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Center for Environment and Development

Forest Policy and Governance for Sustainable Forest Management in Ethiopia: The Case of Bale Eco-Region, Oromia Regional State

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Forest Policy and Governance for Sustainable Forest Management in Ethiopia: The Case of Bale Eco-Region, Oromia Regional State

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Declaration

Declaration by candidate

I, Endalkachew Birhan, declare that this dissertation manuscript is my own original work with the guidance and close direction of my supervisors and it has never been presented for degree in any other institution.

Signed _____Date: _____

Declaration by supervisor

This dissertation manuscript has been submitted for examination with my approval

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This is to certify that the dissertation done by **ENDALKACHEW BIRHAN**, which is entitled "Forest Policy and Governance for sustainable forest management in Ethiopia: The Case of Bale Eco-Region, Oromia Regional State" and submitted in fulfillment of the requirements for the degree of doctor of philosophy in Development Studies (Environment and Development) complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

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Abstract

With the ineffectiveness of centralized forest management, the Participatory forest management approach was introduced in to the forests eco-system of the Bale Eco-Region in the late 1990s. In addition to this, REDD+ project was implemented in the Bale Eco-Region between 2012 and 2015 to ensure sustainable forest management. However, despite the efforts made by different actors, deforestation and forest degradation have been continued due to mainly poor forest policy formulation and implementation and lack of good forest governance. Hence, the purpose of this study was to examine the challenges of forest policy and governance in sustainable forest management in the Bale Eco-Region of Oromia Regional State. To this end, mixed research approach was adopted and thus, the desired data was collected through key-informant interviews, focus group discussions and questionnaires. Depending on this methods, the study found the following key things. First, the federal forest policies are not easy for implementation because further regulations are not developed at the regional level, there is conflict of interest between the regional and federal government over policy development , the time when to achieve the policy intentions are not specified and the inputs of all key stakeholders are not exhaustively incorporated. Second, there is lack of good forest governance, particularly lack of accountability, low efficiency, low fairness and ineffectiveness in the Bale Eco-region. Finally, while implementing the REDD+ project, forest governance of the Bale Eco-Region has faced different challenges, such as weak institutional arrangements, continuation of deforestation, low enforcement capacity, low economic benefit of the community, lack of strong coordination with media and research institutes, conflict of interest among sectors over forest land, and lack of adequate budget and logistics to undertake proper monitoring and evaluation. Hence, every concerned stakeholder should contribute their part to improve the formulation and implementation of forest policy, good forest governance, to finance the REDD+ to improve the forests and community livelihoods, to improve the forest audits and coordination of forest offices with media and research institutes.

Key Words: Forest policy; good forest governance; REDD+; Participatory forest management; Bale Eco-Region

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List of Acronyms

BER	Bale Eco-Region
BERSMP	Bale Eco-Region Sustainable Management Program
CBOs	Community-based organizations
CRGE	Climate-Resilient Green Economy
EPRDF	Ethiopian People Revolutionary Democratic Front
EU	European Union
FDRE	Federal Democratic Republic of Ethiopia
FGDs	Focus Group Discussions
GDP	Gross Domestic Product
GHGs	Greenhouse gas
GTP	Growth and Transformation Plan
NGO	Non-Governmental Organization
OFWE	Oromia Forest and Wildlife Enterprise
OCAT	Organizational Capacity Assessment Tools
OMN	Oromia Media Network
PCI	principles, criteria, and indicators
PFM	Participatory Forest Management
REDD+	Reducing Emission from Deforestation and Forest Degradation
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

List of Publications

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1. Introduction

1.1. Background of the Study

Forest provides various functions to the human well-being. For instance, according to UN (2014), forest provides an ecosystem services that is grouped into four main services namely provisioning (useful physical products of forest), regulating (preventive benefit of forests), cultural (aesthetic, spiritual, recreational and educational benefit) and supporting services (biodiversity services such as species and habitat conservation). However, the earth is plagued with the huge array of environmental problems, due largely to anthropogenic causes (Nhamo and Inyang, 2011). In other words, the existing mode of production and consumption have resulted in the degradation of our global environment (Sosa-Nunez, 2016).

Deforestation and forest degradations are among the major problem of the global environment (Antwi-Agyei, 2017). These major environmental problems are currently threatening Africa in general (Nhamo and Inyang, 2011) and Ethiopia in particular mainly due to lack of good forest governance. In support, literatures (eg. Monditoka, 2011; Gregersen et al., 2004) argued that weak forest governance is exacerbating the problems of deforestation in different part of the world.

In Ethiopia, centralized, hierarchical, top down and command and control approaches had been exercised to manage forests for long. This centralized forest management approaches of the state has not brought the desired outcomes (Saguye, 2017; Lemenih and Bekele, 2008). Due to this, pilot decentralized Participatory Forest Management (PFM), which has considered the needs and interests of the communities, was introduced in to Ethiopia the mid-1990s (Lemenih et al.,2015; Ayana et al., 2015). PFM was introduced in to Ethiopia mainly to avert the persistent problem of deforestation and to deliver better social and economic outcomes **(**Saguye, 2017**;** Ayana et al., 2015**)**. Similarly, it was introduced in to the Bale Eco-Region (located in the Oromia regional state of Ethiopia) in 1998 with the intention to ensure sustainable forest management and to improve the livelihoods of the forest-dependent local communities. However, it was failed to control or reduce deforestation and forest degradation in the study area as expected (Tadesse, 2016;

Hailemariam et al., 2015). For instance, forests of Bale Eco-Region had lost substantial areas of 123,751 ha between 1985 and 2015 with an annual deforestation rate of 4,661 ha (Hailemariam et al., 2016).

Coupled to this, Ethiopia is planning to carry out successful REDD+ projects to sustainably reduce emissions from deforestation and forest degradation. In this regard, REDD+ pilot project is already being carried out in different parts of the country. To cite example, REDD+ pilot projects are being carried out in Bale Mountain Eco-Region, Nono Sele and Yayu (Ministry of Environment, Forest and Climate Change, 2015). As it can be remembered, the REDD+ mechanism has been negotiated at the successive United Nations Framework Convention on Climate Change (UNFCCC) Conferences of Parties since 2005 (Vanderhaegen et al.,2015). It comprises of local, national and global actions whose primary aim is to reduce emissions from deforestation and forest degradation and enhance forest carbon stocks in developing countries (Angelsen et al., 2012). In the Bale Eco-Region, the carbon sequestration work was done under the first phase of REDD+ project of FARM Africa and SOS Sahel Ethiopia for three years, between 2012 and 2015. During this time, these NGOs identified the major causes of deforestation and effectively worked in collaboration with the community-based organizations (CBOs) and the Forest-Dwellers Associations. Finally, they had generated a total of 5.5 million metric tons of carbon dioxide equivalent through controlling the causes of deforestation and forest degradation. However, the REDD+ pilot project of Bale Eco-Region is not successful in bringing sustainable impact on the reduction of emissions from deforestation and forest degradation due to the absence of the expected financial benefits to the community. Thus, it has not contributed to the improvement of forest-dependent communities' livelihoods as it was intended.

It is clear from the aforementioned discussion that the former traditional forest management approach, the newly introduced PFM approach and even the REDD+ project have not brought the desired outcome in the Bale Eco-Region. The above discussion gives indication to the existence of challenges in forest policy formulation and implementation and lack of good forest governance. Therefore, this forest policy related and forest governance challenges need to be identified to ensure sustainable forest governance in the Bale Eco-Region. Hence, the overall objective of this study is to examine the challenges of forest

policy and governance in sustainable forest management in the Bale Eco-Region of Oromia Regional state.

1.2. Statement of the problem

Ethiopia has been following centralized forest management approach to govern its forests resources. The successive governments of Ethiopia, starting from the imperial government (1931-1974) to the coming of the Ethiopian People Revolutionary Democratic Front (EPRDF) in 1991, followed the centralized forest management approach. However, this centralized forest management approach has been practically proofed to be ineffective in-terms of sustainably managing forests. Hence, pilot projects of the decentralized participatory forest management (PFM) approach was introduced in to Ethiopia in the mid-1990s (Ayana,2014). This new PFM approach provided an opportunities for greater community participation in forest governance.

Similarly, pilot project of participatory forest management approach was began in the Bale Eco-Region in the late 1990s. However, as shown above, the participation of the community through PFM has not totally solved the problem of deforestation and forest degradation in the Bale Eco-Region. From this, it is clear that while community participation in the forest governance is important, the existing problem of deforestation and forest degradation is beyond the question of involvement. To tackle the problem of deforestation and forest degradation, even REDD+ (Reduction of emissions from deforestation and forest degradation) project was introduced in to the Bale Eco-Region in 2012. This REDD+ project had brought positive results for a brief period until 2015. However, it did not bring sustainable impact on the reduction of deforestation and forest degradation. Hence, deforestation and forest degradation have been continued in the Bale Eco-Region (Hailemariam et al., 2016). The factors for the continuation of this deforestation and forest degradation are lack of good forest governance and poor forest policy formulation and implementation. For instance Tadesse (2016) argued that corruption and weak law enforcement is highly observed in the Bale Eco-Region.

However, these lack of good forest governance and poor forest policy formulation and implementation are not studied in Ethiopia in general and the Bale Eco-Region in particular. Most of the studies are conducted on the participatory forest management

approach. Concerning PFM, the existing literatures can be broadly classified in to two: those that argue that PFM has brought positive results in Ethiopia and those that identified weaknesses of PFM. To cite example, Gobeze et al. (2009) in their study about participatory forest management and its impacts on livelihoods and forest status in Bonga forest in Ethiopia found that PFM had positive impacts both on the state of the forest and the living conditions of participant households at least within the project lifetime. Furthermore, Engida and Teshoma (2012) conducted a study on the socio-economic effects of community forest management in Dendi District, Ethiopia. Their findings showed that participatory forest management enhanced the livelihood, the conservation measurements, and the social assets of the local communities. Winberg (2010) also carried out her study on the practices and experiences of participatory forest management in Ethiopia. She found that participatory forest management led to improved forest and environmental conditions in Ethiopia regardless of the problems of leakage and financial sustainability and its ambiguity over poverty reduction. On the other hand, literatures also showed the weaknesses of the existing practices of PFM. For instance, Saguye (2017) made an empirical analysis about gender inclusiveness in participatory forest management approaches in the Chilimo-Gaji Forest, West Shewa Zone. The results of his study revealed that participatory forest management processes in the study area excluded women from the lowest nominal typology of participation to the highest level in the hierarchy of participation. In addition to this, Ayana et al., (2015) studied the performance of participatory forest management in Ethiopia taking the case of Agama Forest Cooperative (AFC) of Gimbo district. The study found a significant disparity between the PFM institutional principles and the actual local forest management practices. Engida and Mengistu (2013) also showed, in their work titled "Explaining the determinants of community-based forest management in Alamata, Ethiopia," that the level of participation was influenced by gender, family size, level of economic benefit, distance from the forest, and location. In addition to these, Tadesse et al. (2017) undertook a study about forest users' level of participation in a participatory forest management program in south-western Ethiopia and found that the statistically significant ($P < 0.05$) predictors of the level of participation were gender, family size, education level, income from the forest, distance of the home to the forest, restriction on charcoal and timber harvesting, elite domination in decision-making processes, and lack of incentives.

Generally, the above study did not focus on the challenges of forest policy and governance in the Bale Eco-Region, which makes this study very important. Hence, this study was

necessitated due to the following two major reasons. The first is that the existence and continuation of deforestation and forest degradation in the Bale Eco-Region. The second is that the absence of literature on the main factors of deforestation and forest degradation i.e lack of good forest governance and poor forest policy formulation and implementation. Hence, the main purpose of this study is to examine the challenges of forest policy and governance in sustainable forest management in the Bale Eco-Region.

1.3. Objectives of the Study

1.3.1. General Objective of the Study

The general objective of the study is to examine the challenges of forest policy and governance in sustainable forest management in the Bale Eco-Region.

1.3.2. Specific Objectives of the Study

Specifically, this study has addressed the following five objectives.

1. To identify the challenges of forest policy in Ethiopia in general and Oromia regional state in particular.
2. To identify the determinants of good forest governance in the Bale Eco-Region.
3. To examine the contribution of different actors in the forest governance of the Bale Eco-Region.
4. To identify the challenges of forest governance in addressing REDD+ in the Bale Eco-Region.
5. To investigate the existing governance related opportunities for the further implementation of the REDD+ project in the Bale Eco-Region

1.4. Research Questions

The study attempted to address the following questions:

1. What are the challenges of forest policy-making in Ethiopia in general and Oromia Regional State in Particular
2. What are the factors that affect good forest governance in the Bale Eco-Region
3. What are the contribution of the different actors in the forest governance of the Bale Eco-Region
4. What are the challenges that are facing forest governance while addressing REDD+ in the Bale Eco-Region
5. Is there an opportunities for further implementation of REDD+ in the Bale Eco-Region

1.5. Significance of the Study

It is believed that this study has the following significance for the academia, the policy makers and society. First, it is believed that it will become a body of knowledge for the academic debate and research in the area in that it will serve as a sources for those researcher who are interested to critique and/ or further carryout their study on the issue. Second, it will inform the policy makers about the existing limitation on the forest policy and governance. Furthermore, it will alarm them the existing challenges of forest governance in addressing REDD+ project in the area of concern. Finally, it will attempt to benefit the society by showing the actors of REDD+ the way how to better address the existing challenges of forest governance to effectively carryout REDD+ Projects.

1.6. Delimitation of the Study

The study is delimited geographically to Oromia Regional State, particularly to Bale Eco-Region. The Bale Eco-Region is found in three zones of Oromia Regional State. These are West Arsi Zone, Bale Zone and East Bale Zone. In these three zones, it has examined the challenges of forest policy and governance. Specifically, it identified the challenges of forest policy, the determinants of good forest governance and the role of different actors in forest governance. Furthermore, it examined the challenges and contribution of forest governance in addressing REDD+ in the study area.

1.7. Limitation of the Study

The study has faced the following constraints. First, it mainly faced lack of financial resource which is covered from the personal sources. The financial resource supported by the university is not enough to complete the whole process of research writing. Furthermore, practically the researcher faced lack of adequate transportation when collecting data from geographically too remote area. To handle this, the researcher used motorbike and hence, collected the desired data.

1.8. Structure of the Dissertation

The dissertation is organized under two parts. The first part contains general introduction of the study, which includes background of the study, statement of the problem, objectives of the study, limitation, delimitation, significance of the study literature review and

conceptual framework, over all methodology and synthesis, conclusion and recommendation. Part two of the dissertation four papers. While the first paper deals with the challenges of forest policy-making in Ethiopia with special focus on Oromia Regional State, paper two and three deals with the role of stakeholders in the forest governance and determinants of good forest governance in Bale Eco-Region respectively. The remaining papers i.e paper four and five deals with the challenges of forest governance in addressing REDD+ and the opportunities of forest governance for the further implementation of REDD+ in the Bale Eco-Region respectively.

1.9. Literature Review and Conceptual Framework

1.91.The Concepts of Public Policy and Forest Policy

Before attempting to clarify public policy in general and forest policy in particular, it is good first to conceptualize policy which will enable us have a good understanding of it. Various literatures have indicated that there is no concise and comprehensive definition of policy. Rather, different scholars attempted to define it differently based on their way of understanding. In this regard, De Coning (2000) stresses that an assessment of the nature of definitions in the field of policy provides no universally accepted definitions (cited in Abebe, 2005). The traditional starting point for defining policy is that policy constitutes the decisions taken by those with responsibility for a given policy area and these decisions usually take the form of statements or formal positions on an issue, which are then executed by the bureaucracy (Keeley and Scoones, nd). Here it was thought that policy is formulated and executed solely by the government and its bureaucracy. However, Hocking and Smith (1997) outline the now widely-recognized trend towards the increasing importance of non-state actors in the policy-making arena, such as international organizations, research groups and NGOs (cited in Sutton, 1999). Osman (nd) defined it as a broad statement that reflects future goals and aspirations and provides guidelines for carrying out those goals. The above definitions indicates as policy is not only an aspiration rather it is something that is going to be practically executed.

The other thing to be worth to be conceptualized here is public policy. A public policy is a deliberate and (usually) careful decision that provides guidance for addressing selected public concerns (Torjman, 2005). When a government takes a decision or chooses a course of action in order to solve a social problem and adopts a specific strategy for its planning

and implementation, it is known as public policy (Anderson 1975: cited in Osman, nd). In other way Anderson (1997: 9) defined public policy as 'a relatively stable, purposive course of action followed by an actor or set of actors in dealing with a problem and matter of concern' (Abebe, 2005). But, policy may not always results in rational decisions, rather it may be derived from political motives. Thus, it also needs to be seen as an inherently political process, rather than simply the instrumental execution of rational decisions (Keeley and Scoones, nd). When addressing forest issues lies at the center of a given policy, it is known as forest policy. Hence, forest policy is a policy developed through the participation of different concerned actors or otherwise to deal with the prioritized forest-related issues.

1.9.2. The Concept of Forest Governance and Good Forest Governance

The concept of Forest Governance

To have a good understanding of forest governance, it is vital first to have a good conceptualization of governance. The notion of governance has been in existence since the beginning of human civilization (Monditoka, 2011) and has been understood to be synonymous with government or "what the government does" (Monditoka, 2011; Sekeleti, 2011). However, it has evolved over time with the realization that the government is not the sole solution to all of society's problems, and hence, has begun to incorporate other actors like civil society and the private sector in the governing process (Birhan, 2012). With the changing vision of the role and responsibilities of the government, a broader vision of governance has evolved, which takes into consideration the new roles of civil society and the private sector (Sekeleti, 2011). Governance is, therefore, an interactive process that takes place among multi-stakeholders (including government) with the intention to handle societal top priorities (Saito 2008). It involves multiple actors at multiple levels (local, national and international) and acknowledges that different stakeholders have different views, values, and interests (Sekeleti, 2011).

Similarly, forest governance is a consultative approach, in which the government, the private sector, and civil society are involved in the conservation and management of forest resources. In forest governance, the authority and competencies have been moved away from the state and given to other bodies, such as international organizations, NGOs, and businesses (Pierre and Peters, 2000: cited in Arts, 2014). Instead of being the authority from the top, the commander, or the controller, the state has now become an (more) equal

partner vis-à-vis private and civic ones in the new governance networks and partnerships (Arts,2014).

Generally, Giessen and Buttoud (2014) conceptualize forest governance in more detail and state that forest governance comprises of a) all formal and informal, public and private, regulatory structures, i.e., institutions consisting of rules, norms, principles, decision procedures, concerning forests, their utilization and their conservation, b) the interactions between public and private actors, and c) the effects of either a) the structures or b) the institutions on the forests. However, while this definition indicates some of the crucial actors, both public and private, it misses a critical actor of forest governance, such as the community. In this case, therefore, forest governance is the execution and enforcement of forest policy and law through the active participation of various concerned actors such as the government, the community, the private sectors, non-governmental organization, media, research institution and other concerned actors

Good Forest Governance

To understand good forest governance, it is first important to conceptualize good governance. There is no consensus among writers on what exactly good governance consists of and definitions vary from literature to literature (Secco et al., 2014). However, some literatures shows that the key features of good governance include: 1) adherence to the rule of law (observing the law of the country), 2) transparency, 3) low levels of corruption, 4) efficiency, 5) effectiveness, 6) participation and accountability by all officials, 7) equity, 8) low regulatory burden (low level of government regulation), and 9) political stability (smooth running of the political system). For instance, Larson and Petkova (2011) state that "good forest governance" means decisions are fair, transparent and just; rights are respected; laws and rules are enforced equitably; decision makers are accountable, and decisions are made based on the analysis of what is good for people and forests in general, not personal interest. Similarly, Secco et al. (2014) identify the key dimensions of good local forest governance as sustainable local development, efficiency, effectiveness, participation, transparency, accountability and capacity. Furthermore, FAO and PROFOR (2011) clearly indicated that good forest governance can be determined by accountability, efficiency, fairness, effectiveness, transparency and participation, which is used in this study to identify the determinants of good forest governance in Bale Eco-region. *For the purpose of this study, good forest governance is defined as an accountable, effective, efficient, fair, participatory, and transparent governance which ultimately*

ensures both sustainable forest management and improvement of the forest-dependent community livelihoods.

1.9.3. Forest Governance

1.9.3.1. Evolution of Forest Governance

Forests are essential for all life through sustaining vital ecosystem functions such as oxygen production, carbon sequestration, water quality, soil fertility and biological diversity (Wallin, 2017). Furthermore, they can generate multiple products—wood for construction and/or fuel, wildlife, water, leaves, fruits, fodder, seeds, straw, shade, fertile soil, stones, etc. (Andersson et al.,2004). For long, traditional forest management had been experienced across the world. Since the pre-industrial Europe depended mostly on their adjacent forest commons, they developed local management system to govern those forests (Gilmour, 2016). However, the customary laws and institutions were gradually faded away with the advent of industrialization and modernization. Before the advent of European colonialism, most colonized countries had also their own way of customary mechanisms of how to use forests. During colonialism, the African indigenous people were excluded from participation and benefit sharing rather the focus was on timber exploitation and export, as well as to reconcile the competing land and forest demands of farmers and loggers (Wiggins *et al.,* 2004; Asante, 2005: cited in Alhassan, 2010). Forest management in most colonized countries became characterized by the imposition of "scientific forestry" where central governments assumed all rights over forest access and management and attempted to manage forests to maximize timber production for the benefit of the colonizing power and/or the State (Gilmour, 2016). The communities as well as other concerned stakeholders at that time had no legal rights, access and economic incentives to manage and use forests (Wily, 2001: cited in Alhassan, 2010).

In the aftermath of colonialism, centralized governments in the developing world took it upon themselves to govern all of the valuable resources under their territorial control (Andersson,2006). Hence, little had been changed in the first decade of post-colonial rule (Gilmour, 2016). Until and through the 1960s, forest policy had been technically oriented, focusing on the commercial aspects of forest management. Forests could either be managed by the state or by private entities, but in either case, it was seen as a valuable natural resource whose protection was ensured by the value of its stock and flow to the market (Monditoka, 2011). During the 1970s and 1980s, smallholder and community-based forestry emerged in response partly to a perceived failure of the forest industry

development model to lead to socioeconomic development, and partly to the increasing rate of deforestation and forest land degradation in developing countries (Gilmour, 2016). The 1980s, therefore, witnessed the rise of community forestry, which sought to look first at community needs and then design a local forest program around them (Monditoka, 2011). Community based forestry (CBF) covers social, economic and conservation dimensions in a range of activities including decentralized and devolved forest management, smallholder forestry schemes, community−company partnerships, small-scale forest based enterprises and indigenous management of sacred sites of cultural importance (Gilmour, 2016). The devolution of control over the world's forests from national or state level governments to local control is an ongoing global trend that deeply affects all aspects of forest management, conservation of biodiversity, control over resources, wealth distribution and livelihoods (Monditoka, 2011). However, in practice, decentralization and devolution have been only partially realized and many governments retain significant authority over forest management (Gilmour, 2016). Today, a much larger number of actors have come to influence how environmental assets are used (Andersson, 2006).

1.9.3.2. Decentralized Forest Governance

Due to the poor performance of centralized system of administration in natural resource governance, decentralizing government power to its own sub-units have been highly supported and practiced. Theoretically, decentralized management can improve efficiency, equity, democracy, and resource management. However, empirical evidence has shown that decentralization of decision making can benefit natural resource quality (Hajjar et al., 2012). According to Andersson et al. (2004), regarding natural resource governance, two forms of decentralization have been emerged. These are devolving property rights over natural resources to local individuals and communities and transferring formal powers of government to its own sub-units. The PFM is , therefore, a devolution of property rights over forests to local community. Because, in PFM, the government make maximum sharing of power on forest management with the community.

Similar to the general trend, forest governance have also been decentralized with the intention to efficiently conserve and improve rural and forest-dependent livelihoods (Hajjar et al., 2012). It took place in most parts of the world. Because, decentralization and networks of community-based forest groups (forest federations) are often viewed as a

means of promoting good forest governance that is more responsive and adaptive to local needs, especially those of the poor and underprivileged (Suryanata et al.,2003). Thus, decentralization includes not only the transfer of power, but also access and use rights over forest resources (Djogo, 2003).

However, in practice, decentralization and devolution have been only partially realized and many governments retain significant authority over forest management (Gilmour, 2016 ; Hajjar et al., 2012). Furthermore, it created problem of accountability (Djogo, 2003) and also lead to conflict, particularly when it involves the transfer of ownership and use of valuable natural resources (Ribot 2002: cited in Djogo, 2003).

Challenges of Decentralized Forest Governance in Ethiopia

With the ineffectiveness of centralized system of administration, decentralization was accepted as an effective and efficient forms of governance nationally and internationally. However, Andersson (2006) has indicated that decentralization itself has been and is being challenged by lack of popular participation in local decision making process, lack of accountability, local capacity problem and lack of adequate resources particularly finance. According to the team of specialists on participation in forestry (2000), lack of public participation, emanating from lack of information and interest, lack of self-confidence (not believing in once ability to influence), problem of access to the participatory process and tactical behavior (preferring silence), is among the major challenges of decentralized forest governance. Furthermore, Andersson et al., (2004) stated challenges related to its nature (being common pool resources), problem of conforming to existing political institutions and existence of externalities with the use of natural resources as a difficulty to effectively govern natural resources.

Ethiopia has also adopted decentralized participatory forest management approaches with the support of NGOs in the 1990s. The shift was made from the centralized conventional approaches due to its ineffectiveness and also to make it more responsive to the local needs. However, this decentralized approach itself is facing the following challenges:

-The existence of significant disparity between the PFM institutional principles and actual local forest management practices (Ayana et al.,2015).
-Low participation of women (Engida and Mengistu, 2013)

-Weak enforcement of forest law and land-use policy, lack of adequate capacity, limited knowledge on the multifaceted advantages of forestry, lack of market access and limited value addition, weak inter-sectorial linkages, absence of proper institutional arrangement at regional level (Asfaw et al., 2015).

-Regarding carbon related projects, Moges (2010) indicated challenges such as absence of benefit sharing mechanism (e.g., how much for community and how much for the project developer, and how much for the government, etc), absence of participatory forest management in the forest policy of the country and the upfront cost.

1.9.4. Reduction of Emission from Deforestation and Forest Degradation (REDD+)

1.9.4.1. The Emergence of REDD+

The indispensable role of forests in the conservation of flora and fauna and the importance of it in the provision of ecosystem services through serving as a sinks for carbon dioxide is widely attested. Its vital role of carbon sequestration is scientifically proofed as indispensable in the move to manage global warming. Considering this, the international community agreed to invest on forest in developing countries through a project known as REDD+ (Reduction of Emission from Deforestation and Forest Degradation). It aims to mitigate climate change by curbing carbon dioxide emissions stemming from the destruction of forests (Bushley and Khatri, 2011).

Reducing emissions from deforestation and forest degradation in developing countries (REDD+) is an emerging policy instrument in climate negotiations, and represents a next-generation mechanism in encouraging the sustainable management of forests as a means of reducing greenhouse gas emissions (Fujisaki, 2016). Since Bali, the Forest Carbon Partnership Facility (FCPF), administered by World Bank and financed by developed countries, emerged and asked developing countries to develop REDD+ project identification notes (R-PINs) which shows a plan on how to reduce emissions from deforestation and forest degradation (Wertz-Kanounnikoff, 2010). REDD+ proposals show great promise for creating incentives to slow deforestation and degradation, and to maintain and expand carbon stocks in natural forests (Cronkleton et al. ,2011). By 2009, out of the 35 countries submitted, three were approved and financed namely Indonesia, Guyana and Panama (Wertz-Kanounnikoff, 2010). But, natural forests continue to suffer degradation as a result of anthropogenic activities (Antwi-Agyei, 2017).

1.9.4.2. Forest Governance and REDD+

The role of governance for the success of REDD+ is great (Larson and Petkova, 2011). Rather than being in conflict with, it has to be in line with the interests of local communities and indigenous groups ('forest communities') (Wollenberg and Springate-Baginski, 2010). Forest governance in context to REDD+ is a complex issue as it involves the participation of multiple stakeholders and also holds diversified interests of individuals and communities across different scales such as local, national, and global. Thus, it requires inclusive policy development processes which is essential for its effectiveness (Wollenberg and Springate-Baginski, 2010). However, challenges associated with sector coordination and participation of stakeholders have been among the most prominent governance issues shared by countries developing REDD+ (Fujisaki, 2016). Thus, to carry out a full-scale REDD+ implementation, the country is required, in addition to writing a REDD+ strategy, to develop a robust forest governance (Larson and Petkova, 2011).

In Ethiopia Asfaw et al. (2015), taking the case of SNNPR, pointed out that improving forest governance requires among other ensuring transparency and building accountability in defining access to, use and management of forests; promoting public participation in planning and evaluation of processes and impacts; ensuring stability and building the capacity of forestry institutions; coherence of laws and regulations in implementing the forest legislation and guarantee of the rule of law.

1.9.4.3. REDD+ in Ethiopia

Climate change funding mechanisms available for financing forestry sector are CDM (clean Development Mechanism) and REDD+ (Reducing Emission from Deforestation and Forest Degradation) (Moges et al., 2010). The pilot REDD+ and CDM projects in the country include the Bale Mountain Eco-region REDD+ Project (in Oromia), NonoSele Participatory Forest Management REDD+ project (includes Oromia location), Yayu REDD+ Project (includes Oromia location), forest related CDM Projects and, lastly, the new Oromia Forested Landscape Program (OFLP) (Ministry of Environment and Forest, 2015). From this pilot project a good experience will be developed which is critical to move in to carrying out the full implementation of the project in the country.

1.9.5. Methodological Review

Most research works found around participatory forest management were conducted through mixed approaches. For instance Tilahun et al. (2015) in their work titled " The Contribution of Ethiopian Orthodox Tewahido Church in Forest Management and Its Best Practices to be Scaled up in North Shewa Zone of Amhara Region, Ethiopia" used both qualitative and quantitative approaches. They used Descriptive statistics to analyze the data. Saguye (2017) in his work titled "Empirical Analysis of the Reality of Gender Inclusiveness of Participatory Forest Management Approach: The Case of Chilimo-Gaji Forest, West Shewa Zone, Oromia Region, Ethiopia" has also used both approaches. He used descriptive statics for quantitative and thematic analysis for qualitative data. In addition to them, Engida and Tashoma (2012) in their work titled The Socio Economic Effects of Community Forest Management: Evidence from Dendi District, Ethiopia, have used quantitative and qualitative methods. Furthermore, Tadesse et al (2017) in their work titled "Forest Users' level of Participation in Participatory forest Management program in Southwestern Ethiopia" used qualitative and quantitative data. They analyzed quantitative data through logistic regression model.

Some works were done qualitatively. For instance, Ayana et al (2015) in their work titled "Performance of participatory forest management in Ethiopia: institutional arrangement versus local practices" employed a qualitative ethnographic case study to investigate the interaction between the PFM institutional arrangement and local forest management practices. Furthermore, Winberg (2010) in her work titled "Participatory Forest Management in Ethiopia, Practices and Experiences" analyzed her result qualitatively. Lemenih and Bekele (2008) in their work titled "Participatory Forest Management. Best Practices, Lesson Learnt and Challenges Encountered. The Ethiopian and Tanzanian Experiences" used qualitative analysis.

There are also researchers who solely employed quantitative approach to study forests. For example, Engida and Mengistu (2013) in their work titled "Explaining the Determinants of Community Based Forest Management: Evidence from Alamata, Ethiopia" employed quantitative method and analyzed their data using binomial logit model.

1.9.6. Conceptual Framework

Here an attempt is going to be made to narrate the conceptual framework. The content and the way how policies have been formulated affects the success of forest governance. Hence, the Ethiopian forest policies will be going to be evaluated from the angle of ease of implementation, legitimacy, coherence with the national development goal and transparency. In turn, the forest governance will have effect on the effective implementation of policies which makes relevant the study of forest governance. The forest governance can be influenced by accountability, transparency, effectiveness, efficiency, fairness and participation which have been critically examined in the study area. Ultimately, the development of good policy and the establishment of good forest governance will lead to the sustainable forest management. The REDD+ project, which is adopted to ensure sustainable forest management, can also be affected by the forest governance.

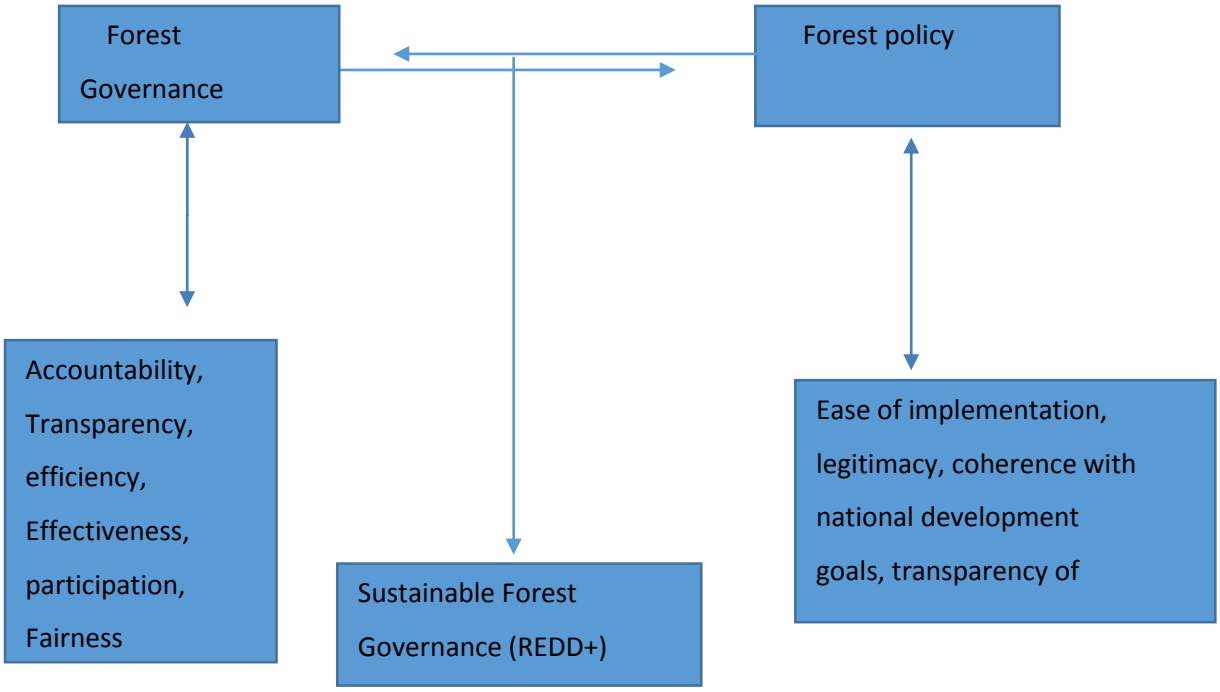

Fig 1: Conceptual Framework

1.10. Overall Methodology

1.10.1. Description of the Study Area

The study was undertaken in south-eastern Ethiopia, specifically in the Bale Mountain Eco-Region (BER), which is composed of three zones of the Oromia regional state; namely the

West Arsi zone and the East and West Bale zones. From the West Arsi zone, only four districts (Weredas) namely Adaba, Dodola, Kokosa, and Nansabo are part of the Bale Eco-Region while it covers seven districts (Dalo Mena, Haranna Buluq, Madda Walabu, Goba, Gololcha, Barbare and Agarfa) of the Bale Zone and the newly structured East Bale Zone (formerly both zones were named together Bale Zone).

BER is part of the Afromontane biodiversity hotspot, which belongs to the 34 global biodiversity hotspots (Negash et al., 2016). Over 40 streams and springs originate from the mountains in the Bale Eco-Region that drain into five major rivers—Wabe-Shebelle, Web, Welmel, Genale, and Dumal. Approximately 12 million people who live in the downstream areas depend on these rivers for their livelihoods (Share Bale Eco Region, 2017**)**. The Eco-Region exhibits a wide range of topography which spans from 1500 to 4377 meters above sea level, having the second-highest mountain in Ethiopia, Tullu Dimtu which is 4377 meters tall (Tadesse,2016). It has different ecological zones encompassing moist tropical forest, afro-alpine habitats, woodlands, grasslands, wetlands and a large percentage of Ethiopia's endemic plant and animal species (OFWE,2014 ; Juju, 2012: Cited in Tadesse, 2016).

According to the 2007 population census, the total population of the Bale Eco-Region is 1,202,015 (FDRE Population Census Commission, 2008). From this, 1,058,665 is classified as rural, while the remaining 143,350 as urban. This means, 88% of the population of Bale Eco-Region is rural.

The Bale Eco-Region receives almost eight months of precipitation (March-October) (Hailemariam et al., 2015). The mean annual maximum temperature is 18.4 ^{o}C, while the mean annual minimum is 1.4 ^{o}C. These mean annual temperature of the area also varies with altitude. Temperature at high elevations, such as the Sanati plateau is low with the annual average temperature of less than 7.5 ^{o}C, whereas at the lower altitude (500–1000 m) the temperature is higher, reaching an annual average of more than 27.5 ^{o}C (Hailemariam et al., 2016).

Agriculture is the main economic activity practiced in the Bale Eco-Region. The local population primarily depends on mixed agriculture, both on crop growing and animal husbandry. Generally, the livelihoods of communities in the highland area are

predominantly based on a mixed crop-livestock subsistence agricultural system, while communities living in the mid altitude and the lowlands are mainly pastoral and agro-pastoral (Negash et al., 2016**)**. Traditional farming is dominantly practiced, but there are some attempts for using mechanized farming.

In addition to agricultural lands, the local inhabitants are also the direct beneficiaries of the forest resources. At present, the local communities are organized into Forest-Dwellers Associations (WAJIBs) and community-based organizations.

1.10.2. Philosophical Base of the Study

This study follows a pragmatic research philosophy. The reason is that the nature of the issue requires the researchers to adopt the mixed approaches that are both quantitative and qualitative approaches. Pragmatism provides the philosophical justification for the mixed research approach (Maarouf, 2019). The mixed approaches enabled the researcher to come up with a relatively reliable and dependable results. Because, it allows the triangulation of data collected through one approach by another.

1.10.3. Research Design

Descriptive research design was used for this study considering the nature of the study because the issue requires in depth description of the events that is currently happening. The goal of descriptive research is to make detailed description of a phenomenon and its characteristics (Nassaji, 2015).

Consistent with this, with the attempt to come up with valid and reliable evidence, the researcher employs mixed approaches in that it predominantly employs qualitative research which is supported by quantitative data. According to Maarouf (2019), mixed research has two major advantages. These are the "complementary strengths", which means using the strengths of one research method to enhance or support another one, and “Triangulation" advantage. In this study, the dominant role is given to qualitative research because the issue mainly requires the researcher to make in-depth description through consulting the knowledgeable and experienced respondents in the area. In support of this, Nassaji (2015) argued that the qualitative research often involves a rich collection of data from various sources to gain a deeper understanding on the issues of concern. The purpose of qualitative research is to describe and interpret issues or phenomena systematically from the point of view of the individual or population being studied (Haradhan, 2018). On the other hand, the quantitative approach is used mainly to triangulate the data gathered through qualitative approach.

From qualitative approach, it employed case study research design. Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) and reports a case description and case-based themes (Creswell et al.,2007)

1.10.4. Sources of Data

The study used both primary and secondary sources of data. The primary data was used to gather empirical data regarding the challenges of forest policy and governance in the Bale Eco-Region. It helped the researcher to generate adequate empirical data on the issue of concern using different data collection tools such as key informant interviews, focus group discussion and questionnaires. In addition to this, the secondary sources such as the published and unpublished documents, policies, laws and proclamations were used.

1.10.5. Method of Data Analysis

As it is shown in detail under each article, the method of data analysis used to analyze each objective is different based on the nature of the issue. Generally, quantitative and qualitative way of data analysis was employed. The qualitative data was analyzed using descriptive analysis. The goal of descriptive research is to make detailed description of a phenomenon and its characteristics (Nassaji, 2015). Whereas the quantitative data was analyzed through descriptive statics and binary logistic regression model.

1.10.6. Ethical Considerations

This study was conducted in a manner that is consistent with professional research ethical standards. First, official letter was received from Addis Ababa University, College of Development Studies particularly from Center for Environment and Development to show and get support from the government officials and the community to collect the desired data. Then, the consents of the respondents were obtained before starting data collection. Anonymity and confidential of the information were made and no information will be disclosed without their consent. Finally, the study was made human friendly in that it has not harmed human being in general and any section of it in particular.

1.11. Synthesis, Conclusion and Recommendations

1.11.1. Synthesis and Conclusion: Forest Policy, Forest Governance and Sustainability in Ethiopia

1.11.1.1. Forest Policy and Forest Governance

Forest policy is a prerequisite for the effectiveness forest governance. The well-developed forest policy is a good input for the success of the forest governance which in turn, is essential for the achievement of forest policy priority. Generally, as it is discussed below, the forest policy priority, the legitimacy of it, the forest policy coherence, the development of the required further regulations and directives and the existence of good forest governance determine the success of the forest policy intention of a given country. Here under, an attempt will be made to discuss them.

9.11.1.2. Forest Policy and Sustainability

The forest policy and sustainability of the forest has direct relations. Because, the forest sustainability depends primarily on the priority of forest policy as shown here under. Generally, the factors that matters in the forest policy development to realize sustainable forest management are summarized as follows:

1. **Forest policy priority**: it is widely agreed that forest has both economic and environmental contribution. The economic contribution of forest is expressed in terms of its contribution to the national economy and also in terms of its contribution to the improvement of forest dependent community livelihoods. On the other hand, the environmental contribution is expressed in terms of its contribution to the eco-system and balancing the global greenhouse gas emissions. The latter is all about the sustainable management of forests. Both are needed and highly valued, but the question here is which one should the forest policy prioritize? Is the forest policy priority should be the economic contribution of forest or environmental sustainability? Because what is prioritized affects the sustainability of forest resources. For instance, if the economic contribution of forest to the GDP is prioritized, it will endanger the sustainability of forest resources. This is observed, for instance, in the 2007 federal forest policy of Ethiopia. On the contrary, there is wider consensus that the economic benefit of community from forest has positive contribution to the sustainable management of forest. For instance, if the community gets economic benefit from the REDD+ project, it will encourage them to commit to work on the reduction of deforestation and forest degradation. But, the community has got no economic benefit from REDD+ project in the Bale Eco-Region. Unlike the economic contribution of forest to GDP, if the forest policy prioritized environmental sustainability, it will have a positive contribution to the sustainable management of forest and ultimately to the sustainability of global forests.

2. **Stakeholder's participation during the development of policy**: It is key for the future success of the policy. Key stakeholders participation during the development of forest policy is important because it will increase the legitimacy of it. Every stakeholders should be allowed to express their interests and also provide useful input to the policy process. However, this is not always be practical. Instead of taking inputs from key stakeholders, the government of different countries mostly summoned them to let them familiar with the already done forest policy. The typical example here is the federal forest policy and proclamations of 2007 and 2018. According to the informants, different stakeholders like NGOs, regional forest offices and researchers were participated. But, the participation was not in such a way to give input, rather to make them familiar with the forest policy and proclamations.

   Generally, the active and genuine participation of all key stakeholders in forest policy making is essential because it will enable them to express their interests and ultimately own the policy which is vital for the success of the policy during the implementation.
3. **Forest Policy Coherence**: this can be seen from two angles i.e., vertical coherence of forest policy and horizontal coherence of forest policy. Vertical coherence of forest policy is important in the federal state especially in countries where the authority to make forest policy is decentralized to sub-national state. The vertical coherence of the forest policy requires sub-national states to develop their own respective forest policy in line with the federal forest policy. But, all the federal state may not decentralize the power to make forest policy to sub-national states. For instance, Ethiopia is a federal state. But, the forest policy making is centralized and hence, it is under the authority of the federal state. On the other hand, horizontal coherence is the consistency that the forest policy has with the national development plans. It is about whether the existing forest policy is based on the national development priorities? For instance, the 2007 federal forest policy of Ethiopia has coherence with both Growth and Transformation plans (GTP) I and II, but not with the Climate Resilience Green Economy (CRGE). To ensure the forest policy coherence with the CRGE, another forest proclamation was enacted in 2018. However, the coherence of forest policy with the national development priority doesn't necessarily guarantee the sustainability of the environment. Because, the sustainability of the forest depends primarily on the priority of forest policy. For instance, the 2007 federal forest policy of Ethiopia is coherent with GTP I and II, but its priority is to increase the national GDP contribution of forests.

4. **Development of further regulation and directive at sub-national level.**

   The forest policy and proclamation of a central government are expected to be supported by further regulation and directive at the lower layer of the government. Because, it enables the lower layer of government to effectively translate the laws in to practice. If further forest regulation and directives are not developed based on the national forest policy and proclamation especially at the lower layer of government, it will become difficult to realize the intention of the policy at the grassroots level. For instance, Ethiopia is a federal state which has developed federal forest policy and proclamation in 2007 and later on also developed federal forest proclamation in 2018. But, its regional states have not developed further forest regulation and directives, based on the federal forest policy and proclamation, to realize the intention of the national forest policy. This is the case, for instance, in Oromia regional state of Ethiopia. Hence, the absence of forest regulation and directives at regional level became a barrier for the effective implementation of federal forest policy and proclamation in Oromia Regional State which in turn hamper the sustainable management of forests.

9.11.1.3. Stakeholders Participation, Good Forest Governance and Sustainability

Different stakeholders are making various contributions in the forest governance of the Bale Eco-Region. However, deforestations and forest degradations are continued and forest dependent communities livelihood is not improved as expected because the stakeholders have the following limitations while discharging their duties. For instance, the Oromia Forest and Wild Life Enterprise has focused more on utilization than the conservation and development of the forest. Furthermore, the Environment, Forest and Climate Change Authorities have not yet evaluated and audited the status of forest resources that are transferred to Oromia Forest and Wildlife enterprise and the community through agreement. In addition to these, the capacity-based PFM (the so-called Forest Dwellers Associations) is currently failed mainly because of demographic pressure. The capacity building training provided by the NGOs has not also reached the grassroots community. On top of these, the community has got minimal or no economic benefit from forest conservation and management due to the failure of the expected carbon trade.

Due to these, it is vital to ensure good forest governance to realize the sustainability of environment in general and forests in particular. But, to achieve this, it is first important to prioritize the forest sustainability in the forest policy. Once sustainability is prioritized, the

next thing is to work to realize good forest governance. To realize good forest governance, it is necessary to identify the aspects of good forest governance that is missing in the areas of focus. For instance, it is found that lack of accountability, low efficiency, low fairness and ineffectiveness are the problem of good forest governance in Bale Eco-Region of Ethiopia.

9.11.1.4. REDD+ and Forest Sustainability

In addition to forest policy priority and good forest governance, it is vital to have projects that conserve the forests, like for instance the REDD+ to ensure the forest sustainability. However, different governance related factors are challenging its implementation in the Bale Eco-Region. These are weak institutional arrangements, continuation of deforestation, low enforcement capacity, the failure of carbon trade and low direct benefits to the community, lack of strong coordination with media and research institutes and lack of adequate budget and logistics to undertake the monitoring and evaluation. Especially, the failure of carbon trade and the subsequent low direct benefits of the community is the major challenge that is threatening sustainability. Because the financial support of REDD+ depends on the freewill of the developed countries and international organizations and financial institutions. Because of this, the forest dependent local communities have not mostly benefited from the project. For instance, the REDD+ project was carried out in Bale Eco-Region for three years between 2012 and 2015. During this time, the community, expecting the economic benefits, highly worked on suppressing the major causes of deforestation and forest degradation. The project was, thus, successful in reducing deforestation and forest degradation. But, the international community was not committed to buy the estimated amount of the sequestered carbon dioxide equivalent and due to this, the community is not paid the promised money. This in turn discouraged the community which is responsible for high deforestation in the area. Therefore, to reduce deforestation and ensure sustainability, the government and other concerned stakeholders should work to compensate the community and restart again the REDD+ project. This is because ensuring forest sustainability in the Bale Eco-Region requires the collective efforts of many actors both local and international actors.

1.11.2. Recommendaations

Based on the findings of the study, the writer recommends the following points, for policy makers, implementers and the community.

1 The policy makers should prioritize forest sustainability than the GDP contribution in the federal forest policy, which is lacking in the 2007 federal forest policy.

2 To ensure the easeness of the implementation of the federal forest policy,

-the time when to achieve the objectives of the federal forest policy has to be specified in the policy.

-Further regulations have to be developed at the level of regional state.

- The existing conflict of interest between the federal and regional forest offices need to be resolved through discusion.

3 The federal government need to include exhaustively the inputs of all the stakeholders, especially the inputs of the regional governements when developing the forest policy.

4 The study also found that lack of good governance, specifically lack of accountability, low efficiency, low fairness and ineffectiveness are the things to be addressed in the Bale Eco-Region. Hence,

-To specifically increase accountability, it is recommended to improve the effectiveness of court measures, to conduct forest audits, and to strengthen the enforcement capacity of the government.

- In order to increase efficiency, it should be ensured that the resources and training provided by NGOs (Farm Africa and SOS Sahel Ethiopia) should directly target and practically address the desired goals.

-To increase fairness, the youths forming new households within the compartment of the Forest Dwellers Associations and the excess households initially evicted during the establishment of those organizations, should be treated equally.

5 The government should assign adequate budget to the Environment, Forest and Climate Change Authorities to enable them audits the performance of the Oromia Forest and Wildlife enterprise and the participatory forest management.

6 The concerned stakeholders should work to improve the implementation of REDD+ project in the Bale Eco-Region through incentivizing the local community.

7 The government should work to strengthen the enforcement capacity of the forest offices.

8 The forest offices should improve its coordination with media and research institutes to identify and address the forest-related problems and also to publicize forest related issues.

Future Research Areas

Based on the current study, the researcher recommends the following issues for further study.

1. The condition of the forest in Oromia Regional State, after it has been transferred to the Oromia Forest and Wild Life Enterprises and also to the Forest-Dwellers Associations and CBOs through PFM, is not well known and thus the researcher recommends further research on it.

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Paper one: Challenges of Forest Policy-Making in Ethiopia: The Case of Oromia Regional State

Abstract

This study examines the effectiveness of federal forest policy making in Ethiopia with a focus on Oromia Regional State. It attempts to address the question "What are the challenges in the development and implementation of the federal forest policy in Ethiopia in general and Oromia Regional State in particular?" Data were collected through in-depth interviews and document reviews. Descriptive and thematic approaches were employed to analysis the data. The study found that while the constitution authorizes the federal government to develop binding forest proclamation, the Oromia Regional State had enacted and committed in implementing the 2003 Oromia forest proclamation, which is not in harmony with the 2018 federal forest proclamation. This shows that there is lack of common consensus between the federal and regional governments. It is, therefore, recommended that both the federal and the regional governments develop common understanding and commit to the practicality of the constitution side by side while also holding a talk on how to amend it if needed.

Key Words: Challenges of Forest policy formulation and implementation in Ethiopia; Federal Forest policy-making of Ethiopia; Principle, Criteria and Indicator approach; Oromia regional state.

Introduction

In response to the ongoing deforestation and forest degradation, the successive Ethiopian governments have followed different policies at different times. For instance, the imperial government (1931-1974) and the Derg regime (1974-1991) established a centralized forest administration and forests were protected by guards. During the time of these governments, the policy making (including forest policy making) was top-down and centralized. However, after the fall of the Derg regime in 1991, Ethiopia became a federal state, under the then ruling party known as Ethiopian People's Revolutionary Democratic Front (EPRDF). The constitution created two levels of government, i.e., the federal and the regional governments. It authorized the federal government to formulate and implement national policies, plans, and strategies concerning the overall economic and social development of the country (Habib, 2010). Under the federal structure, it also allowed the regional states to design their own policies (Assefa, 2016) and to formulate and execute economic, social, and development policies (Tegegne, 2016).

As far as forests are concerned, however, the power to formulate policy and proclamations was vested with the federal government. Under the constitution of the Federal Democratic Republic of Ethiopia (FDRE), the power to formulate natural resource policies and laws, including forest law and policy, are exclusively given to the federal government as it is indicated in article 51(5) of the FDRE constitution. The regional states are given the power to administer land and other natural resources in accordance with federal laws rather than formulating policies and enacting laws. Despite this, the Oromia regional state enacted the forest proclamation of Oromia in 2003 and continues to administer its forests by this proclamation regardless of the existence of the federal forest laws of 1994, 2007 and 2018 at different time. Moreover, the forest proclamation of Oromia and that of the federal government have content differences, particularly with regards to punishment allotted by the court to individuals undertaking deforestation. For instance, according to the 2018 federal forest proclamation, an individual found illegally destroying the forests, would be penalized with imprisonment of one to five years; while the 2003 Oromia forest proclamation penalty was even more stringent – between five to fifteen years of imprisonment. Furthermore, the 2003 Oromia forest proclamation prohibits the cutting and utilization of endangered tree species such as Hagenia Abyssinca, Cordia Africana, Podocarpus Falcatus, Prunus Africana and Juniperus Procera, while the 2018 federal forest proclamation does not limit the cutting and utilization of these endangered species.

These disparities create a conflict of power between the federal and the regional governments as there is no consensus between them. The experts from the Environment, Forest, and Climate Change authority from the Oromia regional state have responded that the official removal of the Oromia forest proclamation of 2003 by Chaffe (regional council) is a prerequisite to accept the new federal forest proclamation of 2018 and to develop a regulation to execute it.

The purpose of this study, therefore, is to analyze and respond to the following issues: 1) the ineffectiveness of the 2007 forest policy and strategy, as well as the proclamation; 2) the existence of a conflict of power and content differences between the federal and the regional forest proclamations; and 3) the gap in the literature regarding forest policy in Ethiopia. Our extensive review has shown that there is barely any literature dedicated to the systematic analysis of forest policy in Ethiopia; and when literature does exist, it focuses on other aspects of forest policy or relies on different approaches of analysis.

The approach used in this study is the PCI (principles, criteria, and indicators) approach, which analyzes the policy's ease of implementation, its coherence with national development goals, legitimacy, and financial transparency (Bird et al., 2013). Furthermore, there is limited studies that are carried out on forest policy in Ethiopia in general and Oromia Regional State in particular. For instance, in his study titled "How environmental NGOs have influenced decision making in a 'semi authoritarian' state: the case of forest policy in Ethiopia," Ayana, et al., (2018) emphasized how environmental NGOs influenced the 2018 forest laws of Ethiopia. Also Ayana, et al., (2012) in another study, "Historical development of forest policy in Ethiopia: Trends of institutionalization and deinstitutionalization" focused solely on the historical development of forest policy. Yonas (2001) in his study, "Status and Prospects of Forest Policy in Ethiopia," acknowledged that basically Ethiopia had no comprehensive forest policy established by 2001. After that, however, there have been different developments concerning forest policy, including the development of the 2007 forest policy of Ethiopia. The current study, therefore, is a complement to these existing studies. Hence, the purpose of this study is to assess the effectiveness of Ethiopia's forest policy based on the PCI (principle, criteria and indicators) approach with a specific focus on the Oromia Regional State.

Methodology

Research Design

Descriptive research design was employed in this study to assess Ethiopia's forest policy. The reason for choosing a qualitative rather than a quantitative type of research is due to the nature of the study—it requires a detailed description of the ease of implementation, the legitimacy, transparency, and coherence of the policy with the national development goals. To that end, qualitative research design was followed and hence, the data was collected through in-depth interviews and document analysis.

Sources of Data and Sampling Techniques

Both primary and secondary sources of data were used to critically review Ethiopia's forest policy. The primary data was collected through key-informant interviews conducted with experienced and knowledgeable experts of forest policy. More specifically, interviews were conducted with twelve experts from the Environment, Forest and Climate Change Commission and from Oromia Environment, Forest and Climate Change Authority, five experts from Oromia Forest and Wildlife Enterprises, and four experts from NGOs (FARM

Africa and SOS Sahel Ethiopia). The interviewed individuals were the leaders and experts of the policy who have detailed knowledge and understanding about the federal forest policy and proclamation and Oromia forest proclamation. Hence, they were purposively selected because of their knowledge and experience of the issues of this research.

The interview was structured interview in which the questions are developed based on the policy related effectiveness principles, criteria's and indicators. The questions were first developed in English and then translated in to two local languages-Amharic and Afan Oromo language. Finally, the interviews were conducted with those selected key informants, using the two local languages based on their knowledge. Based on the adequacy and saturation of the desired data, the researchers stopped conducting further interviews.

In addition to the primary data, relevant secondary documents, both federal and regional documents, were consulted. Hence, the 2003 Oromia forest proclamation, the Federal Democratic Republic of Ethiopia (FDRE) constitution, the 1994, 2007, and 2018 national forest proclamations, and the 2007 national forest policy were all reviewed for this research.

Framework of Analysis

The analyses of the Ethiopian forest policies were made based on the policy related effectiveness of the PCI (principle, criteria and indicators) approach shown in Table 1 below. The PCI approach is based on four principles, namely ease of implementation, legitimacy, coherence, and transparency. These four principles can be developed further by identifying criteria that are consistent with each principle, and indicators of compliance for each that reflect current practices. The PCI approach is relevant for this study because its principles relate to the core of debate in the policy circles (Bird et al., 2013). Thus, this analysis of Ethiopian forest policies addresses the following four questions:

- Are policies designed for ease of implementation?
- Is the legitimacy of policies recognized by stakeholders?
- Are regional policies coherent with national development policies?
- Do policies promote transparency in finance delivery?

Table 1: Policy-related effectiveness principles, criteria and indicators (PCI)

Principle	Criteria	Indicators
Are policies designed for ease of implementation	Policy objectives are clearly expressed	Targeted objectives are listed in the policy documentation. Timelines to achieve the set policy objectives are articulated in the relevant policy documents. The method for mobilizing financial resources to implement the policy is contained within the policy statement
	Subsidiary instruments for implementation accompany the policies.	Subsidiary instruments to achieve specific policy objectives are identifiable within the policy documents. Timelines are in place to establish appropriate subsidiary instruments. Appropriate subsidiary instruments are published in the authority's legal newspaper.
Is the legitimacy of policies recognized by stakeholders?	Key stakeholders' interests are represented in policy-making processes.	Policy-making platforms exist, where key policy decisions are made (e.g. policy working groups, expert working groups, sector working groups). Existing policy platforms provide for representation of key stakeholders from both government and civil society. Existing policy platforms provide opportunities for stakeholders to contribute to the policy-making process.
	Policy-making is evidence-based.	The policy formulation process is preceded by, and benefits from, background analytical work. Policy think tanks and research institutions provide evidence-based analysis to support the policy process. Relevant policy documents contain explicit references to background analytical work and contributions from policy think tanks.
Are policies coherent with national development policies?	Policy statements acknowledge national development goals.	Reference is made to national development
	Actions are consistent with strategies and planning processes for national development.	Strategy documents and national development goals refer to each other
Do policies promote transparency in finance delivery**?**	Policies provide for the establishment and operationalization of mechanisms and modalities to promote transparency.	Mechanisms and modalities exist to promote transparency of finance

Source: Bird et al., 2013 ; Simane and Bird, nd

The PCI approach has been used in different studies with some variations among the approach's theoretical framework and its purposes. For instance, Colfer et al. (1995) explored the people-forest interface. Based on literature review and field tests of five sets of criteria and indicators (C&I) in Indonesia and Cote d'Ivoire, the authors identified two principles and six criteria, defined as fundamental to the benign human involvement in sustainable forest management. The two principles are: (1) Forest management should maintain or enhance the flow of benefits from forest resources, with access generally perceived as just by all stakeholders, and (2) The voice of all stakeholders must inform forest management. Based on these principles, six criteria were developed. Generally, the criteria and indicator approach developed by Colfer et al. (1995) emphasizes the implementation side of policy making, while the PCI approach with its principles, criteria, and indicators, is more relevant to the policy development and implementation aspect of policy making.

In the realm of policy, Bird et al. (2013) developed the policy-related effectiveness principles, criteria, and indicators (PCI) approach to examine climate change policies that have different principles, criteria and indicators. The PCI approach is different from the C&I one because it has four different principles—ease of implementation, legitimacy, coherence, and transparency— developed based on literature that underpins the development and implementation of policy. Furthermore, the framework was developed for examining policies specifically applicable to climate change policy development of a given country, but has not been applied to a specific study. Based on the review, however, it has been realized that this framework can be applied to any policy, and hence, applied to forest policy and this study.

Method of Data Analysis

Structured interview questions were first prepared in English and then translated and administered in two local languages—Amharic and Afan Oromo (Oromic). The results were recorded using recording materials based on the consent of the respondents. Then, the audio was transcribed and translated into English. Subsequently, it was repeatedly read and categorized under the four principles of policy related effectiveness PCI. These are policies ease of implementation, legitimacy, coherence and transparency. Finally, it was analyzed using descriptive data analysis method. Furthermore, it was supported by content analysis

of the federal constitution, the 1994 forest proclamation, the 2007 federal forest policy and proclamation and the 2018 federal forest proclamation.

Results and Discussions

Evolution and Development of Forest Policy in Ethiopia

Forest policy was developed for the first time in 2007 in Ethiopia, which makes it a relatively recent phenomenon in the country's history. Prior to 2007, there were enactments and legislations concerning forestland ownership, utilization, and conservation over a period of time. For instance, in 1965, during the reign of Emperor Haile Selassie I, three consecutive proclamations No. 225, No. 226, and No. 227 were enacted, which respectively recognized three forms of forests; namely, state forests, private forests, and protected forests (Nune, 2007).

In 1980, the Derg repealed all the 1965 forest proclamations and proclaimed a new law that reflected its ideology, i.e., Forest and Wildlife Conservation and Development Proclamation No. 192/1980, which recognized three new types of forest ownership; namely, state ownership, ownership by peasant associations, and ownership by urban dwellers associations (Ibid, 2007). During the transitional period (1991-1995), immediately after the fall of the Derg regime, the FDRE government adopted a new proclamation known as Forest Conservation, Development, and Utilization Proclamation no. 94/1994, annulled the former proclamations, and recognized three forms of forest ownership, namely—state, regional, and private. Within well-established set of rules for forest management and conservation, the 1994 proclamation gave a more significant role to private sector participation in wood harvesting and processing (Mekonnen and Bluffstone, 2007).

The first forest policy in Ethiopia was adopted in April 2007 under the FDRE government, which gave due attention to forest development and conservation considering the significance of forests to the national economy, food security, and sustainable development of the nation (Nune, 2007). Immediately after the policy was developed, the Forest Development, Conservation and Utilization Proclamation No.542/2007 was enacted to give legal ground for the policy, which recognized two types of forest ownerships—state and private forest ownership (Ibid, 2017). However, while some issues were specified in the policy, they were not addressed by the 2007 forest proclamation. In particular, specific incentives were mentioned in the policy but not in the proclamation. One of them was the possibility of exemption from payment of land tax for land allocated to trees/forests in an

agroforestry system and the provision of credit services for individuals involved in forest development (Mekonnen and Bluffstone, 2007).

In 2018, another proclamation known as the Forest Development, Conservation, and Utilization Proclamation 1065/2018 was enacted. It is the latest forest law governing the forests of the country. The 2018 proclamation repealed the previous Forest Development, Conservation, and Utilization Proclamation No. 542/2007. It classified forests into four types: private, community, association, and state. The 2018 proclamation also recognized participatory forest management.

Forest Policies Ease for Implementation

This section assesses whether the policy objectives are clearly set out and whether subsidiary instruments are identified for the ease of implementation. The forest policy has both general and specific objectives. The general objectives of the 2007 forest policy were to meet public demand in forest products and foster the contribution of forests in enhancing the economy of the country through appropriately conserving and developing forest resources. The policy emphasized economic development, focusing on how to meet forest product demands of the society and increase the contribution of forest resources to the national economy. According to Ayana et al. (2012), given the long-standing advocates for forest conservation in Ethiopia, it was rather strange to have such one-dimensional, production-focused policy objective under the general objective.

The specific objectives of the policy include: 1. To encourage sustainable forest development by rendering professional and technical assistance to farmers, pastoralists, investors and institutions engaged in forest resource development; 2. To adequately meet the forest and forest product demands of the public through sustainably enhancing the production of forest resources in areas that are suitable for forest and forest resource development; 3. To foster the contribution of forest resources to food security and industrial development through the identification, rejuvenation, multiplication and distribution of tree species that are suitable for our country and capable of giving diverse benefits; 4. To lay the foundation wherein forest resources deliver all-embracing services to the country in a sustainable manner through the prevention of threats as well as the conservation and development of forest resources; 5. To ensure maintenance of the natural ecological balance through adequately conserving and developing the forest resources of the country.

These specific objectives are actually attainable but it is difficult to measure how well they have been accomplished. Furthermore, the time for achieving them had not been clearly stated in the document. In addition, the method for mobilizing financial resources to implement the policy had not been included in the policy statement. According to key informants, the financial resources needed to implement the policy were budgeted by the government upon the request of the concerned government bodies. Similarly, based on the 2004-2005 review, Europe recognized that one of the main concern to the European forest policy was that the goals of the European Union forest strategy were vaguely specified, and therefore, tools and instruments to implement the Strategy were not well targeted (Tikkanen, 2005). Due to this, it was challenging to evaluate the effectiveness and efficiency of the forest strategy.

Regarding subsidiary instruments, the Forest Development, Conservation and Utilization Proclamation No.542/2007 was enacted immediately after the development of the policy. This proclamation attempts to provide legal grounds for the Forest Development, Conservation and Utilization Policy and Strategy of 2007 (Ministry of Environment, Forest and Climate Change, The National REDD+ Secretariat and Oromia REDD+ Coordination Unit, 2017). However, directives and guidelines were not developed to ease the process of the implementation of the policy (Ayana et al., 2012). Hence, the absence of concrete implementation regulation and directives in Ethiopia in general and in Oromia Regional State in particular has been considered to be a hindrance for the effective implementation of this proclamation

The Oromia Regional State has not developed the regulations and directives for the further implementation of this policy. Instead, the Regional State is committed to implement the Oromia Forest proclamation of 2003. The FDRE government, on the other hand, has developed the Forest Development, Conservation and Utilization Proclamation 1065/2018 and underlined the need for other regional states to develop a regulation and directives to further implement it. But, the Oromia Regional state has not yet done so. The main reason for this, according to the experts from Oromia Environment, Forest and Climate Change Authority, is that there is no consensus or common understanding between the federal and the regional offices. The regional offices believe that they have the power to enact the regional forest proclamation. But, the federal offices refer to the FDRE constitution article 51 (5) and argue that the power to enact the forest proclamation belongs to the federal

government; the regional government can develop and enforce regulations and directives only. Because of this, the recent proclamation has not been developed as a further instrument in the Oromia regional state.

The Legitimacy of the Forest Policy

According to the federal policy experts, researchers, experts from concerned NGOs, and experts from the regional states, did participate and provide input when the 2007 forest policy and the 2018 forest proclamation were formulated. However, according to the expert of the Oromia Environment, Forest and Climate Change Authority, the regional offices have not fully participated when the 2018 forest proclamation was enacted. They were invited to familiarize themselves with the policy rather than to provide input. Hence, the forest policy-making was top-down and centralized.

Similarly, the policy making in Nepal is also centralized. In this respect Ojha et al. (2007) argued that despite the rhetoric of participatory development, decentralization and democracy, actual policy decisions on forestry in Nepal continued to be captured by forest officials, who have both scientific and bureaucratic authority. The participation of civil society in forest policy making is also limited in Nepal.

The policy experts further stated that the major problem was on the implementation of the forest policy. For instance, the 2007 policy allows for the establishment of private forests. However, starting in 2007 and up to now, nothing has been done to realize it. The private sector needs credit to invest in forests. But the Ethiopian Banks give loans only for up to 15 years and with high interest rates. However, mostly investors who are engaged in forest development, need more than 15 years to harvest the forests they've planted. Hence, nothing is done on the ground and there are no medium and large private forest investors.

Generally, there is no common understanding between the federal Environment, Forest and Climate Change Commission and the regional Environment, Forest and Climate Change Authority. Instead of developing regulations and directives to further implement the 1065 /2018 federal forest proclamation, the Oromia Environment, Forest and Climate Change Authority committed to implementing the 2003 Oromia Forest Proclamation, which has content differences with the newer federal proclamation because the Oromia Authority believes that it has the power to enact the regional proclamation. But the federal office has

argued that it is the power of the federal government under the FDRE constitution article 51(5), which states that the federal government shall enact laws for the utilization and conservation of land and other natural resources. The constitution gives the regional state the power to administer land and other natural resources in accordance with federal laws (article 52, D). However, starting in 2003, the Oromia forest proclamation has been active in Oromia regardless of the existence of 2007 and 2018 federal forest proclamations. Similar case was also happened in Nepal. According to Ojha et al. (2007), whilst Parliament is considered as the ultimate and legitimate source of any regulation binding on citizens, according to the 1990 Constitution of the Kingdom of Nepal, the decisions by various layers of government actually modified or brought additional binding provisions that were often contrary to the spirit of the law formulated by the parliament. Hence, common understanding has to be created between the different layers of government.

Coherence with National Development Policies

Although the 2007 Forest Policy and Strategy document did not reference the national development policies and developed early, it has coherence with both the Growth and Transformation plan I and the Growth and Transformation plan II. This means their priority is the same i.e to increase the GDP contribution of the forest sector. Furthermore, both intended to increase the forest cover. For instance, During the GTP I (2010/11-2014/15), forest coverage of the country increased from 13.0 million hectares in 2010/11 to 15.93 million hectares by the end of 2014/15 (National planning Commission, 2016). Furthermore the GTP II (2015/16-2019/20) had planned to increase the forest cover from 15.5% in 2015 to 20% in 2020 (National Planning Commission, 2016) and the sectors GDP contribution to 10% by the end of GTP II. In 2015, the sector's contribution to the national GDP was 3.3% (Ministry of Environment, Forest and Climate Change, 2018).

However, according to forest policy experts, the 2007 forest policy and proclamation and CRGE document, which was developed in 2011, do not read each other. This was one of the factors that initiated the enactment of Forest Development, Conservation and Utilization Proclamation 1065/2018. Ethiopia has initiated the CRGE strategy to safeguard the country from the adverse effects of climate change and to build a green economy that will help realize the goals set in the GTP I. The Climate-Resilient Green Economy baseline scenario showed that agriculture and forestry together contribute 85% of the country's total GHG emissions, out of which emissions from the forestry sector account for approximately 37% (FDRE 2011: cited in Ministry of Environment, Forest and Climate Change, 2018).

The CRGE sets the target to afforest/reforest three million hectares and improve management of four million hectares of forests and woodlands (Ministry of Environment, Forest and Climate Change, 2018).

Similar problem of lack of coherence with regard to EU (European Union) forest related policies is observed in European Union (Aggestam and Pulzl, 2018). For instance, the 20-20-20 targets of the Climate and Energy Package are in potential conflict with the targets of the new EU Biodiversity Strategy (Winkel et al., 2013).

Transparency in Finance Delivery

The sources of finance for the implementation of the 2007 forest policy and proclamation and the 2018 forest proclamation were specified in neither the policy nor the proclamation. According to the experts from the Environment, Forest and Climate Change authority, the sources of finance to implement the policy and the proclamation should have come from the government as it was responsible for their development. The responsible government office was supposed to plan and request the government to allocate the necessary financial resources. However, the Environment, Forest and Climate Change Authority is not the sole body that governs the forests. In addition to it, the Forest and Wildlife Enterprises and the community (through participatory forest management) are authorized to govern the forests as they have different sources of finance under their jurisdiction. The Oromia government had given the power to protect, conserve, use, and manage the forests in Oromia through concession to Oromia Forest and Wildlife Enterprises. This office does not receive its budget from the government, but derives its revenue from the sale of plantation forests. Financially, it is independent from the government offices. The communities are also organized into forest-dwellers associations and community-based organizations and have an agreement with the government to co-govern the forests under their jurisdiction. They have their own offices and budgets to govern the forests that they were given by the government via this agreement—they are given the power to protect, conserve, use, and manage the forests under their control. In short, the sources to finance for the implementation of the forest policy and the proclamation come from different sources—both from the government and other bodies like Forest and Wildlife Enterprises and communities. But, according to the experts, the government has allocated an insignificant amount of funds to its offices, which has become a barrier for the effective implementation

of the policy and the proclamation. The problem is not one of transparency of finances but a lack of government funds, allocated to the effective execution of the required activities.

Findings of the PCI approach in relation to the Ethiopian Forest Policy

The policy-related principle, criteria and indicator (PCI) approach is effective in enabling us to explore the challenges of forest policies in Ethiopia in general and the Oromia regional state in particular. As summarized below, we found that the 2007 and 2018 forest policy and proclamation were not designed for ease of implementation; the legitimacy of the policy was more or less recognized by stakeholders; and the policy was coherent with national development goals, in particular with GTP I and II; Finally, we also found that the policy did not promote transparency in finance delivery.

Table 2: Summary of the Ethiopian forest policies based on the policy-related effectiveness principles, criteria and indicators (PCI) approach

Principle	Criteria	Indicators
The policies are not designed for ease of implementation	Policy objectives—both the general and the specific objectives—are expressed clearly, but the general objectives prioritize economic development while the specific—forest sustainability.	Targeted objectives are listed in the 2007 forest policy. Timelines to achieve the set policy objectives are not articulated in the 2007 federal forest policy. The method for mobilizing financial resources to implement the policy is not contained within the policy statement
	The 2007 and 2018 Proclamations were developed, but further regulations were not developed in regional states, specifically, in the Oromia regional state.	Subsidiary instruments to achieve specific policy objectives are not identifiable within the 2007 policy documents. Timelines are not in place to establish appropriate subsidiary instruments. Appropriate, but not enough subsidiary instruments are published in the authority's legal newspaper.
The legitimacy of the policies is more or less recognized by stakeholders.	Key stakeholders' interests are not represented in the forest policy-making processes, particularly the interest of Oromia regional state.	Policy-making platforms exist, where key policy decisions are made. Existing policy platforms provide for representation of key stakeholders from both government and civil society. Existing policy platforms had not provided opportunities to let all stakeholders to contribute their best to the 2007 and 2018 forest policy-making process.

	Policy-making is evidence-based.	The 2007 forest policy formulation process is preceded by, and benefits from, background analytical work. Policy think tanks and research institutions provided evidence-based analysis to support the policy process. The 2007 federal forest policy documents have not contained explicit references to background analytical work and contributions from policy think tanks.
The 2007 forest policy is coherent with GTP I and II, but not with CRGE	The 2007 Forest policy statements did not acknowledge national development goals.	Reference is not made to national development plan, but emphasis is given to the economic contribution of it
	Actions were consistent with strategies and planning processes for national development.	The policy documents and national development goals mostly refer to each other
The 2007 forest Policy did not promote transparency in finance delivery**.**	Of course, it is not transparency that is the major problem here, but lack of adequate funds for the work of Oromia Environment, Forest and Climate Change Authority.	Mechanisms and modalities do exist to promote transparency of finance

Conclusion and Future Policy Implications

After 1991, Ethiopia became a federal state and hence, authority and responsibilities were transferred to the regional states. Regarding policy making, the adoption of federalism allowed regional states to formulate and execute their own economic, social and development policies. However, the forest policy making is yet top-down and centralized in federal Ethiopia. The federal government is authorized to constitutionally formulate forest policy which is then implemented by the regional state. Beyond this, the Oromia Regional State raised the question about the autonomy of regional forest policy making and hence, was not willing to further develop regulations and directives based on the existing federal forest policies and laws. The authorities have not been able to develop a sense of ownership for the existing federal forest policy and laws at the regional level. The question here is how the policies are translated in to the grassroots levels for implementation if not owned by a regional state? Can regional autonomy in forest policy making be granted under the existing condition without amending the constitution? If granted, does it give regional states the freedom of not aligning their forest policies and laws with the federal ones?

Generally, the federal forest policy and proclamations are not easy to implement because further regulations and directives are not developed for the implementation of the policy and the laws at the regional level, specifically in the Oromia regional state. In addition, a lack of adequate budget allocation, particularly for monitoring and evaluation, has been a big challenge for the effective implementation of the policy. Besides, the federal government has not arranged for long term credit (for more than 15 years) for private investors willing to engage in forest development. Regarding the 2007 forest policy, policy objectives were not measurable and the specific timeline for their achievement was not outlined in the document.

Apart from all this, researchers, experts from concerned NGOs, and experts from regional states, more or less participated and provided input when the 2007 forest policy and the 2018 forest proclamation were formulated. But, the interests of all stakeholders have not been addressed as has shown to be the case in the Oromia Regional State.

In addition to all these challenges, there is a discrepancy in the prioritization of the policy goals—as the main goal of a forest policy should be to prioritize the sustainable management of forests rather than their exploitation. That was not the case with the reviewed policy documents in this research. We saw, for instance, that the 2007 forest policy prioritized economic development rather than sustainable forest management. Since policy is a tool to realize a certain goal, what is prioritized has an impact on the sustainable management of the forests. If emphasis is given on the economic development, subsequently, the sustainability of the forests becomes disregarded. Therefore, balancing the economic contribution of forests with their sustainable management should be an extremely essential element in any forest policy.

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Paper Two: The Role of Stakeholders in Forest Governance: the Case of Bale Eco-Region, South Eastern Ethiopia.

Abstract

This study assesses the practical role of stakeholders in forest governance taking Bale Eco-Region as a case study. Data was collected through in-depth interviews and focus group discussions with both the primary stakeholders (government and organized forest communities) and secondary stakeholders (NGOs, research institutions and Media). Regardless of the various efforts and contributions made by different stakeholders, deforestation and forest degradation have continued and the livelihoods of the local community have not been improved as expected. Hence, empowering those critical stakeholders to enable them effectively discharge their roles that in turn ultimately realize sustainable forest management and livelihood improvement is highly required.

Key terms: forest governance; stakeholder's participation; participatory forest management; forest dwellers associations; community-based organizations.

Introduction

Traditional forest management had been mostly practiced across the world until the 19th century. This kind of forest management had been practiced in Europe (Gilmour, 2016) and other parts of the world. However, the customary laws and institutions were gradually faded away with the advent of industrialization and modernization in the 19th century. During colonial time, forest management was characterized by the imposition of "scientific forestry" where central governments assumed all rights over forest access and management and attempted to manage forests to maximize timber production for the benefit of the colonizing power and/or the state (Ibid, 2016). The communities, as well as other concerned stakeholders at that time, had no legal rights, access and economic incentives to manage and use forests (Wily, 2001, cited in Alhassan, 2010). In the aftermath of colonialism, centralized governments in the developing world took it upon themselves to govern all of the valuable resources under their territorial control (Andersson, 2006).

Later on, it was decentralized in most countries of the world with the intention to efficiently conserve and improve rural and forest-dependent livelihoods (Hajjar et al., 2012). The devolution of control over the world's forests from national or state level governments to local control is an ongoing global trend that deeply affects all aspects of forest management, conservation of biodiversity, control over resources, wealth distribution and livelihoods (Monditoka, 2011). Because, decentralization and networks of community-based forest

groups (forest federations) are often viewed as a means of promoting good forest governance that is more responsive and adaptive to local needs, especially those of the poor and underprivileged (Suryanata et al.,2003). However, in practice, decentralization and devolution have been only partially realized and many governments retain significant authority over forest management (Gilmour, 2016). Today, a much larger number of actors have come to influence how environmental assets are used (Andersson, 2006).

In Ethiopia, the socialist regime known as Derg (1974-1991) nationalized all the forest resources of the country, acting not only as the exclusive owner but also as a sole developer (Gobeze et al., 2009). During this time, the forest was protected by guards and the communities were considered as enemies of forests. Later on, in response to deforestation and also as a result of the political shift following the coming of the Ethiopian People Revolutionary Democratic Front (EPRDF) to power in the early 1990s, two major forest governance reforms took place in Ethiopia (Ayana, 2014). The first is that the national government devolved the authority to administer forest to regional governments. The second reform was taking place in the mid-1990s when pilot projects of the decentralized participatory forest management (PFM) approach began. Contrary to the former approach, it is known in giving more room for the participation of NGOs and local communities. Some NGOs especially GTZ, FARM Africa and SOS Sahel Ethiopia had initiated the approach in most parts of the country. The local communities, on the other hand, are organized into Forest Dwellers Associations and community-based organizations to jointly administer the forest resources with the government. Currently, nearly one-third of the country's high forests are under the organized local communities (PNMU, 2013, cited in Ayana, 2014). Here the community is not a mere participant but they are also part of the decisions and managers of the forest resources that are transferred to them through agreement. Generally, various stakeholders like governments, communities, and NGOs are currently playing their parts in forest governance in Ethiopia (Gobeze et al., 2009).

It is widely agreed among the policymakers and national planners of most countries that states cannot adequately manage and police large public forestry estates and protected areas without public involvement and support (Banajee et al., 1997). This justifies the need for the involvement of the community in forest governance with the intention to create a sense of ownership in them which, in turn, enables them to sustainably manage the forest while benefitting from it either directly or through carbon trading. According to Kessler (2004), "With involvement comes understanding, with understanding comes public support and commitment." It also reduces the marginalization of the weak sections of the society,

enables interventions and technologies to be better adapted to local socio-cultural and environmental conditions (Reed, 2008) and enhance legitimacy (Kessler, 2004). It is also widely agreed among the literature that participation boosts compliance because it will increase stakeholders' knowledge, commitment, and support if they had a say in the process. Contrary to this, there are challenges to stakeholders' participation such as delay in decision making, increased expenses, tension among stakeholder groups, and lack of consensus (Kessler,2004). Hence, participation alone is not a panacea that solves all forest-related problems (Banajee, 1997) unless the relevant stakeholders have effectively carried out their responsibilities. Besides this, there is a lack of substantial empirical investigation or research regarding stakeholders' participation (Grimble and Wallard, 1996) particularly on their role in forest governance.

The Bale Eco-Region is among the pioneers in the implementation of participatory forest management in Ethiopia. Starting from 1998, the implementation began with the formation of the Forest Dwellers Associations (WAJIBs) in Adaba and Dodola. This Forest Dwellers Associations was formed taking in to account the carrying capacity of the forest. Following this, another form of participatory forest management approach also known as community-based organizations (CBOs) have been established in other parts of Bale Eco-Region. However, the establishment of these participatory forest management has not brought the expected results of reducing deforestation and improving the livelihoods of the community. Only limited members of the Forest Dwellers Associations had got direct financial benefits from it, while the members of the CBOs have not yet got any direct financial benefit from it. On the contrary, the efforts of the main stakeholders especially the government, community, and NGOs cannot be underestimated. Thus, examining the roles of those stakeholders and identifying their weaknesses may alert them to take corrective measures which are vital to realize the intentions of PFM. Regarding literature also, there is a knowledge gap as other writers (e.g.. Saguye (2017), Tadesse (2016), Ayana et al., (2015), Lemenih et al. (2015), Ayana (2014), Engida and Mengistu (2013), Engida and Teshoma (2012), Winberg (2010), Gobeze et al., (2009) and Lemenih and Bekele (2008)), emphasized on other aspects of participatory forest management. Due to this, the role of stakeholders in forest governance in Ethiopia in general and Bale Eco-region, in particular, is overlooked in the former studies. Hence, the purpose of this study is to examine the role of stakeholders in forest governance taking Bale Eco-Region as a case study.

Theoretical Framework

Forest Governance and Governmentality

The practical shortcomings and theoretical criticism on state forestry gave rise to the concept of forest governance (Arts,2014). To be more clear with forest governance, it is good first to conceptualize governance. Governance can be conceptualized as a process involving the interaction of multiple actors, including state, private and civil society to influence decision making (Mushonga, 2012). Similarly in forest governance, the authority and competencies have moved away from the state to other bodies, like international organisations, NGOs and businesses (Pierre and Peters, 2000, cited in Arts, 2014). Instead of being the authority from the top, the commander or the controller, the state has now become an (more) equal partner vis-à-vis private and civic ones in new governance networks and partnerships (Arts,2014). Thus, the shift has taken place from government to governance.

Forest Governmentality: Governmentality was first conceived by Foucault in 1970s (Rose et al., 2009). It questioned whether the shift from government to governance has actually happened in modern state. Crucial in this approach is that current government by the state and self-governance by communities and individuals are intrinsically intertwined (Arts and Visseren-Hamakers, 2012). Therefore, government is not so much about governing others, but about letting others govern themselves ("conduct of conduct") (Arts and Visseren-Hamakers, 2012; Arts, 2014). According to Arts (2014), two branches of governmentality studies are particularly relevant for forest governance, one on political reform and neoliberalism and one on the environment. The first branch theorizes about governance reform as 'control at a distance' by the state. The second branch of literature focuses on the creation and self -confirmation of environmental subjects and of forest-related identities by states and NGOs. The creation of forest-dwellers association and community-based organization in the Bale Eco-Region can be categorized in the later one. Hence, it can be applied to this study.

Methods

Research Design

A descriptive research design is identified as appropriate for this study as the issue requires an in-depth description of the role of all relevant stakeholders. Consistent with the design, a qualitative research approach was followed. Qualitative research often involves a rich collection of data from various sources to gain a deeper understanding on the issues of concern

(Nassaji, 2015). Based on the research approach, relevant data gathering tools such as interview and focus group discussion were identified as appropriate and hence, used to gather the desired data.

Data and Sampling

Both primary and secondary data were collected using interviews, focus group discussions and document review. The primary data for this research were collected from West Arsi, East and West Bale Zones. It was collected from Environment, Forest and Climate Change Authority at regional and local levels, Oromia Forest and Wild Life Enterprises, NGOs, Forest Dwellers Associations, Community Based Organization, Unions, Cooperatives, Research institutions, and Media through in-depth interview and Focus group discussions. Secondary data was obtained from published and unpublished material such as books, and peer-reviewed journal articles to strengthen the argument.

The qualitative research approach was selected as appropriate depending on the nature of the issue. This means the issue requires in-depth description of the role of various stakeholders in forest governance. Thus, as it can be seen from Table 1, 70 respondents were consulted through purposive and snowball sampling for an in-depth interview and focus group discussions (FGDs). As the study is qualitative research, the number of the respondents is not predetermined, instead, it is based on the saturation of the data. When the data-saturated, the researcher stopped going further.

Table 1. Qualitative Sample Size

Categories of respondents	Numbers	Affiliation	Methods of data collection
Oromia Environment, Forest and Climate Change Authority	10	Experts	In-depth interview
Oromia Forest and Wild Life enterprises	10	Experts	In-depth interview
NGOs (Farm Africa and SOS Sahel Ethiopia)	5	Experts	In-depth interview
Forest Dwellers Associations (WAJIBs)	16	Leaders and members	In-depth interview and Focus Group Discussion

Community Based Organization	16	Leaders and experts	In-depth interview and Focus Group Discussion
Unions	3	Leaders and members	In-depth interview
Cooperatives	5	Executive committee	In-depth interview
Research institutions (Madda Walabu University)	3	Researchers	In-depth interview
Media (Shashemene FM)	2	Journalists	In-depth interview
Total	70		

Data Collection Methods

Consistent with the research approach, qualitative data was gathered through in-depth interviews and focus group discussions. 46 experts and leaders were selected and consulted for an in-depth interview. Interviewing with various actors enabled the researcher to capture in-depth information and the diverse view of the respondent on the role of stakeholders on forest governance. It was conducted with experts and leaders because of their better experience and knowledge on the issue of concern. In addition to this, 4 FGDs, each having 6 members, were made with the foresters mainly to triangulate the reliability of the data. Similar guiding questions were also used for the interview and FGDs to triangulate the data.

Methods of Analysis

Descriptive analysis was employed. The goal of descriptive research is to make detailed description of a phenomenon and its characteristics (Nassaji, 2015). To do this, first similar interview and focus group discussions guides were prepared and administered. The results were recorded using recording materials based on the consent of the respondents. Both interviews and FGDs were undertaken in the local language Afan Oromo (Oromic). Then, the audio was carefully transcribed and afterwards, it was translated into English. Following this, it was repeatedly read, coded and thematic areas were identified. Finally, the interpretation and analysis were carried out through descriptive analysis.

Results

Identification and Categorization of Stakeholders in Forest Governance

Currently, in Bale Eco-Regions, forest governance is open for the participation of all critical stakeholders regardless of its relative failure in bringing the desired outcomes. In this regard, the government and the community are jointly governing the forest in the area of concern. On the side of the community, there is forest jointly ruled by the community and government through participatory forest management in which the Union, Cooperatives, Forest Dwellers Associations and CBOs are playing their part in its governance. On the part of the government, there is forest protected, conserved, used and managed by the Oromia Forest and Wild Life Enterprise. On top of this, state is playing regulatory role through Environment, Forest and Climate Change Authorities of the Zone and Weredas. In addition to these primary stakeholders, secondary stakeholders like NGOs (non-governmental Organizations) particularly FARM Africa and SOS Sahel Ethiopia, research institutions and media are playing supportive role in the forest governance of Bale Eco-region.

Trends of Stakeholders Participation in Forest Governance in Bale Eco-Region

After the overthrow of the Derg regime and coming of EPRDF (Ethiopian People Revolutionary Democratic Front) to power in 1991, the government of the Federal Democratic Republic of Ethiopia (FDRE) devolved power to regions which enabled them to have their own executive, legislative and judicial organs of government. Based on this, the Oromia Regional Government was established and began to rule over Oromia Region where Bale Eco-Region is located. Hence the power to administer natural resources in general and forest resources in particular which are found in Oromia fail under the jurisdiction of Oromia regional government.

Based on this, the Oromia Regional Government established Oromia Forest and WildLife Enterprise in 2008 and gave it the power to administer forest found in Oromia Regional State. Part of the forest in Oromia was, therefore, transferred through concession to Oromia Forest and Wildlife Enterprise. The enterprise was given the power to manage, conserve and use forest and forest products in Oromia. It governs both plantation and natural forests. Before the establishment of Oromia Forest and Wildlife Enterprises, forest in Bale Eco-Region was ruled through two ways. The first one was through a centralized way that requires the respective government office to protect and conserve the resources. Before 1998, the government directly protect forest through its guards who looks after it. The centralized approach restricted the local community from using the forests. In 1998 another

approach the so-called participatory forest management was introduced. This approach is known for giving space for community participation in forest governance. The community was recognized as one of the critical stakeholders particularly in Dodola and Adaba and began to jointly administer forests with the government. The typical example of participatory approach is the Forest Dwellers Associations of Adaba- Dodola and the CBOs (Community Based Organizations). In Forest Dwellers Associations, the government allowed the community to manage, conserve and use forests. This approach was first initiated by the NGO known as GTZ in Adaba and Dodola in 1998. The Forest Dwellers Associations is a group of foresters who are organized and subsequently authorized to jointly rule over forest along with the Government. One group is composed of 30 foresters who are given the power to manage, conserve and use 360 hectares of forests. The group was organized considering the carrying capacity of the forest which means 12 hectares per household. Later on, further studies were carried out to determine the capacity of forests which reduced it to 8 hectares per household.

The other example of participatory forest management are the CBOs (Community Based Organizations). This type of participatory forest management was first initiated in Bale Eco-Region in 2006 by the NGOs known as FARM Africa and SOS Sahel Ethiopia. It didn't take into account the carrying capacity of forest resources and hence, everyone living in the kebele can be members of the CBO. Here, the number of hectares that is ruled by the given household is not determined as it is the case in the Forest Dwellers Associations.

The Practical Role of Stakeholders in Forest Governance in Bale Eco-Region

As it is clearly shown above, the critical stakeholders were incorporated in the governance of forests in Bale Eco-Region. However, the participation of these critical stakeholders alone has not brought the desired results which motivated the writers to examine the practical roles that each stakeholder is currently playing. Generally, based on their role in governance, stakeholders can be classified into primary and secondary stakeholders. Primary stakeholders are those who have the power to directly participate in the governance of the forests. Those stakeholders include the government and the community. Whereas secondary stakeholders are those who do not directly govern, but they are those who provide support in the form of providing materials and information and also shapes the decisions and implementation of forest governance. It includes NGOs, research institutions and media. Hereunder an attempt is going to be made to critically discuss the role of each relevant stakeholders in tandem.

The Roles of Primary Stakeholders in Forest Governance

The Role of Government in Forest Governance

The experience of the Bale Eco-Region shows that the forests cannot be ruled by a single actor. Hence, various relevant actors are playing their part in its governance. From these actors, government bodies are one of the known actors that are working to manage forests and forest products. From the government bodies, the Environment, Forest and Climate Change Authorities are playing a leading role in the governance of forest resources in Bale Eco-Region. This doesn't mean that with the sole efforts of them, the goals of forest management can be achieved. Because of this, other government bodies like the police, prosecutor, woreda administration, the court and agricultural office are playing their part in forest governance.

As it is shown above, the government sector contributing greatly to forest governance in Oromia Regional State in general and Bale Eco-Region in particular is the Environment, Forest and Climate Change Authority. This sector has offices at regional, zonal and Wereda levels. There are various responsibilities given to the sectors by the government. Generally, it works on the protection of the environment, forest and climate change. Under forest, it emphasizes the protection, development and sustainable use of forest and forest resources as well as on the protection, administration, and use of biodiversity. That means concerning forest its main role is the regulation of forest and forest products as well as biodiversity. The protection and sustainable use of those resources without harming the environment is its main concern.

As one regulatory body, it regulates and audits the activities of the Oromia Forest and Wildlife Enterprise and participatory forest management approaches being carried out by the local community. Whether or not their activities are being undertaken based on the agreement initially made. If they fail to carry out their responsibility as per the agreement, the office is authorized to take corrective measures. However, the office have not yet audited the activities of both of them. This is due to a lack of financial, material and human resources attributed to its recent establishment in 2017. Hence, the state of the forest after it has been transferred to these two institutions is not well known.

The sector is authorized to give the legal permission to those forest products harvested keeping the forest law of the country in general and the region in particular. The Oromia Forest and Wildlife Enterprises, as well as the Forest Dwellers Associations and community-based organization (CBOs) are required to receive pass permits from the Environment, Forest and Climate Change Authority to transport and sell forest products.

The authority is greatly working to separate the illegal forest products from those legally being transported into the market centers. As the forest products are highly demanded in the markets, there are individuals engaged on the illegal selling of forests outputs, violating the forest law. The so-called contraband is highly observed particularly in Adaba and Dodola. When this happens, the authority identifies and takes legal measure on the contrabandists.

In addition to legal measures on contrabandists, the authority together with other sectors such as Oromia Forest and Wildlife Enterprise, the police, the prosecutor and local administration takes measures on individuals contributing to the destruction of forests through illegal settlement, expansion of agricultural lands and converting forest land to grazing lands. They are some of the main causes of deforestation in Bale Eco-Region. For instance, according to the respondent, an illegal settlement is high in Bale Eco-Region. To handle this illegal settlement, a task force committee was set up. The members of the committee are from nine sectors which include Wereda courts, Police Officer, Justice Office, Environment, Forest and Climate Change Authority, Forest and Wildlife Enterprise, Bale National Park, Wereda Administration, Agricultural Office, and Land Administration Office. They work together to handle the issues of illegal settlement. When illegal settlement within the boundaries of the forest takes place, the committee identifies the measures that it should be taken. After identifying the measure that it should be taken, if the issue invites administrative measures, the committee passes it. Otherwise, they refer the case to the court. The NGOs, to strengthen the enforcement capacity of the government, were giving financial support to the committee.

Oromia Forest and Wildlife Enterprise (Public- Private Partnership)

The Oromia Forest and Wildlife Enterprise is another office working on forests in Bale Eco-Region. It is a manifestation of public-private partnership in the study area. After it has taken part of the forest through concession in 2008, the enterprise began ruling over the forest under its jurisdiction. Generally, it has founded nine branches and thirty-eight districts throughout Oromia Regional State to ease the administration of these vital resources. The enterprise has given the responsibility of managing, conserving and sustainably using the forest and forest products found in the Oromia Regional State. While it emphasizes the plantation forests, the enterprise also administers natural forests.

In Oromia regional state, most of the plantation forests are found under Oromia Forest and Wildlife Enterprise. The office, after assessing the existing market demands, sells the forest and forest products to the interested bodies. The key informant indicated that the Oromia

Forest and Wildlife Enterprise sells forest and forest products keeping its scientific procedure. It recovers areas formerly under plantation with new plantation forests. Hence, it plants and conserves trees in places where the selling of the plantation forest takes place. This is mainly to ensure the sustainability of forest resources in the area. The basic question here is that does the enterprise balanced the utilization with the plantation and conservation? Regarding this, most respondents estimated that the utilization is more than plantation and conservation. This, however, has a great effect on the sustainability of these vital resources. Concerning this, one of the existing gap is that the performance of the Oromia Forest and Wildlife Enterprise is not yet evaluated and hence, no corrective measure is taken.

This enterprise performs every one of its activities by the income that it generates from forests. The plantation, management, conservation and protection of forests undertaken by this office is done by the revenue that it generates from the selling of plantation forest. It allocates budget for each of the above activities.

All of these plantation forests are not found under the Oromia Forest and Wildlife Enterprise. As can be seen below, there are also places (particularly in Adaba-Dodola) in which the community owns a plantation forests

In general, an attempt is being made by the government offices to manage, conserve, protect and facilitate the legal use of forest and forest resources. However, it is widely agreed among the respondents that the government has given less priority for the forests (in terms of allocating the required funds) as compared to other sectors.

The Role of Community in Forest Governance

i. Forest Dwellers Associations

In its formation, Forest Dwellers Associations are given the rights as well as the responsibilities. The responsibilities of Forest Dwellers Associations includes developing a sense of ownership and protecting the forest, planting trees and keeping forest from illegal destruction and grabbing. After fulfilling these responsibilities, the Forest Dwellers Associations are given the right to sustainably use forest resources. The members are allowed to sell and use aged trees, use grazing lands and undertake beekeeping activities inside the forest.

According to the informants, the Forest Dwellers Associations were relatively effective in a year before 2015. But, starting from 2015, the Forest Dwellers Associations began to face two challenges. The first challenge comes from the instability that happened in the country

thereafter. Owing to this instability, people began highly violating the laws and hence, destructed the forests, particularly during the transition. The non-members began to claim the use of forest arguing that nature has equally provided us with these vital forest resources. The political instability created a favorable condition and hence resulted in the destruction of the forest resources. The second challenge is from demographic pressure. When the Forest Dwellers Associations were first formed in 1998, only 30 households were allowed to be members of one Forest Dwellers Association. During that time, in places where there are more than 30 households, the excess numbers are obliged to withdraw based on the times of settlement. The early settlers were given priority at that time. The then children of the members at the time of formation have now grown and claimed to be part of the Forest Dwellers Associations. Initially in its formation, the government promised to arrange ways in which those youths can be withdrawn. However, the respondents confirmed that the government failed to keep its promise. Furthermore, their withdrawal will separate families apart. Hence due to social reason and low commitment of the government to enforce, the resettlement of part of the community was not achieved. They married each other within the boundaries of Forest Dwellers Associations which in turn contributed to its failure. Hence, the capacity-based formation of the group in Adaba and Dodola to manage, protect and sustainably use forest was failed because of the existence of more households than it ought to be.

At the kebele (lower layers of government) level, different Forest Dwellers Associations form cooperative. The cooperative of different kebele come together and form union at the Wereda (district) level. The union gives different kinds of support to the cooperatives which in turn supports the Forest Dwellers Associations. To illustrate, according to the informants, Forest Dwellers Associations are allowed to sell aged trees that have finished its growth. The Forest Dwellers Associations sells them to the cooperative, which in turn sells to the union. Then, the union provides the trees to the markets. From this, some Forest Dwellers Associations accrued good benefits. Furthermore, the union and cooperatives worked with the concerned stakeholders to ensure rule of law in the Weredas particularly as regards to the destruction of forest.

In general, the local community mostly engage in the management of natural forests. But, there are also plantation forests that are currently being managed by the local community. In areas where the protection of such forests is carried out by the community, they are authorized to sell and share 50%. Through this way, some members are accruing many benefit from plantation forests. This has taken place in some kebeles of Adaba and Dodola

weredas. In the same way as Oromia Forest and Wildlife Enterprise, they are supposed to replace and plant trees which is vital for the sustainability of those resources. However, the lack of strong conservation of the planted trees is highly observed in those areas.

ii. Community-Based Organizations (CBOs)

The membership of the CBOs is open to everyone living in the kebele. An individual who is interested to be members of the CBO can be a member. CBO is different from Forest Dwellers Associations in that it doesn't take in to account the carrying capacity of the forest. Furthermore, unlike Forest Dwellers Associations, the CBO is not allowed to sell the aged trees and share the dividend among members. The CBO is expected to protect the forest and use forest products only for home consumption. For instance, by applying to their office, the members can use the forest for house construction with minimum cost. The members are also allowed to sell woods used for home consumption. Furthermore, they are allowed to engage in beekeeping and beefing. Apart from this, they do not directly derive income from forests.

Here, it should be clear that the community has got nothing directly from the REDD+ project. As it will be discussed later on, there are NGOs known as FARM Africa and SOS Sahel Ethiopia in Bale Eco-Region that is providing different kinds of material and capacity-building support to the community.

The Role of Secondary Stakeholders in Forest Governance

The Role of NGOs in Forest Governance in Bale Eco- Region

While it is widely agreed that there are only a few NGOs that are interested to work on the forest in the country in general and Oromia Regional state in particular, different NGOs are currently participating in the protection, conservation, and management of forests in the Bale Eco-Region in one way or another. For instance, before the coming of FARM Africa and SOS Sahel Ethiopia, GTZ was working on the conservation, management and sustainable use of forest in Adaba and Dodola. It was GTZ that initiated the formation of Forest Dwellers Associations in these two Weredas. After working with Forest Dwellers Associations for brief years, the GTZ had withdrawn.

The NGOs that are currently active in supporting the protection, conservation, management and sustainable use of forest in Bale Eco-Region are FARM Africa, SOS Sahel Ethiopia and Frunk Furt (active around the Bale National Park). In 2006, the FARM Africa and SOS Sahel Ethiopia came having the experience of CBO and initiated the formation of CBOs in the Bale Eco-Region. Initially, four CBOs were formed. After that, the Oromia Forest and Wildlife Enterprise, together with these NGOs, have established more CBOs in priority

areas where there are more forests. Currently, there are around 64 CBOs in Bale Eco-Region. The FARM Africa and SOS Sahel Ethiopia are currently working together and they are active in 11 Weredas in Bale Eco-Region: 4 Weredas from west Arsi and 7 Weredas from Bale Zone.

These two NGOs have been working in the Bale Eco-Region since 2006. The NGOs have begun currently the third phase of the project in Bale Zone. To be clearer with the role of NGOs, it is found vital to see each phase of the project briefly. The first phase of the project was Bale eco-region sustainable management program (BERSMP). This project is having six outputs. From these, four of them were being carried out at the grassroots level. The first one is capacity-building training on how to develop inclusive planning in Bale Eco-Region. The training was given by these NGOs to the concerned government staff. The second output was working on participatory sustainable natural resource management which is commonly called participatory forest management. Before 2006, participatory forest management was not practiced in the Bale zone regardless of its implementation in other parts of Bale Eco-region in the form of Forest Dwellers Associations in Adaba and Dodola. Adaba- Dodola PFM was among the pioneering PFM even at country level starting from 1998. BERSMP project focused on the east Bale zone and Bale Zone and initiated the establishment of the CBOs in the zones. With the support of Oromia Forest and Wildlife Enterprise, CBOs were established to ensure government-community joint administration of forest in the area. This improved the existing relations of the local community with forests. Before the establishment of CBOs, the community had no sense of ownership which is radically changed as a result of the establishment of CBOs. Because, it allowed the community to sustainably use forest resources without harming it. In addition to the above two outputs, they have also greatly undertaken capacity building activities. The capacity building training is directly given to the CBOs and government sector workers. The training attempted to capacitate leaders of CBOs, members of Oromia Forest and Wildlife Enterprise, members of agricultural office (because the forest sector was under them before the establishment of Environment, Forest and Climate change authority), land administration office and cooperatives promotion agency. In addition to the capacity-building training, FARM Africa and SOS Sahel Ethiopia had given materials supports (computer, GPS, Motorbike and others) to both the CBOs and the government bodies concerned with forest administration. In addition to these, these NGOs have worked on the livelihoods of the community where they bring no significant change upon the life of the community. The community has been/is getting nothing directly from the forest. Different

capacity-building training on how to diversify livelihoods and how to boost productivity particularly coffee is given to the community which brought no significant change upon the lives of the community

The second phase of the project of FARM Africa and SOS Sahel Ethiopia was the REDD+ (Reduction of Emission from Deforestation and Forest Degradation) project which failed to bring the expected financial benefit to the community. Under this, expansion of farm inside the forest, illegal logging, occasional wildfire, and illegal settlement were identified as major cause of deforestation. Based on it, an intervention was designed to reduce those causes of deforestation that in turn contributed to REDD+. With the contribution of the CBOs, deforestation was suppressed which resulted in the reduction of an estimated 5.5 million metric tons of carbon dioxide equivalent. This was internationally certified by an international organization and then brought to the international market for selling. But, no country or international organization is interested to buy it. The incentive that the community was to get from the selling of the carbon was not successful which resulted in their discontentment. During the training, FARM Africa and SOS Sahel Ethiopia promised to give direct payment to the community from the selling of carbon.

FARM Africa and SOS Sahel Ethiopia had also been giving capacity building training to the CBOs. This training was being given after assessing the capacity gap of the members of the CBO through OCAT (Organizational capacity assessment tools). Using this tool, the cooperative administrative capacity, finance and asset administration of the cooperative, effectiveness of the cooperatives in forest business, forest development and women empowerment in the cooperatives are assessed. Through this tool, the capacity gaps are identified and hence, interventions were designed. However, it is widely agreed among the members of the CBOs that the training is frequently given to the leader of the cooperatives who failed to transfer down to the community. Furthermore, the training is not practically realized on the ground. Coupled to this, some of the materials provided by these NGOs were not made functional especially nursery materials. Nursery materials were given to the CBOs by FARM Africa and SOS Sahel Ethiopia. But the CBOs have not yet established nursery sites and they have not begun planting trees.

The Role of Research Institutions in Forest Governance

Research institutions are vital in undertaking research and finding alternatives ways of approaching a certain issue. The research institutions found around the Bale Eco-regions are Madda Walabu University, Sinana Agricultural research institute and Wendo Genet College of Forestry and Natural resources. The role of research institutes in carrying out

the study, proposing alternative ways of tackling the problem, publicizing results and providing capacity building training on the forest is limited. According to the informants, sometimes researchers come and collect data. But we do not see their results. Hence, the results of the study are not made accessible. While it is evident that the universities have been carrying out a study on various issues in the eco-region, more emphasis is given to the other aspect of it than PFM in particular and forest governance in general.

The Role of Media in Forest Governance

The proper use of media is vital for the improvement of forest governance. Because it raises the awareness of the community on the governance of these vital resources. Furthermore, it shapes the decision of government officials. However, the study found that media as a force in the governance is playing a limited role in forest governance. Some medias such as OMN (Oromia Media Network), Shashemene FM and EBC have been contributing their part in educating and creating awareness about the current state of deforestation and forest degradation in the Bale Eco-Region. For instance, the informants indicated that the OMN has been sponsored by the Oromia Forest and Wildlife Enterprise to discuss issues of forest in Oromia Regional State. The enterprise has concluded the necessary agreement with the OMN media and makes the necessary payment to let the OMN transfer news and other relevant information regarding forest in Oromia for 20 minutes per week under the program known as "Qophi Gadisa". During this time, various issues will be presented to the people especially on the existing legislation, causes of deforestation, best practices in forest governance and the measures taken to correct the behavior of the individuals. Furthermore, the Shashemene FM has also been serving as a platform where discussion regarding forests is taking place. In addition to OMN and Shashemene FM, the experts asserted that documentaries have been done on EBC through the initiation and support of the then Ministry of Environment, Forest and Climate change (now commission)

Despite these, however, the community has asserted that there is weak coordination between media and responsible government sectors. Because, mostly the media is not willing to approach the issue of forest and forest governance unless invited and sponsored either by the government or other concerned stakeholders. On the other hand, the concerned government bodies mainly the Environment, Forest and Climate Change Authority have lack of enough budget to invite and let them produce news on the issue of concern.

Discussions

Various stakeholders have been taking part in the management of the forests particularly after the introduction of participatory forest management in the areas in the late 1990s. It

is widely argued that identifying and involving critical stakeholders in forest governance is essential for the sustainable management of forest resources. But, the participation of critical stakeholders alone is not enough unless they have effectively discharged their responsibilities. Generally, the following points can be drawn from the study. The first is that the participatory forest management has not been decentralized to the lower tiers of government keeping the formal government structure, rather it is the transfer of authority and responsibilities down to the organized communities. The second is that the communities are not empowered well enough to be in parallel with the government on decisions, but decisions are not made excluding them in the PFM.

The other point is that the intention of PFM i.e sustainable forest management and livelihood improvement (Chhetri et al.,2013; cited in Tadesse et al.,2017) have not been realized in Bale Eco-Region. Deforestation and forest degradation have been continued and the forest-dependent community livelihoods have not been improved. Only a limited number of the Forest Dwellers Associations, the capacity-based organized foresters, have got limited direct benefit in Adaba and Dodola. Currently, the Forest Dwellers Associations itself is endangered because of mainly population pressure which has become beyond the estimated capacity of the forest. On the other hand, in the community-based organization, the members have got no direct benefit from forest apart from using forest for home consumption. Contrary to this Gobeze (2009) argued that participatory forest management has improved the state of the forest and living condition of participant households at least within the project lifetime in Bonga, Ethiopia. But, this has not happened in Bale Eco-Region particularly in a year after 2015. Of course between 2012 and 2015, under the REDD+ project, 5.5 million metric tons of carbon dioxide equivalent have been produced. This is internationally certified, but has got no international market. The community has got no financial incentive for generating this amount of carbon dioxide equivalent. Probably, the absence of incentives together with the political instability during transition and inability of the stakeholders to effectively carry out their duties contributed to the worsening of deforestation in the area.

Conclusion

Before 1998 centralized forest management approach was in place to administer the forest resources in Bale Eco-Region. Starting from 1998 participatory forest management (PFM) approach was beginning to be implemented in this area. The Forest Dwellers Associations were formed in Adaba and Dodola with the support of an NGO known as GTZ. Taking this experience, another form of participatory forest management known as CBOs (community-

based organizations) was established in other parts of Bale Eco-Region. In both types of PFM, various relevant stakeholders are currently playing their part to ensure the sustainable management of forest resources regardless of their relative failure.

Generally, deforestation and forest degradation has been continued and forest dependent communities livelihood is not improved as expected because of the following main reasons. The first reason is that the Oromia Forest and Wild Life Enterprise has focused more on utilization than the conservation and development of the forest. The second reason is that the Environment, Forest and Climate Change Authorities have not yet evaluated and audited the status of forest resources that are transferred to Oromia Forest and Wildlife enterprise and the community through agreement. The third reason is that the capacity-based PFM (the so-called Forest Dwellers Associations) is currently failed mainly because of demographic pressure. The fourth reason is that the capacity building training provided by the NGOs has not reached the grassroots community. Finally, the community has got minimal or no economic benefit from forest conservation and management due to the failure of the expected carbon trade.

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Paper Three: Determinants of Good Forest Governance in South-eastern Ethiopia: The case of the Bale Eco-Region

Abstract

This study aims to identify the determinants of good forest governance in south-eastern Ethiopia specifically in the Bale Eco-Region. The data was collected using a mixed methods approach through questionnaires, key informant interviews, and focus group discussions. The quantitative data was analyzed using both descriptive and binary logistic regression analysis, while the qualitative data was analyzed through descriptive analysis. The results revealed that lack of accountability, low efficiency, lack of fairness and ineffectiveness were the major challenges of good forest governance in the Bale Eco-region. The results of the binary logistic regression has also confirmed this and showed that the effectiveness of forest governance is determined by accountability, efficiency, and fairness. This means that the effectiveness of forest governance increases as the accountability, efficiency and fairness increases. Hence, it is recommended that the government and other concerned stakeholders should work mainly on improving accountability, efficiency, and fairness of forest governance in the Bale Eco-Region.

Keywords: good forest governance; forest governance; forest governance effectiveness; accountability; Bale Eco-Region.

Introduction

Forests play a number of important roles such as carbon sequestration, preserving soil fertility, harboring clean water, maintaining ecological balance and preserving the majority of terrestrial biodiversity (Petkova et al., 2010). They also support the livelihoods of over one billion people from poor rural forest-dependent communities (Larson and Petkova, 2011). Due to their important role, forest degradation leads to both global and local consequences, such as environmental and economic degradation, species loss, and climate change. Many deforestation and forest degradation problems are currently happening mainly because of poor forest governance (Monditoka, 2011; Gregersen et al., 2004). Hence, forest governance is considered to be one of the major tools for forest conservation (Mohanty and Sahu, 2012).

Currently in Ethiopia, different actors play a direct role in forest governance. The government and the communities through their various organizations deserve a special mention. For instance, in the Oromia regional state, the government is playing a direct role

in forest governance through its institution of the Environment, Forest and Climate Change Authority and in partnership with the Oromia Forest and Wildlife Enterprise, which acts more like a private actors. Furthermore, in the Bale Eco-Region of Oromia Regional State, the forest-dependent communities are organized into Forest-Dwellers Associations and Community-Based Organizations (CBOs) which are authorized to conserve, protect, manage, and sustainably use forests under their jurisdiction. Hence, **participatory forest management (PFM)** has been in place to enable the government to co-govern the forest with the community. PFM was introduced in to Ethiopia in the mid-1990s mainly to avert the persistent problem of deforestation and to deliver better social and economic outcomes compared to the former centralized command-and-control resource management approach **(**Ayana et al., 2015**)**. However, deforestation with the resulting environmental degradation in Ethiopia has been a major issue (Stellmacher, 2013; Winberg, 2010) and a key challenge to food security, community livelihoods, and sustainable development (Winberg, 2010).

PFM was first introduced in the Bale Eco-Region (located in the Oromia regional state of Ethiopia) in 1998 with the intention to ensure sustainable forest management and to improve the livelihoods of the forest-dependent local communities. Two forms of PFM were introduced in to the Bale Eco-Region at different time. These were the Forest Dwellers Association in 1998 and the CBOs in 2006. However, it failed to control or reduce deforestation and forest degradation (e.g Tadesse, 2016; Hailemariam et al., 2015) mainly because of the lack of good forest governance. In support of this, Tadesse (2016) has revealed that weak law enforcement and corruption were among the major challenges of PFM in the Bale Eco-Region. Those factors in turn, limit the provision of forests' vital functions of environmental services, such as biodiversity conservation, carbon sequestration, and watershed protection (Castrén and Pillai, 2011). Furthermore, the livelihoods of the forest-dependent communities could be threatened unless scientifically studied and dealt with. This problem, together with the lack of good forest governance studies, creates the need for the current study. Hence, the purpose of this study is to identify the determinants of good forest governance in the Bale Eco-Region, based on the principles of good governance —accountability, efficiency, effectiveness, transparency, fairness, and participation.

Literature Review

The Notion of Governance and Forest Governance

To have a good understanding of forest governance, it is vital first to have a good conceptualization of governance. The notion of governance has been in existence since the

beginning of human civilization (Monditoka, 2011) and has been understood to be synonymous with government or "what the government does" (Monditoka, 2011; Sekeleti, 2011). However, it has evolved over time with the realization that the government is not the sole solution to all of society's problems, and hence, has begun to incorporate other actors like civil society and the private sector in the governing process (Birhan, 2012). With the changing vision of the role and responsibilities of the government, a broader vision of governance has evolved, which takes into consideration the new roles of civil society and the private sector (Sekeleti, 2011). Governance is, therefore, an interactive process that takes place among multi-stakeholders (including government) with the intention to handle societal top priorities (Saito 2008). It involves multiple actors at multiple levels (local, national and international) and acknowledges that different stakeholders have different views, values, and interests (Sekeleti, 2011).

Similarly, forest governance is a consultative approach, in which the government, the private sector, and civil society are involved in the conservation and management of forest resources. In forest governance, the authority and competencies have been moved away from the state and given to other bodies, such as international organizations, NGOs, and businesses (Pierre and Peters, 2000: cited in Arts, 2014). Instead of being the authority from the top, the commander, or the controller, the state has now become an (more) equal partner vis-à-vis private and civic ones in the new governance networks and partnerships (Arts,2014).

Generally, Giessen and Buttoud (2014) conceptualize forest governance in more detail and state that forest governance comprises of a) all formal and informal, public and private, regulatory structures, i.e., institutions consisting of rules, norms, principles, decision procedures, concerning forests, their utilization and their conservation, b) the interactions between public and private actors, and c) the effects of either a) the structures or b) the institutions on the forests. However, while this definition indicates some of the crucial actors, both public and private, it misses a critical actor of forest governance, such as the community. The following diagram shows community as one of the crucial actors of forest governance, in addition to state and private actors, and shows a comprehensive picture of the existing interactions among those actors of forest governance.

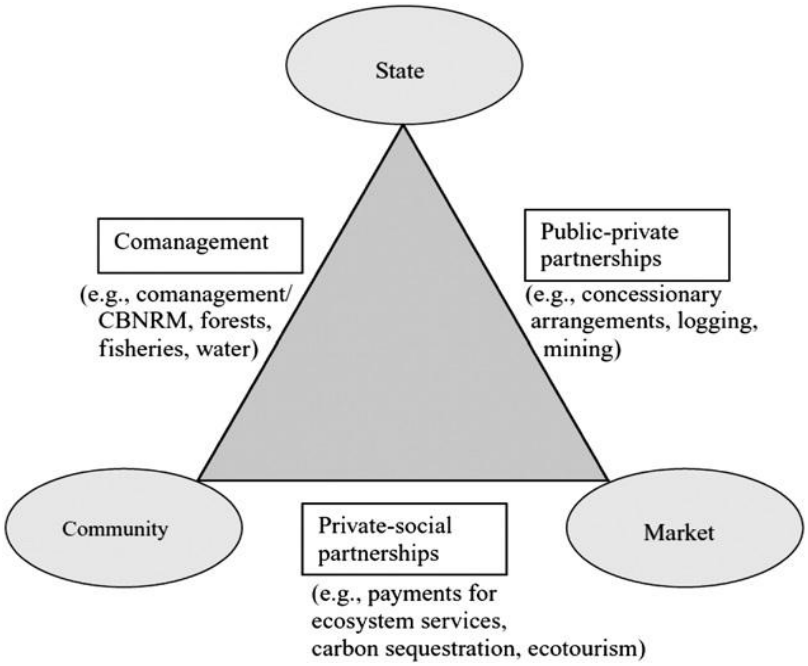

Fig.1. The governance triangle. Source: (Lemos and Agrawal, 2006, p. 310: Cited in Arts, 2014).

Good Forest Governance and Sustainable Forest Management

At the heart of good forest governance, there is sustainable forest management, fair decision making, and benefit distribution (Larson and Petkova, 2011). The question here is what constitutes good forest governance? There is no consensus among writers on what exactly good governance consists of and definitions vary from literature to literature (Secco et al., 2014). However, some literatures shows that the key features of good governance include: 1) adherence to the rule of law (observing the law of the country), 2) transparency, 3) low levels of corruption, 4) efficiency, 5) effectiveness, 6) participation and accountability by all officials, 7) equity, 8) low regulatory burden (low level of government regulation), and 9) political stability (smooth running of the political system). For instance, Larson and Petkova (2011) state that "good forest governance" means decisions are fair, transparent and just; rights are respected; laws and rules are enforced equitably; decision makers are accountable, and decisions are made based on the analysis of what is good for people and forests in general, not personal interest. Similarly, Secco et al. (2014) identify the key dimensions of good local forest governance as sustainable local development, efficiency, effectiveness, participation, transparency, accountability and capacity. Furthermore, FAO and PROFOR (2011) clearly indicated that good forest governance can be determined by accountability, efficiency, fairness, effectiveness, transparency and participation. *For the purpose of this paper, good forest governance is defined as an*

accountable, effective, efficient, fair, participatory, and transparent governance which ultimately ensures both sustainable forest management and improvement of the forest-dependent community livelihoods.

The level of good forest governance determines the sustainability of forests and ultimately, of the environment. For instance, it is widely believed that good forest governance is invaluable in ensuring sustainable use and conservation of the world's forest cover and resources (Stellmacher, 2013). To the contrary, poor forest governance is shown to have significant negative impacts on development outcomes in all the three pillars of the World Bank forest strategy: 1) environment, 2) poverty reduction and social development, and 3) economic growth (World Bank 2004: cited in Mohanty and Sahu, 2012). Thus, poor forest governance is an impediment to achieving optimum development outcomes in the sector (Castrén and Pillai, 2011).

Literature Gaps

There is scanty of literature on good forest governance in Ethiopia. Most of the studies are conducted on the participatory forest management. Concerning PFM, the existing literatures can be broadly classified in to two: those that argue that PFM has brought positive results in Ethiopia and those that identified weaknesses of PFM. To cite example, Gobeze et al. (2009) in their study about participatory forest management and its impacts on livelihoods and forest status in Bonga forest in Ethiopia found that PFM had positive impacts both on the state of the forest and the living conditions of participant households at least within the project lifetime. Furthermore, Engida and Teshoma (2012) conducted a study on the socio-economic effects of community forest management in Dendi District, Ethiopia. Their findings showed that participatory forest management enhanced the livelihood, the conservation measurements, and the social assets of the local communities. Winberg (2010) also carried out her study on the practices and experiences of participatory forest management in Ethiopia. She found that participatory forest management led to improved forest and environmental conditions in Ethiopia regardless of the problems of leakage and financial sustainability and its ambiguity over poverty reduction. On the other hand, literatures also showed the weaknesses of the existing practices of PFM. For instance, Saguye (2017) made an empirical analysis about gender inclusiveness in participatory forest management approaches in the Chilimo-Gaji Forest, West Shewa Zone. The results of his study revealed that participatory forest management processes in the study area excluded women from the lowest nominal typology of participation to the highest level in the hierarchy of participation. In addition to this, Ayana et al., (2015) studied the

performance of participatory forest management in Ethiopia taking the case of Agama Forest Cooperative (AFC) of Gimbo district. The study found a significant disparity between the PFM institutional principles and the actual local forest management practices. Engida and Mengistu (2013) also showed, in their work titled "Explaining the determinants of community-based forest management in Alamata, Ethiopia," that the level of participation was influenced by gender, family size, level of economic benefit, distance from the forest, and location. In addition to these, Tadesse et al. (2017) undertook a study about forest users' level of participation in a participatory forest management program in south-western Ethiopia and found that the statistically significant ($P < 0.05$) predictors of the level of participation were gender, family size, education level, income from the forest, distance of the home to the forest, restriction on charcoal and timber harvesting, elite domination in decision-making processes, and lack of incentives.

Generally, most of these studies are specific to a given area and some are important at the national level, but none of them focus on good forest governance, utilizing forest governance principles. Hence, this study is carried out to identify the determinants of good forest governance in the Bale Eco-Region, in south-eastern Ethiopia, based on the principles of good governance, i.e., accountability, efficiency, effectiveness, transparency, fairness, and participation.

Methodology

Study Area

The study was undertaken in south-eastern Ethiopia, specifically in the Bale Mountain Eco-Region (BER), which is composed of three zones of the Oromia regional state; namely the West Arsi zone and the East and West Bale zones. From the West Arsi zone, only four districts (Weredas) namely Adaba, Dodola, Kokosa, and Nansabo are part of the Bale Eco-Region while it covers seven districts (Dalo Mena, Haranna Buluq, Madda Walabu, Goba, Gololcha, Barbare and Agarfa) of the Bale Zone and the newly structured East Bale Zone (formerly both zones were named together Bale Zone).

BER is part of the Afromontane biodiversity hotspot, which belongs to the 34 global biodiversity hotspots. Over 40 streams and springs originate from the mountains in the Bale Eco-Region that drain into five major rivers—Wabe-Shebelle, Web, Welmel, Genale, and Dumal. Approximately 12 million people who live in the downstream areas depend on these rivers for their livelihoods. The Eco-Region exhibits a wide range of topography which spans from 1500 to 4377 meters above sea level, having the second-highest mountain in Ethiopia, Tullu Dimtu which is 4377 meters tall (Tadesse,2016). It has

different ecological zones encompassing moist tropical forest, afro-alpine habitats, woodlands, grasslands, wetlands and a large percentage of Ethiopia's endemic plant and animal species (OFWE,2014 ; Juju, 2012: Cited in Tadesse, 2016).

According to the 2007 population census, the total population of the Bale Eco-Region is 1,202,015 (FDRE Population Census Commission, 2008). From this, 1,058,665 is classified as rural, while the remaining 143,350 as urban. This means, 88% of the population of Bale Eco-Region is rural.

The Bale Eco-Region receives almost eight months of precipitation (March-October) (Hailemariam et al., 2015). The mean annual maximum temperature is 18.4 ^{o}C, while the mean annual minimum is 1.4 ^{o}C. These mean annual temperature of the area also varies with altitude. Temperature at high elevations, such as the Sanati plateau is low with the annual average temperature of less than 7.5 ^{o}C, whereas at the lower altitude (500–1000 m) the temperature is higher, reaching an annual average of more than 27.5 ^{o}C (Hailemariam et al., 2016).

Figure 2. Map showing the location of Bale Eco-Region

Agriculture is the main economic activity practiced in the Bale Eco-Region. The local population primarily depends on mixed agriculture, both on crop growing and animal husbandry. Generally, the livelihoods of communities in the highland area are predominantly based on a mixed crop-livestock subsistence agricultural system, while communities living in the mid altitude and the lowlands are mainly pastoral and agro-pastoral. Traditional farming is dominantly practiced, but there are some attempts for using mechanized farming

In addition to agricultural lands, the local inhabitants are also the direct beneficiaries of the forest resources. At present, the local communities are organized into Forest-Dwellers Associations (WAJIBs) and community-based organizations. The Forest-Dwellers Associations were established in Adaba-Dodola in 1998 on a capacity-based principle (based on the carrying capacity of the forests). Based on study, it was determined that 12 hectares of forests per household and hence 360 hectares of forests per Forest-Dwellers Association (30 households) is an optimum size for forest sustainability, depending on the carrying capacity of the forests. The members are authorized to conserve, protect and manage the forests under their control. This includes the right to sell and use the old trees with the expectation that they will replace them by replanting new trees. Because of the emergence of more new households by the youths in a forest delineated to a given association, this capacity-based approach has failed. Another deficiency of this approach has been the fact that it was not open to every member of the community. Due to these deficiencies, a variation of PFM emerged in other parts of the Bale Eco-Region. Starting in 2006, community-based organizations (CBOs) began to form. The members have the rights and responsibilities to conserve, protect, and manage the forest under their jurisdiction. CBOs are different from Forest-Dwellers Associations because of the following two reason. The first is that unlike the Forest-Dwellers Associations, in CBOs there is no limit on membership and every interested member of the Kebele (the lower tier of government below district) can be a member. The second reason is that in CBO, the members are not allowed to sell the aged trees. They are allowed to use those only for home consumption such as fuel wood and house construction.

Based on the agreement, the income generated from forests is shared between the Oromia Forest and Wildlife Enterprise and the community. When there is trophy hunting or road construction, the community receives 40% as compensation, while 60% goes to the Oromia Forest and Wild life Enterprise. Furthermore, when plantation forests, protected and conserved by the Forest-Dwellers Associations, are sold, the community receives 50%

while the remaining is shared among the Oromia Forest and Wildlife Enterprise, the unions and the kebele. In addition to these, when plantation forests, conserved and developed by the Oromia Forest and Wildlife Enterprise are sold, 5% of the revenue is shared with the kebele and the remaining 95% goes to the enterprise. Hence, the Oromia Forest and Wildlife Enterprise is receiving the larger share of the income generated from the selling of forests. The community especially the members of CBOs have received either very limited or no any kind of direct payments from the protection and conservation of the forests.

Currently, in the Bale Eco-Region, different separate offices, run by different actors, are existed and coordinated to attain the targeted purposes. Hence, the Oromia Forest and Wild Life Enterprise, the Environment, Forest and Climate Change Authority and the communities have their own separate offices and chains of responsibility. Moderate coordination exists among them. Thus, it is clear that the forest governance is open to the participation of all critical actors, particularly the government, the community, and NGOs. To elaborate it, the forests, under the community, are jointly ruled by the community and the government through participatory forest management in which the Union, Cooperatives, Forest-Dwellers Associations and CBOs play an active role in the governance. In addition to this, there are also forests protected, conserved, used, and managed by the Oromia Forest and Wild Life Enterprise. Furthermore, the government is playing a regulatory role through the Environment, Forest and Climate Change Authorities of the Zone and Weredas.

In addition to these primary actors, secondary actors are also playing supportive role in the forest governance of the Bale Eco-Region. The typical example here are the NGOs such as FARM Africa and SOS Sahel Ethiopia. In 2006, the FARM Africa and SOS Sahel Ethiopia initiated the formation of CBOs in Bale Eco-Region. These NGOs provided different capacity-building training and materials supports to the leaders, the Forest-Dwellers Associations and CBOs. They even initiated the REDD+ project in the Bale eco-region.

All actors are allowed to express their interests and hence, the decision making is inclusive. The Oromia Forest and Wildlife Enterprise and the Environment, Forest and Climate Change Authorities have more influence on decision making. The Oromia Regional State transferred through concession most of the forests in Oromia to the Oromia Forest and Wildlife Enterprise. This office is authorized to conserve, protect, manage, and use the forests under its control. It performs all of its activities from the income it generates from the selling of plantation forests. On the other hand, the Environment, Forest and Climate

Change Authority is a government office that receives its budget from the government. While there is no formal domination of one actor over the other, the community is not empowered well enough to be in parallel with the government in decision making. Mostly the community gives consent to the decisions that are made. Figure 3 below illustrates the actors' interactions in forest governance in general and in the Bale Eco-Region in particular.

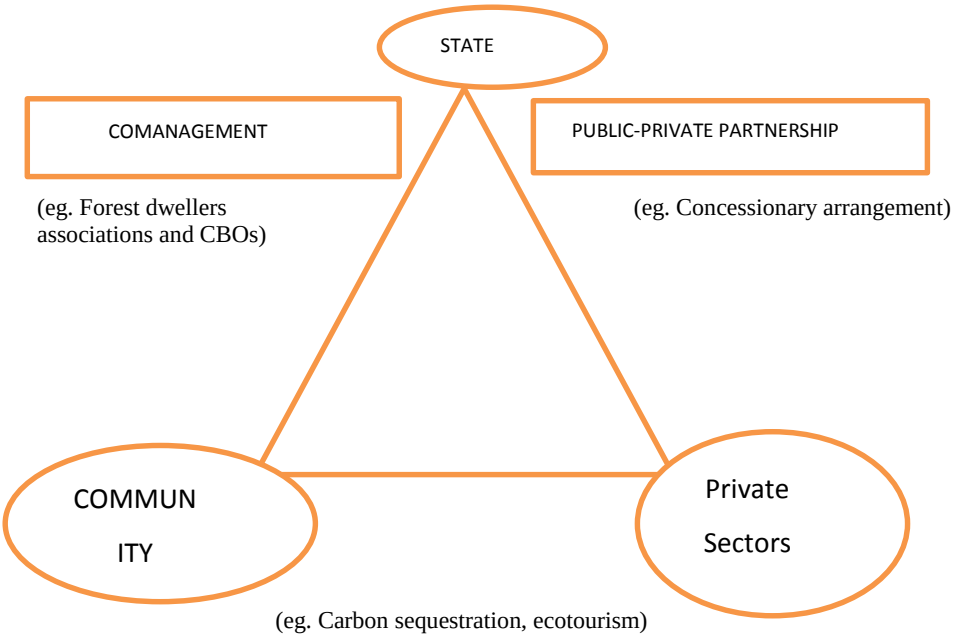

Fig 3: Actors interaction in forest governance of Bale Eco-Region**.**

Research Design

In line with the purpose of this study, which is to identify the determinants of good forest governance in the Bale Eco-Region, explanatory research design and mixed research approach were employed. Qualitative data were gathered through interviews and focus group discussions, while the quantitative data were gathered through questionnaires. The study is predominantly quantitative while the qualitative data is used to support the quantitative analysis.

Sample Size

As can be seen from Table 1, 65 respondents were identified and consulted through purposive and snowball sampling techniques for in-depth interviews and focus group discussions (FGDs). The number of the consulted respondents was determined based on the saturation of the collected data (collection of adequate or enough data). The researcher stopped going further when more than the required data were collected.

Table 1. Sample size, affiliation and data collection methods of the qualitative data

Categories of respondents	Numbers	Affiliation	Methods of data collection
Environment, Forest and Climate Change Authority	10	Experts	In-depth interview
Oromia Forest and Wild Life enterprises	10	Experts	In-depth interview
NGOs (Farm Africa and SOS Sahel Ethiopia)	5	Experts	In-depth interview
Forest-dwellers associations (WAJIBs)	16	Leaders and members	In-depth interview and Focus Group Discussion
Community-Based Organizations	16	Leaders and experts	In-depth interview and Focus Group Discussion
Unions (community structure composed of different cooperatives)	3	Leaders and members	In-depth interview
Cooperatives	5	Executive committee	In-depth interview
Total	65		

The quantitative data were collected using a questionnaire as a tool. The questionnaire, which consisted of five-point Likert scale questions, was prepared and distributed to 395 members of the Forest-Dwellers Associations and the Community-Based Organizations. The sample size was determined using Yemane (1967) sample size determination formula. Overall, there are 30,000 members – 5,000 are members of the Forest-Dwellers Associations and 25,000 are members of the Community-Based Organizations in Bale Eco-Region. From this, 395 respondents were identified using the sample size determination formula. From 395 respondents, the proportion assigned to the members of the

Community-Based Organizations is 329; the remaining 66 were assigned to the Forest-Dwellers Associations. Systematic random sampling technique was employed to select the required sample from the targeted population. To do this, organized lists of the members of Forest-Dwellers Associations and CBOs were received from the community offices at the kebele level (the lower tier of the government).

$n=N/1+N(e)^2= 30,000/1+30,000(0.05)^2 =395$

Where n= sample size for this research

N= total members

e=designates maximum variability or margin of error 5 % (0.05) (modified by researcher)

1=designates the probability of the event occurring

Methods of Data Analysis

Qualitative Data Analysis

Interview and focus group discussions were prepared and administered in the local language—Afan Oromo (Oromic). The results were recorded using recording materials after the consent of the respondents was obtained. Then, the audio was transcribed and translated into English. Subsequently, it was repeatedly read and coded and similarities between the data were identified. Finally, it was analyzed using descriptive data analysis.

Quantitative Data Analysis

Binary logistic regression and descriptive analysis were used to analyze the quantitative data. Binary logistic regression was employed because the dependent variable is dichotomous, (effective or ineffective). We leaned on studies by Berger (2017), who has argued that binary logistic regression is more effective when the dependent variable is dichotomous. The binary logistic regression was formerly used by Kerse (2016) to examine factors affecting local people participation in forest management for carbon sequestration in the case of Mount Damota of Southern Ethiopia. In addition, Tadesse et al (2017) used binary logistic regression to examine the level of forest users' participation at different stages of a participatory forest management (PFM) program in south-western Ethiopia.

In addition to binary logistic regression, descriptive statistics - percentage and frequencies - were used to indicate the status of forest governance in the study area. In total, 33 questions were prepared and administered, which were later on computed and re-coded into six variables—Accountability, Effectiveness, Efficiency, Fairness, Participation and Transparency. Each variable is represented and addressed by different questions i.e more than two questions developed based on the definition given to it in Table 6.5 below. Then

the average results of all the respondents on all the questions that represent each variable was used to discuss the results.

Binary Logistic Regression

Binary logistic regression analysis extends the techniques of multiple regression analysis in which the outcome variable is categorical. It allows one to predict a discrete outcome, from a set of predictor variables that may be continuous, discrete, dichotomous, or a mix of any of these. The independent variables can be categorical or continuous, or mix of categorical and continuous whereas the dependent variable is always categorical (Ismail and Alias, 2015). Thus, when the dependent variable is dichotomous (in this case ineffective or effective), binary logistic regression is recommended. Thus, here binary logistic regression was used to determine the relationship between forest governance effectiveness (having dichotomized dependent variables - **ineffective** and **effective**) and the related underlying factors or independent variables (accountability, efficiency, fairness, participation, and transparency). The dependent variable i.e forest governance effectiveness is coded with a value of 0 for ineffective and 1 for effective. Whereas, the independent variables (accountability, efficiency, fairness, participation, and transparency) coded with a value of 0 for low, 1 for fair and 2 for high. SPSS version 20.0 was used to perform binary logistic regression by making the low scale level as a reference category for the independent variables.

Logistic Regression Assumptions

The main reasons for selecting binary logistic regression as the method of analysis is because it complies with the following factors:

- It does not assume a linear relationship between the dependent and independent variables.
- It assumes binomial distribution of the responses (the dependent variable must be dichotomous and does not need to be normally distributed).
- It makes no assumptions about the distribution of the independent variable, similar to a discriminant analysis function (which assumes independent covariates should be normally distributed).
- The categories (groups) are mutually exclusive and exhaustive; a case can only be in one group and every case must be a member of one of the groups.
- It has a minimum of 50 cases per predictor, which is recommended as larger samples are needed because the maximum likelihood coefficients are large sample estimates.

Before applying the final binary logistic regressions with factor variables for the intended purpose, the model was assessed and diagnosed for possible inadequacies.

Assessing Model Fit

To assess the overall fit of the model, a Hosmer and Lemeshow test was performed. Because the chi-square value is non-significant (Sig=.277), we do not reject the null hypothesis that there is no difference between the observed and expected frequencies. This indicates that the model adequately fits the data.

Table 2. Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	8.667	7	.277

Another way of assessing the goodness of the model is to see how well the model classifies the observed data. Table 3 reveals that overall, 87.8% of forest governance effectiveness is predicted correctly. The independent/covariate variables suggest forest governance would be ineffective (98.5% correct) rather than it would be effective (17.3% correct).

Table 3. Classification Table

Observed			Predicted		
			Effectiveness		Percentage Correct
			ineffective	effective	
Step 1	Effectiveness	ineffective	338	5	98.5
		Effective	43	9	17.3
		Overall Percentage			87.8

The model summary table (Table 4) also allows to assess the goodness of the model. The result shows that 44.8% of the variance in forest governance effectiveness as a whole can be explained by a linear combination of the five independent variables (accountability, efficiency, fairness, participation and transparency).

Table 4. Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	197.951	.243	.448

Based on the results of the classification table, the Hosmer and Lemeshow test, and the model summary table, we conclude that the fitness of the model with the given independent variables is satisfactory**.**

Results

Based on the definitions of the six variables (accountability, efficiency, fairness, effectiveness, transparency and participation) summarized in Table 5, a questionnaire containing 33 questions was developed and administered. As it is difficult to show all survey questions here, some of them are: To what extent do you think that the desired results have come about? To what extent do you think that the results achieved is in line with forest policy? To what extent do you think that the existing human resources are capable in bringing the desired forest results? To what extent do you think that forest outputs matches with the financial inputs? Based on those questions, data were collected from the members of the Forest- Dwellers Associations and CBOs. After collecting the data, these 33 questions (since they were separately constructed for each variable) were computed and condensed back to the six variables. Then the results of both descriptive statics and binary logistic regression were obtained and are presented in the next section.

Table 5. Framework to analyze forest governance

Principles	**Definition**
Accountability	Responsibility of political actors to all members of society for their actions and decisions
Effectiveness	Production of results meeting needs; production of desired results
Efficiency	Maximum use of human, financial and other resources without unnecessary waste or delay
Fairness/ equity	Equal opportunities for all members of the society to improve or maintain their well-being including impartial application of rule
Participation	Involvement of citizens or stakeholders in decision making directly or legitimate intermediaries representing their interests
Transparency	Clarity and free flow of information, enabling all members of society to have access to, understand and monitor processes, institutions and information

Source: FAO and PROFOR, 2011

Results of the Descriptive Statics

The results show that out of all the factors that define good forest governance, accountability and efficiency are considered to be least effective. Table 6 shows that the majority of respondents (56.7%) consider forest governance in the Bale Eco-Region to be "low," accountability while 38.7% and 4.6% of respondents respectively consider it to be "fair" or "high." Perceiving accountability as "low" could be attributed to the following factors: ineffective court measures, lack of forest audits and weak enforcement by the government. For instance, the key informants asserted that the court is not taking effective measures against individuals accused of engaging in deforestation. This is mainly because the court faces two challenges when gathering evidence that shows whether or not an individual is a criminal. The first is that the witnesses are unable to give detailed information of the person doing the act, as required by the court. The second challenge is that the existing family ties among the community influence the witnesses by telling them not to disclose genuine information. Besides the courts, the Environment, Forest and Climate Change Authority was given as an example of low accountability. For instance, the office had not officially undertaken the evaluation of the progress of the Oromia Forest and Wildlife Enterprises and the organized communities which were using more trees than the trees they were conserving. Furthermore, when the young people, who live with their parents, form new households within the compartment of the forest-dwellers associations, which have already exceeded their initial capacity, the government remained silent and did not take any corrective measures, contrary to its promise during the formation. This is because of the lack of adequate preparation and resources on the part of the government. In addition to this, there is strong family ties that is established there, which is difficult to separate them.

Table 6. Frequency Distributions

Variable	Accountability	Effectiveness	Efficiency	Fairness	Participation	Transparency
	Frequency (%)					
Low	224 (56.7)	114 (28.9)	194 (49.1)	145 (36.7)	55 (13.9)	105 (26.6)
Fair	153 (38.7)	229 (58.0)	165 (41.8)	167 (42.3)	302 (76.5)	193 (48.9)
High	18 (4.6)	52 (13.2)	36 (9.1)	83 (21.0)	38 (9.6)	97 (24.6)
Total	395 (100)					

Efficiency—another attribute of forest governance in the Bale Eco-Region—is characterized as "low" by 49.1% of respondents. This is because most of the resources that the NGOs

provided to the community have not brought the targeted results. According to the FGD participants and key informant interviews, the forest office, with the support of NGOs known as Farm Africa and SOS Sahel Ethiopia, provided the Forest-Dwellers Associations and the Community-Based Organizations with materials and support to establish a nursery site. But, the nursery site never materialized mainly because of shortage of water. In addition, the NGOs provided capacity-building training for the leaders and members of the committee of the Forest-Dwellers Associations and CBOs with the intention to let them train the community. However, the grassroots communities were not trained and hence, brought no further impact at the grassroots level.

Table 6 also shows that a large portion of respondents indicated fairness (42.3 %) to be a factor that moderately affects forest governance in BER. The remaining number of respondents is split between considering fairness in forest governance to be either "low" (36.7%) or "high" (21%). The key informants also confirmed that the problem of fairness is often clearly observed in the forest governance of the Bale Eco-Region, and especially in the Forest-Dwellers Associations, which are not equally open to all members of the community.

Table 6 also shows that 48.9% of respondent reacted that transparency is moderately observed in the forest governance of BER. The FGD participants and the key informants also confirmed that transparency is moderately observed in the forest governance. They argued that transparency is not a major problem of forest governance of the Bale Eco-Region because forest-related decisions are made in consultation with the community and are also made clear to the community. The communities are informed of all the decisions through their established networks. In addition to this, the PFM has even further authorized the community to make their decisions on forests that are under their jurisdiction through participatory forest management.

As it can be seen from Table 6, a large number of respondents (58.0%) characterized effectiveness as "fair" in the forest governance of the Bale Eco-Region, while the remaining 28.9% and 13.2% of respondents indicated that effectiveness of forest governance is "low" and "high" respectively. The FGD participants and key informants, however, claimed that effectiveness of forest governance is low because deforestation and forest degradation had continued mainly because the community had received minimal or low direct financial benefit from forests. This is because carbon trading has not succeeded in international markets as expected. This in turn discouraged the community to take proactive measures and hence,

encouraged illegal destruction of forests, illegal settlements and expansion of agricultural and grazing land.

Finally, Table 6 shows that 76.5% of respondents believe that participation in forest governance in the Bale Eco-Region is moderate ("fair"). While the remaining 13.9% and 9.6% indicated that the participation in forest governance is "low" and "high" correspondingly. The leaders of the forest office also confirmed that participation is not a major problem because participatory forest management has been in place in the Bale Eco-Region since 1998. Direct participation of the community in forest governance was first assured with the establishment of the Forest-Dwellers Associations in 1998. The drawback of this approach was that it had not given equal chance of participation to every member of the community. For this particular reason, the community-based organizations were later on introduced in 2006.

In summary, low accountability is the major problem of forest governance in the study area followed by low efficiency and then by fairness, effectiveness, transparency, and participation.

Binary Logistic Regression Results

The results of logistic regression, as shown in table 7, reveal that accountability, efficiency and fairness are significant at the 5% level of significance, but participation and transparency are insignificant.

Note that Exp (B) gives the odds ratios for each variable, as indicated in Table 7 below. As shown in Table 7 below, therefore, a log odd of forest governance effectiveness is positively related to accountability, efficiency and fairness. Hence, the odds ratio of forest governance effectiveness with fair accountability, fair efficiency, fairness are 3.969, 6.602 and 4.453 times more likely to have an effect than that of low accountability, low efficiency and low fairness respectively. Similarly, the odds ratio of forest governance effectiveness with high accountability, high efficiency and high fairness are 112.060, 21.449 and 8.017 times more likely to have an effect than that of low accountability respectively, keeping other variables constant. Hence, the above three variables (accountability, efficiency and fairness) have a high positive significant effect on forest governance effectiveness.

Table 7. Variables in Equation

Variables	B	Sig.	Exp(B)	95% C.I.for EXP(B)	
				Lower	Upper
Accountability(ref.=low)		.000			
accountability(fair)	1.379	.010	3.969	1.385	11.374
accountability(high)	4.719	.000	112.060	19.279	651.360
Efficiency(ref.=low)		.005			
Efficiency(fair)	1.887	.006	6.602	1.705	25.558
Efficiency(high)	3.066	.001	21.449	3.255	141.330
Fairness(ref.=low)		.025			
Fairness(fair)	1.494	.038	4.453	1.089	18.216
Fairness(high)	2.082	.007	8.017	1.773	36.259
Participation(ref.=low)		.988			
Participation(fair)	16.795	.997	19673461.58	.000	.
Participation(high)	16.893	.997	21693658.05	.000	.
Transparency(ref.=low)		.038			
Transparency(fair)	-.194	.852	.823	.106	6.391
Transparency(high)	-1.670	.162	.188	.018	1.958
Constant	-22.116	.997	.000		

On the other hand, it is clear from Table 7 above that participation and transparency are insignificant in that they have no significant effect on forest governance effectiveness in the Bale Eco-Region. We attribute this result to the high participation level of local communities and existence of community network for the easy flow of information respectively. The community participation is high because they have even owned forests, on which they are authorized to protect, conserve, manage and use. Furthermore, they are also part of every forest-related decision. When we see transparency, all of the relevant forest-related information is freely flowing with in the community structure. Every forest related decision is also disclosed to the local community.

Discussions

This study illustrates that establishing participatory forest management and involving local communities in forest governance are not a panacea that addresses all the problems of deforestation and sustainable forest management. Realizing good forest governance is a prerequisite to ensuring sustainable forest management. Hence, this study determines the

aspects of good forest governance that are not being effectively exercised in the Bale Eco-Region. It is clear from the study that as accountability, efficiency and fairness increase, the effectiveness of forest governance also increases, which in turn, greatly contributes to sustainable forest management.

Hence, the factors that determine good forest governance in the Bale Eco-Region deserve to be discussed and will be presented below, starting with the ones most severely impacting implementation.

Lack of Accountability is one of the most severe problems of forest governance in the Bale Eco-Region. Piabuo et al. (2018) in their review of community forest governance in Cameroon also find that forest governance in Cameroon is known by poor downward accountability to the people. In the Bale Eco-Region, various actors including the Oromia Forest and Wildlife Enterprises, the Environment, Forest, and Climate Change Authority, the Forest-Dwellers Associations, the Community-Based Organizations, the unions, the police officers, and the courts do participate in forest governance. The results of this study show lack of accountability on the part of the government bodies and the organized foresters. The FGDs and key informants asserted that effective court measures are not being taken on individuals engaged in deforestation. According to the experts from the Environment, Forest, and Climate Change Authority, the problem persists mostly not because of the absence of law, but because of poor law enforcement. Supporting this, the literature has argued that weak law enforcement (Tadesse, 2016; Gobeze et al.,2009) and corruption (Tadesse, 2016) are among the major challenges of forest governance in Ethiopia. Furthermore, Counsell (2009) argued that most forest laws are not observed in most countries of Africa. There is also a legal gap between the regional and federal forest proclamations. For instance, in the Oromia Regional State of Ethiopia, the 2003 regional forest law was implemented while having content differences from the federal Forest Development, Conservation and Utilization Proclamation 1065/2018. Because of this reason, when decisions are made at the local level, the accused can go further to appeal to the federal court for revisions. In addition, lack of sufficient and reliable evidence is another challenge for the effectiveness of the court. This emanate from the fact that the community has strong social bonds and hence they are not willing to give reliable evidence that would enable the court to penalize the wrong doers. Furthermore, the court and the concerned government officials are not organized well enough so as to gather adequate evidence that makes an individual a criminal when caught in wrong-doing.

Lack of Efficiency is another problem of forest governance in the Bale Eco-Region. Key informants in this research have confirmed the lack of funds assigned to the work of the Environment, Forest, and Climate Change Authority. Furthermore, the Oromia Forest and Wildlife Enterprise is not getting budget from the government and operates by the income that it generates from the sale of forest products. Mostly the support for its work is coming from NGOs like Farm Africa and SOS Sahel Ethiopia. They have provided capacity building training and material support including nursery material to the community. However, all these efforts are not fruitful because deforestation has increased and nursery sites have not been established.

Lack of Fairness/ equity is the third major problem of forest governance in the Bale Eco-Region. This is mostly observed in the Forest-Dwellers Associations (WAJIBs) of the Dodola-Adaba. Here, the households who are found to be more than 30 were forced to withdraw from the forest blocks that are administered by every association. These evicted households were not offered relocation and membership to these associations and prohibited from entering and using forests products (Kemerink-Seyoum et al., 2018). The other problem with the Forest Dwellers-Associations is that starting from its establishment in 1998 up to present, the youths grown within the forest blocks have not withdrawn from the 360 hectares of forest given to each association. They inter-married there and even claimed the illegal use of forests which aggravated deforestation in the area (Tadesse, 2016). Legally, the youngsters are not members of any association.

Effectiveness: Effectiveness is another problem of forest governance in the Bale Eco-Region, where forest governance has not been effective in reducing deforestation and forest degradation and in improving local community livelihoods. Similarly, community-based forest management in Cameroon had brought negative environmental results, such as degradation of many community forests in the forested Cameroon (Duguma et al., 2018). Contrary to this, however, Gobeze et al (2009) argue that the forest governance in Bonga of Ethiopia has improved both the state of the forest and the livelihoods of the community, particularly after the introduction of participatory forest management.

Transparency: Currently transparency is not a major problem of forest governance in the Bale Eco-Region. This is because the forest related decisions are made mostly with the participation of local communities. Furthermore, the grassroots communities are informed about the decisions through the community structure. The problem of transparency is observed within the organized communities themselves. In support of this, the key informants indicated that the members of the Forest Dwellers Associations in Adaba-

Dodola were not recently informed about their capital holdings. They were not told how much they have and sharing of profits has not recently taken place. This, however, does not affect the overall forest governance and the perceptions of its transparency.

Participation: the introduction of PFM into the Bale Eco-Region, starting in the late 1990s, boosted the participation of local communities in forest governance. The organized communities began to rule over forests that are legally under their jurisdiction. Hence, in Ethiopia the development of the PFM arrangement has transferred the management responsibilities of more than one million hectares of forests, nearly one third of the country's high forests, to organized local communities (PNMU, 2013: Cited in Ayana, 2014). Currently, the communities are part of all decisions made about the management of forests. This finding is similar to the findings by Gobeze et al (2009) who argued that PFM empowered local people in Bonga of Ethiopia and thus, enhanced their participation in decision making regarding the management of the forest resources.

Conclusion

Participatory Forest Management has been practiced in the Bale Eco-Region since the late 1990s. The first modality of participatory forest management (PFM) that was introduced in the Bale Eco-Region was the Forest-Dwellers Associations (WAJIBs) to Adaba-Dodola in 1998. After that, the Community-Based Organizations were introduced in other parts of the Bale Eco-Region, starting in 2006. These two modalities of PFM were introduced with the intention to reduce deforestation and forest degradation and to improve the livelihoods of the forest-dependent communities. However, the empirical evidence, mainly from the qualitative analysis, attests to the fact that deforestation has continued and the livelihoods of the forest-dependent communities have not improved as expected. This is mainly due to the lack of good forest governance.

The study revealed that lack of or low accountability is the major problem of forest governance in the study area, followed by low efficiency, fairness, effectiveness, transparency, and participation. The study also found that when the level of accountability, efficiency, and fairness increases (goes from low to high), forest governance effectiveness also show an increment. Hence, to specifically increase accountability, it is recommended to improve the effectiveness of court measures, to conduct forest audits, and to strengthen the enforcement capacity of the government. Similarly, in order to increase efficiency, it should be ensured that the resources and training provided by NGOs (Farm Africa and SOS

Sahel Ethiopia) are used to achieve the targeted goals. Furthermore, since Forest Dwellers Associations are capacity based, to increase fairness, the youths forming new households within the compartment of the Forest Dwellers Associations and the excess households initially evicted during the establishment of those organizations, should be treated equally. Finally, because the results of the model show that the five variables—accountability, efficiency, fairness, participation and transparency—account for 44.8% of the variance in the effectiveness of forest governance, we need to consider that other variables might also be accountable. These factors might be attributed to the low enforcement capacity (both legally and administratively) of the forest offices, lack of adequate budget and logistics to undertake monitoring and evaluation, and the low commitment on the part of international communities to buy the generated amounts of carbon.

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Paper Four: Challenges of Forest Governance in Addressing Redd+: Status, Effects and Prospects. The Case of Bale Eco-Region, Oromia Regional State, Ethiopia

ABSTRACT

Reduction of emissions from deforestation and forest degradation (REDD+) is an internationally accepted mechanism for encouraging developing countries to contribute to climate change mitigation by reducing greenhouse gas emissions (GHGs) by preventing forest loss and degradation; and by increasing removal of GHGs from the earth's atmosphere through the conservation, management and expansion of forests. This mechanism, however, has failed to bring the desired results in the Bale Eco-Region. Thus, the purpose of this study is to identify the main challenges of forest governance in addressing the implementation of REDD+ projects. Mixed research approach was employed. Relevant qualitative data were gathered through key informant interviews and focus group discussions. Quantitative data were collected through questionnaires. This study revealed that the community produced a total of 5.5 million metric tons of carbon dioxide equivalent in three years (between 2012 and 2015) as a contribution to the global environment. But, they were not received any economic incentives from the REDD+. Generally, while implementing the REDD+ project, forest governance of the Bale Eco-Region has faced different challenges, such as weak institutional arrangements, continuation of deforestation, low enforcement capacity, low economic benefit of the community, lack of strong coordination with media and research institutes, conflict of interest among sectors over forest land, and lack of adequate budget and logistics to undertake proper monitoring and evaluation. All these challenges have in one way or another contributed to the failure of the REDD+ project in the Bale Eco-Region.

Key Words: Forest Governance Challenges; REDD+; Forest Governance; Bale Eco-Region; Carbon Trade.

Introduction

Global forest cover is decreasing due to deforestation and forest degradation. FAO estimates that 13 million hectares of tropical forest are being converted to other land uses every year due to deforestation and forest degradation (Vanderhaegen et al. 2015). Deforestation and forest degradation also contribute indirectly to the global greenhouse gas emissions. According to Bluffstone et al. (2013), deforestation and forest degradation are estimated to contribute between 12% and 20% of annual greenhouse gas emissions. To

avert this, REDD+ was internationally adopted (Peter et al. 2014). The REDD+ mechanism has been negotiated at the successive United Nations Framework Convention on Climate Change (UNFCCC) Conferences of Parties since 2005 (Vanderhaegen et al. 2015). It comprises of local, national and global actions whose primary aim is to reduce emissions from deforestation and forest degradation and enhance forest carbon stocks in developing countries (Angelsen et al. 2012). While reducing forest-related climate emissions and sequestering more carbon, it aims to financially benefit low-income countries, communities and forest users (Bluffstone et al. 2013). Two approaches for REDD+ implementation have been discussed within the UNFCCC: a project/result-based payment mechanism and country-governed REDD+ programs that could become a part of wider Nationally Appropriate Mitigation Actions (NAMAs) (Mulyani and Jebson 2013). The governance of forests in general and REDD+ in particular is vital for the success of REDD+ because governance deficiencies threaten both the effectiveness and legitimacy of REDD+ (Larson and Petkova 2011).

Ethiopia has limited contribution to the overall greenhouse gas emissions when compared to the developed world. It is estimated that the country's per capita emissions are less than 2t CO_2 e. This is 10 times less when compared to the 20t CO_2 e per capita in the USA and Australia (Zerga and Gebeyehu 2016). In 2010, it was estimated that Ethiopia had a total of 150 million t CO_2 e emissions which accounted for less than 0.3% of global emissions (Ibid 2016). According to the Climate Resilient Green Economy (CRGE) document, out of this, forestry contributed 37% of the emissions (Bekele et al. 2015).

Consistent with the global goals, Ethiopia had its Readiness Preparation Proposal (R-PP) approved in 2011 and officially launched the REDD+ Readiness implementation phase in 2013 (Bekele et al. 2015). Currently, the REDD+ pilot project is being carried out in different parts of the country. For example, REDD+ pilot projects are being carried out in the Bale Mountain Eco-Region, Nono Sele, and Yayu (Ministry of Environment, Forest and Climate Change 2015). However, according to Asfaw et al. (2015), forest governance is facing different challenges such as weak enforcement of forest law and land-use policy, lack of adequate capacity, limited knowledge about the multifaceted advantages of forestry, lack of market access and limited value addition, weak inter-sectorial linkages, and absence of proper institutional arrangements at the regional level. Furthermore, there is a disparity between the participatory forest management institutional principles and the actual local forest management practices on one hand (Ayana et al. 2015), and between the local

management practices and the low participation of women in forest governance, on the other (Engida and Mengistu 2013).

For the purposes of this paper, it is relevant to differentiate forest governance from participatory forest management (PFM). Forest governance is broad and inclusive of PFM. Forest governance is a consultative approach in which different actors such as the government, the community, and private sector organizations decide on the overall governance of forests (Arts 2014). On the other hand, PFM is a co-governance approach in which the community and the government jointly manage part of the forests that are under the community organizations.

Above all, REDD+ pilot projects themselves are facing various governance challenges. For instance, the Bale REDD+ pilot project has already failed because it has not been successful in bringing sustainable impact on the reduction of emissions from deforestation and forest degradation due to the absence of incentives for the community, which sequestered a certain amount of carbon dioxide initially. Hence, to successfully implement the forthcoming REDD+ projects, it is vital to critically identify the challenges of forest governance in addressing the REDD+ pilot projects and to propose alternative ways of addressing those challenges, because it is widely recognized that the role of governance for the success of REDD+ is important (Larson and Petkova 2011). All of these reasons, together with the absence of adequate literature in the area of REDD+ projects, particularly in the Bale Eco-Region, establish the need for this particular study.

According to the literature, limited studies have been carried out on REDD+ projects in Ethiopia. Bekele et al. (2015) and Beyene et al. (2013) have carried out their studies entitled «The Context of REDD+ in Ethiopia» and «Community Controlled Forests, Carbon Sequestration and REDD+ in Ethiopia» respectively. In addition to having scale differences with the current study, they do not focus on the challenges of forest governance in addressing REDD+. Other studies by Hailemariam et al. (2015) and Devries et al. (2012) have investigated REDD+ implementation at the local level, particularly in the Bale Mountain Eco-Region and Kafa respectively. However, their studies do not emphasize the challenges of forest governance in addressing REDD+. Instead, they stress the implementation of REDD+. Therefore, from the overall assessment, it is clear that the study is necessitated by the existence of forest governance challenges and the absence of literature on them. Thus, the purpose of this study is to identify the main challenges of forest governance in addressing the implementation of REDD+ projects.

Methods and Materials

Study Area

This study was undertaken in south-eastern Ethiopia, specifically in the Bale Mountain Eco-Region (BER), which is composed of three zones of the Oromia regional state; namely the West Arsi zone and the East and West Bale zones. From the West Arsi zone, only four districts (Weredas), namely Adaba, Dodola, Kokosa, and Nansabo, are part of the Bale Eco-Region while it covers seven districts (Dalo Mena, Haranna Buluq, Madda Walabu, Goba, Gololcha, Barbare and Agarfa) of the East Bale Zone and Bale Zone (formerly both zones were named together the Bale Zone).

BER is part of the Afromontane biodiversity hotspot, which belongs to the 34 global biodiversity hotspots. Over 40 streams and springs originate from the mountains in the Bale Eco-Region that drain into five major rivers—Wabe-Shebelle, Web, Welmel, Genale, and Dumal. Approximately 12 million people who live in the downstream areas depend on these rivers for their livelihoods. The Eco-Region exhibits a wide range of topography which spans from 1500 to 4377 meters above sea level.

Fig 1. Map showing the location of BER

According to the 2007 population census, the total population of the Bale Eco-Region is 1,202,015 (FDRE Population Census Commission 2008). From this, 1,058,665 is classified as rural, while the remaining 143,350 as urban. This means, 88% of the population of the Bale Eco-Region is rural. The Bale Eco-Region receives almost eight months of precipitation (March-October) (Hailemariam et al. 2015). Temperature varies from the lowest of less than 7.5°C at the Sannati Plateau to over 25°C in Dolo Mena (WBISPP 2001: Cited in Hailemariam et al. 2015).

Agriculture is the main economic activity practiced in the Bale Eco-Region. The local population depends primarily on mixed agriculture, both on crop growing and animal husbandry. Generally, the livelihoods of communities in the highland area are predominantly based on a mixed crop-livestock subsistence agricultural system, while communities living in the mid altitude and the lowlands are mainly pastoral and agro-pastoral. Traditional farming is dominantly practiced, but there are some attempts for using mechanized farming. Furthermore, the local inhabitants are also the direct beneficiaries of the forest resource in the area. At present, the local communities are organized into the Forest-Dwellers Associations and community-based organizations, and are authorized to manage the forests. The communities are benefiting from the forests through selling aged trees (mainly by the Forest-Dwellers Associations), receiving compensation when roads are constructed, sharing from trophy hunting, using the forests for house construction and fuel wood.

Research Design

Considering the nature of the problem (i.e., challenges of forest governance in addressing REDD+), descriptive research design was employed and mixed research approach was followed. Descriptive research design is used because the nature of the problem requires an in-depth description of the challenges of forest governance in addressing the implementation of REDD+ projects. Similarly, mixed approach is employed with the intention to come up with dependable and reliable data by supporting the qualitative data with the quantitative one. Hence, the study is predominantly qualitative while the quantitative data are used to support the qualitative analysis. While the qualitative data were gathered through interviews and focus group discussions, the quantitative data were gathered through questionnaires.

Sample Size

As can be seen from Table 1, 65 respondents were identified and consulted through purposive and snowball sampling techniques for in-depth interviews and focus group discussions (FGDs). The number of respondents was based on the saturation of the collected data (collection of excess data). The researcher stopped going further when more than the required data were collected.

Table 1. Sample size of qualitative data

Categories of respondents	Numbers	Affiliation	Methods of data collection
Environment, Forest and Climate Change Authority	10	Experts	In-depth interview
Oromia Forest and Wild Life enterprises	10	Experts	In-depth interview
NGOs (Farm Africa and SOS Sahel Ethiopia)	5	Experts	In-depth interview
Forest dwellers associations (WAJIBs)	16	Leaders and members	In-depth interview and Focus Group Discussions
Community-Based Organizations	16	Leaders and experts	In-depth interview and Focus Group Discussions
Unions	3	Leaders and members	In-depth interview
Cooperatives	5	Executive committee	In-depth interview
Total	65		

The quantitative data were collected using a questionnaire as a tool. The questionnaire, which consisted of 11 five-point Likert scale questions, was prepared and distributed to 395 members of the Forest-Dwellers Associations and the community-based organizations. The sample size was determined using Yemane (1967) sample size determination formula.

This formula was preferred because the size of the population, i.e., the number of members from both the Forest-Dwellers Associations and the community-based organizations is finite and known. Overall, there are 30,000 members – 5,000 are members of the Forest-Dwellers Associations and 25,000 are members of the community-based organizations in the Bale Eco-Region. From those, 395 respondents were identified using the sample size determination formula. From the 395 respondents, the proportion assigned to the members of the community-based organizations was 329; the remaining 66 were assigned to the Forest-Dwellers Associations. Systematic random sampling technique was employed to select the required sample from the targeted population.

$$n = \frac{N}{1+N(e)^2} = \frac{30,000}{1+30,000\,(0.05)^2} = 395$$

Where n=designates the sample size the research uses;

N=designate the total members

e=designates maximum variability or margin of error 5 % (0.05)

1=designates the probability of the event occurring

Methods of Data Analysis

Qualitative Data Analysis

The qualitative data was analyzed through descriptive analysis. Discussion guides were prepared and administered for both the interviews and the focus group discussions. The results were recorded using recording materials based on the consent of the respondents. Both interviews and FGDs were undertaken in the local language Afan Oromo (Oromic). Then, the audio was carefully transcribed and afterwards, it was translated into English. Following this, it was repeatedly read, coded and thematic areas were identified. Finally, the interpretation and analysis were carried out.

Quantitative Data Analysis

Descriptive statistics such as percentage and frequencies were used to analyze the quantitative data gathered on the challenges of forest governance in addressing REDD+. SPSS Version 20 was used to analyze the quantitative data. As mentioned earlier, this quantitative analysis was carried out mainly to support the qualitative data.

Analytical Framework

As shown in Figure 2 below**,** different actors such as the Oromia Forest and Wildlife Enterprise, the Environment, Forest and Climate Change Authority, the local communities and NGOs are contributing their part to the effectiveness of forest governance in the Bale Eco-Region. Despite these contributions, however, forest governance is facing different challenges, such as weak institutional arrangements, continuation of deforestation, low enforcement capacity, low economic benefit to the community due to absence of the expected carbon trade, lack of strong coordination with media and research institutes, conflict of interest among sectors over forest land and lack of adequate budget and logistics to undertake proper monitoring and evaluation, which in turn hamper the effectiveness of the REDD+ project in the Bale Eco-Region.

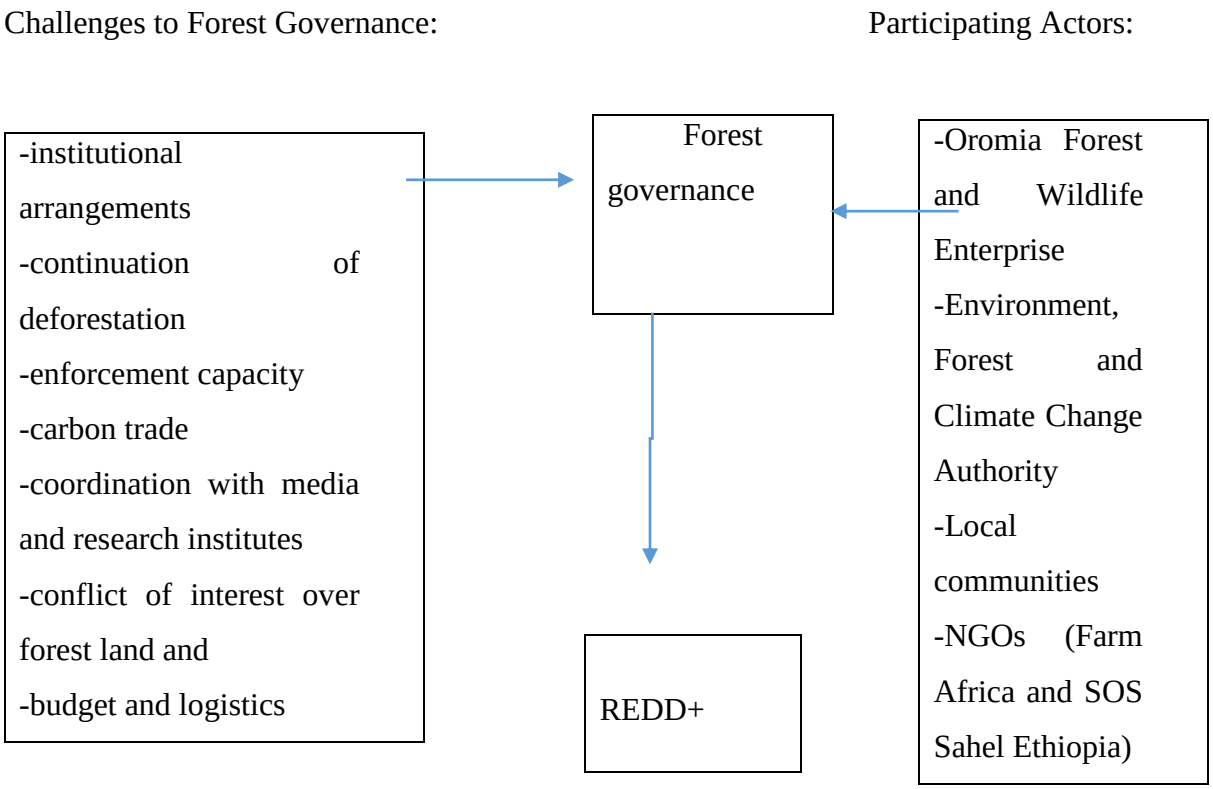

Fig. 2. Analytical Framework for Research

Results and Discussion

Overview of Forest Governance and the REDD+ Project in the Bale Eco-Region

The governance of forests in general and REDD+ in particular in the Bale Eco-Region is characterized by the existence of multiple actors that contribute their own part to the

sustainable management of forest resources. Government, community, and NGOs are actively taking part in the governance of forests, and hence, in the implementation of REDD+. The government is leading the forest governance through its institution of the Environment, Forest and Climate Change Authority and in partnership with Oromia Forest and Wildlife Enterprise (OFWE), while the community is co-governing through its organizations of Forest-Dwellers Associations and community-based organizations (CBOs).

In the Bale Eco-Region, the REDD+ project was carried out for three years, between 2012 and 2015. It was undertaken with the generous support from the NGOs known as Farm Africa and SOS Sahel Ethiopia. These NGOs used the already established community structure to reduce the emissions of carbon dioxide from deforestation and forest degradation. They identified the major causes of deforestation and effectively worked in collaboration with the community organizations, including the CBOs and the Forest-Dwellers Associations to address it. This had become fruitful and hence, effectively reduced a certain amount of emissions from deforestation and forest degradation at least during the project life time. From this, therefore, it is clear that while attempting to address the REDD+ project, forest governance is an interactive effort that invites various actors to play an active role in its governance.

Challenges of Forest Governance in Addressing REDD+

Forest governance is facing different challenges while addressing the REDD+ project. These challenges need to be urgently identified and systematically dealt with. Some of the major challenges are described below.

Weak Institutional Arrangements: Institutional arrangements are one of the factors that reduce the effectiveness of forest governance in general, and REDD+, in particular. Why is this a challenge in this case? Because of the lack of a central and responsible authority that continuously follows the activities of every stakeholder and then makes them responsible for their misdeeds. If we examine, for instance, the existing chains of responsibility, we see that the different bodies are responsible to govern the forests differently in their own respective institutions. For instance, the district level Oromia Forest and Wildlife Enterprise office, which concessionally has the authority to govern the forests, reports to their branch offices and the branch offices report to the regional office, which in turn reports to the regional government. Similarly, the community organizations that co-govern the forests, such as the Forest-Dwellers Associations (WAJIB) and the CBOs at Kebele levels (lower levels of government below the district level) report to the

cooperative, while the cooperative reports to the district level union, which in turn reports to the cooperative promotional agency. These two institutions—the Forest and Wildlife Enterprise and the community organizations—are benefit-oriented and hence, their main priority is not forest conservation, but rather the benefits that they derive from it.

The other institution working on forest governance is the Environment, Forest and Climate Change Authority. Its offices are also vertically responsible, which means the district Environment, Forest and Climate Change Authority is responsible to the Zone, which in turn is responsible to the Region. The Environment, Forest and Climate Change Authority was actually established as a regulatory body of the forests and the forest products. It is the office that allows the above two offices to transport and sell their legal output to the markets. It is non-profit oriented and it is run by the government. Theoretically, this office is authorized to follow, evaluate, and take corrective measures of the performance of the above two bodies. In practice, the office is facing two major challenges. The first is that there is no clear chain of responsibility that obliges the other two offices to submit their plans and performance reports to this office. The second stems from the recent formation of the office. Because of this, the office does not have enough capacity in terms of financial, material, and human resources. For instance, the Forest-Dwellers Associations were formed in 1998 in Adaba-Dodola. The CBOs were formed starting from 2006 in the West and the East Bale zones and the West Arsi Zone, while the Oromia Forest and Wildlife Enterprise was formed in 2008 in Oromia region in general, and the Bale-Eco Region, in particular. These institutions were given the responsibility of managing, conserving, and sustainably utilizing the forest and the forest products. As they are benefit-oriented, they may utilize more resources than they are supposed to utilize. In relation to this, the respondents indicated that the Oromia Forest and Wildlife Enterprise is utilizing more and planting less. As shown below, deforestation also continues inside the Forest-Dwellers Associations and the CBOs. However, the Environment, Forest and Climate Change Authority has not yet made performance evaluations on those institutions, nor taken any corrective measures.

In relation to this, the other problem continuously raised is institutional multiplicity and instability. The key informants and FGD participants stressed that the Environment, Forest and Climate Change Authority and the Oromia Forest and Wildlife Enterprises are more or less working on the same things. Because of this, there is duplication of effort between them. The respondents argued that if both offices are vital, it is better to merge them or otherwise to dissolve one and retain the other. The respondents also stressed that

continuous change of the structure of those offices was another challenges of the office in its attempt to realize sustainable management of forest resources.

The Continuity of Deforestation: Deforestation is another challenge that has affected the implementation of REDD+ in the Bale Eco-Region. Actually, tree-planting is also taking place in Ethiopia. For instance, since 2007, the government of Ethiopia has been planning and planting trees every year by mobilizing the communities. However, it is widely believed that deforestation of old-growth forests is much higher than that of recently planted forests. In Ethiopia, conversion of forests to agricultural land and unsustainable use of fuel wood are the two major drivers of deforestation (Forest Carbon Partnership Facility 2018). Similarly, agriculture is the primary driver of deforestation in Latin America and Asia (UN-REDD PROGRAMME 2013).

Contrary to this, however, while experts have attested that deforestation and forest degradation are taking place at high rates in the Bale Eco-Region, different factors, as shown in Table 2, are responsible for the continuation of deforestation. According to the survey respondents, the main ones are illegal use of the forests for construction, uncontrolled conversion to grazing land, settlement, conversion to farm land, and charcoal extraction; in order of their significance respectively. Below, we discuss each one of them.

Table 2. Causes of Deforestation

No.	Questions	Measure	Low	Fair	High
1	Illegal use of forest products for construction	Frequency	60	131	204
		Percent	15.2	33.2	51.7
2	Uncontrolled land conversion to grazing land	Frequency	97	129	169
		Percent	4.5	32.7	42.8
3	Uncontrolled land conversion to settlement	Frequency	143	110	142
		Percent	35.2	27.8	36
4	Uncontrolled land conversion to farm land	Frequency	131	169	94
		Percent	33.4	42.8	23.8
5	Forest land grabbing	Frequency	127	135	133

		Percent	32.2	34.2	33.6
6	Charcoal extraction	Frequency	232	104	59
		Percent	58.8	26.3	15

One of the main factors that has contributed to the continuation of deforestation in the Bale Eco-Region is illegal destruction of the forests for construction. As it can be seen from Table 2, the majority of the respondents (51.7%) indicated that the illegal use of forests for construction is «high», while 33.2% and 15.2% defined it as «fair» and «low», respectively. From this, it can be concluded that the illegal use of the forests for construction is the main cause of deforestation in the study area.

Furthermore, conversion to grazing land is the second major factor that mainly contributed for deforestation in the study area. As it can be seen from Table 2, more than 40% of respondents (42.8%) reacted that conversion of forests into grazing lands is «high» in the Bale Eco-Region while 32.7% and 4.5% responded that it was «fair» and «low», respectively. Thus, the quantitative result revealed that conversion to grazing land is high. Actually, using forest land for grazing is allowed to the community particularly after planted trees have reached the age of maturity (after two years). According to the informants, there was an agreement made about this between the community and the government at the time of formation of the participatory forest management organizations. Cattle and other animals live in the forest along with the local community. There were also households having grazing land even before the implementation of PFM. However, grazing land became the cause of deforestation in two ways. First, households that previously had grazing lands were expanding by converting the forests into additional grazing lands. Second, during the dry season, households from the lowlands were moving with their cattle to the Haranna forest—the well-known forest in the Bale Zone—in search of water and grass. Millions of cattle were being moved from the lowland areas and settled in the Haranna forest. This has become the second major cause of deforestation in the study area.

Illegal settlement within the boundaries of the forest is the next major factor that is responsible for the continuation of deforestation in the Bale Eco-Region. As shown in Table 2, more than one-third of the respondents (36%) said that illegal settlement within the boundaries of the forest was «high», while the remaining 35.2% and 27.8% responded

that it was «low» and «fair», respectively. It should be made clear that there are two forms of PFM currently being practiced in the study area. These are the capacity-based settlements and the management of forests, which are known as the Forest Dwellers Associations and the CBOs. What is meant by «settlement»?

First, expansion of settlements within the Forest-Dwellers Associations themselves. Considering the capacity of forests, Forest-Dwellers Associations were formed in Adaba-Dodola in 1998. It was analyzed and agreed then that the carrying capacity of each Forest-Dwellers Association would be 360 hectares for 30 households. During the formation process, priority was given to early settlers. Late settlers were obliged to withdraw in places where there were more than 30 households and the government promised to arrange other mechanisms of withdrawal for the new households that would be formed there. After nearly 20 years, however, so many households had emerged and kept settling there, which according to the initial rules of formation, was beyond the carrying capacity of the forests. The youngsters who had not formed their own families at the time of institutional formation, began to form their own families. The government failed to enforce the withdrawal of these new households. Currently, many discussions are going on among the concerned stakeholders on how to address this problem.

Second, there are new settlements from newcomers, coming mainly from outside areas and settling primarily in the Haranna forests. According to PFM, such kind of a new settlement is not allowed and illegal. Through GPS, the boundaries of the forest are known. While it is forbidden to undertake new settlements within the boundaries of the forest, some people move and settle within the boundaries of the forest mainly because of population pressures. According to our informants, while those populations are coming from different areas, they are mainly coming from the Harar of Oromia Regional State and the Sidama from Sidama Regional State. Such kinds of illegal settlements are highly observed in the Bale zone, particularly in the Madda Walabu district, Haranna Buluq district, Dallo Manna, and Barbare districts respectively in order of severity.

The other factor for the continuation of deforestation is the expansion of agricultural lands. As shown in Table 2, the largest percent of respondents (42.8%) said that conversion of forests into agricultural lands was a «medium» reason for deforestation, while 33.4% and 23.8% said it was «low» and «high» respectively. Hence, agricultural land expansion is also contributing its own part for the destruction of forests. In support of this, Beyene et al. (2015) argued that the conversion of forests, woodlands, and shrub lands into agricultural

lands is the largest driver of deforestation in Ethiopia. This, however, does not include lands in forests that were formerly converted to farming. The FGD respondents asserted that farmers were allowed to undertake farming on lands in forests which is formerly allowed for agricultural activities.

Low enforcement capacity of forest offices is the third factor that affects the implementation of the REDD+ project. As it can be seen from Table 3 below, the majority of respondents (57.5%) said that the enforcement capacity of the forest offices was «moderate» while the remaining 33% defined it as «low», and only 9.6% defined it as «high.»

Table 3. Enforcement Capacity

No.	Questions	Measure	Low	Fair	High	Total
1	How do you rate the enforcement capacity of the forest offices?	Frequency	130	227	38	395
		Percent	33	57.5	9.6	100

Contrary to the survey respondents, the key informant experts argued that the enforcement capacity of the forest offices was low, which is also the researchers' observation. This is because there are so many instances that justify the low enforcement capacity of the forest offices. The first is, according to the informants, when individuals are caught in the act of deforestation, effective measures are not taken in the courts. This is mainly due to the absence of adequate evidence emanating from the witnesses' willingness not to disclose the evidence, as well as the detailed process of evidence gathering. In most cases, the witnesses are willing to report to the office about the deforestation taking place by certain individuals at first. Later on, they either refuse to confirm their statements in front of the court or resolve the issue through elders. This is mainly due to the existence of strong social bonds among them.

The other instances that strengthen the existence of low enforcement capacity in the forest governance of the Bale Eco-Region is that the performance evaluation of both the Oromia Forest and Wildlife Enterprise and the PFM organizations has not yet been carried out as

per the agreement. They have taken many years after their establishment, but the forest related audit has not yet been done to determine whether they have utilized more of the natural resources or contributed more to the eco-system. Finally, when the Forest-Dwellers Associations were formed, the forest capacity was analyzed and it was determined, based on the carrying capacity of the forests. The government promised to withdraw the households that were above the forest capacity i.e., when it became more than 30 households in one Forest-Dwellers Association. However, due to the demographic pressure, the households within each Forest-Dwellers Association increased and became more than 30. This was because the sons and daughters of the members of each Forest-Dwellers Association grew, formed families and were not willing to withdraw from their Forest-Dwellers Associations, which led to the failure of this capacity-based forest management. The government also failed to enforce the withdrawal of these newly formed households.

In addition to these examples, another example related to the weak government enforcement can be found in forest replanting. The International NGOs FARM Africa and SOS Sahel Ethiopia have trained the community on how to establish nursery sites to plant additional trees and how to manage seeds and seedlings. Furthermore, they provided the community with seeds and different nursery materials. But no nursery sites were established by the community.

Yet another example that strengthens the low performance capacity of the forest offices is the failure of carbon trading on the international markets. The offices initially promised that carbon trading would benefit the local community by securing incentives from the donor organizations or countries through the sale of the produced amount of carbon dioxide equivalent, which was not practically accomplished.

Low direct benefit to the community due to the failure of carbon trade is another factor that has affected the implementation of REDD+ and the sustainable management of the forests. PFM began to be implemented in the Bale Eco-Region starting in 1998 with the intention to reduce deforestation and forest degradation and to achieve the conservation of biodiversity while ensuring the participation of the community and their direct benefit from conservation. As it has been indicated above, different forms of PFM were practiced in the Bale Eco-Region. The first one was the Forest-Dwellers Associations, which have derived direct benefit from the forests and the forest products. The members of the Forest-Dwellers Associations, starting with their formation in 1998, have been benefiting directly from the

forests, particularly until 2016. They were selling aged trees both plantation and natural forests under their protection. When they sold such trees, they received 50% from the sale. Furthermore, they were also benefiting from trophy hunting that was legally undertaken by foreigners, paying certain amounts of money. From this, 60% was given to the Forest-Dwellers Associations, while 40% was taken by the Oromia Forest and Wildlife Enterprise. In addition to that, these organizations have also been benefitting from charging park entrance fees and from the compensation given to them during road construction.

The other form of participatory forest management is the CBOs, which primarily works on the protection rather than the benefits. They cannot sell and directly derive benefits from the forests. However, there are situations in which they do derive benefits from the forests. The first is through compensation given during road construction. For instance, when the Adaba-Angetu road was constructed, the Ethiopian Roads Authority paid 10,000,000 Ethiopian birr (equivalent to nearly 400,000 USD) as compensation for the destruction of natural forests. From this amount, 40% was given to three CBOs, which were conserving these natural forests while the remaining amount was taken by the Oromia Forest and Wildlife Enterprises. Furthermore, trophy hunting was also conducted in the forests that were under the control of the CBOs and from this, 60% went to the community. Moreover, when plantation forests conserved and protected by the Oromia Forest and Wildlife were sold, the office gave 5% to the community. However, when asked individually, the members had not received any, or in some instances had received insignificant amounts, directly from the protection and conservation of the forests.

Because of the above reasons, the community in general and the CBOs and Forest-Dwellers Associations in particular had great hopes to benefit from the selling of carbon that has been sequestered. In support of this, Duker et al. (2018) stated that the local communities had high expectations concerning the benefits that they would receive from the REDD+ project, and they were anticipating that they would be compensated for forest conservation. This is because REDD+ is meant to incentivize the forest-dependent communities of developing countries for reducing greenhouse gas emissions from deforestation and forest degradation or for increasing carbon stocks within their forests compared to a reference emissions level (Vanderhaegen et al. 2015). In the Bale Eco-Region, the carbon sequestration work was done under the first phase of REDD+ projects of FARM Africa and SOS Sahel Ethiopia for three years, between 2012 and 2015. During this time, these NGOs identified the major causes of deforestation and effectively worked in collaboration

with the CBOs and the Forest-Dwellers Associations. It was identified then that some of the perceived major causes of deforestation in the Bale Eco-Region were the expansion of agriculture inside the forests, illegal logging, illegal settlement, and occasionally, wild fires. Thus, they effectively worked and suppressed the effects of those factors and consequently reduced deforestation and forest degradation. Finally, the CBOs had generated a total of 5.5 million metric tons of carbon dioxide equivalent. With tropical deforestation accounting for up to a fifth of global, anthropogenic carbon dioxide emissions, the storage of this gas is probably the most valuable non-market benefit associated with forest conservation (Groom and Palmer 2012). This was done by 64 CBOs that were established then in the Bale Eco-Region. However, this internationally recognized amount of carbon has not yet reached international markets. Hence, REDD+ has not yet contributed to the improvement of forest-dependent communities' livelihoods. This has greatly discouraged the communities and reduced their trust in the main actors of the issue of carbon sequestration, particularly FARM Africa and SOS Sahel Ethiopia and other international actors.

Regarding the failure of the expected carbon trade, the communities were asked about the existence of well-established channels to access carbon markets. Depending on the question, as shown in Table 4, 82.6% responded that there were «low» established channels to access the carbon markets.

Table 4. Existence of Well-established Channels to Access Carbon Markets

No.	Question:	Measure	Low	Fair	High	Total
1	To what extent do you believe that there are well-established channels to access carbon markets?	Frequency	326	44	25	395
		Percent	82.6	11.1	6.3	100

The key informants also indicated that the certificate of existing results of carbon sequestration had been released on the web site. However, there were no lobbyists in

foreign countries to work towards selling the carbon emissions. Hence, the absence of established channels to access the carbon markets might be the reason for not selling this stock of carbon.

Low coordination with Media and Research Institutes is yet another challenge that has affected the effective implementation of the REDD+ project in the Bale Eco-Region. As it can be seen from Table 5, the majority of the respondents (73%) have indicated that the forest offices have «low» cooperation with the media. The key informants also indicated that because of lack of resources, the forest offices were not utilizing media to the expected level. But media plays a vital role in publicizing about REDD+ and educating the citizens about the existing laws of forests, their importance, conservation and the existing destruction.

Table 5. Coordination of Forest Governance with Media and Research Institutes

No.	Question:	Measure	Low	Fair	High	Total
1	To what extent do you perceive that forest offices cooperate with the media?	Frequency	289	88	16	395
		Percent	73.4	22.3	4.1	100
2	To what extent do you perceive that forest offices cooperate with research institutes?	Frequency	213	134	48	395
		Percent	53.9	33.9	12.2	100

Similarly, the majority of the respondents (53.9%), as shown in Table 5, indicate that the forest offices had low cooperation with the research institutes. The key informants also confirmed that the research institutes closest to the Bale Eco-Region were Madda Walabu University and Wendo Genet College of Forestry and Natural Resources. From these two

institutions, researchers did occasionally come and collect data, but they did not make the results of their studies accessible to the forest offices.

Conflict of interest over forest lands is also another challenge that has affected the implementation of the REDD+ project in the study area. As can be seen from Table 6, the majority of respondents (39.5%) reacted that there was a «fair» share of the conflict of interest among the government sectors over the use of forest land.

Table 6. Existence of Conflict of Interest Over Forest Land

No.	Questions	Measure	Low	Fair	High	Total
1	To what extent do you believe that there is a conflict of interest among sectors over the use of forest land?	Frequency	140	156	99	395
		Percent	35.4	39.5	25.1	100

In support of the above information, the key informants also confirmed that the local government, the small and micro enterprise offices, and the agricultural offices, at some point had organized the unemployed youths to engage in agricultural activities of the forest land, which led to deforestation and forest degradation. Furthermore, there was also a situation in which small and micro enterprises had licensed the unemployed youths to engage in the home furniture activities in areas where there was no plantation forests. In those locations, the youths were using natural forest resources, which is illegal. Although the Oromia Forest and Wildlife Enterprise and the Environment, Forest and Climate Change Authority oppose those actions, any of their attempts to correct these illegal agricultural expansions and illegal uses of the natural forests, have been futile.

Lack of budget and logistics: Particularly the Environment, Forest and Climate Change Authority of the Weredas (districts) lack adequate budget and logistics to undertake the proper monitoring and evaluation. They do not have vehicles to undertake field visits and to follow the activities of the Forest-Dwellers Associations, the CBOs, and the Oromia Forest and Wildlife Enterprises. Due to the lack of capacity, mainly financial resources, they had not yet carried out forest auditing. According to key informants, the government, besides creating the structure, had not allocated adequate budgets for the Environment,

Forest and Climate Change Authority so that it can effectively carry out the responsibilities it had undertaken.

The Effects of Forest Governance Challenges on REDD+

Our study has shown that while attempting to address the REDD+ project, forest governance has faced different challenges, such as weak institutional arrangements, continuation of deforestation, low enforcement capacity, the failure of carbon trade and the consequent low direct benefit of the community, lack of strong coordination with media and research institutes, conflict of interest over forest land, and lack of adequate budget and logistics to undertake the monitoring and evaluation. Other studies have also confirmed these findings. For instance, Asfaw et al. (2015) have revealed that absence of proper institutional arrangements and weak enforcement of forest laws have been observed in other regional states of Ethiopia, particularly in the Southern Nations, Nationalities and Peoples Region. Furthermore, Rahman and Miah (2017) have also argued that the lack of enforcement of forest policies, deforestation, competing interests among government organizations and lack of coordination with academic and research institutes are also some of the problems of forest management observed in the Rema-Kalenga Wildlife Sanctuary in Bangladesh.

These challenges of forest governance have both a direct and an indirect effect on the implementation of REDD+ projects in the Bale Eco-Region. For instance, the continuation of deforestation has a direct effect on REDD+. Since when deforestation continues, the emissions of carbon dioxide from deforestation also continue to grow, which is contrary to the intention of REDD+. Similarly, the failure of carbon trade and the consequent low direct benefit of the community also had a direct effect on REDD+. The intention of REDD+ was to economically support the developing countries in general and the forest-dependent communities in particular for their contribution to carbon dioxide emissions reduction from deforestation and forest degradation. When forest-dependent communities are not economically supported, they engage in deforestation and forest degradation for their daily livelihoods. This has been observed in the Bale Eco-region. After the end of the REDD+ pilot project in 2015, the registered success of REDD+ has not continued, which has led to further deforestation and forest degradation. The reason for this is the lack of economic benefits, initially promised to the communities via the REDD+ mechanism.

On the other hand, weak institutional arrangements and low enforcement capacity have had an indirect effect on the implementation of REDD+ as well. Because of weak institutional arrangements, there has been a weak chain of responsibility among the Oromia Forest and

Wildlife Enterprise, Environment, Forest and Climate Change Authority, and the community organizations. This, in turn, weakens the monitoring and evaluation of the Oromia Forest and Wildlife Enterprises (concessionally holding the power to administer the forests) and the community organizations (authorized to administer the forests under their rule) that in turn worsened deforestation and forest degradation. Similarly, the weak law enforcement capacity of the forest offices, which has been observed in the administrative activities of the forest offices and the courts, has had an indirect effect on the implementation of REDD+. For instance, it has created gaps in establishing nursery sites, building the capacity of the members, and encouraging the illegal deforestation by the local people. These, in turn, have hampered the effectiveness of the REDD+ project even further. Besides those challenges, the lack of strong coordination of the research office with the media and research institutes has also had an indirect effect on the REDD+ project in the Bale Eco-Region. Since the media has been responsible for the low publicity of the achievements so far made regarding the REDD+ project, it has in turn weakened the international community response to the generated amount of carbon dioxide equivalent.

Response to the Challenges of Forest Governance and REDD+

Various research studies and solution attempts have been undertaken to tackle the challenges of forest governance and the problems of deforestation. The study have found that the main factors responsible for the continuation of deforestation are the use of forest outputs illegally for construction, uncontrolled conversion of forests to grazing land, illegal settlement, conversion to farm land and charcoal extraction. For instance, a task force was formed in the Bale Eco-Region to tackle the problem of illegal settlement that caused deforestation. The task force was formed and included nine sectors—the courts, the police office, the justice office, the Environment, Forest and Climate Change Authority, the Oromia Forest and Wildlife Enterprise, the Bale National park, the Woreda administration, the agricultural office, and the land administration. This task force was successful in some districts, mainly in the Haranna Buluq district. In addition, as part of the REDD+ project, NGOs (FARM Africa and SOS Sahel Ethiopia) and community organizations (both Forest-Dwellers Associations and the CBOs) have identified the major causes of deforestation and have effectively tackled them, particularly for three years, between 2012 and 2015. Due to this success, the international organizations had certified them for effectively reducing emissions from deforestation and forest degradation. However, there have been no countries or international organizations that were willing to buy the generated amount of

carbon dioxide equivalent, which discouraged the local community and encouraged further deforestation.

Currently the other challenges such as absence of PFM in the forest policy of the country and absence of benefit sharing mechanisms (e.g., what percentage of the benefits should go to the community, to the project developer, and to the government) have been attempted to be addressed. The issue of participatory forest management was addressed by the government and thus, PFM was included in the Forest Development, Conservation and Utilization proclamation 1065/2018. However, regarding the benefit sharing mechanism of REDD+, a clear, dependable and universal benefit sharing system has not yet been developed because this requires a clear definition of what the benefits are, who has rights to them, how will they be allocated and distributed, and who should make these decisions (Ravikumar et al. 2015). Despite this, however, an attempt was made in the Bale Eco-Region to develop an agreed upon benefit sharing mechanism. Through discussions with the government and NGOs, the community had reached consensus on the benefit sharing, which prioritized community benefits. But, contrary to this, in Ghana, the benefit sharing has been biased towards the traditional authorities and local governments, and hence, farmers and forest fringe communities have not been directly included in the benefit sharing, and so they receive few direct benefits (Hansen et al. 2009).

Thus, through long discussions in the Bale Eco-Region, the community has set the following criteria that facilitate the fair assignment of the expected benefits to the community organizations.

1. Deforestation is weighted out at 50%. The CBOs and the Forest Dwellers Associations that score less on deforestation, will get more benefits
2. The size of the population will be weighted out at 20%
3. Areas will be weighted out at 8%
4. Organizational Capacity Assessment Tools (OCAT) results will be weighted at 22%.

The remaining task has been to decide how the dividend would reach the communities and hence, after many discussions, they have established committees. They have also discussed how to treat grievances and for that, they have established different committees whose members are selected from each district in order to make it more representative. Regardless of the attempt so far made to develop an agreed upon benefit sharing mechanism in the Bale Eco-Region, the benefit sharing mechanism needs further refinement as it is expected to be binding.

Prospects of Forest Governance and Implication to REDD+

It is clear from this study that the forest governance of the Bale Eco-Region has the following prospects. The first is that the existing forest governance has authorized the community, specifically the Forest-Dwellers Associations and the CBOs, to administer parts of the forests. Thus, forest governance is inclusive of the community. The second is that capacity-building training and material support are being continuously given to the members of these organizations by NGOs, such as FARM Africa and SOS Sahel Ethiopia, which is vital for the implementation of REDD+. Furthermore, moderate coordination is created among the government sectors, particularly between the Oromia Forest and Wildlife Enterprise and the Environment, Forest and Climate Change Authority, which can be considered as an opportunity for the implementation of REDD+. This is important because studies have revealed that the lack of coordination among government organizations in the Rema-Kalenga Wildlife Sanctuary in Bangladish (Rahman and Miah 2017) and poor coordination among government ministries and between different levels of government in Indonesia (Mulyani and Jepson 2013) are among the main challenges of REDD+ implementation.

Furthermore, the decision making is inclusive of all critical actors, which is vital to address the interests of stakeholders. The existing community structure—Forest-Dwellers Associations and CBOs—is also another element for the implementation of the REDD+ project in the Bale Eco-Region. Formerly, FARM Africa and SOS Sahel Ethiopia relied on those community structures to carry out the Bale REDD+ project, which was successful in reducing emissions from deforestation and forest degradation. However, the international community was not committed to buy the generated carbon dioxide equivalent. Most likely, this was because prior agreements were not concluded with any international organizations or any interested countries. Currently, however, the Oromia government has concluded an agreement in advance with the World Bank to buy-out a certain amount of carbon dioxide equivalent. The Oromia REDD+ is being carried out throughout the Oromia regional state. However, the Bale Eco-Region is not made part of it. Experts from the district Environment, Forest and Climate Change Authority and Oromia Forest and Wildlife Enterprise want the inclusion of the Bale Eco-region in the Oromia REDD+. But, the government has not yet decided, probably because the communities are exhausted by the former Bale REDD+ project.

Conclusion and Policy Implications

The Bale REDD+ project was supported mainly by the NGOs FARM Africa and SOS Sahel Ethiopia. Sixty-four (64) community-based organizations, with the support of different sectors and mainly the NGOs, produced a total of 5.5 million metric tons of carbon dioxide equivalent in three years between 2012 and 2015. Regardless of this, however, deforestation and forest degradation have continued in the Bale Eco-Region, especially after 2015.

Forest governance has faced different challenges in an attempt to realize the REDD+ project. Some of the major challenges that have been identified in this study are weak institutional arrangements, continuation of deforestation, low enforcement capacity, the failure of carbon trade and low direct benefits to the community, lack of strong coordination with media and research institutes and lack of adequate budget and logistics to undertake the monitoring and evaluation. Because of these challenges, the REDD+ project of the Bale Eco-Region was not successful in bringing sustainable reduction of emissions from deforestation and forest degradation. Of these challenges, the main one is that the REDD+ project has not brought the expected financial benefit to the local community, which in turn has contributed to further deforestation, particularly after 2015. Immediately after the generation of the estimated carbon dioxide equivalent, the community expected to get financial benefit for their achievement from the international community. But, the absence of an international market for the then produced amount of carbon dioxide equivalent discouraged them, which in turn was responsible for loosening community forest conservation and control that caused further deforestation and forest degradation. From this, it can be learnt that the promise alone to incentivize the community through REDD+ projects, without actually realizing it, has a devastating negative effect on the sustainable reduction of greenhouse gas emission through the REDD+ mechanism. It undermines the legitimacy and effectiveness of the REDD+ approach and the actors involved in its implementation. To overcome this, it is recommended to sign an agreement, in advance, with the interested donor organizations or countries, which are willing to buy the anticipated carbon dioxide equivalent.

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Paper Five: The Opportunities of Forest Governance for the Further Implementation of REDD+ in Oromia Regional State: the Case of the Bale Eco-Region

Abstract

It is evident that the Bale REDD+ was failed in that it is not successful in bringing sustainable reduction of emission from deforestation and forest degradation after the end of the project in 2015. Despite this, however, there are still governance related opportunities for the further implementation of REDD+ in the Bale Eco-Region. But these governance related opportunities are not yet identified. Hence, the purpose of this paper is to identify the existing opportunities of forest governance for the further implementation of REDD+ in the Bale Eco-Region. To achieve this goal, a mixed research approach was employed. The qualitative data was collected through key informant interviews and focus group discussions, while the quantitative data was gathered through questionnaires. The study revealed that the presence of moderate coordination among sectors, the establishment of participatory forest management, stakeholders participation in decision making, existence of benefit sharing mechanisms, giving capacity building training, women participation, the openness of governance to change, and the existence of forest conservation programs are some of the major opportunities available in the Bale Eco-Region to further implement the REDD+.

Key words: the prospect of REDD+; REDD+; Forest Governance; Bale Eco-Region; Bale REDD+

Introduction

Forests are essential for all life through sustaining vital ecosystem functions such as oxygen production, carbon sequestration, water quality, soil fertility, and biological diversity (Wallin, 2017). Furthermore, they can generate multiple products—wood for construction and/or fuel, wildlife, water, leaves, fruits, fodder, seeds, straw, shade, fertile soil, etc. (Andersson et al.,2004). Hence, forests provide various ecosystem services such as provisioning, cultural, supporting, and regulating ecosystem services that have high value both at the local and global scale (Vanderhaegen et al.,2015).

The world has so far experienced different forms of forest governance. Until and through the 1960s, forests could either be managed by the state or by private entities (Monditoka, 2011). The 1980s witnessed the rise of community forestry, which decentralized the

authority and responsibilities down to the community. Hence, decentralization was accepted as an effective and efficient form of forest governance nationally and internationally. Despite this, the team of specialists on participation in forestry (2000) indicated that lack of public participation, emanating from lack of information and interest, lack of self-confidence (not believing in their ability to influence), the problem of access to the participatory process, and tactical behavior (preferring silence) are among the major challenges of decentralized forest governance. Furthermore, Andersson et al., (2004) stated the challenges related to its nature (being common pool resources), the problem of conforming to existing political institutions, and the existence of externalities with the use of natural resources as a difficulty to effectively govern natural resources.

Similarly, Ethiopia had been experiencing a centralized and top-down approach of forest governance especially until the introduction of PFM in the mid-1990s. Because of the ineffectiveness of this centralized forest management approach, the state introduced the decentralized forest governance in general and Participatory Forest Management (PFM) approach in particular at the project level in the mid-1990s. However, this decentralized approach itself is facing various challenges such as the disparity between the PFM institutional principles and the actual local forest management practices (Ayana et al.,2015), low participation of women (Engida and Mengistu, 2013), weak enforcement of forest law and land-use policy, lack of adequate capacity, limited knowledge on the multifaceted advantages of forestry, lack of market access and limited value addition, weak inter-sectoral linkages and absence of proper institutional arrangement at regional level (Asfaw et al., 2015).

Despite this, Ethiopia is currently carrying out the implementation of REDD+ pilot projects. Bale REDD+ project is one of these projects which began in 2012. Between 2012 and 2015, it is internationally certified that a total of 5.5 million metric tons of carbon dioxide equivalent was produced through this project in the Bale Eco-Region. However, the project failed to bring sustainable impacts on emission reduction particularly after 2015. Regardless of this, however, the forest governance of Bale Eco-Region has yet different opportunities for the further implementation of REDD+ in Bale Eco-Region. But, this opportunities of forest governance are not yet scientifically investigated. Hence, the purpose of this study is to identify the opportunities of forest governance for the further implementation of REDD+ in Bale Eco-Region.

Methods and Materials

Research Design

Considering the nature of the problem (i.e., the opportunities of forest governance for the further implementation of REDD+), descriptive research design was employed and mixed research approach was followed. Descriptive research design is used because the nature of the problem requires an in-depth description of the challenges of forest governance in addressing the implementation of REDD+ projects. Similarly, mixed approach is employed with the intention to come up with dependable and reliable data by supporting the qualitative data with the quantitative one. Hence, the study is predominantly qualitative while the quantitative data are used to support the qualitative analysis. While the qualitative data were gathered through interviews and focus group discussions, the quantitative data were gathered through questionnaires.

Sample Size

As can be seen from Table 1, 65 respondents were identified and consulted through purposive and snowball sampling techniques for in-depth interviews and focus group discussions (FGDs). The number of respondents was based on the saturation of the collected data (collection of excess data). The researcher stopped going further when more than the required data were collected.

Table 1: Sample size of qualitative data

Categories of respondents	Numbers	Affiliation	Methods of data collection
Environment, Forest and Climate Change Authority	10	Experts	In-depth interview
Oromia Forest and Wild Life enterprises	10	Experts	In-depth interview
NGOs (Farm Africa and SOS Sahel Ethiopia)	5	Experts	In-depth interview
Forest dwellers association (WAJIBs)	16	Leaders and members	In-depth interview and Focus Group Discussion

Community Based Organization	16	Leaders and experts	In-depth interview and Focus Group Discussion
Unions	3	Leaders and members	In-depth interview
Cooperatives	5	Executive committee	In-depth interview
Total	65		

The quantitative data were collected using a questionnaire as a tool. The questionnaire, which consisted of 12 five-point Likert scale questions, was prepared and distributed to 395 members of the Forest-Dwellers Associations and the community-based organizations. The sample size was determined using Yemane (1967) sample size determination formula. This formula was preferred because the size of the population, i.e., the number of members from both the Forest-Dwellers Associations and the community-based organizations is finite and known. Overall, there are 30,000 members – 5,000 are members of the Forest-Dwellers Associations and 25,000 are members of the community-based organizations in the Bale Eco-Region. From those, 395 respondents were identified using the sample size determination formula. From the 395 respondents, the proportion assigned to the members of the community-based organizations was 329; the remaining 66 were assigned to the Forest-Dwellers Associations. Systematic random sampling technique was employed to select the required sample from the targeted population.

$$n = \frac{N}{1+N(e)^2} = \frac{30{,}000}{1+30{,}000\,(0.05)^2} = 395$$

Where n=designates the sample size the research uses;

N=designate the total members

e=designates maximum variability or margin of error 5 %(0.05)

1=designates the probability of the event occurring

Methods of Data Analysis

1. Qualitative Data Analysis

The qualitative data was analyzed through descriptive analysis. Discussion guides were prepared and administered for both the interviews and the focus group discussions. The results were recorded using recording materials based on the consent of the respondents. Both interviews and FGDs were undertaken in the local language Afan Oromo (Oromic). Then, the audio was carefully transcribed and afterwards, it was translated into English. Following this, it was repeatedly read, coded and thematic areas were identified. Finally, the interpretation and analysis were carried out.

2. Quantitative Data Analysis

Descriptive statistics such as percentage and frequencies were used to analyze the quantitative data gathered on the challenges of forest governance in addressing REDD+. SPSS Version 20 was used to analyze the quantitative data. As mentioned earlier, this quantitative analysis was carried out mainly to support the qualitative data.

Analytical Framework

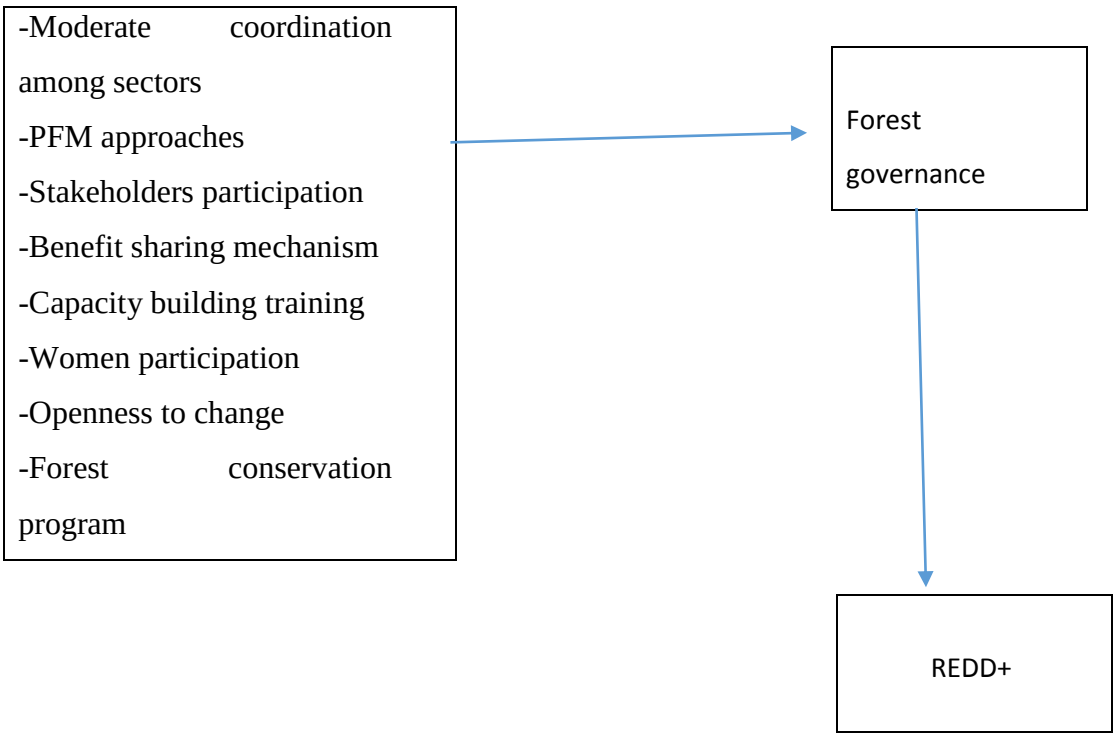

Figure 1. Analytical Framework for Research

As shown in Figure 1, the existence of moderate coordination among sectors, the establishment of PFM approaches, the participation of key stakeholders in decision making, the development of benefit sharing mechanism, the capacity building training,

women participation, actor's openness to change and the existence of forest conservation program are the existing opportunities that positively affect forest governance in the Bale Eco-Region, which in turn contributes to the further implementation and consequent success of REDD+

Results and Discussion

The Opportunities of Forest Governance for the Further Implementation of REDD+

There are different opportunities available in the Bale Eco-Region for the further implementation of REDD+. Some of the major opportunities are reviewed as follows.

Existence of moderate coordination among sectors: is one of the opportunities available for the further implementation of REDD+. As it is shown in Table 2, the majority of the respondent's i.e 59.2% responded that there is moderate coordination among sectors working on or concerned with the governance of forest and forest products. The qualitative data also confirms the existence of moderate coordination among sectors.

Table 2: The Existing Coordination among Sectors

No.	Questions	Measure	Low	Fair	High
1	To what extent do you perceive that you have coordination with other sectors?	Frequency	65	234	96
		Percent	16.4	59.2	24.4
2	To what extent do you believe that you have regular interaction with other sectors?	Frequency	77	243	75
		Percent	19.5	61.5	19.0
3	To what extent do you believe that you have two way interaction with other sector?	Frequency	96	252	47
		Percent	24.3	63.7	11.9

The informants also stressed that the nature of the work particularly the protection, conservation and usage of forest and forest products oblige the sectors to have interaction. Because sector offices such as Environment, Forest and Climate Change Authority, Forest and Wildlife Enterprises, Land Administration, Agriculture, Zonal and Wereda

Administration, Judges, Prosecutor, Justice Office and Police Officers have involved in one way or another on the management of forests and forest products. The respondents from the Forest and Wildlife Enterprise further indicated that they have yearly coordination plan as the issue of forest cannot be effectively undertaken by a single body. To do this, stakeholder analysis was first done, which identified the sectors concerned with the protection, management and usage of forests. Thus, an agreement was concluded with 11 sectors, which took their own respective roles. For instance, the Environment, Forest and Climate Change Authority and Forest and Wildlife Enterprise works closely with the Zonal and Wereda Administration, Judges, Prosecutor and Police Officer to ensure rule of law particularly concerning forests. Because, it is widely observed that there are individuals who engaged illegally on the destruction of forests to satisfy their own personal need. In this regard, illegal destruction for construction, illegal settlement within the boundaries of forest, illegal expansion of agricultural lands, converting forest land to grazing land and contrabands of forest products are highly observed in the Bale Eco-Region.

To tackle this, a task force committee was established. Currently, the committee is getting financial support from an NGO known as the Frankfurt zoological society and is working in three districts. The task force has nine members coming from nine sectors such as the Court, the Police Office, Justice Office, Environment, Forest and Climate Change Authority, Forest and Wildlife Enterprise, Wereda Administration office, Agriculture office, Bale National Park and Land Administration. This task force committee is established at district level to reduce or if possible stop forest destruction. After identifying the existing problems of deforestation, they either take administrative measures or refer the issue to the courts. Currently, while the task force committee has become relatively effective in Haranna Buluq Wereda, it is still at infant stage in Dalo Mena and Barbare districts.

The main challenge regarding sector coordination is the absence of regular interaction among sectors and the existing interaction itself is not two-way interaction. Regular and two way interaction is observed only between the Environment, Forest and Climate change Authority and Oromia Forest and Wildlife Enterprises. But, these offices have no regular interaction with the agricultural office. Concerning forest, the agricultural office is charged with the task of establishing and managing nursery sites. But, no nursery site is currently being established by agricultural office in Bale Zone. At present there are only two nursery sites found at Goba and Dalo Mena districts that were established and managed by the Oromia Forest and Wildlife Enterprise.

Establishment of Participatory Forest Management: Participatory forest management began to be established in the Bale Eco-Region in the late 1990. Forest-Dwellers Associations (WAJIBs) were the first to be established in Adaba-Dodola in 1998. They are authorized to conserve, manage and use forests under their rule. Following Forest-Dwellers Associations, another form of participatory forest management known as CBOs (community Based Organizations) was established in other parts of the Bale Eco-Region in 2006, with the generous support of FARM Africa and SOS Sahel Ethiopia. These two forms of participatory forest management authorized the community to administer forests under their control. Because of this, the community has recently a sense of ownership. Even the community together with the FARM Africa and SOS Sahel Ethiopia has contributed greatly for REDD+ projects in Bale Eco-Region.

The participatory forest management approach, as it empowered the community to actively engage on the forest issues, can have positive contribution for the realization of REDD+ projects. Because, it is empowering the community through training, organizing, authorizing and enabling them to contribute for the reduction of emission from deforestation and forest degradation. The attempt to use the community structure to realize REDD+ in Bale Eco-Region was also successful between 2012 and 2015 for three years.

Stakeholder's participation in Decision-making: different concerned stakeholders are participating in the governance of forest resources in the Bale Eco-Region. The government, the community and NGOs are the main actors that are playing a larger role in forest governance. Furthermore, research institutions and Medias are also playing limited roles in supporting forest governance.

While the Environment, Forest and Climate Change Authority of the Zone and Weredas and Oromia Forest and Wildlife Enterprise are playing a major role on the part of the government, the Forest-Dwellers Associations and CBOs are playing a greater role from the side of the community in governing forest and forest outputs. In addition to them, different government sectors and the forest unions are contributing to the governance. This shows that some kind of common understanding is created among concerned stakeholders which is vital for the further implementation of the REDD+. As it can be seen from the Table 3, every stakeholders are highly allowed to express their interests and the decision making is inclusive. Hence, the domination of one actor over the other is not observed. Instead, the decision is made through consultative way. NGOs mostly do not participate in decision making. Rather than participating in decision making, NGOs mostly work on the implementation of those decisions. They play a supportive roles in the governance of

forests. Such kinds of consultative decision making is vital for the realization of REDD+ in that it allows various stakeholders to contribute their label best for the effectiveness of it.

Table 3: Stakeholders Participation

No.	Questions	Measure	Low	Fairly	High
1	To what extent do you believe that there is well established mechanisms of stakeholder's involvement?	Frequency	120	236	39
		Percentage	30.4	59.7	9.9
2	To what extent do you perceive that every stakeholders are allowed to express their interest?	Frequency	48	125	222
		Percent	12.1	31.6	56.3

Development of a Benefit-Sharing Mechanism: is another opportunity available in the Bale Eco-Region for the further implementation of REDD+. Developing clear benefit sharing mechanism is needed for the effective implementation of REDD+ project. Regarding this, it is clear that one of the main challenges of carbon related projects in Ethiopia is absence of benefit sharing mechanism (e.g., how much for community and how much for the project developer, and how much for the government, etc). Currently, however, it has shown improvement in Bale Eco-Region. In this area, the community, together with the NGOs known as FARM Africa and SOS Sahel Ethiopia, undertook REDD+ project. After ensuring practical improvement in the global environment, it was promised that the community would receive practical financial benefit from the project. With this in mind and having tangible result, the community, FARM Africa and SOS Sahel Ethiopia and local government began discussion on how to share the anticipated benefits of REDD+. Depending on the community discussion, the government has finally decided that the community would receive 80% while the government receives 20% from the carbon trade.

As it is clearly shown on Table 4, the foresters were also asked the extent to which there is well established benefit sharing mechanism in the Bale Eco-Region. Based on this 44.1%

and 44.3% indicated that the strength of the benefit sharing mechanism is moderate and low respectively. From this, it is clear that the benefit sharing mechanism needs further improvement.

Table 4: Benefit-Sharing Mechanism

No.	Questions	Measure	Low	fairly	high
1	To what extent do you believe that there is well established benefit sharing mechanism?	Frequency	175	174	46
		Percent	44.3	44.1	11.6

Provision of capacity building training for both the employee and the foresters: Capacity building training is vital for both the government employees concerned with forest and the foresters to enable them effectively undertake their duties. Mostly, the NGOs (FARM Africa and SOS Sahel Ethiopia) are providing this capacity training for both the employee and the foresters. Furthermore, the Oromia Forest and Wildlife Enterprises and the Oromia Forest Land Scape Program are also occasionally providing training to the organized community.

Concerning the accessibility of the existing capacity building training, as shown in Table 5, the majority of the respondents' i.e 51.1% rated it as moderate. The key informant interview result also confirmed that FARM Africa and SOS Sahel Ethiopia mostly provides the training to the leaders. It doesn't neither include the whole employees including the experts nor has similar kind of training been arranged by the trained personnel. It remains with the leaders and hence, the training doesn't not have further impact at the grassroots level.

Similarly, as it is revealed in the Table 5, the majority of the respondent's i.e 49.1 % indicated that the accessibility of the training to the members of Forest-Dwellers Association and CBOs is estimated to be moderate. Here also the training is criticized for having similar problems. The first is that the training is mostly given to the leaders of Forest-Dwellers Associations, CBOs, Cooperative and Unions. It is repetitively given to them. Second, it is weak in-terms of having impacts on the other members as they do not arrange further training at local level. Finally, the impact of the training is not being checked and followed.

Table 5: Capacity Building Training

No.	Questions	Measure	Low	fairly	high
1	To what extent do you believe that the capacity building training is accessible for all employee?	Frequency	115	204	76
		Percent	29.1	51.6	19.2
2	To what extent do you believe that the capacity building training is accessible for the members of Forest-Dwellers Association and CBOs?	Frequency	130	194	71
		Percent	33	49.1	18

Women Participation: As it is clearly shown in the Table 6, the large portion of the respondent's i.e 50.4% indicated that women participation in the forest governance is high in Bale Eco-Region. They do participate both as member and leaders of the CBOs and Forest-Dwellers Associations.

Table 6: Women Participation

No.	Questions	Measure	Low	fairly	high
1	To what extent do you believe that there is well established mechanism of women involvement?	Frequency	38	158	199
		Percent	9.6	40.0	50.4

About 40 % of the members of both CBOs and Forest-Dwellers Associations are women. Mostly women serve as the deputy manager of the committee. They do also receive capacity building training. Because, women empowerment is one dimension of OCAT (organizational capacity assessment tool) evaluation. This tool helps to assess the capacity

of the members of those organized forest groups, which is used as an input to arrange further training.

Openness to change: as it is shown in Table 7**,** the large portion of the respondents' i.e 53.2% attested that the readiness of the existing forest governance to embrace new change is estimated to be high. The leaders of the Oromia Forests and Wild Life Enterprise, the Environment, Forests and Climate Change Authority, the Forest-Dwellers Associations and CBOs have also confirmed that they are ready to accept new changes. But, to accept it, the change has to be rational change.

Table 7: Openness to Change

No.	Questions	Measure	Low	fairly	high
1	To what extent do you believe that the forest governance is open to change?	Frequency	55	130	210
		Percent	13.9	32.9	53.2

For instance, when the REDD+ was introduced by FARM Africa and SOS Sahel Ethiopia, it was accepted by the forest offices, especially by the CBOs and Forest-Dwellers Associations, which contributed much for its effectiveness without resistance. The REDD+ practically contributed to the environment by generating a total of 5.5 million metric tons of carbon dioxide equivalent. Thus, in terms of contributing to the environment, it was successful. However, in terms of generating income to the local community, it was not successful, because there was no market for the generated carbon.

Existence of Forest Conservation Program: As it has been shown in Table 8, the majority of the respondents, i.e. 59.5% rated the existing forest conservation program as moderate. The results of the interview also confirmed that the major conservation projects available in Bale Eco-Region was the Bale REDD+ project.

This REDD+ project was conducted for three years between 2012 and 2015. By addressing the root causes of deforestation, it has achieved fruitful results and hence contributed to the global environment. Similarly, as it is revealed in Table 8, the majority of the respondent's i.e. 51.6% estimated the strength of the Bale REDD+ as moderate. According to the respondents, the weakness of this project is that it is implemented over a shorter period of time, while the objective of forest development cannot be achieved with in a short period

of time. It is difficult to plant, grow, conserve and ultimately utilize the forest resources with in this very limited time. By its nature, forest is a long term investment.

In addition to this project, the government has been planning and planting trees through mass mobilization under the slogan known as “green legacy”. For instance, the government has planted 5 billion trees under green legacy in Ethiopia in 2020.

Table 8: Existence of Forest Conservation Program.

No.	Questions	Measure	Low	fairly	high
1	To what extent do you think that forest offices have forest conservation programs?	Frequency	82	235	78
		Percent	20.8	59.5	19.8
2	How do you rate the strength of this forest conservation programs?	Frequency	140	204	51
		Percent	35.5	51.6	12.9

Furthermore, the Oromia Forest and Wild Life Enterprise and Forest Dwellers Associations are also responsible to plant, grow and conserve plantation forests with the intention to replace the area from where the aged plantation trees are sold as they are given the right to utilize it.

Conclusion

Consistent with the international goals, Ethiopia had been carrying out pilot REDD+ projects in different parts of the country. Bale REDD+ project is one of such projects. This Bale REDD+ project was carried out for three years between 2012 and 2015. During the project life time, it has produced a total of 5.5 million metric tons of carbon dioxide equivalent. However, it has not brought the expected economic benefit to the community. Because of this, the registered success has not been continued after 2015 and hence deforestation and forest degradation have continued. Regardless of this, forest governance of the Bale Eco-Region and the REDD+ project has left good opportunities for further implementation of REDD+. Some of the existing governance related opportunities to further implement REDD+ are presence of moderate coordination among sectors, the

establishment of participatory forest management, stakeholders participation and inclusive decision making, existence of benefit sharing mechanisms, capacity building training being given, women participation, the openness of governance to change, and the existence of forest conservation program. However, to succeed, the international community should work to realize their promise and hence incentivize the local community for their contribution to carbon sequestration.

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Appendices

Appendix I: Questionnaire

General Instructions: The purpose of this questionnaire is to explore the challenges of forest policy and governance taking the case of Bale Eco-Region, Oromia Regional State. It is designed mainly to generate genuine information on the issue of concern for an academic ends which is mainly a fulfilment for the requirement of PhD in environment and development. It will not certainly affect negatively any sections of the society. It will not have impact on you in your attempt to provide genuine information in the area. Even your name will not be disclosed without your consent to do so. The university and the researcher would like to thank you in advance for your cooperation. Because, it is highly believed that your genuine response will have great value for the success of this study.

Part one: you are requested to tick on the answer that you feel right from the given alternatives

Indicators to analyze Forest Governance

No.	Indicators	Perception of trained foresters on forest governance				
		Very Highly	Highly	fairly	low	Very low
1	How do you rate the rightness of the forest related decisions taken in your area?					
2	How do you rate the rightness of the forest related actions taken in your area?					
3	How far do you think that there is a body that review the rightness of the forest related decisions and actions taken in your area?					
4	To what extent measure is taken on wrong forest related decisions and actions?					

5	To what extent do you think that the desired results have come about?					
6	To what extent do you think that stakeholders have contributed for the achievement of the desired forest results?					
7	To what extent do you think that the results achieved is in line with forest policy?					
8	To what extent do you think that the existing human resources are efficient in bringing the desired forest results?					
9	To what extent do you think that the existing human resources are capable in bringing the desired forest results?					
10	To what extent do you think that the existing financial resources are efficient in bringing the desired forest results?					
11	To what extent do you think that the allocated finance is invested on the desired forest projects?					
12	To what extent do you think that forest outputs matches with the financial inputs?					
13	To what extent do you think that the desired forest project results have achieved on time?					
14	To what extent do you think that there is fair mechanism of involvement?					

15	To what extent do you think that the existing forest project invites every member of the society equally?						
16	To what extent do you think that the existing forest rules and regulation equally applies on every member of the community?						
17	To what extent do you perceive that there is well established mechanism to involve stakeholders when forest related decision is taken?						
18	To what extent do you perceive that the forest office identify and invite critical stakeholders?						
19	To what extent do you perceive that the interest of every stakeholders are represented?						
20	To what extent do you perceive that every stakeholders are allowed to express their interest?						
21	To what extent do you perceive that the stakeholders are willing to participate in forest governance?						
22	To what extent do you perceive that stakeholders are committed to participate in forest governance						
23	To what extent do you perceive that you have cooperation with those stakeholders?	Media					
		NGO					
		Research institute					
		Communit y					

24	To what extent do you perceive that there is dominance of one stakeholders over the other?					
25	To what extent do you perceive that stakeholders have the necessary expertise for effective participation					
26	To what extent do you perceive that the decision made on forest related issues are accessible to the community?					
27	To what extent do you perceive that the action taken on forest is open to the community?					
28	To what extent do you perceive that forest related information is open for every member of the community?					
29	To what extent do you believe that the forest related information is clear to the community?					
30	To what extent do you perceive that there is established network of communication on forest related issues?					
31	To what extent the existing forest governance involves you in the decision making and implementation?					
32	To what extent do you believe that the decision taken on forest governance is responsive to the interest of the community?					

Part two: you are requested to tick on the answer that you feel right from the given alternatives

Challenges of Forest Governance in addressing REDD+

No.	Indicators		Rating				
			Very Highly	Highly	fairly	low	Very low
1	To what extent do you perceive that you have coordination with other sectors?						
2	To what extent do you believe that you have regular interaction with other sectors?						
3	To what extent do you believe that you have reciprocated interaction with other sector?						
4	To what extent do you believe that you have coordination with those stakeholders?	NGOs					
		Communities					
		Research institutes					
		media					
5	To what extent do you believe that there is free flow of information among stakeholders? (NGOs, Communities, Research institutes, media)						
6	To what extent do you believe that your forest office is open to change?						
7	To what extent do you think that there is illegal use of forest products for construction?						
8	To what extent do you perceive that	farmland					
		grazing land					

	there is uncontrolled land conversion to	settlement					
9	To what extent do you believe that there is land grabbing?						
10	To what extent do you perceive that there is charcoal extraction?						
11	How do you rate the enforcement capacity of the forest offices?						
12	To what extent do you think that there is procedural fairness?						
13	To what extent do you believe that there is well established dispute settlement mechanisms?						
14	To what extent do you think that forest offices have forest conservation programs?						
15	How do you rate the strength of this forest conservation programs?						
16	To what extent do you think that land and forest tenure is secure to the community?						
17	To what extent do you believe that the rights to carbon from forest is clear?						
18	To what extent do you think that there is coherent land use plan?						

19	To what extent do you believe that there is conflict of interest over land use? (among agriculture, industry and others?					
20	How do you rate the financial management of the forest office?					
21	How do you rate the revenue management of the forest office?					

Part three: you are requested to tick on the answer that you feel right from the given alternatives

Contribution of forest governance for REDD+

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No.	Indicators	Perception of trained foresters on forest governance				
		Very Highly	Highly	fairly	low	Very low
1	To what extent do you believe that there is well established institutions and bodies aimed at developing and implementing REDD+					
2	To what extent do you believe that there is well established benefit sharing mechanism?					

3	To what extent do you believe that there is capacity building for	Employee					
		forest user groups					

4	To what extent do you believe that there is fairness of benefit sharing mechanism						
5	To what extent do you believe that the necessary resources are deployed to forest user groups?	NGOs					
		Media					
		Research institutes					
		Community					
6	To what extent do you believe that there is favourable environment to attract more international support?						
7	To what extent do you believe that there is well established recruitment criteria from local community?						
8	To what extent do you believe that there is established body that continuously follow the project?						
9	To what extent do you believe that there is a continuous follow up from the concerned body?						
10	To what extent do you believe that there is a regular meeting to discuss over REDD+?						
11	To what extent do you believe that there is well established rules and regulations governing REDD+?						

12	To what extent do you believe that there is well established mechanisms to increase carbon stocks?					
13	How far do you believe that there is agreement among stakeholders over the implementation of REDD+?					
14	To what extent do you believe that there is well established mechanisms of stakeholder's involvement?					
15	To what extent do you believe that there is well developed service delivery mechanisms?					
16	How far do you believe that REDD+ governance converge with local practices?					
17	To what extent do you believe that there is well established mechanism to add value to the existing forest resources?					
18	To what extent do you believe that there is well established channel to access carbon markets?					
19	To what extent do you believe that there is well established					

	mechanism to involve women during recruitment?					
20	To what extent do you believe that appropriate hand over ways to the local community is designed when the REDD+ will faith out to ensure sustenance of the conservation and community livelihoods?					
21	To what extent there is well established mechanism that let local people independently lead their life when the project faith out?					
22	To what extent do you believe that there is policy support on certification of forest product?					
23	To what extent do you believe that there is policy on land use planning that incorporated environmental sustainability objectives?					
24	To what extent do you believe that there is policy on payments for environmental services					

Appendix II: Interview Guiding Questions

1. Type of stakeholders

A. NGO B. community C. Media

D. Government official's E. Research institutions

2. Could you tell us the state of forest governance before the introduction of REDD+

3. What are those criteria's that are considered to qualify as REDD+ projects

4. Do you think that the existing forest governance involves you?

5. Do they involve you in every decision taken on forests?

6. Please, could you tell us when they involve you and when they do not?

7. Do you recognize differences between the current and the former forest governance?

8. If your answer is "yes", could you tell us those differences?

9. Could you tell us some of the benefits that are achieved as a result of REDD+ projects

- ✓ Regarding establishment of enforcement laws
- ✓ tree planting
- ✓ development of alternative means of energy
- ✓ community livelihood improvement
- ✓ community capacity building
- ✓ environmental education
- ✓ creation of employment opportunity
- ✓ direct payments
- ✓ Ecotourism

10. What kind of decisions that influence forest governance are so far taken?

11. Who mostly initiates?

12. Who are decision maker?

13. To whom decision makers are responsible?

14. If your answer is "yes", could you tell us a bit about this responsible body?

15. if your answer is "no", what will happen if decisions that contradict the policies are made?

16. What kind of actions that influence forest governance is so far taken?

17. Who had taken them?
18. Are they responsible for it?
19. Who holds them responsible?
20. What will happen if wrong actions are taken?
21. Could you give examples of measures taken on wrong actions?
22. When you have taken forest related actions, what kind of results have you registered?
23. Have you achieved the desired objectives?
24. Could you tell me some of your achievement in relation to your objectives?
25. Who achieved them?
26. How do you see the sustainability of REDD+ projects? What will happen to local community livelihoods and environmental sustainability if REDD+ will faith out?
27. Could you separately tell us the roles of the following stakeholders on the decentralized forest governance?

1. Local government officials
2. Medias
3. Civil society organizations (local and international NGOs)
4. Research institutions (Think tanks and other research institutions)
5. Community