

CONTESTED DEVELOPMENT INTERVENTION

**Imagination, Reaction, and Practices of an Irrigation Project in the Upper
Awash Valley of Ethiopia**

By

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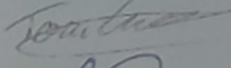
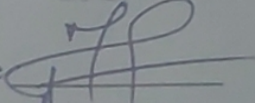
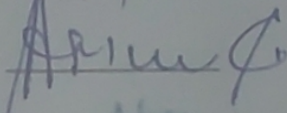
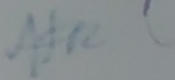
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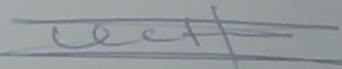
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Declaration

I, the undersigned, declare that this dissertation is my original work and has not been produced and presented in any other academic institution. All sources of materials used for the dissertation have been duly acknowledged.

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Table of Contents

Acknowledgment	i
Table of Contents	iv
List of Figures.....	viii
List of Tables	viii
List of Photo.....	viii
Acronyms	ix
Abstract	xi
CHAPTER ONE	1
1. Introduction.....	1
1.1. Background of the study	1
1.2. Setting the Scene: Encountering the Karrayu and Conceiving the Research Project	3
1.3. Statement of the Research Problem	7
1.4. Objectives of the Study	10
1.5. Research Questions.....	11
1.6. Significances of the Study	12
1.7. Limitation.....	13
1.8. Research Approach and Strategy	15
1.8.1. Philosophical Stance and Choice of Methodological Perspectives	15
1.8.2. Methodology: Overall Research Design.....	17
1.8.2.1. Methods: Data Collection Instruments and Procedures.....	19
1.8.2.1.1. Data from Secondary sources	20
1.8.2.1.2. Focus Group Discussions (FGD).....	21
1.8.2.1.3. In-depth Interview.....	22
1.8.2.1.4. Key Informant Interview.....	23
1.8.2.1.5. Participant Observation.....	24
1.8.3. Data Analysis.....	25
1.8.4. Ethical Consideration.....	27
1.9. Organization of the Dissertation	28
CHAPTER TWO	30
2. Pastoral Development, Irrigation, and Transformation: Review of Theoretical and Empirical Literatures	30
2.1. Introduction.....	30
2.2. Understanding Development (project): Theoretical Perspective.....	31

2.2.1. Critical Marxian Political Economy Theory.....	32
2.2.2. Critical Development Discourses	34
2.3. The Political Economy of Pastoral Development: Marginalities, Contestation, and Local Responses.....	37
2.3.1. Forms of Pastoral Marginalization.....	38
2.3.1.1. Economic Marginality	38
2.3.1.2. Political Marginalization.....	41
2.3.1.3. Ecological Marginalization.....	43
2.3.2. Contested Views and Local Response to Pastoral Projects	45
2.4. The Discourses of Pastoral Development: Irrigation versus Pastoralism.....	47
2.5. Irrigation Development in the Lowlands of Ethiopia: A Historical Overview.....	51
CHAPTER THREE	57
3. The Study Area: Descriptions, State Intervention, and Development Projects	57
3.1. Introduction.....	57
3.2. Fentalle District in Upper Awash Valley.....	57
3.2.1. The Research Area: Location and Physical Features.....	57
3.2.2. The People	62
3.3. State Intervention and Development Project on the Karrayu Land	63
3.3.1. Earlier Development Projects and the Locals.....	64
3.3.1.1. Metehara Sugar Estate	65
3.3.1.2. Awash National Park	66
3.3.2. Resettlement and influx of migrants to Karrayu.....	72
3.3.3. State-Karrayu Relation: Dynamics and Continuity	74
CHAPTER FOUR.....	79
4. Imagination, Reaction, and Implementation of FIBID	79
4.1. Introduction.....	79
4.2. The FIBIDP in Context: What is it?	80
4.3. Divergent Views Within the State Structure: FIBIDP as symbol of autonomy vs waste of money	84
4.3.1. The Project as ‘anti-poverty’ and a Symbol of Regional Autonomy– the View from Oromia Regional State	85
4.3.2. The project as ‘waste of money’ – the View from Federal Government.....	91
4.4. Contestation and Divergent Views Among Local Communities.....	95

4.4.1. Memories of the Past Dispossession: Initial Perception and Early Response of the Community.....	95
4.4.2. Discontent and Contemporary Attitude of the Community	98
4.5. The FIBIDP as a ‘success’: Self-presentation and Dynamic View	104
4.6. Convergent view within the State Structure: FIBIDP as Modernizing Project	107
4.7. Summary	111
CHAPTER FIVE	113
5. Privatization of the Common: Land Ownership, Access, and Exclusion	113
5.1. Introduction.....	113
5.2. Access and Property Right in Karrayu Pastoral Context	115
5.3. Property Right Reconfiguration through Land Certification	117
5.4. Land Distribution Process, Ownership and Access	122
5.4.1. Legal Access to Land.....	122
5.4.2. Illicit Access to Land	126
5.5. Land Ownership and Access Benefit.....	127
5.6. Irrigable Land ‘hoarding’	133
5.7. Exclusion of Pastoral Communities via Land Distribution and Certification	136
5.8. Summary	139
CHAPTER SIX.....	141
6. Competition, Control, and Access to Irrigation Water	141
6.1. Introduction.....	141
6.2. Water: Socially Constructed and Relational Resources.....	142
6.3. Competition and Access to Irrigation Water	147
6.4. Struggle for irrigation water access: blockage and diversion as a strategy	150
6.5. Explaining irrigation water scarcity and uneven distribution: A contested view ..	155
6.6. Collective effort of Water Management-Water committee	160
6.7. Summary	162
CHAPTER SEVEN	164
7. The FIBIDP: A Door for Emerging Capitalist Relations.....	164
7.1. Introduction.....	164
7.2. The Irrigation Project: Reinforcing Capitalist Relations	165
7.3. Actors and Their Agency	166
7.4. Sharecropping and Complex Profit-sharing Arrangement	170
7.4.1. Sharecropping Contract	171

7.4.2. Complex-profit Sharing Arrangement	174
7.5. The Commodity Marketing.....	177
7.5.1. Marketing strategies.....	177
7.5.2. Market price determination.....	178
7.5.3. Harvesting and loading of the produce	181
7.5.4. Marketing destination	184
7.6. Contextualizing the emerging production relationships	186
7.7. Reaction and movement against exploitation	188
7.7.1. ‘Maxxanaa off irraa baasaa’ movement (litt. The movement to expel ‘dependents’).....	189
7.7.2. ‘Qeerroo’ movement: quest for a fair share	190
7.8. Summary	192
CHAPTER EIGHT	193
8. CONCLUSIONS	193
8.1. The main focus and argument of the study	193
8.2. Revisiting the Research Problems	197
8.2.1. Politics of the development intervention	197
8.2.2. Dynamism in Resources Access, Ownership, and Exclusion.....	199
8.2.3. Capitalist Production Relations and Wealth Accumulation.....	201
8.3. Some Policy Suggestions.....	201
8.3.1. Increasing the Capacity and Negotiating Power of the Locals	202
8.3.2. Recognize the Local Context and Ensure Equitable Land Allocation Processes.....	203
8.3.3. Consideration for a More Comprehensive Approach	204
8.5. Future Research	204
References.....	207

List of figures

Figure 1. Proliferation of irrigation Schemes in Awash valley during the 1970s.....	54
Figure 2. Map of the study area	61
Figure 3: Development projects on Karrayu Land	71
Figure 4: The FIBIDP catchment area	83
Figure 5: Sharecropping actors, contracts, and profit-sharing relationship	169
Figure 6: Some marketing locations for onions produced in Fentalle District.....	186

Lists of tables

Table 1. Land distribution and certification.....	118
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List of Photos

Photo 1: Lake Beseka destructing infrastructures	60
Photo 2: Onion vendor on the asphalt road at Ilaala village	103
Photo 3: Visit by high-level regional and federal officials to the project area	106
Photo 4: The irrigation canal blockage and water diversion at Xuxuxi and Ilaala	151
Photo 5: Wasteful irrigation water use at Tuurroo village	157
Photo 6: Local children and women's engagement in onion harvesting	183

Acronyms

AU	African Union
AVA	Awash Valley Authority
CAAP	Comprehensive Africa Agriculture Development Program
CELEP	Collision of European Lobbies on Eastern African Pastoralism
CGTN	China Global Television Network
DA	Development Agent (A government employee)
E.C	Ethiopian Calendar
e.g.	Short term for the Latine ‘ <i>exempli gratia</i> ’ (‘for example’)
EPRDF	Ethiopian People’s Revolutionary Democratic Front
ETB	Ethiopian Birr
FAO	Food and Agricultural Organization
FDPDO	Fentalle District Pastoral Development Office
FDRE	Federal Democratic Republic of Ethiopia
FGD	Focus Group Discussion
FIBIDP	Fentalle Irrigation Based Integrated Development Project
GDP	Gross Domestic Product
GTF	Gudina Tumsa Foundation
HRW	Human Rights Watch
ibid.	Short term for the Latin ‘ <i>ibidem</i> ’ (‘in the same place’)
IFRC	International Federation of Red Cross and Red Crescent Societies
IUCN	International Union for Conservation of Nature
KII	Key Informant Interview
MoFED	Ethiopian Ministry of Finance and Economic Development
MoFPDA	Ministry of Federal and Pastoralist Development Affairs
MoWR	Ethiopian Ministry of Water Resources
NGO	Non-Governmental Organization
OPDO	Oromo People Democratic Organization
OWWDSE	Oromia Water Work Design and Supervision Enterprise
PSNP	Productive Safety Net Program
SNNP	Southern Nations, Nationalities and Peoples

SSE	Ethiopian Statistical Service
TPLF	Tigray People Liberation Front
UMFPED	Ugandan Mistry of Finance, Planning and Economic Development
WALQO	Waldaa Liqii fi Qusannaa Oromiyaa (in the Oromo language) (‘Oromia Credit and Saving Share Company’)
WB	World Bank
WIDE	Wellbeing, Illbeing and Dynamic in Ethiopia

Abstract

Large-scale agricultural schemes in Ethiopia's pastoralist lowlands have historically been part of state consolidation, resource expropriation, and the strategy of transforming pastoralist livelihoods. Although successive regimes implemented pastoralist development projects with a highly centralized and top-down approach, this research shows that state development intervention is highly contested within state institutions and among local communities. Based on fieldwork among the Karrayu pastoral communities in Ethiopia's Oromia region, this dissertation explores how a large-scale irrigation project, exemplifying pastoral development, has been differently imagined by the regional state, the federal government, and the local people, as well as how its outcomes have been negotiated on the ground. The study employed multi-method of data collection such as focus group discussion, in-depth interviews, and observation which were then analyzed using a thematic data analysis strategy. The project was initially viewed as a symbol of 'autonomy' and an instrument of poverty reduction for the regional state, but was a 'waste of money' for the federal government, whereas the local community blamed it as a consolidation of land alienation. However, while this was eventually considered a 'success' and an 'achievement' of development by the regional and federal administrations, it became a source of unhappiness and confusion for some local people, mainly in the downstream villages. In contrast, other locals in the upper stream and some in downstream villages still believe the project is a prospect of betterment and economic improvement. The project linked to privatizing communal land has excluded many pastoral individuals and groups from accessing their ancestral land. Some were not allocated land; all, including those who were allocated a parcel, lost access to the rest of the land to which they previously had access; and some of those who were granted ownership rights were also unable to reap the full benefit of their land. The project has also radically altered the traditional value, understanding, and pattern of interactions centered on natural resources in the area. Natural resources, water, and land have gained significant economic value. Access to water (for irrigation) has grown more competitive than ever before, and sometimes even conflictual, making the equitable distribution and allocation of irrigation water critical, often in opposition to the persistent tradition of water sharing and utilization in the area. The implementation of the project has also reinforced exploitative economic interactions mediated through sharecropping arrangements involving multiple actors and marketing relationships. Landowners and pastoralists have marginally benefited, while capitalists maximize wealth without displacing locals from their land, i.e., accumulation without dispossession. Finally, the study suggests a policy implication targeted at increasing households' capacity and negotiating power, as well as ensuring equitable land allocation, so that local pastoralists and disadvantaged members get maximum benefit from the project.

Key words: Pastoral development, Ethiopia, Karrayu, Irrigation project, Sharecropping

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

The notion of development has been reframed in the context of a very changing political environment (Mosse, 2005). The presupposition that world development is a process of transition to modernity, improvement, and poverty alleviation is growingly disputed. In this regard, literature from various parts of the world (e.g., Ferguson from Lesotho, Escobar from Colombia, and Tania Li from Indonesia) has witnessed that rural development interventions in practices do not bring about major change and eradicate poverty as they are supposed to. Such development programmes are often manipulated to serve other interests rather than the improvement of rural welfare (Ferguson, 1998; Escobar, 1995). Yet they are ‘often framed in the language of unkept promises’ (Li, 2007:2). This makes them unlikely to benefit the rural poor and may even be harmful to them. Many development interventions in pastoral areas have reflected this fact, with many rural pastoralists bearing the brunt of such programmes.

Pastoral communities are often associated with mobility and flexible resource use patterns that are considered to be the best strategy to conserve the ecosystem and sustain themselves in the fragile environments in which they live (African Union, 2010; FAO, 2018; Jenet et al., 2017). These are communities that scholars have long recognized as possessing a high level of ‘ecological mastery’ (Helland, 2001: 56), necessary to adapt and survive in ‘fringe’, resource- poor environments (Catley et al., 2013; Girmu, 2013). The pastoral system and their mode of production have been demonstrated remarkably resilient (FAO, 2018). Through intervention of state and private companies, however, they are in transition from once ‘self-contained and independent’ society to what becomes known as ‘dependent’ societies losing their autonomy that endanger their economic, social, political tradition and relations (Helland, 2001: 56). They are highly tightened and spirally declining to support their household demands due to the dwindling of natural resources, mainly pasture and water, restricted mobility, loss of herding land (Ayalew, 2001b; Devereux, 2006; Fratkin, 2001; Helland, 2001), and increasing population pressure (Devereux, 2006; IFRC, 2011; Notenbaert et al., 2012). This process of destitution is further expedited due to the state’s misguided

development policy mostly favoring sedentary and agrarian life (Buli, 2006; Eyasu, 2008; Ronald, 2014; Schlee, 2013).

These days, however, the East African pastoral communities have become victims of recurring drought and famine and, thus dependent on humanitarian relief beneficiaries (FAO, 2018; Fratkin, 2001; Hartmann et al., 2010; Helland, 2001). Repeated drought-induced shocks in the Horn of Africa in 2002, 2006, 2008, and 2011 were cases in point (Mortimore, 2013). Their economic bases, pastoralism, and traditions have been eroded over time due to the mounting pressure resulting from increasing incorporation (rather exposure) to the political economy causing an increase of food insecurity and weakening of adaptation and capacity to recover from repeated shocks.

In this regard, FAO (2018) reported that following an increase of drought incidence, the food insecurity problem among the pastoral communities of the Horn of Africa is widening than ever before and challenging the humanitarian agencies to meet the demand to protect the livelihood and lives of people at risk. Consequently, the number of drought-affected pastoralists has increased over time regardless of the effort made to convert the problem; it becomes five times than it was sixty years ago (IFRC, 2011). Moreover, a growing number of former pastoralists drop out of pastoralism due to increase destitution (Catley & Yacob, 2013; Fratkin, 2014; Mortimore, 2013; Rettberg et al., 2017). On contrary, however, development planners in the region have been facing profound difficulty to get an appropriate policy that will halt the pressing problem and secure the livelihood and enhance pastoral development (Notenbaert et al., 2012). Eventually, sedentary crop farming has been opted by nearly all policymakers in the region to curb the problem and improve the pastoral life (Carr, 2017; Fekadu, 2014; Markakis, 2011; Turton, 2011); intervention on the development of irrigation schemes have been made to materialize this policy, regardless of little success of the earlier schemes (Behnke & Kerven, 2013; Bont, 2018; Carr, 2017; Hogg, 1983).

In recent years, irrigation development is revamping in Africa in general and East Africa in particular after some twenty years of silence and set back to the stage of policy agenda (Bont, 2018; Woodhouse et al., 2017). It is hoped that irrigation transforms the agricultural performance of the region from what was known as sluggish and low productive associated with less modern input utilization to modern and high productivity that increase food supply and reduce hunger (NEPAD, 2003; Woodhouse et al., 2017). Consequently, expanding irrigation farming and control of water for agriculture becomes one of the priority agendas for

Africa's policy framework called Comprehensive Africa Agricultural Development Program (CAADP) (NEPAD, 2003), a pan-African agricultural initiative which is inspired to transform Agriculture and increase economic growth, food security, and Africa's participation to the global market (Woodhouse et al., 2017). It is also noted that water harvesting, mainly irrigation is much more important for arid and semi-arid areas, where water is in critical supply to maintain the lives and livelihood of pastoral inhabitants.

Similarly, Ethiopia has endorsed policies supporting irrigation and pushing pastoralists towards a sedentary life. Most of the policies are aimed to 'transform' pastoral production through increasing agricultural production and commercialization rather than enhance pastoralism itself (Rettberg et al., 2017: i). In the same vein, the Oromia regional state in Ethiopia has developed the Fentalle Irrigation-Based Integrated Development Project (FIBIDP, henceforth 'the Project') in the upper Awash valley. Unlike earlier large-scale commercial farming ventures in the lowlands of the country in general and the upper Awash Valley in particular, this scheme was supposed to be 'pastoralist-managed'¹ and meant to benefit the local residents while promoting pastoralist development.

1.2. Setting the Scene: Encountering the Karrayu and Conceiving the Research Project

It was one early morning in September 2011 that I dragged my suitcase to make a journey to an area where I had never been, in the Upper Awash Valley. The trip was meant to gather ethnographic field data from Karrayu pastoralists for the WIDE² Ethiopia project, in which I have been a member of the research team since then. The project was intended to understand the impact of development projects interventions and their impacts on the Karrayu community. It was meant to document the development trajectories and overall dynamics, i.e., the well-being and ill-being situation of the Karrayu community over a decade, using data collected from Gaalchaa village, one of 18 villages in the area.

¹ The head of the project scheme administration explained that the plan was to construct the irrigation canal infrastructure and transfer it to the community to manage and administer all activities related to the project, including its maintenance. However, later, this was changed in view of the fact that the community lacked adequate skills and experience to run the scheme. Thus, the project scheme administration and overall activities remained within the state bureaucratic structure—in the hands of the Fentalle Irrigation-Based Integrated Development Scheme administration under the Oromia regional state government. There is also no idea of transferring the project to community management.

² A longitudinal research project that studies the economic, social, cultural, and political trajectories of twenty rural communities in Ethiopia since early 1990 (see www.ethiopianwide.et). Thus, the data collection in Karrayu was mainly to understand the long-term development impacts and dynamics in the area.

I enjoyed the landscape on my way. I was looking through the window as far as my eyes could capture the beauty of the scenery. The bus was cruising swiftly forward, leaving objects in its wake. Adama (a zonal town), Welenchit (a district town), many incoming cars, and the landscape—sometimes flat, mountainous terrain, small mounds formed by volcanic eruptions, and a variety of vegetation but dominantly scanty bush and acacia trees—all passed one after the other.

I was happy with the terrain and the warm weather, though I put off my sweater and irregularly opened and shut the window to ventilate myself. However, my heart was pounding hard as my lap of travel increased and I approached my destination. This was for fear of being strange to the area and its people on the one hand and for the stereotypical portrayal of pastoralists and their terrifying representation that they are ‘warlike’ and ‘rebellious’ echoing in my mind on the other (Markakis, 2011: 42), though I later proved that this was not an issue during my stay. I had no prior research exposure or visits to lowland areas or people, including Karrayu community, due to my upbringing in an agrarian-dominated area. This is my first encounter to the Karrayu. However, I share the same ethnic background and language (Afan Oromo) with the Karrayu community, which I hope facilitated my rapport and data collection process.

I was mumbling, and all the horrible thoughts passed through my mind one after another. I had been previously informed, and some individuals even advised me not to go to the area when they knew my intention to do research. The explanation was that the Karrayu were not hospitable, and in the worst cases, they shot by passers and strangers passing through their territory. Not only that, but I was told they could not even be identified by the authorities after they attacked because they do not have permanent dwellings and frequently move their location. The Ethiopian pastoralists in general, including the Karrayu, had been nationally relegated and referred to for over a century with the derogatory term ‘zelan’(nomads) though the naming officially changed to ‘pastoralist’ recently. ‘Zelan’, as defined in Ethiopian Addis Zeman Amharic Magazine (February 05, 1959), is ‘someone who does not stay in one place and, unlike others (often meant highlanders), is unscrupulous and ready to betray his co-residents at any time’ (translated from Amharic). This represents ‘coarseness, aggressiveness, as well as material and cultural impoverishment’ (Markakis, 2011: 39).

I was heavily caught by the misrepresentations of the community and pondering how to build rapport with the community, my first immersion into and stay in the field, whom I should

contact first, and so many other things. In the wake of my daydream, I come to see a large water body, Lake Beseka, from afar. It opens up to the sun on a hot, deserted flat land in the valley and is a visually attractive but damaging saltwater lake bordering Metehara town, the district capital of Karrayu Land. This appears to be a gatekeeper and was a signifier of my last laps and my arrival at my destination, Metehara Town, as it is for any travelers to the area.

At this time, I spent nearly two months in the field in two phases for the data collection. I came into contact with a wide range of informants, including local community members of various ages, sexes, and positions, government officials in the district and villages, experts working for an NGO, immigrants, and urban inhabitants, to discuss overall development dynamics and impacts. Many of them called my attention to an ongoing large-scale irrigation³ project called the Fentalle Irrigation Based Integrated Development Project in the area. The informants mentioned the project repeatedly, which I was entirely unaware of at the time. Some of them even wanted to make this the focus of our discussion, as if there were no other development interventions in the area. The justification was that the project was a timely development initiative and was controversial in the area. Then I had an informal discussion with some of the informants to get their opinion about the project and its benefits.

Astonishing to me, my informants produced different narratives and had various views about the project in relation to its inception, implementation process, purposes, promises related to its benefits and beneficiaries, and its consequences. Intriguingly, these multiple narratives and stories produced by different social actors have interacted, sometimes in contradiction with what was stated in the technocratic project document. These diverse views of the project were, among others, based on the actors' divergent interests, knowledge, and positionality in the power structure (cf. Long, 2001).

While a district administration head depicted the project as a remedy to improve the pastoral livelihood and uplift them from deep impoverishment if the pastoral households 'wisely' used it, another local government official viewed the project as primarily a political instrument for the government rather than benefiting the locals. In credence of the later view, an expert working for an NGO operating in the area pointed out a case whereby the officials in the

³ Ethiopian Ministry of Water Resources (MoWR) classified irrigation projects in the country as large-scale irrigation if the size of land it covers is greater than 3,000 hectares, medium-scale if its size ranges between 200 and 3,000 hectares, and small-scale if it covers less than 200 hectares (Seleshi et al., 2007).

Oromia regional state initially rejected the proposal that his organization submitted to provide skill training to the locals on irrigated farming, with the officials justifying that "the regional government is capable of independently implementing the project and providing all necessary skill training to ensure the local pastoralists benefit without a need for support, let alone from an NGO but also from the federal government (expressed in a way that highlights the existence of some tension between the regional and federal states over the project)"⁴.

Some members of the pastoralist group also portrayed the project as a subtle state strategy to creep over Karrayu land and thus considered the project to further deteriorate the pastoral livelihood rather than improve it. Similarly, other pastoralists explained the scheme as pointless to them but for land-seeking farmers and investors with the skill and capital to invest. In this regard, I learned that the local officials have insisted that water-accessing pastoral households engage in irrigated farming on the one hand while launching a movement known locally as "maxxanaa ofi irraa baasaa" (literally, expelling dependents) on the other in an attempt to control the growing sharecropping contract with the external actors so that local pastoralists benefit from the project.

Contrary to this, some other local pastoralists were eager to see the project reach their village with the hope that it would provide water for human and animals and enable them to diversify their livelihood from crop farming. Furthermore, through personal contact with an expert working at regional offices, I learned that the project was a source of contention between the federal and Oromia regional governments and even among officials within regional structures, with some supporting it and others criticizing its implementation.

These multiple opinions ignited two main inquiries in my mind. First, how is a single project meant to improve a local community, as stated in the technocratic document, imagined differently among various actors related to the project, and how does this guide the practical execution of the project? Second, what effect does such a contested development project have on the local community, and how are the outcomes negotiated on the ground? With this, I began to dream of pursuing my Ph.D. research on a specific site and development project.

⁴ Interview with expert working for NGO called Gudina Tumsa Foundation (GTF), October 2011 during the field work for WIDE

1.3. Statement of the Research Problem

Scholars have well documented and demonstrated the complex and contrasting nature of development. Some of this has been broadly linked to the two major assumptions: that the development is a state instrument intended to realize national interests, including economic, social, and political goals, and that development processes promote economic differentiation (Stevenson & Buffavand, 2018). It implies that a development project, on the one hand, served state's objectives such as establishing discourses and rationalizing actions (Long, 2001), making the people and environment legible (Scott, 1998), or creating a governable subject (Foucault, 1991). As Nandy & Visvanathan (1990: 145) neatly put this that it has served the state's interest as a 'legitimizing of regimes, as part of the vision of a good society, and, above all, as a shorthand expression for the needs of the poor.' On the other hand, the development process facilitated inequality, favoring some by creating wealth at the expense of others (Li, 2007). Yet the process is context specific and shaped by complex social and political setting and policy narratives (Getu et al., 2022; Li, 1999). While all of this is true, it is also imperative to have an exemplar account of a state-driven project, in this case, the Fentalle irrigation project, to provides an excellent vantage point to understand how the tensions have actually operated on the one hand, and how development meanings and its outcomes are negotiated among actors on the ground on the other hand (Li, 1999, 2007).

Development projects in African pastoral areas have often been seen by the state actors as a symbol of progress and a means to economic growth and improved livelihoods (Kochore, 2016; Fana, 2021; Stevenson & Buffavand, 2018). The governments have lauded it as state-of-the-art for transforming the local community and overcoming poverty and impoverishment. Such framing of development as a lifesaving and betterment intervention is, in fact, not a new phenomenon. Tania Li (2007) clearly articulated that the discursive framing of development as 'improvement' and 'transformation' is used as a mechanism for legitimating external interventions. To that end, since the 1960s, the arid and semi-arid lowlands of Eastern Africa have received increasing large-scale investments, including agro-industry, irrigation schemes, dams, and infrastructure construction, to mention a few (Mosley & Watson, 2016). In Ethiopia, these projects have a long history and have been implemented as part of pastoral development, but with significant increases in the last two decades (Rettberg, 2020; Rettberg et al., 2017). They are presented as engines of social and economic transformation (Asebe & Korf, 2018; Lavers, 2012a).

A bulk of literature on state intervention in Ethiopia's pastoralist peripheries present the Ethiopian state as a monolithic, centralized, and uncontested in terms of its development interventions (e.g., Clapham, 2018; Fana, 2021; Getu et al., 2022; Lavers, 2016). In his analysis of the Ethiopian developmental state and its authoritarian and top-down strategies of channeling down development programs, Clapham (2018) argues that the federal government, specifically the late Prime Minister, Meles Zenawi, had uncontested power in designing and implementing mega-projects. Likewise, Puddu (2022) dives into the trajectories of state intervention in pastoralist lowlands through high-modernist development schemes and situates it within broader projects of state building. Taking the case of state development schemes in Lower Awash Valley (in the 1960s and 1970s), Puddu argues that the central government coopted lower-level state authorities into its high-modernist narratives of transforming and modernizing pastoralist livelihoods through mega-development schemes. Similarly, Fana (2021) asserts in a study of lowland regions (lower Omo Valley and Western Ethiopia) that the central government has adopted a villagization program linked to large irrigation schemes, with discursive engagement with the community as a modernizing initiative while strategically instrumentalizing it for state building processes and power consolidation.

These characterizations of the Ethiopian state are partly true in highlighting the highly centralized nature of the state but obscure internal heterogeneities and contestations on resource ownership and governance. Korf et al., (2015) for example explored the agency of local actors in maneuvering state development schemes to their advantages. Development is the activities and practices of the state to frame and manage relationships (Li, 1999). Apart from contestations over practical and technical approaches to pastoralist development, such intervention also entails different interpretations of sovereignty: political and resource sovereignty. Following the global land rush since 2007/2008, the issue of sovereignty is much discussed from the perspective that multinational companies may threaten decision-making power of weak states in the Global South (Cotula, 2013; Lavers, 2016; Fana, 2016). For example, Cotula argues that the African State's position over space and society has historically been rooted in unbalanced political economy relations with the Global North and that their sovereign power of decision over the resources has been endangered by foreign governments and multinational corporations. In his analysis of the complex interplay between national sovereignty, state building, and large-scale investment in Ethiopia, Lavers (2016) also contends that large-scale investments have strengthened the state's ability to control resources and local people at the periphery, while the involvement of foreign investors has

jeopardized the state's decision and sovereignty to exercise such power. These scholars limit their analysis of sovereignty to a state's sovereign power over space and how such exercise of power is often infringed by multinational companies. However, the Karrayu case shows multiple and overlapping sovereignties – the federal state, Oromia regional state and the Karrayu pastoralist population's perception of sovereignty – and how these are negotiated and contested.

Furthermore, studies (e.g., Ayalew, 2001; Buli, 2006; Emmanuel, 2006; Alemmaya, 2008; Hagmann & Alemmaya, 2008) conducted in the upper Awash valley investigated how development policies and undertakings, including large-scale commercial agriculture and investments, affect the socio-economic and political conditions of the Karrayu community. They indicated that the development initiatives in the area led to resource deprivation, weakening of the pastoral system of production, and environmental destruction. This in turn increases competition for meager resources, heightening tension and conflict among pastoral communities (Alemmaya, 2008; Hagmann & Alemmaya, 2008). On the contrary, Tsion (2011) reported that the FIBIDP has improved food production, consumption, and access to health and education services. Girum (2013), in his study attempting to address how the Karrayu pastoralists generally adapt and respond to climate change and its induced stress and shocks, also reported that crop farming linked to the Fentalle irrigation project is one of the strategies that some local pastoralists opt for in response to the changing ecology and socio-political contexts. Fekadu (2014) and Abdi (2015) also noted that, despite its predicaments, the same project has offered alternative livelihood strategies and increased the income of some households in the Karrayu pastoral area.

Many of the previous studies have attempted to understand how broader structural phenomena such as shifts in government policy and changes in the market have affected development interventions (including irrigation) and hence impacted local inhabitants and their environment. They have also underlined the role of the larger arena of economic and power relations in shaping different imaginations of development initiatives and structuring the social relations of production and economic activities. However, little attention has been paid to the intra-state heterogeneity of understanding of the different interpretations of sovereignty that the improvement project entails. Some of them also overlook not only the agency of the local communities in influencing the project but also their imagination and narrative about the development project. Less emphasis has been paid to various views and controversies within the state structure. In fact, contestations over development strategies in peripheral areas are not limited to intra-state structures. Rather, although often ignored in

policy debates and scholarly literature on Ethiopia (Abbink, 2012; Tsegaye, 2015), local people often resist or negotiate external interventions (Asebe et al., 2018; Buffavand, 2016; Fana, 2021; Tsegaye, 2017).

In light of the foregoing, taking the Fentalle irrigation project as its central arena of inquiry, this research aims to provide a broader picture and an in-depth understanding of how the political dynamics influence the inception and implementation of the project and how different actors with different interests imagine, interact with, participate in, react to, or resist the execution of the project and negotiate over its outcome. In this way, the study demonstrates how the project is being perceived and contested on the ground within the state structure and local communities, as well as what unintended repercussions it has on production relations and access to and ownership of basic livelihood resources.

1.4. Objectives of the Study

- The study critically examines how a development project is politically entangled and conceptualized differently by actors at different spatial scales (federal, regional, and local), shaping the process and actual execution of the project, and what unintended consequences this project has on resource access, control, and production relations in the Karrayu community.

Specifically, the study

- Examine how the FIBIDP was imagined and interpreted differently (or similarly) at different spatial scales, namely national, regional, and local representing the federal government, Oromia regional state, and local community, respectively.
- Understand the dynamics in land ownership, access and exclusion among the local pastoral community.
- Examine the dynamics in social relations over the meaning, control, and access to irrigation water associated with the project.
- Examine how the project unfolds to serve the interests of external actors, reinforcing the process of wealth accumulation at the expense of the local pastoralists.

1.5. Research Questions

Linked to the stated objectives, this study has addressed the following interrelated questions relevant to the topic under investigation.

1. How was FIBIDP imagined and understood differently (or similarly) by different social actors?

The FIBIDP drew markedly varied opinions—not only divergent ones but also convergent viewpoints, signifying heterogeneity within state institutions and local communities. It was very debatable and the center of discussion nationally, regionally, and locally. The dominant narrative of the federal government in promoting large-scale irrigation projects in pastoral areas is linked to modernizing society and transforming the economy (Carr, 2017; Fantini et al., 2018; Puddu, 2022). This comprehension is problematic, as it tends to overlook and flatten the various narratives within state institutions and only provide part of the story. However, the complex power dynamics in contemporary Ethiopia, which are characterized by struggle over power and autonomy between the multi-ethnic federal government and its constituent regional states (Vaughan, 2011), complicates project implementation, prompting divergent views within the state power structure for better understanding (Assefa, 2012).

Furthermore, in contested development projects in Ethiopia, the narrative from local people is frequently absent, and their views and opinions are ignored and less known (Abbink, 2012; Tsegaye, 2015). Thus, there is a paucity of literature examining how such projects are envisioned and narrated concurrently by various actors involved, notably the federal government, regional states, and local people in the context of Ethiopia. Thus, this question aims on understanding the project's meaning as perceived by these group of actors and its implications for the actual execution process. This is informed by Li's (1999) suggestion that investigating how development is actually negotiated on the ground in complex settings is critical to gaining a better understanding of how the project is politically fused and how practical commitments are made in relation to it.

2. How does the irrigation project affect access to and control of economic resources in the Karrayu pastoral community?

This question is designed to explore the dynamics in use, access, and ownership of the two critical livelihood resources, such as land and water, apparent in the area following the inception of the project. It first critically addresses how the practice of land distribution for private use and certification has not only altered the customary property regime but also served as a marker of exclusion—exclusion from both land entitlement and benefit gain for some community members. Following Hall et al., (2011), it demonstrated how this land formalization establishes a legitimate exclusionary right, representing a type of double-edged exclusion in which the prevention of other users has become necessary to sustainably benefit the holders. Furthermore, as suggested by Ribot and Peluso (2003), putting the Karrayu in perspective, this question is also designed to investigate how individualizing of land ensures access—the benefits gained from the land. Second, linked to the earlier, it interrogated how the meaning, value, and access to irrigation water have changed since the advent of the project. In so doing, it provides insight into how the project, as a technological package, resulted in the dynamics of meaning and value of water in the area guiding social relations over its access and control, with a focus on competition, negotiation, or conflict aspects among local social actors (such as water users and government bureaucrats at the local level).

3. How does the Fentalle irrigation scheme reinforce inequality and exploitative wealth accumulation in the Karrayu pastoral area?

This specific question seeks to establish how the project plays out to promote inequality and capital accumulation. A considerable amount of research has underlined the role of development projects such as irrigation in impacting and serving the interests of the state, but little attention has been paid to understanding how these projects play out to create wealth for some while impoverishing others. In light of the foregoing, this question is then designed to document the dynamics and emerging capitalist production relations in which the local pastoralist community is exploited and only earns marginal benefit from the economic interactions. In doing so, it provides a detailed understanding of how a development project intended to benefit the local community has operated to facilitate the accumulation of wealth for others at the expense of the locals.

1.6. Significances of the Study

The study has both policy and academic relevance in that it addresses critical issues pertinent to the pastoral development agenda in Ethiopia and more broadly. It will contribute to the

understanding of the nexus between diverse imaginations of a development project and its practical implementation and effects on the ground. More specifically, it will expand knowledge on how pastoral development projects are differently imagined by different actors and are politically fused and guided to determine the fate of the project—not only the course of its implementation but also its actual outcomes and impact on the local pastoralists. This demonstrates how such a project is being used as a state political tool and also privileges the economic elites rather than serving its explicitly stated objective of benefiting the majority of the local pastoralists.

Linked to the above, the study sheds light on issues having policy implications related to evolving livelihoods and social relations, changes in institutions governing resources, and differential resource access and inequality at the very local level. It will also contribute to the growing debate over ‘pastoralism’ versus ‘farming’ that has policy implications for ensuring economic development in pastoral communities. As discussed below, some argue that pastoralism is an outdated economic pursuit and consequently there is a need to transform it into crop farming, while others argue that pastoralism and the pastoral system are the best adaptive resource governance and livelihood strategies in arid and semi-arid areas, where crop farming is futile. However, development planners in Africa in general and in East Africa in particular have been and still face profound difficulty developing an appropriate policy that will address pressing problems commonly affecting pastoral areas, secure livelihoods, and enhance development in these areas. Thus, it is hoped that the findings of this study will benefit policymakers by reflecting not on the policy formation process but on the implementation of the project and on the opportunities and dilemmas that the local people have been facing in different contexts for the pastoralist-transforming project being implemented in the area.

1.7. Limitation

Studying development projects is very complex because it involves multiple contexts, actors, and institutions, processes, strategies, and outcomes at numerous levels. Its meaning is also likely to vary, as are its impacts. However, as stated in this research, the attempt to understand the meaning of the project at various scales, such as the ‘local community’, the ‘Oromia regional state’, and ‘the federal government’, has not been free from limitation, as such categorization has a risk of generalization.

The members of the local community are not homogenous. Rather, they can be politically fragmented and socially differentiated in more complex ways than commonly imagined, and consequently, the perception of a development project and its impacts on and within the community can be different depending on their social, economic, and political circumstances (Borras & Franco, 2013). In this regard, an exhaustive effort was made to elicit thoughts and perspectives from as many and diverse local informants as possible, including community notables and representatives, women, young men and girls, economic elites, and so on. Even so, this does not mean the information represents the views of all local actors. Thus, such a construct as 'local community' has a risk of downplaying internal differentiation such as gender, spatiality (head-tail to the irrigation canal), and prior farming experience, among other things.

The same is also true for the regional state and the federal government. The state is not monolithic either, but rather a multifaceted and differentiated actor with inherent inconsistency in its agenda and practice at various levels (Tsegaye, 2015). Further, as De-Sardan (2005: 4) noted, 'there is often difference between the public discourse of development officials and deciders and the private conversation of experts and operators in the field.' Thus, such a label as 'state' (either the federal government or the Oromia regional states) has the limitation of omitting such internal differences within the state institutions and actors. To reduce such danger, in referring to regional and federal states, I think of officials working in bureaucratic structures who are influenced by ethnic cleavage and agricultural and sedentary orientations in making decisions and engaging in mundane practices of development in the country.

The other caveat to mention is that this study takes a critical stance to show the predicaments and limits of the project under consideration. However, the positive outcomes and contribution of the project have received less attention, though not completely ignored. Much emphasis has been placed on revealing the hidden motives of the project and its unanticipated consequences for the local community. This is expected to broaden the opportunities for critical thinking about what is and what might be (Li, 2007). However, I do believe that conducting a further study to figure out the contribution of the projects to production and productivity and improve the wellbeing of the community is paramount and will also serve to counterbalance the conclusions of this study.

1.8. Research Approach and Strategy

1.8.1. Philosophical Stance and Choice of Methodological Perspectives

Historically, and still now, social science research has been shaped by two grand paradigms: postivism⁵ and constructivism⁶, though the importance of the positivist notion of perceiving social reality has diminished since the 1980s. There has also been a long-lasting debate between the two over the essence, knowledge, and method (Corbetta, 2003: 12) of [social] reality. These paradigms have divergent views on ontological (the existence and form of social reality), epistemological (knowledge about social existence and how we gain knowledge about it), and methodological (how we are going to know) questions in social research. They hold opposing views on social reality and how it is studied and thus employ two distinct research methods: qualitative and quantitative (Corbetta, 2003; Creswell, 2003, 2014). Far from a detailed discussion of the debate, in this section I would rather highlight the basic premises of part of the argument so as to justify the approach I opt for in this study: social constructivism.

The positivists argue that social reality exists independent of our awareness and outside of the human mind (Corbetta, 2003; Johnson & Onwuegbuzie, 2004; Marvasti, 2004). Empirical observation and measurement in the form of quantification are of paramount importance to understand this reality and study it objectively in the same way as natural phenomena (Ibid). Epistemologically and methodologically, the positivists assert that the researcher and the object being studied are distinct and exist independently, though the researcher may influence and disturb the object being studied in certain ways (Bryman, 1988). Consequently, objective knowledge is something that has to be emphasized (Creswell, 2003, 2014; Leavy, 2017). It also follows a deductive approach and theory verification to arrive at generalization in the form of a law (Corbetta, 2003; Johnson & Onwuegbuzie, 2004).

⁵ The postpositive paradigm, a slightly modified version of the original postivist perspective, was adopted in the twentieth century to overcome the postivist stance's limitations, such as recognising imperfection in understanding reality due to limited human knowledge (Corbetta, 2003; Philips & Burbules, 2003; Creswell, 2014). However, because of the fact that the fundamental presupposition of postivits remains intact within postpositivism (Phillimore and Goodson, 2004), no separate section is dedicated here to discuss the postpositivist paradigm.

⁶ The concept of constructivist/interpretive encompasses a wide range of approaches, including symbolic interactions, phenomenology, ethnomethodology, and postmodernism. Thus, in this research, an attempt has been made to refer to the fundamental characteristic that is somehow shared among all these perspectives.

The constructivist paradigm, on the other hand, rejects the objective reality of positivists and views reality as 'subjective and situationally and culturally variable' (Marvasti, 2004: 5), which is 'not simply to be observed but rather (to be) interpreted' (Corbetta, 2003: 21). This paradigm shifted from the idea that reality existed 'out there' in the social world to the consideration of multiple realities in the social world that could be reached through qualitative research (Phillimore & Goodson, 2004). Thus, social reality is constructive and relative in nature, indicating that reality is all about mentally constructed meanings created in the process of human interaction, which varies across individuals, social groups, and cultures. This means that there is no universal and absolute reality, but rather multiple realities that are interpreted and understood differently by different social actors (Leavy, 2017). More importantly, this paradigm promotes an inductive approach to knowledge production in which the collaborative process between the researcher and the researcher subject is critical (Phillimore & Goodson, 2004).

As previously stated, this study focuses on how various actors contextually define and redefine the meaning of the development project, ownership rights, and access to basic livelihood resources, particularly irrigable land and water. It is clear that the state and local communities are internally divided and have advocated for different narratives about the development of the irrigation scheme. Therefore, I adopted a methodological paradigm that acknowledges the persistence of multiple views and interpretations and allows me to gain comprehensive insights into the project's complex nature and the project-related production relations and struggle for resources.

With the implementation of the schemes, pastoral spaces have been transformed into productive spaces, attracting a diverse range of people from various backgrounds and locations, including capitalists, land-hungry farmers, daily laborers, land transaction brokers, and agricultural produce marketing brokers, all competing for resources and benefits. This alludes to the actors' use of resources at their disposal (social capital, financial capital, knowledge, agency) to eke out a living, maintain and maximize advantage, or deter others from gaining some form of advantage in the project area.

The actors' production of various forms of knowledge and narrative and discourse about the project and in pursuing their claim over land and water, as well as the way project implementation and practices are defined, contested, and negotiated, all point to multiple interpretations of 'reality'. Thus, in order to embrace and entertain such diverse voices and

interpretations generated by various subjects, this research employs a constructionist paradigm as an epistemological stance, as the narrative held by different social actors verifies the construction of social reality.

‘Constructivism,’ Crotty (1998: 43) noted, ‘is the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practice, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context.’ This implies that the role of the social researcher is to comprehend socially constructed meaning through various interpretations. As Geertz posits, social research is ‘not an experimental science in search of law, but an interpretive one in search of meaning’ (1973:5).

Thus, I argue that rather than attempting to discover a universal truth about the project and its outcomes, the complex dynamics in irrigation-people relations, imagination and discourse about the project, negotiation and tension over resource access and benefit gains, and state intervention and local responses could be better understood from the perspectives of those who participate in the project.

1.8.2. Methodology: Overall Research Design

Considering the above epistemological stance, this research adopted ethnographic research as one of the methodologies for data collection and analysis. This approach is a holistic approach that helped me to understand the local community’s lived-in experience and their day-to-day encounter with the project, relations with one another and natural resources, and engagement with the state. It is used to study the subjects’ context-specific accounts, processes, meanings, and interpretations of the project and relations linked to the inception of the project within the research setting. Yet to overcome the intrinsic limits of the ethnographic tradition that is claimed to be ahistorical and local for its emphasis on immediate interaction and specific location (Burawoy, 2009), I augment it with the extended case method.

Unlike conventional ethnography, the extended case approach, as Burawoy (2009: xv) discussed, is methodology that used to broaden the scope of investigation beyond specific situation and interaction. It is defined by four extensions, each of which has involved dialogue: the extension of observers into the lives of the study participants; the extension of

observations over time and space; the extension from microprocesses to macroprocesses; and the extension of theory. This extended case method promotes interactive dialogue while also benefiting from recognizing everyday life in its extra local and historical context (Burawoy, 2009).

The first three dimensions of the extended case are essentially important in this study. It is because understanding development intervention at the local level is impossible without connecting it to historical trajectories as well as external forces and processes that impact the economic and political rhetoric of diverse actors.

Perceptions, understandings, and responses to the development project under consideration are partly shaped by historical as well as pastoral development policies and practices promulgated from the center over successive Ethiopian regimes. Furthermore, it is determined by the dynamic interaction of local, regional, and national forces. This requires extending observation beyond the specific location to relate it to national processes, such as, for instance, the political dynamics within the ethnic federalism of the country, as these influence how different actors perceive, interpret, and act. At this point, I made two extensions: from the current scenario to the past trajectories, and from the local level or microprocess to the national forces.

In this regard, first, I made historical reconstructions about past development interventions, people's social relationships, economic practices, and relations over resource access and ownership in order to comprehend the various interpretations of sovereignty and contestation over practical and technical matters that the project under study entails. This was done through interactive dialogue to retrospectively recapture past memories and events.

Second, the second component of the extended-case method was used to connect local-level occurrences to macro-forces. Pastoral development strategies and practices in Ethiopia have taken a top-down approach and are often centralized. The national and regional-level dynamics and processes have definitely affected the local-level development interventions. This needs to broaden observation beyond the time and specific geographical boundaries of the current fieldwork to encompass a variety of entities operating at multiple spatial and temporal scales. The extension in this research was made by having research subjects situated at the regional and federal levels, as well as contestation within a broader political trajectory at various levels, to link local phenomena to macro influences. The historical trajectory of

local development projects, national political discourse, the interaction of local and external factors, and the claim of federal-regional states to political sovereignty, development, and resource management have all been addressed by extending the investigation of local phenomena to extra-local forces.

Therefore, in this research, the extended case method is used as a supplement to ethnographic methodology to capture and reconstruct the historical experience and encounter related to development interventions, resource ownership, and access on the one hand, and to extend the local process to national forces such as policy and political context affecting events in the field on the other hand.

1.8.2.1. Methods: Data Collection Instruments and Procedures

This study was based on five months of ethnographic fieldwork conducted in two rounds between October 2020 and February 2021 in five (Agro-) pastoralist *gandaas*⁷ (loosely to mean village) of Fentalle district (locally called *Aanaa*⁸), which is located in the East Shoa Zone of Oromia National Regional State in North-Eastern Ethiopia. Further a Key Informant interview was made in the mid-June 2023 with a former top official in Oromia region for clarification of information and have their opinion and views. In addition, the data that were collected in 2011 for WIDE project was also used in this study when it was necessary. These five villages were the project reach areas at a time and specifically chosen based on irrigation water access and utilization. The villages were systemically classified to represent upper (Gidaaraa), middle (Dirree-Sedeen and Tuurroo-Baddannootaa), and lower (Xuxuxi and Ilaala-Qaraarrii) stream villages along the irrigation catchment to appreciate the spatial variability of water availability and accessibility, as well as the variation in production relationships that this entails.

Various quantitative data collection methods were employed. The combination of methods is believed necessary to enrich the research by diversifying the sources of information. This is

⁷ Is the lowest administrative and political structure in Ethiopia. This is often locally referred to as '*Gandaa*' in Afaan Oromo. Yet, some Amharic-affiliated people also opt to use the Amharic term '*Kebele*' to refer to the same structure in the area. Thus, in order to avoid such inconsistency and confusion with the terminology, I prefer to use 'village' throughout this dissertation.

⁸ is the formal administrative structure between *gandaa* and Zone. i.e., hierarchically above the *gandaa* but below the zone and regional state. This is often locally referred to as '*Aanaa*' in Afaan Oromo. Yet, some Amharic-affiliated people also opt to use the Amharic term '*Woreda*' to refer to the same structure in the area. Thus, in order to avoid such inconsistency and confusion with the terminology, I prefer to use 'District' throughout this dissertation.

mainly to achieve the aim of triangulation, where findings of one method is checked/supported against those of others; to benefit from the strengths of each method and to compensate for the weaknesses, and to establish confidence and obtain trustworthiness of the research findings (Creswell, 2014; Leavy, 2017). The first round of data was collected primarily from Gidaaraa and Ilaala villages using various data collection methods such as in-depth and key informant interviews, focus group discussions, and observation. In the second round, more qualitative data was collected from the two earlier villages and officials at this point, but intermittent visits were also made to the remaining villages to conduct interviews with notables (such as elder, village chairs and representative) and government-employed development agents. The data sources and gathering tools will be explained as follows.

1.8.2.1.1. Data from Secondary sources

The secondary information for this study mainly come from written records and archival materials. These sources include academic journals, books, published and unpublished materials, project proposals related to FIBIDP, and reports from various government and non-government organizations.

As it has already been stated, there are dozens of studies conducted related to development projects in the pastoral areas in general and Awash Valley in particular. These materials were exhaustively consulted to get an insight into the pastoral communities and understand the social, cultural, and economic consequences of the foregoing projects in the area. Moreover, past and current policy documents, proclamation, and enacted laws relevant to pastoral development was analyzed to depict state-pastoral relationships overtime. These documents apparently highlighted the government strategies and directions towards pastoral development and pastoral economy.

Furthermore, pertinent reports and archival material from the district pastoral and rural development bureau, district land administration office, and Oromia Water Works Design and Supervision Enterprise were examined to obtain detailed information about the irrigation project, including its intention, size, process, and implementation practice, land distribution, and land use change.

1.8.2.1.2. Focus Group Discussions (FGD)

Focus group discussion is the strategy to gain a deep insight into a 'group meaning, process, and norms' associated with a given issue (Bloor et al., 2001). It often draws on group dynamics to have rich data related to people's experiences, ideas, and perspectives on the issue under study (Matthews & Ross, 2010). Andrea and James (1994) noted that the group interview offers advantages over the individual response in that it is less expensive, data-rich, adaptable, engaging to respondents, recall-helping, and cumulative and elaborative.

In this regard, during this study, a total of seven separate focus group discussions were held with a group of old men, women, young men who were members of disbanded cooperatives, and girls involved in agricultural product sales. Two FGDs constituting six to seven participants each were conducted with groups of older men to reconstruct their past and current experiences and opinions related to earlier development projects and the ongoing irrigation scheme. From this, detailed information about the process, implementation, and actual practice of the project, as well as state-pastoralist and production relations linked to the project, was obtained. It is also used to get data relevant to understanding the group meaning attached to the project, the dynamics in the tenure regime, as well as negotiation and struggle over access to basic resources (such as land and water) following the implementation of the scheme. Similarly, two FGDs with women were conducted to have their experiences and involvement in the implementation of the project including the opportunity and costs this brought to them. The two separate FGDs with young men and girls also helped to track the participation of young members of the community in the implementation of the project, their role in the production relation and how this affects their livelihood. Information related to dynamic in resource ownership and access were also captured. Furthermore, one FGD was held with experts working in the Fentalle Irrigation Scheme administration office to obtain detailed information about the scheme's entire operation, including the distribution of water resources, scheme maintenance and follow-up, organization and support to water user associations and individual beneficiaries, and relationships with other line officials and experts in the area.

The short-listed questions were used to facilitate and guide the FGD. This would aid in probing and maintaining the process of free discussion to obtain pertinent information. During all focus group conversations, I acted as a note-taker, while my interlocutor, who was from the local area and had graduated from university, served as the facilitator. The

discussion was audio-recorded and held in the local language (afan Oromo). The FGD lasted between 75 and 105 minutes.

1.8.2.1.3. In-depth Interview

An in-depth interview provides a good understanding of the world from the respondents' point of view and has the potential to unveil a variety of attitudes toward a given issue (Marvasti, 2004). It entertains open responses and freedom to informants to narrate their experience and encourage probing for more details, and thus has the potential to achieve a comprehensive understanding of the issue under study (Dawson, 2009; Matthews & Ross, 2010; Spradley, 1979). The in-depth interview is used 'to understand the complex behavior of members of society without imposing any a priori categorization that may limit the field of inquiry' (Andrea & James, 1994:366).

For this study, interviews were conducted with informants from local communities of various ages and genders (men, women, and young people), community leaders and village representative, external actors working in the villages (farmers, capital owners, and agriculture produce market brokers). This is meant to understand the meaning and unintended consequences of the project from the experience of the respondents. As Spradley (1979) well described, such an in-depth interview fosters good interviewer-respondent interaction and consequently enables researchers to understand rather than explain.

The informants for the interview were purposefully selected because of their experience and knowledge of the issue under study. Accordingly, an attempt was made to interview key members of the community who understood the historical context and earlier development interventions in the area and who also participated in the consultative discussion during the initiation of the project and were able to articulate the dynamics in imagining the project over time. With this, detailed information related to the unintended critical impact and meaning of the project, including changes in livelihood resources, ownership, access, and strategies, experience and interaction with government bureaucrats, and dynamic production-marketing relations among actors related to the irrigation project in one way or another. More specifically, the in-depth interview provided a more detailed and broad range of data, including production and land transaction practices and marketing relationships. Furthermore, negotiation and competition among actors over the resources (such as land and water) were

addressed. The interviews were conducted in Afan Oromo, and each session generally lasted between 30 and 95 minutes.

The interview guide was carefully prepared and used, but questions were not always ordered and worded the same way, allowing for different follow-up and probing questions. The interview guide was used to set clear instructions and direct interviews towards the issues under investigation during the process of interviewing. More importantly, this assisted in remembering the topic to cover, providing a possible sequence of topics, ensuring that all topics were covered, and simulating informants to produce more information, among other things (cf. Matthews & Ross, 2010).

1.8.2.1.4. Key Informant Interview

The key-informant interviews were conducted with officials from villages, District, Regional State, vegetable trader at Addis Ababa, as well as former top officials representing both the regional and the federal governments. These informants were interviewed because of their expertise obtained through their participation in the earlier initiation and implementation stage of the project and/or still have role in the current progress of the project. Intensive interview was conducted with officials and experts working in different offices at district and village scale and directing and participating in activities related to the project at local level. This includes among others, interview with head of the district land administration and environmental protection, the head of district irrigation units, district irrigation experts, the head of the district Agriculture extension, Agriculture Development Agents (DAs). Interview were made with the site manager and engineer working on the construction of the project and the head of the scheme official, who is responsible to administer the scheme and supervise and follow the proper distribution of the irrigation water. From this, a wide range of data about earlier initiation, funding, process of implementation and current progress of the project, land distribution and ownership, government-local pastoralist relations over the project, cooperation and relations among responsible offices, dynamic production relations, and social and economic change that has resulted over time in the area as a result of the implementation of the project can be obtained.

Moreover, key-informant interviews were held with the vice head of Oromia agriculture and irrigation bureau, a former Oromia disaster prevention and food security commission commissioner, a former top official who was lynchpin official both at regional and federal

governments having multiple positions in both bureaucratic structures of different scales. This enabled to have detailed information related to the political nature of the project tracking data about negotiations, confrontation within the government structures notable between the officials representing the regional and federal governments during the initiation, implementation of the project. This helps to understand the intention, funding, diverging/converging views of the project among top officials, the contexts (social and political contexts) in which the project is implemented, and the strategies the regional officials employed to perused the federal governments as well as resistant local people. A key informant interview was also done with an expert working for a rural microfinance institution called Oromia Credit and Saving Association (locally called '*WALQO*') in order to understand the local access to microfinance services. Not least, interview has made with vegetable marketer at Addis Ababa who directly receive and distributed the vegetable crops produced in the research sites. This helps to create understanding on the marketing process and challenges that the local people faced in relation to the product distribution and sale.

1.8.2.1.5. Participant Observation

Participant observation is one of the strategies that enable us to observe and record what is occurring in a real-life situation. It is not just a matter of looking and noting it down rather it calls for “systematic viewing of people’s action and the recording, analyzing and interpretation of their behavior” (Gray, 2004). However, the success of this method mainly depends on the skill of the fieldworkers (Bernard, 2011). It requires an art of approaching people to make them comfortable to talk and share their life and observing and recording the pertinent phenomena going on in the field. A well-done observation ‘turns the field workers into instruments of data collection and data analysis’(Bernard, 2011). However, the extent of the fieldwork involvement and the role of the researcher varies from complete participants, to participant-as observer, to observer-as-participant, to complete observer at different time and different purpose in a single research project depending on the need arises (Bryman & Bell, 2016).

I employed observer-as-participant method where I marginally participated in group activities and social life but actively observe, interviewed and recorded relevant information (cf. Bryman & Bell, 2016). I visited crop farming areas and have observed daily routines related to irrigation farming practices, including crop production and management, crop harvesting and marketing, patterns of land use, and identifying who is involved in the farming practices

and the allocation of labor on the farm. Further, I made observation at vegetable market center in Addis Ababa to understand how the marketing and transaction of the product has made.

More importantly, I observed along the irrigation catchment to understand the over operation of the scheme, the size of water flow in the canal along the catchment (head-tail distribution of water), and diversion and management of water from the main canal to the crop fields. The observation was crucial to gather practical phenomena to augment the data collected through interview, focused group discussion. As Colmen (2005) pointed out, it also provides an opportunity to understand any discrepancies between the information gathered and the actual phenomena on the ground (cited in Yihunbelay, 2020). This also helped me to create rapport with the local community whom I met on the farm fields as well as on my visits along the irrigation canal. In fact, my earlier field experience and good contact to some local people in the area, though in other village provide me opportunity to create good rapport with my study subjects and as well as easily find a local field interlocutor who further reinforce good relation in my research area.

1.8.3. Data Analysis

Data analysis ‘involves interpretation of the meanings, functions, and consequences of human actions and institutional practices, and how these are implicated in local, and perhaps also wider, contexts’ (Hammersley & Atkinson, 2007: 3). I began the data description and analysis during the fieldwork and continued to work on it throughout the writing process. As Hammersley and Atkinson (2007) noted, the data analysis is embedded in the overall research process and begins with pre-fieldwork and continues through the writing stages, though it formally takes shape in analytical notes and memos.

Information from field observation and discussions had been reviewed, described, noted, and organized on a daily basis during fieldwork. This created an opportunity to understand emerging patterns and themes for further follow-up as well as to facilitate the process of analysis. The audio-recorded information was clearly labelled and arranged in preparation for transcription and analysis. All the data from different sources, including field notes, memoranda, and transcription-translation, was processed and analyzed throughout the writing phases.

As noted, all of the interviews and the focus group discussions with the local informants were conducted in the local language, Afan Oromo. Interviews with external actors such as farm laborers and capitalist sharecroppers, on the other hand, were conducted in Amharic language. Some of the interviews with officials at the district level were also made in Amharic based on their preferences. Given that I am a native speaker of the Afaan Oromo language, I did not require a language interpreter throughout the fieldwork, and I independently conducted all interviews and took the field notes. In fact, I had a field assistant who was a university graduate and was himself from Karrayu. His role, however, was minimal and limited to interlocution and connecting me to some informants, primarily during the early stages of the data collection process, and he assisted me in serving as moderator during the FGDs.

The audio-recorded interviews and FGDs were directly transcribed and simultaneously translated from Afan Oromo and/or Amharic to English. Each interview and FGD were transcribed verbatim in order to keep a complete record of the interviews and FGDs. The transcription followed the intelligent verbatim, in which all words were maintained but silences, laughers, coughs, and utterances were avoided.

I had transcribed and translated most of the interviews as well as all FGDs. However, the transcription and translation of the remaining audio-recorded interviews were completed by professional social researchers with the experience and skill of transcription and translation. I gave instructions for the transcription and double-checked that they were followed. I went back to some of the recoding to check the quality of the transcription and for any clarification in case of confusion.

Using Atlas. ti 9 software, the qualitative data from all sources was coded and categorized to generate a small number of themes. From this, a master report document (grouped by codes) was created. This was then used to identify and describe patterns and themes from the participants' points of view in order to understand and explain these patterns and themes. Some verbatim quotations were also presented in the finding section when it was necessary. I interpreted the data from both an emic and an etic perspective by considering the relationships between and among the variables under discussion. This interpretation was made to draw conclusions and make inferences pertinent to the research questions.

1.8.4. Ethical Consideration

Maximum care was taken to maintain the ethical obligation that is deemed to be essential in social sciences research. To this effect, all necessary precautions and procedures were followed in this research. A formal letter of support from Addis Ababa University was submitted to Oromia Pastoralist Development Bureau from there hierarchally directed to Zone then to the Fentalle district Administration as an entry point and get permission to reach the local community.

During the fieldwork, maximum effort was also made not to violate the right and dignity of the participants and not cause any risk to them. In this regard, oral informed consent was obtained from each study participant after explaining the purpose of the study. Participation in the research was voluntary and none of the study participants was forced to involve either in interviews or FGDs. The participants were also informed as they have the right to quit and end the interview or discussion at any time even if they already voluntarily begun the interview or discussion. Similarly, they were also told to be free not to answer any question which makes them feel uncomfortable expressing their view and experiences. Then, oral consent from informants was obtained to participate in the study and to be audio recorded, when necessary, before conducting any of the interviews and discussions.

Moreover, all information that was provided was held confidentially and analyzed and reported without evading the informant's privacy. The audio recorded and what the informant said was only accessed by the researcher but was not given for the third party/ies. The name of the study participant and other names that participants mentioned during the interviews and FGDs was not stated in reports, presentations, or publications except those individuals who are public figures and their names were commonly aired on medias and referred by many of my informants. Instead, in the interest of confidentiality and to maintain anonymity, pseudo names or unique identification codes were used in this research to identify study participants.

1.9. Organization of the Dissertation

Together with the introduction in chapter one, there are eight chapters. Chapter two presents an overview of relevant literature and provides theoretical background for the study. It reviews different understandings of development and critical Marxian political economy as the theoretical framework of this study. Besides, it highlights various forms of pastoral marginalization that are entangled with the political economy of pastoral development and also discusses the basic premises and dilemmas related to pastoral development projects.

Chapter three introduces the study area, its physical characteristics, and the people inhabiting in the area. It also emphasizes the major development projects and initiatives that have profound effects on the local people and their environments, so as to situate them within the context of the study.

The remaining chapters, from chapter four to seven, contains the gist of the tops of this dissertation. These chapters provide insight into how a development project has been conceived differently, influencing its execution and consequences in terms of access to fundamental livelihood resources and economic relationships. They help readers of this study comprehend how a large-scale irrigation project intended to benefit local people has been used to advance the state's political agenda while negatively affecting resource access and production relations in the area. Specifically, chapter four highlights the contestation and divergent meaning of the project within the state institutions, representing the federal and regional governments, and among the local community. Chapter five presents how the process of land distribution linked to the irrigation project has changed and impacted traditional relations over land ownership and access. It demonstrates how this transforms the tenure relationship and results in the exclusion of many local people from their ancestral land. Based on this chapter, an article was published in the *Journal of Contemporary African Studies*⁹.

Chapter six explores how the value and meaning attached to water have altered due to the implementation of the project and the practices associated with it. It also appreciates the changing relationships and negotiations over accessing the water among local people and with local officials. Chapter seven discusses the emerging production relations and practices

⁹ Tefera Goshu and Ayalew Gebre (2024). 'Privatization of the commons: land ownership, access, and exclusion among the Karrayu Pastoralists of Eastern Ethiopia.' *Journal of Contemporary African Studies* <https://doi.org/10.1080/02589001.2024.2346658>

following the implementation of the irrigation project. It demonstrates how these changing production relations perpetuated and reinforced pastoralist exploitation while facilitating capitalist accumulation without displacing the locals from their land. It is based on this chapter an article was published on cogent social sciences¹⁰.

The final chapter draws on the conclusion of the study. It summarizes the main argument of the study and revisits the research objective that was formulated at the beginning of the study. It also points out some policy implications and directions for future research.

¹⁰ Tefera Goshu and Ayalew Gebre (2023). 'The impact of a state-sponsored irrigation project on Karrayu Pastoralist in Ethiopia'. Cogent Social Sciences, <https://doi.org/10.1080/23311886.2023.2184304>

CHAPTER TWO

PASTORAL DEVELOPMENT, IRRIGATION, AND TRANSFORMATION: REVIEW OF THEORETICAL AND EMPIRICAL LITERATURES

2.1. Introduction

This chapter broadly presents theoretical and conceptual tools, as well as literature, in order to provide a better understanding of the empirical phenomena under investigation. The chapter begins with highlighting concepts that illuminate the dynamics and differential understanding of development projects and their effects. It reflects on the critical Marxian political economy and critical development discourse, assessing their potential and limitations as analytical and theoretical instruments in this study. In doing so, it creates a better understanding of both the wider structural context and the role of local actors in affecting, determining, and shaping the process and implementation of development projects and their outcomes.

The chapter also discusses some relevant literature related to the political economy of pastoral development. It draws attention to various forms of pastoral marginalization over time, entangled with the political economy of pastoral development and facilitated by the national states. This helps to understand the forces and dynamism of pastoral transformation related to development projects in pastoral areas and irrigation projects as part of them to situate the context in which the contemporary pastoral communities of eastern Africa in general and Ethiopia in particular are operating. In this regard, it critically examines some of the predicaments of the projects in the pastoral area and the grassroot response to them.

Further, the chapter also discusses the dilemma of pastoral development. It emphasizes the discourses over ‘irrigation vs. pastoralism’ so as to underline the basic premises and confusion in choosing the appropriate pathway to pastoral development and guiding irrigation projects in pastoral areas. Lastly, the chapter highlights the historical development of irrigation projects in the lowland part of Ethiopia in order to contextualize the project under study with the country's political and policy practices over time.

2.2. Understanding Development (project): Theoretical Perspective

There is no universal agreement on what constitutes development and what is the right intervention to accomplish it (Crewe & Axelby, 2013; Singh & Katar, 2009). It varies contextually based on economic, cultural, historical, and power dynamics. This makes development an inherently contested arena of negotiations and struggles among various stakeholders at a multiplicity of scales (Long, 2001). As Oliver-Smith cogently notes, ‘despite some superficial consensus that development should refer to some idea of progress or improvement, the concept has come to mean many things to many people’ (2010: 9). Further understanding of the term ‘development’ has also shifted temporally through the 1950s modernization, 1960s dependency theory, and 1990s post-development perspectives, signifying ‘social and political modernization, national accumulation, and authoritarian engineering’, respectively (Pieterse, 2010: 7). This entails a significant shift in epistemology from focusing on the function of macrostructures to the agency of actors, i.e., shifting from the notion that reality is structurally determined to socially constructed (Pieterse, 2010; Schuurman, 2009), which leads to the demise of meta-narrative theories and emphasizes the importance of spatialized and contextualized thinking about development (De-Sardan, 2005).

The fact is that generalizations about development are unattainable (Sandhu, 2019), but the essential issue is ‘whose development?’ and how different actors perceive development and represent their interests (Pieterse, 2010:11). This generates more interrelated questions, such as what development is for and who defines what it should be (Crewe & Axelby, 2013: 4). These are critical concerns that have also been addressed in this research, i.e., what the development project (in this case, FIBID) intends for and how various actors contested and negotiated over its meaning and outcomes on the ground.

Development practice and its outcomes have been shaped by a combination of external forces, such as historical and structural changes linked to government policy and market expansion, and internal forces related to local actors. The role of actors and interests—competition and contestation, bargaining and negotiations—that arise as a result of actors pursuing their own interests matters in the implementation and outcomes of development projects (Li, 2007; Long, 2001). As Mosse (1998: 4-5) eloquently noted, ‘development action [practice] is undeniably complex, often unpredictable and locally variable in its effects, and significantly influenced by political, institutional, and social relationships involved in the development setting’. This suggests the need for focusing analysis on the political approaches

to development projects that adequately explain the power of structures and actors. To better explore the peculiarity (in terms of underlying motives, multiplicity of meaning, and contradictory or unintended effects) of such a project, this study is grounded in the critical political economy of development. Following Cooke (2004: 418), ‘Critical theory’ means ‘...a mode of reflection that looks critically at processes of social development from the point of view of the obstacles they pose for individual human flourishing.’

Critical development is not a single grand theory but rather an amalgamation of variant theories with diverse stances on development issues but sharing the Marxian political economy of capitalism as a broader common framework (Schuurman, 2009: 835). It encompasses a wide range of perspectives, spanning from mainstream development to ‘post-development’ thought (Munck, 2021). Regardless of differences within and between mainstream development and the post-development theorists, they are all engaged in critical political economy in some way (Browning & Kilmister, 2006). Thus, critical Marxian political economy and post-development assumptions focusing on critical development discourses are emphasized in this work.

2.2.1. Critical Marxian Political Economy Theory

The Marxian political economy denotes a wide range of perspectives but is mainly rooted in and connected to the writings and insights of Karl Marx. This perspective views development as a tool for advancing capitalist development, with the state structure facilitating and reinforcing the process (Pieterse, 2010). Development projects that provide conditions for growth also promote inequality and a system of oppression of a more material sort (Li, 2007). Its outcome benefits the dominant class at the expense of the vast majority of people. For Marx, this makes development essentially nothing more than the perpetuation and reflection of the political and ideological interests of the class formed through production relations (Dwivedi, 2001). Drawing from Marx, Bernstein (2017: 8), noted that there are four central empirical questions that are critical to understanding rural development interventions: who owns what, who does what, who gets what, and what do they do with it? This research mainly focuses on the three of them. It poses questions related to the dynamics and newly established systems of property and production relations in the project area, such as access and rights to basic resources (land and water), patterns of economic investment, labor relations and distribution of the product of labor, and its use in reproduction.

Marx regarded primitive accumulation, constituting the enclosure of the common land, as the genesis of capitalist agriculture (Bernstein, 2017; Li, 2007). The process entails the appropriation of peasant land for large agriculture and the exploitation of labor power, resulting in the dispossession of the majority (Bin, 2018; Ekman, 2012; Li, 2007). This is backed by legal structure and institutional settings supporting the concept of property ownership, with the view that privatizing landownership is a strategy for encouraging entrepreneurship (Li, 2007). Exploitation is a driving force of capitalist production; without it, neither capital nor capitalism as a system would exist (Cox, 2005). It has been aided by a power of exclusion involving inequality and dispossession (Hall et al., 2011). The notion is that some groups must be barred from benefiting from resources in order for others to gain and benefit from them, resulting in accumulation (ibid).

Inspired by Marx's concept of primitive accumulation, Harvey argued that capital formation occurs through both the expansion of reproduction (as Marx argued) and accumulation by dispossession, and that the two are 'originally linked and dialectically intertwined' (Harvey, 2003: 176), but that in contemporary capitalism, the relative weight is skewed towards the latter (Gogoi & Saikia, 2020). For him, appropriation is an essential prerequisite for accumulation and hence for the continuance of capitalist-dominated social structures in which money and power are concentrated in the hands of a few (Batou, 2015). Marxists, in particular, Marx's primitive accumulation and Harvey's accumulation by dispossession, have been accused of emphasizing the process of capital accumulation and dispossession, which is characterized as irreversible ownership transfer based on coercion and violence, while ignoring peaceful transfer of ownership rights and wealth accumulation without expelling the locals (Paudel, 2016; Shrimali, 2016).

Akin to this, in the lowland pastoral area in Ethiopia in general and the study in particular, the enclosure and privatization¹¹ of communal land have been viewed as improvements by the state, and the process has been pushed forward with support from government policy and institutions and appears in the form of land distribution linked to the project. This is rooted historically in earlier Ethiopian regimes that the current government also reproduces to cause

¹¹ Unlike many other African countries, Ethiopia's constitution vests exclusive ownership of land and its natural resources in the state and the people of Ethiopia. It also prohibits any transfer of land by sale. The land policy thus validates state ownership of land, whereas individuals merely have usufruct rights to pieces of land, including the right to lease out a share of farmland for a certain period of time, but are not allowed to transfer by sale or mortgage. Thus, the term 'privatization' related to the Ethiopian context in this dissertation is mainly used to refer to a situation in which common pool land is divided for individual private use and exclusive rights (usufruct rights are formally transferred to individuals by certification).

property regime transformation for (pastoral) development to happen (Abdulahi, 2007; Bekele & Padmanabhan, 2012). Some actors in the study area have been more opportunistic about the change in property ownership and more successful at accumulating land and capital than others. The context, in turn, results in processes of accumulation for some and dispossession for others, creating winners and losers (Scoones, 2015). To understand the distinctive property and production relationships linked to the project's implementation and why and how they are formed, I need Marxist political economy as an analytical tool. The critical Marxist political economy helps to interrogate and understand the political-economic interface that is linked to issues of control over means of production and formalized laws backing systematic inequality and differentiation (Li, 2007).

Nonetheless, I am aware that the critical Marxist viewpoint is not without limitations. It is frequently chastised for exaggerating material inequalities and the significance of market dynamics based on competition as the foundation for analytical interpretive frameworks (Cox, 2005; Hebinck et al., 2001). It is also indicated that, despite advances in political economy, material determinism and structuralism are regarded as important flaws and sources of critique for their various variants (Sau, 2021). Furthermore, it has shown little interest in the area of meaning (Cox, 2005) and fails to connect economics with the cultural element (Sau, 2021). Thus, to complement the critical Marxist political economy and to better understand the meaning of the project under consideration, I turn to critical development discourse, since this emphasizes meaning and analyses the underlying rationale for the development project (Pieterse, 2010).

2.2.2. Critical Development Discourses

In his seminal work on failed development interventions in Lesotho, James Ferguson (1994) critiqued the representation of development interventions as technical practice while it is often political. Despite promising to improve local life, the development project worked to establish a depoliticized space by suppressing political contestation and local action. Thus, it (development project) often fails to deal with the complex social and economic reality on the ground, instead maintaining the continuity of the power status quo and marginalizing local actors.

Escobar (1995) also critiques the dominant instrumental views of development as rational problem solving for their universalizing tendency and imposing western values and ideas on

society in the global south, resulting in the marginalization of local knowledge and practices. He claims that it fails to account for the complexity of the local context and perpetuates existing power imbalances by benefiting elites and multinational corporations at the expense of the majority of the population. With this, he calls for an alternative vision of development and social transformation that recognizes multiple cultures, historical settings, and social situations while challenging the mainstream paradigm.

Similarly, Tania Li (2007) also draws a critical understanding from her study in Indonesia that development is not merely an economic or technical process but intricately entwined with systems of governance and power. It serves as a mechanism of governance, influencing the behavior and expectations of the local community.

A development project, as argued by Ferguson (1996) and Escobar (1995), represents an overarching discourse that denotes a particular mode of thinking, imagination, and practical action. They contended that development has a truly political intention, both in promise and practice—enhancing bureaucratic power, reproducing hierarchies of knowledge and society, and subjugating and silencing the locals (Mosse, 2004). Yet discursive practices conceal these realities and all the while whisking the subtle purpose of development (Escobar, 1995; Ferguson, 1996).

Discourse could be defined as ‘set of meanings embodied in metaphors, representations, images, narratives and statements that advance a particular version of ‘the truth’ about specific objects, persons, events’ (Long, 2001: 242). It ‘has created an extremely efficient apparatus for producing knowledge’ (Escobar, 1995: 9), knowledge that enables interpretation of the world and intervention (Akinkunmi, 2021; Crewe & Axelby, 2013). The argument is as Escobar viewed, consistent discursive practices generate hegemonic knowledge from which the unifying and singular understanding of development emerges (Akinkunmi, 2021). However, the critics to Escobar and true to Ferguson to some extent reads that this assumption considers development as monolithic enterprise and omit the agency of actors and failed to see the counter discourse and divergent meanings of development this entails (Akinkunmi, 2021; Lie, 2008; Pieterse, 2000). They give ‘little attention to incoherence, uncertainty and contradictions, which are nonetheless structurally inscribed in development institutions’ (De-Sardan, 2005: 5).

In fact, discourses are often constructed to influence other social actors and to create some common understanding and vision (if possible) to proceed in the same direction (Long, 2001). Far beyond that, it serves as a strategy for powerful social actors to achieve their goals and agendas by justifying specific actions and control (Escobar, 1995; Ferguson, 1996). It ‘simultaneously has a structuring capability by providing the parameters within which people act and shaping the way actors influence the world around them’ (Keeley & Scoones, 2000: 91). However, shared vision could not be maintained due to the agency of actors producing their own narratives that may or may not be consistent with the state's projected narrative (Long, 2001), and sometimes even local actors may resist, despite the fact that they often have limited political spaces (Scott, 1985, 1990).

At the center lies ‘power’, which puts actors in positions of influence and persuasion. Thus, diverse understandings of development often not only constitute knowledge, as Escobar implicitly assumes, but also knowledge and power relations, as a Foucauldian reading suggests (Akinkunmi, 2021). This is influenced by the various agendas and goals of different actors with varying knowledge, interests, and agencies (Keeley & Scoones, 2000; Li, 2007; Mosse, 2004). Actors have always strived to maintain their representation and protect their interests in development practices (Mosse, 2004).

For example, as already noted, many African governments, including Ethiopia, have described irrigation projects as a tool for improving rural development. They imagined irrigation projects as a technological transformation package that alters traditional production and the local social fabric (Woodhouse et al., 2017). Irrigation infrastructure investment and associated institutional change were defined to represent the state's modernist development discourse and were used to impose this ideology in order to create shared meaning and translate it into practice (Bont, 2018). However, a unitary meaning of the project is rarely achieved, inviting multiple interpretations due to the actors' agency to think and understand in certain ways. Instead, social actors interpreted and imagined the ‘world’; understand ‘development’ such as irrigation development in pastoral areas, and ‘pastoralism’ in a diverse way. This diversity of understanding is especially important for Ethiopian pastoralists, whose mode of production contrasts with settled crop farming, which serves as a state's modernity benchmark (Puddu, 2022).

In recognition of actors' agency, anthropologists (for instance, Long, 2001; Mosse, 2004) speak of development as the plurality of discourses that comprise both practice and theory,

encompassing symbols, action, and institutions. Long (2001) went on to stress that a development project (an irrigation scheme in this context) is a space of struggle in which individual actors or groups of actors imagine and contest meaning, values, and representation, resulting in diverse understandings and practical undertakings. The project under consideration, FIBIDP exemplifies this diverse meaning rather than a monolithic one.

Therefore, here in addition to Marxist political economy, critical development discourse is adopted to recognize and look into multiple realities and meaning on the issues of pastoral development particularly the irrigation project as interpreted temporally by various actors located at different spatial scales namely national, regional, and local representing the federal government, the Oromia regional state, and the local community. Not less, it also very important to understand the subtle motive of the project and shade on the dynamic understanding of basic resources (land and water) and negotiation, competition and contestation among social actors to control and access over resources following the project implementation.

2.3. The Political Economy of Pastoral Development: Marginalities, Contestation, and Local Responses

The pastoral development in East Africa mainly come to be characterized by state hegemony and growing interference and decline of pastoral autonomy and mobility (Galaty, 2021; Markakis, 2021; Ronald, 2014). Government policies and programs aimed to improve the pastoral inhabitants has been mired of the inherent problem of misconception and misunderstanding of the pastoral way of life and their environment (Campbell, 2004; Cas & Ahmed, 2009). There has also been a tendency to assume ‘pastoral development’ to be a replacement of pastoralism to other alternative forms of production systems, notably sedentary farming (International Union for Conservation of Nature (IUCN), 2012). This thinking has guided development undertakings, the most prominent of which have been irrigation developments and settlement programs that have aimed to visualize the same assumption (Berihun, 2016). Consequently, much of the intervention in the region could not ensure a secure livelihood for the majority of pastoralists, who still struggle with persistent drought, famine, and conflict (Akall, 2021; Catley et al., 2013). Rather, it has been reinforcing the process of integration to the national political economy as well as international relations. It facilitates encroachment by state and immigrants subsequently creating conditions for control and exploitation. This condition has contributed to different forms of marginalization which

(Blaikie, 2016) regarded as loose of control over lives and impoverishment of the pastoral communities. Thus, as argued by most adherents of political economy perspectives, development is an ‘inherently unequal process involving the continued exploitation of peripheral society...’ (Long, 2001, p. 11). The marginalization could be manifested economically, politically, or in all of these forms (Ayalew, 2001b; Blaikie & Brookfield, 1987).

2.3.1. Forms of Pastoral Marginalization

2.3.1.1. Economic Marginality

In simple terms, the pastoral economic marginalization refers to the process through which the pastoral communities are alienated from their primary economic activity due to external programs and interventions. Remarkably, through the 1970s and 1980s donor agencies and states in Africa had been promoting large-scale projects in pastoral areas. Some of the projects include mechanized irrigated agriculture, commercial ranching, and pastoral sedentarization and settlement, all of which were against the pastoralists communal resource holding and promoting privatized farming in trust of Hardin's thesis (1968) of ‘the tragedy of the commons’ that accused the pastoralists of environmental degradation and suggesting the transformation of the collective held resource to individualization (Fratkin, 1997, 2001). Yet still many similar interventions and projects has been persistence in pastoral areas even after the 1990s when the notion of ‘the tragedy of the commons’ was refuted and a new paradigm emerged, creating a more positive understanding about pastoralism and its contribution to pastoral ecology (Galaty, 2013).

These projects evacuated and deprived the pastoralists of their essential communal pastoral resources notably the best dry grazing land and major water points due to expropriation and increased regulation limiting livestock grazing. Some examples of apt illustration of the past process include in case of Tanzania is a large commercial wheat production scheme in 1968 that was supported by Canadian and displaced the Barabaig pastoralists initially from their 70,000 hectares of prime grazing land but in the meantime expanded to 100,000 hectares (Fratkin, 1997, 2001). In the case of Uganda, the Karamoja pastoralists lost 36% of their land for game and forest reserve and controlled hunting (UMFPED 2002 in Markakis, 2004). Other similar cases also happened through other African pastoral areas including in Kenya (Fratkin, 1997, 2001; Hogg, 1983), central Sudan of Gedaref State (Babiker, 2013), Uganda (Ronald, 2014), and beyond. The displacement of pastoralists throughout the Omo River

basins and Awash valley in Ethiopia due to the establishment of sugar plantations, dams, and irrigation, as well as game parks, is also another instance in Eastern Africa (Catley et al., 2013). All these results in shrinking and loss of a large tract of grazing areas and lead to restriction and erosion of the pastoral rights of control and access to natural resources, which ultimately marginalized pastoral communities from their economic pursuit. It also induces resource competition and consequently affects the long-enduring relationships and interaction within pastoral groups and between pastoralists and sedentary farmers instigating tension and conflict (FAO, 2018).

With the recent and increasing large-scale projects in Africa more land and resources are withdrawn from pastoral production (Babiker, 2013; Galaty, 2013; Lavers, 2012a; Letai & Lind, 2013; Nunow, 2013; Ronald, 2014). This has also deepened the pastoralists integration to national and international political economy, and have further established the economic marginalization through aggravating the insecurity in pastoral landholding, restricting pastoralists' mobility and access to natural resources, and promoting fragmentation of rangelands that alter the way people related to land and land use in the pastoral area. The proliferation of large-scale projects such as irrigation and villagization encourages the sedentarization process that has forced pastoralists to farming and/or settlement in urban areas in the one hand (Akall, 2021; Fana, 2021) and undermine and weaken pastoral productive land use in other hands (Khurshid et al., 2019).

Many studies documented that such development projects are failures or make little contribution, at least in terms of improving the wellbeing of the local pastoralists. Instead, they impose a sedentary lifestyle that contradicts the enduring local tradition but coincides with the stereotypical view of some African governments that depict pastoralists as backward, and development intervention is intended to modernize them (Behnke & Kerven, 2013; King-Okumu et al., 2015; Schlee, 2013). Nonetheless, it serves to introduce and extend the state's structure and regime's control over the local pastoralists (Asebe, 2021; Cochrane & Skjerdal, 2015; Lavers, 2012a; Tsegaye, 2017).

For example, research findings from Ethiopia's Awash and Omo Valleys (e.g., Alemmaya, 2008; Ayalew, 2001b; Buli, 2006; Fana, 2021; Getachew, 1997; Mulugeta & Firehiwot, 2014; Stevenson & Buffavand, 2018; Tewolde & Fana, 2014) revealed that development projects involving large-scale agriculture and settlement endeavors lead to increased competition over meagre resources, restricted mobility, and environmental destruction, and

thus increase tension and conflicts in the locality. For example, Fana (2021) indicated that the villagization program linked to large irrigation projects with the aim of sedenterazing the (Agro-) Pastoralists in lower Omo and western Ethiopia has facilitated state control and resource dispossession. Worse, some of these projects have resulted in severe poverty, forcing many locals into malnutrition and starvation (Stevenson & Buffavand, 2018). In this line, Behnke & Kerven (2013) argued that the large-scale agriculture investment in the Awash valley of Ethiopia has no better benefit (economically, socially, and environmentally) than leaving the land for the pastoral mode of production but it adversely affects the local pastoralists and their environment.

Likewise, Badurdeen and Omalegne (2015) and Mungai and Omondi (2014) reported that the development of irrigation schemes in the pastoral area of the Tana delta river (Kenya) has fallen short of its stated goal of ensuring food security, instead eroding the tradition of co-existence among different communities and exacerbating poverty and conflict over resources. Similarly, Roth and Fratkin (2005) also reported that sedenterzing pastoralists on new agriculture schemes in Kenya has resulted in new health hazards and malnutrition.

These projects and government policies have also expanded pastoralists differentiation, out of which only 'few well-connected elites' have benefited while the majority of them are economically deprived of (Babiker, 2013: 177). It has created uneven development; opportunity for wealthier pastoralists but devastation for poor pastoralists (Catley & Yacob, 2013; Roth & Fratkin, 2005). Some pastoralists with large livestock and means (financial or political) to control and access production resources have benefited from being integrated into the market economy (Cas & Ahmed, 2009; Catley & Yacob, 2013). However, the majority of poor herders are marginally benefited, and even the process further limits their chance of sustaining pastoral production (Catley & Yacob, 2013; Roth & Fratkin, 2005). It is because, on the one hand, the poor pastoralists lack the power to negotiate over the terms of exchange, and on the other hand, they lose control over key resources of production, mainly water and grazing, which become highly commercialized (Ayalew, 2001b). Besides, limited market infrastructure and isolation from urban centers increase transaction costs for pastoral households, which consequently put herders at a disadvantaged position in the process of market exchange (Workneh, 2011; Pavanello, 2010). In supported to this, Nunow (2013) asserted that large-scale farming and settlement projects in Kenya's Tana Delta have facilitated the delta's incorporation into national and regional economies as well as

opportunities for wealthier herds to accumulate more wealth through commercialized pastoralism.

2.3.1.2. Political Marginalization

In the Horn of Africa, the relationship between pastoral communities and the state has historically signified exclusion, typified by the marginalization of pastoralists from national political, economic, and social life (FAO, 2018; Markakis, 2004). This relationship has been extended over a long period, from pre-colonial and colonial times to today's postcolonial era (FAO, 2018). Political marginalization is a process by which certain categories of groups within a political framework are excluded and become outsiders in the decision-making process, even on the issue of their own affairs, and their autonomous action is restricted and limited due to external influences and actions (Doorbos cited in Ayalew, 2001b). In many African countries, pastoralists are among the most politically marginalized groups (Zinsstage et al 2006 in Khurshid et al., 2019; Oxfam 2008 in Pavanello, 2009) and have been representing what Raleigh (2010: 70) called 'politically irrelevant' social groups who do not only have political importance and function but effectively excluded and discriminated from national level political agenda and decision making.

The pastoral political marginalization could also be understood as unequal power relations between the state and the pastoral civic society (Pavanello, 2009). The relationship qualifies the patron-client relationship in which the state takes hegemonic and determinant positions acting as a controller, manager, and provider, while the pastoralists are subordinate and at a disadvantaged position and low political weight (Raleigh, 2010). The pastoralists have been excluded and little involved in state policies circle and formulation of development projects affecting their lives (Ayalew, 2001b; Khurshid et al., 2019). Further, their representation in the formal government system is limited and inadequate (FAO, 2018; Khurshid et al., 2019), though some attempts have been made in recent times to include them [pastoralists] in the political apparatus and to be represented and empowered. The establishment of Pastoral Parliamentary groups in Ethiopia, Uganda, and Kenya are cases in point (FAO, 2018; Pavanello, 2009). Associated with this, the post-1991 multi-ethnic federalization in Ethiopia and Kenya's decentralization in the early 2010s are part of recent progress and efforts to empower pastoralists (Mosley & Watson, 2016). However, participation in development practices remains restricted as the formulation of development policy continues the tradition

of being developed at the center and rolled out to peripheral pastoralists (ibid.). Participation is often merely symbolic (Nassef & Mulugeta, 2012).

In most cases, the state policymaking process could not engage and involve pastoralists in policy dialogue and debate, and subsequently, interventions affecting pastoral communities have often been projected and imposed from outside (FAO, 2018). Thus, many pastoral development projects have been undertaken without informed consent or without adequate consultative discussions that entertain the multidimensional reality of the local pastoralists and ensure grassroots participation (Abbink, 2012; Akall, 2021; Tsegaye, 2015).

This political marginalization and exclusion are partly emanated because of the economic features of the pastoralists itself. It is apparent that the pastoralists live in arid and semiarid lowland where considerable climatic variability impels spatial and temporal variation in the availability of resources particularly water and forage. Consequently, herders' spatial mobility, together with their livestock, between different ecological niches is indispensable to a pastoral economy. This flexibility and mobile nature of pastoralists, in turn, prohibit the formation of fixed boundary and administration systems in pastoral areas and consequently contribute to a weak connection of pastoralists to the center of power (FAO, 2018). Added to this, the causes and part of the process of pastoralist political marginalization are twofold; government-related and pastoralist related (FAO, 2018; Pavanello, 2009). Very often, the government institutions that are established to address pastoral development are marginal and weak due to limited resources associated with skilled manpower and finance (FAO, 2018). This is partly explained because of the general stereotypic perception of the government towards pastoralists (Rueff & Rahim, 2016). On top of that, there is a lack of coordination and integration between different sectoral institutions. Subsequently, these institutions have failed to entertain pastoralists' interests at the national policy agenda, rather, on the contrary, they have 'deprived pastoralists of an integrated policy and program approach' (FAO, 2018: 7). Apart from this, the pastoralists themselves are not often organized to impose collective action to influence policies and actions directed from the central power (Pavanello, 2009). Pavanello noted the causes of the pastoral marginalization related to government and pastoralists themselves by stating that:

The political marginalization of pastoralists' communities [on the one hand] is the result of long-standing governance failures, non-responsive and unaccountable institutions, and politicians and policy-makers lacking the will and incentives to

include pastoralists' interests in national policy debates. On the other hand, pastoralists often lack the ability to organize themselves and sustain collective action required to exert political leverage in policy-circles (Pavanello, 2009: 8).

Moreover, the pressures to integrate the pastoralists into national as well as wider political economy have posed threat to pastoralists' political power and participation in making decisions (Ayalew, 2001b). The process excludes pastoralists from modern governance system and decision making through eroding their material and social bases necessary to participate in the political arena on the one hand, and it undermines the pastoral institutions and subsequently weakens their customary governance system on the other (Ayalew, 2001a; Raleigh, 2010).

2.3.1.3. Ecological Marginalization

Ecological marginalization refers to the process by which the pastoralists are pushed to margin and less productive areas due to the expansion of development projects including agriculture and commercial ranching (Galaty, 2021; Behenk, 2013). This entails the conquest of land or other resources by a variety of powerful actors, be it privates and/or states, and cause a shrinking resource base and resource scarcity that gradually or immediately forces the pastoralists into less productivity and growing impoverishment (Lemessa, 2015).

In the last decades, the pastoral communities have come under pressure with the growing interference of actors to their system of production and ecology that directed at the appropriation of pastoral resources. Subsequently, they have been displaced from their traditional habitat and recoiled to unproductive marginal grazing areas (Khurshid et al., 2019). Extensive pastoral lands have been dispossessed and allocated for large scale development projects including irrigated and rain-fed agriculture resulting in a shortage of pasture and livestock grazing ground. This reduction also forced most pastoralists to settle away from their original environment in or around market towns where a resource is even much scarcer (Galaty, 2021; Ahmed, 2009; Cas & Ahmed, 2009).

Moreover, neighboring farmers and influx of people from agricultural areas have intruded into traditional pastoral rangelands and pushed the pastoralist to inhabit in further marginalized areas to cause aggressive resource exploitation in a way that it undermines the conservation of resource bases and destruct the physical environment (Alemmaya, 2008). The

complementary relationship of resource access between pastoralists and farming communities has also turned in to tension and growing conflict as herders compete with framers over the same space following the incidence of resource scarcity (Moritz, 2006; Moritz et al., 2002; Schmidt & Pearson, 2016).

The concept of pastoralist ecological marginality also indicates the environmental degradation associated with the conversion of pastoral land to none pastoral activities notably crop farming that often attributes to pastoral eviction and resection of mobility causing exhaustive resource use. On the bases of investigation in Nigeria for instance, the penetration of crop farming [commercial farming] in rangelands has induced erosion and pasture degradation in two ways; directly through the production system of the crops under cultivation and indirectly due to pastoral displacement from their local inhabitant (Franke & Chasin 1981 in Blaikie, 2016).

Following different development projects in the pastoral areas, the pastoral commons are privatized and commercialized (Cas & Ahmed, 2009; Dessalegn, 2016; FAO, 2018; Galaty, 2013); the land is growingly fragmented (Flintan, 2011b; Letai & Lind, 2013; Mungai & Omondi, 2014); the traditional institutions meant to manage rangeland resources and control of grazing system is fragile (Ayalew, 2001a; Khurshid et al., 2019). These all combined, limit the pastoralists' access to natural resource and preclude seasonal mobility and consequently lead to overgrazing of the available rangelands (Hagmann & Alemmaya, 2008; Khurshid et al., 2019).

The problem exacerbated by the growing human and animal population resulting in fierce competition on a reduced range that further damages the local ecosystem (Catley et al., 2013; Sandford, 2013; Schmidt & Pearson, 2016). It has impacted and caused steady deterioration of the environment and destruction of natural resources as it was wittiness in various parts of African pastoral areas (Ahmed, 2009; Getachew, 2001; Kameri-Mbote, 2013). The impact includes the deforestation and intensification of charcoal making, fuelwood production, and overgrazing (Asebe, 2021; Fekadu, 2014; Schmidt & Pearson, 2016). This in turn severely affects the pastoralists themselves who are dependent on trees and tree branches either for their animal to browse and/or shades (Ahmed, 2009).

2.3.2. Contested Views and Local Response to Pastoral Projects

Development projects in pastoral areas are increasingly contested not only on the basis of their consequences and outcomes but also in terms of their definition and understanding (Abbink, 2012; Kochore, 2016). The nature of the projects varies, as do their impacts and outcomes, resulting in various interpretations and different reactions from social actors (cf. Oliver-Smith, 2010). This diverse interpretation is also influenced by the interests and economic and political agencies of the actors involved, which ultimately guide their responses to the project (Tsegaye, 2015).

Empirical evidence from Ethiopia and other pastoral areas in Africa revealed such disparities in interpretations of development projects and how the grassroots responded to them. Kochore (2016), for example, observed that a large-scale infrastructure project (the Isiolo-Moyale road) in Northern Kenya was perceived as a national integration project for the state and an instrument of solidifying communal identity for the local Borana of Mersabit. He indicated that Kenyan politicians imagined the project as reinvigorating state building by facilitating the connection and incorporation of previously neglected peripheral pastoralists of the region, whereas the locals viewed it as the project of reconstructing their commonality of diverse identity and connection to their Ethiopian counterpart (Borana of Ethiopia) in a way refuting their identity and belongings to Kenya.

Similarly, Abbink (2012) documented the divergent views on the Gibe III dam project in Ethiopia. He analyzed the positions of different social actors, including the government, donor and international agencies, the world press and critical non-governmental organizations (NGOs), the Ethiopian Diaspora political opposition, independent experts and researchers, and local people. He reported that the government narrated the project as a way of achieving self-sufficiency in the face of increasing energy demand and boosting national power, which consequently contributed to poverty reduction and enhanced economic growth. While donors and international organizations support the government's position, other social actors, especially local communities, see the project as a source of disaster and poverty (Abbink, 2012). These other social actors opposed and contested the project on their own terms, but the common reasons were a lack of a comprehensive social and environmental impact assessment, a lack of prior discussion and informed consent of indigenous people, and providing little value to the affected people and their agency (ibid).

Cochrane & Skjerdal (2015) also highlighted the contested discourses and opposing stances between the government and Human Rights Watch (HRW) over the villagization project in Gambela, Western Ethiopia. They reported that the former regarded it as a betterment program with the voluntary participation of the affected people, while the latter viewed it as a forcible relocation violating the very nature of the rights of the local residents.

It is also recognized that the local pastoralists are thus not simply passive recipients of the development undertakings but are drivers and actors of change themselves. They have reacted and responded to it in a certain way, mainly based on their perceptions of the risks and opportunities associated with the particular project (Mosley & Watson, 2016). They have sometimes made collective efforts to oppose, protest, and resist the development projects. However, the response is not necessarily open resistance in an organized manner but rather could be unheard, as Scott (1990:4) refers to a ‘hidden transcript’ embedded in every-day mundane practices. It could also be a covert reaction and discursive contestation against the project that is neither organized politically nor economically (Buffavand, 2016; Tsegaye, 2015). This may include, among other things, ‘...food dragging, dissimulation, false compliance, feigned ignorance, slander, and sabotage...’ (Scott, 1985: 134) in relation to the project. In this regard, for instance, drawing on a case study in the Benishagulu-Gumuz region of Ethiopia, Tsegaye (2015) demonstrated the local reaction towards land acquisition related to large-scale investment. He found out that reluctance to pay tax, flights, investors’ property sabotage and crop damage, attacks on external actors and laborers working for investors, encroaching on and cultivating the land already given to investors, and repeated appeals to government authorities were some of the local responses against the project. Buli (2006) also found a comparable situation in the response of Karrayu pastoralists to large-scale development ventures in the Awash valley area.

To wrap up, the review discussions make clear that development projects have altered social, environmental, and economic relations while also being influenced by broader structural phenomena. Further, it is also well documented that the development projects are differently perceived among various actors, such as the state, experts, donors, and local people. However, there is limited understanding of how political dynamics shape the inception, process, and actual execution of development projects and influence the negotiation over their outcomes on the one hand and how a given project is imagined within state structures on the other.

2.4. The Discourses of Pastoral Development: Irrigation versus Pastoralism

Most countries in East Africa (e.g., Kenya, Sudan, Ethiopia, Uganda, Tanzania, and beyond) enthusiastically have been implementing sedentarization linked with irrigation schemes in pastoral areas either as a famine and drought response to the destitute pastoral community or to enhance the national economy or both. It is mainly because policy planners have considered settlement and agriculture ‘as a cure for the ills of nomadic pastoralism’ (Hogg, 1983: 1). However, its outcomes and impact are uneven and context-specific (Fratkin, 2013; Sandford, 2013). As indicated above, varied claims and opposing views are reflected concerning the impact and consequences of large-scale development projects in general and irrigated farming in particular on local life and livelihood. Thus, no consensus and empirical evidence is showing that these new forms in land use especially large-scale agriculture that is often associated with settlement lead to improved livelihood and reduce vulnerability across pastoral areas (Lemessa, 2015). At the same time, there is also a dilemma on the continuance of successful pastoral livelihood, given the predicaments in which the pastoral communities are operating today as part of the political economy (Mungai & Omondi, 2014).

In this regard, there are ongoing and contesting debates over policy pathways to realize development in pastoral areas. Scholars and policymakers have different perspectives on what is the ‘appropriate’ policy option to alleviate the problem related to food security and enhance sustainable development in pastoral areas. The discourses particularly focus on the role of pastoralism versus irrigation [large scale] farming to bring about the development and ensure food security. As such, there are generally two lines of discourses and one middle ranging views influencing the policy pathways to pastoral development (Lemessa, 2015; Mortimore, 2013). While the two discourses are contrasting; one favor for sustaining mobile pastoralism and the other argues for its replacement and transformation to agriculture farming, the third suggests diversification between herding, agriculture farming, and other nonfarm alternatives.

The first line of argument supports the continuation of pastoralism both from an economic and an ecological standpoint of view. The proponents of this perspective argue that pastoralists occupy and live in an area where the resource is dispersed and meager, weather-related vulnerability is high, and the rainfall is often variable and unpredictable. In such areas, the pastoralists are the mastery, innovators, and efficient managers who experienced flexible and mobile resource use that enables them to survive and live in harmony with their

environment (Catley et al., 2013; FAO, 2018; Future Agricultures, 2012; Markakis, 2004). Unlike others, the pastoralist production system is also highly adaptive, respond to changing contexts (such as climate and market change) and efficient economic activity in such marginal areas (African Union, 2010; FAO, 2018; Helland, 2001). Therefore, the shift from the pastoral system of production to another land-use system notably to agriculture farming is lethal and could not produce a positive impact on the local livelihood (Behnke & Kerven, 2013). Rather it may end with environmental crises and other social and economic ills associated to the land alienation and nature of the new form of the production system; as these problems have been documented in different parts of Africa such as Ethiopia (Ayalew, 2001b; Behnke & Kerven, 2013; Getachew, 1997), Sudan (Babiker, 2013; Casciarri et al., 2009), Kenya (Fratkin, 2001; Hogg, 1983), Uganda (Ronald, 2014), and more. At the same time, an attempt to transform pastoralism to other alternative land use also have distorted the enduring pastoral institution and resource governance, without it the pastoral production system could not sustain and the pastoral rangelands are also adversely affected (FAO, 2018; Niamir-Fuller 1999 in Notenbaert et al., 2012).

Mortimore (2013) pointed out three main reasons that necessitate the continuance of the pastoral production system involving mobility in the current era. First, in Africa, the livestock sector has substantially contributed to the gross domestic product (GDP) and export earnings of the national economy (Future Agricultures, 2012; Little, 2021; Mortimore, 2013). The annual export earnings from livestock in the Horn of Africa have currently surpassed US \$1.3 billion (Little, 2021). In this regard, according to CELEP (2017: 1), in Uganda, the livestock sector contributed to 7.5% of total GDP and 17% of the agriculture GDP, where pastoralists own 90% of the national herd and provide livestock products that are supplied to national and international markets; in Ethiopia, livestock exports comprised 20% of national exports, where 90% of live animal exports are derived from pastoralists, which also contributed to 80% of the national milk supply; likewise, in Tanzania, pastoralists and agro-pastoralists have contributed to 70% of the national milk production; in Kenya, pastoralism contributed an annual marketed value of € 50–80 million. Its significance has also increased with the growing demand for livestock and livestock products such as meat, milk, and others following the increase in urbanization, population, and global market linkage (Abdi et al., 2013; Oba, 2013; Rockeman et al., 2016). Second, pastoralism is a livelihood strategy for a large population in Africa. It is estimated to support 268 million people on the continent (Africa Union, 2010). While it represents primary sustenance for some parts of the region, it

is also a pursuit from which others eke part of their living. Thus, the support directed to the pastoral production system ultimately addresses and helps to secure the livelihood of such a high number of populations and consequently assists in achieving the Millennium Development Goals (MDGs) to which the pastoralists are also entitled. On the contrary, refusal to do so results in development failure at the national level (Mortimore, 2013). Third, in arid and semi-arid areas where resources are spatially and temporally variable and uncertain, mobile pastoralism is an efficient economic activity. It is proven to be suitable for livestock production but futile for crop production (Africa Union, 2010; Nassef & Mulugeta, 2012).

The second argument favors the transformation of the pastoral production system and the expansion of irrigated farming in pastoral areas to bring about pastoral development. National governments, notably in the Horn of Africa, believe that pastoralism is backward and inefficient (Ronald, 2014), and it cannot feed the growing pastoral inhabitants while also not boosting economic growth (Mortimore, 2013). Albeit the contribution of pastoralism is growingly recognized at different stages, these old misunderstandings still endure and guide policy related to ongoing large-scale irrigation farming in pastoral Africa (Catley et al., 2013; Future Agricultures, 2012).

Furthermore, pastoralists and subsistence farmers lack the capital and technology needed to develop the vast tract of land in which they dwell and consequently fail to produce enough food and create employment (Deininger & Byerlee, 2011). To efficiently and effectively utilize these resources, which are said to be 'idle and marginal', and ensure economic prosperity, large-scale [irrigated] agricultural investment supported by advanced technology is paramount (ibid). Thus, apart from the controversial claims over its success, large-scale irrigation farming in pastoral Africa is anticipated to enhance pastoral economic development on the one hand and modernize the traditional pastoralists on the other hand (Badurdeen & Omalegne, 2015; Ronald, 2014).

The other justification also lies in the fact that pastoralists in the Horn of Africa have been struggling with drought, famine, loss of resources, population growth, and other environmental uncertainties (Catley et al., 2013; Fratkin, 2013). The pastoral rangeland is dwindling and reaching the point where it is no longer productive to support increasing livestock to respond to the demand of the ever-increasing population of the pastoral community (Sandford, 2013). These necessitate alternative livelihood strategies (Fratkin,

2013; Sandford, 2013). Thus, given the huge potential of available irrigable land in pastoral areas, encouraging and investing in irrigation, mainly small-scale private-led irrigation development, is one of the best livelihood strategies (Mortimore, 2013; Sandford, 2013).

According to Sandford (2013), there is no need for automatic rejection of 'pastoralist-related' irrigation¹² of any type. It is because, first, there are not sufficient and comprehensive studies dealing with the success and cost-benefit analysis of irrigation projects, mainly large-scale ones in pastoral areas. Second, there is also a possibility of turning the large irrigation schemes for the better by working on causes that resulted in past failure. Third, there is also evidence indicating that smallholder irrigation schemes, mainly privately owned ones, become successful in pastoral areas of the Horn of Africa. Consequently, it is crucial to encourage and harness the smallholder irrigation potential and work on the past bottleneck that challenged large-scale irrigation in pastoral areas to end the impoverishment of pastoral communities (Sandford, 2013).

However, the critiques contend that irrigation development plays a crucial role in expanding government power over pastoralists in the name of their wellbeing. Development projects represent the governmental apparatus through which governmentality is exerted (Li, 2007). Governmentality is a 'conduct of conduct' in which power is used to discipline, shape, and govern individuals and communities towards some standard ideas through a variety of procedures, strategies, and discourses (Foucault, 1991).

This (governmentality) involves three interrelated aspects: rationalizing and justifying the activity of the governing subject (government rationalities), (re)creation of governable subjects (subjectification), and deploying technology (technology of government) (Getu et al., 2022). To that end, an irrigation project is an instrument and mundane practice through which government rationalities are transformed into practice so as to (re)produce governable pastoral subjects and spaces (Getu et al., 2022). It functions as a technical tool of government by advancing technocratic control and external interest over marginal areas and people. Having this view, proponents of pastoralism are skeptical of a government's genuine support for pastoral development. Instead, they argue that the government's rush to sedentary agriculture at the expense of mobile pastoralism is a strategy to gain material and political

¹² Sandford (2013:49) refers to both indigenous irrigation schemes, which happen with the direct involvement of pastoral communities, and irrigation schemes that are set in place due to external interventions, wherein the pastoral communities have a marginal role in the overall process and operation of the scheme but are affected by its consequences in one way or another.

benefit through resource exploitation, control, and the formation and reformation of territoriality (see for example, Asebe et al., 2018; Behnke & Kerven, 2013; Schlee, 2013).

The third middle-range perspective suggests the diversification of pastoral production with non-pastoral activities including herding, agricultural farming, and non-farming ventures. The pastoral system has faced multifaceted challenges related to social, economic, and political problems (FAO, 2018; Galaty, 2013; Letai & Lind, 2013; Mungai & Omondi, 2014). It comes to be characterized by resource security, environmental shocks and calamities, and conflicts that are often instigated over meagre resources (Goldsmith, 2013). The growing interference in the form of land alienation undermines access to resources and disrupts customary pastoral institutions. All these adversely affect the pastoral enterprise and make it no longer viable in a contemporary situation as a sustainable livelihood, urging diversified economic activities including sedentary farming, wage employment, business, etc. on top of herding to support the growingly impoverished pastoral inhabitants (Fratkin, 2013).

2.5. Irrigation Development in the Lowlands of Ethiopia: A Historical Overview

The historical emergence of (modern) irrigation in the pastoral area of Ethiopia has been inextricably interwoven with resource expropriation and sedenterazation as part of the state-making process (Puddu, 2022). Resource appropriation and state interference in the lowland pastoral areas date back to a period of territorial expansion and state consolidation during the second half of the nineteenth century (Buli, 2006; Puddu, 2022), though modern irrigation development is a later phenomenon. During this time, the then northern Christian Kingdoms (Tewodros II, then his Successor Yohannis IV, and the then king Showa, Menelik) had the elusive goal of achieving a centralized state through territorial expansion and unification of the northern and central parts of the country under the flagship of Ethiopia (Buli, 2006; Markakis, 2011). To accomplish the mission, the emperor monarchs waged successive wars and expanded their political power to incorporate the peripheries inhabited by pastoralists and agro-pastoralists. This was further intensified by Emperor Menelik (Markakis, 2011).

King Menelik was able to extend his power by the end of 1880 to the southern, central, and eastern regions of the country, with some pastoralists being part of it. At this time, he stretched the frontier of Ethiopia to the northeastern, the southern and southeastern lowlands, and the western lowlands, among others, incorporating (ago-)pastoralists such as Borana Oromo, Afar, Somali, and Beni-Shangul (Bahru, 2001). The empire, however, did not exert

effective territorial authority in the pastoral areas, instead claiming sovereignty through international treaties and deals with local leaders, *balabats* (Bahru, 2001; Puddu, 2016). The empire extracted tributes from these areas as a signal of submission through local administrator. For example, the Karrayu was ruled by two *balabats* during this time (Buli, 2006). The balabat was selected from the local people to act as intermediaries between the state and the people, ensuring the smooth function of the tributary relationships (Asafa, 1993). Some of the subdued pastoralist groups, such as, for example, Afar (Bahru, 2001; Puddu, 2016) and Karrayu (Buli, 2006), were subjected to annual fixed tributes collected by the local governors, while others, such as Borna, who fell under the jurisdiction of Menelik generals, became both sources of wealth and military strength (Bahru, 2001).

This territorial expansion and military control provided the governors with at least two interrelated benefits. First, they were able to extend their influence across a broader geographical area, dominating a large portion of the populace who became submissive, thereby economically supporting the central power through paying tributes and taxes (Bahru, 2008). Second, and most importantly, the territorial expansion and military supremacy had given them the opportunity and ‘right’ to control local resources (Markakis, 2011).

The processes of domination and extractive-authoritarian relationships have also been further consolidated in subsequent regimes (Bahru, 2008). According to Buli (2006), with the coming of emperor Haile Selassie in the 1930s, three remarkable developments occurred that further tightened political and economic power in the conquered regions in general and the inhabitants of the lowlands in particular. First, the Imperial government created central and modern government administrative structures with the help of Europeans, notably the British, that facilitate resource control in pastoral areas. Second, it continued to grant land to the northern settlers in order to keep pastoral areas under state control. Finally, the government granted land to foreign investors for cash crop production.

During the imperial period, in the 1950s, the country began planned development interventions in pastoral areas guided by modernization theory (Bahru, 2008; Dessalegn, 2009), a development thought that dominated the then development discourse of many countries around the world (Pieterse, 2010). The main intent of the Imperial development policy was to enhance economic growth by modernizing agriculture using new technologies and practices (Dessalegn, 2009). To suit this, the development of large-scale commercial farms had been encouraged to boost foreign earnings (Diriba, 2018), resulting in land

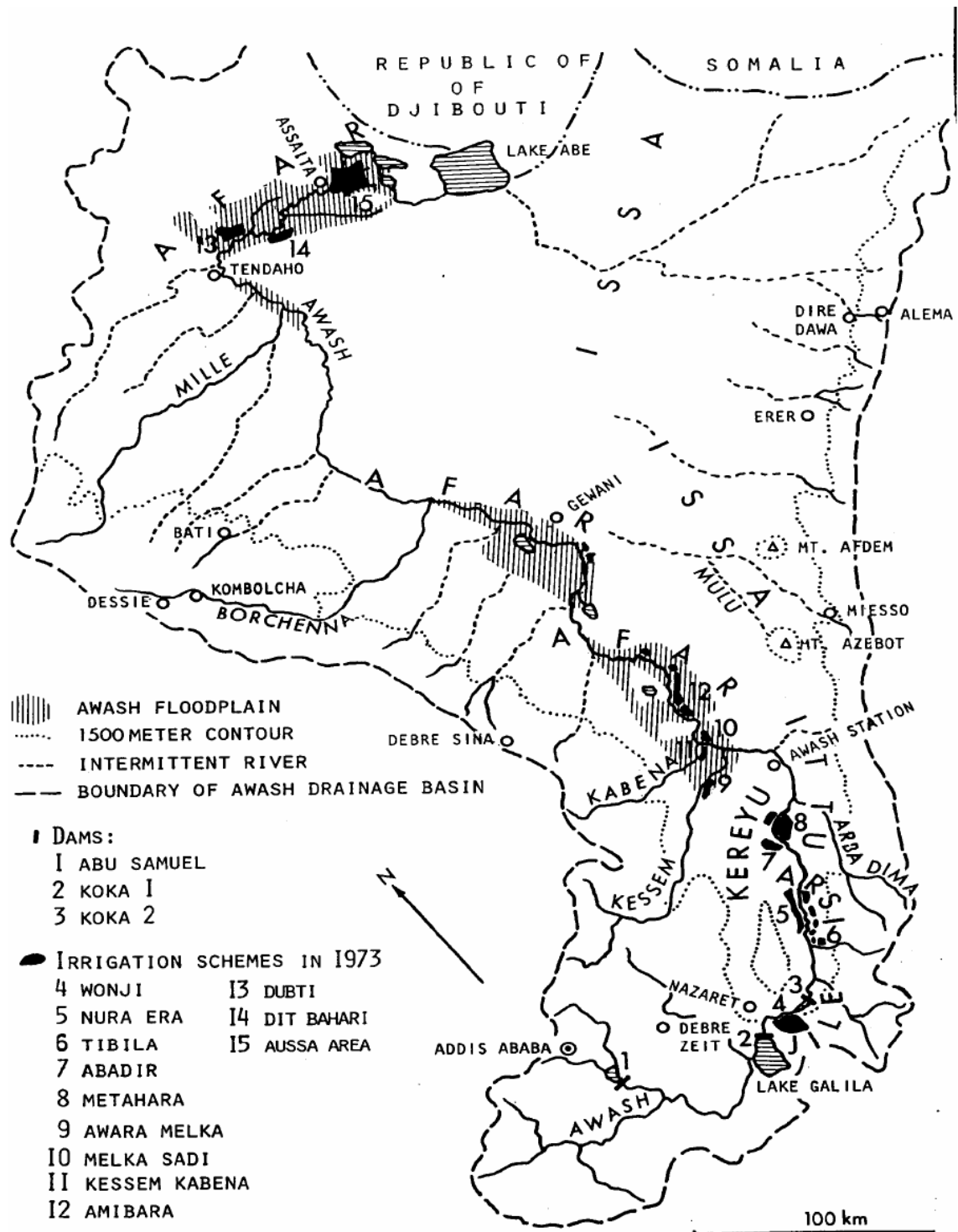
concessions to international agribusiness firms. This era marked the beginning of the introduction of a modern irrigation scheme in the country (Gebremedhin, 2015; Markakis, 2021; Reta, 2018). Thus, the construction of hydro dams along with the development of irrigated commercial crops in the 1960s in the Awash River basin was noted as the first endeavor for modern irrigation in the lowland areas of the country (Carr, 2017; Fratkin, 2014; Markakis, 2021). The government also established the first river basin development office, the Awash Valley Authority, in 1962 to explore the irrigated agricultural potential of the pastoral areas and support the overall development of the valley (Girum, 2013; Markakis, 2021; Reta, 2018). The authority was tasked with paradoxical responsibilities: promoting irrigation and commercial agriculture in the Awash valley while also overseeing the welfare of the indigenous inhabitants (Carr, 2017).

The government also made small-scale irrigation interventions aiming to settle the Afar pastoralists in the Awash valley (Woldeab, 2003). This also laid the foundation for the remarkable emergence of irrigation development in the rift Valley as well as in other lowland parts of the country (Behnke & Kerven, 2013; Seleshi et al., 2007). Importantly, despite efforts to enhance agriculture during this time period, feudalism was the dominant system in the country, and land tenure issues remained unresolved (Woldeab, 2003).

Following its third five-year development plan (1968–1973), the imperial government placed more emphasis and investment on modernization and large-scale commercial farms by availing and granting pastoral land to concessionaires. This paved the way for the ever-expanding large-scale irrigated agriculture held by individuals and transnational companies (Markakis, 2011; Seleshi et al., 2007). Wonji I, Nura Era, Tibila, Abadir, Metahara, Awara Melka, Melka Sadi, Kesse Kabena, Amibara, Dubti, Dubit Bahari, and Aussa area are some of the irrigation schemes developed in the Awash valley during the 1970s (Kloos, 1982b). Further, traditional irrigation schemes and crop cultivation using canal overflow on such large-scale commercial farms mushroomed more than ever before during this period (Girum, 2013). However, at the time, the government was mainly concerned with the expansion of commercial irrigated farms rather than strengthening and improving the live (Diriba, 2018; Nassef & Mulugeta, 2012). The proliferation of irrigation in the Awash Valley impeded pastoralists' access to resources along the Awash River basin (Behnke & Kerven, 2013). A large tract of river floodplain was cleared and bulldozed for cultivation of plants such as

sugar cane, cotton, fruits, and vegetables at the expense of pastoralism and pastoral production (Ayalew, 2001b; Behnke & Kerven, 2013).

Figure 1: Proliferation of irrigation Schemes in Awash valley during the 1970s



Source: Kloos, 1982a

In the Derg period (1974-91), the irrigated agriculture in the area continued to be aggressively intensified, with the state nationalizing and owning all commercial farm concession (Ashami & Lydall, 2021; Markakis, 2011). The land was nationalized and ownership was transferred to the state, resulting in the demise of the earlier feudal landlordism (Markakis, 2021; Woldeab, 2003). Irrigation schemes were further expanded in the lowlands of the country along major rivers, including the Belese, Bambis, and Wabi Shebele river basins, among others. At the time, great focus was placed on the development of large and medium irrigation schemes to combat drought and famine in the country (Lijalem, 2013; Seleshi et al., 2007). The government sought the irrigation intervention as a way out of the severe drought striking the country in 1984/85 (Woldeab, 2003). Accordingly, the government put more lands for irrigated agriculture and enforced a policy to sedentarize pastoralists as national strategies for development that compulsorily pushed many pastoralists to permanent settlement around irrigated land and to be crop cultivators (Markakis, 2021).

The EPRDF (post-1991), like its predecessors, prioritized the development of irrigation facilities to alleviate poverty in pastoral areas. Strategies and measures targeted at maximizing the use of endowed water resources are regarded as critical for tackling food insecurity and deep-rooted poverty. With this, expanding irrigation has been reinforced and has become one of the top priorities in responding to national development goals and policies that focus on resilience, food security, and livelihood transformation in order to achieve sustainable development and climate adaptation (Nassef & Mulugeta, 2012). Consequently, whenever possible, a shift from rain-fed to irrigated agriculture is given attention to improve agricultural production and productivity in the country.

Subsequent National development plans, such as, for example, the Poverty Reduction Strategy Paper (PRSP) (2001), The Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) (2006), and the Growth and Transformation Plans (GTPs) (2010–2020), all stressed the importance of water development. To feed into these plans, the Federal Ministry of Water Resources devised a fifteen-year Water Sector Development Program (WSDP) to promote irrigation and dam construction in response to enhancing food security and boosting national power, respectively (Markakis, 2021).

The plan was divided into three 5-year periods: short-term (2002–2006), medium-term (2007–2011), and long-term (2012–2017), with the former prioritizing small-scale irrigation and the latter successive phases emphasizing the development of large and medium-sized

irrigation projects (MoWR, 2001). The strategy, among other things, contributed to the development and increased support for irrigated agriculture along the river banks of Awash, Wabi Shebele, Genale, Dawa, Akobo, Weyi, Omo, and Abaya (Markakis, 2021). Thus, the recent (mainly since the last few years in the current regime) expansion and conversion of land to large-scale irrigated farming across the periphery, even in areas previously considered buffer zones (Carr, 2017), is a good indication of the commitment to promote irrigation projects in the country in general and in pastoral areas in particular.

These successive policies have also favored selective settlement linked with the development of irrigation to deal with the lack and inaccessibility of services and infrastructure and food insecurity in pastoral areas. With this, the government (EPRDF) resurrected the settlement policy of its predecessor after a period of pausing under the guise of 'volunteer' settlement, but it has been practiced forcefully (Fratkin, 2014; Little, 2021; Turton, 2021). Common to all regimes, from Imperial to socialist to EPRDFE, sedentarization has been portrayed as a prerequisite for modernizing the outdated pastoral pursuit and integrating pastoralists into the national political economy (Korf et al., 2015).

Pastoralist production and livelihood were regarded as unproductive and backward to bring development and not suit the notion of 'modernity' (Carr, 2017; Fratkin, 2014). This viewpoint consequently supported the promotion and development of irrigation and infrastructure projects, which were also used by succeeding rulers to consolidate their power in the arid and semi-arid periphery (Korf et al., 2015).

Furthermore, unlike its predecessor, during this time, water and pastoral development have also been decentralized, and policy implementation has become a regional responsibility (Korf et al., 2015; Nassef & Mulugeta, 2012). However, the substantial involvement of the federal ministries, among others, in planning, ensuring alignment with the federal policies, strategies, and plan, and the deployment of technical experts remain important (Nassef & Mulugeta, 2012). Regional governments have established authorities responsible for the development and rehabilitation of irrigation systems (Woldeab, 2003), particularly small and medium-sized ones, as the construction of large and mega-sized water projects is the mandate of the federal ministry of water resources (Nassef & Mulugeta, 2012). Thus, small-scale irrigation has grown significantly since the mid-1990s, offering an alternative source of income for pastoralists (Markakis, 2011; Sandford, 2013).

CHAPTER THREE

THE STUDY AREA: DESCRIPTIONS, STATE INTERVENTION, AND DEVELOPMENT PROJECTS

3.1. Introduction

This chapter outlines the research site and some development projects in the research area. The chapter introduces Fentalle district of the upper Awash Valley, where this study is based. It also introduces the physical characteristics of the area and the inhabitants dwelling in. Following that, the chapter highlights the major key development interventions and projects that have a significant effect in the area. It mainly highlights two large-scale projects, the Metehara sugar estate and Awash National Park, and the settlement initiative. This might lead to better understand development projects in the area over time and enable us to contextualize the current large-scale irrigation project under study.

3.2. Fentalle District in Upper Awash Valley

3.2.1. The Research Area: Location and Physical Features

The study was carried out among (agro-) pastoral groups in the Upper Awash Valley of Ethiopia. The area covers the Fentalle District in the Great Rift Valley in the Northeastern part of the Eastern Shewa Zone¹³ of the Oromia Regional State (see figure 2 below). The district has eighteen rural and two urban villages (locally called Gandaa), namely Metehara and Haro Adi (also called Addis Ketema). Metehara, the capital district town, is about 200 kilometers southeast of Addis Ababa, along the Addis-Dire Dewa-Djibouti corridor. The Metehara Plain and Fentalle Mountain area surround the district, with the Kesem and Awash drainages north and south of the mountain, respectively (Ayalew, 2001b). The Afar Regional State also borders it in the north, the Arsi-Oromo in the south, the Argoba in the Minjar-Shenkora special district in Amhara regional state in the west, and the Awash National Park in the east (Ayalew, 2001b; Buli, 2006). According to Fentalle district administration (2018), the district has a total area of 1339.65 Km².

¹³ In Ethiopia, a zone is the formal administrative structure between the district and the regional state. i.e., hierarchically above the district and below the regional state.

Geographically, the Fentalle district is in the tropical zone, between 8° 45' to 9° 00' N and 3° 45' to 4° 00' E. It is notable for its erratic rainfall, arid and semi-arid climates, and drought-prone areas (Girum, 2013). Microclimate factors such as rainfall, humidity, and temperature vary widely both spatially and temporally in the area (Ayalew, 2001b). The elevation of the district ranges from 862 to 1997 masl, with the mean minimum and maximum monthly temperatures ranging from 12.80 °C to 21.90 °C and 28.0 °C to 36.70 °C, respectively (Muluken & Desta, 2021). Rainfall is often unpredictable and sparse, falling just two or three times per year. The Ethiopian National Meteorology Agency (NMA) reported that the area received 400–572 mm of mean annual rainfall between 1989 and 2011 (Boru et al., 2023).

Essentially, there are two rain seasons: the small rains and the big rains periods. The main rainy season in Karrayu occurs from July to September. This season provides the highest overall rainfall and is locally named '*ganna*' (it means rainy season). The second rainy season lasts from February through April. It is a small rainy period, locally termed '*afraasa*'. This rainy season is unreliable but very important for the Karrayu, as it occurs when cattle and humans are tired of the long dry seasons. Further, the area also receives some rainfall in December, but this only occurs in good years.

The area has a variety of physical features, including undulating plains, hills, and flat landscapes (Muluken & Desta, 2021). The Fentalle mountain and other undulating plateaus such as Barru Harka, Bosset, Fentale Xinnoo, and several other small peaks, are located to the north and north-east of Metehara town. The Fentalle mountain was formed by sporadic volcanic eruptions and dominates the surrounding landscape. It also contains the highest elevation in the area, rising as high as 2007 meters above sea level, and a crater lake 35 meters deep and 3.5 kilometers in diameter. The mountain, with its steep bottom, covers a considerable region, contributing to the entire architecture of its vicinity. The large Metehara plain suitable for pasture begins at the slopes down to the flat floor of the Rift Valley on the western and southern flanks of the mountain.

The Awash River is one of the main and largest rivers that drains into the Metehara Plain and has provided a source of livelihood for arid and semi-arid areas, including the pastoral community of the district (Girum, 2013; Tsion, 2011). This river flows from its source in the Oromia highlands at Ginchi, west of Addis Ababa, and travels along the rift valley, covering a length of 1200 km before ending in Lake Abe on the boundary between Ethiopia and Djibouti. It is one of the second-largest and most heavily used for multifunctional

development schemes such as large and small-scale irrigation projects, hydroelectric power generation, and water supply reservoirs (Reta, 2018). The drainage from the river provided the best dry and wet seasons for grazing pasture in the lowland plain for the Karrayu pastoralists. However, much of this area has now been taken over by mechanized agriculture and Awash National Park (see section 3.3. below).

Lake Beseka is another physical feature of Karrayu land, located on the western outskirts of Metehara town. This is locally referred to as '*Nogoba*' to mean useless for animals and plants. The lake has alarmingly expanded in the last half-century, owing primarily to the start and expansion of irrigation schemes in the area (Buli, 2006). It is assumed that drainage discharges into the lake from nearby irrigated plantations contributed to its development (Megersa, 2012). The satellite image revealed that its surface area has grown sixfold in the last three decades, from 7.53 square kilometers in 1973 to 45.85 square kilometers in 2008 (ibid).

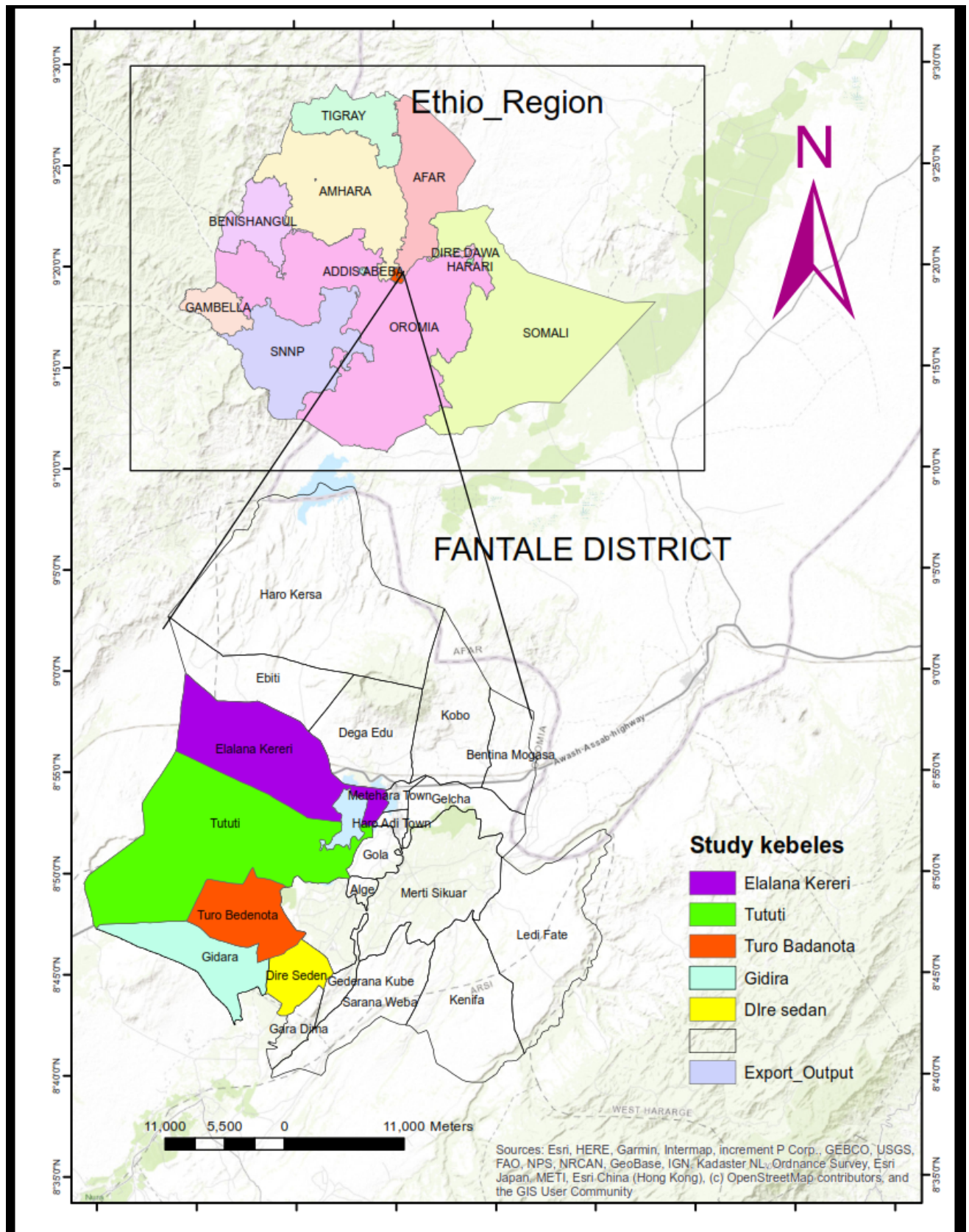
The lake has a high salt and fluoride content and cannot be used for human or livestock consumption. Instead, its expansion restricts plant growth and access to pasture land, as well as causes infrastructure damage. The Karrayu elders and notables, such as Gada leaders, reported that the expansion of Lake Beseka overtook a significant number of small water bodies that were originally fresh and served for human and animal uses (Oromia Water Works Design and Supervision Enterprise (OWWDSE), 2009; Reta, 2018). Furthermore, the lake also swamped and destroyed many infrastructures in the area. In this regard, the destruction of schools, government offices, and the main asphalt road caused by the overflowing of Lake Beseka is a very recent memory in the area. It has the potential to merge with the Awash River, affecting all the downstream irrigation projects and the livelihoods of people who rely on the basin (Megersa, 2014). A large canal has been constructed as a detour to reduce the size of the lake and discharge the overflow to the Awash River, though much of the water was stored in Gaalchaa village. However, this has accelerated the process of the intrusion of lake water into the Awash River, causing its disastrous effects to occur in a shorter period downstream.

Photo 1: Lake Beseka destructing infrastructures



Photo: by author

Figure 2. Map of the study area



3.2.2. The People

The Karrayu and Ittu Oromo make up the majority, with others such as Somali, Amhara, and Kambata constituting the minority ethnic group residing in the Fentalle administrative district. The Karrayu and Ituu are descended from the same ancestor and are the two Oromo clans within the five Barentu confederacies known as Shanan Bareenturma (Boru et al., 2023; Buli, 2006). The Karrayu are the indigenous and original inhabitants of the area. They first began living in the area in the 16th century (Mudersis (1998) in Girum, 2011:37). The Ittu were originally residents of Charchar highland in what is now West Hararge. However, they spread westward and began living with Karrayu a century ago (Boru et al., 2023). The other groups have also migrated into and resided in the area over time (see also section 3.1.2. below).

According to the July 2023 population projection data, the total population of the district was 131, 720, of which 86,985 are inhabited in the rural part of the district, with 46,438 males and 40,547 females in terms of sex compositions (SSE, 2023). The remaining inhabitants (44, 735) lived in the two urban towns (Methera and Haro Adi towns) (ibid) and were involved in various occupations such as business, administration, and other activities.

The Karrayu are the Oromo pastoral groups with similar linguistic and cultural affiliations to other groups of Oromo. They also have social and organizational structures akin to those of other pastoral Oromo tribes. Like that of the pastoral Borona Oromo, for instance, clanship, the council of elders, the Gada system, the Qaallu, and the ganda (village) are the prominent traditional institutions that have played a fundamental role in all social, economic, cultural, spiritual, and political affairs of the Karrayu people. The Karrayu's oral history revealed that some pastoral Borena clan members migrated in search of pasture for livestock in the 16th century (Ayalew, 2001b). This led them to their current site in the vicinity of Fentalle Mountain. Their language, Afaan Oromo (Oromiffa), which the larger Oromo group speaks categorizes them into the Eastern Cushitic people and closely associates them with other pastoral groups of similar linguistic affinity in Ethiopia, mainly Afar, Somali, and Benja (Alemmaya, 2008; Ayalew, 2001b; Buli, 2006).

Karrayu is made up of two main endogamous clans: Dullacha and Basso. Dullacha is believed to be Karrayu's elder son, while Basso is his younger. These two main clans are further divided into sub-clans and sub-sub-clans (Buli, 2006). Common to the large Oromo

Group, the Gada system leads and controls the local governance and the sociocultural and religious life of the Karrayu people. Each of the two main clans has its own respective Gada system that is organized and functions based on generational sets. These institutions have continued to guide every aspect of the life of the society.

Livestock production, such as cattle, camels, goats, and sheep, is the main sustenance of the community in the district, with sedentary farming and wage employment becoming increasingly important as a response to natural and man-made calamities (Girum, 2013). Nearly, out of the eighteen rural villages in the Fentalle district, eight (such as Kobboo, Xuxuxi, Dhagaedo, Bantiimogasaa, Haroo Qarsaa, Gaalchaa, Dheebitti, and Ilaala-Qaraarrii) and five (such as Goolaa, Tuuroo, Fateeleedii, Gidaaraa, and Dirree sadeen) of them are considered to be pure and agro-pastoralist, respectively, while the remaining five (such as Algee, Godoo Fafaatee, Saara weebaa, Gaara dimaa, and Kanifaa) practice mixed farming (OWWDSE, 2009). Pastoralists make up the majority of the Karrayu-dominated villages (ibid). Historically, the Karrayu group predominantly relied on transhumance pastoral modes of livelihood exclusively based on animal herding. However, this has now altered and has been gradually declining over time following the shrinking of grazing land and constraints on mobility patterns caused by development interventions and escalating resource conflicts with surrounding communities (Boru et al., 2023).

3.3. State Intervention and Development Project on the Karrayu Land

The Ethiopian state has a long history of intervening in the Karrayu pastoral area of the upper Awash valley. These interventions have primarily been carried out through land expropriation and state territorial expansion. This strained the relationship between the pastoralists and the central state (Devereux, 2010). Despite the dynamics of understanding in the current regime, government policies and interventions failed to acknowledge pastoralism as a viable way of life (Devereux, 2010; Müller-Mahn et al., 2010). National rural development policies and strategies have been developed with the agrarian communities in mind but have guided the development interventions in the pastoral areas, including in Karrayu territory. As noted earlier, the Karrayu pastoralists, like other pastoralists in the country, are among the most socially, economically, and politically marginalized groups. There had been no national development policy and strategy document that centered on pastoralists up until recently. The draft pastoral development policy and strategy document that was released in 2017 is the first initiative in the history of pastoral development in the country.

Large development initiatives performed over time in the area have also been designed to support the same phenomenon of land confiscation and state encroachment. They have also created conditions for the ever-expanding central government to extend its control over the pastoral inhabitants of the valley and their environment. This has been supported further by the settlement of migrant farming groups and the establishment of local administrations acting on behalf of the central state. The government policies have promoted farmers and permanent settlement by providing cultivators greater certainty in land ownership through inheritance rights while marginalizing the Karrayu pastoralists to the extent that they have no right to free land for grazing (Markakis, 2004). The government's rural land use planning programs and irrigation initiatives have all pushed for the resettlement of the local pastoralists and promoted the privatization of communal land.

In what follows, I briefly highlight the main large-scale development projects and settlement interventions reinforced over time. Many of the projects were initiated during the imperial regime. Because of this, the Karrayu considered this period the most important in their relationship with the Ethiopian government, as they experienced the ruthless face of the state through these projects and the disastrous consequences that defined their future (Alemmaya, 2008). However, these projects have expanded over time and continue to have a significant impact on the Karrayu community to this day.

3.3.1. Earlier¹⁴ Development Projects and the Locals

Awash Valley is notable for the concentration of large projects in previous years (Reta, 2018), exemplifying the irrigation development trend in pastoral areas in Ethiopia (Kloos et al., 2010) and elsewhere in Africa (Admas, 1992, cited in Behnke & Kerven, 2013). The Rift Valley program initially began with several farming schemes in the Upper and Middle Valleys (Kloos, 1982b). The Upper Awash Valley, as part of the Awash Valley, has also drawn substantial numbers of these development projects. Its potential agricultural land and favorable climate conditions, together with its accessibility to local and international markets, make the area a hub for major development projects. It housed several projects, including irrigation projects, agro-industrial projects, hydroelectric projects, sugar industries, horticulture farms, and a wildlife park. Koka Dam, Upper Awash Agro Industry, Wonji Shoa

¹⁴ I referred to it as 'earlier' just to indicate that the discussed projects first happened in the forgoing regmies. However, it has to be noted that they still exist and are expanding over time, having a significant impact on the lives and livelihoods of the Karrayu today.

Sugar Factory, Methara Sugar Factory, Nura Era, and Abadir are some examples of development projects that have been implemented in the Upper Awash Valley since the 1960s. All have had an impact on the Karrayu pastoralists and the Awash Valley inhabitants in one way or another but to varying extents.

Here, however, I only have an overview of the Metehara Sugar Estate and the Awash National Park. It is because, as the informants stressed, these are the two development projects in the valley that have the most profound effects on the Karrayu pastoralists. They are regarded as exceptional in determining the economic, sociocultural, political, and environmental contexts and the contemporary situation in which Karrayu pastoralists operate. These projects have also been and continue to be an important point of interaction, shaping the significant part of state-Karrayu relationship (Alemmaya, 2008).

3.3.1.1. Metehara Sugar Estate

Owing to its modernist orientation, the Haile Sillasie government proposed the development of irrigation-based commercial farms in the 1960s, of which the Metehara sugar Estate was the most prominent. It was initially established under a share agreement between the Dutch company Handles-Vereening Amsterdam (HVA) and the Imperial Ethiopian government to meet increasing sugar demand. The agreement granted the gradual allocation of 10,000 hectares of Karrayu land to HVA for irrigated sugar plantations. The company had already gained concessions in the adjacent areas; it first began in the Wonji area in 1951, followed by a sugar estate in Shoa in 1958, and then the Metehara Sugar Estate in 1965 (Ayalew, 2001b; Buli, 2006).

After years of operation under private ownership, the sugar estate was nationalized in 1975 following the Derg national proclamation for the transfer of all commercial farm concessions and enterprises to state management. However, the Estate continued to grow, with an increase in processing capacity and a progressive expansion of the cane plantation field, sparking fierce opposition from Karrayu and igniting major conflict with estate management and employees. According to the claim from the Karrayu informants, the Metehara Sugar Estate has consistently expanded its area coverage of the sugar plantation. It has demarcated even more Karrayu land than the legally authorized 10,000 hectares. In this regard, the production manager of the company mentioned that the estate currently occupies about 15,000 hectares

of land¹⁵. This expansion has come at the expense of increased land dispossession and resource confiscation for the Karrayu pastoral group.

Moreover, the Sugar Estate absorbed the previously independent enterprise called Abadir Fruits and Sugar Plantation from 1979 to 1981 (Ayalew, 2001b). The Abadir farm was established in the valley on the Karrayu territory before the beginning of the Metehara Estate in 1955 by a Greek national named Muse Paynote to produce cotton and various fruit crops (Seifu, 2003). However, upon his withdrawal, the farm was owned by different private investors (Ibid). In 1964, the Israeli investors took over on contract terms and managed the firm on a land area of 2800 hectares (Rettberg, 2010), which was later given to the Metehara sugar estate.

With the establishment of the estate, the Karrayu pastoralists lost their best dry grazing space and water points. This area used to be a vital source of pasture, supporting a large livestock population of cattle, camels, goats, and sheep during the dry seasons. The ecologically important trees, such as acacias and tall grass that used to be dominant in the area, have been replaced with sugar plantations. Tall trees along the river bank that used to provide adequate shade and protection against the sun for animals and humans during the dry season were bulldozed and abandoned. Many ritual sites of greater importance to the Karrayu people along the river banks were included in the estate administration and are no longer accessible to locals. The Karrayu settlements were demolished to relocate the pastoralists from and around the plantation-delimited territories (Alemmaya, 2008; Ayalew, 2001b).

3.3.1.2. Awash National Park

The Awash National Park is another important development venture in the area that led to the removal of the Karrayu pastoralists from their ancestral land, on which their economic, political, and cultural existence depended. The park was established in 1969 in the Awash Valley, fencing off significant biodiversity and natural resources previously utilized by the Afar and Karrayu pastoralists (Girum, 2013). It enclosed 75600 hectares of land that had served as both dry-season and wet-season grazing areas for the local pastoralists (Alemmaya, 2008). The park was established in response to the government's adoption of 'an exclusionary protected area policy, which strictly limits the use of the land for all kinds of human use, such as settlement, exploitation of natural resources, grazing of livestock, and mining, except as

¹⁵ Interview with Metehara sugar factory production manager, December 2011 (during fieldwork for wide)

required for the management of wildlife 'conservation' (Jacobs & Schloeder, 2001: 15). This policy then urged the evacuation of local residents of Afar and Karrayu from the demarcated park area to create a confined conservation area and avoid human interference in wildlife space.

Following this exclusionary protected-area policy, the Karrayu households that had lived in the park's gazette area for so many years were forcibly displaced. The government military also burned some of the adjacent Karrayu villages to discourage and scare the locals from interfering with the park (Girum, 2013). According to Alemmaya (2008), Estate representative justified this in two ways to solve the problem. First, the park was established under the state's ownership, and the tract of land for this purpose was principally reserved for the king's private hunting grounds against which no complaint could be entertained. Second, they promised to provide substitute land to the displaced Karrayu groups in adjacent locations, such as Borchetta in Bosset district and places near the Kesem River, so that they (Karrayu) could reside with neighboring groups of people (Alemmaya, 2008). However, the promises were not fully enforced, and no system was set to ensure that the locals benefited from the park or to soothe their anxieties and mitigated the losses the community has suffered from due to the game park (Buli, 2006; Girum, 2013). This disappointed the Karrayu and made them unwilling to cooperate with the state's initiative to preserve the fauna and flora in the conservation area (Alemmaya, 2008). In the worst cases, they even started killing beasts and burning the grass in the parks (ibid).

This conservation project prioritized animal (environmental) protection over people. It disfavored the local people and overlooked the prospects for their harmonious relations with these natural resources. The creation of the park was mainly guided by the Western orientation of the nature-culture duality (Buli, 2006; Girum, 2011). The local pastoralists were depicted as problematic and an anti-conservation sanctuary, for which exclusion was deemed important (Ayalew, 2001b; Jacobs & Schloeder, 2001). Such a misconception thus not only disregards the very right of the local people to access the bounty of their natural resources, but also denies their enduring coexistence with the wildlife. This was once well captured in the story of the Karrayu informant, which Buli (2006:39) quotes as follows:

We know how to rear cattle and how to live with the wildlife. Our cattle are more familiar with the *Saala* (Oryx) than the cars of the government are to *Saala*. Our spear is less harmful than the guns of the government and the hunters. We are forbidden to live

with the *Saala* while Haile Sellassie and the faranji (white men) are allowed to kill our *Saala* (the emphasis is original).

In the view of Karrayu pastoralists, the development of both the sugar plantation and the national park signaled the beginning of the long process of their plight. It has curtailed the seasonal mobility and flexibility of livestock movements between different grazing sites as these places have become occupied with these initiatives. This has resulted in a significant decrease in pasture and grazing ground, as well as a deprivation of access to water sources. This in turn has intensified resource conflict between Karrayu and its neighboring pastoralists and agro-pastoralists, with whom they had a relatively amicable relationship (Boru et al., 2023). It has also dramatically averted and negatively impacted the Karrayu land-holding structures, their relationships with one another, and their natural environment.

Furthermore, the loss of key grazing sites has weakened pastoral production and increased Karrayu's vulnerability to drought (Duguma, 2013; Girum, 2013). The expansion of large-scale farms at the expense of prime grazing land contributed to the recurrent drought in the Awash Valley (Kloos, 1982a). After the development of the projects, Karrayu has been hit by repeated droughts. The major drought events in the area were in 1974, 1979, 1984–1986, 1994, 2002, and 2008–2011 (Girum, 2013). During these periods, a large number of livestock and human lives were lost, as well as very important plant species and grasses (Ayalew, 2001b; Girum, 2013).

The Karrayu were neither consulted for the establishment of the new projects nor were they compensated for the loss of their land; instead, they were all forced to leave the area (Ayalew, 2001b). The land policy of the 1940s favored agricultural cultivation and designated the pastoral land in the country as 'no-man's land', directing it to become under the domain of the state (Markakis, 2004). This not only benefited the government and land grantee agriculturalists in the pastoral area but also legitimized the confiscation of pastoral land (as well as all resources on the land) and expulsion of indigenous pastoralists (Mohammud, 2007).

In fact, the Karrayu were promised compensation for the land expropriation and eviction caused by these projects, but it was never delivered. For example, the sugar estate pledged to develop schools, provide employment opportunities, provide sugar for free, establish grazing grounds through irrigation, and construct water points for the local pastoralists (Buli, 2006;

Fekadu, 2016). However, these were only words, despite the fact that the development of some ponds in the area was considered part of the commitment (Buli, 2006). The government and the scheme dug some ponds as a form of compensation for the lost land and watering points, but the real goal was to keep the pastoralists away from the park and estate areas. Yet this created a negative impact, causing overgrazing and disrupting the Karrayu traditional grazing system (Ayalew, 2001b; Buli, 2006). According to Buli (2006), these ponds had two intrinsic difficulties. First, they were excavated in wet grazing areas where pasture and wet-season springs and surface water were available. Following the creation of the ponds, a huge number of animals congregated and overcrowded in this area, resulting in overgrazing and resource depletion. Second, the ponds had brief lives and only lasted as long as it rained.

In response to the resource acquisition and unfulfilled promise, the Karrayu continuously protested against the projects and peacefully appealed to the authorities at different times (Buli, 2006). However, this could not help them regain their ancestral land. In the process, they not only lost their resources but also sacrificed the lives of humans and animals due to brutal government retaliation for their resistance (Ayalew, 2001b; Girum, 2013). They were seriously confronting the park and the scheme management, as well as their employees (Ayalew, 2001b). They have also encroached in and stealthily grazed their cattle in the parks and/or the scheme, which is still a common practice for which they have been forced to pay a fine or be jailed for trespassing once found (Buli, 2006; Girum, 2013). All these have led to hostility and enmity between the administration of the projects and Karrayu pastoralists. It then roughened the Karrayu-State relationship even further.

Regarding the Karrayu-Metehara sugar estate relations, a top management member of the estate expressed progressive improvement over time, from very antagonistic interactions during the early days of the establishment of the estate to improved understanding, cooperation, and smooth relations currently¹⁶. The official justification for the improvement was as follows: first, the estate has allowed some individuals/households of the surrounding villages, such as Fateeleedii, Saara weebaa, Tuuroo Baddaannoottaa, and Gaalchaa, to use overflows of water to engage in irrigated production. The estate has paid more than one million birr per year for its own irrigation water consumption, including the overflow used for community purposes. Second, the company allows the locals to use post-harvest crops and grass as feed for livestock. Third, it has employed many local individuals. Fourth, and

¹⁶ Interview with Metehara sugar factory production manager, December 2011

very importantly, the estate formed a committee that included local community elders to smoothly deal with the issues of trespassing on livestock on the sugar plantation.

However, the local informants noted disagreements and disputes with the estate continued to erupt at various times, often over the use of the resources, primarily irrigation water, and the intrusion of livestock into the sugar plantation, for which the estate imposed a fine of birr 50 per cattle. This disagreement is sometimes serious, leading to the injury of people, as the local informant¹⁷ narrated such an incidence as follows:

Last year [2010], two estate guards attempted to stop the surplus water flow that we have been using for irrigation. Then, other irrigation users and I approached them and politely requested that they did not do so. However, they refused and continued blocking the channel, so we fought with them. In the fight, one of the guards had his leg broken, and the other lost three of his teeth. Soon after, the federal police from the sugar factory arrested me and two other members of the community who were involved in the conflict. Then we were jailed for seven days and made to pay birr 9000 for compensation to the injured individuals. The dispute was settled later with the involvement of the community elders, and we continued using the irrigation water (interview at Gaalchaa village, December, 2011).

In fact, apart from dispute and disagreement, the Karrayu felt more resentful for the park, which they considered not beneficial to them compared to the sugar plantation, which at least employs members as guards, provides them with overflow water for irrigation and cattle, and provides grass and cane tops in times of drought (Girum, 2011). In this regard, the Karrayu informant has to say, "both the Awash National Park and the Metehara Sugar Estate harmed and ruined our lives. However, the sugar estate allowed us to use the postharvest crops such as cane top and grass for our cattle during the dry season, but we gained nothing from the park."¹⁸

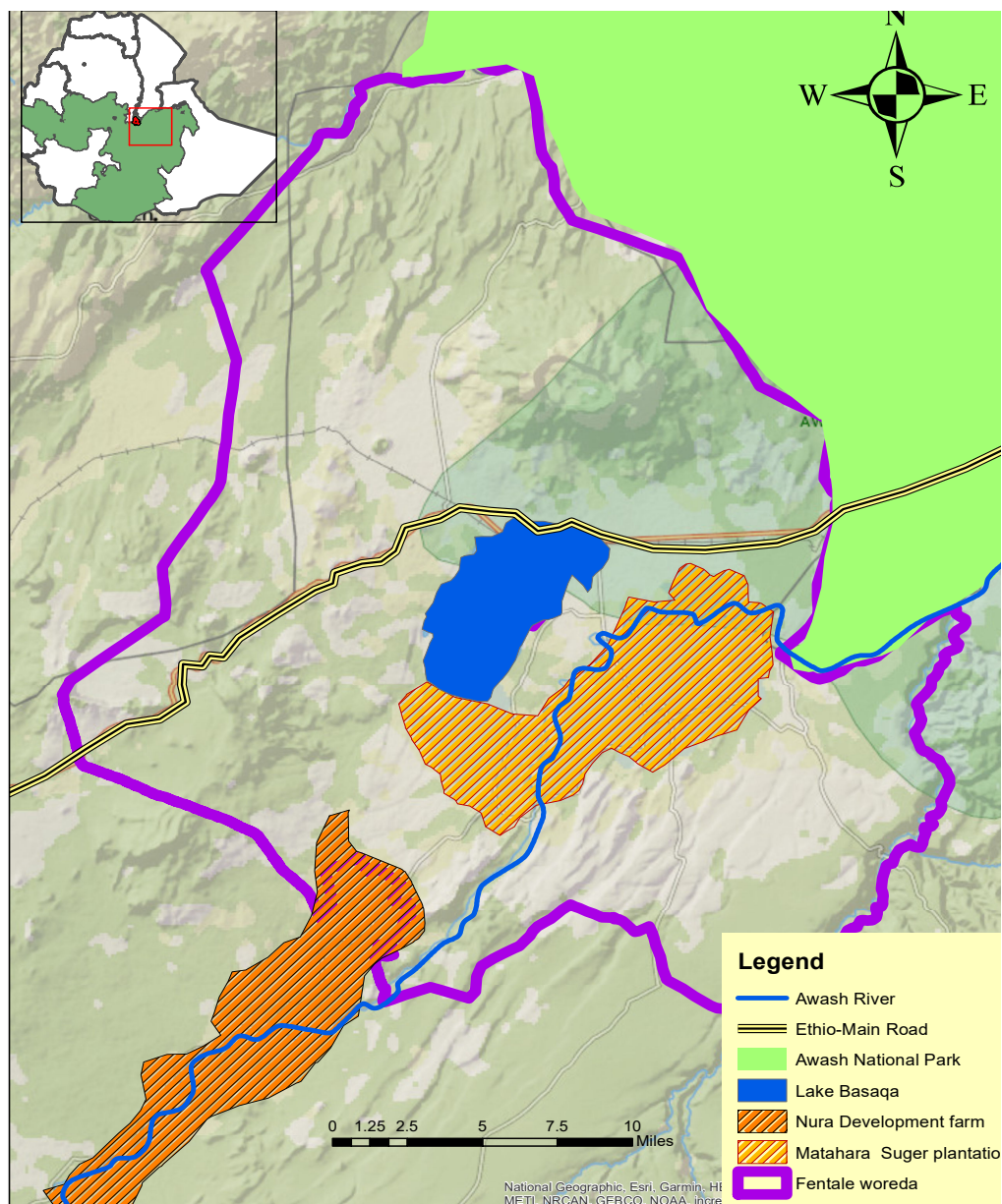
Moreover, the establishment of the sugar estate and other large-scale plantations in the vicinity has attracted labor migrants from highland parts of the country. Extensive labor forces with farming skills from the southern highlands, such as Kambata, Hadiya, and

¹⁷ He is a Karrayu individual and among the irrigation water-user households in Gaalchaa village. He began experimenting with irrigation production a decade ago, using the surplus flow water from the estate farm to produce maize for household consumption and tomatoes for cash.

¹⁸ Interview with a Karrayu elder at Direee-Sadeen village, January, 2021

Sidama, and the northern highlands joined the estate farm and settled in camps and surrounding areas (Alemmaya, 2008; Kloos, 1982b). This led, among other things, to the mushrooming of satellite villages, which progressively expanded and matured into townships. The development of Metehara and Haro Adi towns are such instances in the area (Buli, 2006). This facilitated the commercialization process and the introduction of a cash economy linking the Karrayu to the capitalist economy, exacerbating their exploitation through market exchange (Buli, 2006; Kloos, 1982b). It created a condition whereby the Karrayu engaged in unfair terms of trade; they exchanged their produce at low prices but bought primary goods and services for higher prices from the town market centers (Buli, 2006).

Figure 3: Development projects impacting the Karrayu Pastoralists



3.3.2. Resettlement and influx of migrants to Karrayu

The Karrayu land has experienced a surge of migration and resettlement since the earlier days. It began when Meneliks's army first made some Gumuze people settle on the northern fringe of Karrayu territory in the nineteenth century (Buli, 2006). The national political economy has mainly determined this over the past years. The program is associated with a long history of initiatives aiming at resettling people in the region and encouraging agricultural development. The Afar pastoralists of the Awash Valley were the first to be resettled in the late 1960s (Kloos & Adugna, 1989). The resettlement program basically involved two distinct practices. On the one hand, it entailed establishing the local nomadic pastoralists in a permanent settlement area within the same region; on the other hand, it involved settling individuals or groups from other locations into the region. It was embarked upon with the settlement of the development project-displaced local pastoral households during the imperial regime under the auspices of the Awash Valley Authority (AVA) (Ayalew, 2001b).

The irrigation schemes in the Awash Valley, for example, were said to have displaced 20,000 pastoralists at the time (Kloos, 1982a). To this end, the program was meant to relocate these displaced families to settlement farms as compensation for the loss of their land. However, only a few households received settlement land. By 1973, for example, AVA had settled about 300 Afar families on 2.5 hectares of cotton plots, while a significant number of displaced Afar, Karrayu, and Jile had received no land for settlement (Kloos, 1982a: 32). The authority (AVA) produced maize and cotton on a large tract of land set aside for this purpose, using hired labor to cater to the needs of the displaced population, with the maize produce distributed for consumption and the earnings from the cotton sales paid out in cash per household (Ayalew, 2001b).

The succeeding Derg regime further reinforced the practices with a national villagization policy. The execution of the resettlement program between 1977 and 1980 was a notable instance of this regard (Fana, 2021). Settlement defined the status of being and becoming a citizen at the time (and still implicitly does today) (Alemmaya, 2008). The motive was to permanently 'settle' the semi-nomadic pastoralists via the introduction of irrigation agriculture (Fana, 2021; Woldeab, 2003). Further, the rural land proclamation of the time established public ownership, but its implementation tacitly favored settlers over nomads, urging permanent residency and tax payments to qualify for land occupancy (Alemmaya, 2008).

This has promoted settling locals in permanent villages and the resettlement of non-locals from other regions to Karrayu land, which the government often depicts as underutilized. The Fentalle Irrigation Scheme has also encouraged the resettlement of the Karrayu pastoralists in recent times. This project has resulted in the resettlement of 4,500 Karrayu Pastoralist households out of the foreseen 22,000 households (Girmu, 2011).

On the other hand, the creation of the previously mentioned large-scale farms and projects in the area facilitated the influx and resettlement of migrants on Karrayu land. As previously stated, the resettlement linked to the labor migrants was also very important. About 100,000 influxes of laborers came from the highlands to work on the irrigation schemes in the Awash Valley during 1975–1976 (Kloos, 1982b). Many labor migrants who arrived to work the large irrigation farms in the Karrayu did not return to their original location after their contracts expired; instead, they permanently settled in the area (Alemmaya, 2008). Many of them arrived with their family and relatives and immediately engaged themselves in buying and keeping livestock in the surrounding areas of the plantation. Some of them also embarked on farming in the area by entering into different land transactions, which have been introduced and pronounced since then. These processes further create pressure and competition over the already dwindling local resources.

The Ittu and the Somali are among the external groups that moved into Karrayu land. The Ittu Oromo group initially fled to the Karrayu area in the 1950s from their original place in West Harerghe highland due to a resource conflict with the Issa group (Buli, 2006). The expansion of Issa into the Ittu imposed a tremendous push on Ittu migration and settlement on Karrayu territory, which had already shrunk due to the development projects (Kloos, 1982a, 1982b). The Somali settlers also first appeared in the area following the construction of a railway station during the Minilik regime (Buli, 2006). However, both groups have gradually increased over time due to intermarriage and the accommodating local culture of Mogasa, among others (Ayalew, 2001b). Since the 1970s, a significant number of Ittu, Somali, and Argoba people have also resided in Karrayu territory due to the national land reform. Taking advantage of land reform, a great number of migrants arrived and encroached on the Karrayu land at this time (Girum, 2011). The number of settlers was aggravated further by the 1974 and 1984/85 drought which contributed to a substantial surge in migrants seeking land in Karrayu (Alemmaya, 2008; Ayalew, 2001b).

These settlements were made on large tracts of Karrayu land, putting pressure on the traditional range lands. Such an influx of external migrants has also impacted not only the local demography but also social relations. It causes resource rivalry, strains on infrastructure and services, and potential conflicts between the different groups.

3.3.3. State-Karrayu Relation: Dynamics and Continuity

Apart from the long-term neglect of pastoralists and disturbed pastoralist-state relations in Ethiopia, there has been a considerable change over time. This is remarkable following the 1991 political restructuring and implementing a federalist governance system. During this time, the EPRDF government has persuaded a decentralization policy along ethnic regional line. The advent of a decentralized federal system of governance promised to eliminate the historical power hegemony of the center, instilling hope and optimism in the periphery (Markakis, 2011). It has in fact given better room for pastoralist inclusion in the development agenda at the early years. This was noticeable with increased attention and interest to pastoralism and the institutional representation of pastoral concern (Hagmann & Alemmaya, 2008).

For the first time in history, the pastoralists were considered to be part of the political domain as a strategy for the government to elicit more support from previously marginalized groups. This was followed by the establishment of the Pastoralist Standing Affairs Committee in 2003 at the parliamentary level, which drew members of the parliament from pastoral areas to represent the pastoralists' constituency (Hagmann & Alemmaya, 2008). It had eight pastoral and five non-pastoral members chosen by parliament and was legislatively responsible for ensuring pastoralists' issues were adequately addressed on national agendas (Morton et al., 2007). It ensured, among other things, the inclusion of pastoral issues in national policy formulation, affirmative forms of subsidiary budget allocation for pastoral activities, and national poverty eradication strategies that should account for the improvement of pastoralists' livelihoods and encourage pastoralist participation (Morton et al., 2007).

Long-subordinated and neglected peripheral pastoral areas were being administered by their people, and their culture and language have received more attention and a chance to revitalize (Markakis, 2011). Pastoral individuals are also included in the civil service, cabinet ministries, and army, although they are not receiving adequate representation (Duguma, 2013). Pastoral issues have been integrated through ministries (for example, education and

health) (Markakis, 2011). The regions have also established separate institutions responsible for pastoral affairs, such as the Oromia Pastoral Areas Development Commission, the Pastoral Development Commission in the SNNP region, and the Pastoral Coordination Office under the regional Bureau of Rural Development in the other regions (Little et al., 2010).

Along the same line, the ethnic-based federal system has resulted in administrative reform, with Karrayu being under the jurisdiction of the Oromia regional state. The Karrayu territory, which was originally administered as the Yerer and Karrayu Awuraja, was reorganized into Fentalle-Berehet in 1991 with the same district status and eventually created the current Fentalle district based on ethnicity in 1995 under the Oromia regional state (Ayalew, 2001b). Beyond administrative reorganization, this rearrangement resulted in the Karrayu's political representation and participation within the Oromia Regional State, which has slowly risen with the Karrayu's growing awareness of their marginalized condition (Alemmaya, 2008). In this sense, some Karrayu individuals have gotten seats in parliaments at the regional and federal levels to represent the local community. They are progressively engaging in various state-organized conferences and projects at the regional and national scales (ibid). However, as the years passed, the federal system under the EPRDF became mired in party-state mergers, failing to ensure the promised equitable power-sharing and decision-making of the periphery community, including Karrayu (Markakis, 2011). Instead, it reproduced the old unfair center- periphery relations and retained the old Ethiopian nationalist mission, albeit in more subtle ways (Ibid).

Various factors have contributed to the rise in government recognition and interest in pastoralism in Ethiopia over the past few decades. Part of the explanation can be traced back to increased international financial resources dedicated to assisting pastoral groups. Notably, following the catastrophic droughts of 1995–1997 and 2000–2001, large-scale humanitarian aid and development initiatives have expanded in the pastoral area with massive financial investment (Markakis, 2011). In this context, pastoral representation and intervention in pastoral development have become economic opportunities to grasp such valuable financial resources (Hagmann & Alemmaya, 2008). The EPRDF government designed more holistic strategies and programs that targeted not only livestock and rangeland management but also focused on improving the people's social, economic, and political conditions, including the meager social services and physical structure of the area (WB, 2016). The Pastoral Community Development Program (PCDP) was one such development plan (Solomon,

2006). The PCDP was a 15-year, three-phase pastoral program that the Ethiopian government started implementing in 2003 in collaboration with multimillion-dollar funding support from the World Bank and the International Fund for Agriculture Development (IFAD). In contrast to the top-down and centralized strategy used for decades, this was intended to be participatory and empower pastoralists as well as the district and regional governments to better manage development in pastoral areas (Solomon, 2006). However, its implementation as envisioned and the promised delivery would be subject to scrutiny.

Further, the number of non-governmental and civil society organizations working on pastoralism has significantly increased. During its early years, the EPRDF created a better environment for civil society and non-governmental organizations (NGOs) to participate in the national development agenda in general and pastoralists in particular (Markakis, 2011). With this, many of these organizations focused on policy advocacy and campaigned for expanded pastoral rights and inclusions. They had been promoting for pastoralists free mobility and the best possible use of their rangelands. However, this was limited due to government decisive actions in the later years to restrict the involvement of foreign organizations in the field of human rights and conflict-related issues (Lefort, 2012; Markakis, 2011).

Following the increase in the number of NGOs, a consortium of charity organizations called Pastoralist Forum Ethiopia (PFE) was initially established for the first time in 1998 and later legally registered by the Charities and Societies Agency under the Ministry of Federal and Pastoralist Development Affairs (MoFPDA) in 2003. It was intended to positively contribute to pastoral development through pastoral capacity building and empowerment. It has also been leading the organization of Annual Pastoralist Days since 1999 in collaboration with the government (Little et al., 2010). This Ethiopian Pastoralist Day is both a cultural celebration and an advocacy opportunity, contributing to the pastoralists to share their experiences and express their concerns to those in authority (Little et al., 2010).

Care Ethiopia was one of the international organizations that started operating in Karrayu in 1995 in natural resource conservation and development (Alemmaya, 2008). The organization attempted to facilitate community-based conservation by integrating the Karrayu into the preservation of the national park to foster a sense of ownership. However, given the long history of land dispossession related to the park, it was difficult for the community members

to be willing to participate in the conservation practices, and consequently, the plan hardly succeeded.

The Gudina Tumsa Foundation (GTF) was one of the local NGOs involved in multi-sectoral development activities in the Karrayu area, including improving education access, water development, reforestation, and women's empowerment, as well as expanding its religious mission (Alemmaya, 2008). It began by establishing a primary school first in Dhebit village and, in the meantime, opening a junior school in the surrounding town to serve students who completed primary school from different villages in the district. This organization was highly reputable and respected among the Karrayu community for its immense contribution, particularly for creating formal educational opportunities for the younger generation. Some Karrayu recognized and acknowledged the organization as being far more important to the development of the locality than the government. The Karrayu elder in Gaalchaa village has this to say:

We do not see a government that really wishes for and strives to develop our community. It is the government that has brought all the bad to our community. GTF, on the other hand, has done a lot for us, expanding access to formal education for our children and engaging in different interventions to develop Karrayu. In this respect, our government is GTF, not the government you are familiar with (interview October, 2011).

According to the local informants, its popularity and wide acceptance of the organization (GTF) were not appreciated by government officials. Instead, it was marked as a potential political threat to the government, and it was fraught not to mobilize the local community against the government. Notably, following the 2005 national election, many of the organization programs related to empowerment and advocacy were denied renewal from the government¹⁹. However, the GTF ended its operation in the area during the fieldwork, though the local community hoped it would return to serve them.

The establishment of new institutional structures and the increase of NGOs have created chances for Ethiopian pastoralists, including Karrayu, to engage with the government in dialogue and negotiations (Little et al., 2010). However, neither side's endeavors go any further than changing the derogatory group name 'nomads' to 'pastoralists' (Alemmaya, 2008).

¹⁹ Interview with an expert working for GTF, October 2011 during the field work for WIDE

Apart from the recognition mentioned, the pastoralists are still considered backward. According to national policy documents such as the Food Security Strategy (FDRE, 2002) and the Plan for Accelerated and Sustainable Development (FDRE, 2006), the government's pastoral development policy has only changed the methods, while the overarching development vision has remained remarkably unchanged (Müller-Mahn et al., 2010). Subsequent national policies, even the recently released Pastoral Development Policy and strategy framework draft document (2017), have stressed the long-term necessity to transition pastoralism to sedentary farming. However, it proposes that the intervention should be participatory and voluntary rather than top-down and forceful, as was the case in the earlier era.

CHAPTER FOUR

IMAGINATION, REACTION, AND IMPLEMENTATION OF FIBID

4.1. Introduction

(Pastoral) Development is the rational activities and practices of the state to frame and manage relationships (Li, 1999). However, its meaning and outcomes have been negotiated on the ground as a result of actors' agency to think and act differently (Li, 2007), making agreement on a single meaning and understanding of it difficult. As a dominant actor, the state has established discourse to influence other social actors and attempt to create a shared understanding of the meaning of development projects as well as legitimize a specific action (Long, 2001). However, involving actors produces their own narrative in specific ways that may or may not be in line with the state's projected narrative, despite often having limited political space and power to challenge the narrative (ibid). Similarly, irrigation projects are also extremely complex, engaging numerous social actors with varying interests (Woldeab, 2003). This chapter starts by discussing the overall context of the project in question. It highlights its purpose, objective, and cost of construction, among other things. It then discusses how a development project, in this case, FIBIDP, was imagined and understood differently (or similarly) at different spatial scales and various points in time. It illuminates how actors related to the project, such as the Oromia Regional State, the Federal Government, and the local people, perceived the project and its implementation.

It focuses on creating a better knowledge of the multiple interpretations of the project and the logical explanations of various actors that guide their imagination and understanding of the project. It is these divergent perspectives that place the project in a meaningful position and have also guided its initiation, earlier implementation, and current progress. In doing so, the chapter demonstrates the motive and how this development project was co-opted for political purposes. However, it is important to note that when discussing the imagination of states, whether regional or federal governments, differences in perspective among individuals working in state bureaucracies are to be expected. The individual government actors discussed here are top politicians and officials dominating the state institutions and may represent the overall perspective and directives of the respective governments with which they are associated. Similarly, the discussion for the local community mainly emphasizes critical viewpoints, though attempts were made to entertain the other dimension: positive

perspectives. The expressions and opinions discussed only represent part of the imagination of the local community towards the project. Thus, it is important to acknowledge that such labels as 'state' and 'local community' are not without risk of generalization.

4.2. The FIBIDP in Context: What is it?

There are traditional and modern irrigation schemes involving pastoralists in Fentalle district that encourage farming activities in the area. The traditional schemes are those that are usually made from local materials and managed and constructed by the community (Gebremedhin, 2015). It also includes the drainage outflow from Metehara sugar plantations and other nearby farms. Modern irrigation schemes, on the other hand, are cemented canals that are usually more sophisticated than the traditional ones (Fekadu, 2014). There are also three forms of irrigation in the area, depending on how water is accessed: gravity-fed, channel diversion, and motor pumps. According to the Fentalle district pastoral development office (FDPDO) report (2017), there were a total of 17 modern and traditional, including motor-pumped irrigation schemes, operating in 13 villages of the district. However, the FIBIDP is the largest of all the schemes in the area.

The Fentalle Irrigation-Based Integrated Development Project (FIBIDP) is a regionally implemented development venture located in the Fentalle and Bosset districts of the East Shoa zone in the Oromia region. It is part of the five-year Oromia Growth Corridors Plan (OCGP), which was developed in 2006 as a comprehensive regional development initiative focused on the effective exploitation of untapped water resources (Nassef & Mulugeta, 2012). The plan was aimed at enhancing diverse land uses and alternative livelihood options such as livestock production and irrigation farming in pastoral areas (ibid.). In doing so, it ultimately feeds into the grand national policy that envisions the 'voluntary' settlement of pastoralists in the long run.

During this time, the regional government has also implemented small-scale modern irrigation schemes using its own professional capacity and funds in different parts of the region. In this regard, the Sogido projects 1 and 2 and the Lugo irrigation projects could be mentioned as examples of irrigation projects in the area that were funded with the regional budget and implemented by the Oromia Irrigation Authority. These projects mainly benefited three villages in the districts, namely Saara weebaa, Godoo Fafaatee, and Gaara Dimaa

Villages, irrigating 280, 97, and 46 hectares, respectively²⁰. However, among others, the FIBIDP differs from these projects due to the fact that it is the first regionally implemented large-scale modern irrigation project covering a wider area and addressing a large number of beneficiaries, as well as its high implementation costs.

The project (FIBIDP) was initiated following the visit²¹ to the Red Flag Canal in Hanna Province, China, which is 70 km long and was entirely dug by hand labor in the 1960s to solve the problem of drought (CGTN, 18 September, 2019). It draws water from the Awash River, the largest basin on which other modern irrigation schemes have been based since the 1950s (Reta, 2018). The project was intended to cultivate 18,000 hectares of land in 13 villages (11 of which are in Fentalle, and the remaining two are in Bosset districts; (OWWDSE, 2009, 2011). It was funded by the regional government of Oromia, which redirected the subsidy budget from the federal government for the food security financing scheme to support the Productive Safety Net Program (PSNP) in the region²². Its cost was initially estimated to be between 350 and 400 million birrs (USD 6.6–7.5 million), but it exceeded 741 million birr (more than USD 13.78 million) during fieldwork and is expected to be much higher because construction was not yet completed at the time²³.

The Fentalle district has been tagged as one of the most food-insecure areas in the region, with a significant proportion of households experiencing acute food crises and difficulty meeting their food demands. In 2007, nearly half of the rural populations (30642) in the district were food insecure and depended on the Productive Safety Net Program (PSNP), of whom 15760 were working on public works and 14882 on direct supports (OWWDSE, 2009). In subsequent years, the number of people affected by food shortages increased, demanding interventions to curb the problem (OWWDSE, 2011). In view of this, the project sought to bring about the betterment of the local pastoralists and eventually settle them in the long run. It represents one of the water-based pastoralist improvement projects that

²⁰ Interview with the Fentalle district irrigation head, October 2020

²¹ Abadula, then-Oromia Regional State President and Chief of OPDO (henceforth; KII5), in an interview with Bridge Media on January 3, 2024.

²² Interviews with a former State Minister of the Ethiopian Ministry of Water Resources, who was also a lynchpin at the regional and federal levels and was instrumental in the project's conception and implementation (henceforth; KII1), March 2021, and with a former Oromia disaster prevention and food security commission commissioner (henceforth; KII2), June 2023. KII2 was also a member of the regional food security steering committee and played an important role in the implementation of the project from the Oromia side.

²³ Interview, the project construction site manager and engineer, December 2020.

government officials and planners in Ethiopia have dreamed of and emphasized as a poverty eradication and pastoral transformation strategy (Pertaub & Stevenson, 2019).

According to OWWDSE (2009, 2011), the project was designed to benefit a total of 51,813 people and 8,025 households drawn from the two districts. In Fentalle District, the project was expected to benefit 43,926 rural inhabitants living in 6,752 households, accounting for 71% of the total rural population in the district in 2007 (CSA, 2008). Of this, 1,871 households were female-headed²⁴, while the remaining 4,881 households were male-headed beneficiaries. Likewise, it was also planned to address a gross population of 7,887 and 1,273 selected households in the two adjacent villages (namely Qawa Hara Mirqisa and Huluqo Huruta) of Bosset District. Of these, 60 households were female-headed and the remaining 1,213 were male-headed.

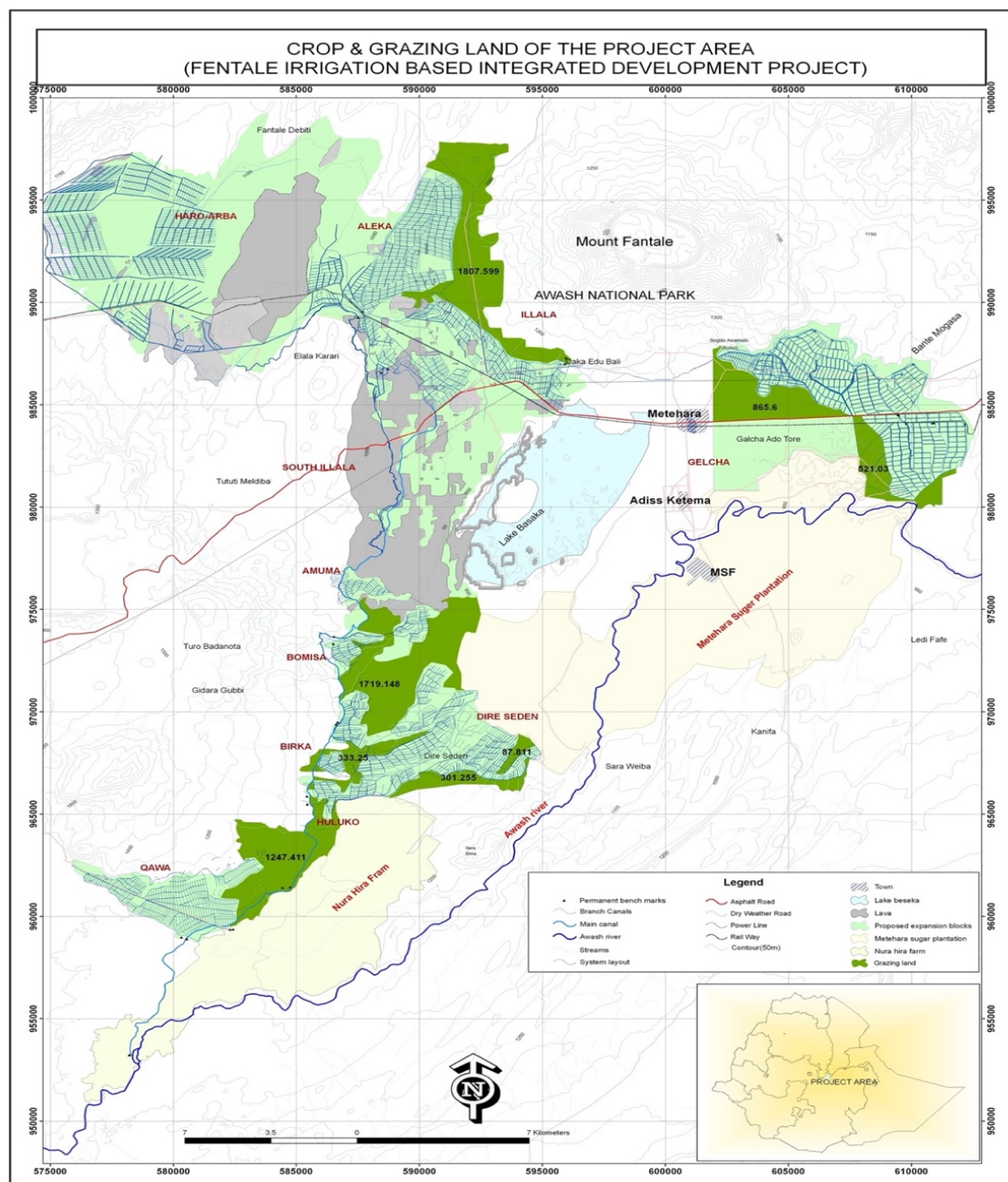
The project in the official (among the regional officials) circles was hoped to ensure food security and alleviate deep-rooted poverty by supporting livestock production and encouraging staple and cash crop production (Fekadu, 2009; Tsion, 2011). Unlike the previous large-scale projects, this one is said to be 'unique' in terms of shifting the dominant approach of development by dispossession to development through inclusion, from which the local population will benefit fully. It also foresees 'radical transformation in the community tradition' (OWWDSE, 2011:11) that involves social, political, economic, and environmental changes. To this end, crop cultivation is emphasized and becomes the core target of the project intervention, with others, such as livestock-related activities, as a subsidiary element. Following the suitability of the project command area, the project document proposed to grow different crops for cash as well as a staple food. The crops include maize, sorghum, groundnut, onion, tomato, sugar cane, forge, and fruits (OWWDSE, 2009). Some of these crops, such as maize, sorghum, groundnuts, and fruits, are mainly produced for household or animal consumption, whereas crops such as onions and tomatoes are mainly grown for market purposes.

Moreover, as an integrated development scheme, the project is supposed to improve the availability of livestock pasture and feed that enhance the production and productivity of livestock. The project is expected to support the cultivation of sufficient quantities and

²⁴ Unlike much of what is common in highland rural areas, the local community and officials often refer to the first wife in polygamous households as being independent and female-headed. This definition is often used during selection of PSNP beneficiaries, for land distribution, and for other benefit packages targeting households.

quality of fodder such as alfalfa and pasture, increase the availability of crop residue that serves as animal feed, and promote fattening practices induced by increased feed production. This consequently contributes to the modernization of livestock management practices and to future livestock development prospects.

Figure 4: The FIBIDP catchment area



Source: Oromia Water Works Design and Supervision Enterprise

4.3. Divergent Views Within the State Structure: FIBIDP as symbol of autonomy²⁵ vs waste of money

The state is ‘cobbled together’ of multiple structures and institutions constituting people with different interests, negotiating and sometimes competing and contradictory ones (Bierschenk and Olivier De Sardan, 2014:5), who create their own narratives and influence development practices. Bierschenk and Olivier De Sardan (2014:14-15) made clear the diverse and divergent practices within the state, recognizing the state as ‘a bundle of practices and processes’ resulting from the intricate power struggles of competing interests that produce different effects, either solidifying or weakening the state. Watts noted that the state, ‘be opened as a theatre in which resources, property right, and authority are struggled over’ (1989: 4). This suggests that divergent interpretations of state development and its practical endeavors are better understood when state structures and institutions are dissected rather than viewed as a whole and monolithic entity. In this line Welford et al. (2013) call for the ‘need to know more about the nature of states themselves...the motivations of particular actors as well as the capacity of governments and the political cultures that shapes the paths from policy to practice’ (P:191).

In the post-1991 political and administrative reconfiguration of the state along ethno-linguistic lines, the question of who benefits from the national resource has become a political issue with strong ethnic connotation. The institutionalization of ethnic federalism²⁶ was supposed to ensure the equitable allocation of national resources and to decentralize power to its constituent regions to make autonomous decisions on development issues. However, this has not been implemented as hoped in the provision, resulting in a gap between principle and reality (Abbink, 2011).

Although the federal government is ostensibly supposed to manage a fair distribution of development projects across its constituent regions, critiques point out that there was differential treatment of some regions such as Tigray on the basis of the impact of the war of

²⁵ refers to the implicit and explicit effort made by the Oromia regional state to gain autonomy within the national state power hierarchy in order to make independent decisions on development issues affecting the region.

²⁶ Following a four-year national protest that caused power reshuffling, the coalition of the core ethnic-based parties forming the Ethiopian People’s Revolutionary Democratic Front (EPRDF) merged together, including all other regionally based parties, to form a single centralized party called the Prosperity Party in 2019, leaving out its dominant founding member, the Tigray People's Liberation Front (TPLF).

liberation (Regassa, 2016; Assefa, 2012). In such a context, the Ethiopian state exhibits what Migdal (2004) refers to as the dual nature of the state: imagined as a coherent and unified entity but fragmented in practice, hinting at the existence of a variation in the understanding of development within the political structures and institutions. Thus, viewing the state, such as the Ethiopian state, as a unified entity from the outset obscures the plurality of social actors and their interpretations of development within state structures (Asebe, 2016).

The development projects such as the FIBIDP draw diverse interpretation and understanding within the state structures. As it is discussed in what follows, the implementing regional state, Oromia, and the federal government perceive the project differently; it is a symbol of ‘autonomy’ for the former and a ‘waste of money’ for the latter.

4.3.1. The Project as ‘anti-poverty’ and a Symbol of Regional Autonomy– the View from Oromia Regional State

Among officials and politicians in Oromia regional state, the project was viewed as more than just a poverty-reduction development venture. It was regarded as a lasting solution to chronic food insecurity and pastoral transformation, as well as a tool for the region to advance its political goals, not only over the local pastoralists but also over the federal state.

This has to be understood in the broader historical context of the federal state formation in the country and the inherent unequal power relations among the political parties that led the country. Following the overthrow of the military Derg regime, Ethiopia was reestablished as a federalist state led by the Ethiopian People’s Revolutionary Democratic Front (hereafter EPRDF). This democratic front was formed with a coalition of ethnic-based parties, of which the Oromo People’s Democratic Organization (OPDO) ruling the Oromia region was part. The country was divided into nine national regional states, largely ethnic-based, and one city, but later two cities with independent administrations, which were thought to have power autonomy in rhetoric. However, it was dominated by a single ethnically-based party, the Tigray Peoples’ Liberation Front (TPLF), which created dependent satellite parties at regional levels to ensure and maintain the hegemony of the federal government (Clapham, 2002, 2009). This shaped the patron-client relationship between the federal government and regional states (Clapham, 2009). The federal government owned authority and dominance over the political instrument, while regional states were recipients and beneficiaries through

subordination but also lacked decision-making freedom (Ashami & Lydall, 2021; Clapham, 2009; Kidane, 2001).

The project in this regard was conceived as part of a resistance to the federal system to delicately reclaim and defend regional autonomy in decision-making as well as to build the capacity to do development independently. The federal government dominated power and made exclusive decisions over some aspects of development, particularly, large-scale development ventures involving land control and transfer for investment (Ashami & Lydall, 2021; Assefa, 2012). The regional state authorities narrated the project as the first of its kind and regionally designed and implemented to demonstrate the regional state's growing capacity to independently implement such a large project, as well as its political strength to resist and confront the federal state in the process²⁷. Yet the resistance was made subtly rather than directly and boldly.

The authorities in the Oromia region employed the strategy of what James Scott (1990: 4-5) calls 'public transcript' and 'hidden transcript', in conveying their position on the project vis-à-vis the federal government. The former refers to the performance act of the subordinate (the regional state) to gain acceptance and credibility in the presence of the dominant actor (the federal government), and the latter to the act of the subordinate behind the scenes of the dominant group that may 'confirm, contradict, or inflect' what is already staged in the public transcript. While seeking budget and recognition from the federal government, they perform acts of subordination, but in communicating with local communities, they present the project as a resistance to the federal government's unfair allocation of budget and as a guarantee for the region to be independent from federal subsidy in the future.

The regional state's overt description of the project as symbolizing an art of betterment is part of the public transcript. It was flagged and discoursed that the project is a panacea to alleviate deep-rooted poverty and food insecurity and cause improvement among the Karrayu pastoralist community. This justification was meant to persuade and convince the federal government and the general public²⁸, though it is also part of the regional's intended ambition. Poverty was used as a 'discursive means in ... fulfilling desires and presenting arguments or rationalization for actions taken' (Long, 2001: 18). Such a narrative helps to establish the creditability of the project and legitimizes the actions of regional politicians, but

²⁷ Interview, KII2, 31 March 2021; KII5

²⁸ Interview, WO3, 20 January 2021

it also conceals the political goal that the project is intended to achieve (Escobar, 1995; Ferguson, 1996).

The financing of the project in defiance of a federal government directive, as well as the refusal to involve a federally appointed professional for implementation, were examples of opposition in this case²⁹. Joint international development partners have granted PSNP (Productive Safety Net Program) funds that are only intended to support the food security schemes through conditional and unconditional safety net resource transfers (Dessalegn, 2013). The federal government also provided subsidy funding to strengthen food security schemes initially for four regions, such as Tigray, Amhara, Oromia, and SNNP, that exclusively serve to build the resilience of chronically food-insecure households through loans³⁰. At the time (in 2005), Tigray received 1.7 million ETB, while Amhara and Oromia got 800 and 500 million ETB, respectively³¹. This subsidy budget was allocated based on the historical trajectory of the community and the extent of chronically food-insecure households in specific regions. The federal government then strictly prohibited the use of such funds for other purposes, such as long-term development projects, including large-scale irrigation ventures. Nonetheless, the Oromia regional state used the budget to continue funding the implementation of the FIBID project, despite criticism and accusations from top officials in the federal government. A key informant explained the case as follows:

We started funding the project with money from the food security budget. Oromia had previously received a share of between 350 and 500 million ET Birr (USD 6.5–9.3 million) from the federal government as part of a subsidy for the food security financing scheme. We know that a large portion of this money was squandered on per diem and other frivolous expenses. We believed that solving the community's food security problem in this manner was impossible, but we created dependency. They (the federal government) wanted us to keep spending money in the same way in order to maintain the local reliance on donations and almsgiving. However, we designed and began implementing the project to bring long-term development and ensure food security....We received a lot of criticism, but we persisted in our efforts.³²

²⁹ Interview, the Vice Manager of the Oromia Regional State Agriculture and Irrigation Bureau, March 2021.

³⁰ Interview with KII2, June 2023

³¹ Ibid

³² Interview with KII1, March 2021.

In support of the foregoing, the former regional food security commission commissioner recalled the context and the opposition, saying:

A regionally established steering committee did an assessment in the chorionic food insecure areas and suggested water-related projects that could fit into the local context, solve the problem at hand, and bring development to the local level. We found that subsidizing food-insecure households neither lifted the beneficiaries out of poverty nor was effectively utilized. With this, we initiated many projects in pastoral and agro-pastoral areas in the region, including the Fentalle and Tibella (in adjacent districts) irrigation-based integrated development, using the food security subsidy budget. However, the region was denounced for using the money against the federal government directive, and even we were told to stop, but the region resisted and kept on executing (Interview, June 16, 2023).

Further, the federal government has retained fiscal control, subsidization, and redistribution authority over the regional governments though both generate revenue within their respective jurisdictions (Abbink, 2011; Tegene, 2007). This made the regional states financially dependent and subjected to imposition to spending the budget based on the wishes of the federal government rather than the regional prior interests and development needs (Tegegne & Kassahun, 2007). For example, the Oromia regional state has been one of the largest national revenue generators through tax collection but has been heavily reliant on the federal government's financial redistribution and thus incapable of initiating a large-scale development scheme independently (Kidane, 2001). Thus, funding of the specified project was in violation to the budget line and the dogmatic practice that was contested by officials at federal level but reflect part of the effort that the regional officials undertaken to have regional autonomy of financing and making development.

To further highlight the contest over the project and the regional commitment to envisioning an independent development project, the same informant quoted earlier continued to narrate that the project was implemented through "struggle" and "confrontation."³³ It was partly to persuade federal officials and local residents who had initially opposed the project and partly to establish a new enterprise and pool qualified technocrats to execute the project. For example, at the time, the establishment of a regional development institute, Oromia Water

³³ Interview with KII1, March 2021

Work Design and Supervision Enterprise (OWWDSE), represented part of the capacity-building to implement the project with regional capacity and institutional setting, as well as preparation to refuse a possible professional assignment from the federal government³⁴.

Local informants and bureaucrats at the district and regional levels frequently also credited and referred to the project in the names of two political figures who had been in confronting and tiresome negotiations with the federal government. These individuals are Abadula Gamada, a well-known figure in Ethiopian politics, having been a founding member and leader of the political party, Oromo Peoples' Democratic Organization (OPDO) as well as a federally elected member of parliament. He was also the president of the Oromia regional state at the time (2005–2010), and he had served as Minister of the Ministry of the Ethiopian Defense Forces at the federal level just prior to his presidency. The second key figure was Shiferaw Jarso, a top member of the OPDO who also served as the federal government's representative to the House of People's Representatives and had previously served for a decade as a Minister of the then Federal Ministry of Water Resources. Because of their contributions to the regime, these two individuals were also appointed to various top leadership positions at the federal level in the years that followed. Their personal agencies related to experience and power attached to their positions put them in a position to better negotiate, convince, and sometimes resist others in the federal government power structures (cf. Long, 2001).

In consolidating similar views, a Karrayu elder³⁵ stated that the two prominent politicians had been at odds with the federal government, including the then prime minister, due to the project. The elder believes that Abadula was removed from his regional presidential position, among others, due to the dispute over the project and also due to his popularity³⁶. This justification, however, is that during his regional presidency, he passed decisions against the

³⁴ Interview with KII2, June 2023

³⁵ Interview, Karrayu elder who served as a village chairperson during the initial implementation of the project and was later elected to and served on the regional council (henceforth; KII3), February 2020

³⁶ In his detailed interview, the informant stated that late Prime Minister Meles was unhappy with the project and at odds with Abadula for two main reasons, which he assumed strained their relationship and was also one of the reasons for the latter's demotion from the presidency in late 2010. First, Melese disrespected the pastoral community, and there was a prior intention to expand the state-owned sugar plantation in the project area, which Meles supported. Second, Meles saw the project as part of economically organizing the Oromo, which he had been cautious about in order to ensure that such a project in the region would not have political implications, undermining his power. In support of the informant's second point, Meles once told local media that, given their majority in the country, nothing, military in Ethiopia or military in Africa, could stop the Oromo once they went into full-scale resistance, implying the need for serious measures to be taken before this occurred, including against activities aimed at strengthening Oromo solidarity, as this was viewed as a threat to the government.

federal government in favor of the Oromo, including aggressively organizing the Oromo, which enabled him to gain popularity at the time. In fact, Abadula's removal from presidency is considered among many Oromo as a demotion due to his popularity, which Prime Minister Meles Zenawi considered as a threat to his own power (OPride, October 8, 2017).

Meanwhile, this (confrontation over project implementation) rewards the regional governing party with political popularity (at least among the locals), depicting the message that the regional governing party is committed to its inhabitants³⁷. This hints at the project's importance as a political tool for OPDO and its members to regain regional and local constituencies and acceptance. For instance, as informants repeatedly mentioned such confrontation made the two earlier mentioned figure OPDO leaders become popular and got recognition in the area. As the party originally created by Tigray People's Liberation Front (TPLF) in late 1980s from war captives (Clapham, 2002, 2009), OPDO did not have political legitimacy in Oromia much also due to its weakness to in defending Oromo interest at the federal level (Asebe & Getachew, 2021). Referring to Gudina (2003), Asebe and Getachew (2021: 14) rightly explained it that the party was not autonomous and powerful enough to decide on regional development issues but was simply a 'surrogate and puppet party(ies)' serving the power consolidation of the federal state. Consequently, the party had lost support among the people in the region. The former chief of a party also confirmed this in his interview, explaining that the party (OPDO) was in trouble until things began to improve in the 2000s: first, it lacked acceptance and recognition among the Oromo community; second, other opposition Oromo political parties considered the OPDO not representative of the Oromo community; and third, among the members of a coalition party itself, the OPDO was ranked inferior and weak³⁸.

Therefore, the firm confrontation and the push for the implementation of the project were not derived from the genuine development of local pastoralists; rather, it was part of the strategy of regaining political constituencies and an attempt to improve the public image of the party³⁹. During his presidency in Oromia, Abadula for instance gained popularity among the Guji Oromo pastoralist people because of refusing the federal government's plan to relocate the people from Nech Sar National Park (Abebe, 2016).

³⁷ Interview KII3, 9 February 2020

³⁸ KII5 interview with Bridge Media, 3 January 2024

³⁹ Interview WO3, 20 January 2021

4.3.2. The project as ‘waste of money’ – the View from Federal Government

Irrigation was a priority policy agenda item for the federal government at the time. However, the FIBIDP was met with criticism and opposition from prominent politicians and federal state leaders. The project was portrayed as squandering vast sums of money on 'undeserved' people who were once derisively referred to as 'Zelan' (wonderers). The resentment began with the late Prime Minister Meles, who was skeptical of the local pastoralists' commitment to farming and smirked as he visited the area for the first time after the regional government proposed the project⁴⁰. This is not surprising given that the same person publicly referred to pastoralists as backward a few years later, on the occasion of the 13th anniversary of Ethiopian Pastoralists' Day on January 25, 2011 (Asebe et al., 2018).

This was followed by strong rejection from another federal level politician called Adissu Lgesse⁴¹, who was deputy Prime Minister and Minister of the Ethiopian Ministry of Agriculture and Rural Development at the time. His accusation of the Oromia regional state officials and rejection of the project were based on questioning the spending of such large sums of money on pastoralists as well as the redirection of the federally allocated subsidy funds from the food security schemes, which he claimed was illegal for diverting funds from already planned and federally approved activities⁴². One of the main concerns of top federal officials about such a deviation was that it would also encourage other regional states to follow suit, undermining the autonomous power of the federal government over the fund and other related issues⁴³. The fact is that any attempt to depart from the federally designed uniform system and prototype was perceived as insurgent (Markakis, 2011).

Some members of parliament were also opposed to the project, seeing it as a waste of money. It was debated in the federal parliament assembly and even aired on national television at the time. The interviews with officials in Fentalle District also revealed that the project had sparked a great deal of discontent and strife at the federal level. In this regard, the former local development agent (DA)⁴⁴ stated that "the parliament members' justification was as if the Karrayu community had no farming experience and the construction of the project was

⁴⁰ Interview KII1, March 2021.

⁴¹ He was also a pioneer and leader of the Amhara Peoples' Democratic Organization (APDO) and president of the Amhara National State before his post at the federal level.

⁴² Interview KII1, March 2021, interview with KII2, June, 2023

⁴³ Interview with KII2, June, 2023

⁴⁴ Interview a former DA who participated in project implementation but worked at the district office during field work (henceforth; WO1), November 2020.

considered pointless but just spending money." The district irrigation head also augmented the idea, saying "some members of parliament accused the Oromia regional government of playing with the federal money⁴⁵ meant to support food security program to construct large scale irrigation for the community who do not know about farming."⁴⁶

The paradox here is that, given that irrigation has been emphasized and sought to be the strategy to settle and lead to pastoral development (Federal Ministry of Finance and Economic Development (FMoFED), 2003; Pertaub and Stevenson, 2019), why then are officials and some politicians at the federal level found to be strong opponents of this particular project? This is due, in part, to the long-standing state-pastoralist relationship and the way pastoralists have been represented in the process.

The State-pastoralists relationship has historically been characterized by the center-periphery dichotomy. The center, tracing its origin to highland and agrarian identity and a source of power, defines civilization and development, while the periphery is lowland pastoralists at the margin of the country and has been viewed as a prostrate subject (Getu et al., 2022; Rettberg, 2020). Beginning in the second half of the nineteenth century, the center-periphery encounter has been based on an attempt to incorporate the pastoralists under the central polity as a process of Ethiopia's state expansion and making at the lowland frontiers (Markakis, 2011). The geographical imagination of pastoralist lowland as underdeveloped and unutilized empty space served as legitimizing instrument for violent state intervention (Asebe & Korf, 2018; Getu et al., 2022; Markakis, 2011). This was based on the notion that pastoralists are archaic, with no agency and no hope of making development and productively exploiting their nature-endowed untapped resources on their own, necessitating outside intervention. The state despises and undermines pastoralists and their culture. The viewpoint gives the central government the upper hand and legitimacy in making development (pastoral development) decisions, while denying pastoralists the opportunity to actively participate and have a say, and instead makes them recipients of the centrally projected intervention (Mosley & Watson, 2016).

⁴⁵ It has to be noted that donor money went into the PSNP transfer, while federal funds were allocated to support a complementary set of food security activities collectively known as other food security programs (OFSP).

⁴⁶ Interview with District irrigation head, who was in the same position during the inception of the project and has been actively involved in its implementation (henceforth; WO2), October 2020

This has continued to constitute and shape the trajectory of government interventions and development practices in lowland areas to the present day (Puddu, 2022). Indeed, the EPRDF's ethnic based federal policy has increased pastoralist inclusion and representation by, for example, establishing separate departments to coordinate and facilitate pastoral development (Abduselam, 2019). Nonetheless, the state's perspective on pastoralists confirms Galaty's (2013) contention that the biased attitude continues to influence state bureaucrats and policymakers in determining pastoral development intervention. Such a perspective further undermines and reduces pastoralists to 'second class citizenship' (Ronald, 2014: 216), as the narrative by federal representatives posits that pastoralists in general, and Karrayu in particular, have no equal right to enjoy the national budget allocated to other members of the communities, such as agriculturalists and urban dwellers.

Moreover, part of the paradox has also been associated with being hesitant about regional capabilities in making development, which calls into question the actual practice of the federal system in empowering the regions. In this regard, the district irrigation head mentioned above continued, "They (some members of parliament) also debated that the region lacks the capacity to execute on its own and claimed that without the involvement of the federal state, this project could not be realized at the regional level." This explanation portrayed the federal government as powerful and capable of 'all knowing and doing,' while undermining the ability and autonomy of regional states in decision-making. It also demonstrated that the dominant-subordinate political relationship culture persisted and was idealized in the minds of parliamentarians who were supposed to oppose it. This raises concerns about the difficulty of establishing independent and autonomous regional states in the near future.

Furthermore, the project was used to symbolize ethnic representation rather than simply being a development intervention, adding complexity and explaining part of the paradox raised. Both the federal and regional governments attempted, in their own ways, to present the project as an ethnically focused project in terms of target beneficiaries and inherent intention (including how and by whom this project was initiated and implemented) in order to garner support, but for opposing reasons. This demonstrates that similar narrative has been utilized by the two actors in order to build on their respective viewpoint and image. While the federal government used it to mobilize ethicized parties to consolidate power against project

implementation, the regional government used it to persuade the local people for implementation and has backing from the grassroots community.

Some federal officials, including members of parliament, purposefully linked the project execution to ethnic politics in order to incite opposition from downstream areas (Afar regional state) and exert pressure on the regional government. An informant narrated:

Given that I am an Oromo and was previously the Minister of Water Resources, I was allegedly accused of using my knowledge and power to benefit the Karrayu Oromo, diverting the flow of the Awash River, and denying water to downstream Afar communities while being expected to be fair as a federal position holder.⁴⁷

The allegation above stems from the characteristics of Ethiopian ethnic-based federalism, which created ‘internal frontiers’ and sharp distinctions among people based on their ethnic nationalities (Clapham, 2009: 187). In such context, development interventions involving resource use, allocation, and administration are viewed through the lens of ethnicity, resulting in friction and tension among regional states as well as between regional states and the federal government (Asebe, 2016; Assefa, 2018). Elites are compelled to prioritize their own ethnicity not only for the benefit of their home communities, but also to effectively manipulate them in order to generate political backing and support (Clapham, 2009). The two earlier mentioned prominent politicians, both affiliated with their respective ethnic parties but serving at the federal level, are examples of this; one was insisting for the project to benefit his ethnic group, while the other was opposing it because it did not benefit his ethnic group. Such ethnic-based political identity and representation complicate the nature of Ethiopia's ongoing state-making and governance system, and undermine the trustworthiness of bureaucratic institutions.

It is also worth mentioning that, in addition to what has been discussed, there were objections to the project due to concerns that the funds would be misused in the name of the implementation of the project. Some top officials in the federal government and also in the Oromia region had challenged the implementation of the project with the view that the fund

⁴⁷ Interview KIII, March 2021.

would be abused and extravagantly spent as the execution had begun without any research or project design⁴⁸. To paraphrase the key informant at length,

Following the suggestion of the regional steering committee, the regional president decided to implement the project and ordered that no more time be spent on study and design. The project then began with the ‘design-and-build’ modality, in which the designing and construction processes were carried out simultaneously. This drew criticism from regional officials as well as federal officials (interview, June, 16, 2023).

The project implementation was started without a study design in hand. The studies that were pertinent to determining and guiding project execution were followed by project implementation, and their final reports were also issued subsequently. In this regard, the complete reports on the study design of the project, such as socio-economic assessment, crop production and agronomy, identification of water potentials, hydrology, hydrogeology, irrigation and drainage design, and feasibility of the project, were produced after 2008. Most of the study reports were prepared in 2009 and 2011, once project execution was underway. This caused the repeated modification of the project design and readjustment and rebuilding of the already-implemented structure, resulting in extra costs for the region⁴⁹. This had contributed to hesitation and a lack of trust among some officials.

4.4. Contestation and Divergent Views Among Local Communities

4.4.1. Memories of the Past Dispossession: Initial Perception and Early Response of the Community

The local community had strongly opposed the project's inception. At the time, the project was viewed as a tool of land confiscation and intimidation used by the state to further marginalize local communities. This perception was shaped by past memories of their interactions with the government. It is very much based on experiences and understandings of the past: historical relations with the state, experiences of prior development projects and their associated costs and rewards, and historical power dynamics between different groups (cf. Mosley & Watson, 2016: 455). Such collective memory has manifested itself in everyday forms of life and has an impact on how the present is perceived and represented (in this case, the project) (Constance de, 2018).

⁴⁸ Interview with KII2, June 2023

⁴⁹ *ibid*

Historically state-pastoralists relations in general and Karrayu as part of it have been marked by practices of violent land alienation, resulting in multiple forms of marginalization: economic, political, and ecological of the local community (Alemmaya, 2008; Markakis, 2011). The subsequent regimes have control resources and consolidated power in the pastoral territory through force and/or large-scale investments (Asebe et al., 2018). The large-scale projects in the area, such as Metehara sugar estate and Awash national park, caused the appropriation of more than 70,000 hectares of Karrayu land, for which the community has been appealing and resisting the act ever since the imperial regime (Buli, 2006). However, previous and subsequent regimes downplayed pastoralists, reacted harshly, and continued confiscating more lands, thereby shaping the long relationship (Markakis, 2011, 2021). Many local Karrayu reaped little benefit from the process, but were evicted and denied access to their land and water resources for livestock, human, and spiritual purposes (Ayalew, 2001b; Buli, 2006).

This government's land confiscation and eviction of locals in the name of development is a real and living memory echoing in the minds of the Karrayu elders and passed down to the current generation. As many Karrayu informants⁵⁰ expressed their discontent, there was never a time when the government implemented projects with the genuine intention of assisting the local community, all of them directed to achieve its subtle mission. Various Ethiopian regimes promised to improve the social and economic conditions of the local community, but none kept their words (Buli, 2006). For instance, with the establishment of the Metehara sugar factory, the government made unfulfilled promises to the Karrayu pastoralists to provide them with 100 kg of sugar per household on an annual basis in compensation for the loss of 15,600 km² of local grazing land to the sugar plantation (Fekadu, 2016). Thus, it is now common to hear Karrayu refers to the government as "she," not to express femininity and love but rather to express hatred and agony from the past, as well as a lack of hope that the government will do better for them in the future.

Thus, with this sentiment, the coming of the project was initially perceived as the continuation of the past tradition and further land confiscation to expand the existing sugar plantation in the area. Many members of the community were, in fact, still suspicious of the government and had no confidence that the project was introduced for them. This created difficulty for politicians and officials in convincing the local community, who were

⁵⁰ FGDs Karrayu Elders in upper and downstream villages, December 2020

vehemently opposed to the proposal, citing previous land alienation. An elderly key informant from the area recalled the cases in the blink of an eye:

The Karrayu land was much larger than it is now. First, Hailisalies (ruled the country 1930-1974) appropriated our best dry season grazing area for government projects, Awash National Park and the Metehara sugar plantation. Then Mengistu (ruled 1974-91) continued to enclose more land in order to expand on these projects. Our fathers had resisted and petitioned to reclaim the land or, as a last resort, to receive a reasonable benefit from the projects. Despite this, they were deafened and ousted from their father's land. They did not receive the land back, nor did they benefit from the project, though a few Karrayu were hired as guards. We are now forced to live on shrinking land that cannot support livestock production, rendering us helpless in the face of survival. So, how can we put our trust in the government?⁵¹

In their hidden transcript, they (regional officials) established the dichotomy between the regional state and the central government as 'we' and 'they' to persuade and negotiate with the local community. They presented themselves as 'we,' are from and for Oromo, and have no intention of harming the Karrayu Oromo community as 'they' (central government) did previously. Instead, they are working and struggling to 'defend' the Oromo people, including from the federal government. In doing so, the regional elites drew a line between the federal and regional states, portraying the regional state as a collection of Oromo individuals working for Oromo people, while the federal state was anti-Oromo. Ethnicity is framed and used to invoke local pastoralists, serving as a tool for mobilization. Furthermore, regional government elites traced back the historical negative state-pastoral relations to win the hearts of local communities, justifying that the project be based on land distribution to locals rather than confiscation, as it had been in the past. This depiction of the federal government as an adversary corresponded with the locals' prior state imagination as well as the agony over land appropriation. This approach captivated many Karrayu community members and began to influence them. An elder from Karrayu recalled a case:

I recall a good Zone administrator named Ayanna saying to us during a discussion, 'Dear all, we are working with our enemies (referring to the federal government). Why do you keep on resisting? Even if you cannot do something special with the irrigation,

⁵¹ Interview elder and village leader at Gidaaraa (henceforth; KII4), March 2021

do you think you will at least fail to use the 0.75 hectares of land you will be given? Why not grow maize on 0.25 hectares and use the remaining 0.5 hectares for fodder production using the water?' With this, we were reassured that they cared about us and were encouraged to accept the project.⁵²

The quote exemplifies how local officials portray federal officials as opponents, indicating an internal schism within the state structure on the one hand, and this characterization also serves as a strategy for convincing the local community that the region is on their side and mobilized for project implementation on the other.

4.4.2. Discontent and Contemporary Attitude of the Community

The project's construction covered 6 villages of the planned 11 villages before it completely ceased in 2011. Some regional and district officials explained that the project was halted due to political disagreement between the regional and federal governments (pointed earlier), first causing the removal of the regional president and then budget cuts for the project subsequently. However, subsequent regional presidents and their cabinets either did not prioritize the project or faced budget constraints in order to build it. The vice regional agriculture and irrigation bureau head noted that:

When one leader is changed, the next position holder criticizes what the earlier did because of either negligence or any other reason. This was what happened in the case of this project too. In addition, the region had faced a budget cut from the food security scheme (subsidy), and it was impossible to keep up with the construction of the project (Interview March, 2021).

The amount of water in the canal had gradually decreased. The last downstream village went out of production due to a water cut-off after only one production season. The next above, downstream village also kept on getting intermittent scarcity of water, but later, water access was limited to only the upper part of this village, forcing the other part out of production for an extended period of time.

Further, in 2010, after two to three years of production, support from regional politicians, officials, and local development agents also dwindled. The mobilization came to an end

⁵² Interview with KII3, February 2020

quickly. Subsidies for fertilizer and maize seed have not only been discontinued, but their supply in the area has become scarce; the intensity of crop farming awareness creation and training, as well as follow-up from district officials, has gradually declined; and the irrigation issue is no longer an agenda of discussion, except when rarely mentioned at public meetings. Local DAs, who are supposed to assist farmers in this regard, are no longer doing their jobs and are rarely seen visiting the villages and farms, except to produce reports and mobilize the community for non-agricultural activity meetings. Following that, external actors (farmers and investors) were/are viewed as alternative agents for providing agricultural inputs, technical knowledge, and marketing, without undermining the few agriculturally successful local individuals or households. As a result, very few external investors who had secretly begun sharecropping land in the project area continued to sharecrop openly, while more others did the same for maximum income at the expense of the land owner, earning only a marginal return (Bekele & Padmanabhan, 2012).

Meanwhile, construction activities ceased completely in 2011. Machineries, construction engineers, and surveyors left, leaving only a few guards to guard the construction camp. The scheme administration had and continues to have a shortage of personnel as well as little support from the regional government, preventing them from properly carrying out their duties and assisting the local people. Water shortage and unfair distribution have been pronounced and continued; the upper and middle stream villages have only benefited from locationality advantages, while the downstream villages have suffered as a result. Worse, many households, primarily in downstream villages, were despondent and abandoned their land, as they couldn't even find sharecropper investors due to the lack of water. The abandoned lands were, in turn, infested with *Prosopis Juliflora* trees, which have now become a burden to clear for landowners regaining water access and wishing to farm⁵³.

Yet, after a seven-year hiatus, construction on the project has resumed and has continued to expand to the remaining villages since late 2018, following the appointment of the new regional president and the national Oromo youth movement. However, this creates worries and yet unanswered interrelated puzzles among the community members in the downstream villages. First, the already-covered downstream villages are not receiving enough water, and the push to address more villages is expected to exacerbate the water problem. Local

⁵³ Interview KII4, 13 March 2021

residents are concerned that when all of the proposed villages begin farming, there will be more fierce competition for water. The puzzle then becomes: with insufficient water flow in the canal and unmet water demand for the existing villages, how will the new further downstream villages get access to water, and why does the government wish to continue construction? In this regard, an elder and village chair in Ilaala (a downstream village) expressed that:

We are not getting enough water for our production, but they (the government) are still constructing the canal to the furthest downstream village. I do not know what they are doing. We do not ask and also do not know whom we are going to ask now, as the district officials already told us they themselves do not have any mandate on the project (Interview March 2021).

Second, extension support and access to infrastructure in already irrigated areas are minimal or nonexistent, forcing many households to sharecrop their land and thus not reap the full benefits of their land. The puzzle is, then, why is the government rushing to cover other villages before ensuring that the existing villages benefit? The claim among the informants in the downstream village was that the government is more concerned with simply putting irrigation canals in all of the villages in accordance with the proposed plan than with supporting the locals and ensuring that they benefit from the project. Thus, many local pastoralists, notably in the downstream, have lost hope in the project and see it as a strategy for the government (both regional and federal) to maximize its political agenda rather than genuinely benefiting the local people, as has been the case with previous development interventions in the area. In this line, an informant from Ilaala village (downstream) who initially accessed irrigation water but lost in the meantime pointed it out, saying,

The water was gradually stopped from reaching down here, and irrigation farming was stopped. This leads us to believe that the government was using the project for political purposes rather than for our benefit. As a result, we no longer have confidence in the project to rely on for sustainable irrigated farming and to change our lives (interview November 2020).

This is further emphasized in the FGD with women in Ilaala village, who stated, "We do not have hope that the water will consistently come to the village and transform the life of the

community through farming, but it benefits us by allowing access to water at a closer distance for human and livestock consumption."⁵⁴

Contrary to the discontent, there were also positive views and reflections towards the project. This depends on the spatial context and experience of the case informant in touch. Given their location, the upper stream village has had easier access to irrigation water and has benefited more from the project than the downstream areas (the details are discussed in subsequent chapters). Thus, relatively significant numbers of informants in the upper stream village were generally more hopeful or less complaining about the project than their counterparts in the downstream villages. Aside from common criticisms regarding a lack of technical support, inputs, and market linkage, many informants approached in Gidaaraa village referred to the project's contribution and its future prospects for supporting livelihood and local development in general.

A 67-year-old informant in Gidaaraa village expressed that

Following the establishment of the project, many young people were organized into cooperatives to load and unload agricultural produce, though the groups have disbanded now. In addition to the group savings, they each received a daily minimum income of between 100 and 200 ETB. Some of them even constructed corrugated iron houses to live in or rent out. Some of these cooperatives had good savings and were also lending large sums of money to community members from their savings. If the government supports cooperatives, many more individuals in the area will benefit from project-related work opportunities (Interview, February 2021).

To supplement the above stated, a 50-year-old agropastoral informant from Gidaaraa, who farms his own land and shares more with others, has to say this:

The project promotes local development. Many people can produce adequate food for their families and obtain cattle feed from crop leftovers. They also diversify their livelihood and generate additional income from irrigation production. For instance, I managed to construct a corrugated iron house and buy a television, refrigerator, and water pump motor using cash from irrigated farming. Had this project not been here, I would not have had a thatched house, let alone built such a corrugated iron house. Now

⁵⁴ FGD with women, 6 November 2020

I sharecrop more irrigated land and grow cash crops on 3 hectares to prosper more (interview, February 2021).

In the downstream village of Ilaala, some informants mentioned that, despite its limits, the project has some spill-over positive effects. It allows them to earn some cash by engaging in the petty trading of vegetables grown by the project. In this regard, interviewed informants who engaged in the retailing of onions on the asphalt road valued the additional income they were able to generate from the activities that followed the development of the project. One of the women petty traders in the Ilaala village has to say this:

I hope many people can tell you about the many constraints of the project. That is all true! Apart from all the problems, many poor local women, including myself, were able to augment our income from retailing onion on the street. Look, all of us [showing the rows of onions in containers along the asphalt roadside] have been involved in the retailing of the onions recently following the establishment of the project. Previously, I often relied on my husband to provide me with some cash for household expenses. Now I have collected the leftover onions from the fields and sold them to passing travelers and passengers on the street. With this, I am able to cover my household expenses and no longer need to solicit funds from my spouse for miscellaneous household expenses. I am hopeful that if we have regular water flow from the project and engage in cultivation, our income will improve (Interview at Ilaala village, December 2020).

The above explanations exemplify and constitute a major element of the enthusiastic outlook of some of the residents surrounding the prospects that the FIBID is expected to bring to the area. This imagination also feeds very well into the regional and federal states optimistic perspectives that the irrigation project is the state of the art in modernity and will cause improvement and betterment in pastoral areas.

Photo 2: Onion vendor on the asphalt road at Ilaala village



Source: by author

4.5. The FIBIDP as a ‘success’: Self-presentation and Dynamic View

In late 2006, human and material resources were mobilized and deployed to the project site. Site engineers and surveyors had already begun plotting and laying out the irrigation canal. Machines screamed, attempting to break the stone and rocks in order to facilitate the layout. Construction was gaining traction and was making its way down to Karrayu land. Politicians and experts from all levels had arrived and gathered at the construction site, including regional, zonal, district, and village officials. Task forces had been formed, and they had all been assigned tasks and marched out to carry them out. The top officials, consisting of the regional president and the then-government chief at parliament, as well as other officials from the area, were busy convincing local people about the project. Development Agents (DAs) were tasked with plotting farm land, convincing and mobilizing households, providing farming assistance and guidance, and providing overall professional support.

The village representatives were informed and instructed to form a land distribution committee and persuade the allocation of irrigated land with the assistance of experts depending on the water reach area. Multiple activities had been carried out concurrently under the Karrayu sky, including the design and construction of the canal, consultation with the community, clearing farm land, ploughing the land, dismantling and reconstruction of houses, plotting and distribution of farmland. Tents were stretched out in the open field to accommodate incoming experts and local DAs for the night because there were either not many houses there or within a short distance. People were busy; there was no time for food, but everyone was too busy breathing. Activities were done day and night, and things were moving very fast. Meanwhile, a separate scheme administration responsible for the regional state was established. The scheme administration is in charge of maintaining the scheme, monitoring overall water distribution, raising awareness, and organizing pastoralists to form an association to ensure fair irrigation utilization.

A district irrigation expert, who is originally from the Karrayu community and was also a DA at the time, recalled that 33 irrigation experts from three districts, as well as many DAs from the locality, were stationed on the project site to facilitate its implementation. Plowing of the land began in November 2007 with the deployment of six tractors by the regional government. Metehara sugar estate subsidized fuel consumption and provided tractor maintenance. Furthermore, the regional government provided free maize seed and fertilizer to households and continued to assist them for the next three years, until the beginning of

2010. However, community members were skeptical of the regional government at the time. DAs and other experts had taken the lead and primary responsibility for the production activities, with some assistance from younger family members. With a few exceptions, many land-granted households remained less involved when their land was plowed, and they observed what was going on from the outside. Even some of them did not believe that the growing crops were theirs until they were told to harvest the produce.

Since the early 1970s, mass mobilization campaigns have been popular in Ethiopia to get development programs implemented (Filatie, 2020), and this has also continued to be the strategy for the federal government to pursue its developmental state ideology (Daniel, 2019; Lefort, 2012). However, citing a consistent campaign for natural conservation, scholars characterize the attempts as short-lived and ineffective (Smit et al., 2017). In the same way, the FIBIDP execution activities have been pushed forward for a while. The project-related campaign was also kept for a short period, intended not only for the project to be implemented, as it had been in the previous days, but also for self-presentation and regaining acceptance among federal politicians and the community. An interview with the local DA backed up this notion, saying that "the mobilization was not long-lasting, but it drew appreciation and popularity to the regional state at the federal level and also persuaded the local communities."⁵⁵

The upper stream village was planted with maize in the first round, with almost complete effort from DAs and officials, and it grew well and produced a good yield, though this was later flagged in disguised ways by the top district as well as regional officials, who presented it as if it had been cultivated by the community⁵⁶. Shortly, thereafter, regional officials began working on image restoration in order to re-establish the positive relationships that had deteriorated as a result of the earlier confrontation over the project.

This was accomplished by inviting politicians, experts, and other relevant individuals from various regional states, including Amhara, Afar, Somali, Southern Nations Nationalities, and People's Region (SNNP), among others, to visit the project and witness its success⁵⁷. Media representatives were invited and permitted to photograph and film videos on the site in order to widely disseminate information to the public. All of these were used as part of an

⁵⁵ Interview WO3

⁵⁶ Interviews WO1 and WO3

⁵⁷ Abadula, then-Oromia Regional State President, in an interview with Bridge Media on January 3, 2024.

"impression management" strategy (Goffman, 1956: 208), which is a critical coping strategy in power-laden relationships (Scott, 1998).

In his seminal work 'the Presentation of Self in Everyday Life,' Goffman metaphorically represents everyday social interaction as 'dramaturgy,' and the actor always attempts and works to manipulate and obtain others' impressions during his self-presentation to the public audience, 'frontstage' behavior (Goffman, 1956). Similarly, the show and propaganda by regional officials were intended to create a specific impression in the minds of political figures and others concerned about both the project and the capacity of the regional state, and, as a result, to regain political space.

Photo 3: Visit by high-level regional and federal officials to the project area



Photo by Oromia Water Works and Design Enterprise; source Girum (2013)

The project was soon to be symbolized and lauded as a 'success'. It was also reported that "the Karrayu, who were previously pastoralists and PSNP dependents, became farmers and food self-sufficient"⁵⁸. The media, which earlier reported the confrontation and presented the project as an unwise investment, now portray it as an 'exemplary' development practice. Those officials from the federal government who had initially criticized the project were

⁵⁸ FGD Karrayu elders, downstream village

humiliated and bowed their heads, but they later changed their minds and rushed to replicate it in their region, seeing it as a success. In this regard, a key informant has to say this: "Meanwhile, we invited Addisu Legesse (who initially strongly criticized the project) to visit the project. He liked and appreciated our effort on the project. He was therefore eager to replicate the experience in the Amhara region"⁵⁹ (Interview, June 16, 2023).

In the same vein, another former high-ranking official also stated,

... after visiting and witnessing the success of the project, Addisu Legesse himself made the Amhara region irrigation experts share the experience and adopt the same in the region. He then immediately initiated a similar project in the Amhara region to be implemented in Kobo in the North Wollo area."⁶⁰

The former Oromia regional president also mentioned⁶¹ that, apart from appreciation, there were politicians from the sister coalition party who persistently refused to visit the project as they were unhappy to see the OPDO be strong and gain recognition in the community. He also stressed that it was at this time that the party (OPDO) gained growing public acceptance, despite the fact that those politicians were constantly skeptical of the political action and decisions that the party took.

The above informants went on to mention that once it achieved success, the project became popular and a model at the national level, from which regional and federal states copied and implemented similar projects.⁶² Therefore, the new narration of the project was evolved to depict 'success' and 'achievement' for many regional and federal politicians and officials, as well as an instrument for Oromia regional state to demonstrate 'who is whom,' as one of the above informants kept on saying, "we showed them."⁶³ Furthermore, by doing so, the regional government effectively silenced critics of the project.

4.6. Convergent view within the State Structure: FIBIDP as Modernizing Project

Ethiopian rural development has been underpinned by modernist thoughts guiding state interventions and development practices in the lowlands (Puddu, 2022; Rettberg, 2020).

⁵⁹ Interview KII2

⁶⁰ Interview KIII1

⁶¹ KII5

⁶² Interviews KII1, KII2, KII5

⁶³ Interview KIII1

These modern concepts have largely been borrowed from elsewhere, representing what Clapham (2006) refers to as ‘the politics of emulation,’ and have been imposed on the local people and environment. This has been mediated through the implementation of high-tech and capital-intensive projects. Sedentarist farming in the highlands has been symbolized as part of modernity that is seen as vital to be exported to the lowland frontier (Asebe et al., 2018; Ashami & Lydall, 2021). In contrast, pastoral culture and practices have been portrayed as not only irrelevant but also impediments to the national development trajectory (Rettberg et al., 2017). With this in mind, mega projects such as agro-industries, commercial irrigated farms, dams, and infrastructure have been depicted as modernizing projects, and their implementation in lowland areas has been motivated by the desire to make mobile pastoralists emulate and transform into sedentary farming life (Asebe et al., 2018; Asebe & Korf, 2018; Catley et al., 2013).

During the imperial (1930-1974) and socialist (1974-1991) regimes, these projects were driven by a civilizing narrative and an outright rejection of lowland peculiarities, and they were implemented with direct investment from private actors in the former case, and with direct state intervention and control in the latter (Puddu, 2022). The rational prescription from state planners was based on the view that the lowland frontiers were generally backward and homogenous, in need of reconfiguration and redemptive development to fit into the modern order (Getu et al., 2022; Rettberg, 2020). The same narrative has been also upheld during the EPRDF regime to legitimize both state and private-implemented large-scale projects in the lowland areas, despite a shift in recognition of the local context (Puddu, 2022). Apparently, regardless of ideological differences between successive governments, such as the Imperial with market-driven, Derg with socialist, and EPRDF with developmental state ideologies, state interventions in the lowland appear to have been directed towards achievement of modernity in contrast to the outdated pastoralist mode of production (Markakis, 2021).

The biased view toward pastoralists has also existed within the regional states in the federal system, and this could be reflected as often ignorance or undermining the pastoralist agency not fully engaged in decision-making on issues affecting their lives. For example, development interventions in the Oromia region that have focused on and planned to benefit the pastoral community have frequently been made without involving local pastoralists and their institutions, but rather by outsiders with a highland background and agriculturalist mentality (Helland, 2001). Similarly, Buli (2006) also observed in the case of Karrayu that

the district administration was entirely staffed and managed by people with highland and sedentary mindsets who saw pastoralism as primitive and actively sought to transition to crop cultivation.

The construction of the FIBIDP was superimposed by regional authority from the Oromia irrigation office to facilitate pastoralist settlement and encourage sedentary-based means of sustenance in accordance with the national villagization policy. Villagization and settlement programs, which had been dominant since the 1970s, were restored in the late 2000s with ideological continuity with the past (Abbink, 2012). However, as already mentioned it is pursued under the pretext of voluntary participation, providing a new vibe and momentum for implementation in arid and semi-arid areas (Mekonnen et al., 2020). This is also linked to the development of the river basin and associated irrigation water in order for pastoralists to eventually evolve into agro-pastoralists and then agrarian life (Getu et al., 2022), which state officials believe will happen through long-term sedentarization. On the one hand, villagization is expected to promote settlement life and make modern services and infrastructures more accessible to mobile pastoralists (Federal Democratic Republic of Ethiopia (FDRE), 2013), while on the other hand, it is expected to thicken state appearance and enforce territorial control over geographically remote lowland pastoralists (Lavers, 2012b).

The project hoped to encourage crop farming while also mediating the provision of modern infrastructure and facilities such as health stations, schools, roads, and transportation in order to improve service coverage (cf. Cochrane & Skjerdal, 2015). It is also clearly noted in the project study and design report that the project is not only a cure for poverty but also a means of bringing ‘radical transformation in the community tradition’ (from backwardness to modernity) (OWWDSE, 2011:1). Consequently, government officials at the federal and regional levels, including those in the lower state apparatus, framed the project as an instrument to transform the pastoral mode of production and convert the transhuman Karrayu pastoralists to sedentism, which was viewed as a step toward modernity (Puddu, 2022). In this regard an informant explained the context saying,

Take a look at Gidaaraa village (the upper stream village)! Prior to the implementation of the irrigation project, there were no villages or infrastructure in the area, but now people have voluntarily gathered in the village and created a town where you can find

various services. They have electricity, a health station, milling houses, a school, and live in a corrugated iron house, leading a modern life.⁶⁴

This viewpoint is shared, and it represents one of the points of negotiation and compromise between the federal and regional governments for project implementation. Moreover, as well noted by many local informants and district officials, both regional (as already discussed) and the federal governments conceived the project as a political instrument over the local pastoralists. The project began immediately in subsequent year of the 2005 national election. The 2005 election was the first historical moment of all the preceding national elections where very tough competition had been seen and the government also won with a narrow result, though even the result was very contestable and controversial (Aalen & Tronvoll, 2009; Lyons, 2010). This made the government concerned about the upcoming election (2010) (Lefort, 2012), which was also reflected in tightening and establishing repressive administrative structures and rules to prevent incidents that would challenge its power (Aalen & Tronvoll, 2009). Thus, the regional government could use the project to win the hearts of the community members and get a winning vote card for the 2010 election that has also have determinantal effect for the regional governing parties to sustain on power. The trajectory of the project implementation could be supportive of this. In this regard, a Karrayu elder has to say this;

The project was being used by the government for its own political agenda and election. Look, the implementation was very quick and well-organized, and the officials came here frequently to encourage us to cultivate crops. However, shortly after the election (2010 election), the officials who used to spend a significant amount of time on the project gradually decreased and eventually vanished, and the project was abandoned (Interview, November 2020).

Good number of informants claimed that the federal government was neither pleased with the project's implementation nor pushing hard to halt its construction at the time, recognizing its importance in securing election support. In support of the claim, previous research has found that the national ruling party, EPRDF, has been co-opting development programs in the highland areas for political purposes in order to gain political bases and maintain its power hegemony (Daniel, 2019; Lefort, 2012; Smit et al., 2017).

⁶⁴ Interview a district administration official (WO4), February 2021

To conclude, the federal and regional states have overlapping and converging interests in the project. Both have perceived pastoralists as subjects whose livelihoods should be 'improved' and 'transformed', for which this large-scale project is considered to be the state of the art to realize the vision. Further, there is a shared understanding that this project plays out the political objectives of maintaining power and governing the mobile pastoralists. However, reiterating from the above (section 4.3.2.), the contradiction and varying interpretation over the project mainly emanate due to the 'internal frontier' created within the ethnic federalism in Ethiopia (Clapham, 2009). This ostensibly heightens the struggle for power and autonomy between the federal state and its constituent regional states and the resource competition therein. Thus, the specified project has become a reflection of such competition.

4.7. Summary

The development project, FIBID, has been envisioned and differently imagined by the Oromia regional state, the federal government, and local pastoralists. This is guided by the underlying discursive image of space and people in pastoral development intervention. The misperceived hegemonic view that pastoralists are backward and at odds with 'development' has explained the federal government's disinterest in and unwillingness to support the project. However, the internal power rift linked to ethnic politics in the federal system makes the regional state depart from the federal government, reinforcing the notion that the state is not monolithic. This, in some way, hampered the practical commitment to development interventions in pastoral areas.

At the same time, the perception of the project has changed dynamically over time as a result of the actor's (regional state) persuasive ability and the project's subsequent execution. It was initially viewed as 'anti-poverty' and a symbol of regional autonomy for the Oromia Regional State, but was deemed a 'waste of money' for the federal government and a 'consolidation of land alienation' for the local community. However, it was later regarded as a 'success' and an 'achievement' of development for the regional state and federal government, which, in the meantime, conformed to the idea of the regional state but was an arena of discontent and puzzlement for some and hope and betterment for others in the local community.

This chapter clearly noted that the project was very controversial, drawing different interpretations and reactions. It also clearly highlighted that the interpretations were dynamic and had changed over time, partly due to the progress of the project's implementation. The

intriguing question now is what outcomes and effects such a project has had on the local community. Thus, the subsequent chapters then dwell on discussing the consequences of the project, with an emphasis on its unforeseen effects. The implementation of the project began with the distribution of the common land to private irrigated land for the locals to work on. The immediate subsequent chapter would then discuss and analyze the process of project-related communal land distribution for private use and its effect on land access and ownership, as well as people-land relations.

CHAPTER FIVE

PRIVATIZATION OF THE COMMON: LAND OWNERSHIP, ACCESS, AND EXCLUSION

5.1. Introduction

The pastoral commons-land has been squeezed and fragmented and much of it is no longer in use for extensive livestock grazing for collective purposes. Instead, they have been enclosed and taken for other functions, including intensive agriculture, dam construction, private grazing, wild life parks, and other competitive uses. This has hampered the pastoral livelihood, and the process is also expedited due to insecure landownership (Bauer, 2005; Behnke, 2008).

In rural development analysis, land ownership and access are considered to be key to improving the livelihoods of the rural poor. The property rights perspective argues that land ownership entitles the holders to certain forms of ‘bundles of rights’ to invest in and flexibly use land under their custody. It is believed that security of land tenure has a positive contribution in encouraging investment, realising increased production, and promoting good production practices and sustainable land use and management (Birhanu, 2021). This argument entails that ownership of land is a condition for benefiting from the land (Deininger et al., 2011; Mequanint & Bulte, 2015).

Yet, in their theory of access, Ribot and Peluso (2003) argued that a land right associated with ownership is not a guarantee of benefit unless the holders have a certain form of power enabling them to benefit. In this regard, they distinguish between two forms of access: right-based and structural-relational, which determine the benefit from things (in this context, land). The former is an access mechanism that includes both legal (approved by law, tradition, or convention) and illegal (not socially acceptable) ways. The latter refers to a specific set of political, economic, and cultural settings that collaborate with the former to create access gains, control, and maintenance. In doing so, they imply that access to land extends beyond the land-holding right (Myers & Hansen, 2019). In contrast, Hall et al. (2011) viewed land registration and certification as creating a distinct boundary of exclusion that prevents non-right holders from using the parcel of land. They argue that land certification

establishes a legitimate exclusionary right, a type of double-edged exclusion in which preventing other users have become necessary to sustainably benefit the holders.

Developing countries such as Ethiopia have established the legal framework and implemented land registration and certification to address land insecurity and ensure the benefits associated with individual farmland in agrarian communities (Deininger et al., 2011; Samuel, 2006). The process has been carried out for over a decade in these areas, and many studies have reported that it has produced a wide range of beneficial consequences (Birhanu, 2021; Mintewab et al., 2016; Tatwangire & Holden, 2013). Among other things, it increased uptake of agricultural extension packages (Birhanu, 2021), improved tenure security and reduced land-related disputes (Holden et al., 2010), increased land rental market and women's participation (Mintewab et al., 2016), increased household consumption (Hailemariam et al., 2021), and improved farm productivity and sustainable land management practices (Holden & Hosaena, 2013; Mequanint & Bulte, 2015)

As already discussed, and also indicated in Ethiopia's national policy, sedentarization is a future waiting for the pastoralist community in the lowland area (Fratkin, 2014). The country has also invested in the development of irrigation to encourage farming and a settled life. With this, communal land distribution for private use has been conducted in many irrigable and water-access pastoralist areas, such as, for instance, in Afar (Ashami & Lydall, 2021; Bekele & Padmanabhan, 2012), Gambella, and the Southern Nations, Nationalities, and Peoples regions (Fana, 2021). Similarly, the Oromia Regional State has implemented land distribution, registration, and certification for irrigated land linked to the FIBDP in the Karrayu pastoral area.

This chapter thus discusses how the process of land distribution and certification linked to the irrigation project has changed and impacted enduring relations: land-pastoralist relations and production relations, in a unique way in the pastoral areas but in a less common way in the highland farming communities. It takes a critical look at the project-linked individualization of common land and certification, with a focus on the unintended repercussions on traditional resource ownership and access among the Karrayu Pastoralist group. In doing so, it clearly demonstrates how the process not only results in tenure transformation but also excluded many pastoral individuals and groups from their ancestral land.

5.2. Access and Property Right in Karrayu Pastoral Context

Ribot & Peluso (2003) define access as a diverse and dynamic process comprising social relations, power dynamics, and institutional frameworks. Moving away from the equating of access and property rights (Myers & Hansen, 2019), they argue that access is not simply a matter of physical closeness or ownership rights to resources. It is instead formed by social and political processes that define who has the ability to control, use, and benefit from resources. Access is not static but rather evolves and changes over time as a result of struggles, negotiations, and contestations (Peluso & Ribot, 2020; Ribot & Peluso, 2003). Property rights, in conjunction with other variables such as customary practices, social identity, and relations of power, have influenced access (Peluso & Ribot, 2020; Ribot & Peluso, 2003).

The property rights in the Karrayu pastoral area have been characterized by communal customary tenure relations. The land resources are still predominantly communal, though there has been a gradual and significant increase in individualized holdings over time. In a pastoral context, communal property can be understood as a tenure in which resources are jointly owned and used by a well-defined group of users who are usually related based on territorial boundaries, kinship ties, or certain social characteristics (Fekadu & Korf, 2012; Fratkin, 2001). It is frequently distinguished by communal resource holding, administration, and management.

Historically, land in Karrayu, like that of their neighboring Afar pastoralists in the Awash valley, was not sold, and exclusive holdings or claims by individuals or families were restricted (Getachew, 2001). It is considered to be communal property and can only be used communally without discrimination, though private ownership of some watering points and trees has been entertained at the same time (Ayalew, 2001b).

The literature on African pastoralism indicates that the customary land tenure relations in most pastoralist communities are informal, and access to land resources such as pasture, water, and minerals is communally and collectively used and controlled (Fratkin, 1997, 2001; Moritz, 2016; Salih, 1990). According to Macpherson (1978: 6), communal property ownership has given each individual inalienable rights to "not be excluded from things". In the same manner, every Karrayu member of the group has the right to access the ecosystem and its resources on the communal land. As Karrayu elders often refer to it, pasture and

pasture land is God-given and all Karrayu individuals, regardless of their sex, age, and generational difference, are entitled to have equal rights of access to it. An individual has primary access to grazing and grazing ground by virtue of being a Karrayu (Ayalew, 2001b; Buli, 2006). However, there are certain rules that govern and guide specific users and benefits (cf. Moritz, 2016). For instance, external users who do not have the right to use them are also barred. As a result, non-members must negotiate with village leaders and clan elders having customary authority in order to obtain permission to access pasture and water on Karrayu land (Ayalew, 2001b; Buli, 2006). To put it differently, the use of communal resources such as rangeland is not openly free, but instead there are distinct social boundaries and territories defining the utilization and the users who are supposed to benefit (Fekadu & Korf, 2012; Senda et al., 2020). For example, Moritz (2016) observed that pasture resources in Cameroon are openly accessed from communal pools, not in a manner conforming to the tragedy of the commons but with the presence of defined property regimes.

Moreover, local institutions and social fabric governing resources have been designed to account for the variable nature of resources such as pasture and water across geographical niches. This ensures flexible and seasonal mobile livelihood strategies that best fit the need to utilize such ecologically specialized and dispersed resources to meet the demands of various animal species (Helland, 2001; Moritz, 2016; Senda et al., 2020). Essentially, it enables them to sustain and adopt themselves to the fragile environment in which they dwell (Catley et al., 2013; Girum, 2013; Helland, 2001). As Buli (2006) noted, in the early days, the Karrayu had three spatially and ecologically distinct grazing areas: wet season grazing, winter dry season grazing, and autumn dry season grazing areas. Water and pasture are both highly variable in space and time. Any Karrayu individual was free to move their flocks of animals along these three grazing areas in a cyclical pattern based on the temporal availability of rainfall water and pasture to ensure effective use of the ecological resources at their disposal. However, village leaders and respective clan leaders have bestowed the customary authorities on specific territory and determined the pattern, time of movement, and types of stock grazing on specific pasture land so that every member of the group must adhere to it (Buli, 2006).

At present, however, the pressure over communal grazing land has intensified and the community has remained with one grazing zone, the wet season grazing area, while the dry season grazing areas have shrunk due to confiscation for farming and game park and the alarmingly expanding Lake Besaka (Girum, 2013; OWWDSE, 2009). Along with this, an

individual holding system has also emerged and is growing because of the increasing crop production, either by migrant farmers or the Karrayu themselves, who opt for it in one way or another (Alemmaya, 2008; Fekadu, 2014; Girum, 2013). Growing government interference, private rangeland enclosure, and the intrusion of migrant farmers have increased phenomena in many pastoral areas, including the Karrayu community, causing the loss of potential collective grazing land and intensifying the process of private holding (Ashami & Lydall, 2021; Hagmann & Alemmaya, 2008). This has altered the management and limited flexible use of resources from the common pool while at the same time aiding the emergence and prefiltration of dual forms of land tenure (both communal and private) in the areas (Fekadu, 2016). This makes the current form of land use and tenure system where land is used either for grazing, crop production, or a combination of the two, and also communal and private tenures operate simultaneously but still with the predominance of the communal system (Fekadu, 2016; Girum, 2013).

The land distribution linked to the project further reinforces the land use change and expedites the shrinking of communal tenure, favoring private holding (Fekadu, 2016; Mcpeak & Little, 2019). It also restructures property rights in more legalized ways, as will be discussed further below.

5.3. Property Right Reconfiguration through Land Certification

With the implementation of the project, the Fentalle district Land Administration Office in Karrayu conducted land distribution in collaboration with the Zone⁶⁵ Administration officials. It has been distributed with the intention of the effective use of irrigated land and water as suggested and stated in the Oromia regional state rural land proclamation no. 13/2007 (par.14.4). This is one of the first formalized ways of parceling the communal land out to local residents for irrigated farming and private use in the area (OWWDSE, 2009). This land was part of the communal dry grazing zones of the Karrayu land. It was carried out in six villages of the project's water accessed area in the district, and there is also a plan and preparation to continue it to the other villages and remaining sub-villages following the further development of the project.

⁶⁵ The formal administrative structure in Ethiopia represents the middle structure between the district and the regional state. i.e., hierarchically above the district and below the regional state.

The distribution began in 2007 in Gidaaraa village and expanded to the next villages in sequence, eventually reaching the Dheebitti, the sixth villages in the downstream area, in late 2009. Later in 2012, the second round of revision, registration, and certification was carried out in all six villages using cadastral surveys with collaboration and funding support from USAID's Land Administration to Natural Development (LAND) program (Pankhurst, 2013). Later in 2012, the revision, registration, and certification were carried out in all six Villages. The 2012 report from the Fentalle District Land Administration (FDLA) indicated that at the time, a total of 3621.73 hectares⁶⁶ of land were allocated to a total of 5786 people across the six villages. The same report also indicated that 5068 landowners in the six villages received digitized certificates for the parcel of land they were given at the time (see table 1 below).

Table 1. Land distribution and certification

No	Village	Households (HH) receiving land			Young people receiving land			Over all total	Parceled land (hectare)	People receiving land certificates ⁶⁷
		MHH	FHH	Total	M	F	Total			
1	Gidaaraa	614	341	955	85	48	133	1088	669	914
2	Dirree Sadeen	650	362	1012	89	50	139	1151	727.41	996
3	Tuuroo	671	374	1045	93	51	144	1189	710.86	1115
4	Xuxuxi	427	239	666	60	32	92	758	458.42	703
5	Ilaala	398	222	620	56	30	86	706	457.88	594
6	Dheebitti	505	281	786	70	38	108	894	598.16	746
	Total	3265	1819	5286	473	257	730	5786	3621.73	5068

Source: Compiled from Fentalle district land administration (FDLA) report (2012).

The land tenure relationship in Karrayu is predominantly customary, where members have communal ownership and access. The land allocation, registration, and certification have redefined and reconfigured the existing pastoral landownership rights as well as the

⁶⁶ Though there were various figures from the district that were inconsistent and confusing, it is expected that the amount of land transferred to private ownership has increased over time as intermittent land distribution related to the project has been conducted. For instance, referring to the district (the specific office and year were not stated), Fekadu (2016) mentioned that 4642 hectares of land were covered by the irrigation project in a recent year.

⁶⁷ Note: There were ready but unprinted 2nd level certificates at the time due to some overlap of holders. To avoid confusion, the unprinted certificate is purposefully left out of the figures in this table.

relationships associated with the parceled land. It has brought significant changes to how the local pastoral fellows relate to one another and to land and land resources in relation to their access, use, management, and administration. The basic element of property rights- the rule and its enforcement (Crewett et al., 2008)-that had been formerly applied to the specific land, has no more functioning under the new arrangement, necessitating a different set of rules, rights, and governance systems (cf. Oba, 2013). In this process, the enduring communally owned land has transformed into strictly individualized land backed with proof of holding certificates. In other words, the land ownership system that was flexible and non-exclusive in nature has shifted to rigid and exclusive land entitlement, which consequently diminished mobility (Letai & Lind, 2013). It also expedited the shrinking of communal land tenure in the area, promoting private holdings. Similarly, earlier studies by Fekadu (2016) and Mcpeak and Little (2019) noticed that project-related land distribution in the Karrayu area has encouraged individual holdings and resulted in land use change while eroding the traditionally existing collective land holding system.

Unlike earlier days for the commons, individual landholders have been endowed with the right to determine the use and management of their respective parcels of land, including who, what, when, and how to grow and harvest. The benefit and use of land resources is no longer relaxed and free based on membership or collective use, but rigid and solely owned by the holders or their associates. Even allowing livestock to graze on plots where crops have already been harvested has been contingent on the owners' willingness. This is in congruence with findings in South Africa, which show that the formalization of commons in the Namaqualand area increased tenure security for private holders while lowering pastoralists' collective rights over the common (Wisborg & Rohde, 2005).

According to informants, a growing number of landowners are refusing to allow others to graze their livestock on crop residue because they collect and store it for personal use during the dry season. This is well elucidated by the Karrayu elder as follows:

We did not deny any Karrayu individual the right to graze on the land in our culture. Even shared it with guests from other neighbors during a critical period. However, the project has now accelerated the process of land privatization and the increase in crop production. Consequently, animals are restricted from earlier grazing fields as they are now covered with crops. Some landholders also deny even letting others' livestock

graze on crop residues of maize after harvest, as they want to collect and store them for personal use (interview at Gidaaraa, November 2020).

As noted, the landholders have covered the area with crops and restricted animal entry and other potential users of the land. Further, officials had little engagement over practical decisions about the land in the past, despite the land being formally under state authority. It was mostly determined by customary institutions (Crewett et al., 2008). However, this has shifted with the growing involvement of local authorities in relation to the project. Among other things, they have become actively engaged in the delineation of areas reserved for irrigated farming, determining land allotment, following up on and enforcing its implementation, and dealing with matters linked to land rights and uses. This process has transformed the land use pattern from an earlier collective grazing space into an enclosed cropping field, but it has also limited the space of customary institutions for autonomous decision-making over a given land.

The process of land distribution and privatization has also made pastoral land a marketable and exchangeable commodity, leading to the emergence and intensification of land transactions. As part of the package of rights, the land holders have gotten the authority to lease and contract out the land to other parties, principally as per the delineated rules and regulations. The Oromia Rural Land Use and Administration Proclamation No. 130/2007 grants the usufruct right, including a permit, to the land holder to enter into a sharecropping agreement and also rent out up to half of his holdings for a certain period of time. This has encouraged the Karrayu landholders to engage in different land-related transactions such as sharecropping and renting activities (Ayalew et al., 2016; Fekadu, 2014). Many of the land holders have also sharecropped or rented out all of their holdings regardless of the size restriction in the formal law. Similarly, earlier research from neighboring pastoral areas such as Afar has reported that the government's allocation of communal land for private use has intensified and reinforced the process of agro-pastoralists' participation in land transactions in the form of rent and sharecropping arrangement with external investors and land-hungry highland farmers (Ashami & Lydall, 2021; Bekele & Padmanabhan, 2012).

Moreover, the collective action of natural resource management for which pastoralists have been well known (Fekadu & Korf, 2012; Hartmann et al., 2010; Notenbaert et al., 2012) is no more practiced on parceled land as it was before. Instead, the main management of land has come to be the pursuit of individual rights holders, with the exception of collective effort by

groups of holders for proper utilization of irrigation water- clearing of water canals and ditches, for instance. The growing emphasis on private investment has exacerbated the disputes, which have drawn the attention of local traditional leaders more than resource management. It was observed that conflict due to livestock intrusion on private croplands as well as access to irrigation water was a common problem. The Karrayu informants noted that boundary disputes between neighboring farm holders have increasingly occurred, for which the local elders have spent much time resolving them. Similarly, earlier research by Fekadu (2016) found that the tenure transformation associated with privatization in the area has hampered collective efforts for sustainable land management due to a growing emphasis on private investment. He also stated that such an alteration has resulted in disputes over farmland borders, putting a strain on local traditional authorities and limiting their participation in collective resource management.

In support of this, let me quote an elder from Gidaaraa village in length:

Land is now reserved for the government and those who receive land certificates. The landowner decides what to do with his land and is also responsible for resource management on his land. Many individuals have prioritized private investment and individual advantage over collective benefit. Collective action for natural resource management has diminished and is no longer as successful as it once was. This has become more pronounced as the project has progressed. Exceptionally, we have collectively engaged in the clearance of common irrigation ditches; even some individuals may not be voluntary without being forced to do so, as they prefer to invest on their own. We (elders) have also been very tight and involved in resolving the escalating dispute over boundary, crop trespassing by animals, and water sharing (interview, November, 2020).

The statement indicated that boundary disputes between neighboring farm holders have become a common phenomenon and frequently require the local elders' involvement to resolve. Similarly, the former district land administration and environmental protection head stressed the importance of local elders in land dispute resolution, but also mentioned that cases were reported to the office and solved using GPS, as the majority of the land under the project is already digitalized. One important point to note here is that the individualization and distribution of communal land to private use has contributed to tension and dispute over land use, which was not the case when this specific area was fully under communal tenure.

5.4. Land Distribution Process, ‘Ownership’ and Access

The land distribution linked to the irrigation project makes many individuals and households own irrigated land for private use and also defines the legal ‘ownership’ of the holders. It has represented what Ribot & Peluso (2003) referred to as the right-based form of land ownership and access. Right-based access includes both the legal, in which land is accessed in socially approved ways and is sanctioned by law, tradition, or convention; and the illegal, which involves accessing land through acts that are not socially sanctioned by the state and society. Local people in the study area own irrigated land through a combination of legal and illegal mechanisms as discussed below. In this context, the legal refers to the situation in which an individual obtains land through formal land distribution while meeting the prescribed criteria, whereas the illegal refers to any other illicit means of access, including coercion and stealth, as Ribot & Peluso (2003) mentioned. It should be noted, however, that a clear distinction between the two is difficult to establish.

5.4.1. Legal Access to Land

The process of land distribution began by forming an ad hoc land distribution committee at the village level. The committee consisted of selected community members, the village chair, and the village manager, who was primarily in charge of identifying and preparing lists of eligible households and individual residents who would receive irrigated land based on predetermined criteria. Experts from the Fentalle District Land Administration registered, measured, and allotted the land to beneficiaries with assistance from DAs and experts from the zone. In the event of a snag, they would also lend their support to the committee. At the time, the distribution was done both traditionally and using standard modern measuring units through a campaign in which many government officials and experts participated to facilitate the activities of the project.

The regional state and the local bureaucrats established the standard for eligibility, size, and purpose of the land use, so that the ad hoc committee should adhere to it. Households and individuals of both sexes, age 18 and above, residents of respective villages, and a person with no other source of income (non-government employees and those not earning income from non-agricultural activities) were among the criteria for eligibility. The regional government decided that a household should get 0.75 hectares of land to combine crop farming with animal fodder production (0.5 for crop production and 0.25 for fodder), while

young unmarried people should be given 0.5 hectares of land. This land exceeds the maximum recommended size, 0.5 hectare in the regional land administration and use proclamation No. 130/2007. According to the district irrigation head, the extra land, 0.25 hectares, was aimed at engaging the household in fodder production as part of encouraging livestock production.

However, many community members opposed the criteria during the consultative meetings, and this was a contentious issue, even though they later accepted. Members of the community wished that any Karrayu individual, regardless of gender, age, employment, or residential status, receive the larger size of the irrigated land (up to 2 hectares, according to the Karrayu elder informant), arguing that all Karrayu individuals have the right to land. According to informants, the issue was not only about the size of the share but also about who would exclude whom from one's ancestral land, given that all individuals enjoyed equitable access under the locally prevailing communal holding arrangement. The local community contended that the established criteria excluded many of them from their ancestral land. For example, a Karrayu elder criticized about residence as part of the eligibility criteria, stating:

How come a Karrayu man be denied access to his father's land simply because he lives elsewhere? Why not live in America? This does not prevent him from returning to his birthplace. He must have his share of land and enjoy the benefits of his father's land at all times. Land does not return to us (to communal tradition) once it is distributed for individual use. Regardless of our communal land tenure, which assumed the right of every Karrayu without regard to gender, age, educational status, or place of residence, the government land distribution made and separated our educated children and others living away from their parent land (interview at Ilaala, March 2021).

Meanwhile, sizable grazing land was parceled out for individual irrigated farming. As indicated in Table 1, a total of 3621.73 hectares of land were legally transferred to a total of 5786 people across the six villages at the end of 2012. However, at the time, 1,919 residents from these villages who were eligible and applied for irrigated land were unable to get it due to a shortage.

Yet, the actual implementation of the formal land distribution—the legal mechanism of land access—was marred by problems, limiting land access to the most disadvantaged members of the community. It conformed to the idea of a theory of access that actors or groups of actors

who have better positionalities; political, social, economic, and cultural positionalities are privileged to access resources such as land (Peluso & Ribot, 2020; Ribot & Peluso, 2003). Accordingly, some who did have such power were given the first priority. Even those who did not meet the predetermined criteria but had certain powers were granted land, while others who did not have such powers but met the requirements were either excluded or given second rank of priority to access the land.

In this regard, though there was some variation across villages, young⁶⁸ girls were generally barred from obtaining land in the first round, while female headed⁶⁹ (widowed) and young boys were given little attention (not given an equal chance with men) at this time in almost all the Villages. A former village chair explained that the exclusion of young girls from land allocation was justified by the fact that they would marry out and obtain access to the property from their husbands' sides throughout their marriage lives. This argument was rooted in the patrilocal culture of most Ethiopian communities; women tend to move to their husbands' homes (Mintewab et al., 2016). The first priority of accessing land was given to male-headed households (including polygamous households) in all villages and then to some young boys in some of the study villages, such as Gidaaraa, Dirree-Sadeen, and Tuur0o-Baddannootaa. In the case of polygamous households, the first wife received land as an independent household, while the husband took land with his second wife. It is worth noting that government officials often referred to the first wife in polygamous households as the 'female-headed' to argue that the land distribution related to the Project made women landowners and empowered them.

Many government employees, including DAs and top district officials who were originally from the area, were given land, in spite of having other sources of income. Moreover, some individuals from Metehara town who had good relations with the ad hoc committee, also received land and benefited from the project. These all put the fairness of the land distribution under question.

⁶⁸ In this text, 'young girls' and 'young boys' refer to unmarried individuals of age 18 and above who did not establish independent households.

⁶⁹ Unlike much of what is common in the highland rural areas, the local community and officials often refer to the first wife in polygamous households as being independent and female-headed households. This definition is often used to recruit PSNP beneficiaries, for land distribution, and for other benefit packages targeting households.

According to the report from the FDLA (2012), 28 government employees in the district received land totaling 22.501 hectares from five villages except the last village, Dheebitti. It was also indicated in the same report that there was an allegation that land distribution, mainly in the first round, was not done in a transparent and fair manner. Rather, it was based on intimacy and relationships, but community members were afraid to expose this at the time. In support of this, one Karrayu key informant recalled and explained what happened, saying

The problem was with ourselves and the committee members we appointed. Some community members registered their children as independent households to receive more land. Moreover, the committees were engaged in favoritism. Individuals in their circles and contacts benefited from their efforts. As a result, children and also those unrelated to the project, such as people from other areas and government employees, were given the land, while others who were supposed to get it were denied. We were required to inform the government at the time, but we were afraid to do so. The officials in charge of land allocation also did not know who was who, as many of them were newcomers who could not identify the residents (Interview at Ilaala village, 30 October, 2020).

The report from the district further confirmed that some individuals took land out of their village; held a larger plot of land than 0.75 hectares; households received land in the name of their underage children; some young boys also received larger plots of land as an independent household; and illegal enclosure of irrigated land were the main problems.

Later, in the months of June and July 2012, the second round of land re/distribution was carried out to address the earlier problems, distribute newly water-accessible land and registering and certifying land ownership using the modern cadaster system. Experts in land cadastral and registrar from six districts of the Zone were mobilized and participated in the process of land re/distribution via GPS. A land distribution committee was reformed in each village, and they were made responsible for identifying and registering landless individuals, as well as facilitation of the re/allocation process in collaboration with experts. The report from the FDLA (2012) indicated that during this time, more than 202 hectares of project land were taken from 617 individuals who 'illegally' held it (including government officials,

excess holding, and occupied without registration) and re/distributed to the landless⁷⁰. Further, the newly water-reached fields were parceled and allocated to individuals who registered as landless. Consequently, more land was re/distributed to a greater number of individuals.

In fact, this second round created more land available for re/distribution and opportunity for those who were excluded in the earlier phase, mainly for young girls, female headed, and more young boys. As seen in Table 1, a total of 730 young people and 1819 female-headed households obtained land during this time. However, this did not entirely fix the problem identified in the previous round, as the informants agreed. Favoritism based on social relations and kinship ties also continued at the time too while the community members remained silent about it. As a result, some households have more land in the name of their underage children, people from other villages have taken land from the area, and some young men continue to hold a large size of 0.75 hectares as an equivalent to a household, primarily by bringing and showing their sister or any stranger woman to officials, pretending to be married. This in turn made the land that was enough for a larger number of households get short, increasing the number of landless households.

To sum up, it is argued in this section that the formal land distribution related to the project has benefited groups having some form of social and economic power. While some social groups, such as women and young people, are less privileged, others, such as men and even young people with strong connections and networking, can benefit more from it. Further, in the process, many members of the community also lost access to land that they had customarily used. This is partly due to the problems related to the actual implementation of the land distribution as well as the inherent challenges that arise as a result of replacing communal landholding with individualized tenure rights. Thus, the land distribution in the area did not ensure equitable access to land. Rather, it has promoted the inequality of landownership and the differentiation of wealth that this would create.

5.4.2. Illicit Access to Land

Even after the end of formal distribution, individuals have kept on accessing land either through communication with village administration or by illicitly bypassing the local

⁷⁰ Fentalle District Land Administration and Environment Protection Bureau (2012), Report on the Project's Land Distribution Performance.

administration. The formal land distribution involved land that was only included in the project catchment area and was mainly done under the leadership of the concerned district office with the cooperation and support of the village structure as well as the regional state. However, in later days, more households and individuals enclosed land that was not previously considered part of the project area. Despite differences in size, intermittent land distribution to the landless has also occurred at all five village levels without being registered or recognized at district level.

Some substantial tracts of land were distributed at the local level to community members who had not received land through earlier distribution or who had but did not have access to irrigation water. In this regard, the former head of district land administration, for instance, witnessed more than 200 hectares of communal land being enclosed and divided among the community members in Xuxuxi Village alone but not reported to the district, causing complaints and arguments related to its process and fairness. Moreover, in line with what Ayalew et al. (2016) reported, there was also conspicuous enclosure of open fields with the hope and speculation that the irrigation water will come, or assuming the possibility of diverting irrigation water to the land in certain ways, such as, for instance, using water pumps through sharing out to an able investor. This consequently made the land a source of contention among community members. In some of the villages, the disagreement and tension over its distribution was greater than in others. For instance, as the village chair indicated, in Ilaala Village, there was an incident where the village administration held back and restricted the distribution of large plots of land, which remained restricted during the fieldwork, due to disagreement among community members.

5.5. Land ‘Ownership’ and Access Benefit

One of the common flaws in understanding related to property rights is that land ownership has often been equated with access to benefit from the land. It is assumed that individuals benefit from their holdings simply by having land ownership rights—an enforceable claim to use (cf. Myers and Hansen 2020). Irrigated land distribution and titling have been done in Karrayu, among others, with the same expectation that it creates equitable and secure holdings, which then ensures holders benefit from their land. Conceptualizing access as ‘ability to benefit’(Ribot & Peluso, 2003), this finding, however, indicates that this may not always be the case as some households and individuals fail to drive the benefit that they are supposed to get from their holdings.

In fact, the land distribution and certification vested the holders with exclusive use rights. However, some of them stated that they were unable to reap the expected benefits from their holdings due to a combination of reasons that were not necessarily related to the ownership issue. Groups such as young unmarried girls and sometimes divorced women could not totally benefit, while some other individuals or households only received marginal benefit from their land, for which they have certificates.

Access is beyond ownership and also determined by a combination of interconnected factors, where ownership could be part of it (Myers & Hansen, 2019). Factors that Peluso & Ribot (2020) and Ribot & Peluso (2003) collectively referred as "structural and relational" are determinantal and influence the ability of actors or group of actors to derive benefit from their holdings. Better positioned in relation to these factors endowed individuals/groups with better assemblage of power and ultimately enhance the ability to extract the benefit from the land. Otherwise, it limits and constrains one's ability to benefit, even if they own the land. This is clearly seen among individuals or groups in the study area.

In relation to young girls, in the later phases of land distribution, some girls (at least 257; see Table 1) were allowed to structurally possess land. They were formally entitled to landownership and have been granted an exclusive right to benefit from the land under their control. However, they could not benefit from their holdings due to two main reasons related to cultural barriers that jeopardized their ability to do so. First, it is culturally emphasized that children, primarily unmarried girls, are expected to be in their parents' custody. At this stage, they are not expected to have independent economic resources or ownership of permanent assets. Irrigated land is likewise. As a result, they are not the ones who make decisions about the land or who benefit directly from it while living with their family. Instead, their holding of irrigated land is controlled, managed, and benefited solely by the parents, despite the fact that the girl already has a landownership certificate.

Second, after her marriage, the bride has to move to her patrilocal residence, leaving the irrigated land behind. At this time, it is her parents who keep on benefiting from and managing the land. She and her husband make no claim to the land left to her parents. It is hoped that she benefits as a household from the land owned by her husband or from other permanent assets, including land arranged by her husband's parents and clan. In this context, the practice of letting women take irrigated land during marriage is not common. This is primarily due to the cultural expectation that a woman has benefited from land on her

husband's side, on the one hand, and the cultural confusion created in relation to land inheritance during the land tenure regime transformation process, on the other. Customarily, land has been inherited through patrilineal lines for communal use but remains under the control of the clan from which the women tend to benefit (Flintan, 2011a). However, the privatization of land that necessitates exclusive rights and strict control and inheritance for private use (mainly in the case of women) is something new and alien to the dominant culture. This makes the practice of allowing women to keep their holdings unfamiliar. This is reflected in the response of Karrayu elder, who explained it as follows:

In our culture, young men and women are almost equally privileged, though girls marry and leave their parents. They, like men, inherit some assets if their father dies. However, traditionally, the large plot of land has been communally owned and not inherited by either men or women for private use. So, how do we now allow the girl to take the irrigated land after her marriage while she is away and customarily expected to use land from her husband's side? (Interview at Ilaala, February 2021).

Parents have also taken for granted that the land owned by the daughter is, by virtue, considered to be theirs, and they also don't expect any claim of ownership or acquisition from her. This is also assumed to be an opportunity for a household to own large irrigated land, as a male FGD participant expressed this by saying, "She will marry and leave you the irrigated land behind." This was also a very likely reason why some young boys decided to receive land during distribution jointly with their sister or stranger girls, pretending to be a married couple. In this regard, both young girls with landholdings and those without land are qualitatively similar in the sense that neither could benefit from irrigated land. The distinction is between being numerically registered as a landowner and having a bundle of formally recognized rights or not.

This is also true for divorced women, who are less likely to share land with their partners in the event of a marriage breakup (Mintewab et al., 2016). In theory, as an expert in the district Women, Children, and Youth Affairs Office expressed, the land certification grants women the right to claim it at any time, including during marriage breakdown. However, most women have been reluctant to assert their access and control rights for fear of being condemned by society. A village women's affairs representative stated succinctly in support of this:

It is not cultural for women here to share land in the event of divorce. It is also considered dishonorable to do so. There have also been no women who have done this before, though I am not sure if there have been any exceptions. When a couple has a disagreement, they usually try to resolve it through the mediation of clan leaders. If the worst happens and the marriage ends, she will leave the land behind but will not ask for a share of the irrigated land from her husband (Women FGD participant, Ilaala village, November 2020).

Studies in other parts of the country, such as Mebrat (2011) in the Tigray region and Mintewab, Holden, and Mannberg (2016) in the Amhara region, have similarly indicated that women had limited inheritance of land from their parents due to traditional norms and the belief that they relocated to their husband's home after marriage. The prevailing patrilineal system has restricted Ethiopian women from getting access to land from their parents (Mintewab et al., 2016). Tenzing, Millar, and Black (2021) also stated that the local tradition of the Bhutanese community discourages the daughter from inheriting the family pasture. Rather, she is expected to obtain it from her spouse.

In this regard, Mebrat (2011) stated that women's rights to claim land upon divorce have been hampered in most parts of Ethiopia due to factors such as the dominance of customary laws that supersede constitutional rights, a lack of awareness of legal procedures, physical difficulties, and financial constraints.

Moreover, many other agro-pastoralists in the area also do not receive the full benefits of their land, despite the fact that many of them have been granted property rights. Instead, they have engaged in exploitative sharecropping and land transaction arrangements due to a lack of power impeding their ability to work on the irrigable land (see chapter seven below). A Karrayu informant⁷¹ stressed that the pastoralist landowners are 'dependent' and overly reliant on others, predominantly individuals coming from outside the community to produce on their land. This echoes the idea that a bundle of rights can be part of, but it is not always sufficient to ensure that actors have access to and benefit from the property (land) they own (Peluso & Ribot, 2020; Ribot & Peluso, 2003). At least in this case, the right-based explanation is insufficient to explain this failure (Myers & Hansen, 2019). Rather, the fundamental problem in the area is related to what Ribot and Peluso (2003) refer to as

⁷¹ Interview with a Karrayu elder from Ilaala village, November, 2020

structural and relational difficulties. The identified challenges in this regard include a lack of technology (agricultural inputs, roads, scarcity of water), capital, knowledge and farming skills, labor, market and market connections, cultural barriers, and a lack of an entrepreneurial attitude towards farming. All are intertwined and debilitate the ability of pastoralists to cultivate crops independently and obtain exclusive benefit from their land. A Karrayu informant has this to say:

Many of us have livestock but no cash...we also lack farming skills and experience; the irrigation water in this village (part of a downstream village) is intermittent, so we are forced to sharecrop or abandon our land. Furthermore, the wealthy could sell livestock to finance farming, but many do not do so because they lack confidence and trust in crop production, particularly cash crops, due to a lack of skill and government support. As a result, they either sharecrop with external investors and some locals or abandon their land to follow their livestock, despite the fact that there is plenty of water flowing over their land. When they return, the abandoned land is infested with *prosopis juliflora*, further discouraging them from growing crops on their own. (Interview at Ilaala, March, 2021)

These constraining factors are cross-cutting, and their impact varies depending on the social, economic, and political situation of the individual or group concerned. In this regard, many female-headed and poor households are in a disadvantageous position. In the same vein, Ayalew et al. (2016) revealed that a larger proportion of female-headed households in the area lack access to labor and resort to sharecropping than male-headed households and young people.

Many local informants have stated that they lack capital and credit access to purchase increasingly expensive agricultural inputs, farm technologies (including oxen or tractors and water pumps in downstream villages where a shortage of irrigation water is prevalent), and labor. The group-based credit access that was provided by a rural credit institution called Oromia Credit and Saving Association (OCSA) was stopped shortly in these study villages due to the defaulted money and outstanding debt. According to an OCSA expert in the district, credit provision was halted in many parts of the district, including the study villages, as neither a large sum of money had gone unpaid nor were the local government officials willing to cooperate in making the debtors pay the loan. He also indicated that more than 3 million ETB of outstanding debt had not yet been paid in the area. He stated that, for

instance, out of a total of 7,118,669.26 birr disbursed for youth revolving funds in the area, only 3,371,142.28 birr of it was paid back.

Earlier research findings from the area also supported these facts in one way or another. Abdi (2015) and Fekadu (2014, 2016), indicated that inefficient technical know-how and farming experience among Karrayu households resulted in lower farm income and overall gains and consequently further deterred household engagement in irrigation farming. This, combined with a lack of finance, makes the local people sharecrop their cultivable land rather than invest in it themselves (Ayalew, 2012; Ayalew et al., 2016). Inadequate irrigation water supply in the downstream villages has also reduced the motivation of the pastoralists to engage in crop production (Fekadu, 2016; Girum, 2013; Tsion, 2011), as this has already caused repeated crop failures in the area (Tsion, 2011). Comparably, the recurring occurrence of drought causes crop failure and renders farming activities uncertain among Saimbu pastoralists in Northern Kenya (Lesorogo, 2008).

Furthermore, there was little or no support to improve farming skills and crop production knowledge in any of the study villages. Agriculture development agents (DAs), who are supposed to assist pastoralists with knowledge transfer, were neither frequently available nor technically competent to deliver crop farming skills. In this regard a Karrayu informant⁷² has to say this:

The government-assigned DAs are simply roaming the village for propaganda and political purposes, but there is no one who properly and tangibly advises us on how to farm and work on agricultural practices. They rarely visit and sometimes stay for a week in the village for their own reporting when they are insisted upon by top officials. Some of them even lack sufficient farming expertise and skills to share with us (interview at Ilaala village, March 2021).

Similar to what previous researchers (Abdi, 2015; Ayalew et al., 2016; Fekadu, 2014) in the area reported, it was noted that the experience of learning from others with farming experience, such as Ittu migrants, incoming highlanders, and ago-pastoral fellows with some

⁷² The informant was in his early forties. He stated that he had repeatedly attempted to farm his irrigated land on his own. However, he was not productive and could not succeed due to constraints, of which a lack of farm experience and capital were the keys. In the meantime, he has continued to sharecrop his irrigated land with other individuals coming from Metehara town.

technical know-how, is the dominant form of getting farming skills for many pastoralist individuals and households.

The lack or shortage of labor in general has affected the ability of households or individuals to drive the benefit from the land. Given limited farming skills and some households' attempts to combine farming and herding, skilled labor is sometimes required but not afforded by many households. Furthermore, Abdi (2015) and Fekadu (2014) observed that even wealthy pastoralists with large livestock either abandon their allotted irrigable land or sharecrop it out and return to full-time pastoralism. This is due, first and foremost, to the nature of irrigation pursuits that compete with animal herding, particularly for livestock-rich households attempting to combine both activities concurrently (Abdi, 2015; Sandford, 2013). This labor incompatibility hampered pastoralists participation in crop farming and is also blamed for past irrigation failures in the Horn of Africa to benefit pastoralists (Sandford, 2013). Second, it is related to pastoralists' negative attitude and aversion to crop production as a result of their previous, long-standing pastoral mode of life (Lesorogol, 2008; Sandford, 2013), as well as their prior adversity experience with irrigation projects (Sandford, 2013). The previous study by Oromia Water Works Design and Supervision Enterprise (2009) also concluded that pastoralists with a large number of livestock have a lower interest in engaging in agriculture. It was also extrapolated that villages that were primarily pastoralists (many of which are dominated by the Karrayu clan) have a lower tendency to engage in agriculture than agro-pastoralists (often with a significant Ittu clan in the village) with extensive farming experience. In this context, two of the study villages (Xuxuxi and Ilaala) are pastoralists, while the remaining three (Gidaaraa, Tuuroo Baddannootaa, and Dirree-Sadeen) are agro-pastoralists.

5.6. Irrigable Land 'hoarding'

Gainers or losers of the project are determined and also depend on access to the assemblage of power rather than merely legal holding of the irrigated land. Those with more power are more confident and initiation to engage in irrigated farming and related activities and, as a result, obtain the highest economic return. As it was discussed, given a lack of power, many pastoral landowners were obliged to either sharecrop or abandon their holdings. This creates opportunity for others and leads to the accumulation of a larger tract of irrigated land (at least for fixed period use) in the hands of a few local individuals or households and external investors having such power. In this regard, a small but growing number of community

members have been directly involved in the production of irrigated farming both for staple foods and the market.

Unlike many locals who either sharecrop for cash crops or only produce staple crops, few community members have grown both staple and cash crops on their own or sharecropped land or both. These are individuals who have the entrepreneurial quality of mobilizing and organizing social and financial capital at their disposal in order to maximize the benefit (Tefera & Dom, 2018) from irrigation and achieve economic success. These people are mostly young and energetic adult men (Ayalew et al., 2016), but they are not the only ones. They are committed and willing to take on the risk associated with crop failure and market issues. These entrepreneurs often sharecropped large tracts of irrigated land from the local individuals/households. They either cultivated the sharecropped land by themselves, or sharecropped it out for the third party, or both (to cultivate part of it while sharecropping out the remaining land), depending on the size of the sharecropped land and the practicality of managing the land at the time. For example, Ayalew et al. (2016) observed in the area that a local individual held 30 *kert*⁷³ (equivalent to ten households' ownership) of land through sharecropping and working by himself. Similarly, the case of the young men in Gidaaraa village also illustrates the situation more clearly:

I have sharecropped about 80 *kerts* (20 hectares) from various people, including my parents, and all of the land is now covered with an onion crop for market. I cultivate 30 *kerts* (7.5 hectares) of the land by myself, covering all costs, but sharecrop the remaining 50 *kerts* (12.5 hectares) with other external investors who finance the cost and share the profit at the end of the day. I have also hired farmers to help me with farming (Interview at Gidaaraa, November, 2020).

This case indicates that a single individual has accumulated large irrigated land as equivalent to a holding of 27 households to use it for a determined period per the contract. The land is contracted-in from individuals and households who are unable to fully exploit and benefit from their land. Typically, crops are produced three times per year (Fekadu, 2016): once for staple crops and twice for cash crops. In this context, some households have produced staple food on their own and sharecropped the land for cash crops, whereas others have

⁷³ is the local land measuring unit. One *kert* is equivalent to 0.25 hectares.

sharecropped the land for both staple and cash crops due to constraints limiting their ability to engage in either form of crop farming activity.

In this process, the sharecropper not only accumulates land but also maximizes the benefit from it at the expense of many households who finally share a very marginal benefit (the detail discussed in chapter seven). This in turn results in economic inequality and reinforces wealth differentiation among individuals or households in the community. Some of the young individuals from the Gidaaraa and Tuuroo-Baddannootaa villages who became successful in the process were recognized by the government as model farmers and received prizes from the district agricultural office for their success (Ayalew et al., 2016).

Furthermore, external investors and highland farmers with capital have contracted large irrigated plots from many local households, either through the local brokers or directly by themselves, for the production of cash crops. Because of their financial capacity and business networks, primarily investors in urban towns, including the capital city, sharecropped vast tracts of land and participated in cash crop farming ventures from afar. Some external investors may be civil servants who work from a distance or who have given up their previous professions in town to become fully immersed in farming activities. In this regard, it was observed that a person who had been a medical doctor in a hospital had completely abandoned his profession and was fully placed in the community to engage in farming by share-cropping large irrigated land and hiring many farmers to work with him. Furthermore, a case with one informant revealed that there was a university professor working at a distant university and who engaged in farming activity as an external investor, financing the farm operation from afar on share-cropping land.

Regardless of the background of the external investors, all of them have sharecropped large areas of land from many local individuals and have gradually consolidated large plots of irrigated land to maximize their profit during their term of contract. For example, it was noted by the former district land administration head that there was an external investor living in Addis Ababa who sharecropped more than 60 *kert* (15 hectares or equivalent to the ownership of more than 20 households).

5.7. Exclusion of Pastoral Communities via Land Distribution and Certification

As highlighted, the process of converting communal land to private use and authorizing it with a legally binding certificate has transformed the land ownership system from flexible and non-exclusive communal holding rights to rigid and exclusive private holding rights. It establishes a clear boundary and grants the holders the right to private use, preventing others from accessing the parcel of land (Hall et al., 2011). The process has benefited a few while excluding many individuals and groups of Karrayu pastoralists from accessing and benefiting from the natural resources of their ancestral land. It has maintained exclusive land rights, restricting flexibility in access and management (Robinson & Flintan, 2022). Hall et al., (2011), identified three exclusion processes: actors retaining access while effectively preventing others from using it; actors who already have access losing access; and actors who do not have access being prevented from obtaining it. The first two are primarily representative of and characterize the type of access exclusion manifested in the study area as a result of tenure transformation and associated land certification.

As previously discussed, the state and its local representatives defined the land distribution through establishing various criteria, such as age, place of residence, and occupational status. They also sketched the landscape for irrigation purposes so that they could determine the land use as well as the total size of land for parceling and certification. These processes set the scene as a precondition to the exclusionary framework, such as determining who is included and excluded, the number of individuals included, and the size of land for which an actor will have the right of exclusion in the new setting of production relations. The framework is then complemented through land distribution and certification. It then resulted in who actually included and the actual figure of an individual or household having a chance in the process to continue benefiting from the land while also having the right to prevent others from doing so. For example, as shown in the Table 1. 5786 households and individuals who got the land are entitled to a bundle of rights to use a specific plot/s and to prevent others from using it. Theoretically, according to Ethiopian land law, pastoralists receiving land have the usufruct right, the right to use the land as well as prevent other individuals from benefiting from a given parcel of land. Whereas those who didn't receive any irrigated land were effectively excluded and also lost access rights to which they had before the land was put under irrigation. As follows, the process has excluded different groups or individual members of the community.

First, the land distribution and certification have entitled some households and individuals to land, while many others who were 'legible', fulfilling the predefined criteria to be considered in the land distribution process, are now landless and excluded from the ancestral land that they had been using. Given the limited irrigable areas that the project has created, all individuals who were in need of the irrigated land could not receive the land. During the process of distribution, some individuals or groups were given priority to take the land, while others were either rejected or given secondary importance to access due to their positions (social, economic, cultural, political, etc.) in the community. For instance, as pointed out earlier, young people and women-headed households were not given priority to take land. Moreover, according to a 2012 report from the district, 1919⁷⁴ registered individuals in the six villages did not get access to irrigated land due to a scarcity during the second round of re/distribution. This implies that at least a certain number of officially recognized individuals who previously had customary access rights to the particular land were excluded from accessing and using it. They were denied legitimate rights as well as restricted from using them. Similarly, Lebert and Rohde (2007) in South Africa and Bekele and Padanabhan (2012) in Ethiopia documented that the process of privatizing common land excludes many households, notably the poor and disadvantageous, leading to a loss of access to their former commons.

Population expansion and market development have made land extremely scarce, putting increased pressure and competition on high-value agricultural areas (Toulmin, 2008). Thus, the figure and numbers of individuals being excluded are hoped to increase now and in the future with the increase of the new younger generation joining the economy as well as with continuous communal land distribution following the expansion of the project in the remaining villages. Moreover, the more available arable land in the area is also presumed to induce further private farming (Fekadu, 2016) and, consequently, more exclusion.

Second, the inclusion criteria of age 18 and above indicated that any Karrayu teenagers aged below eighteen years are restricted and excluded from the land to, which they had access rights by virtue of being born Karrayu (Ayalew, 2001b; Buli, 2006). This contradicts the Karrayu concept of customary land ownership, which was inclusive and entertained all members of the community regardless of their sex and age. Similarly, the future generations

⁷⁴ Fentalle District Land Administration and Environment Protection Bureau (2012), Report on Irrigated Land Distribution and Certification Performance in the Project Command Area.

(new born) are also denied the same rights and needs that were accommodated in the customary tradition. In this context, individuals born to land-owning (agro-)pastoral parents have a better opportunity of getting land through inheritance, but those who are born to landless parents have little chance of landownership, at least through inheritance. Like what Goetter and Neudert (2016) discovered in Madagascar, this resulted in intergenerational inequality by leaving nothing for future generations. Thus, it contradicts the national goal of land distribution, which seeks to ensure equitable and secure ownership (Mebrat, 2011; Toulmin, 2008).

Third, the criteria that urged only the inclusion of current residents of the area also excluded other Karrayu individuals who were living away from the area at the time. This seems to balance the scarcity of rural land with addressing the growing rural population, excluding urban residents and those engaged in other professions (Alelegn, 2020). Yet the process actively barred individuals, mainly close relatives such as parents, children, or siblings who moved away from the area. It denied these groups access to the land they had traditionally used, even from a distance, for instance as absentee herd owners or part-time pastoralists (Little, 1985).

Fourth, those who have been given irrigated land and title are also barred from accessing land that they no longer own but previously had access to. The vast former common land was subdivided among many individuals and households. In the process, a given individual or household was only granted and entitled to a portion of the common land set aside for subdivision but was excluded from the other, larger portion. The Karrayu informant from Ilaala village clearly elucidated this saying,

Land is being measured and limited. We cannot use this (he indicated the surrounding area) extended field of land as we did before. We just use the portion that they (the officials) have allotted and determined for us (Interview, February 2021).

The inclusionary portion of land for one holder is exclusionary for the other fellows who own the other segment of the same field (cf. Hall et al. 2011). In this regard, as shown in the preceding table 1., out of 3621 hectares of land allotted for irrigation a household/individual only received a bundle of rights for less than a hectare of irrigated land (0.25-0.75 hectare) while being excluded from the remaining field, for which it had access rights to all of it in the past.

5.8. Summary

Linked to the irrigation project, the communal land has been distributed for private use, largely for irrigated crop farming. This has shrunken the dry grazing land that had earlier been used for collective pasture purposes. The process has also eroded the enduring pastoral customary institutions and tenure systems that have resulted in a new order of relationships in the area. The communally held land has transformed into private property, giving the holders the right to benefit and also exclude other potential fellow users. The land certification has also affirmed and tightened the exclusive rights of the holders related to use, management, and decision-making over the land and its resources.

The process of land distribution has granted land ownership to some agro-pastoralist individuals and households. However, many of them still fail to access the land they hold. Many of them either totally failed to benefit and/or only marginally benefited from their holdings due to a lack of power to do so. Some groups of the pastoralist members, such as unmarried young girls and divorced women, have less opportunity to benefit from their holdings due to cultural barriers that delegitimize their independent use of holdings while they are with their parents (unmarried girls), or sharing of land during family breakdown for divorced women. And also, the cultural expectation that girls use land from their husband's side is another barrier for girls not to benefit during marriage life from their already entitled holding.

Similarly, many other individuals and households also do not fully benefit from their holdings due to factors constraining their ability to use them. As mentioned, the irrigation project has necessitated tenure transformation and land use change, and consequently new production relations and livelihood strategies for which many Karrayu pastoralists are less familiar with and incompetent. Many of them lack factors endowing them with a certain form of power to fully engaged in irrigated farming. The identified constraining factors generally include technology, such as agricultural inputs and irrigation water shortages in some villages; capital; knowledge and skill; labor; market; and socio-cultural factors, such as entrepreneurial attitude toward crop production. As a result, they frequently sharecropped their land with those in positions of power, earning only a marginal profit.

Instead, a small but growing number of the local pastoralists benefit not only from their own holdings but also from others' holdings through entering into sharecropping arrangements.

Similarly, external investors, who are much more competent and have the power to manage crops, benefit from the land owned by the agro/pastoralists. In the process, both the investors and the able local pastoralists have to consolidate large tracts of land by entering into land transactions with many individuals and/or households to maximize their benefit.

Lastly, the land distribution and certification have granted landownership to a few individuals and households in the community, while at the same time excluding many members of the community from ancestral land. In this regard, some members of the community, including the younger and the new generation, have been excluded from the land that they had customarily tended to access. This in turn creates inequitable land access that can be transcended over generations.

So far, this chapter has shown that the implementation of the project affected access to and ownership of land. Its cumulative effect is a further alteration in the customary property regime and a marker of exclusion from natural resources such as land. The chapter that follows will show how the project, as a technological package, transformed the value of another significant natural resource—water. It reflects on how these shapes the dynamics in terms of meaning, access, and utilization of water in the area.

CHAPTER SIX

COMPETITION, CONTROL, AND ACCESS TO IRRIGATION WATER

6.1. Introduction

Water is one of the most important natural resources (Mehretie & Woldeamlak, 2013), and it is even more critical in arid and semi-arid pastoralist areas, not only for crop production but also for human and animal consumption (Fekadu & Korf, 2012). Its availability and accessibility in sufficient quantities are key components in increasing productivity and ensuring sustainable development. In lowland areas of Ethiopia, where livestock production is the main sustenance, competition, control, and access to irrigation water are becoming increasingly critical challenges. Importantly, the value and meaning associated with it are dynamically changing and have affected the way people and natural resources are related.

As the case of the Karrayu pastoralist area has demonstrated, the value and meaning attached to natural resources such as water and land have changed over time. This is partly due to the new development venture of irrigation facilities and its associated narratives and practices, including the privatization of communal land. The social element—relationships and interaction over water—has shifted, and the process now involves multiple actors with various interests. The introduction of the project (FIBIDP) and growing importance of crop cultivation, which, in fact, is aligned with other elements (Li, 2014b), has changed the purpose and usage of water in the area.

In the study area, the practice of social relations related to water access, usage, and control has come to be characterized by stiff competition, disagreements, negotiations, and certain forms of cooperation, but in a way that differs from the traditional way of resource management and utilization. Water, which was previously used primarily for humans and animals, has become critical for agricultural use, particularly for commoditized crop production, making water more valuable and precious than ever before. This reframes and mediates how water is perceived in the area, as well as how different actors related to it interact with one another and establish social relations in the process of accessing, managing, controlling, and governing it in the new context and setting.

This chapter addresses how the value and meaning attached to water in the Karrayu pastoral area have altered over time due to technology (irrigation infrastructure) and associated practices placed upon it. It also discusses how this in turn shapes relationships and practices among various groups of actors involved, such as villagers differentiated spatially along the catchment, irrigation experts working in the Fentalle district administration, and those working for the scheme administrator over the use, access, and control of water in a way that was not previously common in the area.

6.2. Water: Socially Constructed and Relational Resources

Water is life for humans, livestock, and plants, but its meaning and uses can change dynamically over time and space, as well as depending on the actors involved. This is due to social and technological change rather than the physical and substantive quality of water as a resource (cf. Bridge, 2009; cf. Li, 2014a). According to Bridge (2009), natural resources (water in this case) are material objects and socially constructed entities whose value and utilization are dynamic and shaped temporally and spatially by the technology and culture that define what constitutes them. For many arid and semi-arid pastoral areas, including Karrayu pastoralists, whose history of livelihood strategies predominantly depends on livestock production, water has been traditionally used for livestock and humans rather than farming. In such context, in Karrayu, what people often thought of when they heard the word ‘water’ was its primacy for humans and livestock, aside from its religious and ritual/cultural values, as well as its value for pasture and tree growth (in the broadest sense) (Buli, 2006; Girum, 2013). Yet, for many of them, imagining and valuing water for irrigated agriculture was distant or secondary, as such a practice (crop farming) was not only uncommon among pastoralists, but was also regarded as an inferior and degraded pursuit (Sandford, 2013). It was in the late 1980s that a few Karrayu agro-pastoralists (particularly in the Gaalchaa area) began experimenting with irrigated crop cultivation on a small plot using overflow water from the adjacent Metehara sugar plantation (Buli, 2006; Pankhurst, 2013). However, the practice (irrigated farming) has gradually expanded since then, with the Fentalle irrigation scheme hastening the process over the last decade and a half. This has significantly changed the social understanding of water among Karrayu pastoralists in general and in the study villages in particular.

The Awash River, the largest body of water on which the referred scheme is based, has been one of the most essential sources of water for the economic, social, and cultural life of the

Karrayu community (Buli, 2006; Müller-Mahn et al., 2010). It has been serving the locals for animal and human use as well as ritual purposes, despite the fact that many access points to it have been denied due to government development ventures; Metehara sugar plantation and Awash national park are typical examples. However, when linked to irrigation technology, its value is much more appreciated and is becoming increasingly important for irrigated farming apart from the earlier function it performs. In this regard, a local elder irrigation water users well noted,

We have been sharing and using the Awash River harmoniously, primarily for our livestock, but now it is used for irrigation of crops and has become very precious, making access to it very competitive and conflictual (interview at Gidaaraa village, December, 2020).

The Awash River in its bank has often been referred to locally as '*Bishaan Hawaas*' (Awash water), but its name has changed and it is now referred to as '*Bishaan Jalliis*' (irrigation water) when it has just diverted from its natural route and joined the irrigation structure. This shift in water terminology denotes the application of technology to naturally flowing water (river). It affects the mechanism of accessing it on the one hand and the understanding and social value of the water in terms of its priority use and importance on the other, i.e., water for irrigation, which is generally defined as supplying water for crop production (Osman & Hag, 1974). It is now more common in the area to hear people refer to '*bishaan jalliisi*' when discussing water-related issues rather than '*bishaan Hawaas*,' as was before, even though the latter is still the source of the water they are discussing. This supports scholars' (e.g., Bridge, 2009; Li, 2014a; Pertaub & Stevenson, 2019) contention that it is technology and culture (in the broadest sense) that bestow utility and value on resources.

Earlier research work in the area documented that the local community has long complained about government development projects that prevent them from accessing '*bishaan Hawaas*' and the grounds connected to it for livestock, human, and ritual purposes (Ayalew, 2001b; Buli, 2006; Müller-Mahn et al., 2010). However, during the fieldwork, it was observed that many of them, notably in the downstream villages, are now actively claiming and complaining about a lack of access, scarcity, and inequitable distribution of '*bishaan Jallis*'—the same water but conveyed through irrigation structures primarily for crop cultivation.

(Natural) resources, as described by Gavin Bridge, are ‘part physical entity, (and) part social category’. The former denotes the resources are ‘things’, indicating its materiality, while the latter is the cultural aspects of the resources ‘into which societies place those components of the non-human world that are considered to be useful or valuable in some way’ (Bridge, 2009: 1219). Its inherent quality does not reflect the ‘resourceness’ of the material that is regarded as a resource (in this case, water) but rather the ‘assemblage of heterogeneous elements’ that are linked to it, explain and come to define its use value and the social meaning embedded in it (Li, 2014a: 589). Resource as material entity, ‘is not property unless it is actualized in particular relational arrangements’ (Blomley, 2013: 39). It is then a relational and combination of other elements that made together allows water to possess certain attributes and be considered as a resource by various actors (cf. Blomley, 2013; cf. Li, 2014a).

Irrigation technology associated to FIBIDP is one of the assemblages and adds value to the water in the area in four interrelated ways. First, the irrigation infrastructure redirects and regulates the flowing water on the riverbank, making it governable or rendering it legible and ready as one of the key inputs to be converted to production—crop production. Without readily available water, crop production in such arid and semiarid pastoralist areas where rainfall is erratic is futile. Second, irrigation infrastructure transports water via canal over long distances where it would otherwise be impossible, bringing it closer to production sites, covering larger spaces or villages, and affecting many people. The scheme transfers water through a 49km main canal and two canals 38km and 31km branching canals to serve and primarily impact the lives of a large population spread across more than 11 villages along such a large catchment area (OWWDSE, 2011). Third, irrigation as a technological package—water at the center—transforms pastoral land into a space of investment—crop investment, one of the elements that the government envisioned while putting effort and resources into irrigation (Buffavand, 2016; Fratkin, 2014). Finally, this scheme reorders the social relations and relationship between nature and local people by creating opportunities for production and marketing, thereby making the environment the focus of attraction for a conglomeration of actors.

The other element of the assemblage is related to government practices and discourses in its wider sense, including policy environments that encourage sedentarization. As noted, many African governments, including Ethiopia's, have undermined the pastoral mode of production

and emphasized crop farming as a means of improving pastoral life and ensuring food security (Ronald, 2014; Schlee, 2013). To that end, water harvesting and control for irrigation are not optional but required, making water a vital resource to transform and enhance agricultural production and productivity (Bont, 2018). As previously stated in the previous chapter, during the project's implementation, the government portrayed and characterized Karrayu as having a large arable space but in need of skills and water, which the referred project would contribute to solving. The discourse emphasizes, on the one hand, the existence of large tracts of land that are not cultivated, partly due to the pastoralist's limited ability to do so, and, on the other hand, it stresses the importance of water in bringing this land under cultivation. This has created dynamics in how officials and other actors perceive water and land in pastoral areas, as well as impacted local practices and relationships with such resources.

Moreover, practices related to the irrigation project, such as privatizing the common land via land certification and demarcating it for farming, redefined the property ownership and land use pattern, making the pastoral land investable (Bekele & Padmanabhan, 2012). The privatization of the tenure regime makes exclusionary rights easily enforceable (Hall et al., 2011; Macpherson, 1978). It is an exclusion, among other things, that makes land resourceful for humans (Li, 2014b). Furthermore, irrigation is typically part of a land improvement investment (Pertaub & Stevenson, 2019). Thus, the availability of water in the area increases the value of the land and makes it more investable and desirable for crop production.

Water is a very crucial resource parallel to land in irrigation systems. In this regard, irrigation determines the value and price of the specified land. For instance, as also true elsewhere, in the study area, the distinction of land in terms of quality is often defined and based on availability and access to water, among other things. It is also the readily available water that encourages and attracts more actors (both internal and external) wishing to invest capital and labor to produce marketable crops. Therefore, (irrigation) water has become one of the resources that are not only crucial for production by itself but also a resource that redefined the value of Karrayu's land as commodified material and productive space as well as made it a source of profit through investment. A young informant from Gidaaraa village, as quoted in length, has to say this:

Because there is abundant irrigation water, a growing number of investors (external capital owners) are coming in and wishing to sharecrop in Gidaaraa village over

neighboring villages. They can get enough gravitational irrigation water for production without having to pay for a water motor pump. If you go to the farthest villages in downstream, such as Xuxuxi and Ilaala, you will relatively find fewer investors; some of them even went there because they could not get sharecropping land here. They often use water motor pumps there to draw water from the canal, as the gravitational irrigation water is not always reliable and the size of the water in the canal fluctuates and declines. They (investors) always move in response to the availability of irrigation water, as this affects their productivity and profit. When there is enough water, investors arrive and nag the villagers to contract out their land, but when the water becomes intermittent and declining, they leave, as is common in the Ilaala village, where access to sufficient water is problematic (Interview, December 2020).

The above informant clearly highlights the importance of irrigation water in determining both the productivity of the land and the value attached to it.

Furthermore, the widely held stereotype, not only among officials but also among highlanders, that pastoralists are wanderers with no skill, are unwilling and unfit for farming, but have an abundance of surplus land (Little, 2021) contributes to the dynamics. As shared by many interviewed migrant farmers and an investor, the below case of migrant young farmer exemplified this fact when he responded to what motivated him to come to the area, saying:

Land and water are available but they [the local pastoralists] do not know how to farm but move with cattle leaving the productive land and irrigation water aside. I have to grasp the opportunity to change and improve my life (interview, in Haro Adii, November 2020).

The growing numbers of external actors come to the area seeking farm employment and cultivable irrigable land. As Ayalew et al. (2016) also noted, many people, including land-hungry highland farmers and capitalist investors from nearby and distant towns, flock to the area to take advantage of the scheme's opportunity. Thus, the new thinking and dynamics over water in the area consequently have created the shift of social value and meaning of water that guide the relationships among various actors and local practice over accessing, controlling and utilizing the water as a resource as discussed below.

6.3. Competition and Access to Irrigation Water

Water access is inextricably linked to community definitions and ways of life (Pertaub & Stevenson, 2019: 177). In the case of Karrayu, water is coordinated with entities such as irrigation technology, government discourse and practices including policy encouraging sedentarization and water harvesting, privatization of the communal land, and the influx of incoming migrants competing for the resources. These have given rise to a new reality for imagining and gaining access to water. Such consortium with other elements and the form it takes makes property (water) to be more important (Bloomley, 2013). This has altered the social relationships in the project area regarding irrigation water access, use, and management. Irrigation water is increasingly demanding, and its access is highly competitive. The local people have competed and sometimes disputed within and across villages over its access for crop production.

The competition is exacerbated further by unequal distribution and asymmetric access to irrigation water, which varies spatially between the head and tail ends of the irrigation system (Dayton-Johnson, 2003). Similarly, and as it is also common to many irrigation projects, in the project area the availability and accessibility of irrigation water have varied both temporally and spatially along the catchment. The amount of irrigation water in the main canal as well as arrived at the field level has not uniformly distributed along the bank in all the five study villages. It has declined and in short supply as one goes from upper stream to downstream areas.

In the very upper stream village of Gidaaraa, the local community has no complaints about the availability and quantity of water, as there is enough water in the canal and enough water to reach the farm level. The entire Gidaaraa village has received sufficient water for their crops, and it has even been observed that water flows within the village on the roadside to serve shade trees and regulate (lowering) the temperature. Yet, sometimes there is disagreement among users over mismanagement in relation to its use (such as not returning the excess water to the canal, letting the water impregnate the next farm, and causing damage). The remaining villages, on the other hand, have experienced varying degrees of water scarcity, and the problem with quantity and accessibility of water worsens as one moves down the villages: Tuuroo, Dirree Sadeen, Xuxuxi, and Ilaala, in order. The villages along the middle stream, such as the irrigation reach part of Tuuroo Baddannootaa and Dirree

Sadeen, have also received a good amount of irrigation water, but there has been a decline during the dry season of the year, disturbing the production.

This variation and uneven distribution of water also exists not only between villages but also within the village among sub-villages based on the topographic setting of the land. For example, all six sub-villages of Gidaaraa in the upper stream have received adequate irrigation water all year, even getting a fair amount during the dry season when the amount of water in the canal drops. However, water flows in downstream villages like Xuxuxi and Ilaala have frequently been very low and intermittent in all or parts of their sub-village areas. Much of the water was used and trapped by the upper village users.

The scarcity of water worsens mainly during the dry season of the year (mid-year) and is also much worse in Ilaala than in Xuxuxi. For example, a significant portion of the village in Ilaala had been out of production for a long time due to insufficient water flow through the main canal and erratic water availability. Only the upper tip of this village managed to sustain production. Many individuals and households who received land in this part had abandoned their land, which later became infested with *Prosopis Juliflora* (locally called '*Muka Woyyaane*'), and kept on following their livestock. Some of those who were fortunate enough to obtain capitalist sharecroppers also sharecropped-out their land to investors who could afford a water pump to draw water from the canal.

The acute water shortage in the downstream villages makes the competition over water access much more stiff and violent than in the upper stream villages. This is consistent with previous works (examples: Bacha et al. (2011) in Mehretie & Woldeamlak, 2013; Ribot & Peluso, 2003) that argue that position in relation to a resource (in this case, being at the tail end of an irrigation project) matters and influences access to resources (water). As Dayton-Johnson (2003) also noted, in a context where the benefit of resources such as irrigation water is not fairly distributed spatially, access to irrigation water is very competitive and creates conflict and disagreement among water users.

Furthermore, due to their geographical location, the water users' interaction and negotiation have also extended beyond their own specific village, i.e., they interact not only with the adjacent users within the same village but also with users in the immediate next upper stream villages who impact the available irrigation water in the downstream villages. For example, there have been incidents in which water users in Ilaala village disputed with water users in

the adjacent upper village, Xuxuxi, over blocking and diverting irrigation water from the main canal, as discussed below.

Attempts at illicit water use, such as theft and turn abuse, have been made to access irrigation in the study area, though this is much more common in downstream villages, such as Ilaala, than in upper stream villages. This has caused disagreement and conflict that have spoiled the community's long-standing relationships over resources. In this regard, a local water user informant in the downstream village expounded that

We have an irrigation water schedule that all users must adhere to in order to properly share the available irrigation water, which varies seasonally and is frequently in short supply. Many users in the area, however, steal water and divert it to their farms without being noticed, both at night and during the day. This has frequently resulted in disputes and disagreements between neighbors that we had not previously experienced (Interview, December 2020).

Furthermore, citing a rising rivalry for irrigation water, many migrant farmers stated that they are always afraid of dealing with water Rota in order to avoid conflict with locals. Rather, in the process of contractual production relations between the external farmer and the local actors, ensuring water access to farms and negotiating water turns are assigned to and part of the responsibility for the local actors. This is due to the fact that disputes with locals over water access are far more serious for outside parties than disputes among locals. An migrant farmer explained, saying

There is an increasing problem of water theft and turn abuse among local water users, but most of the time they tolerate each other and resolve disputes informally through their traditions. If the disagreement is with us (with non-locals), we will not be tolerated, but they rather attacked. As a result, we are not involved and do not wish to be involved in dealing with the water turn. This is up to the local individual with whom we enter into a sharing contract (Interview at Metehara, November 2020).

The emergence of many users along the scheme, linked to a dynamic in the value of water, was one of the reasons mentioned by local pastoralists for the existence of stiff competition and conflict over water access.

6.4. Struggle for Irrigation Water Access: Blockage and Diversion as a Strategy

As previously stated, water distribution has varied throughout the project depending on the season and head-tail setting in relation to the project. Water is readily available in upper and partly middle stream villages, both in terms of distribution and quantity. The availability of sufficient quantity and ease of access reduces the disagreements between water users, if not non-existent. The water Rota is not rigid, allowing users to use irrigation water for their crops in a flexible manner. They irrigate their crops whenever they want, but they should negotiate and give priority to each other when the need arises in case of overlap in watering the adjacent fields. The village head in Gidaaraa elaborated on the situation, saying,

We have enough irrigation and any of us can use it as we wish. Access to irrigation water was also not a frequent source of contention in the village. However, there is a problem with water mismanagement, as people simply let water and overflow out of their fields, soaking the neighboring farms (interview, February 2021).

However, in downstream villages such as Xuxuxi and Ilaala, there is insufficient irrigation water. This is coupled with the gradual expansion of irrigated farming, heightening competition among water users within and across villages for access to water. There is a strict water Rota that does not allow for flexibility in access. This consequently, as informants mentioned, leads water users to engage in water theft and turn abuse mainly during critical stages of crop growth, such as at seedlings and the early stages of seedling transplanting. Furthermore, unlike users in other upper villages, many water users in these two villages employ a strategy of blocking the main canal in order to divert and get enough water to their farm fields. It was observed that there were two major (large) blockages in the main canal at two points in downstream villages: one in Xuxuxi village to collect enough water for Xuxuxi village users while preventing water from following to Ilaala downstream, and the second other blockage was below the first blockage in Ilaala village to divert the lion's share of water to privilege some users while denying other users just below the blockage in the same village.

Photo 4: The irrigation canal blockage and water diversion at Xuxuxi and Ilaala (from top to bottom)



Source: by author

There were also some more small blockages at different points in the main canal in Xuxuxi village with the same intention of getting enough irrigation water for the crop production. Many of the users in the area have illicitly constructed canals to redirect the water to divert to their farm out of the planned route. The district irrigation expert state the case as:

Some water users have constructed new water detours that block the main canal and divert the water to farmland outside the planned command area. Such a practice is more common in Xuxuxi village than others. For example, there are about eleven such illegal water routes. This practice is becoming more common as interest in irrigation grows (Interview, January 2021).

These blockages of the main canal are also partly related to the conspicuous land enclosure to expand cultivation outside of the project catchment area. Many individuals engaged in the illicit enclosure of plots of land that were not originally part of the project's planned area. For instance, as pointed in earlier chapter five more than 200 hectares of land were illicitly enclosed in Ilaala village and put under irrigation. This land was on the outskirts and not part of the project's catchment area. To ensure irrigation water accessible to such distant crop field, the owners organized and built a new water diversion. In this context, water users in downstream villages block the main canal to collect enough water that passes through the high-rising secondary canal to irrigate farm land in the project catchment as well as land in the peripheral area outside of the project.

This act of blockage has consequently caused serious tension and confrontation among water users within the same village as well as between the water users in neighboring villages, on the one hand, and with officials of the scheme administration, on the other, who have attempted to dismantle the blockage and clear the main canal at various times.

Within the villages of Ilaala and Xuxuxi, where the researcher conducted an intensive farm visit, the two big blockages were built within the main canal with the initiative of groups and individual water users using wooden logs, debris, and stones. This allows them to redirect water flow away from its original paths and into their peripheral crop fields, while restricting access to the adjacent fields included in the command area below it. This has induced the impalement and breakage of the functioning canal on the one hand, and disagreement and dispute among adjacent users on the other.

The blockage of the main canal in Xuxuxi village for instance, has increased the water shortage in Ilaala village and consequently caused serious dispute and disagreement between the users in the two villages. This recall Suhardiman et al., (2017) important suggestion of considering more complex issues to understand that exploitation of resources by one user reduces the availability of resources for others, rather than simply viewing water availability and scarcity alone.

The problem of blockage is especially severe during the dry season, when the amount of water in the main canal has decreased. A DA who previously worked in Xuxuxi village recalled an incidence of dispute between the two villages over the blockage of a canal, saying:

There was a time when serious disagreements erupted between the two villages over the full blockage of the main canal, which aimed to irrigate large tracts of new peripheral land (land that was not included in the project catchment) in Xuxuxi village. However, government officials arranged for negotiations and dealings to take place between representatives from the two villages and handled the case at the time. The negotiations were concluded and resolved with the decision that the water users in Xuxuxi remove a portion of the blockage to allow some portion of the water flow for Ilaala village. This consequently resulted in the removal of approximately 50 hectares of land from production in Xuxuxi village (Interview, January, 2021).

An elder in Ilaala village also recalled the aforementioned incident and emphasized the importance of blocking practices in the two villages as a strategy for accessing irrigation water, saying:

We had been in dispute with water users in Xuxuxi village about diverting water, blocking the main canal, and preventing us from accessing irrigation water. Our crops failed on the field due to water shortages, and we got into a confrontation with the users in Xuxuxi. We even got to the point where we were about to fight over the gun. The case was taken to the district police, who later insisted on removing the blockage partially. However, the problem still persists and is widespread. When there is a water shortage, the users in Tuuroo village (in the middle stream) block the main canal to store the passing water from the upper village. Similarly, users of Xuxuxi village obstruct the main canal and collect some of the overflow water from Tuuroo, but we are

at the tail end and do not have enough water passing through all of these blockages, putting us in danger (Interview, January, 2021).

The irrigation scheme administration also encountered resistance from users to dismantling the blockage and cleaning the main irrigation canal along the stream. According to informants, water users in Xuxuxi and Ilaala villages who benefit from the blockage organized and clogged the bulldozer machine in order to prevent it from cleaning the canal. As the Fentalle district irrigation expert recalled, on the day when the bulldozer arrived in the areas in 2016, some of the water users came armed with guns, sticks, and other defensive materials to attack anyone who attempted to dismantle the blockage and prevent the machine from clearing. The issue was highly politicized and created contention between the water users and the officials. After extensive discussion and negotiation, the blockage was removed, and the canal was temporarily cleared, though users rebuilt it later. The same irrigation expert, who is originally from the Karrayu community and was a key player in resolving the issue, stated:

I was appointed after other officials failed to pursue the water users, who kept on resisting the clearing of the canal. During my conversation with the water users, I asked them, 'Who built this blockage?' 'We did it,' they said. Then I said, 'If that is the case, why not rebuild it after the bulldozer cleans the canal if your land will remain inaccessible to water rather than confronting the government?' I suggested. They clapped their hands together and agreed with the idea immediately. In this way, I tactically convinced them and settled the dispute at the time. The water users also rebuilt the blockages on the main canal again after the bulldozer finished its mission after 23 days (Interview at Metehara, January 2021).

The quote above has indicated that blockage and illegal water diversion have continued to be practiced among some water users with the knowledge of district officials, but also with the subtle support of some officials in providing advice on how to practice as the informant did in contrary to the scheme administration officials criticizing the act. However, neither the water users involved in the blocking nor the aforementioned informant took into account the negative impact such an act would have on other water users in the same village in the downstream area. While some of the affected water users interviewed were hesitant to confront and expose the illegal activities of the blockers partly for fear of losing their relationships, others expected government officials to handle the issues.

6.5. Explaining Irrigation Water Scarcity and Uneven Distribution: A Contested view

The acute shortage of irrigation water mainly in downstream villages have attracted attention. Its cause has differently been explained and justified among the officials working in the scheme administration and construction engineer, water users, and officials working in the district (such as irrigation expert and development agents). These explanations have sometimes overlapped and been shared, while other times they have been contested by users and officials who blame one another. The fact is that, however, as Kissawike (2008) argued, water scarcity (and its inequitable distribution alike) is a natural or physical but also socially induced phenomenon in the process of human-nature interaction.

The justification from the officials, notably from the administration of the scheme, focused on making the water users accountable for the existing water related problems such as scarcity and unequitable distribution. It was about blaming the victim for the problem. They depicted as if there were no technical problems related to the project design and implementation, the amount of water flow in the canal, or scheme management from their side.

In this regard, the head of the irrigation scheme administration argued saying:

We are letting enough water into the command areas. We have a modern irrigation scheme that enables us to properly control the amount of water and determine the direction of the water flow. Thus, we have a watering schedule, and accordingly, we turn some lines off and let enough water flow to irrigate some others based on their turn. However, the users neither follow this schedule nor properly utilize the water (FGD, February, 2021).

On the contrary, the construction site manager and engineer of the project blame both water users and the scheme administration, pointing out that

There is no design or implementation problem. The canal is up to standard and carries irrigation water sufficient for the command areas. However, the problem stems from poor water management and utilization among users, as well as poor water administration by scheme officials (Interview, January 2021).

Water users, primarily in upper and middle stream villages, have been criticized by scheme administration experts for their extravagant and wasteful water usage. This was due to water mismanagement, such as leaving water in the canal after watering in the upper stream, impaling the water pipe canal, and irregular water usage without a schedule and Rota in a negligent and unconcerned manner to the downstream villages. In support of part of this assertion, it was also observed in Tuuroo village that the water wastefully flows out of the canal, simply soaking and damaging the road, as was also noticed in Gidaaraa and Dirree-Sadeen villages. Further, the scheme administration officials argued that the widespread act of blocking the water canal and extend the water out of the command area in the downstream villages have facilitated the scarcity of irrigation water and inequitable distribution among the water users along the catchment as well as within the same village. They also believed that the problem also linked and exacerbated because of the increasing demand for irrigation water due to growing actors (both internal and external) involved in production of crops. During the FGD, they stated that they have a plan to work hard to reduce water waste in Gidaaraa and middle-stream villages, such as Tuuroo village, so that they could intervene and respond to the critical water shortage and unfair distribution in downstream villages like Ilaala. With this goal in mind, they have been patrolling from dawn to dusk along the irrigation catchment to supervise and take measures against the extravagant use and mismanagement of water.

Water users in the downstream villages, however, explained and associated the problem with the design and implementation of the scheme on the one hand and poor service delivery from officials in scheme administration on the other. They explained that the project's design has a flaw, and the secondary canal is connected to a rising point from the base of the main canal/primary/, making water flow through it impossible in the event of a decrease in the amount of water in the canal. The amount of water flow in the main canal frequently reaches below the level of the secondary canal and thus make gravitational irrigation, the system for which the project is designed, impossible. In support of this claim, during field work it was also observed in the downstream village of Ilaala that the water in the main/primary/ canal was lower than the level of the secondary canal, necessitating the use of certain mechanisms to raise the level of the water so that it could pass through the secondary canal and reach the farm field.

Photo 5: Wasteful irrigation water use at Tuuroo



Source: by author

The local informants further explained that the secondary canals are susceptible to blockage and are not manageable for clearing manually with the effort of the users. It requires machines to clean the deep-grounded secondary canal, which makes the users dependent on government involvement. This makes the easy fix of the canal problematic and creating shortage of water which consequently make the users to get frustrated to abandon irrigation or to impale and broke the canal to use.

Moreover, some informants in the downstream also pointed out that the shortage was man made created by official working at scheme administration notable water outlet gate keeper. The gate keeper either let insufficient amount of water making the scheme operated under its capacity releasing small quantity of water or do not regularly open the gate per scheduled Rota in order to have some bribe money from the users. Many informants, mainly in

downstream villages, argued that irrigation water is highly commoditized, whereby the users who are in need of it pay bribe money to a gate keeper in order to be privileged to have access to it. In a similar vein, Suhardiman et al. (2017) noted that the commodification of communal resources has contributed to a change in the process of making rules to access the resources while also undermining collective property rights and resource governance efforts. In this regard key informant elder in Ilaala village also expounded that

The main cause of the uneven water distribution is due to the partiality of the scheme gatekeepers at Kawa (the initial point of the diversion and where the scheme administration is based). The irrigation system is not operating at full capacity; they only opened one of the three or five water outlets from the sources, resulting in a water shortage for users. They also opened the water for the investor or individual who had already paid some bribe money and closed it for others' turns. The investors went there and negotiated with the gatekeeper for the bribe money in order to get enough water and have the water open for them on their wish. This is a serious problem for which the government has yet to provide a solution. The gatekeeper was replaced, but the problem remains. The government also doesn't give solution for this (Interview, November, 2020).

A DA in the downstream village also recalled an incident in which a water gatekeeper was fired for allegations of taking bribe money after the community accused him to scheme administration officials at an organized meeting. The district irrigation expert and also scheme administration head himself noted that the local community had made repeated claims about a gatekeeper receiving bribe money to favor some users over others but that it was difficult to prove the case with tangible evidence.

In sharing the idea of local informants, the officials working for the district also accused the design problem related to the project and the partiality of the scheme gatekeeper of being part of the cause of the critical water shortage and inequitable access to water in the downstream villages. Notably the district irrigation experts strongly emphasized that the growing act of canal blockage and illicit diversion in the community has reinforced due to the problem with the project design and water administration from the responsible scheme officials. In support of this, but in a slightly different way, one water user informant who participated in water blockages stated:

We did not completely block the main canal; instead, we diverted some of the water to irrigate the farm fields that were being jumped during the project implementation. We should not have been cursed and chastised for it because we have the right to use it as well. Rather, we should be commended for bridging the gap and correcting the experts' fault (Interview at Xuxuxi village, November 2020).

As indicated by the quote, some of the water users involved in blocking actions responded to criticism from scheme administration officials by claiming that their actions were not illegal but rather an act of correcting a technical error for which they should be praised rather than chastised.

In upper stream of Gidaaraa village on the other hand some informants shared part of the accusation from the scheme administration officials that they contributed to part of the problem to acute water shortage in downstream villages. In this regard, it was witnessed that the tertiary canals were broken and damaged in many places; water flowed over the surface and was wasted without use in Gidaaraa village. However, some informants still blamed the problems on the scheme administration's failure to provide regular follow-up and maintenance. The local users lack the capital and expertise to repair and replace the structure (pipe). As a result, some who were able to manually dig the ditch accessed water, while others remained without access. As one informant pointed out, "even though we are very close to the canal and have plenty of water, some of us faced difficulty accessing this water for our farm due to the damage to canals."

Another key informant in Gidaaraa village also confessed the mismanagement of water in the same village and their contribution to problem in downstream village saying:

Water users can use water at any time without restriction and on a very flexible schedule in the village. No one pays attention to water waste and instead uses it inadvertently. They divert water to their farms, but at the end, many of them do not return it to the ditch, allowing water to spill over onto adjoining fields and roads. This wastes water while also causing a shortage of water in the downstream village. Only a few people may turn the water back to the ditch, not often out of concern for downstream users but to avoid overflowing the adjacent farm, which could lead to a dispute with the farm owner (interview, December 2020).

The quote clearly indicates that, in addition to technical issues with the irrigation structure and water administration problems from the scheme administration, improper water use and management by water users in the upper stream village have contributed to and hampered water flow in the downstream areas.

6.6. Collective effort of Water Management-Water committee

Theoretically, the water committee has assumed the responsibility of ensuring fair sharing and allocation of water among irrigation users (Woldeab, 2003). The committee is established with the objectives of managing irrigation and the drainage system, which may include ensuring equitable water distribution among users, managing and resolving disagreements over water access and use, and maintaining and rehabilitating irrigation and drainage systems, among other things (A Proclamation on Irrigation Water Users' Associations, 2014). For similar purposes, the water committees have been organized and established in all the study villages. However, their functionality was under question. Dayton-Johnson (2003) argued that the problem related to asymmetric benefit allocation among water users has been mitigated through successful collective effort among users via the water committee. However, such an effort is weak in the study area due to less coordination and less commitment of members and support to strengthen the water committee.

Many of the committees in the study villages were inactive, and also many locals water users may have been unaware of their existence or activities. In cases where there are some active (relatively) water committees, such as in Gidaaraa and Xuxuxi villages, their role is very limited and they engage in fewer activities than they are supposed to do. They often only mobilize and attempt to meet their respective members for the duties of clearing and maintenance of irrigation ditches.

The water user association in Xuxuxi is relatively more active than the associations in the other villages and is better engaged in collecting contribution fees from members though there is unwillingness from members; mobilizing members for irrigation ditch clearing and maintenance; and resolving disputes over water among users.

According to the discussion with the committee members of the water association in Xuxuxi, the main (village level) water association committee in Xuxuxi is made up of a conglomeration of a number of small committees formed at secondary canal level (13 canals)

and consisting of a total of 626 households. Each secondary canal serves up to 70 households, forming a committee containing five members. This smaller committee is responsible for the distribution of water and mobilizing the farmers to clean the canals and identify the cultivated and uncultivated land. The structure is similar across all villages, though there is variation in performance.

In other village like Ilaala for instance, the water committee in the area was not active and some of sub-committees were abandoned during the field work and had totally stopped functioning following the cut of irrigating water in earlier years in some part of the village. Some of the existing canal level sub committees were not effective in interfering and solving the growing problem related to water assignment and access. Most of the time elders on the water committee have dealt with disagreements over irrigation water between users, frequently acting as members of the local community rather than members of their respective water committees. This is well noted by an elder informant in Ilaala village who stressed the importance of customary institution over the water user committee saying:

I heard that there is an organized water user association but it is not actively functioning and I do not see when the committee regularly deals with problems related to water access. If we have not had strong and persistent customary institutions, we would have killed each other due to fierce competition and illegal attempts to access water, such as water theft during the night and diverting irrigation without Rota (Interview, January, 2021).

This is consistent with the findings of Fekadu (2014), who noted an increase in disputes over resource access including water following the project's implementation and remarked that this disagreement has often been addressed through the existing traditional local institution than the established committee, adding more burden to the customary institution and constraining local elders from participating on other issues that matter to the community.

Some informants in the downstream village in Ilaala explained that the water user association in the area has a bylaw that states a fine of birr 1500 in case of violation of the water Rota. However, the association is not strong enough to enforce the bylaw despite the fact that the problem is widespread in the area. During the focused group discussion, officials in irrigation scheme administration also revealed that water users' committees are not actively functioning in the study area, with the exception of Xuxuxi village, which is relatively better. They have,

however, supported the strengthening of water committees to ensure equitable water use and management among project users. They also stated that they had attempted to establish a water user federation to facilitate and encourage cooperation among water users across the villages through their respective water associations in order to deal with disputes over irrigation water along the catchment. However, the attempt has not yet been successful, in part due to weak and inactive water associations throughout the villages.

6.7. Summary

The development of the FIBIDP has changed the basic characteristics of the Awash River as a common pool resource (cf. Suhardiman et al., 2017). The change has affected the value and social relations and interactions over access, control, and use of water. The water from the Awash River, which was traditionally primarily used for livestock production, has become increasingly crucial for plant production in general and marketable vegetable production in particular. This has partly to do with assemblages of entities contributing to the way this water (river) is dynamically imagined and used. Irrigation technology, privatizing communal land, government discourse linked to policy direction and orientation, and a growing influx of external actors are among the identified entities of the assemblage. All collectively shape and reshape how the water is perceived, and different actors interact, negotiate, and relate in the process of accessing, controlling, and managing irrigation water in the project area.

The FIBIDP project, as part of technology, became one of the enabling conditions for facilitating water access and improving the Karrayu land to be a productive agricultural space. It has attracted an increasing number of actors and altered the traditional pattern of social relations around natural resources, particularly water and land. On the contrary, the project is not only facilitating but also impeding smooth relations. It caused conflict and tension between water users in the same and adjacent villages. Given the increased value of natural resources and the increasing demand for them as a result of technological advancements, access to water is becoming more competitive and conflictual than ever before.

Related to this, the equitable distribution and allocation of irrigation water is becoming a critical issue and challenge, contradicting the long-held tradition of water sharing in the area. Nonetheless, the cause of the problem has been debated by various actors. Officials from the irrigation scheme administration blamed the problem on water users who engaged in illegal

activities, most notably excessive water use and mismanagement in the upper stream and blocking canals and water diversion in downstream villages. The project's construction engineer, on the other hand, blamed both the irrigation scheme administration and water users for poor irrigation water administration and utilization. Furthermore, many water users blamed the project's design and administration. They claimed that flaws in the project's design and poor administration exacerbated the problem of inequitable water allocation and distribution. This has resulted in illegal canal blockage, water diversion, and water theft, which are at the root of the water conflict between water users in the same village and adjacent villages.

CHAPTER SEVEN

THE FIBIDP: A DOOR FOR EMERGING CAPITALIST RELATIONS

7.1. Introduction

As already discussed, the FIBIDP was promised to be unique in that it was meant for the local community, as opposed to earlier development projects from which the pastoralists had barely benefited. It was considered one of the most significant large-scale irrigation schemes in the upper Awash Valley. Among other things, the hope was that the project would provide land to the local community, ensure a year-round supply of water for livestock and crop production, and facilitate service provision. These, combined, were assumed to boost income sources and food production efforts, hence improving the well-being of the local pastoralists. Far from what was presumed, the earlier two consecutive chapters indicated how the project implementation resulted in tenure transformation, with a strong emphasis on privatized resource ownership and access over the enduring communal system. The project fosters dynamism, pronounced competition, and inequitable access, benefit, and ownership of such basic livelihood resources (land and water) while casting a shadow on the traditional process of accessing and benefiting from the resources. Further, the project-linked shift in resource ownership and access has led to dynamics in production relations, which will be dealt with in this chapter. The privatization of communal resources ultimately encourages external actors to venture into economic investment and creates momentum for a new set of production relations (Bekele & Padmanabhan, 2012; Mukhamedova & Pomfret, 2019).

This chapter addresses the emerging production relations and practices as well as the increasing land transactions associated with the development of the project. The transformation in landownership has resulted in the emergence of a ‘new group of agrarian actors (both internal and external) with different access possibilities to land, production inputs, outputs, capital, and with various levels of knowledge and experience’ (Mukhamedova & Pomfret, 2019: 582). Thus, the chapter broadly discusses how these evolving production relations maintained and reinforced the pastoralists exploitation while facilitating capitalist accumulation without the need to displace locals from their land. Further, it highlights the local reaction to the emerging exploitative nature of capitalist production relations in the area following the onset of the project. In doing so, this chapter

zoomed in on production practices in the lowland area, representing dynamism in production relations and tenancy arrangements, and went on to demonstrate how this arrangement depicts capitalist production relations and contributes to the study of capital accumulation without dispossession.

7.2. The Irrigation Project: Reinforcing Capitalist Relations

The development of the irrigation project has changed the pastoralists' mode of production and their relationship to natural resources, particularly land and water, and individual human actors. As mentioned, state-backed privatization of communal land (that associated with the referred project) has consolidated private tenure, individualized use, and 'freedom' of decision over the entitled land, unlike the collective decision in earlier days (Bekele & Padmanabhan, 2012). This tenure transformation has laid the foundation for the evolution of market-based economies (Mukhamedova & Pomfret, 2019).

The availability of irrigation water adds value to the land and then, combined with the readymade cultivable plot, has drawn the attention of an increasing number of actors seeking its use. It also attracts new investable capital and production practices, in which a culture of profit maximization and accumulation is becoming significant and prominent. Consequently, the land in the project area has become highly commodified and valued, with an increasing demand overtime (Ayalew et al., 2016).

The disguised land market has grown against the national land law that prohibits land sales. This gives room and opportunities for the powerful actors, including external actors, to engage in the transactions and production relations from which they maximize gains at the expense of many local landowners. Land contracts and dealings with capitalists based in urban areas have increased, mainly due to the limited power (lack of capital, farming skills, and knowledge) of many Karrayu landowners to independently farm on their land. The land contractual arrangements that have been dominant among the highland farming communities have emerged and continue to flourish in the Karrayu pastoral area (Ayalew, 2009; Ayalew et al., 2016).

The Karrayu have entered into new forms of production relations arrangements, sharecropping, to access the land and its profit. Unlike the well-documented traditional forms of contractual farming between two actors, a landowner and a farmer, the emerging

production relation in the project area is complex and involves multiple actors. It has also followed a very complex deal over land and benefit sharing related to it, which often exposes the pastoralist landowners to exploitation (Bekele & Padmanabhan, 2012). This emerging relationship linked to the irrigation project reinforces capitalist relations. This mainly manifested through the overall production (involving land transaction and sharecropping) and marketing process, where a significant number of actors engaged—all competing to get a share of the benefit for their own advantage (see the subsequent sections). In what follows, I will first introduce the various actors involved in complex production relations and their agency.

7.3. Actors and Their Agency

Crop cultivation in the study area has involved many actors connected through sharecropping relations, forming a continuum along the production line to market the produce. The landowner is on one end of the continuum, while the capitalist is on the other, with associated actors in the production relations connecting the two. These various actors have collectively reproduced and facilitated the capitalist relation of accumulation and exploitation. These actors have ‘agency,’ constituting ‘...a complex mix of social, cultural, and material elements’ (Long, 2001: 242) and actively formulate a strategy to gain in their relationships. The main actors are sharecropping investor, the main farmer, field farmer, landowner, and sharecrop broker.

The sharecrop investor⁷⁵ / henceforth ‘investor’ or capitalist/: The investors are known locally as a ‘*wochi-awuchi*’ /literally: finance provider/, a term that refers to both the financing actor and the sharecropping arrangement process. This is the main key actor; without him, it is difficult to imagine a land transaction for cash crop production. This person is a capitalist with cash to finance all costs incurred during the production process, including agricultural inputs such as seed, fertilizer, pesticides, labor, and others. His wealth ownership in the form of cash put him at the top position in the power structure, giving him an advent (Ayalew et al., 2016; Bekele & Padmanabhan, 2012). These actors, the informants claimed, have long hands in establishing relationships with individuals or groups such as vegetable marketers at central and large markets, laborers, transporters, government officials, and

⁷⁵ This actor is not necessarily an individual having a very large amount of money and/or running a big business or company, but it could be anyone who has the ability to cover all the costs incurred during the production process, including inputs as well as labour.

others who they believe are important in maintaining and protecting their benefit. They were generally outsiders from various geographical origins; they could be from rural or urban areas; they could be from nearby or distant areas, but without undermining the limited but progressive involvement of local farmers and civil servants financing the production. These actors are frequently 'invisible,' in the sense that they simply finance all production-related costs from afar and control the farm remotely. They may never physically visit the farm during the production period.

Main farmer/farm manager/: Another actor, often a migrant from the highlands with good farming experience and skills (Ayalew et al., 2016), is primarily responsible for the production of horticultural crops, as an agreement is made to produce vegetables (onion) for cash. A main farmer is contracted by the investor, who gives him an advance payment (when needed) either in cash or in kind (food crop) for living, but this is calculated and refunded at the end of the harvest. He is responsible for purchasing and providing farm inputs (such as pesticides, fertilizer, seed, and other required items) on behalf of the investor, keeping track of all production expenses incurred during the production period, leading the farm activities, and ensuring all tasks related to production are properly and timely done. Depending on the size of the land contracted, the main farmer also hires one or two field farmers, what is locally called 'ye gebere geber' (literally, a sub-farmer), from his side to handle the activities for a given production period. A main farmer could, at the same time, enter into commitments with multiple investors on different plots to maximize his income.

Field farmer (locally: Ye-gebere gebere): is usually an outsider, with the necessary skills and labor, hired by the main farmer. He is the one who performs the day-to-day routine activities of the farm (including watering, seedling production, land preparation, hoeing, and so on) with little assistance (often chemical spraying of the crop) from the main farmer. He is under the administration of the main farmer. He also received an advance payment from the main farmer, either in cash or food crops for survival, but this will be refunded in the end. This actor has no active or front-line participation in the sharecropping process. However, he has a direct relationship with the main farmer, with whom he shares the marginal portion of the profit at the end of the day. Consequently, he has no direct communication with the investor and frequently does not even know who the investor is.

Landowners: They are local actors with irrigated land. As noted in the previous chapter, many of them got the land through government land distribution and owned property rights

(land title deeds), though some got it through local arrangements and illicit enclosures with individual motivations. These groups can be subdivided into four categories based on their reliance on others for production. First, there were the landowners, who did not produce by themselves and had no direct contact with capitalists but instead relied on brokers to cultivate their land. Second, landowners who occasionally cultivated their land for a staple crop (maize) but relied on brokers to sharecrop it for cash crop production. Third, landowners who cultivate their land for staple crops and directly sharecrop it with investors for cash crops without the involvement of sharecrop brokers. Fourth, very few entrepreneurial landowners produced both food and cash crops independently without the involvement of others, and they even rented more land from others to expand their production. This group can be referred to as an owner-cum-tenant farmer.

Sharecrop brokers/landholders^{76/}: They are frequently, but not always, young community members. They could be any local with good communication skills and a network of investors and/or potential farmers who can connect them with potential investors. They are actors benefiting ‘from the knowledge gaps’ of the landowners and investors (Bräuchler et al., 2021:5). Thus, the ability to be a broker stems from having a good relationship and network with local landowners and investors, on the one hand, and the ability to persuade and be loyal, on the other.

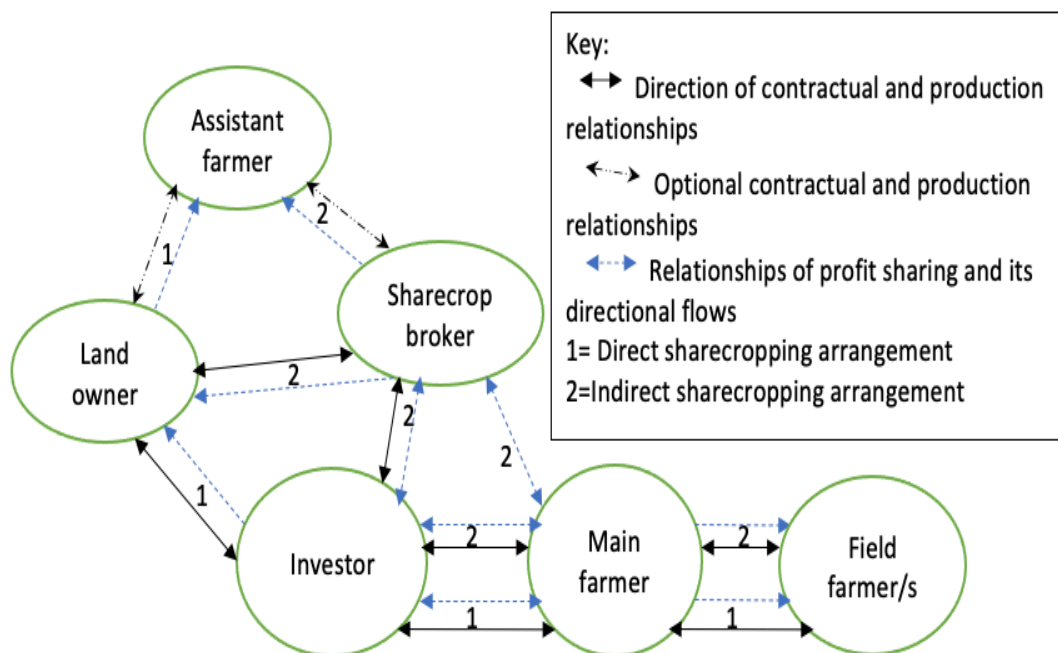
Sharecrop brokers act as go-betweens for landowners and investors. Their role, however, is not limited to mediation alone, but also goes beyond that. They serve as protectors, make decisions, and farm. They are in charge of fencing and protecting the farm from animal trespassing and damage, as well as protecting and defending individuals working on the farm (for example, main farmers and laborers) from any local threat or attack. They have supervised and ensured that the field farmers receive irrigation water in accordance with the scheduled Rota for crop watering. It is because of this responsibility that they are known as ‘*wuha akirabi*’ (lit. water provider) in the community (Ayalew et al., 2016). If crop damage is caused by animals, disagreements between field workers and local residents, or water-related issues arise, it is the broker's responsibility to deal with and resolve the situation. They also represent and make decisions on behalf of landowners. They have independently decided on

⁷⁶ refers to the person in charge of following up on, guarding, and dealing with the land for cultivation. This is not always the person who legally owns the land; he could also be a broker who takes guardianship of the land from the landowner and enters into a sharecropping agreement with the sharecropper. In this paper, the landholders refer to the sharecrop broker.

issues pertaining to the sharecropping arrangement and benefit sharing without the involvement of the landowner. This responsibility makes them eligible to be designated as landholders, the ones who keep and manage the land on behalf of the landowner. As a result, they independently finalize the sharecropping arrangement in the absence of the landowners, with whom the investor usually avoids dealing for the first time (if they had no previous relationship) to reduce the risk associated with trust issues. Moreover, they are also responsible for ploughing the land either on their own or by hiring laborers and making the first-round land preparation, but this assignment depends on the type and deal of the sharecropping arrangement. These actors are part-farmers and part-brokers in the sense that they farm the land they hold on their own for staple crops and mediate to sharecrop-out the same land with investors producing cash crops.

Assistant farmers are optional but are hired by either landowners or brokers who lack labor or skill to help with ploughing the land and other farm activities that the landowners or the brokers are supposed to accomplish as part of their contractual agreement in the sharecropping process. The agreement is in exchange for a percentage of profits or a lump sum payment. The following figure (Figure 5) summarizes the sharecropping actors, contract and profit-sharing relationships between local and external actors for cash crop production.

Figure 5: Sharecropping actors, contracts, and profit-sharing relationship



Source: Based on field data and designed by author

The benefit was shared among all those multiple participating parties in the project area, as opposed to the common practices in agrarian areas where sharecropping is often binary and the benefit is only shared between the two actors. The capitalist, however, earns the maximum share of the benefit, leading to capitalist accumulation. The capitalist mode of production and capitalist accumulation in the context of FIBIDP is thus ‘... purely an economic process...’ and is based on exploitation in ‘...the commodity market and the place where surplus value is produced (horticultural crop farming)’ (Luxemburg, 2003: 432), as discussed further below.

7.4. Sharecropping and Complex Profit-sharing Arrangement

Sharecropping is a de facto contractual arrangement that has been practiced for a long time and continues to thrive in farming communities (Mukhamedova & Pomfret, 2019). It is a method of gaining access to irrigated land for those in need of land and a mechanism of putting land under cultivation for landowners who, for various reasons, are unable to do so on their own (Hosaena & Holden, 2015; Teshome et al., 2021). In the study area, this practice has become more prevalent and widespread following the availability of irrigation water (Ayalew, 2009; Ayalew et al., 2016). It is due, in part, to an increasing number of landowners opting to sharecrop-out as a result of access failures on the one hand, and growing actors' demand for cultivable land, the value of which has increased since the arrival of irrigation water on the other.

As noted in earlier chapter (chapter five), due to factors impeding their ability to access their land, many local pastoralists sharecropped their land to others to generate a marginal profit. These constraining factors, combined with land tenure transformation in the area, accelerate the land market and contributes to the growing prevalence of sharecropping (Deininger et al., 2011a; Khai et al., 2013). Individualizing land rights has promoted capitalist relations of production and facilitated exploitation (Li, 2014a). For example, Bekele and Padmanabhan (2012) observed that privatizing communal land in the Afar Region (adjacent to the study area) allowed for more flexible land use and sharecropping arrangements which were unfavorable for many pastoralists.

There are different forms of sharecropping arrangements in the area. The difference is marked by the type of land contract and the profit sharing that each arrangement entails. It also varies, and the process is shaped by who (local-local or local-external) and the number of

actors involved; the way the deal is made (direct deal between landowner and sharecropper or indirectly with the facilitation of a broker) and the type and purpose (consumption or market) of the crops grown in the given arrangement. Moreover, all the variant forms of the sharecropping arrangement are not equally important across the study villages. Certain forms of arrangement are more prevalent in some of the villages than others.

7.4.1. Sharecropping Contract

The two most popular sharecropping contract modalities in project areas are direct and indirect techniques. The first form of arrangement is that the Karrayu landowner sharecrops the plot directly with someone wishing to produce staple crops (mainly maize) or cash crops (often vegetable crops such as onions, onion seed, and tomatoes). In this case, households with irrigated land but lacking the necessary agricultural skills, labor, draft power, or capital to manage the farming by themselves enter into a sharecropping arrangement with someone having the necessary farming skills, labor, oxen, and other necessary inputs to work on the land.

Most often, it is local fellow pastoralists and some civil servant farmers working in Metehara sugar cane and Nuraera fruit plantations who seek to enter into such a form of contractual agreement to produce staple food. However, investors from outside avoided growing staple crops and instead entered into such contracts to produce market-based crops. Thus, this form of agreement was often made between the locals for staple food production and between the local landowners and external investors in the case of cash crop production, though a few local entrepreneurial agro-pastoralists also contracted the land for a cash crop.

Crops are typically grown in the study area three times per year, using both irrigation and rainwater. The two production seasons are primarily devoted to cash crops, primarily onions and fairly, onion seed and tomatoes, and with the participation of external capital owners, albeit with limited but growing involvement of local agro-pastoralists. The remaining cropping period is allocated for staple crop (usually maize) production under certain conditions, which the capitalist often rejects, but is done by the landowner himself or by local agro-pastoralists who sharecropped the land. The staple crop is often grown when the season is unsuitable for vegetables, such as during a heavy rainy period or when the capitalist has eschewed the land to avoid sequential cropping of the same cash crops on the same land. In the latter case, maize is grown as a rotational crop between the two periods of cash crop

production to optimize soil nutrients and avoid the problem associated with growing the same crops sequentially on the same field.

In this arrangement for staple crops, often only two actors were involved: the landowner and the sharecropper, and consequently, the share of yield was divided between the two depending on their contributions during the production process⁷⁷. The sharecropper is generally responsible for carrying out all farming chores such as ploughing, watering, weeding, managing, and other associated activities using his own and his family's labor, employing laborers, or socially organizing labor. He also provides all inputs, mainly seed but occasionally fertilizer (if it is maize), as the staple crop is grown with fewer financial and technological inputs than cash crops. However, some landowners view it as a social responsibility to voluntarily participate in some way during production (e.g., by providing labor, oxen, etc.) to encourage local sharecroppers to grow staple foods.

In the case of cash crop production, however, a minimum of three actors were involved (landowner, investor, and main farmer) in this type of sharecropping arrangement, and the profit-sharing arrangement among the actors was complex and different (see Figure 5. above for a summary and the subsequent subsection for the detail). The landowner has many responsibilities and obligations when dealing with external investors for cash crops, including fencing and protecting crop damage from animals, providing irrigation water, and protecting farm workers. He also ploughs land if it is stipulated in the contract agreement (for instance, in the case of an equal-half share). These requirements necessitate the active participation and presence of landowners. As a result, households with a limited migration pattern or migratory households with young members in charge of farming frequently enter into direct contracts with outside investors.

The second type of arrangement occurs when the landowner indirectly contracts out his land to external investors via sharecrop brokers. In this case, the landowners have no connection with the investors and must rely on brokers to get their plot cultivated. It is very widely practiced in downstream, middle stream, and upper stream villages, though it is relatively more dominant in downstream villages (Xuxuxi and Ilaala) and some parts of middle stream villages (Dirre-Sadeene and Tuuroo-Baddannootaa). It is extremely difficult, if not impossible, for landowners in downstream villages to find investors to sharecrop directly.

⁷⁷ This arrangement also has several variations in terms of contribution and profit sharing, which are not discussed here (for more information, see Ayalew 2009; Ayalew et al. 2016).

However, the situation is somewhat better in the upper and middle villages, though it is still difficult. According to informants⁷⁸, this is because, first, there is limited or no local pastoralist fellow with capital and sharecrop-in irrigated land to grow cash crops independently, though such an entrepreneur is growing gradually in Gidaaraa, an upstream village. Second, external investors always try to avoid directly sharecropping the land with households with whom they have not contracted before or have no previous relationship to reduce the risks associated with trust issues. Instead, they prefer to access it through intermediaries (sharecrop brokers), with whom they have already established long-term partnerships and confidence. Third, sharecrop brokers spread false rumors to investors that some landowners cannot be trusted, causing investors to be hesitant to enter into contractual agreements without involving brokers. According to local informants, this conspiracy was carried out in very subtle ways.

"Some brokers", as was the case in Ilaala Village and explained by a key informant in the area, "even intimidate main farmers working for investors who made sharecropping deals without the involvement of brokers"⁷⁹. Fourth, in downstream and some parts of middle stream villages, only a limited number of investors are coming to the villages because of the irregularity of irrigation water access. However, in contrast, in Gidaaraa, and a regularly water-accessible part of Dirree-Sadeen, and Tuuroo-Baddannootaa, a higher number of investors are coming in from the nearby area due to regular irrigation water, better road access, and the closeness of the village to rural towns dominated by people of farming background (Ayalew et al., 2016).

In general, households heavily dependent on the pastoral mode of production and those migrating away with livestock preferred this type of arrangement, but this is not limited to such households because there are many other households in the village who give their land to brokers. In this arrangement, the landowner enters into an agreement with local agro-pastoralists (literally: brokers) who have the ability to work on the land while also acting as mediators with the responsibility of sharecropping out to a third-party investor. The sharecrop brokers either farm the land for staple crops on their own or sharecrop it out, depending on the circumstances. They farm the land when the investor abandons it. Importantly, a broker has worked with as many landowners as possible in order to secure a large plot of land for an

⁷⁸Interviews with an Ilaala village landowner who has been struggling to find sharecrop investors; an elder landowner in Gidaaraa village; and a village chair at Ilaala

⁷⁹ Interview with a young man from the downstream village, Nov, 2020

investor, from which both parties can maximize their respective incomes. For example, (Ayalew et al., 2016) referred to local individuals holding 30 *kert* (equivalent to ten households' ownership) of other land and sharecrop for investors.

7.4.2. Complex-profit Sharing Arrangement

Given the number of actors involved in land transactions and production relations, the apportionment of gains from the land becomes very complex. All actors received part of the profit obtained at the end of the production period. The share of benefits depends on the role of individual actors in the sharecropping arrangement and the initial agreement each party reaches with their counterparts. It also depends on whether the contract is 'direct' or 'indirect'. In the study villages, there are many types of profit-sharing arrangements. However, the two dominant types, coinciding with the above-stated forms of sharecropping contracts, are 'equal-half' (locally called 'Harka Lama') and 'one-third' (locally known as 'Harka-sadii') for cash crop production. These are exploitative to the landowners due to the unfair share that they retain in the production relationships.

An equal half refers to a profit-sharing arrangement that is concluded with an equal share of the benefit between two front actors in a land transaction deal, such as the landowner or sharecrop broker and investor. If the agreement is direct, the investor shares profits with the landowner. In contrast, if the agreement is indirect, the sharecrop broker becomes the front actor in sharing profits with the investor. This was the most common form of sharing arrangement in Gidaaraa, Dirree-Sadeen, and, to some extent, Tuuroo-Baddannootaa villages. On the other hand, one-third is the share agreement, in which the profit is divided equally among three front-runner parties: the investor, the main farmer, and the land owner or investor, depending on the contract. The community members regarded this arrangement as more unfair than the equal half, and households in all villages have wished and made efforts to avoid it but frequently accepted it due to a lack of alternatives and investor insistence⁸⁰. This was the more dominant form of arrangement for cash crop production in Ilaala and Xuxuxi and has recently expanded to Tuuroo-Baddannootaa.

After the crops have been sold on the market, the financier (investor) is reimbursed for the costs he incurred during production. The remaining funds will then be divided equally between the two and three actors in 'equal half' and 'one-third' arrangements, respectively.

⁸⁰ FGDs with elders in upper and downstream villages

Though the terms are referred to as ‘equal-half’ or ‘one-third’ share, the actual benefit retained by the landowner is much lower. Because this is further divided among other actors involved in the production relationships. Landowner exploitation is manifested here by many actors scratching over the income obtained from his land, resulting in the landowner being deprived of the benefit he is supposed to obtain.

In the case of indirect and equal-half, cash from the sold produce will be divided equally between the sharecrop broker and the investor. The sharecrop broker then further apportioned his share to the landowner and his side assistant farmer. The investor also further divides rarely half of what he earns, but he usually shares less profit with the main farmer on his side. Likewise, based on their agreement, the main farmer often shares half to a quarter of his profit with the field farmer/s. In this case, if the main farmer hired more than one field farmer, the field farmers would further equally divide what they received from the main farmer. The profit sharing in the case of a direct and equal-half arrangement is identical to the profit sharing in the case of an indirect and equal-half arrangement. The difference is that the former is concluded in the absence of a broker, whereas the latter involves the broker in profit sharing. Furthermore, when the landholder contracts the assistant farmer with a profit-sharing agreement, the landowner only shares the profit from 0.5 hectares (out of the 0.75 hectares contracted), while the assistant farmer receives half of the profit from the investor on the remaining 0.25 hectares of land.

In an indirect and one-third sharing arrangement, the process of allocating profit among the involved actors is similar to that of an equal-half sharing arrangement, with the exception that the main farmer will be positioned to receive an equal share of the profit with the sharecrop broker and investor. The sharecrop broker, investor, and the main farmer divide the profit equally and then share it with their respective side parties (see, Figure 5 line 2 above). The one-third share arrangement gives an investor more advantages than the previous form while narrowing the landowner’s share margin even further. In this case, the investor makes a more significant profit because he keeps his original share and does not have to divide it further with any other actor. As a result, to maximize profit, investors always insist on concluding such types of contractual arrangements. Furthermore, the direct and one-third sharing is similar to indirect sharing, except that the sharecrop broker does not participate.

Furthermore, the investors have contracted for more irrigated tracts of land to expand their production, which has contributed to more wealth accumulation. The case mentioned in

chapter five of an investor living in Addis Ababa who sharecropped more than 60 *kert* (equivalent to the ownership of more than 20 households) and managed it from afar is a good example of this. This process exemplifies the production relationship, which Li (2014a) also observed in her study in Indonesia, where a few highland farmers increased their capital formation through increased productivity by controlling more land at the expense of many other households that could not compete in the process. This situation also bears some similarities with the idea of Harvey (2003, 2010) that capital can be accumulated through both extended reproduction and dispossession. Because the process involves large-scale production while depriving more than 20 households of the exclusive benefit of their land. The following case also demonstrates how capital is accumulated at the expense of landowners and reinforces further accumulation.

I came to this woreda as a civil servant. Some seven years ago, I began sharecropping land to grow onions for the market with initial capital from friends and family members living in my hometown (in the northern part of the Oromia region). I initially contracted 6 *kert* (equivalent to two households' ownership) of land and hired one main farmer. Gradually, I grew and was able to employ a larger number of main farmers while cultivating larger plots of land. Then I resigned from the government position and started my own business. Last year, for example, I worked on 28 *kert* (equivalent to more than nine households' ownership) of irrigated land with four main farmers. Due to clan conflict in the area, I stopped investing in farming this year and will resume when things are resolved. I built my home and own a hotel, as well as large trucks, from which I run my business. (Interview with an investor, February 2021, Metehara).

The landowner benefits only marginally because he or she can obtain a much lower profit in the production relationship. This profit will shrink even more with the broker's involvement. In the presence of brokers, landowners not only share a very small portion of the benefit of the production relationship but are also rendered invisible, passive, powerless, and voiceless on issues pertaining to their land. The landowner has no say in the land transaction and/or production process and is prevented from directly participating as the first party in benefit allocation. A broker is the first point of contact and participates in a profit-sharing arrangement with the investor, then divides half of the cash profit with the landowner from what he receives. The landowner is silenced and marginalized on his own irrigated land. Any direct claim or complaint made by the landowner to an investor and/or his side parties (main

farmer and field farmers) during the production is not appreciated or welcomed. This is because the landowner is considered illegitimate to do so and can only do so indirectly through a broker. If the landowner interferes directly, it will be a good reason for the capitalist to refuse to invest in the land in the next production period. As is frequently the case in Ilaala and Xuxuxi villages, the investor may not even know or wish to know who the actual landowner is⁸¹. Nonetheless, they (investors) always attempt to maintain and ensure that they receive the lion's share of profit in production relations. Thus, the broker is assumed to be the landholder and responsible for dealing in all cases in the production relationship. Though they are dissatisfied, both the landowner and broker accept the preconditions and sharing arrangement from the investor out of fear of not being able to find another financier if he leaves.

7.5. The Commodity Marketing

Marketing of vegetable crops is one of the potential arenas in which Karrayu landowners are literally robbed of their benefit from land. Producers (landowners/sharecrop brokers, investors, and main farmers), a chain of marketing brokers, traders, and transporters are involved in the local sales of cash crop products. The overall marketing chain also operates in a way that further exploits the landowners and undermines and weakens their negotiating and decision-making power. It primarily favors investors, who are networked with traders and brokers and are informally organized alongside vegetable commodity marketing. It is also strengthened by the fraudulent acts of brokers and their associates, who desire to maximize profit at the expense of both sharecrop landowners and a few entrepreneur landowners who are independently engaged in cash crop production. This exploitation process is evident in overall marketing strategies, market price determination, and the harvesting and loading of produce, as explained below.

7.5.1. Marketing strategies

In the study villages, the chain of mediators has participated in identifying the onions ready to harvest, facilitating and connecting producers to the local traders and sometimes to wholesalers in the central market. These mediators are interconnected in hierarchies and subdivided based on their specific functions in the chain. They facilitate the marketing process and receive a commission, which reduces the share of pastoral landowners because

⁸¹ Interview with an elder pastoralist from Ilaala in the downstream village, November, 2020

this is considered a cost of production and is refunded to investors at the end. According to the information from FGD with cooperative members in Gidaaraa village, these mediators commonly include locator (locally called ‘tekwami’), local middle brokers, and big brokers. The locator, as the name indicates, is a local individual, often a young person, who actively roams to identify the onion fields ready for harvest and then suggests, in a way of advising the landowner or sharecropping broker, that they bring a harvester. Then he immediately informs a local middle broker in the village. The middle broker is also a local individual with good connections to the big brokers in urban areas. He may have many locators under him who scout for onions ready to harvest and provide him with information. Based on the information, he may further also speak to the landowner or sharecrop broker (if required) and reports to the big broker, who often deals on the selling price with the concerned parties involved in the production of the crops.

The big broker is based in nearby urban centers and maintains frequent contact with traders and occasionally wholesalers in vegetable marketing centers such as Adama and Addis Ababa. He organizes and hires daily laborers, who usually come from nearby urban areas for their harvesting expertise, and he deals with trucks to deliver the onions to the markets. This person is a point of contact who covers the costs of arranging, packing, and loading the harvest on behalf of traders or wholesalers. He is also the one who made the other necessary upfront payments, such as the commission for the locator and the local middle broker.

Many of the traders, as the informants repeatedly stated, are investors who are involved in sharecropping arrangements but are discreetly marketing the produce through a large broker in their contact to profit in overall economic relationships. This is consistent with Hill's (1966) concept of the broker as a dual-role functionary, acting as both a mediator and a patron at the same time (Bräuchler et al., 2021). This was also evident during the interview with the investor.

7.5.2. Market price determination

The landowner as well as the sharecrop brokers have little involvement in the determination of the selling price of onions and claim to be unfairly exploited by big brokers, traders, and sharecrop investors. The price is not, as such, negotiable between the traders and the parties involved in the production relationship. Instead, it is predetermined and fixed by market brokers who closely consult with traders and wholesalers and, implicitly, with sharecropping

investors, as informants⁸²explained. The landowners or landholder is, however, asked to accept the price offer made to him as an order. Because of their networks and market information at the buying node, market brokers are influential and wield significant power in determining the selling price (Ndukai, 2015).

Landowners rely on the word of mediators for market information (Ndukai, 2015). According to the district irrigation officer, the landowners do not have direct access to information about market conditions, do not know where to sell, whom to sell to, and when and at what price to sell their products. In support of this, a young agro-pastoralist in Ilaala village stated that, "even though the price is unfair, I do not know whom I should call to cross-check the price."⁸³ As a result, the local landowners and landholders are powerless to negotiate and agree to accept the price offer made to them. It was claimed that if the offered price was refused, the market brokers conspired to ensure that the product was not sold on time and was delayed on the field. Thus, they could buy it at a lower price in the following days than was initially proposed due to the perishability of the produce such as onion. According to Bewuketu et al., (2016) and Tesfaye (2021), the perishable nature of the horticultural produce, combined with a lack of storage facilities, forced producers to sell their produce at a lower farm gate price.

Furthermore, it was claimed that big brokers and traders have been using implicit and explicit strategies to discourage and prevent local agro-pastoralists from selling their produce directly in the central market. This strategy includes negotiating with chairs of labor cooperatives and transporters to either not provide their respective services to agro-pastoralists wishing to sell their produce to the market directly or to charge them a higher price than usual. There was also a time when traders from Metehara town (the district capital) opposed entrepreneurial agro-pastoralists selling their produce directly to the central vegetable market. According to local informants and the District Irrigation Officer, the traders accused the organized agro-pastoralists of attempting to transport their onions to sell in the central market, pointing out that the farmers do not have a trade license and thus are not authorized to sell the produce. They also stressed that the act jeopardizes the livelihoods of tax-paying traders who already have a license and are in the business. During then, the farmers' association was temporarily

⁸² FGD with young girls involved in agriculture product sales in Ilaala villages, October 2020

⁸³ Interview, November 2020

denied the right to sell their produce directly to the central market, but they were later granted permission after a lengthy argument at district and regional government offices.

The price offered at the farm gate usually varies from village to village and even within a village. It is generally low and fluctuating but always to the benefit of mediators and their connections (Tesfaye, 2021). A statement from the vice Oromia Regional State Agriculture and Irrigation Bureau confirmed this, saying, “We are aware, but working on it, that the market system has a problem in which traders and brokers purchase onions at a lower price and make a higher profit, sometimes more than 200 per cent.”⁸⁴

The sharecrop investors, the informants claimed⁸⁵, are either traders by themselves or have created a good connection with other key actors important in the process of marketing of the produce. They benefit from being implicitly involved in price-setting in at least two ways. First, because of long-term business relationships with brokers and traders that are in their favor, sharecrop investors deal with higher prices while offering lower prices to local landowners or sharecrop brokers. This allows the market brokers to keep the difference and share it later with the investor. Second, as mentioned, sharecropper investors are often traders, but they indirectly send brokers to bargain for a lower price. The tragedy is that even though local landowners/ sharecrop brokers suspect that a sharecropper investor may cheat on the selling price of onions, many are afraid to talk to and confront him explicitly. They have even lost confidence in calculating and requesting detailed explanations about production costs. It is partly due to apprehension that the sharecropper will decline his agreement during the following cropping period or because they may not keep farm expense records to compare because they may lack the knowledge to do so (Bekele & Padmanabhan, 2012). Buli (2006) also noted that the dishonest act of a sharecropper, such as asking for an additional amount of expense from the final share than he had actually spent, exposed the Karrayu pastoralists to further exploitation. This was because the local landowner could not scrutinize every day practices and document every expense for reasons related to being busy with his own duties, being uneducated to keep a ledger, or trusting the partner (Buli, 2007).

⁸⁴ Interview on March 2021

⁸⁵ FGDs with elders at Ilaala and Gidaaraa villages.

7.5.3. Harvesting and loading of the produce

This is a labor and capital-intensive activity that raises production costs and, as a result, reduces the net benefit that producers are supposed to obtain. Here, the harvesting phase involves uprooting, collecting, and cutting the top part of the onion leaf, while loading includes filling the onion into containers (packing), weighting, and putting it on the trucks for transport to market. A large number of individuals, both outsiders and local pastoralists, are proletarianized and engaged in these activities for a wage, reinforcing the capitalist production relations. The daily labors for harvesting are usually brought in from nearby urban areas for their expertise and are directly organized by the big brokers who deal with the representative of a given cooperative providing such a service, whereas labor for packing, loading, and other related miscellaneous activities is provided by local pastoral fellows. As a result, many active (agro-) pastoral landowners or landholders and their families rely on this wage labor after contracting out their land to sharecrop investors.

Some five years back, in all the study villages, there were cooperatives organized by local individuals and engaged in daily laboring activities for packing and weighting, loading, and other miscellaneous activities such as picking up spilt onions and refiling them into containers. Teenager children of the local pastoralists often take on the task of these miscellaneous activities associated with picking up the spilt produce and refilling it for payment. These organizations were formed by landless people as well as people who own land but also earn money through daily labor. At that time, the cooperative organized labor and determined and fixed the fee that they charged for the services provided by their respective groups. Despite gradual increases, the cooperative charged ETB 60–65⁸⁶ per quintal to load onion, and the big broker paid upfront a lump sum of more than 3000 birr per track (a truck carrying 50–55 quintal) to a given local cooperative. Meanwhile, the landowners and landholders resisted, claiming that the cooperative charge was too high and that they would benefit more if they managed it themselves. Later, the cooperative was disorganized, and the landowner assumed responsibility for coordinating such laborers, determining pay rates, and making payments from the total amount of money that he received in advance (more than birr 3000 per truck) from the big broker. In most cases, the landowner hired fewer locals for less pay (during field work, it was birr 1000 per truck) for loading and kept the difference for himself, which he usually saw as compensation for the unfair minimal

⁸⁶ 1USD=48.5 ETBirr at the time

benefit he earned during profit-sharing arrangements in production relations. Despite such dynamics, an increasing number of local pastoralists and their family members continued to be proletarianized, engaging in labor activities for less pay on an individual basis.

Furthermore, during the harvesting and loading process, landowner pastoralists in the study area have been deprived of their benefits due to weight cheating by brokers and their affiliated sharecrop investors (Tesfaye, 2021). This has also been identified as a problem in other horticultural crops producing areas (Dawit, 2015; Meron, 2015). Local pastoralists and district officials claimed that traders sent fake calibrated scales to their brokers in order to defraud an extra kilo of onion. This was not a claim, but a researcher also observed the onions, which had already been loaded at the village during the day, being unloaded, reweighted, and repacked during the night in Metehara town before being delivered to the market center. Though some private individuals and organized groups in Ilaala village, for example, attempted to provide weighting services with well-calibrated scales, the brokers were frequently unwilling and rejected the scales brought by locals. Instead, they insisted on using their own scales. There were also locals with measuring scales providing services in the other villages in the study area. However, the refusal of the brokers to use it has become a challenge. In this regard, the village leader in Ilaala shared an experience that one of the villagers had:

...three days ago, brokers came to buy his produce using a forged calibrated scale, but he refused, instead requesting that they use the appropriate scale that he provided. They refused, and changed the scale for the second time in case he didn't like the first one. Then he resisted for a while longer, but in the meantime, he accepted because he had no other choice (interview at Ilaala village, March 2021).

The above interview clearly indicates that the local villagers have not only have little say on marketing decision of their produce but also are not in a position to continue refusing to sell their produce with uncalibrated scale or insist the traders to use the standardized scale. Instead, it is the traders and their associated brokers have a greater power of influences to decide.

Photo 6: Local children and women's engagement in onion harvesting



Source: by author

7.5.4. Marketing destination

The vegetable harvests grown in the area have been transported to various market destinations throughout the country, depending on crop quality and demand. Onion is one of the significant cash crops that is grown in bulk quantity and supplied to many market locations. This produce is divided into two categories: first produce and leftover produce (or second harvest). This marks both the quality of the produce and the order in which it was collected. The first product is the main harvest of the onion. It is the produce that is first collected from the field by the producers and their associated partners. It is the main harvest and a high-quality crop that interests not only traders and investors for marketing purposes but also producers and their partners for income and profit sharing based on this harvest.

Many wholesalers and traders in Addis Ababa and elsewhere want to purchase it. Its selling price at the farm is also higher and incomparable with the leftover onion produce. This produce is often transported to big market centers and towns such as Addis Ababa, Mekelle, Jigjiga, Chiro, Dire Dawa, and Hawassa. However, given having the largest vegetable market center and high demand, much of the vegetable produce in the country has been supplied to Addis Ababa (Dawit, 2015).

The second or leftover harvest, on the other hand, is the onion harvested from the field after the main produce has been harvested. In this context, neither the landowners nor their partners were interested in harvesting the residual crop. Rather, they often give up to interested individuals to collect and sell it out for themselves. This was mainly important for women and children (including schoolchildren). Many local women and children have gathered the leftover onion from the field to sell on the main asphalt road or to a businessman who gets it from them and transports it to different market places for profit. It is worth mentioning that some informants considered selling the leftover onion produce as an opportunity for many needy women to earn income to supplement their household income and for the schoolchildren to cover school material expenses. In this regard, a village women's affairs representative in Gadara village, who herself was a widow, has to say this:

Many women and children have collected the leftover onion produce and sold it to a trader in the area. I and my three sons have engaged in collecting leftover onions after the main crop is harvested. For instance, they [her children] have gotten 100–200 birr per day. This is significant money, and they use it to purchase educational materials. Even older women do the same and help themselves to cover their household expenses (interview at Gidaaraa village, December 2020).

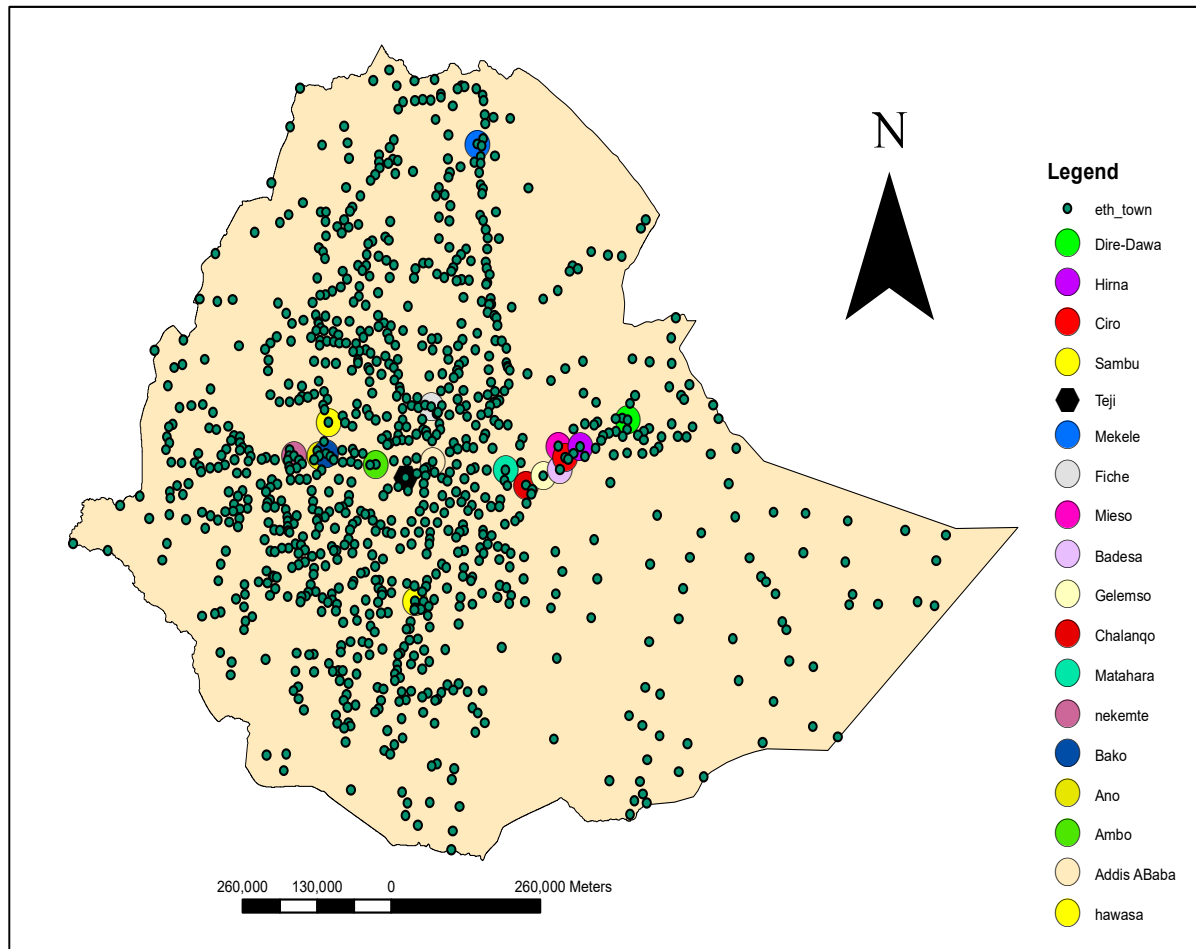
The local trader (non-Karrayu) buys the leftovers from women and children and supplies them to many different market destinations. These destinations included among others Mekelle, Chalanko, Hirina, Badessa, Chiro, Dire Dawa, Fiche, Shambo, Bako, Jaji, Sire, Anno, Dembi Dolo. According to the informants, this crop could be transported to longer-distance towns, including Gambella, which is about 900 km away, depending on the request from the clients. This is mainly possible due to the relatively long shelf life of the crops compared to other vegetable crops grown in the area, such as tomato. The trader⁸⁷ in Gidaaraa has explained this:

I buy the leftover onion from the community and collect it together. When I collect a track or more, I transport it to different parts of the country based on market demand and requests from clients. I often load and transport once or twice a week, depending on the distance to my travel destination. I sometimes transport as far as Gambella Town. I often supplied it to traders in particular locations, who then retailed it to local consumers with advance payment or full payment. If I receive the advance payment, they will transfer me the remaining money through the bank after selling it (interview in Gidaaraa village, February, 2021).

The tomatoes produced in the area are mainly supplied to Addis Ababa, Adama, and the Chiro of Harer. This is mainly due to the high demand, short shelf life, and perishability of the produce.

⁸⁷ He is originally from Wolenchit, a town in the adjacent district. He settled in the Gidaaraa village of Karrayu a few years ago and engaged mainly in the trading of onion crops. His wife also owned a restaurant, providing food services for farm laborers and the local people. She also assisted him in buying the onion in the absence of her husband.

Figure 6: Some marketing locations for onions produced in Fentalle District



7.6. Contextualizing the emerging production relationships

The overall sharecropping process and related production and marketing relationships in the Project area are based on unequal power and bargaining relationships between landowners and their counterpart sharecropper investor/s. It reflects the form of a capitalist mode of production in which investors have maximized at the expense of landowners.

The capitalists who own and control the means of production put labor power into production processes, resulting in surplus value, which ultimately forms capital accumulation (Bin, 2018). In this process, the sharecrop investor is granted temporary land access rights during his contractual period to invest in and enjoy the benefit of the land. He gains and maximizes his benefit from the process, both explicitly by taking the upper hand in sharing and implicitly by engaging in fraudulent acts (Buli, 2006). The other actors have also contributed

to the sustenance of capitalist production relations and capital accumulation while squeezing a benefit from the land, narrowing the landowners' benefit margin. Local sharecrop brokers, for example, have provided security protection for outsiders involved in production, which is critical for external capitalists to have confidence in entering into production relationships. The provision of security protection is one of the key responsibilities of the brokers that the non-local investors would like to emphasize to enter into a deal.

Moreover, laborer from all walks of life sell their labor power and are subordinated to capitalists in exchange for a wage from farming activities. The pastoralist landowners and their family members, notably children and women, turned to "proletarianization" by providing farming labor services, though the "degree of proletarianization" (Bin, 2018: 83) is limited but on a growing trend (Ayalew et al., 2016). This is one of the futures of the capitalist production relation (Sanyal, 2014).

In this case study, however, capital formation does not involve either pastoral land confiscation or the transfer of ownership rights involving unreversed dispossession, as argued in Marx's theory of primitive accumulation and the works of contemporary Marxists such as Harvey. For example, Harvey argued that dispossession is necessary for accumulation and the continuation of capitalist-dominated social formations in which wealth and power are concentrated in the hands of a few (Harvey, 2003, 2010). This dispossession could be coercive and violent (Batou, 2015; Gogoi & Saikia, 2020; Harvey, 2003). However, the production relationship and capital formation in the Project area occurred without dispossessing the pastoral land or expelling the pastoralists from their land. Shrimali (2016) noted that contract farming between farmers and big industries in Punjab, India has resulted in capital accumulation without requiring the big companies to dispossess farmers directly from their land to profit. Instead, the accumulation occurred without dispossession but resulted from increased productivity associated with effective production endeavors (Shrimali, 2016). Paudel (2016) also observed that the community forest in Nepal had reproduced a condition of accumulation without dispossession, in which ownership over communal forestland is secured and capital accumulation through commercialization occurs concurrently.

In an echo of these, the production relations in the study area depicted the very process of accumulation without dispossession, where land ownership rights remained in the hands of (agro-) pastoralist landowners, who are primarily granted tenure rights. However, the lion's

share of profit from the land goes to capitalist investors. As already stated, the locals are constrained due to systemic structural and relational issues that weaken their ability to access their land and independently derive exclusive benefits from it. This creates a condition and obligates them to enter into an unbalanced contractual agreement with capital owners, whose wealth offers them the power to access (Peluso & Ribot, 2020; Ribot & Peluso, 2003; Teshome et al., 2021). In such a situation, capitalists organize labor and resources to convert the land into productive space, from which they quickly reap huge profits at the cost of the landowner, who benefits only marginally from the relationship. Thus, capital formation is not the result of the confiscation of physical land but of benefit and labor exploitation by capitalists and their associated networked actors from pastoral landowners who enter into unfair production processes and marketing due to compelling systemic constraints.

7.7. Reaction and Movement Against Exploitation

As already discussed, the irrigation scheme has increased the exploitation of the local community in some ways. However, actors or groups of actors have agency to actively devise strategies for maneuvering the process (Long, 2001). As a result, there have been counteractions and movements attempting to jeopardize the free ride of sharecrop investors and their associated actors in the study area. These efforts had been made in a more or less coordinated manner by groups with the intent of putting pressure on investors and their associates but also, unintentionally, with an individual attempt to prosper.

Individually, some entrepreneurial local (agro-) pastoralists have been progressive in farming their own and their fellows' land, rejecting sharecropping with other external actors. They have coordinated resources at their disposal, organized labor, and are independently involved in irrigated farming. They finance the production costs and hire the necessary farmers and laborers. Specifically, in Gidaaraa village, an increasing number of Karrayu agro-pastoralists have begun to produce cash crops on their own and have seen increasing success. Some of them have also increased their output by sharecropping-in more land with their fellow pastoralists. In this regard, the local Ittu residents have also been heavily involved in sharecropping more land for cash crop production (Ayalew, 2012; Ayalew et al., 2016).

Many other local (agro-)pastoralists benefit from their fellow farmers' experiences and are inspired to get involved in order to follow in the footsteps of successful entrepreneurs. This, however, goes against the wishes of external investors and their associates, who actively try

to maintain their interest by engaging in efforts that discourage such entrepreneurs. As stated, such activities include investors or traders secretly negotiating with laborers and their leaders to either not work or request a higher price rate; offering a lower market price; and making a deal with track owners to either not load or demand a higher price.

Apart from individual efforts, there were also explicit movements directed either to stop the involvement of external investors or to make them engage in a way that ensures locals receive a fair benefit from the production relationship. However, none of these movements were consistent and brought long-lasting results, despite having an impact for a while. The two most noticeable movements were:

7.7.1. '*Maxxanaa off irraa baasaa*' movement (litt. The movement to expel 'dependents')

As discussed earlier, during the initial implementation of irrigation schemes, officials from various bureaucratic levels were deployed to assist people in working on their land. The government directly assisted them by covering the cost of agricultural inputs such as maize and fertilizers, cultivating the land with tractors, and sending officials to organize the farming and provide technical support. As a result, the landowners produced staple food on their land and continued to produce for at least two to three cropping seasons while under the close supervision and support of officials. However, as time passed, support declined, and a growing number of external investors and highland farmers approached the locals for sharecropping partnerships for the production of cash crops.

At this time, government officials have launched a movement known locally as '*maxxanaa off irraa baasaa*' (literally, expelling 'dependents') to limit the ever-expanding involvement of external actors in sharecropping and land transactions in the area.

External sharecrop investors and the external farmers who worked for them were depicted and discursively imagined as '*maxxanaa*' ('dependent'). Thus, the local officials urged the community to expel those actors. The justification was and still is that the project is serving external actors who are unrelated to the project rather than the intended target groups. More importantly, the officials stated that these external actors benefit and become wealthier at the expense of local people whose lives are little improved⁸⁸. The movement then sought to evict

⁸⁸ Interview with District Irrigation expert

external actors who had already begun sharecropping and prevent newcomers from encroaching on local irrigated land. The paradox with the concept of '*maxxanaa*' ('dependent') in this case is that officials portrayed external investors as 'dependent' and hopeless without landowners for survival, with many local pastoralists echoing the same sentiment. However, the reality is that pastoralist landowners have become increasingly reliant on external investors, either to cultivate their land or to earn a living from wage labour farming opportunities created by them. An elder local informant in Ilaala village elucidated this saying: "While we call them '*maxxanaa*' (dependent), we end up becoming '*maxxanaa*' (dependent) on them."⁸⁹

The local people were repeatedly discussed in meetings and were informed to refuse any offer of sharecropping from external actors in order to fully benefit from the project intended for them. The officials also paid an unintentional visit to the farm to investigate the locals who continue to share their land. There were also instances where officials threatened farmers working on sharecropped land. This movement, however, did not prevent external actors from sharecropping irrigated land but rather forced them to conduct the land transaction in very secretive and covert ways at the time. One of the reasons was that many members of the local community were unwilling to push the external actors away. Rather, they have shielded the sharecroppers and their laborers from being identified by officials⁹⁰. It was because, first, many informants agreed that simply expelling sharecroppers will not ensure that local people benefit from the land, but what matters is that continuous official support to engage the locals in farming is important. Second, the movement was poorly organized, inconsistent, and short-lived. It was claimed that the movement was strong at first, especially in 2008 and 2010, but gradually weakened. It is now only mentioned in public meetings on rare occasions, but no local or district officials are committed to controlling the growing number of external sharecroppers.

7.7.2. 'Qeerroo' movement: quest for a fair share

Locally, the Karrayu youth were protesting against external investors and associated parties, whom they referred to as '*maxxaana*'. This protest was infused with the national *qeerroo* (young Oromo) movement for freedom and democracy, which reached a climax between 2016 and 2018. The *qeerroos* were organized and have been on a quest for the local people to receive a fair share of profit from their land in the process of production relations, primarily

⁸⁹ Interview November 2020, Ilaala village

⁹⁰ Interviews with the District Irrigation Expert, the District Agricultural Extension Head, and local DAs

in the villages of Ilaala and Xuxuxi. This *qeerroo* organization mainly benefited from the political atmosphere created by the broader national *qeerroo* movement. It was also guided by and adhered to the core principles of the inherent broader national *qeerroo* movement, which seeks to safeguard the benefit and decision-making power of locals over the natural resources of their surroundings. The local young people came together not to expel sharecroppers, as government officials had attempted to do, but to seek a relatively equitable share of the benefit arrangement between landowners and sharecrop capitalists.

They were primarily opposed to the dominant one-third profit share in the villages as well as the participation of local brokers in the sharecropping arrangement. As they agreed, the one-third profit sharing largely benefits the sharecropping investor but excludes local landowners. The unjust share is exacerbated by the local sharecrop broker, who is involved in the contract arrangement and scratches even further over the already limited shared gains of the landowner. As a result, the *Qeerroo* movement aspired to achieve a 'fair share' if sharecropping was mandatory. In this regard, the exclusive half-equal portion between the landowner and the sharecropping investor was deemed to be a more equitable share than the one-third. Moreover, the movement was planned to avoid the intervention of local sharecrop brokers and allow direct deals between the landowner and the sharecropper. This was also supported by local officials such as development agents (DAs) and village chairs, as well as notable people in the villages, such as elders and religious leaders.

The organized group had discussed at the village level with landowners, sharecrop brokers, and the main farmer representing the investor, only to have a direct agreement between the investor and the landowner and for half-equal profit sharing. Those who had crops on the field but had already agreed to a one-third share were required to revisit their agreement to share half equally when the harvest was ready. Accordingly, landowners and sharecroppers who already had one-third were forced to sign a new contract in front of local officials in order to share an equal half at the end of the day.

During the harvest period, then, *qeerroos* were patrolling onion farms in the villages, ensuring that the landowner received an equal-half share of the cash from harvest sales. In the event of a sharecropper's refusal, the *qeerroos* insisted on an upfront benefit share on the field and confirmed that the landowner got an equal half share of the total benefit after reimbursing the production costs. When the protest was heightened, some sharecroppers who had originally agreed to share one-third of the profit were unwillingly forced to share it equally. This, however, did not result in a long-term equitable profit-sharing arrangement between the landowner and the sharecropper investor capitalist. Instead, it resulted in the exodus of

sharecropper investors and many farmers to other villages within the same and adjacent districts, such as the Afar region. Furthermore, at the time, some landowners also secretly refunded the difference to their sharecroppers in order to keep their vow and/or avoid losing their future partnership.

7.8. Summary

The Project has expanded crop cultivation and resulted in a new form of economic relationships and interactions over land. Land distribution linked to the Project and the conversion of communally owned grazing land to private tenure for individual use has given the owners more decision rights and involvement in land transactions such as sharecropping. It accelerates the commodification of pastoral lands and the evolution of various actors seeking to engage in crop production (Ashami & Lydall, 2021; Bassett, 2009). In this Project, the state has envisioned pastoral development through settled agriculture. However, the pastoral context, including the households' ability to produce crops and other variables determining the nature of the outcomes, has been taken for granted (Bekele & Padmanabhan, 2012; Kassahun, 2006). As a result, the benefit gained by many pastoralists from the “new project” endeavor remains marginal.

Given the disadvantaged positionality of pastoralists and agro-pastoralists (Markakis, 2011; Regassa, 2021), many landowners have earned less and are also being exploited due to the increasing and intensified sharecropping contracts in the project area. Except for entrepreneurs, many landowners do not often produce primarily cash crops independently, and as a result, they do not reap the full potential benefit from their irrigated land. They enter into a sharecropping agreement in which multiple actors participate, each receiving shares at the expense of the landowner, who earns a small dividend.

Further, the landowners and their household members are being deprived of their labor power with increasing involvement in wage employment created in the production process. This overall production relationship reinforces wealth and capital accumulation for investors. Therefore, many landowners are still disadvantaged as they can no longer use their land for cattle grazing as in the old days, as it has been converted to cropping fields. Nor are they able to reap the full financial benefits of irrigation as in the “modern” days, as it has been taken away by a network of actors for whom it opens up new doors of exploitation to make a profit at the expense of the locals.

CHAPTER EIGHT

CONCLUSIONS

8.1. The main focus and arguments of the study

In the late 2006, the Oromia regional state in the Federal Democratic Republic of Ethiopia launched a large irrigation scheme called FIBIDP in the heart of the Karrayu land. The project was framed as lifesaving, transformative and unique in terms of shifting from the dominant approach of development by dispossession, to development through incorporation of local population. Top-level government authorities including the regional president and the then-government chief at the parliament underlined the urgency of the project, promised the people to supply human and material resources and underlined that there was no time to pause even for break. As promised, the regional government mobilized resources, deployed a technical team, established a task force, and marched to implementation. Local level Development Agents (DAs) were tasked with partitioning farmland, convincing and mobilizing households, and started providing overall professional support.

Such framing of large-scale development schemes in pastoralist areas as lifesaving and a development intervention is not a new phenomenon in Ethiopia (Asebe & Korf, 2018) or elsewhere (Li, 2007). Yet, development projects are complex and rarely initiated with a single purpose in mind (Li, 2007). Any development project is juxtaposing multiple facets, eliciting alternative interpretations of its meaning by various actors, and resulting in outcomes that differ wholly or partly from those expected. With this juxtaposing nature of development projects in focus, the study addressed how a development project intended to 'benefit' the local pastoralist was being perceived, challenged on the ground, and how it actually impacted the local community. It seeks to provide a broader picture and an in-depth understanding of how political dynamics influenced the inception and implementation of FIBIDP in a pastoral area, as well as how its meaning and outcomes were negotiated among participating actors on the ground.

The FIBIDP was contested and conceptualized differently by social actors at different spatial scales (federal and regional states and local communities). These various interpretations have been shaped by differing underlying discursive images of space and people in pastoral development interventions. The hegemonic view that pastoralists are backward and at odds with 'development' has explained the federal government's disinterest in and unwillingness to

support the project. However, internal power rifts linked to ethnic politics in the federal system made the regional state depart from the federal government, reinforcing the notion that the state is not monolithic. Much emphasis was placed on securing political power, and its implementation was mainly geared towards achieving the political goal. This made the project an arena in which regional and federal states competed to advance their respective political interests. With this, the study argues that the project was co-opted for political purposes rather than serving as a vehicle to bring pastoral development and end poverty, as envisioned in the regional state's technocratic document. In retrospect, the historical negative pastoralist-state relationship also caused the local people not to put confidence in the government that it implemented the project for the sake of benefiting them (the local people). These all, in some ways, hampered the practical commitment to the development of the project in the area.

Similar to what researchers (for example, Asebe & Korf, 2018; Laltaika & Askew, 2021; Schlee, 2013) have already noted of other large-scale developments in pastoral areas, I argue that the FIBIDP has significantly served the state's political interests. First, it facilitated state presence by intensifying bureaucratic machinery and subjugation of local people and their environment. Second, it served the state agenda of pushing pastoralists into sedentary life. The EPRDF-led Ethiopian regime claimed this to be a voluntary choice (Mulugeta & Firehiwot, 2014) and that this state policy was promulgated as a way forward for pastoral development (Ashami & Lydall, 2021; Fana, 2021; Markakis, 2021). However, such a shift simplifies tax collection as many mobile pastoralists become confined to settled village life, as well as strengthening state control over people.

The land distribution process associated with the project has also been counterproductive in many respects, contradicting the proposed assumption that it ensures inclusive development in pastoral areas. It altered the traditional values and patterns of interactions center on natural resources, notably land and water in the area. High economic values have been conferred to the natural resources, land and water and the demand for them has sharply increased, making access to it more competitive than ever before.

More fundamentally, the process also destroyed the long-standing customary institutions and tenure structures, ushering in a new order of interaction over resources, whereby individualized land use prevailed. It diminished the dry grazing land that was formerly used for community pasture. The land titling also provided clear boundary demarcation with

written norms and rules (Hall et.al, 2011), while excluding many pastoral individuals and groups from benefiting from their ancestral land. The subdivision of the commons and certification linked to the project granted ownership to some (agro-) pastoralist households and individuals in the study area. Yet due to a lack of fairness, some groups, such as male-headed households, were given first priority over others in acquiring private land. This consequently increased wealth differentiation as the process favored members with better social positions at the expense of disadvantaged members of the community, such as poor households, women, and young girls, who have experienced exclusion not only from the land allocation process but also from control over their ownership (Mintewab et al., 2016; Mwangi, 2009). Furthermore, many households and individuals who got ownership failed to reap any benefit and/or only marginally benefited from their holding due to structural-relational factors constraining their power to do so.

Toulmin (2008) indicated that land titling and certification may not be appropriate in all instances and may have unintended impacts in some cases. She stated that it is most appropriate in situations where the customary institution has lost legitimacy, where tension exists between different groups but the local institution is ineffective in dealing with it, in resettlement areas, and in situations where competition for land is intense. In the same vein, this study argues that while it is certain that land certification has had some benefits for farmers in the highland of Ethiopia, the replication of the same practices and approaches in lowland areas has resulted in outcomes and repercussions, just mentioned, different from those in highland areas.

Very interlinked with the above, the water from the Awash River, which the locals formerly used primarily for animal consumption, has become increasingly important for irrigated crop production. The demand for irrigation water has increased, making access increasingly competitive and, in some cases, conflictual. Water management and sharing arrangements both within the same village and between villages were very problematic. Actors used various ways to get irrigation water for their crops. In this regard, water theft and illicit activities such as canal obstruction and water diversion have flourished, causing disputes among irrigation water users within and between villages. With this, the equitable distribution and allocation of irrigation water are becoming critical, often in opposition to the persistent tradition of water sharing and utilization in the area.

As a historical and continuing trend, land distribution linked to irrigation projects consolidates the process of private tenure transformation at the expense of communal ownership (Ashami & Lydall, 2021; Markakis, 2021). It also allows for more flexible land use and access to different land lease and contractual arrangements, such as sharecropping, which is often unfavorable for many pastoralists (Bekele & Padmanabhan, 2012). Thus, projects like FIBIDP have expanded crop cultivation and resulted in new types of economic relationships and interactions over land, accelerating the commodification of pastoral lands and the emergence of various actors seeking to profit at the expense of pastoralists. In the case under study, many local landowners have entered into unbalanced production relations with external actors and local elites. These economic interactions have often been mediated through exploitative sharecropping arrangements and marketing relations.

In most agrarian studies, sharecropping is known as a phenomenon in highland farming communities and entails direct land tenancy relations between only two actors: the rich landlords and poor tenants (see, for example, Baah & Kidido, 2020; Deininger et al., 2008; Mukhamedova & Pomfret, 2019) or, conversely, the poor landowners and rich tenants (see, for example, Bellemare, 2009; Hosaena & Holden, 2015). Unlike these known patterns, the sharecropping arrangements in the study area represent a new and evolving form of dynamism in tenancy arrangements. They are somewhat akin to those in the highland farming community in that they entail sharing the provision of inputs and benefits from the outputs, but they are also unique and very complex, involving more than two actors. This fosters production relations, resulting in wealth accumulation for a few but rather depriving many locals of the benefit of their land.

Contrary to Harvey's concept of accumulation by dispossession, this study supports the idea of Shrimali (2016) and Paudal (2016), arguing that the production relations in the project area are a case of accumulation without dispossession. The investors have accumulated capital without physical confiscation of land or coercive dislocation of the pastoralists. The accumulation of wealth has taken place through the production relationships, involving benefit and labor exploitation for the local pastoralists, and from which the capitalists retain most of the returns. The local pastoralists, however, have kept their landholding and the right to use it. On the face of it, they have also voluntarily and intentionally entered into such economic partnerships. However, the voluntary nature of their decision must be considered in light of their lack of power, pressing them, therefore, to enter into unfavorable arrangements.

In this regard, the project has facilitated and opened up the pastoral land to the market, thereby maintaining earlier alienation while also reinforcing further exploitation of the Karrayu pastoralists in a systematic manner. Many pastoralist households in the study area have shown little success in terms of life improvement. This can be seen in the fact that many pastoralist households are still receiving alms from the Productive Safety Net Program (PSNP) after more than a decade of implementation, despite officials claiming that the project helped all households in Gidaaraa village achieve food self-sufficiency and graduate from the program. Instead, many sharecropping capitalists have benefited and prospered.

8.2. Revisiting the Research Problems

In this section, I revisit the central problem of the study. In doing so, I outline and ponder over the major conclusions that can be drawn from this study. These mainly reflect on how the development project meant to benefit the local pastoralists has been politically appropriated and became an arena of contest for political gains, rather than improving conditions for the locals, and how this in turn has shaped the implementation project and resulted in unintended adverse effects in the locality. This is summed up in the following three sub-sections below. First, I briefly look at the different meanings related to the project and the political and historical backdrop that defines such multiple interpretations. Then I describe how these various interpretations have influenced project implementation, as well as changes in access to and ownership of resources (mainly irrigable land and water) and exclusion. Lastly, I discuss how the project has also resulted in and reinforced inequality and capitalist production relations in the study area.

8.2.1. Politics of the development intervention

In his seminal work on failed development interventions in Lesotho, James Ferguson (1994) critiqued the representation of development interventions as technical practice while they often are intrinsically political. In echo of this, the development of FIBIDP has been political and it represents the political interests of the state. It was motivated by and co-opted for political purposes, rather than the explicitly stated objective of betterment and improvement for the local population. This is mainly related to the complex political nature of the Ethiopian state, and its continuing perception of pastoralists and pastoral development as archaic. The post-1991 political and administrative reconfiguration of the state along ethno-linguistic lines has created a complex power dynamic in contemporary Ethiopia. The struggle

over power and autonomy between the multi-ethnic federal government and its constituent regional states is characterizing power dynamics in the country (Vaughan, 2011). The question of who benefits from national resources has also become a political issue. These ultimately have prompted divergent views over the FIBID project within the state structures—between the federal and Oromia regional governments.

The regional government started the project in the name of improving the wellbeing of the Karrayu community. Yet the project has become an arena in which the regional and federal governments compete for political influence, between themselves and vis-à-vis the local community. The regional government subtly attempted to resist the dominance of the federal government and gain autonomy through the inception and implementation of the project, while the federal government defended and protected its monolithic, centralized, and uncontested power territory and status quo. It is with this rationality that the regional government viewed the project as symbol of autonomy while the federal government portrayed it as ‘waste of money’ to discourage its implementation. The regional government also framed it as a transformative and improvement project to both, garner local support and get approval from the federal government. Whereas the narrative of the federal government was not only aimed to contest the regional implementation of the project, but also part of the relegation of pastoralists. The implication was that such a huge investment of budget for irrigation of pastoralist areas is not sound, irrelevant, and unjustifiable, as pastoralist are too ‘backward’ to make full use of it.

Apart from internal controversy, both the federal and Oromia regional governments have manipulated the project to get political recognition and local acceptance. The project was instrumentalized and politically used, to the extent that it served as a strategy to get acceptance and win votes in the national election. Further, following the strong persuasive capacity of the regional state and gradual implementation, the project has come to be portrayed as a development achievement for both the federal and regional governments.

On the other side of the story, owing to historically rough relationships with the state, the local community was initially wary of the implementation of the project. They viewed it as part of persistent land alienation, for which they strongly and vehemently resisted its implementation. However, in due course, the project resulted in mixed feelings and polarized views among the community—hope for some and anguish for others. Some, notably the downstream villagers, who struggle to access irrigation water and benefit from the project,

felt discontent and questioned its implementation and further expansion to the remaining villages. Others, mainly in the upper stream villages and among those who had better access and benefits, were hopeful and expecting further betterment from it.

In concluding, it is argued here that the political stances of the actors on issues of sovereignty, territory, and historical experience inform the varied perspectives on the project. These varied perspectives have in turn affected the practical commitment made to its implementation and consequently determined its outcomes and local benefits. Echoing Ferguson (1996) in the 'anti-politics machine', development and projects intended to bring about improvement are politically-laden and driven and should not be considered and reduced to technocratic ventures for solving technocratic problems. Political relations and practices, just as much as technical aspects, determine the success of development projects (Li, 2007). The FIBID project, which is still not fully operational after eighteen years, is a good example of this.

8.2.2. Dynamism in Resources Access, Ownership, and Exclusion

African pastoralists have historically been characterized by communal resource holding, administration, and management (Fratkin, 1997, 2001; Moritz, 2016; M. Salih, 1990). Critical resources such as land and water are communally and collectively used and controlled, giving individuals inalienable rights and access to them. Customary tenure relationships whereby resources are jointly owned and used by well-defined members of society, have been those historically present in Karrayu society. In this system, as the Karrayu elders express so well, resources (pasture land and water) are 'God-given', they are being used without discrimination but with defined rules guiding specific users and benefits. Furthermore, the Karrayu traditionally followed a cyclical migratory pattern in order to capitalize on resource variability across various geographical niches and maintain a relative balance of wet and dry-season pastures. The local institutions and social fabric were designed to suit such flexibility. However, with growing interference with these systems since the 1960s, such as, for example, land allocation for non-pastoral developments, the influx of migrants, population growth and its resulting resource decline, the customary tenure relationships and migratory and flexible resource use in the Karrayu area have been significantly disrupted. The development of FIBIDP has posed further challenges to the customary tenure relationships and traditional institutions governing resource use and management. It both reinforced and

adversely promoted dynamism in resource access and management, and in relationships over resource use and control among the Karrayu (agro) pastoralists.

The FIBIDP has accelerated the transformation of land tenure from predominantly inclusionary communal land ownership to exclusionary private rights. It has reinforced land use change and expedited the demise of communal tenure favoring private holdings. This, in turn, makes access to land much stricter, and ownership is often negotiated formally and managed by formal institutions. It led to the restructuring of resource rights in more formalized ways. This gives owners the right to exclude others, including fellow pastoralists, from using the land. It has also given the owners autonomy over their land, including flexible land use and the decision to enter into different land leases and contractual arrangements.

Linked to the project, the communal grazing land was divided and allocated for non-pastoral pursuits such as agricultural farming. The process shrinks the grazing space, jeopardizing livestock production and local livelihoods. It also granted landownership to some households and individuals, while excluding and denying others the rights they were supposed to have, to use the ancestral Karrayu land. In this regard, in a complete departure from the customary system, children and those from the young generation who moved out (temporarily and permanently) have been completely barred and excluded from benefiting from their ancestral land, now designated for private use. Coupled with the unfairness of the land distribution process, several groups, most notably poor households, women, and young girls, have also experienced exclusion and being denied the right to own and access land. Some community members with better social standing have benefited, while others were disadvantaged. This consequently has fostered wealth disparity in the community.

FIBIDP as a technological assemblage has added economic value to local resources such as land and water, making their access very competitive and a point of contention. A growing number of external actors have arrived in the area to capitalize on the opportunity from the project. With this, the way water is imagined, used, and controlled has been altered. The way the local community connected to water and with each other over access to it has accordingly dynamically changed as well. Water, which was previously used mostly for animal and human consumption, has become increasingly on demand for crop production in the area. Thus, water access is becoming an arena over which irrigation users, both within a village and between villages, struggle for dominance. In a sharp departure from the past, FIBIDP-

related issues of resource access have fostered rough social relationships among the local community.

8.2.3. Capitalist Production Relations and Wealth Accumulation

In connection with the project, crop production has expanded, and new types of economic relations and interactions over the land have been fostered. As noted earlier, the project encouraged the commodification of pastoral land and attracted various land-hungry actors eager to profit from the productive land. Many households and individuals, however, failed to farm independently on their land due to their limited capacity, itself linked to the structural-relationship factors mentioned earlier. Instead, they were increasingly involved in land transactions and leases with external actors and local elites. Consequently, land leases and transactions have intensified, and sharecropping practices with multiple actors have become dominant, characterizing dynamic production relationships in the area. Unlike what is customary in highland Ethiopia and elsewhere, these relationships often take the form of sharecropping arrangements with the participation of numerous actors, all of whom ultimately take a share of the benefits.

These arrangements in practice involves the exploitation of pastoralist landowners, depriving them of the full potential benefits associated with their irrigated land. The other sharecropping actors, most notably the investor, organize and maximize the benefits of the production, and his associates all receive a share of the benefits, at the expense of the landowner. In the process, the benefits gained by many pastoralists remain marginal. This sharecropping process not only systematically excludes landowners from its benefits but it also reinforces wealth and capital accumulation by external investors, some associated actors, and those local (agro-)pastoralists able to engage in independent farming, thereby widening wealth inequality in the community.

8.3. Some Policy Suggestions

The Ethiopian state, which in its modern incarnation has historically been associated with its settled farming communities, has a strong belief and desire that pastoralist development be ensured through settled agriculture. Both the federal and regional state governments consider that sedentarization and the replacement of pastoralism by a settled way of life are ‘right policies’ for achieving pastoral development. The project under consideration, FIBIDP, is

intended to materialize the state's ambition of 'improving' through providing pastoralists with irrigation water and encouraging them to live a sedentary life. However, the study empirically shows that the project had little benefit for many local pastoralists and could not lift them out of poverty. In this regard, I explicitly argue that part of the project's limitations stem from expectations – or an act of faith – that the intervention, based on experience gained in a farming community context, would bring a dramatic difference and improvement in the completely different context of pastoralist life and environment. However, this is not the only reason; implementation practices also matter. With this, I emphasize the significance of not only a policy discrepancy (between farming and pastoralism in the context of pastoral development) but also the way the policy is implemented and practiced on the ground. Efforts to have the right development policy model are important, but the relationship between this model and the project practices is considerably more critical to its success and outcome (Mosse, 2004).

The FIBIDP had been poorly implemented (lags in time frame, high costs, smaller than planned area coverage), and little had been achieved of its promise of improving the pastoralists' condition in dryland parts of Upper Awash Valley. Instead, it has benefited the local elites and external individuals who have the power to manipulate the project's practices to their own benefit. The implementation of the project has produced multiple unintended consequences. It has eroded traditional resource ownership and control, created intense competition over natural resources, weakened existing social relations and coexistence, and promoted inequality. It has also resulted in the exclusion of many local pastoralists from their ancestral land privileges that they used to enjoy by virtue of being Karrayu. The essential question here is how these negative consequences might be halted. The policy suggestions that follow outline responses aimed to address such unintended outcomes and either prevent further escalation of the problem, or ameliorate existing conditions, or both.

8.3.1. Increasing the Capacity and Negotiating Power of the Locals

I have discussed how the initial circumstances of pastoralist communities, which are critical in determining the outcome of the project, were overlooked during implementation. The main rush was about instrumentalizing the project for political agendas. Little attention was given to a detailed analysis and examination of pastoral households' status and their readiness or lack thereof, to benefit from such a large-scale irrigation project. There were few if any attempts to support and capacitate them, to ensure that they could independently farm their

land and maximize the benefit of the project in that way. The priority recommendation in this regard is the need for interventions to address constraining factors so as to strengthen the autonomy and decision-making power of households. In line with Abdi's (2015) and Fekadu's (2014) recommendations, this includes, among other things, interventions on infrastructure such as market development and the establishment of market linkages, credit access, agricultural input provision, and skill training and experience sharing. Skill training and experience sharing on farming practices are paramount for pastoralists, as they have little experience and exposure to crop production. Follow-up and proper administration of the irrigation scheme is also critical in terms of maintaining regular volumes of water flow in the canals and ensuring fair distribution and accessibility of water to users in the project catchment villages.

As stated earlier, the local pastoralists have often entered into exploitative production relationships, owing to their limited capabilities as a result of social and structural issues. A range of powerful actors with a diverse set of capitals—social, financial, and political—enabling them to take the upper hand in production relations, therefore were able to readily encroach on the benefits that the locals are entitled to. Thus, interventions towards improving local infrastructure and farming skills would enhance the local pastoralists' negotiating power in the production relationships, and also boosts their individual capacity to work and benefit from their lands autonomously. These efforts should also take into account the internal differentiation in the pastoral community, and address actors situated in disadvantageous positions in a seemingly homogenous community.

8.3.2. Recognize the Local Context and Ensure Equitable Land Allocation Processes

The project-related land distribution and titling have established demarcation lines that have excluded numerous pastoral individuals and groups from their ancestral land. The distribution procedure and practice were also not fair in terms of addressing the disadvantaged groups and people, aggravating their exclusion. Countering this necessitates policies and practices that take into account the local context, and ensure fairness throughout the land allocation process. In line with earlier researchers (such as Deininger et al., 2011a; Holden et al., 2010; Toulmin, 2008), I believe that monitoring the process and protecting the rights of disadvantaged groups and people are essential to ensuring fairness and equitable access. It is also crucial to recognize and strengthen the long-standing customary tenure system in future

similar schemes rather than only attempting to replace and erode the pre-existing tradition with the individualization of land ownership.

8.3.3. Consideration for a More Comprehensive Approach

In addition to what has already been mentioned, the state should consider and develop local economies more holistically. In the case study, it is likely that even if they were better capacitated, not all households and people could benefit from an irrigated-farming livelihood; there simply would not be enough irrigated land for that. Thus, irrigation schemes in pastoral areas should avoid disrupting and, rather, strengthening the preexisting livestock-based livelihoods. Efforts and practical commitments should be made towards supporting, or at least maintaining, the existing livestock-based economy rather than destroying it. In other words, there is a need to develop mechanisms to manage tensions between the two forms of livelihoods (crop farming and livestock production) rather than relegating and ignoring livestock production. This also has implications in terms of land tenure and, more broadly, resource management systems.

Taking a more holistic view of local economies would also require considering how to generate multiplier effects. In the study case, this would mean developing paths for especially members of the younger generation to acquire some of the technical skills required to maintain the scheme's productive capacity, such as, for instance, pump technicians and/or any mechanized tools that producers need, irrigation engineers, and so on. Local people could also be encouraged and supported to develop small or medium enterprises to channel the produce into markets and consumers.

8.4. Future Research

The development projects have a wide range of impacts. However, this study mostly drew attention to the unintended negative consequences of the FIBIDP project and its concealed motive. Thus, there are areas that are not covered here but need attention for further investigation, as suggested below.

Food security is a major concern in many pastoral areas. With the changing environment and recurring droughts in the dryland areas, many pastoralist households have continued to be destitute, with increasing food insecurity. They become more fragile, and local-level

resilience in the face of shocks is weakened. In this regard, development projects in the pastoral areas of Ethiopia and somewhere in Africa have often been implemented with the promise of boosting local resilience and improving local conditions in terms of infrastructure, income, and food security status. In the case of FIBIDP, officials claimed that the project brought food self-sufficiency to local pastoral households. However, from observation and interviews with locals, I understand that many pastoral households are still suffering from food shortages and remain dependent on the safety net program. For instance, according to the 2024 report from the Fentalle district agriculture office, a total of 2721 beneficiaries living in 538 households only in the selected study villages are currently receiving assistance through the Safety Net programme (2620 beneficiaries through public work and 101 beneficiaries from direct support). Further research aimed to build an in-depth understanding of the impact of the project on improving the intra-household food security status of pastoralist households is needed, to address the existing controversies concerning the project contribution to food security.

It is also clear from this study that income from sales of crops and leasing out land were important sources of income for some individuals and households. This notes that the same intervention can lead to different outcomes for different actors, as they have different capabilities (Scoones, 2015). Linked to the above, unpacking the differential contribution of the project in terms of, for instance, food security and income generation for different groups of local people segregated based on sex, age, wealth status, and so on would also be useful. Furthermore, as far as the impact of such a large development project is concerned, its effect on the local environment is eminent, but this research did not address it. Thus, investigating the environmental impact of the FIBIDP is a potential area that remains for future research.

These (the proposed research areas) are important to counterbalance and complement the findings of this study but also worthwhile so as to draw lessons for further implementation of similar projects on a more comprehensive basis. They are particularly relevant in the present context of Ethiopia. Currently, the Ethiopian government has consistently invested massive amounts of public resources in large irrigation projects in lowland areas. In the past few years, this has been particularly evident in the current government push in many lowland areas of the country, for example, in the Afar and Oromia regions, to produce wheat using irrigation in order to both respond to local and national consumption demand and earn foreign currency through exports. Therefore, studies that scrutinize the differential impact of such

development initiatives and their effect on the environment are worthy of better understanding how they are being implemented and whether and how they are benefiting the local people and their surrounding environment. This could also be part of evaluating the process and progress of the project.

REFERENCES⁹¹

I. General Publication

- Aalen, L., & Tronvoll, K. (2009). The end of Democracy? Curtailing political and civil rights in Ethiopia. *Review of African Political Economy*, 36(120), 193–207.
- Abbink, J. (2011). Ethnic-based federalism and ethnicity in Ethiopia: Reassessing the experiment after 20 years. *Journal of Eastern African Studies*, 5(4), 596–618.
- Abbink, J. (2012). Dam controversies: Contested governance and developmental discourse on the Ethiopian Omo River dam. *Social Anthropology*, 20(2), 125–144. <https://doi.org/10.1111/j.1469-8676.2012.00196.x>
- Abdi, Abdullahi., Seid Mohammed., & Abdirahman Eid. (2013). Town camels and milk villages: The growth of camel milk marketing in the Somali Region of Ethiopia. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 119–128). Routledge.
- Abdi, Etafa R. (2015). Determinants of Agro-pastoralists' Participation in Irrigation scheme: The case of Fentalle Agro pastoral district, Oromia Regional State, Ethiopia. *International Journal of Agricultural Research, Innovation and Technology*, 5(2), 44–50. <https://doi.org/10.3329/ijarit.v5i2.26269>
- Abduselam, Abdulahi. (2019). Pastoralism and Development Policy in Ethiopia: A Review Study. *Budapest International Research and Critics Institute (BIRCI-Journal) Humanities and Social Sciences*, 2(4), 01–11. <https://doi.org/10.33258/birci.v2i4.562>
- Addis Zemen (Amharic newspaper) 'Zelan Woretegna' printed on 28 February 1951 (E.C), Ethiopian Press Agency.
- African Union. (2010). *Policy Framework for Pastoralism in Africa: Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralists Communities*.
- Ahmed, A. G. M. (2009). Transforming pastoralism: A case study of the Rufa'a Al-Hoi ethnic group in the Blue Nile state of Sudan. *Nomadic Peoples*, 13(1), 113–133. <https://doi.org/10.3167/np.2009.130107>
- Akall, G. (2021). Effects of development interventions on pastoral livelihoods in Turkana County, Kenya. *Pastoralism*, 11(1). <https://doi.org/10.1186/s13570-021-00197-2>

⁹¹ Ethiopian authors are cited using their first name

- Akinkunmi, K. (2021). An Analysis of “Encountering Development: The Making and Unmaking of the Third World” by Arturo Escobar. *Sustinere-The University of Toronto’s Journal of Sustainable Development*, 1(1), 64–71.
- Alelegn, Wenedem. A. (2020). Protection of local land use rights in the process of large-scale agricultural land acquisition in Ethiopia. *African Identities*. <https://doi.org/10.1080/14725843.2020.1851652>
- Alemmaya, Mulugeta. (2008). *The transformation of conflicts among Ethiopian pastoralists: Ethnography of the notion of conflict among the Karrayyu in the Upper and Middle Awash Valley* [PhD dissertation]. University of Basel.
- Andrea, F., & James, H. F. (1994). Interviewing: The Art of Science. In N. a. Y. L. Denzin (Ed.), *The Handbook of Qualitative Research* (pp. 361–376). Sage Publications.
- Asafa, Jalata. (1993). *Oromia & Ethiopia: State Formation and Ethnonational Conflict, 1868-1992*. Lynne Rienner Publishers, Inc.
- Asebe, R., Yetebarek, H., & Korf, B. (2018). ‘Civilizing’ the pastoral frontier: land grabbing, dispossession and coercive agrarian development in Ethiopia. *The Journal of Peasant Studies*, 46(5), 935-955. <https://doi.org/10.1080/03066150.2017.1420060>
- Asebe, Regassa, & Korf, B. (2018). Post-imperial statecraft: high modernism and the politics of land dispossession in Ethiopia’s pastoral frontier. *Journal of Eastern African Studies*, 1–19.
- Asebe, Regassa. (2016). *Wilderness or Home? Conflict, Competing Perspectives and Claims of Entitlement over Nech Sar National Park, Ethiopia*. LIT Verlag.
- Asebe, Regassa. (2021). From Cattle Herding to Charcoal Burning: Land Expropriation, State Consolidation and Livelihood Changes in Abaya Valley, southern Ethiopia. In E. C. Gabbert, F. Gebresenbet, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future* (pp. 189–209). Berghahn Books.
- Asebe, Regassa., & Getachew, Tadesse. (2021). Electoral Authoritarianism and the Question of Representation: The Case of Caffee Oromia, Ethiopia. *Journal of Representative Democracy*, 59(2), 207-223. <https://doi.org/10.1080/00344893.2021.2005672>
- Ashami, M., & Lydall, J. (2021). Persistent Expropriation of Pastoral Lands: The Afar Case. In Echi Christina Gabbert, Fana Gebresenbet, John G. Galaty, & Gunther Schlee (Eds.), *Lands of the Future* (Issue 144, pp. 144–164). Berghahn Books.
- Assefa, Fiseha. (2012). Ethiopia’s Experiment in Accommodating Diversity: 20 Years’ Balance Sheet. *Regional and Federal Studies*, 22(4), 435–473. <https://doi.org/10.1080/13597566.2012.709502>

- Assefa, Fiseha. (2018). Federalism and development: The Ethiopian dilemma. *International Journal on Minority and Group Rights*, 25(3), 333–368.
<https://doi.org/10.1163/15718115-02503004>
- Ayalew, Gebre, Mamo, H., Tegegne, G.-E., & Kiya, G. (2016). *The Dynamics of Land Transactions in Selected Agricultural and Agro-Pastoral Woredas of Afar, Oromia and SNNP National Regional States of Ethiopia*. Institute of Development and Policy Research, Addis Ababa University.
- Ayalew, Gebre. (2001a). Conflict Management, Resolution and Institutions among the Karrayu and their Neighbors. In M. Salih, T. Dietz, & A. G. M. Ahmed (Eds.), *African Pastoralism: Conflict, Institutions and Government* (pp. 81–99). Pluto Press.
- Ayalew, Gebre. (2001b). *Pastoralism Under Pressure: Land Alienation and Pastoral Transformation among the Karrayu of Eastern Ethiopia, 1994 to the present*. Shake Publisher.
- Ayalew, Gebre. (2009). When Pastoral Commons are Privatized : Resource Deprivation and Changes in Land Tenure Systems among the Karrayu in the Upper Awash Valley Region of Ethiopia. In Svein Ege, Harald Aspen, Birhanu Teferra, & Bekele Shiferaw (Eds.), *Proceedings of the 16th International Conference of Ethiopian Studies* (pp. 283–298).
- Ayalew, Gebre. (2012). The Dynamics of Land Transaction Practices among the Karrayu Pastoralists in the Upper Awash Valley of Ethiopia: The Cases of Abadir and Merti Communities. *Eastern Africa Social Science Research Review*, 28(1), 59–89.
<https://doi.org/10.1353/eas.2012.0003>
- Baah, K., & Kidido, J. K. (2020). Sharecropping Arrangement in the Contemporary Agricultural Economy of Ghana: A study of Techiman North District and Sefwi Wiawso Municipality, Ghana. *Journal of Planning and Land Management*, 1(2), 50–62. <https://doi.org/10.36005/jplm.v1i2.22>
- Babiker, M. (2013). Mobile pastoralism and land grabbing in Sudan. In A. Catley, I. Scoones, & J. Lind (Eds.), *Pastoralism and development in Africa: Dynamic change at the Margins* (pp. 177–185). Routledge.
- Badurdeen, F. A., & Omalegne, N. W. (2015). Government strategies as contributing factors for resource conflicts among Pastoralists and Farmers in the Tana River County, Kenya. In Yohannes Abera & Abdulahi Mohmmud (Eds.), *The intricate road to development: Government development strategies in the pastoral Areas of the Horn of Africa* (pp. 348–370). Institute of Peace and Security Studies, Addis Ababa University.

- Bahru, Zewde. (2001). *A History of Modern Ethiopia 1855-1991* (Second). Addis Ababa University press.
- Bahru, Zewde. (2008). *Society, State and History: Selected Essays*. Addis Ababa University Press.
- Bassett, T. J. (2009). Mobile Pastoralism on the brink of Land Privatization in Northern Côte d'Ivoire. *Geoforum*, 40(5), 756–766. <https://doi.org/10.1016/j.geoforum.2009.04.005>
- Batou, J. (2015). Accumulation by Dispossession and Anti-capitalist Struggles: A Long Historical Perspective. *Science & Society*, 79(1), 11–37. <https://www.jstor.org/stable/24583625>
- Bauer, K. (2005). Development and the enclosure movement in pastoral Tibet since the 1980s. *Nomadic Peoples*, 9(1–2), 53–81. <https://doi.org/10.3167/082279405781826119>
- Behnke, R. H. (2008). The drivers of Fragmentation in Arid and Semi-Arid Landscapes. In K. A. Galvin, R. S. Reid, R. H. Behnke, & N. T. Hobbs (Eds.), *Fragmentation in Semi-Arid and Arid Landscapes: Consequences for Human and Natural Systems* (pp. 305–340). Springer. https://doi.org/10.1007/978-1-4020-4906-4_2
- Behnke, R., & Kerven, C. (2013). Counting the Costs: Replacing Pastoralism with Irrigated Agriculture in the Awash Valley. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa* (pp. 57–70). Routledge.
- Bekele, Hundie, & Padmanabhan, M. (2012). The Transformation of the Afar Commons in Ethiopia: State Coercion, Diversification, and Property Right Change among Pastoralists. In E. Mwangi, H. Markelova, & R. Meinzen-Dick (Eds.), *Collective Action and Property Rights for Poverty Reduction* (pp. 270–303). University of Pennsylvania Press.
- Bellemare, M. F. (2009). Sharecropping, Insecure Land Rights and Land Titling Policies: A case Study of Lac Alaotra, Madagascar. *Development Policy Review*, 27(1), 87–106. <https://doi.org/10.1111/j.1467-7679.2009.00437.x>
- Berihun, Adugna. (2016). Unsustain the sustainable: An evaluation of the legal and policy interventions for pastoral development in Ethiopia. *Pastoralism*, 6(2), 1–14. <https://doi.org/10.1186/s13570-016-0049-x>
- Bernard, H. R. (2011). *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (fifth). AltaMira Press.
- Bernstein, H. (2017). Political Economy of Agrarian Change: Some Key Concepts and Questions. *RUDN Journal of Sociology*, 17(1), 7–18.

- Bewuketu, Haile., Tsegaye, B., & Awalom, H. (2016). Constraints in Production of Onion (*Allium cepa* L.) in Masha District, Southwest Ethiopia. *Global Journal of Agriculture and Agricultural Sciences*, 4(2), 314–321.
- Bierschenk, T., & Olivier de Sardan, J.-P. (2014). Studying the Dynamics of African Bureaucracies. An Introduction to State at Work. In T. Bierschenk & J.-P. O. de Sardan (Eds.), *States at Work: Dynamics of African Bureaucracies* (pp. 3–33). Brill.
- Bin, D. (2018). So-called Accumulation by Dispossession. *Critical Sociology*, 44(1), 75–88. <https://doi.org/10.1177/0896920516651687>
- Birhanu, Addisu, A. (2021). Land property rights and household take-up of development programs: Evidence from land certification program in Ethiopia. *World Development*, 147, 105626. <https://doi.org/10.1016/j.worlddev.2021.105626>
- Blaikie, P. (2016). *The Political economy of soil erosion in developing countries* (1st ed.). Routledge.
- Blaikie, P., & Brookfield, H. (1987). Defining and debating the problem. In P. Blaikie & H. Brookfield (Eds.), *Land degradation and society* (pp. 1–26). Routledge.
- Blomley, N. (2013). Performing Property: Making the World. *Canadian Journal of Law and Jurisprudence*, 26(1), 23–48. <https://doi.org/10.1017/S0841820900005944>
- Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus Groups in Social Research*. Sage Publications. <https://doi.org/10.4135/9781849209175>
- Bont, C. de. (2018). *Modernisation and farmers-led irrigation development in Africa: A study of state-farmer interactions in Tanzania* [PhD Dissertation]. Stockholm University.
- Borras, S. M., & Franco, J. C. (2013). Global Land Grabbing and Political Reactions “From Below.” *Third World Quarterly*, 34(9), 1723–1747. <https://doi.org/10.1080/01436597.2013.843845>
- Boru, Musa. B., Ameyu, G. R., & Dereje, T. R. (2023). Dynamics of pastoral conflicts in eastern Rift Valley of Ethiopia: Contested boundaries, state projects and small arms. *Pastoralism*, 13(1). <https://doi.org/10.1186/s13570-023-00267-7>
- Bräuchler, B., Knodel, K., & Rösenthaller, U. (2021). Brokerage from within: A conceptual Framework. *Cultural Dynamics*, 1–17. <https://doi.org/10.1177/09213740211011202>
- Bridge, G. (2009). Material worlds: Natural resources, resource geography and the material economy. *Geography Compass*, 3(3), 1217–1244. <https://doi.org/10.1111/j.1749-8198.2009.00233.x>
- Browning, G., & Kilmister, A. (2006). *Critical and Post-Critical Political Economy*. Palgrave Macmillan.

- Bryman, A. (1988). *Quantity and Quality in Social research*. Routledge.
- Bryman, Alan., & Bell, E. (2016). *Social research methods* (Fifth). Oxford University Press.
- Buffavand, L. (2016). 'The land does not like them': contesting dispossession in cosmological terms in Mela, south-west Ethiopia. *Journal of Eastern African Studies*, 10(3), 476–493. <https://doi.org/10.1080/17531055.2016.1266194>
- Buli, Ejeta. (2006). *The Socio-Economic Dimension of Development Induced Impoverishment: The Case of the Karrayu Oromo of the Upper Awash Valley* [Social Anthropology Dissertation Series No. 12.]. Addis Ababa University.
- Burawoy, M. (2009). *The Extended Case Method: Four Countries, Four Decades, Four Great Transformations, and One Theoretical Tradition*. University of California Press.
- Campbell, J. (2004). Ethnic Minorities and Development: A prospective look at the situation of African pastoralists and hunter-gatherers. *Aboriginal Policy Research Consortium International (APRCi)*, 443, 3–26. <https://doi.org/10.1177/1468796804040326>
- Carr, C. J. (2017). *River Basin Development and Human Rights in Eastern Africa — A policy Crossroads*. Springer. <https://doi.org/10.1007/978-3-319-50469-8>
- Cas, B., & Ahmed, A. G. M. (2009). Pastoralists under pressure in present day Sudan: An introduction. *Nomadic Peoples*, 13(1), 10–22. <https://www.jstor.org/stable/43124143>
- Casciarri, B., Ghaffar, A., & Ahmed, M. (2009). Pastoralists Under Pressure in Present-day Sudan: An Introduction. *Source: Nomadic Peoples*, 13(1), 10–22.
- Catley, A., & Yacob, A. (2013). Moving up or moving out? Commercialization, growth and destitution in pastoral areas. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 85–97). Routledge.
- Catley, A., Lind, J., & Scoones, I. (2013). Development at the Margins: Pastoralism in the Horn of Africa. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and Development in Africa: Dynamic Change at the Margins* (pp. 1–26). Routledge. www.steps-centre.org
- CELEP. (2017). *Recognizing the role and value of pastoralism and pastoralists*. CELEP Policy Brief (No.1).
- Clapham, C. (2002). Controlling Space in Ethiopia. In W. James, D. L. Donham, E. Kurimoto, & A. Triulzi (Eds.), *Remapping Ethiopia: Socialism and After* (pp. 9–32). James Currey. <https://doi.org/10.2307/3557016>
- Clapham, C. (2006). Ethiopian Development: The Politics of Emulation. *Commonwealth & Comparative Politics*, 44(1), 108–118. <https://doi.org/10.1080=14662040600624536>

- Clapham, C. (2009). Post-war Ethiopia: The trajectories of crisis. *Review of African Political Economy*, 36(120), 181–192. <https://doi.org/10.1080/03056240903064953>
- Clapham, C. (2018). The Ethiopian developmental state. *Third World Quarterly*, 39(6), 1151–1165. <https://doi.org/10.1080/01436597.2017.1328982>
- Cochrane, L., & Skjerdal, T. (2015). Reading the Narratives: Relocation, Investment and Development in Ethiopia. *Forum for Development Studies*, 42(3), 467–487. <https://doi.org/10.1080/08039410.2015.1080183>
- Constance de, S.-L. (2018). Memory Acts: A Theory for the Study of Collective Memory in Everyday Life. *Journal of Constructivist Psychology*, 31(2), 148–162. <https://doi.org/10.1080/10720537.2016.1271375>
- Cooke, M. (2004). Redeeming Redemption: The Utopian Dimension of Critical Social Theory. *Philosophy & Social Criticism*, 30(4), 413–429. <https://doi.org/10.1177/0191453704044026>
- Corbetta, P. (2003). *Social Research: Theory, methods and techniques*. Sage Publications.
- Cotula, L. (2013). *The Great African Land Grab? Agricultural Investments and the Global Food System*. Zed Books.
- Cox, K. R. (2005). *From Marxist Geography to Critical Geography and Back Again* [The Ohio State University]. <https://www.researchgate.net/publication/228976828>
- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods approaches* (2nd ed.). Sage Publications. <https://doi.org/10.1097/00006527-199301340-00010>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Method Approaches* (4th ed.). Sage Publication.
- Crewe, E., & Axelby, R. (2013). *Anthropology and Development: Culture, Mobility and Politics in a Globalised World*. Cambridge University Press.
- Crewett, W., Ayalneh, B., & Korf, B. (2008). Land Tenure in Ethiopia: Continuity and Change, Shifting Rulers, and the Quest for State Control. CAPRI Working Paper 91. International Food Policy Research Institute. <https://doi.org/10.2499/capriwp91>
- Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. SAGE Publications.
- CSA. (2008). *Summary and Statistical Report of the 2007 Population and Housing Census*.
- Daniel, Mulugeta. (2019). Dynamics of state-society relations in Ethiopia: paradoxes of community empowerment and participation in irrigation management. *Journal of Eastern African Studies*, 13(4), 565–583.

- Daniel, Weldegebriel, A. (2012). Land Rights in Ethiopia: Ownership, equity, and liberty in land use rights. In *FIG Working Week* (Issue May).
https://www.fig.net/resources/proceedings/fig_proceedings/fig2012/papers/ts02d/TS02D_am_baye_5521.pdf
- Dawit, Setegn, H. (2015). *Analysis of Vegetables Market Chain in Dugda Woreda, East Shoa Zone, Oromia Region, Ethiopia* [MA thesis]. Addis Ababa University.
- Dawson, C. (2009). *Introduction to Research Methods: A practical guide for anyone undertaking a research project* (Fourth). How To Books Ltd.
- Dayton-Johnson, J. (2003). Small-holders and water resources: A review essay on the economics of locally-managed irrigation. *Oxford Development Studies*, 31(3), 315–339.
<https://doi.org/10.1080/1360081032000111724>
- De-Sardan, J.-P. (2005). *Anthropology and Development: Understanding Contemporary Social Change* (A. T. Alou, Ed.; Translated). Zed Books Ltd.
- Deininger, K., Daniel, A. A., & Tekie, A. (2008). Assessing the functioning of land rental markets in Ethiopia. *Economic Development and Cultural Change*, 57(1), 67–100.
<https://doi.org/10.1086/590462>
- Deininger, K., Daniel, A. A., & Tekie, A. (2011a). Impacts of Land Certification on Tenure Security, Investment, and Land Market Participation: Evidence from Ethiopia. *Land Economics*, 87(2), 312–334. <https://doi.org/10.3368/le.87.2.312>
- Deininger, K., Daniel, A. A., & Tekie, A. (2011b). Productivity effects of land rental market operation in Ethiopia: Evidence from a matched tenant-landlord sample. In *Applied Economics* (Vol. 45, Issue 25). <https://doi.org/10.1080/00036846.2012.725933>
- Dessalegn, Rahmato. (2009). *The peasant and the state: studies in agrarian change in Ethiopia 1950s-2000s*. Addis Ababa University Press.
- Dessalegn, Rahmato. (2013). Food Security and Safety Nets: Assessment and Challenges. In D. Rahmato, A. Pankhurst, & J.-G. van Uffelen (Eds.), *Food Security, Safety Nets and Social Protection in Ethiopia* (pp. 109–144). Forum for Social Studies.
- Dessalegn, Rahmato. (2016). Large-scale land investment revisited. In D. Rahmato, M. Ayenew, A. Kefale, & B. Habermann (Eds.), *Reflection on development in Ethiopia: new trends, sustainability and challenges* (pp. 221–247). Forum for Social Studies.
- Devereux, S. (2006). *Vulnerable livelihoods in Somali region, Ethiopia*. Brighton: Institute of Development Studies.

- Devereux, S. (2010). Better Marginalised than Incorporated? Pastoralist Livelihoods in Somali Region, Ethiopia. *European Journal of Development Research*, 22(5), 678–695. <https://doi.org/10.1057/ejdr.2010.29>
- Diriba, Welteji. (2018). A critical review of rural development policy of Ethiopia: Access, utilization and coverage. *Agriculture and Food Security*, 7(55), 3–6. <https://doi.org/10.1186/s40066-018-0208-y>
- Duguma, Wakassa, D. (2013). *Adaptation of pastoralists to climate variability: The case of the Karrayu pastoralists' community in Upper Awash Valley of Ethiopia*. [MA thesis] Universit of Oslo.
- Dwivedi, R. (2001). *Resource Conflict and Collective Action: The Sardar Sarovart Project in India*. [PhD dissertation] The Hague, The Netherlands.
- Ekman, M. (2012). Understanding accumulation: The relevance of Marx's theory of primitive accumulation in media and communication studies. *Triple C*, 10(2), 156–170. <https://doi.org/10.31269/triplec.v10i2.407>
- Escobar, A. (1995). Encountering Development: The making and unmaking of the third world. In *Encountering Development*. Princeton University Press. <https://doi.org/10.1515/9781400839926>
- Ethiopian Statistical Service (ESS). (2003). Population projection as of July 2023
- Eyasu, Elias. (2008). *Pastoralists in Southern Ethiopia: dispossession, access to resources and dialogue with policy makers*. Drylands Coordination Group (DCG) Report No. 53.
- Fana, Gebresenbet. (2021). Villagization in Ethiopia's Lowlands: Development vs. Facilitating Control and Dispossession. In E. C. Gabbert, F. Gebresenbet, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future: Anthropological perspectives on Pastoralism, Land Deals and Tropes of Modernity in Eastern Africa* (pp. 210–230). Berghahn Books.
- FAO. (2018). *Pastoralism in Africa's Drylands: Reducing Risks, Addressing Vulnerability and Enhancing Resilience*. Rome
- Fekadu, Beyene. (2009). Property Rights Conflict, Customary Institutions and the State: The Case of Agro-pastoralists in Mieso district, eastern Ethiopia. *The Journal of Modern African Studies*, 47(2), 213–239. <https://doi.org/10.1017/S0022278X09003814>
- Fekadu, Beyene. (2014). The Challenges to Pastoral Transformation to Sedentary Farming: The case of Karrayyu Pastoralists. In G. Mulugeta (Ed.), *A Delicate Balance* (pp. 66–91). Institute of Peace and Security Studies, Addis Ababa University.

- Fekadu, Beyene. (2016). Land Use Change and Determinants of Land Management: Experience of Pastoral and Agro-pastoral Herders in Eastern Ethiopia. *Journal of Arid Environments*, 125, 56–63. <https://doi.org/10.1016/j.jaridenv.2015.10.001>
- Fekadu, Beyene., & Korf, B. (2012). Unmaking the Commons: Collective Action, Property Rights, and Resources Appropriation among (Agro-)Pastoralists in Eastern Ethiopia. In E. Mwangi, H. Markelova, & R. Meinzen-Dick (Eds.), *Collective action and property rights for poverty reduction: Insights from Africa and Asia* (pp. 304–327). University of Pennsylvania Press. <https://doi.org/10.9783/9780812207873.357>
- Ferguson, J. (1996). *The Anti-Politics Machine: “Development,” Depoliticization, and Bureaucratic Power in Lesotho*. University of Minnesota Press.
- Filatie, D. (2020). A History of Green Campaign in Setit-Humera since 1971 to 1978. *International Journal of Development in Social Sciences and Humanities*, 9(1), 6–17.
- Flintan, F. (2011a). *Changing Nature of Gender Roles in the Dry Lands of the Horn and East Africa: Implications for DRR programming*. REGLAP.
- Flintan, F. (2011b). *The Causes, Processes and Impacts of Land Fragmentation in the Rangelands of Ethiopia, Kenya and Uganda: A summary brief of REGLAP*.
- Foucault, M. (1991). Governmentality. In Graham Buchel, Colin Gordon, & Peter Miller (Eds.), *The Foucault Effect: Studies in Governmentality: With two lectures by and an interview with Michel Foucault* (pp. 87–104). University of Chicago Press.
- Fratkin, E. (1997). Pastoralism: Governance and development issues. *Annual Review Anthropology*, 26, 235–261.
- Fratkin, E. (2001). East African pastoralism in transition: Maasai, Boran, and Rendille cases. *Africa Studies Review*, 44(3), 1–25. <https://www.jstor.org/stable/525591>
- Fratkin, E. (2013). Seeking alternative livelihoods in pastoral areas. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 197–205). Routledge.
- Fratkin, E. (2014). Ethiopia’s Pastoralist Policies: Development, Displacement and Resettlement. *Nomadic Peoples*, 18(1), 94–114. <https://doi.org/10.3197/np.2014.180107>
- Future Agricultures. (2012). *Pastoralism in the Horn of Africa: Diverse livelihood pathways*. www.future-agricultures.org
- Galaty, J. G. (2013). Land grabbing in the Eastern African rangelands. In A. Catley, I. Scoones, & J. Lind (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 143–153). Routledge.

- Galaty, J. G. (2021). Modern Mobility in East Africa: Pastoral Responses to Rangeland Fragmentation, Enclosure and Settlement. In E. C. Gabbert, G. Fana, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future: The Anthropological Perspectives on Pastoralism, Land Deal, and Tropes of Modernity in Eastern Africa* (pp. 41–58). Berghahn.
- Gebremedhin, G. H. (2015). Irrigation in Ethiopia, a Review. *Journal of Environment and Earth Science*, 5(15), 141–147. www.iiste.org
- Geertz, C. (1973). *The Interpretation of Cultures: Selected Essays*. Basic Books, Inc.
- Getachew, Kassa. (1997). *Tradition, continuity and socio-economic change among the pastoral Afar of the Middle Awash Valley in North Eastern Ethiopia*. University of London.
- Getachew, Kassa. (2001). Resource conflict among the Afar of north-east Ethiopia. In M. A. M. Salih, T. Dietz, & A. G. M. Ahmed (Eds.), *African pastoralism: Conflict, institutions and government* (pp. 134–144). Pluto Press.
- Getu, Demeke. A., Duncan, J., & Van Dijk, H. (2022). Development, governmentality and the sedentary state: the productive safety net programme in Ethiopia’s Somali pastoral periphery. *Journal of Peasant Studies*, 1–23.
<https://doi.org/10.1080/03066150.2021.1945044>
- Girum, Getachew. (2013). *Localized Adaptation to Climate Change: Pastoral Agency under Changing Environments in Dry Land Parts of Upper Awash Valley, Ethiopia* [PhD dissertation]. Bayreuth International Graduate School of African Studies.
- Goetter, J. F., & Neudert, R. (2016). New Rules are not rules: Privatization of pastoral commons and local attempts at curtailment in southwest Madagascar. *International Journal of the Commons*, 10(2), 617–641. <https://doi.org/10.18352/ijc.743>
- Goffman, E. (1956). *The presentation of self in everyday life*. Doubleday Anchor books.
<https://doi.org/10.4324/9780203787120>
- Gogoi, N., & Saikia, N. K. (2020). Critical review on David Harvey’s “The New Imperialism: Accumulation by Dispossession.” *Annals of R.S.C.B*, 24(2), 1161–1164.
- Goldsmith, P. (2013). the Future of Pastoralist conflict in the Horn of Africa. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and Development in Africa: Dynamic Change at the Margins* (pp. 131–142).
- Gray, D. E. (2004). *Doing research in the real world*. Sage Publications.
- Hagmann, T., & Alemmaya, M. (2008). Pastoral conflicts and state-building in the Ethiopian Lowlands. *Africa Spectrum*, 43(1), 19–37. <http://www.jstor.org/stable/40175220>

- Hailemariam, A., Yeshwas, A., & Chamberlin, J. (2021). Is land certification pro-poor? Evidence from Ethiopia. *Land Use Policy*, 107(April 2020), 105483. <https://doi.org/10.1016/j.landusepol.2021.105483>
- Hall, D., Hirsch, P., & Li, T. M. (2011). *Powers of Exclusion: Land Dilemmas in Southeast Asia*. University of Hawai'i Press.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in Practice* (Third). Routledge.
- Hartmann, I., Sugulle, A. J., & Awale, A. I. (2010). *The impact of climate change on pastoralism in Salahley and Bali-gubadle districts, Somaliland*.
- Harvey, D. (2003). Accumulation by Dispossession. In *The New Imperialism* (pp. 137–182). Oxford University Press. <https://doi.org/10.2307/j.ctv17ppcd0.18>
- Harvey, D. (2010). *A Companion to Marx's Capital*. Verso.
- Hebinck, P., Ouden, J. Den, & Verschoor, G. (2001). Past, present and future: Long's actor-oriented approach at the interface. *Resonances and Dissonances in Development: Actors, Networks and Cultural Repertoires*, 1–16.
- Helland, J. (2001). Participation and governance in the development of Borana: Southern Ethiopia. In M. Salih, T. Dietz, & A. G. M. Ahmed (Eds.), *African pastoralism: conflict, institutions and government* (pp. 56–80). Pluto Press. <https://doi.org/10.5860/choice.40-0536>
- Hogg, R. (1983). Irrigation agriculture and pastoral development: A lesson from Kenya. *Development and Change*, 14(4), 577–591. <https://doi.org/10.1111/j.1467-7660.1983.tb00167.x>
- Holden, S. T., & Hosaena, G. (2013). Welfare Impacts of Land Certification in Tigray, Ethiopia. In S. T. Holden, K. Otsuka, & K. Deininger (Eds.), *Land Tenure reform in Asia and Africa* (pp. 137–162). Palgrave Macmillan. <https://doi.org/10.1057/9781137343819>
- Holden, S. T., Deininger, K., & Ghebru, H. (2010). Impact of land registration and certification on land border conflicts in Ethiopia. *World Bank Annual Conference on Land Policy and Administration*, 1–15.
- Hosaena, H. G., & Holden, S. T. (2015). Reverse-Share-Tenancy and Agricultural Efficiency: Farm-Level Evidence from Ethiopia. *Journal of African Economies*, 24(1), 148–171. <https://doi.org/10.1093/jae/eju024>
- International Societies Federation of Red Cross and Red Crescent (IFRC). (2011). *Drought in the Horn of Africa: Preventing the next disaster*. Geneva.

- International Union for Conservation of Nature (IUCN). (2012). *Supporting sustainable pastoral livelihoods: A global perspective on minimum standards and good practices* (second). IUCN ESARO office.
- Jacobs, M. J., & Schloeder, C. A. (2001). *Impacts of Conflict on Biodiversity and Protected Areas in Ethiopia*. Washington, D.C.: Biodiversity Support Group
- Jenet, A., Buono, N., Di Lello, S., Gomasasca, M., Heine, C., Mason, S., Nori, M., Saavedra, R., & Van Troos, K. (2017). The path to greener pastures: Pastoralism, the backbone of the world's drylands. In P. Mundy (Ed.), *Vétérinaires Sans Frontières International*. <http://vsf-international.org/wp-content/uploads/2016/09/REPORT-pastoralism-2017-pag1-1401.pdf>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A research paradigm whose time has come. *American Educational Research Association*, 33(7), 14–26. <http://www.jstor.org/stable/3700093>
- Kameri-Mbote, P. (2013). Preface: Securing the land and resource rights of pastoral peoples in East Africa. *Nomadic Peoples*, 17(1), 1–4. <https://doi.org/10.3167/np.2013.170101>
- Kassahun, Berhanu. (2006). Review of Policies Pertaining to Pastoralism in Ethiopia. In B. Kassahun & F. Demessie (Eds.), *Ethiopian Rural development Policies* (pp. 71–87). Addis Ababa University.
- Keeley, J., & Scoones, I. (2000). Knowledge, power and politics: The environmental policy-making process in Ethiopia. *The Journal of Modern African Studies*, 38(1), 89–120. <https://www.jstor.org/stable/161953>
- Khai, L. D., Markussen, T., McCoy, S., & Tarp, F. (2013). Access to Land: Market and Non-Market Land Transactions in Rural Vietnam. In Stein T. Holden, Keijiro Otsuka, & Klaus Deininger (Eds.), *Land Tenure Reform in Asia and Africa* (pp. 162–186). Palgrave.
- Khurshid, M., Nafees, M., Khan, A., Somuncu, M., Khan, A. A., & Rashid, W. (2019). Socio-political and ecological stresses on traditional pastoral systems: A review. *Journal of Geographical Sciences*, 29, 1–13. <https://doi.org/https://doi.org/10.1007/s11442-019-1656-4>
- Kidane, Mengisteab. (2001). Ethiopia's Ethnic-Based Federalism: 10 Years After. *African Issues*, 29(1/2), 20–25.
- King-Okumu, C., Wasonga, O. V., & Eshetu Yimer. (2015). *Pastoralism Pays: New Evidence from the Horn of Africa. Briefing*. <http://pubs.iied.org/17312IIED>

- Kissawike, Kalunde. (2008). *Irrigation-based livelihood challenges and opportunities: A gendered technography of irrigation development intervention in the Lower Moshi irrigation scheme in Tanzania*. [PhD dissertation]. Wageningen University.
- Kloos, H. (1982a). Development, Drought, and Famine in the Awash Valley of Ethiopia. *African Studies Review*, 25(4), 21–48. <https://www.jstor.org/stable/524399>
- Kloos, H. (1982b). Farm Labor Migrations in the Awash Valley of Ethiopia. *The International Migration Review*, 16(1), 133–168.
- Kloos, H., & Adugna, A. (1989). Settler Migration during the 1984/85 Resettlement Programme in Ethiopia. *Source: GeoJournal*, 19(2), 113–127.
- Kloos, H., Mulat, W., McFeeters, S., & Turton, D. (2010). Problems for pastoralists in the lowlands: River basin development in the Awash and Omo Valleys. *Water Resources Management in Ethiopia: Implications for the Nile Basin*, 321–351.
- Kochore, H. H. (2016). The road to Kenya: Visions, expectations and anxieties around new infrastructure development in Northern Kenya. *Journal of Eastern African Studies*, 10(3), 494–510. <https://doi.org/10.1080/17531055.2016.1266198>
- Korf, B., Hagmann, T., & Emmenegger, R. (2015). Re-spacing African drylands: territorialization, sedentarization and indigenous commodification in the Ethiopian pastoral frontier. *Journal of Peasant Studies*, 42(5), 881–901. <https://doi.org/10.1080/03066150.2015.1006628>
- Laltaika, E. I., & Askew, K. M. (2021). Modes of Dispossession of Indigenous Lands and Territories in Africa. In E. C. Gabbert, G. Fana, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future: Anthropological perspectives on Pastoralism, Land Deals and Tropes of Modernity in Eastern Africa* (pp. 99–122). https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/01/Laltaika-and-Askew_UN-paper_rev3.pdf
- Lavers, T. (2012a). ‘Land grab’ as development strategy? The political economy of agricultural investment in Ethiopia of agricultural investment in Ethiopia. *Journal of Peasant Studies*, 39(1), 105–132. <https://doi.org/10.1080/03066150.2011.652091>
- Lavers, T. (2012b). Patterns of agrarian transformation in Ethiopia: State-mediated commercialization and the “land grab.” *Journal of Peasant Studies*, 39(3–4), 795–822. <https://doi.org/10.1080/03066150.2012.660147>
- Lavers, T. (2016). Agricultural Investment in Ethiopia: Undermining National Sovereignty or Tool for State Building? *Development and Change*, 47(5), 1078–1101. <https://doi.org/10.1111/dech.12256>

- Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory research approaches*. The Guilford Press.
- Lebert, T., & Rohde, R. (2007). Land reform and the new elite: Exclusion of the poor from communal land in Namaqualand, South Africa. *Journal of Arid Environments*, 70(4), 818–833. <https://doi.org/10.1016/j.jaridenv.2006.03.023>
- Lefort, R. (2012). Free market economy, “developmental state” and party-state hegemony in Ethiopia: The case of the “model farmers.” *Journal of Modern African Studies*, 50(4), 681–706.
- Lemessa, Demie. (2015). Ethiopian pastoralist policy at the crossroads: Further marginalization or revitalizations? In Y. Abera & M. Abdualahi (Eds.), *The intricate road to development: Government development strategies in the pastoral areas of the Horn of Africa* (pp. 16–71). Institute of Peace and Security Studies, Addis Ababa University.
- Lesorogol, C. K. (2008). Land privatization and pastoralist well-being in Kenya. *Development and Change*, 39(2), 309–331. <https://doi.org/10.1111/j.1467-7660.2007.00481.x>
- Letai, J., & Lind, J. (2013). Squeezed from all sides: Changing resource tenure and pastoralist innovation on the Laikipia Plateau, Kenya. In A. Catley, I. Scoones, & J. Lind (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 164–176). Routledge.
- Li, T. M. (1999). Compromising power: Development, culture, and rule in Indonesia. *Cultural Anthropology*, 14(3), 295–322.
- Li, T. M. (2007). *The will to improve: Governmentality, Development, and the Practice of Politics*. Duke University Press.
- Li, T. M. (2014a). *Land's End: Capitalist Relations on an Indigenous Frontier*. Duke University Press.
- Li, T. M. (2014b). What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers*, 39(4), 589–602. <https://doi.org/10.1111/tran.12065>
- Lie, J. H. S. (2008). Post-development theory and the discourse-agency conundrum. *Social Analysis*, 52(3), 118–137.
- Lijalem, Abebaw, E. (2013). Challenges and Opportunities of Irrigated Crop Production in Gedeb river catchment: Machakel Woreda, East Gojjam Zone. *Journal of Agricultural Extension and Rural Development*, 8(8), 174–188. <https://doi.org/10.5897/JAERD2013.0474>

- Little, P. D. (1985). Absentee Herd Owners and Part-Time Pastoralists: The Political Economy of Resource Use in Northern Kenya. In *Human Ecology* (Vol. 13, Issue 2).
- Little, P. D. (2021). Global Trade, Local Realities: Why African States Undervalue Pastoralism. In E. C. Gabbert, Fana Gebresenbet, Galaty John G, & Schlee Gunther (Eds.), *Land of the Future: Anthropological Perspectives on Pastoralism, Land Deals and Tropes of Modernity in Eastern Africa* (pp. 78–95). Berghahn.
- Little, P. D., Behnke, R., McPeak, J. G., & Getachew, G. (2010). *Retrospective Assessment of Pastoral Policies in Ethiopia, 1991-2008* (Issue 1).
- Long, N. (2001). *Development Sociology: Actor perspectives*. Routledge.
- Luxemburg, R. (2003). *The Accumulation of Capital*. Routledge.
- Lyons, T. (2010). Ethiopian Elections: Past and Future. *International Journal of Ethiopian Studies*, 5(1), 107–121.
- Macpherson, C. B. (1978). The meaning of Property. In C. B. Macpherson (Ed.), *Property: Mainstream and Critical Positions* (pp. 1–14). University of Toronto Press.
- Markakis, J. (2004). Pastoralism on the margins. In *Minority Rights Group International* (Issue 1). <https://doi.org/10.1080/00672700009511594>
- Markakis, J. (2011). *Ethiopia: the last two frontiers*. James Currey.
- Markakis, J. (2021). Land and the State in Ethiopia. In E. C. Gabbert, F. Gebresenbet, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future: Anthropological perspectives on Pastoralism, Land Deals and Tropes of Modernity in Eastern Africa*. (pp. 123–142). Berghahn Books.
- Marvasti, A. B. (2004). *Qualitative Research in Sociology: An introduction*. Sage Publications.
- Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. Pearson Education Limited. www.pearsoned.co.uk/matthews
- Mcpeak, J. G., & Little, P. D. (2019). Land Use and Tenure Insecurity in the Drylands of Southern Ethiopia. *Journal of Development Studies*, 55(6), 1307–1324. <https://doi.org/10.1080/00220388.2018.1469745>
- Mebrat, G. G. (2011). *Breaking the Norms: Gender and Land Rights in Tigray, Ethiopia* [MA thesis]. Norwegian University of Life Sciences.
- Megersa, Olumana. (2012). Analysing decadal land use/cover dynamics of the Lake Basaka catchment (Main Ethiopian Rift) using LANDSAT imagery and GIS. *Lakes and Reservoirs: Research and Management*, 17(1), 11–24. <https://doi.org/10.1111/j.1440-1770.2012.00493.x>

- Megersa, Olumana. (2014). Besaka Lake Expansion: Challenges for the Sustainability of Metahra Sugar Plantation in the Awash River Basin, Ethiopia. In Y. Firehun, K. Yusuf, M. Leul, M. Hussein, F. Meberahtom, D. Alemayahu, F. Abiy, & K. Shemsu (Eds.), *Proceedings of the FDRE Sugar Industry Biennial Conference, Volume 2* (pp. 24–38). Ethiopian Sugar Corporation Research and Training (ESCRT).
- Mehretie, B., & Woldeamlak, B. (2013). Traditional Irrigation and Water Management Practices in Highland Ethiopia: Case Study in Dangila Woreda. *Irrigation and Drainage*, 62(4), 435–448. <https://doi.org/10.1002/ird.1748>
- Mekonnen, Adnew, Mohammed, A., Poshendra, S., & Jessica Budds. (2020). Villagization and access to water resources in the Middle Awash Valley of Ethiopia: implications for climate change adaptation. *Climate and Development*, 12(10), 899–910. <https://doi.org/10.1080/17565529.2019.1701973>
- Mequanint, B. M., & Bulte, E. (2015). Does land registration and certification boost farm productivity? Evidence from Ethiopia. *Agricultural Economics (United Kingdom)*, 46(6), 757–768. <https://doi.org/10.1111/agec.12191>
- Meron, Yohanes. (2015). *Performance and Challenges of Vegetable Market: The case of Kombolcha District, East Hararghe Zone, Oromia National Regional State, Ethiopia* [M.Sc. Thesis]. Haramaya University.
- Migdal, J. S. (2004). *State in Society: Studying how states and societies transform and constitute one another*. Cambridge University Press.
- Mintewab, Bezabih, Holden, S., & Mannberg, A. (2016). The Role of Land Certification in Reducing Gaps in Productivity between Male- and Female-Owned Farms in Rural Ethiopia. *Journal of Development Studies*, 52(3), 360–376. <https://doi.org/10.1080/00220388.2015.1081175>
- Mohammud, Abdulahi. (2007). The legal status of the communal land holding system in Ethiopia: The case of pastoral communities. *International Journal on Minority and Group Rights*, 14(1), 85–125. <https://doi.org/10.1163/138548707X181566>
- Moritz, M. (2006). Changing contexts and dynamics of farmer-herder conflicts across West Africa. *Canadian Journal of African Studies*, 40(1), 1–40. <https://doi.org/10.1080/00083968.2006.10751334>
- Moritz, M. (2016). Open property regimes. *International Journal of the Commons*, 10(2), 688–708. <https://doi.org/10.18352/ijc.719>

- Moritz, M., Scholte, P., & Kari, S. (2002). *The demise of the nomadic contract: arrangements and rangelands under pressure in the far north of Cameroon*. 6(1), 124–143. <https://www.jstor.org/stable/43123901>
- Mortimore, M. (2013). *The place of crop agriculture for resilience building in the drylands of the Horn of Africa: An opportunity or a threat?* (Issue June).
- Morton, J., Livingstone, J. K., & Mussa, M. (2007). *Legislators and Livestock: Pastoralist Parliamentary Groups in Ethiopia, Kenya and Uganda*.
- Mosley, J., & Watson, E. E. (2016). Frontier transformations: Development visions, spaces and processes in Northern Kenya and Southern Ethiopia. *Journal of Eastern African Studies*, 10(3), 452–475.
- Mosse, D. (1998). Process-oriented Approaches to Development Practices and Social Research. In D. Mosse, J. Farrington, & A. Rew (Eds.), *Development As Process: Concepts and Methods for Working with Complexity* (pp. 2–29). Routledge.
- Mosse, D. (2004). Is Good Policy Unimplementable? Reflections on the Ethnography of Aid Policy and Practice. *Development and Change*, 35(4), 639–671.
- Mukhamedova, N., & Pomfret, R. (2019). Why Does Sharecropping Survive? Agrarian Institutions and Contract Choice in Kazakhstan and Uzbekistan. *Comparative Economic Studies*, 61(4), 576–597. <https://doi.org/10.1057/s41294-019-00105-z>
- Müller-Mahn, D., Rettberg, S., & Getachew, G. (2010). Pathways and dead ends of pastoral development among the afar and Karrayu in Ethiopia. *European Journal of Development Research*, 22(5), 660–677. <https://doi.org/10.1057/ejdr.2010.37>
- Mulugeta, Gebrehiwot, & Firehiwot, S. (2014). Land use, pastoralism and transformation challenges in the Afar regional state of Ethiopia. In M. Gebrehiwot (Ed.), *A delicate balance: Land use, minority rights and social stability in the Horn of Africa* (pp. 92–116). Institute of Peace and Security Studies, Addis Ababa University.
- Muluken, Mekuyie, & Desta, M. (2021). Perception of Impacts of Climate Variability on Pastoralists and Their Adaptation/Coping Strategies in Fentale District of Oromia Region, Ethiopia. *Environmental Systems Research*, 10(1). <https://doi.org/10.1186/s40068-020-00212-2>
- Munck, R. (2021). Critical development theory: results and prospects. In *The essential guide to critical development studies* (pp. 23–30). Routledge.

- Mungai, M., & Omondi, P. (2014). Re-considering large-scale agricultural investment as a new paradigm for mitigating insecurity in pastoral Rangelands: The Kenyan case. In M. Gebrehiwot (Ed.), *A Delicate balance: Land use, minority rights and social stability in the Horn of Africa*. Institute of Peace and Security Studies, Addis Ababa University.
- Mwangi, E. (2009). *Property rights and governance of Africa's rangelands: A policy overview*.
- Myers, R., & Hansen, C. P. (2019). Revisiting A Theory of Access: A review. *Society and Natural Resources*, 33(2), 146–166. <https://doi.org/10.1080/08941920.2018.1560522>
- Myers, R., & Hansen, C. P. (2020). Revisiting A Theory of Access: A review. *Society and Natural Resources*, 33(2), 146–166. <https://doi.org/10.1080/08941920.2018.1560522>
- Nandy, A., & Visvanathan, S. (1990). Modern Medicine and its Non-Modern Critics: A Study in Discourse. In Frederique Apffel Marglin & Stephen A. Marglin (Eds.), *Dominating Knowledge: Development, Culture, and Resistance* (pp. 145–184). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198286943.001.0001>
- Nassef, M., & Mulugeta, B. (2012). *Water Development in Ethiopia's Pastoral Areas: A synthesis of existing knowledge and experience*.
- Ndukai, M. (2015). *Onion Price Change and Brokers Role: Challenges and Opportunities: Case Study Ruvu Remit Division in Simanjiro District, Tanzania* [MA thesis]. Open University of Tanzania.
- NEPAD. (2003). *Comprehensive Africa Agriculture Development Programme (CAADP)*. NEPAD. http://www.fao.org/nr/water/aquastat/sirte2008/NEPAD-CAADP_2003.pdf
- Notenbaert, A. M. O., Davies, J., De Leeuw, J., Said, M., Herrero, M., Manzano, P., Waithaka, M., Aboud, A., & Omondi, S. (2012). Policies in support of pastoralism and biodiversity in the heterogeneous drylands of East Africa. *Pastoralism: Research, Policy and Practice*, 2(14), 1–17. <https://doi.org/10.1186/2041-7136-2-14>
- Nunow, A. A. (2013). Land deals and the changing political economy of livelihoods in the Tana Delta, Kenya. In A. Catley, I. Scoones, & J. Lind (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 154–163). Routledge.
- Oba, G. (2013). The Sustainability of Pastoral production in Africa. In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 29–36). Routledge.
- Oliver-Smith, Anthony. (2010). *Defying displacement: Grassroots Resistance and the Critique of Development*. University of Texas Press.

- OPride (2017) '*Ethiopia's Speaker of the House, Abba Dula Gamada, resigns*'. 8 October 2017. <https://www.opride.com/2017/10/08/abba-dula-gamada-confirms-tendered-resignation-letter-eprdf/> retrieved on 20 December 2021
- Osman, M. S., & Hag, H. E. el. (1974). Irrigation practices and development in the Sudan. *Sudan Sudan Notes and Records, University of Khartoum*, 55, 96–110. <http://www.jstor.org/stable/42677958>
- Pankhurst, A. (2013). *Community Situation End 2011 Gelcha, Oromia: Long term Perspective on Development Impact in Rural Ethiopia Stage 2*. https://ethiopiawide.net/wp-content/uploads/Gelcha-Community-Report_Web.pdf
- Paudel, D. (2016). Re-inventing the commons: Community Forestry as Accumulation without Dispossession in Nepal. *Journal of Peasant Studies*, 43(5), 989–1009. <https://doi.org/10.1080/03066150.2015.1130700>
- Pavanello, S. (2009). *Pastoralists' Vulnerability in the Horn of Africa: Exploring Political Marginalization, Donors' Policies and Cross-border issues*.
- Pavanello, S. (2010). *Livestock Marketing in Kenya- Ethiopia border areas: A baseline study* (HPG Working Paper).
- Peluso, N. L., & Ribot, J. (2020). Postscript: A Theory of Access Revisited. *Society and Natural Resources*, 33(2), 300–306. <https://doi.org/10.1080/08941920.2019.1709929>
- Pertaub, D.-P., & Stevenson, E. G. J. (2019). Pipe dreams: Water, development and the work of the imagination in Ethiopia's lower Omo Valley. In *Nomadic Peoples* (Vol. 23, Issue 2, pp. 177–194). Berghahn Journals, Ltd. <https://doi.org/10.3197/np.2019.230202>
- Phillimore, J., & Goodson, L. (2004). Progress in Qualitative Research in Tourism: Epistemology, Ontology and Methodology. In J. Phillimore & L. Goodson (Eds.), *Qualitative Research in Tourism: Ontologies, Epistemologies and Methodologies* (pp. 3–29). Routledge.
- Pieterse, J. N. (2000). After post-development. *Third World Quarterly*, 21(2), 175–191.
- Pieterse, J. N. (2010). *Development Theory: Deconstructions/Reconstructions* (2nd edition). SAGE. <http://sagepub.net/tcs/>
- Puddu, L. (2016). State Building, Rural Development, and the Making of a Frontier Regime in Northeastern Ethiopia, c. 1944-75. *Journal of African History*, 57(1), 93–113. <http://www.saga.cornell.edu/>
- Puddu, L. (2022). A pragmatic high modernism? rural development and state building in the Ethiopian lowlands, c.1960–2019. *Critical African Studies*. <https://doi.org/10.1080/21681392.2022.2076705>

- Raleigh, C. (2010). Political marginalization, climate change, and conflict in African Sahel States. *International Studies Review*, 12, 69–86.
- Reta, Hailu. (2018). *Water Security in the Wash Basin of Ethiopia: An Institutional Analysis* [PhD Dissertation]. Addis Ababa University.
- Rettberg, S. (2010). The impact of sugarcane plantations on pastoral livelihoods within the Afar Region of Ethiopia. In A. Caroline (Ed.), *Sugar Cane and Indigenous People* (pp. 7–12). ETHICAL-SUGAR. <https://www.researchgate.net/publication/332189722>
- Rettberg, S. (2020). Shifting Regimes of Violence within Ethiopia's Awash Valley Investment Frontier. In I. S. Jeremy Lind, Doris Okenwa (Ed.), *Land, Investment & Politics: Reconfiguring Eastern Africa's Pastoral Drylands* (pp. 166–201).
- Rettberg, S., Beckmann, G., Minah, M., & Schelchen, A. (2017). *Ethiopia 's Arid and Semi-Arid Lowlands: Towards inclusive and sustainable rural transformation: country study* (03; SLE Discussion Paper, Issue March).
- Ribot, J. C., & Peluso, N. L. (2003). A Theory of Access. *Rural Sociology*, 68(2), 153–181. <https://doi.org/10.1111/j.1549-0831.2003.tb00133.x>
- Robinson, L., & Flintan, F. (2022). Can formalisation of pastoral land tenure overcome its paradoxes? Reflections from East Africa. *Pastoralism*, 12(1). <https://doi.org/10.1186/s13570-022-00250-8>
- Rockeman, K., Tsehay, R., Lotira, R., & Ochan, C. (2016). *Karamoja livestock market assessment report* (Issue January).
- Ronald, M. A. (2014). Land-grabbing in Uganda: Are pastoralists second class citizens? In G. Mulugeta (Ed.), *A delicate balance: Land use, minority rights and social stability in the Horn of Africa* (Vol. 87, Issue 10, pp. 192–223). Institute of Peace and Security Studies, Addis Ababa University.
- Roth, E. A., & Fratkin, E. (2005). Introduction: The Social, Health, and Economic Consequences of Pastoral Sedentarization in Marsabit District, Kenya. In E. Fratkin & E. A. Roth (Eds.), *As Pastoralists Settle: Social, Health, and Economic Consequences of Pastoral Sedentarization in Marsabit District, Kenya* (pp. 1–28). Kluwer Academic Publishers.
- Rueff, H., & Rahim, I. (2016). Enhancing the economic viability of pastoralism: The need to balance interventions. *OIE Revue Scientifique et Technique*, 35(2), 577–586. <https://doi.org/10.20506/rst.35.2.2542>
- Salih, M.M. (1990). Pastoralism and the state in African Arid Lands: An overview. *Nomadic Peoples*, 25(27), 7–18. <https://www.jstor.org/stable/43123304>

- Samuel, Gebreselassie. (2006). *Land, Land Policy and Smallholder Agriculture in Ethiopia: Options and Scenarios*. www.future-agricultures.org
- Sandford, S. (2013). Pastoralists and irrigation in the Horn of Africa: Time for a rethink? In A. Catley, J. Lind, & I. Scoones (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp. 47–56). Routledge.
- Sandhu, J. S. (2019). *Green Revolution: A Case Study of Punjab*. 75(2014), 1192–1199.
- Sanyal, K. (2014). Rethinking capitalist development: Primitive accumulation, Governmentality and post-colonial capitalism. In *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*.
<https://doi.org/10.4324/9781315767321>
- Sau, A. (2021). On Cultural Political Economy: A Defence and Constructive Critique. *New Political Economy*, 26(6), 1015–1029. <https://doi.org/10.1080/13563467.2021.1879758>
- Schlee, G. (2013). Why state still destroy pastoralism and how they can learn that in their own interest they should not. *Nomadic Peoples*, 17(2), 4–17.
<https://doi.org/10.3167/np.2013.170202>
- Schmidt, M., & Pearson, O. (2016). Pastoral livelihoods under pressure: Ecological, political and socioeconomic transitions in Afar (Ethiopia). *Journal of Arid Environments*, 124, 22–30. <https://doi.org/10.1016/j.jaridenv.2015.07.003>
- Schuurman, F. J. (2009). Critical development theory: Moving out of the twilight zone. *Third World Quarterly*, 30(5), 831–848. <https://doi.org/10.1080/01436590902959024>
- Scoones, I. (2015). *Sustainable Livelihoods and Rural Development Agrarian Change & Peasant Studies*. Practical Action Publishing Ltd. www.practicalactionpublishing.org
- Scott, J. C. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. Yale University press. <https://www.jstor.org/stable/161953>
- Scott, J. C. (1990). *Domination and the Art of Resistance: Hidden Transcript*. Yale University press.
- Scott, J. C. (1998). *Seeing Like a State: How certain schemes to improve the human condition have failed*. Yale University press.
- Seifu, Gebremariam. (2003). *Status of Commercial Fruit Production in Ethiopia*. Ethiopian Agricultural Research Organization.
- Seleshi, Bekele., Aster, D., Mekonnen, L., Loiskandl, W., Mekonnen, A., & Tena, A. (2007). *Water resources and irrigation development in Ethiopia* (123).
- Senda, T. S., Robinson, L. W., Gachene, C. K. K., Kironchi, G., & Jaldesa, D. (2020). An assessment of the implications of alternative scales of communal land tenure

- formalization in pastoral systems. *Land Use Policy*, 94(July 2019), 104535. <https://doi.org/10.1016/j.landusepol.2020.104535>
- Shrimali, R. (2016). Accumulation by Dispossession or Accumulation without Dispossession: The Case of Contract Farming in India. *Human Geography (United Kingdom)*, 9(3), 77–88. <https://doi.org/10.1177/194277861600900306>
- Singh, & Katar. (2009). *Rural Development: Principles, Policies and Management* (3rd ed.). SAGE Publications Inc.
- Smit, H., Muche, R., Ahlers, R., & van der Zaag, P. (2017). The Political Morphology of Drainage—How Gully Formation Links to State Formation in the Choke Mountains of Ethiopia. *World Development*, 98, 231–244.
- Solomon, Desta. (2006). Pastoralism and Development in Ethiopia. *Economic Focus, Ethiopian Economic Association*, 9(3), 12–20.
- Spradley, J. P. (1979). *The ethnographic interview*. Waveland Press, Inc.
- Stevenson, E. G. J., & Buffavand, L. (2018). Do our bodies know their ways? Villagization, food insecurity, and ill-being in Ethiopia’s lower omo valley. *African Studies Review*, 61(1), 109–133. <https://doi.org/10.1017/asr.2017.100>
- Suhardiman, D., Lebel, L., Nicol, A., & Wong, T. (2017). Power and Politics in Water Governance: Revisiting the role of and Collective Action in the Commons. In D. Suhardiman, A. Nicol, & E. Mapedeza (Eds.), *Water Governance and Collective Action* (pp. 9–20). Routledge.
- Tefera, Goshu., & Dom, C. (2018). Insight on economic success in rural communities (2010–13). In A. Pankhurst, P. Bevan, C. Dom, A. Tiumelissan, & S. Vaughan (Eds.), *Changing Rural Ethiopia: community transformations* (pp. 465–492). TSHAI publishers.
- Tegegne, Gebre-Egziabher, & Kassahun, B. (2007). A Literature review of Decentralization in Ethiopia. In T. Assefa & T. Gebre-Egziabher (Eds.), *Decentralization in Ethiopia* (pp. 9–68). Forum for Social Studies (FSS).
- Tegene, Gebre-Egziabher. (2007). Introduction. In A. Taye & G.-E. Tegegne (Eds.), *Decentralization in Ethiopia* (pp. 1–8). Forum for Social Studies (FSS).
- Tenzing, K., Millar, J., & Black, R. (2021). How property rights influence equity, efficiency and sustainability of high-altitude rangeland management in Bhutan. *Pastoralism*, 11(1). <https://doi.org/10.1186/s13570-021-00193-6>

- Tesfaye, Tura. (2021). *Determinants of Onion Commercialization Among Smallholder Farming Households': The Case of Fentale District, East Shoa Zone, Oromia Regional State, Ethiopia* [MA thesis]. Ambo University.
- Teshome, Beyene. L., Arega, B. B., & Mehrete, B. F. (2021). Effects of the Current Land Tenure on Augmenting Household Farmland Access in South East Ethiopia. *Humanities and Social Sciences Communications*, 8(1), 1–11. <https://doi.org/10.1057/s41599-021-00709-w>
- Tewelde, Woldemariam, & Fana, G. (2014). Socio-political and conflict implications of sugar development in Salamago wereda, Ethiopia. In Mulugeta Gebrehiwot (Ed.), *A delicate balance: Land use, minority rights and social stability in the Horn of Africa* (pp. 117–143). Institute of Peace and Security Studies, Addis Ababa University.
- Toulmin, C. (2008). Securing Land and Property Rights in Sub-Saharan Africa: The Role of Local Institutions. *Land Use Policy*, 26(1), 10–19. <https://doi.org/10.1016/j.landusepol.2008.07.006>
- Tsegaye, Moroda. (2015). Listening to their silence? The political reaction of affected communities to large-scale land acquisitions: insights from Ethiopia. *Journal of Peasant Studies*, 42(3–4), 517–539. <https://doi.org/10.1080/03066150.2014.993621>
- Tsegaye, Moroda. (2017). Large-scale land acquisitions, state authority and indigenous local communities: Insights from Ethiopia. *Third World Quarterly*, 38(3), 698–716. <https://doi.org/10.1080/01436597.2016.1191941>
- Tsion, Belay. (2011). *Sedentarization: A means to Promote the Right to Food, Health and Education: The Case of Karrayu Pastoralists of Eastern Ethiopia* [MA thesis]. Addis Ababa University.
- Turton, D. (2011). Wilderness, wasteland or home? three ways of imagining the lower Omo valley. *Journal of Eastern African Studies*, 5(1), 158–176. <https://doi.org/10.1080/17531055.2011.544546>
- Turton, D. (2021). 'Breaking Every Rule in the Book' The Story of River Basin Development. In E. C. Gabbert, F. Gebresenbet, J. G. Galaty, & G. Schlee (Eds.), *Land of the Future: Anthropological perspectives on Pastoralism, Land Deals and Tropes of Modernity in Eastern Africa* (pp. 231–248). Berghahn Books.
- Vaughan, S. (2011). Revolutionary democratic state-building: Party, state and people in the EPRDF's Ethiopia. *Journal of Eastern African Studies*, 5(4), 619–640.
- Watts, M. J. (1989). The agrarian question in Africa: Debating the crisis. *Progress in Human Geography*, 13(1), 1–41. <https://doi.org/10.1177/030913258901300101>

- Wisborg, P., & Rohde, R. (2005). Contested land tenure reform in South Africa: experiences from Namaqualand. *Development Southern Africa*, 22(3), 409–428.
<https://doi.org/10.1080/03768350500253260>
- Woldeab, Teshome. (2003). *Irrigation practices, state intervention and farmers' life-worlds in drought-prone Tigray, Ethiopia [PhD Dissertation]*. Wageningen University.
- Wolford, W., Borras, S. M., Hall, R., Scoones, I., & White, B. (2013). Governing Global Land Deals: The Role of the State in the Rush for Land. *Development and Change*, 44(2), 189–210. <https://doi.org/10.1111/dech.12017>
- Woodhouse, P., Veldwisch, G. J., Venot, J., Brockington, D., Komakech, H., & Manjichi, A. (2017). African farmer-led irrigation development: Re-framing agricultural policy and investment? *The Journal of Peasant Studies*, 44(1), 213–233.
<https://doi.org/10.1080/03066150.2016.1219719>
- Workneh, Negatu. (2011). *Economic Interaction of Pastoral Lowland and Highland System and Implications for Sustainable Livelihoods: A Case Study in Northeastern Ethiopia*. FSS Research Report No.7, Forum for Social Studies, Addis Ababa.
- World Bank. (2016). ‘*Project Performance Assessment Report Federal democratic republic of Ethiopia Pastoral Community Development Project: Phase I and Phase II*’. Report No. 104210-ET.IEG
https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ppar_ethiopia2016.pdf
- Yihunbelay, Teshome. (2020). *Living on the “Margin”: Livelihood Strategies in the Changing Social-Ecological Systems of the Upper Course of Wabe Shebelle River among the Dube (Bantu), Ethiopia [PhD Dissertation]*. Addis Ababa University.

II. Government publications

- Ethiopian Ministry of Finance and Economic Development (MoFED). (2006) ‘*A Plan for Accelerated and Accelerated and Sustained Development to End Poverty (PASDEP) (2005/06-2009/10)*’. Addis Ababa, Ethiopia.
- Federal Democratic Republic of Ethiopia (FDRE). (2013). *Regional Pastoral Livelihoods Resilience Project: Resettlement Policy Framework. Final revised*.
- Federal Democratic Republic of Ethiopia Ministry of Water Resources (MoWR). (2001). *Ethiopian Water Sector Policy*. Addis Ababa.
- Federal Ministry of Finance and Economic Development (FMoFED). (2003). *Ethiopian Rural Development Policy and Strategies*. Addis Ababa
- Federal Republic of Ethiopia (2002) ‘*Food Security Strategy*’, Addis Ababa, Ethiopia

Oromia Water Works Design and Supervision Enterprise. (2009). *Fentale Irrigation Based Integrated Development Project (FIBIDP): Socio-economic Study Final Report*.

Oromia Water Works Design and Supervision Enterprise. (2011). *Fentale Irrigation Based Integrated Development Project: Study and Design Project Final Report*.

Proclamation No. 841/2014

'*A Proclamation on Irrigation Water Users' Associations*'. Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia, 20th year, No. 74, 26th September 2014, Addis Ababa.

III. Other Online sources

Bridge Media interview with Aba Dula Gameda.

<https://www.youtube.com/watch?v=xFu08iVk3is&t=2171s> accessed on January 3, 2024

CGTN (2019). "*Red Flag Canal: The spirit of China captured in a legendary waterway*", 18 September 2019.

<https://news.cgtn.com/news/3551444e304d4464776c6d636a4e6e62684a4856/index.html>
accessed on 18 January, 2024.

OPride (2017). "*Ethiopia's Speaker of the House, Abba Dula Gamada, resigns*", 8 October 2017.

<https://www.opride.com/2017/10/08/abba-dula-gamada-confirms-tendered-resignation-letter-eprdf/> accessed on 10 April 2022.