International Institute of Social Studies

Erasmus

"They Think I Know Everything": The Politics and Ethics of Environmental Restoration in Tigrai, Ethiopia

A Research Paper presented by:

Dawit Merhatsidk Gebremedhn

(Ethiopia)

in partial fulfilment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

Agrarian Food and Environmental Studies

AFES

Members of the Examining Committee:

Tsegaye Moreda
Julien-François Gerber
Murat Arsel

The Hague, The Netherlands
December 2018

Inquiries:

Postal address:

Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799

Contents

List of Figures

List of Maps

List of Appendices

List of Acronyms

EPRDF   Ethiopian People Revolutionary Democratic Front
DT   Development Team
FFW   Food for Work
GTP   Growth and Transformation Plan
ISS   International Institute of Social Studies
MoFED   Ministry of Finance and Economic Development
TGE   Transitional Government of Ethiopia
TPLF   Tigrai People Liberation Front
WFP   World Food Program
WB   World Bank

Acknowledgement

Abstract

This research examine the political ecology of environmental restoration and the nature of peasant participation in Ethiopia. It investigate the question of how and to what extent have environmental restoration programs in Ethiopia has been shaped by the 'environmentalism of the state'. Many have been arguing that Ethiopian restoration efforts lack a participatory approach and has been a cause for a less rosy results of restoration projects. EPRDF adopted participatory approach for environmental restoration projects. However, less concern was given to questions like what institutional arrangements exist and what power relations are implied in the planning and implementation of restoration projects and how do the power relation shapes the nature of peasant participation? The research locates itself on the political ecology of conservation and control and argues that environmental restoration projects even though supposedly met their technical merits, but they are being used for social and political control. Peasant participation is limited to the contribution of labor and natural resources. While the literature focuses on the peasant empowerment in economic aspects, this research mobilizes relevant data to argue that the sustainability of restoration is dependent of the political empowerment of the peasants. Despite the claim of that the government is using participatory approach and the peasants are willing to continue to work for free in restoration areas, the research finds out that the peasants considers the restoration areas as a symbol of state power, not their power nor their symbol of commitment.

Relevance of the Study

Environmental Restoration projects can contribute greatly to the development of both political and material lives of agrarian societies. However, this potential of environmental restoration is achieved through greater political participation of the peasants. For this purpose labor mobilization and enforcement mechanisms of restoration must be studded throughout. Political ecology is used to explain how the restoration projects are being used to extend state power and serve for a political and social control. This study will contribute to the ongoing debate on the nature of peasant participation in environmental restoration projects and how that affect the outcomes of restoration projects.

Keywords

Environmental restoration, Participation, state power, Infrastructure of power, Environmentalism of the peasant

Chapter One

1.1 Background of the Study

After his brief visit to the famine-torn areas of Wollo and Tigrai in 1975, Leslie Brown writes that "I see this beautiful and potentially productive country … sliding rapidly towards early and complete environmental and consequently economic ruin" (quoted in Rahmato 2003: 206). Influenced by a disaster-centred and neo-Malthusian discourse of environmental degradation and supported by international funding agencies, the Ethiopian government had extensively invested in environmental restoration programs over the last several decades (Kidane-Mariam 2003). Between the 1970s and 1980s, $900 million mobilized from the European Union, World Bank, World Food Program (WFP), and other funding institutions were invested in environmental restoration projects. However, so little was achieved, and the majority of the projects were either demolished or had fallen into disuse (Rahmato 2003: 207).

Academic debates in Ethiopia since the 1990s on environmental restoration focus on why such huge environmental restoration projects achieve so little? Notwithstanding various explanations on the cause of the failure, most academic research outputs to some level agree on the lack of participation, the way environmental degradation was framed and acted upon, and top-down blueprint approaches as the main causes for the failure of such programs (Hoben 1995, Rahmato 2003, Admassie 2000, and Keeley and Scoones 2000). The failure of the top-down approach begs another solution. Since the 1980s, policymakers and academic debates tend to value the bottom-up approach, and the argument for the political participation of the peasants began to be appreciated and started to get traction.

With the coming to power of the current government Ethiopian People's Revolutionary Democratic Front (EPRDF) by toppling down the Derg military-socialist regime in 1991 and with its promise of democracy, bottom-up participatory approach gained more traction (Keeley and Scoones 2000: 109). However, there are still studies that claim the restoration projects are failing due to a lack of genuine participation (Segers et al. 2008: 94). Besides, current reports and policies on environmental restoration are largely focused on documenting the scale of physical infrastructures constructed and the number of people participating in the restoration projects. In this regard, there is a need to ask at least two interrelated questions. The first one is the question of how peasant labour is being mobilized and how do the peasants perceive their involvement in the restoration projects, and the second one is on how the current government has been framing environmental degradation and how and to what extent has that framing shaping ongoing environmental restoration programs.

Thus, the main aim of this research is to examine the politics of environmental restoration by making the dynamics of labour mobilization at the centre of the study. By the politics of environmental restoration, I mean the political, economic and social context as well as power relations where environmental restorations are taking place. In order to examine the nature of

labour mobilization, a critical engagement on how environmental degradations are framed and how environmental restoration is integrated under this framing appears imperative for two reasons. The first one is to examine the underline governing principle of the policy-makers critically and the second one is to see how the restoration projects are understood and integrated into the current Ethiopian environmental policies. This analysis will help to understand the dynamics of labour mobilization and the meanings that peasants develop towards restoration projects.

1.2. Statement of the Research Problem

Problems related to global environmental change and growing global concern for environmental degradation are well established in academic and public debates (Admassie 2000, Alemu 1999, Carson 2009). In developing countries such as Ethiopia, environmental degradation has been taking a disastrous dimension. Like other resource-poor countries, it has been argued that Ethiopia has been hit hardest due to global environmental changes. Admassie (2000: xx) states that "Ethiopian environmental woes are possibly among the most serious – even by African standard". Triggered by these woes, environmentalists in Ethiopia have raised a specter of large-scale environmental degradation since the 1950s (Rahmato 2003: 206). The way the "environmental condition" has been depicted so far suggests that unless urgent action is taken, the very survival of the nation is at risk and the economy faces ruin (Rahmato 2003: 206-207). This depiction of Ethiopia's environmental degradation helps the Ethiopian government to mobilize sizable amounts of donations from donor countries (Berhanu and Poulton 2014: 197, Rahmato 2003: 206-207).

Numerous studies claim that the sizable amount of money and labor that was invested in environmental restoration in the past decades had limited impacts in reversing environmental degradation and the structures built had largely fallen into disuse (Admassie 2000: 263, Rahmato 2003: 205 Hoben 1995). Research outputs suggest that the way Ethiopia's environmental problem had been framed was misleading (Rahmato 2003). Besides, it excludes the lived experience, the political willingness, and participation of the local people (Hoben 1995, Rahmato 2003). In recognition of this, the current Ethiopian government promotes local initiatives and stimulate a tailor-made approach for environmental management (Neyssen et al. 2004: 142). However, the low performance of environmental restoration due to the lack of genuine participation of peasants in the decision-making process still needs scrutiny (Segers et al. 2008: 94) and put in perspective.

A critical approach in Ethiopian environmental studies shows that the apolitical and top-down versions of agricultural extension (supply-driven) are still influential in Ethiopian environmental policies (Hoben 1995, Rahmato 2003). As most development practices in Ethiopia are dominated by supply-driven, bottom-up political initiatives and environmental restoration practices are limited and mostly ineffective in cases where they were implemented (Segers et al. 2008: 97). So far, little research has been done to critically examine the political context of environmental restorations and the labor mobilization process. The context that informs this research project is the assertion that there

has been a lack of political participation among local communities. Participation has the potential to affect the outcomes of restoration projects beyond the construction of physical infrastructure. Participation can politically empower peasants, enhance a sense of ownership and facilitate a moral commitment towards the maintenance of the restored landscapes.

As a result, it is essential to put the dynamics of labor mobilization at the center of further research on the politics of environmental restoration. The politics of environmental restoration requires a critical analysis of the political and social dynamics in contexts where restoration projects are being implemented. This research sets out to critically examine the politics surrounding the dynamics of labor mobilization and how labor mobilization can affect the outcomes of environmental restoration projects in Ethiopia, with a particular focus on rural areas of the Tigrai regional state.

1.3. Objective of the Study

The main objectives of this research is to explore the extent of environmentalism of the state in shaping restoration projects in Tigrai, Ethiopia. An attempt is made to understand and explain the dynamics of labour mobilization, the nature of participation of peasant and the outcomes of restoration in the context of the current political, economic and social structure.

1.4. Research Question

This research seeks to examine the following main research question followed by a series of specific sub-research questions: How and to what extent have environmental restoration programs in Ethiopia been shaped by the 'environmentalism of the state'?

1.4.1. Sub-Research Questions

- How does the Ethiopian Government frame environmental degradation and how does this impact environmental restoration projects?
- What political and social mechanisms are deployed in implementing these restoration projects?
- How do the political use of environmental restoration shapes the nature of peasant participation
- How do peasants perceive the restoration projects and how do they relate to the restored landscape?

1.5. Description of the Study Area

Endamekoni is one of among the 53 *weredas[1]*, of Tigray region located 127 km away from the capital city of the regional state, Mekelle, in northern Ethiopia. In terms of Zonal division, Endamekoni wereda is found in the Northern Zone of the region. Endamekoni wereda comprises 62,184.25 hectare (622.41 square kilometres). The greatest part of the population are farmers. The *wereda* is mostly located in highlands (*degua[2]* and *weyna dega[3]*) 2826 meters above sea level. This *wereda* has 19 *Tabya/kebeles[4]*, the lower level of local administration, under it. *Tabya* Tekelehaymanot is one of the 19 *tabyas* located in *wereda* Endamekoni and Ajira is one of the *gotts,* (village), located in Teklehaymanot.
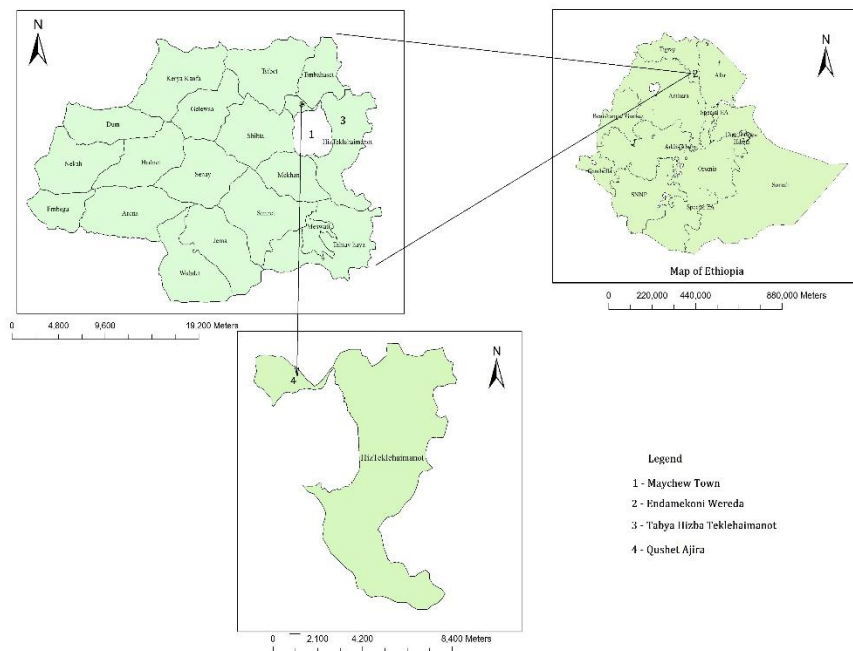
Map 1: Map of the study area. The map was made by Goitom Tewelde, Budget expert at Wereda Endamehoni

1.6. Methodology

To understand the research questions and meet the stated objectives of this research we need a research method that help to examine the everyday meaning making, attitude and power relations between people. Using a qualitative research method helps to understand meaning making among the people, and can make the invisible or unheard to be heard and visible (Hennik et al. 2011: 8). Qualitative method according to Hennink et al. (2011:8-9) is "an approach that allows you to examine people's experiences in detail, by using a specific set

---

[1] District

[2] Highland

[3] Mid attitude

[4] Lowest formal local administrative unit

of research methods such as in-depth interview". I find qualitative method as the most appropriate methodology to conduct this research. Since the prime objective of this research is to seek an explanation on how labor is being mobilized from the local people themselves, and since I contest the state-centered environmental management with a modernist and a positivist account of knowledge, I assume that knowledge can be co-produced in an intersubjective dialogue.

1.6.1. In-Depth Interview and Interview Setting

To better understand how the local peasants perceive their level of participation and how they make a meaning in their involvement in restoration project and relate themselves with the restored landscape, we need to engage in a deep conversation with the peasants and this is possible in an in-depth interview (Hennink et al 2011: 109). In-depth interview is a "meaning-making partnership between interviews and their respondents, which indicates that in-depth interviews are a special kind of knowledge production" (Hesse-Biber and Leavy as quoted in Hennink et al. 2011: 109). In-depth interview is important in providing a detailed insight into the research problem from the perspective of the research participants and facilitate a discussion between the interviewee and interviewer.

In order to keep the natural setting, the farmers were the interviewed in restoration project sites. The respondents were chosen based on purposive sampling. To keep the diversity of the respondents and see power relationship and their attitude, I choose participants based on their role in the restoration projects, their position in the local administration and development team. Age and gender were also taken in to account. I chose five farmers, two network leaders (one from women network and one from men network), two development group leaders (one man and one woman). I also interviewed a total of eight experts and a political appointee informant. One party members who is working in rural politics and one farmers association leader was chose to explian the power relation between civil society and political leaders. Two *wereda* experts and two regional experts were also interviewed. A development agent was also interviewed to exam the power relation in knowledge production. In addition to this, one professor who has done research in restoration projects for long time was also interviewed.

1.6.2. Participatory Observation

To understand how participation is understood by the peasant and examine the power relations in restoration planning and implementation, we need to immerse ourselves in settings on which we can hear, watch and feel people's experience (Marshall and Rossman 2011: 140). The immersion of oneself in the context of the research problem helps to have a direct access to experience of the people and how they understand their involvement in the projects (Marshall and Rossman 2011). Since a researcher works under the assumption that social world is a co-constructed reality (O'Reilly 2009), I used participatory observation to produce an experiential knowledge that lets both the researcher and the

respondent to talk in-depth (Bernard 2011: 256) and co-produce a situated knowledge. To facilitate the in-depth conversation, I need to build a good rapport by participating in the local people's every day activity. Participatory observation in this context is a research method with an ethnographic orientation that enables the researcher to get closer into the reality of the local people and enable direct observation rather than relying on what is being told by the local people. The focus of participatory observation in this research is to observe the dynamics of the social and political relationships in restoration projects (Bernard 2011: 260). The purpose of participatory observation specifically is to complement the in-depth interview. The focus of the observation was to observe how the local people interact with the local administrators in working in restoration sites. The researcher able to participate in public work activities such as planting tree siblings and also helped the peasants plant the siblings.

Figure 1: Participatory Observation with a focus of participation in the restoration effort with the local community in Awu Keren, Ajira. Photo Goitom Tewelde, August, 2018

1.6.3. Data Analysis and Validation

The empirical data gathered was transcribed and translated from Tigrigna (the local language) in to English. The data was coded, analyzed and organized by using the ATLAS.ti 8 software. The software is used to document, retrieve and organize data. I used open inductive coding to identify underlying principles (Flick 2009: 311). To insure the quality of the data, I had a series informal discussions with different actors and key informants throughout fieldwork period. Participatory observation helped to go beyond the interview data, sensitized me about the overall setting of the restoration projects and build good rapport with the local people.
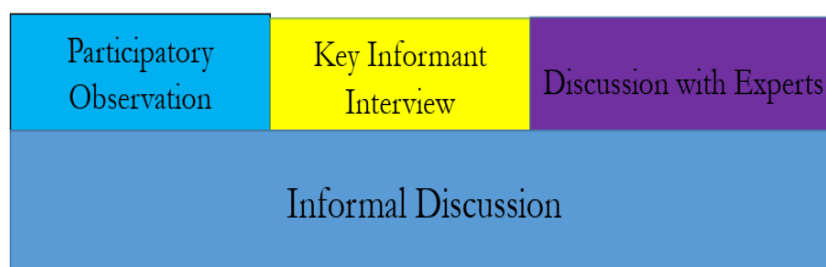
Figure 2: Data collection and validation. Source, Author's elaboration

1.7. Ethical Consideration, Risk, and Positionality

1.7.1. Ethical Considerations

Ethics, according to Orb et al. (2001: 93), "is pertains to doing good and avoiding harm", and thus this research will work to avoid any potential harms by observing ethical principles. Ethical principles in research include "informed consent, privacy, harm, exploitation, and consequences for future research" (Hammersley and Atkinson 2007: 209). I carefully observed research ethics surrounding social research. The first ethical challenge is getting a consent from the participant of the project. I informed them that I am there to help as a graduate student. I got a consent from the local leader, *wereda* and agricultural cadre to involve in the project. Another ethical consideration was the issue of privacy. I will respect the privacy of the interviewees by making their names anonyms (Hammersley and Atkinson 2007).

1.7.2. Researcher's Positionality and Reflexivity

I was born and raised in the Town, Maichew, near to the local community that conducted this research. I speak the same language as the research participants and I am exposed to the life of rural life through my grandparents. This make me an insider that gave me an advantage to talk to gatekeepers easily and have an easy access to the research area. Speaking the same language with the research participant facilitated my communication with the peasants. However, as a graduate student who traveled to do research, made me outsider with academic purpose. This affected my communication in the sense that the peasants in my first contact was not willing to give a critical, fearing that the comments might be shared with the *wereda* officials. I avoid some of my connection of *wereda* officials to make my informant comfortable.

1.8. Chapter Overview

This study contains five chapters. The first chapter outlines the research objective, problem statement and research question. The second chapter deals

with theoretical and conceptual frameworks. The third chapter attempts to address the issue of how the current government frames environmental degradation and how that impact environmental restoration efforts which is the first sub-question of this study. The second and the third sub-research questions which deals with the political, social and economic mechanism deployed to implement environmental restoration and how this shapes the nature of peasant participation in environmental restoration are addressed in chapter four. Chapter five deals with perception of peasant community towards the restored land and how they relate, value and understand the restoration area. The last chapter deals with the conclusion of the study.

Chapter Two: Theoretical and Conceptual Framework

2.1. Political Ecology

If environmental degradation in Ethiopia is associated with the margination of the local people in environmental decision-making, then it appears logical to assume that sustainability of restoration efforts are associated with the wellbeing, ownership, political empowerment and autonomy of the community. This has been evident in Ethiopian context during the Derg regime[5]. When the government withdrew from the restoration efforts, the restoration sites were left unused and the sustainability of the project was undermined by the lack of willingness of the peasant to continue working on restoration sites (Admassie 2000, Rahmato 2003). Admassie ponders the question of why government projects undertaken to avert land degradation has not been sustained by the peasant (Admassie 2000). He establishes an argument that the property right issue contributes most for the "failure" of the soil conservation efforts (Admassie 2000).

As Neumann points out conservation and restoration efforts are not only matters of controlling and rehabilitating nature, it also deals with meaning, autonomy, ethics, culture, place of human being within the natural environment (as cited in Robbins 2012: 178). Besides, the suitability and the outcomes of the restoration projects are dependent on the political use of enforcement in implementing restoration projects and therefore, restoration should not be simply understood as a mere application of technology (Light and Higgs 1996). Locating the political context where restoration activities are undertaken ought to be examined to understand how the participation of the local community to examine power relations, environmentalism, and restoration practices. For this purpose, I locate this research under political ecology that deals with conservation and control.

The argument of conservation and control thesis identifies, according to Robbins (2012: 21), political circumstance and socio-political organizations that has been "disabled by officials and global interests seeking to preserve the "environment". The political power wrested the natural resource in the name of sustainability, community development, and nature. For this, the officials marshal the argument that the local people are the cause and the victims of land degradation and thus capacity-building through technological transfer is proposed as a solution.

According to Robbins (2012: 178), this thesis of political ecology draws upon four theoretical foundations. The first one is based on Michael Foucault's concept of governmentality, a condition where the consent of the governed is obtained through social technologies (Robbins 2012: 178). Conservation

---

[5] Derg is a social military regime that ruled Ethiopia 1974-1987

according to this thesis reflects a form of governmentality that deals with how the society consent to be governed which is obtained through social engineering and enforced by a social institution. The social institutions and form of knowledge like technological supply define what a desirable behaviour is and what is expected from restoration as outcomes (ethics, material, autonomy and aesthetical) (Robbins 2012: 179). The second one deals with institutions like traditional resource management in extraction and control of resource without a necessary state intervention. The third draws from the idea of wilderness as an imposed idea. The last one deals with the shortcoming of conservation as they are not adequate to meet the goals of preservation and livelihood of the local people (Robbins 2012: 179).

2.1.1. Varieties of Environmentalism

The growing concern of humanity about the relationship between economic growth and environmental wellbeing has attracted the attention of environmental scholars since 1970s. There has been proposals that range from the total withdrawal of human beings from nature to incorporating economic growth within the environment (Alier 2002, Daly 2005). Alier (2002) identifies three varieties of environmentalism within environmental movement and activism: the cult of wilderness, the gospel of eco-efficiency and environmentalism of the poor. In addition to this, Rahmato (2003) identified two varieties of environmentalism in Ethiopia that could help to understand the relationship between the state, peasant and their approach: environmentalism of the peasant and environmentalism of the state. In what follows, I sketch the main theoretical assumptions of those environmentalisms and identify the relevant environmentalism to understand my research objectives and answer the research questions.

A. The Cult of Wilderness

This movement is based on conservation biologist and environmental philosophers who hold an idea that it is a human obligation to preserve the pristine nature. As it is represented by John Muir and the Sierra Club, the cult of wilderness considered itself as a movement of a defence of an immaculate nature (Alier 2002: 2). Even though the movement is not against economic growth, however, it also advances an argument that there are values which are not marketable. We have to have, to use Leopold's phrase, "rearguard action" to keep the remaining pristine nature outside of the market (Alier 2002: 2). Besides scientific reasons and utilitarian arguments, the cult of wilderness holds that we have other motivations to preserve nature like religious and aesthetic values. This movement appeals to human instinct of "biophilia", the right of other species to live and religious accounts of the arc of Noah, and the teaching of Francis of Assis on the right of non-human beings (Alier 2002: 2). It successfully influences and shapes movements like biodiversity convention in Rio de Janeiro 1992, and the Endangered Species Act in the United States. This movement further was strengthening by its appeals towards the sacred of nature inspired by indigenous beliefs that helped in clarify concerns of ecological economic namely "incommensurability of values", i.e., values that are

incommensurable with economic values (Alier 2002: 3). According to Alier (2002: 3), this movement was actively represented by deep ecology movement that favoured a "biocentric" attitude towards nature. Based on the assumptions, the policy recommendation of this movement is the preservation of nature and making some pristine nature free from human interference. Friends of Earth can be cited as an example of this movement.

B. The Gospel of Eco-efficiency

As a challenge to the cult of wilderness, this current "worried about the effects of economic growth not only on pristine areas but also on the industrial, agricultural and urban economy" (Alier 2002: 5). The movement holds that the whole economy matters and upholds a sustainable use of "natural resources". Besides "wise use" of resources, it bases its argument on ecological modernization and sustainable development and thus has been considered as a business link to sustainable development (Alier 2002: 6). As a scientific base, this current is based on environmental economics which attempts to get the price right and internalizing environmental costs. In addition to this, it also uses the scientific arm of industrial ecology which studies "industrial metabolism". The key concept in explaining how to make economic growth sustainable without harming nature is the Kuznets curve which advocates for economic growth with a win-win for the environment and economic development (Alier 2002:6). To achieve a win-win solution of environmental and development relevant, ecological modernization proposes emission grant and ecological tax (Alier 2002: 6).

C. Environmentalism of the Poor

The third current of environmentalism which is called environmentalism of the poor or liberation ecology or livelihood ecology challenges the above currents. It holds that an increase in economic growth means is an increase in environmental impact, and it "emphasizes [on] geographical displacement of sources and sinks" (Alier 2002:10). According to this current, the industrial countries dependency on the south for their growing consumption facilitates the creation of different frontiers of raw materials like aluminium frontier (Alier 2002:10). Establishment of such frontiers leads to the dispossession and dislocation the poor and indigenous community. Thus, the current makes fighting of the unequal distribution of environmental goods and bad as its defining character. It appeals to the basic of environmental justice by combining environmental concerns with social justice. This current does not ascribe to sacredness of nature, but a material interest of environment for livelihood (Alier 2002: 11). The interest of future generation and the right of species is not the main concern of the poor of today. Thus, the focus of this current is social justice among contemporary humans. It, however, acknowledges the co-evolved knowledge of peasant and indigenous people on sustainability with nature (Alier 2002: 11). As a scientific arm, it uses agroecology, ethnoecology and political ecology (Alier 2002: 12).

D. Environmentalism of the Peasant

Rahmato (2003) identified two types of environmentalism: environmentalism of the state and environmentalism of the peasant. According to Rahmato (2003: 208), the underlying principle of environmentalism of the state is the state must be the guardian of natural resources and its primary aim is to protect it. Environmentalism of the state brings the natural resource under the control of the state. In designing and implementing environmental policies, environmentalism of the state prefers a modernist approach. Epistemologically, state environmentalism holds a positivist and modernist approach and thus is not context-specific. Working under this matrix, conservation and restoration projects are considered as a means to technological transfer (Rahmato 2003: 209).

Whereas environmentalism of the peasant, according to Rahmato (2003: 209), focus not on the protection of natural resource rather the sustainable use of natural resource. Thus, conservation is meant to "management through use" (Rahmato 2003: 209). This approach also makes having an access to land and control of natural resource at the center of its environmental activities. Those two varieties of environmentalism constitute two different valuations and utilization of nature.

Environmentalism of the peasants can fruitfully be applied to understand the general research question of how and to what extent is environmentalism of the state shape restoration projects in Ethiopia. It can also fruitfully applied to understand power relation, nature of peasant participation and environmentalism in restoration practices.

2.2. Restoration and Territorialization

Restoration as an ecological activity is restoring a damaged ecosystem due to anthropogenic causes (Light 2002: 153). Such activity can range from soil conservation of degraded land to reforestation programs. Andrew Light and other proponents of restoration emphasis on the theoretical and pragmatic merits of restoration. Light (2003: 398) holds that restoration does not mean only restoring the physical landscape, it is also meant to restore "an important part of the human-nature relationship". Some of environmental ethicist vehemently reject environmental restoration projects as if it is a big lie (Katz 2003: 390) or faking nature (Elliot 2003: 381). Part of the reason that some environmental philosophers reject restoration (restorative) thesis is based on the argument that restoration is more technical and reductionist approach (Light and Higgs 1996: 229). Scholars who are against restoration projects critically reflects on territorialization of restoration projects that reduce restoration activities into a simple calculable future that can be controlled and defined by the state power (Robbins 2012: 181).

James Scott (as cited in Robbins 2012: 181) indicates that the state produces a system of knowledge and measurement that provide the simplest version of restoration areas that he called it "legible" nature. This legibility undermines the dynamics of social, cultural, political and economic activities in restoration areas.

Above all, it focuses on the construction of physical infrastructure as a desirable outcome of restoration. This oversimplification of environmental activity, makes restoration project fall short of realizing the inner targets of restoration like political empowerment, feeling of own mastery autonomy and ethics by making them "illegible" (Robbins 2012: 181).

Light and Higgs (1996: 230) hold that "[r]estoration as the mere application of scientific technique—or as the extension of a global paradigm—anywhere, anytime, no longer makes sense". Restoration as an involvement of people with nature can be a way to reestablish a new communion with the earth and thus should not be considered as a physical reconstruction of the landscape (Jordan 2003, Light 2003, Light and Higgs 1996). For this purpose, restoration practices must take a wide political, cultural and social issues into consideration and thus the nature of participation of practitioners and power relationship between them must be put in perspective.

2.3. Infrastructure of Power and Governmentality

Power and power relations remain central to the concerns of local development and state intervention. Power has been understood as a means of coercion (Cahill 2008: 294). Literature concerning power regarded power centrally embedded in institutions, networks and knowledge and thus empowerment and distribution of power meant to redistribution of those power to marginalized people through participatory development intervention. A power that I am referring in this research is a form of state power over the society that is dynamic, multiple and mediated by local institutions (Cahill 2008: 294).

Based on the power structure, competing actors exercise their own power to influence and play their role in the political as well as the social life of the society. The political structure enables people to exercise a "defined" power. According to Michael Mann (1934), the exercise of state power over the society can be considered into two ways: despotic power and infrastructure of power. The despotic power of the state according to Mann (1934: 188) is the power that "the state elite, the range of actions which the elite is empowered to undertake without routine, institutionalised negotiation with civil society groups". In this case, state exercises an exclusive power over the society without the need to negotiate the interest of competing actors. However, the second state power that is infrastructure of power reference to "the capacity of the state to actually penetrate civil society, and to implement logistically political decisions throughout the realm" (Mann 1934: 189). In this sense, the state power can be dependent on the strength of the infrastructure of power.

The growing infrastructure of power can facilitate the coercive power of the state. The state coercion can be understood as a form of an extension of state power through different development works. Infrastructure of power can facilitate acceptance of the coercive state power as a normal day-to-day activity and internalize the self-imposed rule which Foucault named it as governmentality (Robbins 2012: 179).

For this research, I conceptualized infrastructure of power as the capacity of the state to penetrate the rural society and get the policies, ideologies and development strategies implemented both in coercion and in the form of governmentality. This understanding helps the researcher to examine how the power is structure and how the infrastructure of power built by the state facilitate state control over society.

2.4. Participation

Oakley and Marsden (as cited in Admassie 2000: 36-37) give a variety of definitions for participation that reneges from participation as means to increase the receptivity of the local people to the way of increasing control over natural resources and mastery of nature. Admassie (2000: 37) categorizes participation into three models. The first one is a *mobilist model* that restrict participation as a contribution of material and labour for development. This model regards local people as a mere contributor of natural resources and labour. The second approach is instrumentalist approach that conceive participation from its instrumental value in raising the effectiveness of the project and success of rural development projects (Admassie 2000: 37). Participation in this regard is an active involvement of the people in decision-making to make the project effective and successful (Admassie 2000:37). In contrast to this, the radical model goes far beyond the instrumentalist model and conceive participation as a process by which the rural people build their autonomy and control over natural resource management and decreases their dependency on state (Admassie 2000: 37). Radical model advocates grassroots initiatives and organized efforts of the local people to empower themselves. Compared with instrumental model, while radical approach participation as empowerment, instrumentalist conceive participation as consultation.

Another typology of participation focus on nature than a degree of participation. "where information dissemination to passive participants represents "communication", gathering information from participants is "consultation", and "participation" is conceptualized as a two-way flow of communication" (Bixler et al. 2015: 167). Other typologies distinguish participation between pragmatic and normative. In his theory of communicative rationality, Habermas (as cited in Bixler et al. 2015: 167) explains that participation should be fair in representing different stakeholders and "equalizing power between participants". Yet need to keep in mind that participation is more than the above typologies and is multifaceted and loaded with different ideologies based on socio-political and economic interests. Based on the interests and social relations, participation was defined and delaminated to serve as a way of legitimizing unjust power over the society (Cooke and Kothari as cited in Bixler et al. 2015: 167). Due to this participatory environmental management has not always met expectations. Even though the concept of participation is ambiguous, I will use the concept of participation to unpack how participation is captured and understood in the restoration projects in Tigrai, Ethiopia.

Typology	Characteristics of each type
Manipulative participation	Participation is a pretense (people's representatives on official boards but unelected and have no power).
Passive participation	People participate by being told what has been decided or what has happened
Participation by consultation	People participate by being consulted or by answering questions
Participation for material incentives	People participate by contributing material resources (e.g. they contribute labor)
Functional participation	Participation is seen by external agents as a means to achieve programme goals. In this case, people are only co-opted to serve external objectives, while all major decisions have already been made by external actors
Interactive participation	People participate in joint analysis, development of action plans, or formation or strengthening of local institutions. Groups take control over local decisions and determine use of available resources
Self-mobilization	People take initiatives independently to change systems and develop contacts with external actors for resources and technical advice

Figure 3: Typology of participation, how people participate in environmental management, source Bixler et al. (2015: 168).

Chapter Three: Environmentalism of the State in Tigrai

3.1. Ideas of Environmental Degradation in Ethiopia

In her capstone book *The Silent Spring* (1962), Carson successfully outline the anthropogenic environmental crisis and sent a wave of influence to re-examine our human-nature relationship. Since the 1970s, arguments that claims anthropogenic causes of environmental crisis that could be explained by political, economic and social arrangement of a particular society are becoming prominent in environmental scholarship. Even though there is no agreement among scholars on the cause, extent and nature of environmental crisis, but there is an agreement that a single explanation for environmental crisis is erroneous. Besides, a quick fix on system of production and a technical solution cannot alone give a lasting and a sound solution for environmental crisis (Baldwin et al. 1994: 4, Mathews 2006: 1; Plumwood, 2002:16). However, this does not mean that policy framing and practices are free from such kind of accounts. A single narrative about the cause of environmental crisis which is dominated by Neo-Malthusianism discourse with a modernist approaches are still resilient in countries like Ethiopia (Hoben 1995, Rahmato 2003: 206).

Rahmato (2003: 206-207) indicates that the "expatriate" discourses about the nature and causes of environmental degradation in Ethiopia have shaped environmental policies. According to Rahmato the problem with the "expatriate" discourse of environmental policy is its little focus on the social, political and economic arrangement of the society. Not all but most of them prefer to focus on apolitical causes of land degradation. The "expatriate" discourse about the environmental condition in Ethiopian is dominated by "apocalyptic myth" on which the extent of environmental degradation is highly exaggerated with "unscientific" evidence (Hoben 1995: 1015, Rahmato 2003: 207). The neo-Malthusian narratives associated with the unwillingness of peasants and mismanagement of natural resource born out of ignorance gives a logic of justification for a top-down approach for the state (Crummy and Winter-Nelson 2003: 91, Hoben 1995: 1016, Rahmato 2003: 208).

Due to a "disaster-centered" discourse, the Imperial and the Derg regime in Ethiopia adopt a conservation approach that intended to rehabilitate the degraded land (Rahmato 2003: 210). Since the 1960s, the idea of conservation was evolved from the preservation of wildlife and heritage to the protection of the country's forest (Rahmato 2003: 210). However, the famine of the 1973-74 that was occurred in Ethiopia changed the paradigm of agricultural and environmental policies from the narrative that considered ecological wellbeing based on God's providence to a "backward", "primitive" and "uncontrolled" agricultural practices (Hoben 1995, Rahmato 2003: 211). As a response to the drought, the Derg government in collaboration with donor organizations introduced Food for Work (FFW) for rehabilitation of degraded lands. The

"watershed" and "catchment" approach becomes the cornerstone of the project and a focus was given to the construction of bunds and terrace (Rahmato 2003: 214). In some cases, the presence of terraces was considered as the presence of authority in the rural area (Keeley and Scoones 2000: 103).

The project has been criticized for its reliance on physical conservation. Besides, the approach used overlooked peasants' expertise and knowledge. Political participation of the peasant were not considered as well. This shortcoming convinced scholars, policymakers, and actors to plea for a participatory approach. "Participatory" approach was adopted by the government without changing the framing of environmental degradation. Participation in this regard was intended to solve the inefficient land degradation. Political empowering through an every decision-making of the peasants were not considered important. This tendency has been one factor for the apolitical environmental degradation. above all, the solution are predominantly directed by modernist approach with a little attention to the knowledge and political participation of the local people (Bixler et al. 2015: 168, Rahmato 2003: 213, Admassie 2000: 37-38).

When it comes to Tigrai regional state, environmental policy practitioners tend to hold that land degradation is linked with vulnerability of the area to recurrent drought combined with a heavily population density (Lanckrie et al. 2015: 521). As they are working under the above narratives, responses to land degradation in Tigrai were directed by a modernist approach with a focus on building a physical infrastructure with scant attention to the political willingness of the people and feeling of own mastery.

In late 1991, the Transitional Government of Ethiopia (TGE) decide to take the bottom-up approach and established procedures that enable policymakers and practitioners to include the concern of peasants in environmental problems and management, yet the peasants' input in decision-making was nominal (Hoben 1995: 1018). The Ethiopian People Revolutionary Democratic Front (EPRDF) promise of democracy enables its policymakers to buy the argument that policy-making and implementation must be decentralized. In case of Tigrai regional state being under the rule of Tigrai People Liberation Front (TPLF) since 1992 advanced the political participation as its main anchor for different agricultural extension systems. However, the closed political system with a strict bureaucratic controlled decision-making makes participation of peasants limited in its nature (Keeley and Scoones 2000: 113). An aggressive technological transfer approach in form of agricultural extension that favored environmentalism of the state adds another obstacle in facilitating an unequal knowledge production. In this regard, I am not challenging participatory approach as rural development approach and I am not of the opinion that technology transfer is bad per se. the concern here is the nature and degree of peasant participation and put it in perspective of the general environmentalism of the state and modernist approach.

Participation in this regard appears that it can falls under the *mobilist* model of participation that focuses on contribution of labor and other natural resource from the peasants. Besides, there it seems participation is need for the efficiency and "success" of rural development which falls under strong instrumentalist approach (Admassie 2000: 37). This understating of participation might

misleading for two reasons. The first one is it might lead excessive reliance on "science" that might overlook the political participation and expertise of the local people. And the second one is it might depoliticize environmental degradation and with a tendency of neglecting the high degree of peasants participation in decision-making process.

A professor at the Department of Land Resources Management and Environmental Protection, Mekelle University, interviewed for this research explained that the cause of environmental degradation in Tigrai is mainly by anthropogenic forces. He said,

> Northern Ethiopia has long been the center of civilization; population was high, agricultural induced erosion and animal grazing, some historians also argues that the cause of soil erosion is intensive crop production. Some anthropogenic does mean only the intervention and use of environment. You cannot understanding the dynamics of cause of land degradation in Tigrai one narrative (interview, August 17, 2018).

By this he also try to indicate the social and political arrangement of this particular region and how it contribute to soil erosion and other forms of environmental restoration. It appears reasonable to hold a view that in addition to vulnerability of the region to recurring drought and long history human settlement, the cause of land degradation can also be explained from changes in government land use policies and conservation policies. Stahl (1990: 3) argues that the problem of land degradation in Northern Ethiopia eventually is a social-economic and political one. Kebede and Jacob (1988: 68) also reflect the same argument that politics has a commanding effect on land degradation in Northern Ethiopia. In line with this, Moreda (2018: 77) also argues that the "causes of land degradation include not only biophysical factors, but also socioeconomic and political factors (e.g., land-use change, resource demands, population pressure, and land tenure)".

However, an informant, aged 52 who is the head of Tigrai Regional Government Environmental Protection, Land Administration and Use Authority, presents anthropogenic causes as they are limited "population pressure, animal grazing, mining activities and unmanaged intensification of farming" (interview, August 15, 2018). Another informant, aged 38, working in the same office with a position of expert of environmental protection also reflects on the lack of land-use policy as a contributing factors in environmental restoration (interview, August 15, 2018).

The participation of the local people according to both of my informants do not go far beyond the participation of peasants in implementation of directives that comes from environmental protection offices at the regional level. This kind of participation falls under "functionalist" (Bixler et al. 2015: 167) and *mobilist* model of participation (Admassie 2000: 37). Those understanding of participation appears to be preferred by environmentalism of the state for an effective implementation of environmental protection directives produced by experts (Lackriet et al. 2015: 528). The preference of scientific understanding and solution to environmental degradation even though is helpful but an excessive reliance on scientific understanding and technological transfer might mislead the government to ignore its promise of participatory approach, which

I think must also include the expertise and the political empowerment of the local people. Besides, its reliance on environmentalism of the state might distance decision-making from the local people that will mislead environmental practitioners to ignore local facts, reality and political participation (Rahmato 2003: 208). This approach will have a possibility to build inflexible and authoritarian environmental management system.

3.2. Linking Environmental Degradation with Restoration Activities

Lanckriet et al. (2015: 528) claims that land degradation in Northern Ethiopia should not only be explained by "mismanagement, overpopulation or for technical-environmental reasons but is structurally inherent to the political–ecological system and its related conservation policies". I take environmental policy and restoration projects as a contented terrain, with a state trying to create a hegemonic idea. Opposing environmental restoration approaches are, therefore, the upshot of different environmental degradation framing and discourses associated with the cause of environmental degradation. To understand what necessitate environmental restoration projects in Ethiopia, we need to look into why and how certain environmental discourse are realized as policy options and implementation.

In the feudal time, since the land is hold by feudal lords and since there was no equal right to land, the poor farmers who are landless were discouraged to have a long-term investment on the land (Lanckriet et al. 2015: 524). The system and relationship between landlords and tenancy was believed to be destructive. Extraction of resources and tax from the peasants leads to impoverishment of peasantry. In order to pay the tax, the poor peasants intensify the extraction of resources from the already damaged environment (Degefa 2001: 312-313). Due to high extraction of natural resources, the imperial period gave a concern for environmental protection by establishing environmental protection authority in 1970s (Rahmato 2003: 210). Working under the matrix of environmentalism of the state, the imperial period still control the natural resource including farming lands through the landlord system. Influenced by an idea of Edenic notion nature wilderness, restoration and conservation was understood as a construction of natural wilderness that requires state protection and control over nature (Robbins 2012: 180, Rahmato 2003: 210).

Lurking behind this understanding of Edenic notion of nature, according to conservation and control thesis of political ecology, is "rooted … in the tendency to cast the political/economic periphery in the role of a "natural" world contrasted with the "ravaged" human landscapes of core areas" (Robbins 2012: 180). Thus, the primary motives of environmental governance in the "periphery" countries should directed towards protecting nature and the "core" countries assist in this way to protecting nature "out there".

During the Derg regime even though there was a land reform and conservation efforts, however, the land reform was not fully implemented in all part of Ethiopia, especially in Tigrai (Lanckriet et al. 2015: 524). Rahmato (2003:

209) also argues that the land reform policy, collectivization, villagization and resettlement works against the objectives of environmental restoration efforts. The frequent land redistribution also discouraged peasants to do conservation (Degefa 2001: 313, Rahmato 2003: 209). Since the Derg government adheres towards a socialist system of governance, it doesn't appreciate a private ownership of natural resources. It prioritize collective ownership of natural resource in the form of Peasant Association (Admassie 2000). Admassie critically locates the problem of the Derg natural resource management at the ownership problem. In the absence of government and weak local administration that were introduced by the Derg by abolishing the indigenous system of governance, the local people loss their trust on the local administration that left the restoration programs unpopular (Admassie 2000, Degefa 2001). The disruption of the traditional local administration equally disrupt a traditional constraints of human intervention towards nature (Robbins 2012: 180) like spirituality and ethics. This was exhibited when the governments withdrew from the projects, the local people indiscriminately deforest the restored land and left the restoration infrastructure used (Degefa 2001: 315 Rahmato 2003: 206).

Operating under state environmentalism, the Derg regime used state top-down approach environmental restoration project. The famine of 1973-74 in the northern part of Ethiopia undermine the imperial period and justify any intervention of the state to rehabilitate the natural environment. The famine in addition to this provide an ammunition to the Derg regime to execute a new agricultural system based on controlling human activity that was considered to be the cause of environmental degradation in the country. The narratives of a backward farming systems and primitive land use combined with population pressure in the rural area was used as a logic of justification for the state to have a direct control over nature in the name of saving nature, community development, modernization (Robbins 2012: 178). Thus, the idea to restore is directed towards mass mobilization by food for work campaign. The effort was also combined with the development of underdeveloped farming system and dispersing the population in the form of resettlement.

The war between TPLF and the Derg military government, for seventeen years combined with different wars undertaken in the region for political legitimacy and rule substantially damaged the physical landscape and contributed for a downward spiral of land degradation (Lanckriet et al. 2015: 526). After the victory of TPLF, the regime revitalized land reform and initiate "Conservation-based Agricultural Development Led to Industrialization" that some argues has a significant impact on reducing soil erosion (Lanckriet et al. 2015: 527).

	1940s-1974	1974-1991	1991 - ...
Land ownership	land lords and noblemen	partial nationalisation and redistribution	three farm plots per household
Political processes	feudalism	civil war	TPLF governments
Land rights	pure rist; mwufar; Church; Crown	insecure	egalitarian redistribution
Ecology	extension of cropland to marginal area	severe soil erosion and land degradation	decreased soil erosion and sediment yield
Conservation	dagets	conservation from the late 1970s	exclosures, physical SWC

Figure 4: political ecology of land degradation in three consecutive regimes in Tigrai: source Lanckriet1 et al., 2015: 524

The policy choice, for an informant, a professor at Mekelle University, is a correct choice given the urgency of rehabilitating a war torn region. In an interview he claims,

> I think the current government comes with a correct policy. Its promise of democracy at the local level and federalist system of governance enable regional powers to design their own land policy. Environmental rehabilitation was the main priority in Tigrai. Tigrai at the regional level develops land policy that includes voluntary free labor from 20-60 days for environmental rehabilitation with a participatory approach. Since the main cause of soil erosion is a low level of vegetation cover, our restoration programs must be directed towards increasing vegetation cover (interview, August 17, 2018).

It appears that the current government focusing on conservation based agriculture resonates the idea of environmentalism of the peasant which focuses on management through use. However, it is also argued that due to lack of "participation". the restoration programs are not living up to the objectives stated by the officials. One possible explanation could be located on the conflict between environmentalism of the state and environmentalism of the peasant. Even though the current government claims that it is using a participatory approach, however Kidane-mariam (2003: 313) indicates that the current environmental policies and frameworks of restoration essentially reinforce the state-center, modernist, technocratic approach which focuses on population control, poverty reduction and "capacity-building". This resonates the argument of Rahmato (2003: 208) that the narratives and discourses that are generated by donor organizations are still resilient and are dominant discourse in shaping restoration projects.

In such approach, the knowledge, expertise, political participation and decision-making of the local people are rarely acknowledged and democratic empowerment of the local people can easily be silenced. The interview with the head of environmental authority of Tigrai, can also be read as favoring the state environmentalism. He explained that "we need a technological intervention and we have to assist the people, because there are still backward farming activities and the problems related to awareness are still prevalent in the peasant

community that necessities our capacity-building" (interview, August 15, 2018). Here what lies essentially is the essence of capacity-building. Technological transfer of course may appear important to help the effort of peasants in rehabilitating the land, however the state should also be aware that the consent, political participation as well as empowerment of the local people through engaging peasants in decision-making is vital. However, the capacity-building short fall of doing this, for the fast changing capacity-building approach considers the peasants as a passive recipient of state programs (Bixler et al. 2015: 168). Besides, the approach of capacity-building resonates the idea of primitive farming practices of the peasants from whom nature must be saved through state interference. For Hoben (1995: 1008) this reflects the long held and uncritically accepted discourse of Western development by the consecutive Ethiopian regimes. Combined with the fact that capacity-building frameworks and directives are generated by donor countries (Kidane-mariam (2003: 313), the reality, expertise and the interest of the peasants can easily be silenced and the political empowerment and participation of the peasants will be highly limited.

This can be reason enough to forward the next question of how that participation of the peasant is understood and how do the political use of environmental restoration shapes the nature of peasant participation. This requires a thoughtful discussion of state-society relationship and mechanism of enforcements. Participation therefore must be put in perspective of political structure, institutional arraignment, power relations, environmentalism, labor mobilization and enforcement mechanisms. The next chapter examine those concern in the hope of understanding patters of enforcement and the political ecology of restoration in Tigrai.

Chapter Four: Restoration in Tigrai

4.1. State-Peasant Relationship in Tigrai: A Context

It is not the intention of this research paper to outline the ideological bases of TPLF, but it is important to shed light on the culture of power and power relationship in decision-making both at the political party level as well as at the regional level. TPLF has its root in the Marxist-oriented state, understanding of power (Clapham 2018: 1153, Milkias 2003: 13). TPLF ideologically was committed towards Leninist principles of democratic centralism on which the power of decision-making is strictly controlled by Politburo and Central Committee. In the decision-making process, ideas were filtered upward and power was designed to flow downward (Clapham 2018: 1153, Milkias 2003: 13).

Inspired by Maoist peasant-based insurgency and its relations with the local people gave TPLF a distinctive place among the people in Tigrai (Young 1997). The mutual support between TPLF and the rural people during the struggle against the Derg regime plays a crucial role in building a good connection with people living in rural Tigrai. By devolving decision-making to the local people and, through assistance given to the local people in the form of agricultural extension in liberated area of Tigrai during the struggle against the Derg regime, TPLF was able to justify itself as an agent of change and build confidence and support among the rural people in Tigrai (Haile and Mitiku Haile 2001, Hendrie 1999: 83, Segers et al. 2008: 92).

The devolving of decision-making to the local areas was also used to channel TPLF ideology and raised the consciousness of the peasant. Mass mobilization through representation who was elected member of *bayto*, people's council, becomes a key institutional structure through which TPLF establish a connection with the local people and raise consciousness about TPLF's ideologies and policies (Hendrie 1999: 83). The decision-making process at *bayto* was inspired by the TPLF "communal collective participation, based on consensus forged through a discussion led by the vanguard organization" (Vaughan and Tronvoll 2003: 15).

This devolution of power into *bayto* under party supervision is cited as an important factor in gaining support from the peasant community (Hendrie 1999: 83). Besides, through securing the decision-making process through its vanguard enabled the party to hegemonize its own ideology and widespread anti-Derg sentiment among the rural Tigrains (Seger et al. 2008: 95). Even though TPLF promotes self-government at the local level, but still there is a need to keep in mind that its root on Leninist principle of democratic centralism is structured to filter ideas from the below and power to flows downward. Filtering ideas from the below can be considered as an important factor that enabled TPLF to establish a legitimate power in the rural areas of Tigrai (Seger et al. 2008: 96).

4.2. Channelling Rural Development Works to the Local Community

4.2.1 Structure of Power: Looking into Infrastructure of Power

Structure of power, according to Migdal (2001) can define the power relationship that can define rights, the relationship between society and state, the power over resource allocation and control of means of violence. In order to examine power relationship and structure of power, I use how development plans in general and environmental restoration, in particular, get implemented by using political power as the means of implementing the plans at the local level.

To mobilize the rural people for development works, TPLF developed a two-track of governance structure or infrastructure of power: the party wing (*nay party kinfi*) and the government wing (*nay mengisti kinfi*). The main purpose of the party wing is to facilitate party control and disciplining members. It is also used to channel reforms, agendas and political strategies to the lowest level of local administration. According to my informant, aged 33, who is a public servant and in charge of rural politics at the *wereda* level, the main purpose of the government wing is facilitating development programs among local communities. That is through this two-track governance system that the peasants are mobilized for environmental restoration.

Government wing facilitates development works using development team (DT hereafter) which are specifically responsible to channel and facilitate development programs into the local people. According to an informant, aged 33, DT consists 25-30 neighboring farmers. Every DT is led by agricultural cadre[6] who is considered as a "model farmer" as well party members.

Agricultural cadres who are also DT leader are the members of *meseretawi wudabe*[7] and leader of the lower political cell called *wahyo*. An informant who is the leader of the rural political organization at the *wereda* level told me that "all farmers are the member of DT, but may not be party members based on their political inclination and willingness" (interview, August 30, 2018).

---

[6] As it is observed during the fieldwork agricultural cadres are also considered as local experts and they are required to have some level of education and political affiliation with TPLF.

[7] *Meseretawi Wudabe* is the second highest power holder in the part wing who is responsible to the *tabya* leader.

- **Political Wing**

Tabya Leader

Meseretawi Wudabee
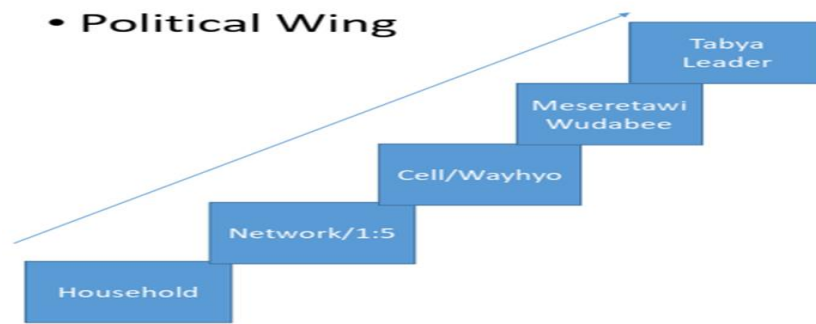
Cell/Wayhyo

Network/1:5

Household

Figure 5: structure of TPLF political wing, source author's illustration

By incorporate model farmers who are an active participant in development works, TPLF established an enormous infrastructure of power. The increase in the number of party member peasants is an increase in the contact persons to control society and create a weak society that can potentially facilities the interest of the state. Since TPLF favored democratic centralism, it does not allow factionalism among the party members (Milkias 2003: 13). Thus TPLF members must be efficient in getting the plan implemented and channel the development plans and directions successfully.

The grouping of the farmers in DT is also further done at a smaller level. Farmers are organized into one-to-five which is the lowest farmers' organization under the government wing. An informant who is responsible for the rural political organization at the *wereda* level explain to me that the primary aim of this farmers' group is facilitating knowledge sharing in development works and other agricultural activities. However, according to one of the informants, the one-to-five farmers grouping is more than a medium of knowledge sharing, it is also medium for the political party members to communicate party agendas and priorities. In addition to this, it appears that as it is the working tradition of TPLF, they use the team to filter ideas from the below (Clapham 2018: 1153, Milkias 2003: 13). However, being tired of the frequently changing programs, the farmer network leaders often sent a fabricated report to the development team, as it is understood from my informal discussion with one of my informant who is the leader of one of the one-to-five farmers' group.

This creates a favorable condition for the state to exercise power through the peasants themselves. State power in this regard is mediated through local administration (Cahill 2008: 294). The party members who are the leaders of DT and one-to-five create a network of communication to exercise power over the society. It appears that the networking of farmers in this kind of governance structure puts DT leader as well as one-to-five leaders to know the details of what is happening in the society. This was well expressed by one of my female informant who is the leader of DT.

> The people think I know everything. They participate in every development works because they don't want to face me and other agricultural cadres (interview, August 3, 2018).

The infrastructure of power that is built by TPLF appears what Mann (1984) describes infrastructure of power as power through the society. In this case, it appears that TPLF exercise state power by penetrating and increasing the number of party members in the local community and by supervising the local

administration in strict party control. However, this does not mean that the infrastructure of power can potentially lead to the exercise of despotic power over the rural people (Bekele et al. 2016: 19). The infrastructure of power coexist within the state and this very nature might lead to an authoritarian state (Mann 1984: 191). If the infrastructure of power grows, then the local administration can no longer serve the interest of the people, it serves as a medium of communication to the party to control the society and facilities the interest of strong state (Migdal 2001: 60). This can create strong state that is capable of enforcing its plans and extend its control over the society. Strong state according to James Malloy (as quoted in Migdal 2001: 60) "is characterized by strong and relatively autonomous governmental structures that seek to impose on the society a system of interest representation based on enforced limited pluralism". Considering the state as an "actor" in this regard resonates the argument on which the state express its will and interests through a consistent ideology in controlling of nature as well as dominating the political space (Arsel and Angel 2012).

Legend
LT: Leader of the Tabiya
YO: Youth Organization
FO: Farmers Organization
WO: Women Organization
AE: Agricultural Expert
(Hirisha Ki'ela)
AC: Agricultural Cadre
(Hirisha Cadre)
DG: Development Group
(Limi't Gujile)
N: Network (One to five,
Hade Ni Hamushte)
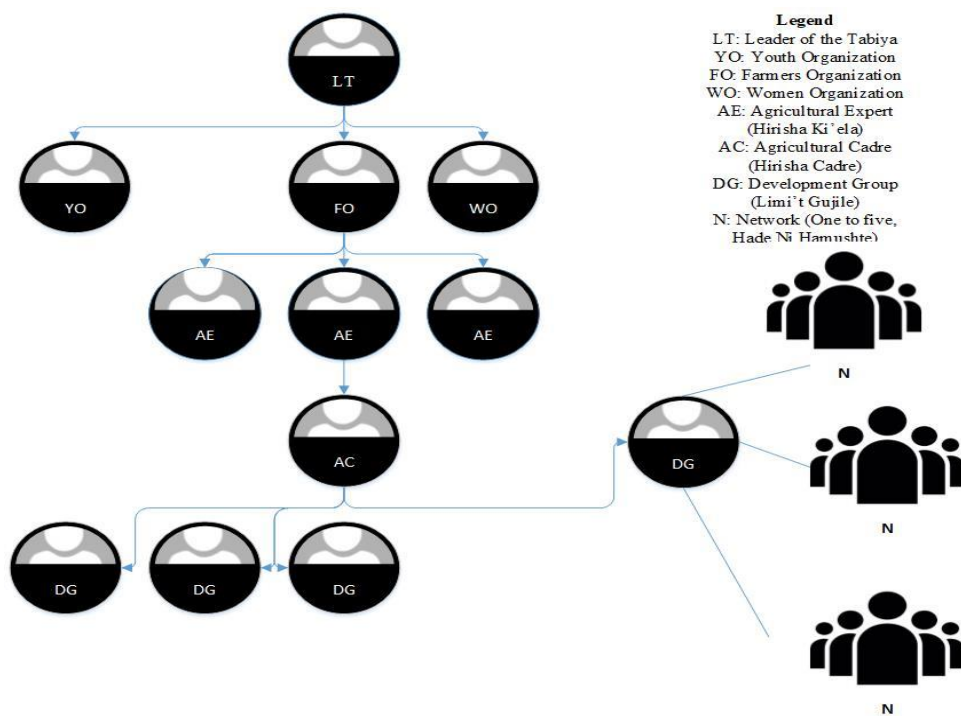
Figure 6: The Government wing structure; source developed by the author

4.3. Mechanism of Enforcement

The current government in Tigrai proposes 20-60 days of free labor in restoration works. In order to enforce the voluntary work and implement restoration projects effectively, the state devised different enforcement mechanism. In this section, we will try to understand the political ecology of restoration from conservation and control thesis perspective.

4.3.1 Political Mechanisms

The government wing, which is integrated and strictly controlled by the political party, uses administrative power to control and enforce the government agenda. The state uses *gimgema*, evaluation, as self-discipline mechanism in both the political life of party members and their efficiency in the implementation of restoration projects. From my informal discussion, I learned that members of TPLF have a different opinion regarding *gimgema*. Some claims that in principle it is good that we evaluate ourselves and this can help to better ourselves. However, practically these days *gimgema* is becoming far more that self-evaluation, it is intimidating. In fear of the intimidation, the party members and people who are responsible for development works provide false data. Thus, the informants argue that it is becoming counterproductive. Keeley and Scoones (2000: 114) also argue that *gimgema* discourage creativity by stifling members to adhere to the TPLF ideology and work ethic. As a result, *gimgema* is used as a means to make sure that what is planned is properly implemented at *tabya* level.

This political mechanism of disciplining and encouraging conformity to party ideology is also extended to non-party members through one-to-five development network and training. Fearing the harsh critiques from the regular evaluation*, gimgema*, agricultural cadres work strictly in enforcing the agenda even at the expense of their social connection. The DT leaders use every necessary means in convincing development agendas. This involves coercion of the peasants to accept state power in restoration areas. This appears that the restoration projects help in facilitating the political control of the people as well as their natural resource in the sense of determining and defining restoration site (Robbins 2012: 179). Through training, the peasants are expected to learn and accept the narratives and working tradition of the state. An informant, aged 35, a farmer and guard in the restoration site explained to me that,

> they (DT) push the people to do what the government order because they need it for a report. If they have a good in implementation, then they can be promoted politically or they will not be harshly criticized" (interview, July 23, 2018).

The fact that the agricultural cadres work and live with the local people make the people believe that they are one of them. This enabled the state to exercise coercive power through the local people (Mann 1984). This can potentially facilitate the coercive power to be internalized by the individuals that ultimately create self-enforcing coercion (Robbins 2012: 179). This is expressed by an informant who explained to that:

> we cannot work without this farmers grouping and even though we sometimes hate to come here to work for free, but it is important that the government uses this to make us work for the community (interview July 27, 2018, Awu Keren).

4.3.2. Social Mechanisms

Social mechanisms like *iddir* is also used to enforce environmental restoration projects in Tigrai. *Iddir* is a self-help informal social organization that is highly rooted in the tradition and religious base of the local community (Pankhurst and

Haile Mariam 2000). The government uses this social organization to influence policy implementation. A professor at Mekelle University, interviewed for this research explained *iddir* has a power to influence the local people that involve social exclusion. The professor explained that:

> if farmers fail to participate in the environmental restoration project, *iddir* has a power to issue social exclusion against the people who fail to be compliant towards development works (interview, August 17, 2018)

The social profile of *iddir* helped the state to easily communicate to the people and convince them to accept the power of the state and implement restoration projects. *Iddir*, as I understood from my interview, is also influenced by local administrators can be used as a social ground to announce development agendas, dates of work and other decisions. Even though *iddir* is an informal traditional self-help organization, but when the state able to convince people who actively participate in the community, then the state can use the social ground to extend its power over the informal social organization like *iddir*. This can potentially facilitate a form of social control into two ways. The first one it can be used to directly influence the people to accept the power of the state and the second one is it can be used as a means to control, organize and reshuffle the society in the way that is suitable to easily exercise the power of the state. This concern is also reflected on the political ecology of conservation of control that restoration projected can be used to facilitate governmentality among the people by creating a condition where consent can be obtained through restructuring the society (Robbins 2012: 178). In this case, I didn't observe any restructuring of the society for such proposes, but it appears that *iddir* as social institution can change coercive power of the state to be internalized by individuals and be a self-imposed rule, i.e., governmentality (Robbins 2012: 179)

4.3.3. Economic Mechanism

Another way of enforcing restoration program is through incorporating restoration sites under public work on which the participants get a direct food or cash incentives from the state. Able-bodied members of the community are required to participate in public works in order to be qualified for the food and capital incentives. This program came into effect in 2005 under food security and Productive Safety Net Program (PSNP) aimed at assisting food insecure rural areas to receive food assistance and capital-incentive to protect household not to sell productive assets in the time of food shortage (MoARD cited in Lavers 2014: 462). The underlining understand of why people in the highlands of Ethiopia are food insecure is according to MoFED (as quoted in Lavers 2014: 462) unpredictable rainfall, 'land degradation and high population pressure', and inadequate knowledge of the farmers, who have 'lost the capacity to be productive'". Working under this broad understanding of the cause of food insecurity, providing training to the farmers is included in the program that somehow resonates the already held modernist approach.

The people in the research site were participating in the free public works in the morning shift whereas, in the afternoon they must participate because they all are included in the PSNP. Therefore it is a must that they have to

participate in the restoration sites because they are being paid in food and sometimes cash. In the morning even though it is a free labour contribution, but according to an informant, aged 43, the people must participate in the morning shift which is a free labour to participate in the PSNP. Even though the morning shift is a voluntary contribution of labour by the peasants, however, employment and benefit in the PSNP require a peasant to contribute a free 20-60 days of labour. A form of voluntarism in this sense is not voluntary. It is enforced by capital incentive. The peasants, however, are not happy to work for free, they are only working because they need to keep themselves employed in the PSNP. An informant, aged 35, explained that:

> we all are poor peasants. I personally have no enough plot of land to farm and feed my family all year. I really need to work in PSNP because the cash is good to pay some of my debt for fertilizers. Maichew is a nearby town and I can go and work to earn some money. I don't like the free labour contribution. We cannot work with an empty stomach (interview, July 23, 2018).

It is clear that the peasants are included in the PSNP program because they are food insecure which is caused according to MoFED (as cited in Lavers 2014: 462) by land degradation and inadequate knowledge of farmers to maintain the productivity of the land. In this line of reasoning, the peasants must be educated and work to restore the degraded land to revive productivity and graduate from the PSNP (Lavers 2014: 462). However, the PSNP employment benefit is being used by the local administrators as well as the state as a means to enforce voluntary labor contribution. The fact that the land is not fertile and since it is decreasing its productivity from time to time convinced the peasant to use fertilizers which they buy using state granted debt. According to my informants, the cash they received from PSNP helped them to pay their debt. However, it is a must that they have to contribute a free labor to be considered in the PSNP. Understood from this point of view PSNP as a capital-incentive is used to control the labor. This resonates Gerber's (2014: 729) argument of credit/debit as a means of controlling labor, land, and capital.
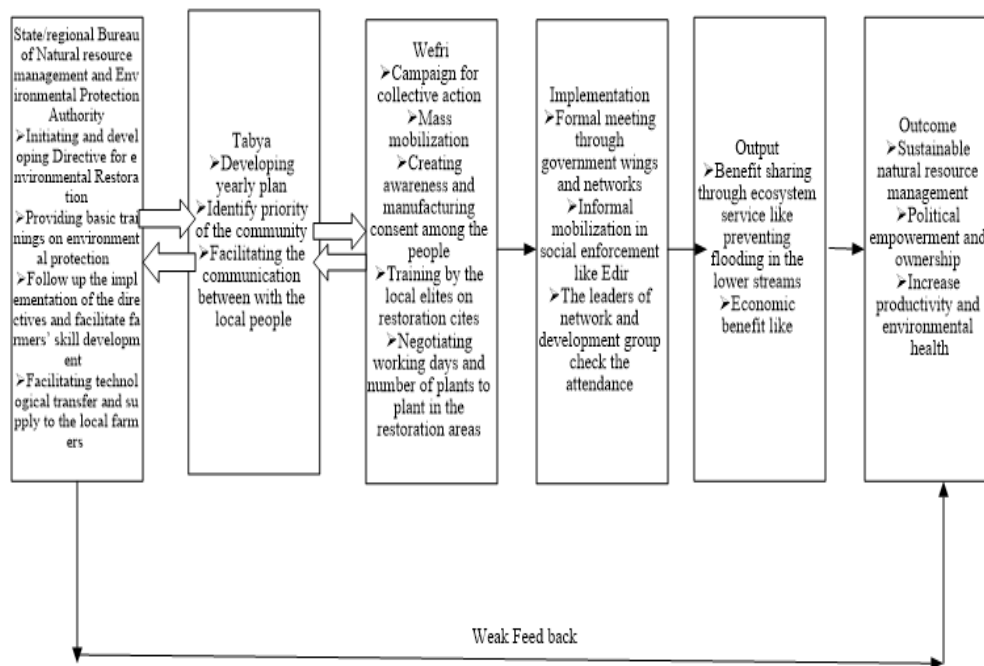
State/regional Bureau of Natural resource management and Environmental Protection Authority
➤Initiating and developing Directive for environmental Restoration
➤Providing basic trainings on environmental protection
➤Follow up the implementation of the directives and facilitate farmers' skill development
➤Facilitating technological transfer and supply to the local farmers

Tabya
➤Developing yearly plan
➤Identify priority of the community
➤Facilitating the communication between with the local people

Wefri
➤Campaign for collective action
➤Mass mobilization
➤Creating awareness and manufacturing consent among the people
➤Training by the local elites on restoration cites
➤Negotiating working days and number of plants to plant in the restoration areas

Implementation
➤Formal meeting through government wings and networks
➤Informal mobilization in social enforcement like Edir
➤The leaders of network and development group check the attendance

Output
➤Benefit sharing through ecosystem service like preventing flooding in the lower streams
➤Economic benefit like

Outcome
➤Sustainable natural resource management
➤Political empowerment and ownership
➤Increase productivity and environmental health

Weak Feed back

Figure 7: an overview of Wefri, its application and with its outcomes; source, developed by author.

4.4. Shared-Program Implementation or Functional Participation

In Ethiopia, the previous restoration and conservation of natural resources were characterized by centralized state control that puts all natural resources under the power of the sate bureaucratic (Hoben 1995, Rahmato 2003). The central problem with this mode of environmental decision-making was associated with the marginalization of the local people who are often dependent on the same environment for survival (Agrawal and Gibson 1999: 632). This kind of exclusionary approach was backed with "scientific narratives" that characterized the peasants as the cause and the victim of the environmental degradation (Bixler et al. 2015, Crummy and Winter-Nelson 2003: 91, Hoben 1995: 1016).

In the face mounting evidence supported by an existential life of different community (Ostrom 1990) facilitate the shift from the argument state must control to local people must control (Bixler et al. 2015: 166). The current government in Tigrai that is led by TPLF adhere to this kind of logic and accept participatory environmental management and restoration program. However, policy reforms and the understanding of participation under the political context may favor the ruling elite than the people and nature. This section addresses the following relevant question: what is the level and nature of participation of peasants in decision-making related to environmental restoration? What exactly is the role of the political, economic and social structure and mechanisms of enforcement in facilitating a genuine participation? How is it that participation understood among the peasant farmers and local administration regarding environmental restoration projects?

Participation of the local people in decision-making concerning environmental restoration can be seen in the process and design of environmental restoration projects. The people feel that they choose the restoration site, however, I learned that the area is first identified by experts at *wereda* level and they visited the local people to convince the importance of restoration. A female informant, aged 46, who is the leader of one-to-five group described that:

> the planning and decision regarding restoration site come from the *wereda* experts. But they come here to inform us that they need a designated area to be restored and asked us our permission to enclosure the place. In addition to this, they asked us to participate in the restoration projects. The initiation always come from the *wereda* officials (interview, August 1, 2018)

Participation in this sense is like consultation (Bixler et al. 2015: 167). If the initiative and the plans come from the *wereda* in the form of a top-down approach, then the local people are required to contribute their labor and natural resource. This can potentially make the local people be a passive receiver of the development agendas and discourage them to develop their own creativity in the planning and implementation of restoration.

However, a professor interviewed for this research argues that the Tigrai restoration is complex than the top-down and bottom-up approach. He explained that the current government takes an essential lesson from the previous government is working to make the people be an active participant. He explains that

> the way environmental restoration is implemented in Tigrai is more complex than the top-down and bottom-up approach, it is a shared program implementation (interview, August 17, 2018).

However, the power vested in local administration as a symbol of state authority (Bekele et al. 2016), it appears it is unlikely that the local people refuse what the government wants to do in the same nature that they are dependent on for their survival. Besides, good governance and democracy according to Segers et al. (2008: 94) "has not yet penetrated the rural Tigrai". The fact that the upward accountability of the local administrators facilitates a form of authoritarianism that can create an imbalance power relationship between the state and the people. In this context, the peasants may not be treated as equal partners in the decision-making process.

Answering to the question what is shared among the state and the peasant in restoration project, the professor explained that "the state comes up with directive and framework and negotiate with the local people in mobilizing the labor for the implementation" (interview August 17, 2018). This reveals the level and nature of participation of the peasants on environmental restoration decision-making process. Under this context, it appears that the farmers' participation is restricted to the level of implementation and contributing resource and labor for the success of restoration objectives. This makes the interest, knowledge, values of the peasants difficult to be realized in the projects. In turn, creates a weak feedback loop on the outcome of the restoration projects. This kind of participation can fall under the category of functional participation on which participation is seen by experts as a means to achieve a specific agenda.

All the decisions and frameworks are made by the experts who are external actors and the people co-opted to meet the objectives of restoration projects that are defined by the *wereda* experts (Bixler et al. 2015: 168).

This claim is reinforced by an informant, aged 52, who is working in Tigrai regional government environmental protection authority, answering to the question how the top-down approach with technological supply enables grass root level participation in local area he said:

> of course, it is important that we need to give directions and scientifically proven way of restoring the degraded land. This does not mean that we don't consult the local people (interview, August 15, 2018).

The implementation of directives, he emphasized, must be based on the willingness of the local people. For this, he said "there is a need to convince the people through training which is called *misirats*", a local language that can be translated to inculcate or instill.

Combined with the modernist approach, *misirats* discourages creativity, active and genuine participation and caused a low self-esteem among the local people. It creates inactive farmers who listen and implement what is told and designed by the state (Bixler et al. 2015: 168). Given frequent meetings, the farmers are not willing to engage in empowering discussions in one-to-five meeting. They prefer to accept and implement what is told by the DT leader. It can be argued that peasants in restoration projects are considered as laborers, not an equal agent in planning and implementation of environmental restoration projects, which implies a risk of sliding back of restoration projects in the absence of government monitoring.

Chapter Five: Peasant or Land: Rethinking Environmental Restoration

Why is that environmental restoration in Ethiopia achieve little in comparison with the money, time and labor invested? Will the peasants continue to work in restoration site if the government withdrew from the projects? These questions are ignited by a phenomenon when the Derg government withdrew from restoration projects, the areas were "destroyed" by the peasants themselves and left unused (Hoben 1995, Rahmato 2003: 205). Understanding this question requires an understanding of how the peasants understand, relate and perceive the restoration areas under the context of politics of labor mobilization process. The purpose of this chapter is to figure out the perception of peasants about the restoration areas and their relationship with it, which is the fourth sub-question of this research.

5.1. Beyond the Physical[8]/Outer" Target of Restoration

Some research output in Ethiopian environmental restoration projects highlights some explanation of why the restoration projects in Ethiopia since the 1970s achieved so little in comparison to the amount of money invested. Admassie (2000) emphasizes the problem of property right whereas Rahmato (2003, 2012) go beyond this point and focuses more on the framing of land degradation and the political ecology of land degradation. We can say that both of them acknowledge the need to go beyond the physical construction of environmental restoration and work more on the inner target like peasant political empowerment, ethics, ownership, and tradition. Alongside both scholars, I am of the opinion that if the restoration projects fall short of addressing the feeling of mastery among the peasant and build autonomy and positive meaning towards the restored land, then it is likely that the current effort will face the problems of unsustainability. To investigate these positive values, I intended to put the agent, the peasant perception, at the center of the study and examine it under the context of political, economic and social mechanism of implementation of the restoration objectives.

In the previous chapter, I established an argument that the political infrastructure that facilitates political, economic and social control in rural Tigrai gives a scant attention to the outcomes of the restoration project, i.e., emancipating peasant and nature from coercion. However, an argument is needed whether restoration has a potential to emancipate peasant and nature

---

[8] The physical or outer target of restoration includes the number of trees planted, hectares of land under restoration, number of people participation, hectares of land irrigated and so on. Whereas the inner or the emancipatory potential of restoration includes the symbol of power, ownership, meaning, and feeling of belongingness, value, and ethics.

from coercion. Besides, what does it mean to have a potential for emancipation or why do we need to argue that the physical construction or the outer target is not enough. Hereunder, I will briefly address the debates on this regard and then I will critically examine the Tigrai condition under this context based on the data collected and arguments established so far.

5.2. Specifying Potential of Restoration Practices

Is restoration intrinsically emancipatory and/or does it have a potential of democratic values to be realized? Jordan (as cited in Light and Higgs 1996: 234), one of the most influential writers on ecological restoration, claims that restoration having a political, cultural and social component, is intrinsically democratic. The reason for his claim is based on his understanding of restoration. He claims restorations "are organized around communal activities for communal concerns … and … thus the people tend to participate by and large as equals, creating an egalitarian framework within which restorations are performed" (as cited in Light and Higgs 1996: 234). Even though he acknowledges the political dimension of restoration, through facilitating a communal connection with the environment, but the claim appears misleading.

Theoretically, if we claim that restoration is intrinsically democratic and has the ability to create a communal connection with the environment, then all restorations must be democratic. If so, we must also prepare for another argument that restorations which include slave labor should also be included in the definition of restoration as having democratic values. In this case, it appears as a self-defeating argument in the sense that restoration that is done using slave labour does not meet Jordan's definition of restoration as environmental activities among equal agent to create a common space under egalitarian framework. We can safely argue that the definition does not assert the conclusion that restoration is intrinsically democratic, if it involves a coercion of environmental agents.

Alongside Light and Higgs (1996), I hold that restoration has an inherent democratic potential. But what are those potential and why are they good to be considered in a restoration project. Restoration as one of environmental activities is a refutation to preservation which prefers wilderness and a withdrawal of human being from the ecosystem. In preservation, human being creates no additional values[9] and priority is given in keeping the already existing values (Light and Higgs 1996: 235). Whereas restoration considers human being as an active value creator in nature, preservationists consider human being as a keeper of the already existing nature. Based on this account, Light and Higgs (1996: 235) argue that "the good for nature produced by a restoration is distinctively bound up with the good for the human community of restorers" This entitled human beings to define questions like what to restore and how to restore.

---

[9] Of course in preservation there is value to be preserved and this is one of the value which can be considered as virtuous. The point I am making here is that in preservation human being is not actively producing value apart from protecting the existing value.

Inferred, restoration is mediated with the political, economic and social interests. Restoration as a practice, therefore, involves the act of restoring and the value of restoration, i.e., it produces value[10] to the people involved and to the land being restored. We can say that the positive value that is involved in restoration is good not only to the people but also to the environment. From this, we can understand that restoration even though is mediated by the political and economic interest of human beings, since it also considered the interest of nature, then we can have a reason to claim that it is not purely instrumental as the proponents of intrinsic value claim it to be. This claim might resonate the argument of weak anthropocentrism which claims if we can create a value which is non-anthropocentric instrumental value for the non-human world, then our involvement is justifiable for we are creating value both for human community as well as to the non-human beings[11] (Light and Higgs 1996: 236).

These positive values to the community and values to nature, therefore, is marked by the interaction of human beings with nature in a collective way. Light and Higgs (1996: 236) argue that "the *character* of this value is at least marked by its participatory elements. At its core, restoration is public participation in nature". "Character" here refers to the way restoration is done and the mechanism of implementation and labour participation. It refers to the process that can somehow determine the outcome and the content of the value that will be produced in restoration activity. From the above discussion, we can understand that if the process and the way people participate is not based on free consent or if some form of authoritarian mechanism of labour mobilization is involved, then the content of the value that is intended to be created will not meet the intended potential positive values like political empowerment (Light and Higgs 1996: 236), because the low level of participation of the local community affects the intimacy and the feeling of mastery of the restored land. Inferred, we can say that the political use of enforcement in restoration projects that can be expressed through the character of participation in decision-making plays a significant role in defining the content of values generated by the restoration activity.

If we agree on the account that restoration has a democratic potential in producing positive value; and if we agree on the point that there are some forms of restoration that are undemocratic; and if we agree on the account that the potential of restoration can be determined by the character or process and nature of participation, then we can agree on one point that regardless of the physical construction, if the restoration fall short of going beyond the physical elements, then we can say that restoration projects are not living up to their potentials. In addition to the outer target or the physical construction that we can evaluate based on techniques, we also need to include these potentials to have a more meaningful restoration which is sustainable and emancipatory.

Below we take up the question of the content of the values created based on the question how peasants perceive and related themselves with the retorted

---

[10] This value can be expressed in form of ecosystem service whereas value to the land includes rehabilitation of degrade land.

[11], For instance, if the restored land facility and create a space for non-human community then it is good not directly to the human community and then is not anthropogenic.

land on the backdrop of the character or process of labour mobilization in Tigrai that we have investigated in the previous chapter.

5.3. The Tigrai Condition

So far, we have discussed the political dimension of restoration and argue for a need to incorporate the inner target or the immaterial aspects of restorations which can be realized by the democratic potential of restoration. This point is important for two reasons. The first one is all restoration practice may not live up to the objective of both fulfilling the physical objects and inner targets and may be used to control labour and nature (Robbins 2012: 178, Light and Higgs 1996). The second one is we acknowledged that the character of participation of the peasant is vital in defining the outcomes of restoration projects.

The infrastructure of power that we identified in the previous chapter has created a favourable condition to establish control over the political, social and economic lives of the peasants. In this case, we argue that even though the infrastructure of power can play a role in facilitating both communication and development works, when it comes to power relations it can easily be used to subjugate the peasant to be compliant with the ideology and plan of TPLF. We understand that the infrastructure of power that is extended up to the household in both forms of political and government wings create a favourable condition to the political party to exercise its power in the absence of other competing actors[12]. This creates a weak society with a strong state (Migdal 1988). To understand the perception of peasants and how they relate themselves with restored land, let us approach the question from two directions, one from structural approach and the second from the way peasants understand themselves in relation to power relations in decision-making processes.

To start from the structure, Rahmato (2003) and Kidane-mariam (2003: 313) argue that the current environmental policies like the previous government in Ethiopia are influenced by the technical and material achievements of the project. Even though participatory approach is incorporated in policy documents, it appears less rosy when it comes to practice and environmental directives. In Growth and Transformation Plan I and II (GTP I and II), the government put an emphasis on physical soil and water conservation structures and hectares of land rehabilitated (National Planning Commission 2016: 124). And thus appears appreciative of an outer target of physical infrastructures which resonate Robbins (2012: 181) argument of territorialization of restoration projects that are defined by the state as "legible" out puts (Scott as cited in Robbins 2012: 181). For a better out puts, the government is working towards adopting a proper technology and is producing knowledge that is mostly influenced by donor organization like the World Bank and United Nations (Kidane-mariam 2003: 313).

Kidane-mariam (2003: 313) claims that Ethiopian policymakers use donor countries as a source of thought and framework which mostly focuses on

---

[12] By this TPLF able to manage other political parties not to have a foothold in the rural Tigrai.

population control and "capacity-building" of the peasant through technological transfer. The *wereda* administration uses development group and one-to-five farmers group as a way of defusing environmental restoration frameworks. An informant, 52, working for the Tigrai regional environmental authority acknowledges that:

> The authority develops environmental framework based on a proven scientific knowledge. We focus on what the science says and work on how to integrate with the existing Tigrai condition. We also get a technical assistance from the federal government (interview, August 15, 2018, Mekelle).

This focus on science has a tendency to overlook the experience of the local people by being overly appreciative of scientific knowledge. This has a danger of putting peasant as a passive recipient of technology by making them inactive and uncreative. Above all, the peasant in this knowledge production may become invisible. In answering the question how do you integrate local knowledge with the modern one, a peasant informant, 40, responded: "we don't need to think about this, I personally come and work based on what the agricultural cadre and experts told me to do" (interview, July 27, 2018). This concern is also expressed by Leta et al. (2018: 100) if the peasants are discouraged to be reflective of what they are doing, then in case of inappropriate advice from development agents might impede the aspired outcome of the projects. This has an implication in shifting the decision-making from the peasants which is considered to be "unscientific", to the state which is considered to be "scientific". This shift of decision-making can harm the sense of ownership. State-imposed rules on restoration projects may not be respected as local imposed rules on restoration projects. Disregarding local knowledge and expertise in the name of science may displace traditional restrains leading to reckless extraction of resources from the restoration site (Robbins 2012: 180).

In addition to this structural approach, the political, economic and social uses of enforcement, make the space of participation very limited. As I have tried to discuss in the previous chapter, the political and social mechanisms of enforcement of restoration plans create both social and political control. In expressing the extent of political and social control an informant, age 50, told me that

> I don't know who so far get punished financially or other means. We even don't have that room to think to be absent from the restoration works. We have to come and work based on the ascribed schedule. The attendance is strict and I don't want to face those people in *tabya* to explain myself. Even though I don't like to work for free but I must come (July 27, 2018).

Beyond harming peasants' autonomy and feeling of belongingness towards the restored land, this creates a feeling that the peasants are being forced to work in restoration sites. This plays a role in the alienation of labor from their work. As Rahmato (2003) and Admassie (2000) outline, in the previous government when the Derg regime withdrew or failed to extend its control to the local communities, the peasant farmers destroyed the restored landscape not because they were not useful but the way they were mobilized takes a little attention to their willingness and autonomy.

If this kind of perception is dominant among the peasant community, it can potentially facilitate a perception of restoration sites as irrelevant, alien and symbol of state coercive power among the peasants. The political, economic and social enforcement that appears coercive and directed by state modernist approach even though achieve its outer target, it does not live up to the democratic potentials of restoration.

Understood from this perspective, it appears logically to hold an argument that if the democratic potential of the restoration projects is not realized, acknowledged and taken sincerely, then it is likely that the project will slide back to the initial stage and sustainability of the project will be a challenge. A professor in Mekelle University who is interviewed for this research holds slightly the same argument that,

> If the policymakers and practitioners fail to incorporate the political will of the local people then the continuity of the project without the government will likely be problematic. The Derg experience is a good example of it (interview held on August 17, 2018).

Another reason that contributes to the danger of sliding back can also be located in the lack of clear ownership tenure right on the restored land. There is an ambiguous ownership perception among the peasant farmers that dangles between the government and the community. From the government side, it is claimed that there is no land owned by the government alone unless it is a national park or reserved area. However, still, the local community understood restored land as a symbol of the state and is also owned by the government. Besides a confusion of the concept of *nay mengisti* (owned by the government) and *nay hizibi* (owned by the People collectively), the peasant farmers associate land restoration with the government project and thus they need payment for their work. This clearly indicates how peasants ascribe ownership to the government, not the community or combined. With a very few exceptions, informants told me that they are not willing to continue working in restoration sites if the government withdraw from the projects. This makes the sustainability of the restoration activity in Tigrai to be less rosy than what is anticipated to be.

5.4. What does it succeed at?

If the Tigrai environmental restoration appears short fall meeting the inner target of restoration that we have mentioned in the above discussion, then the next logical question is at what does it succeeded at? It is true that one can easily observe big physical infrastructure for the purpose of environmental restoration throughout Tigrai. In recognition of this, the Tigrai experience was one of the gold medalists in World Future Forum in 2017 beating 26 other nominees[13]. Research outputs also indicate that the restoration project being undertaken in the post-1991 contribute to food security, economic empowerment and ecosystem service (Mekuria et al. 2007). The Tigrai effort has been cited as an extraordinary example of community-based environmental restoration projects (Gebremariam 2012, Nyssen et al. 2004).

---

[13] https://www.worldfuturecouncil.org/press-release-fpa-2017/

However, the restoration activities serve other purposes as well. I learned during the field work that the peasants felt the presence of state power through those restoration sites. As it had been during the Derg Regime, the presence of terraces is currently considered by peasants as the presence of authority of the state in the rural area (Keeley and Scoones 2000: 103). This can serve the interest of the state that its power and existence can be felt well at the local level. Through the political and development works TPLF not only secure in creating the feeling of the presence of state power in rural Tigrai but also able to eliminate other development actors with different political interests. Through the infrastructure of power built, TPLF manages a good flow of political commands and hinder other political parties, not to a foothold in the rural Tigrai. This helped TPLF to remain a powerful political power among the rural people as it was during the resistance war (Segers et al 2008: 92). As it had been in its history of mobilizing peasants for development works, through restoration works TPLF able to hold a legitimate power in rural Tigrai. This emanates from its underlining assumption that it is through development that TPLF can justify itself as a true allay of the rural people (Clapham 2018). Besides, the projects can also be used as a form of an extension of state coercive power through an environmental project like restoration (Robbins 2012: 179).

In addition to justifying a strong presence of the state in rural Tigrai, TPLF also uses restoration projects to secure job for the peasant through mobilizing fund from the international donor organization in the form of PSNP. As I have mentioned above, the framework of environmental policies in general and environmental restoration, in particular, is derived from the international donor organization. As far as the Ethiopian government accepts the frameworks, it appears that the donor organizations are willing to fund the government in form of food aid. It is evident that a huge amount of food aid was given to the Derg regime from the Western nations regardless of Derg's political inclination towards socialism (Rahmato 2003). Another research, however, is required to understand the interests of international global donors working on environmental restoration.

As it had been in its history, TPLF able to build legitimacy and acceptability through interacting with the community through development works that require a huge amount of labor like that of restoration projects. It appears sensible to hold that the restoration projects are also another means to legitimatizing TPLF as an agent of change. The restoration projects can also be used as a way for greater political and social control through development works. However, during the period of struggle with the Derg regime, TPLF manage to implement a farmer-based approach towards rural development and scholars also are urging the need to return to this kind of approach for a better legitimacy and a sound rural development (Haile and Mitiku Haile 2001).

Chapter Six: Conclusion

This study analyzed the dynamics of labor mobilization and the nature of peasant participation in environmental restoration from a political ecology perspective. An attempt has been made to understand the question how and to what context is environmentalism of the state shapes environmental restoration in Ethiopia and related questions. Unlike other researches which deal with the material achievement of restoration projects, the study has emphasized on the nature of peasant political participation and emancipatory potentials of environmental restoration under the backdrop of politics of labor mobilization and environmental restoration.

As shown, environmental degradation in Ethiopia has long been dominated by neo-Malthusian explanations and the solution was directed by a modernist approach with the aim of restoring the degraded land that is mainly due to mismanagement born out of ignorance. The current Ethiopian government even though acknowledges the participation of the peasants as an important part of decision-making in restoration projects, however; an excessive technology-supply approach which is driven by environmentalism of the state limited the space for participation of peasant and thus overlooks the expertise and knowledge of peasants. Working under this matrix, restoration is understood as a way of "capacity-building" and a way of channelling the environmental discourse of the state. This resonates the argument of Kidane-mariam (2003) and Rahmato (2003) that narratives and discourse that are generated by donor countries remains resilient since the 1950s.

To implement environmentalism of the state, the state uses political, social and economic mechanism. The study's findings reveal that those mechanisms appear to create a more social and political control over the rural part of Tigrai and limit alternative ideas and peasant participation. The growing infrastructure of power built by the state facilitates state coercion and governmentality among the peasants. The participation of the peasants in this regard is understood as important to meet the objectives of restorations that are designed by external actors other than local people. Findings from the study reveals that peasant participation is limited to the contribution of the labour and thus are not equal partner in knowledge production and execution of the restoration projects.

This distancing of decision-making from the peasant and a limited nature of their participation create an attitude among them that the projects are not the symbol of their power and autonomy, they are the symbol of the existence of state power in the rural part of Tigrai. Combined with lack of sense of ownership and lack of clear tenure rights on restored lands, peasants seems unwilling to continue to participate in the restoration projects. Seen from the restorative thesis, the Tigrai projects, being cognizant of the material achievements so far, achieve little in peasant political empowerment, developing a feeling of own mastery and facilitating ethical commitment towards restored nature and in continuing in restoration practices without government involvement. The focus of the current government on the construction of physical infrastructures reduce restoration programs into its simplest and calculable aspects. This simplification

of restoration reflects territorialization of the projects on which state extends its form of knowledge and power to define measures of what should be legible. The approach undermines the dynamics of social, political and economic dimensions of restorations. This might mislead to de-politicization of restorations that potentially disregard the democratic and emancipatory potential of restoration projects. The study established an argument that the Tigray experience falls under territorialization approach which gave a scant attention for positive values which can be generated in restoration projects which includes ethics, political empowerment and feeling of ownership.

This study can potentially contribute to the ongoing debates on restorative thesis and the application of political ecology to the of study environmental restoration programs. Besides, the study contribute to the policy makers to reconsider what restoration ought to be and how participation of the peasant look like. It can hopefully generate a further debate on how and to what extent state environmentalism shapes restoration efforts and how participation should be understood in environmental management. However, since the study is limited in investigating state environmentalism from a political ecology perspective, it cannot substantiate the arguments with statistical proofs to see the material achievements of restoration projects. Since the study is also limited at local politics, it cannot give a full picture of who is benefiting and at whom interest are those environmental restoration takes place. Therefore, a further study is required to understand global political ecology. Besides, a further research is required on how peasants are responding to environmentalism of state. This further can be investigated using environmentalism of the poor and to what extent can environmentalism of the peasant can be understood as environmentalism of the poor.

Reference

Admassie, Y. (2000) *Twenty Years to Nowhere: Property Rights, Land Management and Conservation in Ethiopia*. Lawrenceville, N. J.: Red Sea Press.

Alemu, T. (1999) 'Land Tenure and Soil Conservation: Evidence from Ethiopia'. PhD Thesis, Department of Economics, University of Gothenburg.

Alier, J.M. (2002) *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Cheltenham: Edward Elgar.

Anderson, D. and R. Grove (1987) *The Scramble for Eden: Past, Present and Future in African Conservation*. New York: Cambridge University Press

Arsel, M. and N.A. Angel (2012) '"Stating" Nature's Role in Ecuadorian Development: Civil Society and the Yasuní-ITT Initiative', *Journal of Developing Societies* 28(2): 203-227.

Baldwin, A.D., J. De Luce and C. Pletsch (1994) *Beyond Preservation: Restoring and Inventing Landscapes*. University of Minnesota Press.

Bassett, T.J. and D. Crummey (2003) *African Savannas: Global Narratives & Local Knowledge of Environmental Change*. James Currey Publishers.

Bekele, Y.W., D.J. Kjosavik and N. Shanmugaratnam (2016) 'State-Society Relations in Ethiopia: A Political-Economy Perspective of the Post-1991 Order', *Social Sciences* 5(3): 48.

Berhanu, K. and C. Poulton (2014) 'The Political Economy of Agricultural Extension Policy in Ethiopia: Economic Growth and Political Control', *Development Policy Review* 32(s2).

Bixler, R.P., J. Dell'Angelo, O. Mfune and H. Roba (2015) 'The Political Ecology of Participatory Conservation: Institutions and Discourse', *Journal of Political Ecology* 22(1): 164-182.

Brown, D.R., P. Dettmann, T. Rinaudo, H. Tefera and A. Tofu (2011) 'Poverty Alleviation and Environmental Restoration using the Clean Development Mechanism: A Case Study from Humbo, Ethiopia', *Environmental management* 48(2): 322-333.

Cahill, A. (2008) 'Power Over, Power to, Power with: Shifting Perceptions of Power for Local Economic Development in the Philippines', *Asia Pacific Viewpoint* 49(3): 294-304.

Carson, R. (2009). *Silent spring*. Boston and New York: Houghton Mifflin

Clapham, C. (2018) 'The Ethiopian Developmental State', *Third World Quarterly* 39(6): 1151-1165.

Crummey, D. and A. Winter-Nelson (2003) 'Farmer Tree-Planting in Wallo, Ethiopia 1937-1997', in T. Bassett and D. Crummey (eds) *African Savannas: Global Narratives & Local Knowledge of Environmental Change*, pp. 91-120. London: James Currey.

Daly, H.E. (2005) 'Economics in a Full World', *Scientific American* 293(3): 100-107.

Degefa, T. (2001) *Death of the Mother Tree: Land Tenure and Environmental Degradation in the Oromian Highlands, Ethiopia, 1900-1997*. Shaker Publishing.

Dejene, A. (1990) *Environment, Famine, and Politics in Ethiopia: A View from the Village*. Lynne Rienner Publishers.

Elliot, R. (2003) Faking Nature, in Light, A. and H. Rolston (eds) *Environmental Ethics: An Anthology*. Oxford: Blackwell Publishing. 381-389

Fitzpatrick, S. (2000) *Everyday Stalinism: Ordinary Life in Extraordinary Times: Soviet Russia in the 1930s*. Oxford University Press, USA.

Flick, U. (2009) *The Sage Qualitative Research Kit: Collection*. SAGE Publications Limited.

Gebremariam, K. (2015) 'Sustaining Landscapes: Participatory Watershed Management as the Driving Force for Sustainable Livelihood Change in the Community: The Case of Abreha we Atsebeha', International Water Management Institute (IWMI); CGIAR Research Program on Water, Land and Ecosystems (WLE); Global Water Initiative East Africa (GWI EA).

Gerber, J. (2014) 'The Role of Rural Indebtedness in the Evolution of Capitalism', *Journal of Peasant Studies* 41(5): 729-747.

Hailu, B. and Mitiku Haile (2001). 'Liberating local creativity: building on the "best farming practices" extension approach from Tigray's struggle for liberation', in C. Reij & A. Waters-Bayer, eds., *Farmer Innovation in Africa; a source of inspiration for agricultural development*. London: Earthscan, 310–24.

Hammersley, M. and P. Atkinson (2007) *Ethnography: Principles in Practice*. Routledge.

Hendrie, B. (1999) 'Now the People are Like a Lord: Local Effects of Revolutionary Reform in a Tigray Village, Northern Ethiopia'. PhD thesis. Department of Anthropology University collage of London.

Hennink, M., I. Hutter and A. Bailey (2011) *Qualitative Research Methods*. Los Angeles, London, New Dehli, Singapore, Washington DC: Sage.

Hoben, A. (1995) 'Paradigms and Politics: The Cultural Construction of Environmental Policy in Ethiopia', *World Development* 23(6): 1007-1021.

Jordan, W.R. (2003) *The Sunflower Forest: Ecological Restoration and the New Communion with Nature.* University of California Press.

Katz, E. (2003) "The Big Lie: Human Restoration of Nature", in Light, A. and H. Rolston (eds.) *Environmental Ethics: An Anthology.* Oxford: Blackwell Publishing. 390-397.

Kebbede, G. and M.J. Jacob (1988) 'Drought, Famine and the Political Economy of Environmental Degradation in Ethiopia', *Geography* 73(1): 65-70.

Keeley, J. and I. Scoones (2000) 'Knowledge, Power and Politics: The Environmental Policy-Making Process in Ethiopia', *The Journal of Modern African Studies* 38(1): 89-120.

Kelbessa, W. (2015) 'African Environmental Ethics, Indigenous Knowledge, and Environmental Challenges', *Environmental Ethics* 37(4): 387-410.

Kidane-Mariam, T. (2003) 'Environmental and Habitat Management: The Case of Ethiopia and Ghana', *Environmental management* 31(3): 0313-0327.

Lanckriet, S., B. Derudder, J. Naudts, H. Bauer, J. Deckers, M. Haile et al. (2015) 'A Political Ecology Perspective of Land Degradation in the North Ethiopian Highlands', *Land Degradation & Development* 26(5): 521-530.

Lavers, T. (2013) 'Food Security and Social Protection in Highland Ethiopia: Linking the Productive Safety Net to the Land Question', *The Journal of Modern African Studies* 51(3): 459-485.

Leopold, A. (1970) *A Sand County Almanac: With Other Essays on Conservation from Round River.* Outdoor Essays & Reflections.

Leta, G., G. Kelboro, T. Stellmacher, K. Van Assche and A. Hornidge (2018) 'Nikinake: the mobilization of labour and skill development in rural Ethiopia', *Natural Resources Forum*, Wiley Online Library pp93-107.

Light, A. and E.S. Higgs (1996) 'The Politics of Ecological Restoration', *Environmental Ethics* 18(3): 227-247.

Light, A. and H. Rolston (2002) *Environmental Ethics: An Anthology.* Oxford: Blackwell Publishing

Mann, M. (1984) 'The Autonomous Power of the State: Its Origins, Mechanisms and Results', *European Journal of Sociology/Archives européennes de sociologie* 25(2): 185-213.

Marshall, C. and G. Rossman (2011) 'Managing, Analyzing, and Interpreting Data', *C.Marshall & GB Rossman, Designing Qualitative Research* 5: 205-227.

Matthews, F. (2006) *The Ecological Self.* London: Routledge.

Meadows, D.H., D.L. Meadows, J. Randers and W.W. Behrens (1972) *The Limits to Growth: A Report for the Culb of Rome's Project on the Predicament of Mankind.* New American Library.

Mekuria, W., E. Veldkamp, M. Haile, J. Nyssen, B. Muys and K. Gebrehiwot (2007) 'Effectiveness of Exclosures to Restore Degraded Soils as a Result of Overgrazing in Tigray, Ethiopia', *Journal of Arid Environments* 69(2): 270-284.

Migdal, J.S. (1988) *Strong Societies and Weak States: State-Society Relations and State Capabilities in the Third World.* Princeton University Press.

Migdal, J.S. (2001) *State in Society: Studying how States and Societies Transform and Constitute One another.* Cambridge: Cambridge University Press.

Milkias, P. (2003) 'Ethiopia, the TPLF, and the Roots of the 2001 Political Tremor', *Northeast African Studies* 10(2): 13-66.

Minteer, B.A. and B.P. Taylor (2002) *Democracy and the Claims of Nature : Critical Perspectives for a New Century.* Lanham, Md.: Rowman & Littlefield Publishers.

Moreda, T. (2018) 'Contesting Conventional Wisdom on the Links between Land Tenure Security and Land Degradation: Evidence from Ethiopia', *Land Use Policy* 77: 75-83.

National Planning Commission (2016) 'Growth and Transformation Plan II (GTP II) (2015/16-2019/20)', *Volume I: Main text.*

Nyssen, J., M. Haile, J. Moeyersons, J. Poesen and J. Deckers (2004) 'Environmental Policy in Ethiopia: A Rejoinder to Keeley and Scoones', *The Journal of Modern African Studies* 42(1): 137-147.

O'Leary, Z. (2014) *The Essential Guide to Doing Your Research Project.* Los Angeles, London, New Dehli, Singapore, Washington DC: Sage.

Orb, A., L. Eisenhauer and D. Wynaden (2001) 'Ethics in Qualitative Research', *Journal of nursing scholarship* 33(1): 93-96.

Ostrom E. (1990) Governing the commons: the evolution of institutions for collective action. Cambridge University Press; Cambridge.

Pankhurst, A. and D.H. Mariam (2000) 'The" Iddir" in Ethiopia: Historical Development, Social Function, and Potential Role in HIV/AIDS Prevention and Control', *Northeast African Studies:* 35-57.

45

Plumwood, V. (2002) *Feminism and the Mastery of Nature.* London: Routledge.

Rahmato, D. (2003) 'Littering the landscape: Environmental Policy in Northern Ethiopia', in T. Bassett and D. Crummey (eds) *African Savannas: Global Narratives & Local Knowledge of Environmental Change*, pp. 205-224. London: James Currey.

Rahmato, D. (2009) *The Peasant and the State: Studies in Agrarian Change in Ethiopia 1950s-2000s.* Addis Ababa: Addis Ababa University Press.

Robbins, P. (2011) *Political Ecology: A Critical Introduction.* Vol. 16. John Wiley & Sons.

Segers, K., J. Dessein, S. Hagberg, P. Develtere, M. Haile and J. Deckers (2008) 'Be Like bees–the Politics of Mobilizing Farmers for Development in Tigray, Ethiopia'*, African Affairs* 108(430): 91-109.

Stott, P.A. and S. Sullivan (2000) *Political Ecology: Science, Myth and Power.* New York: Oxford University Press.

Tiffen, M., M. Mortimore and F. Gichuki (1994) *More People, Less Erosion: Environmental Recovery in Kenya.* John Wiley & Sons Ltd.

Vaughan, S. and K. Tronvoll (2003) *The Culture of Power in Contemporary Ethiopian Political Life.* Sida Stockholm.

White, L. (1967) 'The Historical Roots of our Ecologic Crisis'*, Science* 155(3767): 1203-1207.

Young, J. and Thomas Leiper Kane Collection (Library of Congress. Hebraic Section) (1997) *Peasant Revolution in Ethiopia: The Tigray People's Liberation Front, 1975-1991.* Cambridge, U.K.: Cambridge University Press.

Appendix 1: List of Interviewees

No	Informant Name[14]	Sex	Age	Occupation	Position	Date of Interview	Place of Interview
1	Hayelom	M	31	Public Servant	Wereda Environmental Protection Officer	July 25, 2018	Ajira
2	Debas	M	43	Farmer		July 27, 20018	Ajira
3	Aregash	F	50	Farmer		July 27,2018	Ajira
4	Berehane	F	40	Farmer		July 27,2018	Ajira
5	Hafte	M	35	Farmer	Guard at restoration site	July 28, 2018	Ajira
6	Bayru	M	29	Public Servant	Development Agent at Tabia Teklehaymanot	July 30,2018	Maichew
7	Niguse	M	66	Farmer		August 1,2018	Ajira
8	Akeza	F	46	Farmer	Network Leader	August 1,2018	Ajira
9	Adhane	M	47	Farmer	Leader of Development Team, Agricultural Cadre	August 2, 2018	Ajira
10	Aregash	F	25	Farmer	Leader of Development Team, Agricultural Cadre	August 3, 2018	Ajira
11	Kiros	M	62	Farmer and Clergyman	One –to-five leader	August 3, 2018	Ajira
12	Dimtsu	M	42	Public Servant	Agricultural Expert	August 4,2018	Maichew
13	Berehe	M	34	Environmental Management Professional and Coordinator at Regional level	Tigrai Regional Government Environmental Protection, Land Administration and Use Authority	August 15, 2018	Mekelle
14	Tewelde	M	52	Public Servant, Office Administrator	Tigrai Regional Government Environmental Protection, Land Administration and Use Authority	August 15, 2018	Mekelle
15	M	M	-	University Professor	Professor	August 17,2018	Mekelle
16	Tesfaye	M	54	Famer Association Leader	Farmer Association Leader	August 27, 2018	Maichew
17	Kahasay	M	33	Public Servant	Rural Politics Organizer at Woreda Level	August 30,2018	Maichew

---

[14] All names are invented names