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THE ROLE OF THE MORAL ECONOMY IN RESPONSE TO UNCERTAINTY AMONG BORANA PASTORALISTS OF NORTHERN KENYA, ISIOLO COUNTY

TAHIRA SHARIFF MOHAMED

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE UNIVERSITY OF SUSSEX FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN DEVELOPMENT STUDIES INSTITUTE OF DEVELOPMENT STUDIES, UNIVERSITY OF SUSSEX

NOVEMBER 2022

DECLARATION

This thesis is my original work and has not been submitted to any other university or institution for academic award. The cited materials, documents or publications are duly acknowledged and referenced.

Sign Name: TAHIRA SHARIFF

Date: 24/05/2022

MOHAMED

This thesis has been submitted for exAshation with our approval as university supervisors.

Sign: _____

Date:

Sign: _____

Date:

DEDICATION

I dedicate this work to the Almighty for the strength, providence, and patience that has helped me throughout my academic achievements and beyond. To my dear children, Muhammadamin, Mahir and Suheila, I will never forget the sacrifices you made for your mommy to reach her academic panacea. To my loving husband, Ahmed Wako, you are a blessing, and words will never do justice to thank you enough for all the sacrifices, advice, love, support, and encouragement throughout my life and more so during my PhD journey. To my mother, Sadia Nur and parents-in-law Safia Hajji and Wako Duba, your prayers were my mainstay and will always lighten my path. To all my siblings, in-laws, cousins, aunties, uncles, friends and colleagues, your prayers and encouragement will always be remembered. To my late dad Mohamed Shariff and my late sister Lule Mohamed Shariff, it would have been a pleasure to celebrate this moment with you, but you are now in a truthful abode. I will forever cherish you and live to make you proud.

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GLOSSARY

Abba ella -	Well owners
	Water Rationing Supervisor
-	Counting Supervisor
	Poor people's father
Abuuru-	Pasture surveillance,
Adolesa	Proglonged dry season
Amesa -	The right to use a milk stock
Arda -	Collection of neighbourhoods
	<i>i jiddu yaaseenee -</i> The tongue has gone in between teeth.
Boda-boda -	Motorcycle transport in Kenya
Boma -	Homesteads
Bon-adollessa -	
	aheelaa ammalee walii wareegaa -Borana are escort/companions for each and feed one
other.	
Borantiti-	Ideal Borana: having values advocated by Borana traditions such as generosity,
hospitality, neig	hbourliness and other good virtues of human welfare.
	faa' - Institution of cattle redistribution
C'anc'aan	Mixture of cow dung and mud
D'aal/miraath-	Inheritance
D'aawa-	Institution of spreading knowledge about Islam
Dabare -	Transfer of livestock and the right to use the animal's male and milk products for an
undefined period	d until the owner asks for the animal to be returned
Dabsu-	One day water ration
Daha -	Partnership
Dedha -	Grazing territory
Dhuhr -	Noon
-	Trypanosomiasis
Dhulhijja -	11 th month in the Hijri calendar
Duka -	Shops
	dimo'-Red-water flood
•	White colonialists or missionary staff or any white person from abroad
Fora -	Dry stock
Gaadi -	Rope
Ganna/agaya -	
Gutu -	Cattle
Guyeesa-	Dry stock
Halaqa -	Arabic word for Gatherings
Handura -	Navel-nuclei herd
Harambee-	Swahili term that translates to 'pulling together' or fundraising
Harriya-	Agemate- blood relationships
Harriyya Abuya Hawicha -	- Uncle's mend Milk stock
Hirba - Hooriin dumaan	Livestock redistribution
	asaa naamum aarraa qaabuut boor dabaa' -Livestock is like a cloud, those who have
today might lose <i>Horii</i> -	Wealth
110/11 -	

Hoyale -Foot and Mouth Disease Humn -Physical ability Iddir-Social insurance for funeral and livelihood support Ijolle qaabeet wal dabaarsee' - Child upbringing differs due to the care received Ilbah -Modern Ilmole -Young animals Iltii liiqimsaa agaartee lubbu hiinbeetu' -The eyes that have seen sustenance, does not realise any danger associated with such food Intal attin dubr gos tami ?? - Young girl, which tribe are you from? Intal teen taa researcher' -Our researcher girl Itti-hirkaat -Relying /leaning on others Jaala-Friends Jaalaa-sodda - Friends/in-laws Jajjabo-Strong animals Jibich -A bull Jiru-Life/Dear Kaar -Unit of livestock Kaffan -A white piece of cloth for shrouding the deceased Katika -Tear apart Khutba -Friday sermons Kibarua-Contractual labourers Korre -Samburu Kurtubale -Lumpy-skin disease-LSD Limaalim-Two days water ration Mala mar'-Discussion Marro. -Rotational savings Meher-Bride-wealth Milo -Clans Milo-mogole - Kinship bonds, families, clan-lineage Miraath -Inheritance Mona -Enclosures Naassu borantiti - The humility of being Borana Naasu -Pity Nisab -Taxable threshold in Zakat payment Nonitu-Clan Enemies Nyap -Obaa -Watering the livestock Obole dowwe sodda dowwu daadabe' -You can refuse your siblings, but you can never refuse anything to the in-laws Ola bisaan dimo'-Red water drought Ola Eldas'-Eldas drought Ola Kinna -Kinna Drought Ola midan dimo -Yellow-maize drought Ola-Absence of rain or drought Olla -Neighbourhood Ollomiti -Neighbourliness

Ollommafii duudaan ejjanii' -It is with the support of the neighbours and the backbone that we could

stand	
Park ola' -	Park drought
Finno -	PPR (Peste des Petists Ruminants)
Qakhe –	Compensation for loss of life
Qolle-	Impoverished
Qulaamo-	First aid
Raad -	Heifers
Rebu -	Response to attack
Riba —	Usury/ interest on loan
Saa'a dorroba	- A pregnant cow
Sadaka -	Alms
Sadeen-	Water ratioining after three days
Saddeeen aanad	an miyaa - Three with sweet milk
Shilmi -	East Coast Fever- ECF
Silisa -	black quarter disease- BQD
Sodda' -	In-laws
The sahabas -	Prophets' companions
Waare -	Morning pasture
Waheel -	Comradeship
Warr-fora -	Camp family
Warr-Gudda-	Main camp family
Yaasuum -	To be herded
Zakat -	Wealth tax

ACRONYMS

\$- ALRMP-	US Dollar Arid Lands Resource Management Project-
BQD-	Black Quarter Disease
BCE -	Boran Council of Elders
CBPP-	Contagious Bovine Pleuropneumonia
ECF-	East Coast Fever
FGD-	Focus Group Discussion
FMD-	Foot and Mouth Disease
GSU -	General Service Unit
IIRR-	International Institute for Rural Reconstruction
I and E-	Indigenous and Exotic
KNBS-	Kenya National Bureau of Statistics
KPF -	Kenya Pastoralist Forum
KRCS-	Kenya Red Cross Society
KSHs-	Kenya Shillings
KWA-	Kenya Wildlife Association
LSD -	Lumpy-Skin Disease
MID-P-	Merti Integrated Development Programme
MP-	Member of Parliament
NACOSTI -	National Commission for Science, Technology and Innovation
NDMA -	National Drought Management Authority
NFD -	Northern Frontier Districts
NGOs -	Non-Governmental Organizations
NRT -	Northern Rangelands Trust
NSNP-	National Safety Net Programme
PASTRES-	Pastoralism, Uncertainty and Resilience: Global Lessons from the Margins
PPG-	Parliamentary Pastoral Groups
PPR-	Peste des Petists Ruminants
RFV-	Rift Valley Fever
RUA-	Resource Users Association
RVF-	Rift-Valley Fever
WCMA -	Wildlife Conservation and Management Act
WFP-	World Food Programme
WPF-	Waso Professional Forum

ABSTRACT

Drawing on Gudrun Dahl's book *Suffering Grass*, the thesis traces changes and continuities in pastoralists' moral economy practices in Kenya's Isiolo County since 1975, examining how such practices are combined to respond to uncertain conditions in two sites (Kinna and Korbesa) – one more urban and the other more remote. The thesis asks: *What is the role of the moral economy in response to uncertainty among pastoralists of Northern Kenya, and how has it changed since 1975?* Through a longitudinal design centred on participatory historical event mapping, key informant interviews, indepth narrative case studies, archival searches and photo-voice methods, the thesis explores changes in the area over time, including those due to environmental factors (drought/animal disease), land-use change (conservancy, national parks) and shifts in political economy (governance, markets, politics). Despite these many changes, and highly uncertain conditions, pastoralism remains the dominant source of livelihood in both Kinna and Korbesa.

Pastoralists rely on fundamental practices such as herd mobility, livestock species and livelihood diversification, and investing in social relations in order to navigate livestock production uncertainties. Within these practices, particular moral economy practices, centred on collective redistribution of resources remain significant. The thesis identifies five types of moral economy practice. In the more remote pastoral setting, with intensified insecurity and limited state and institutional presence, practices of redistribution and comradeship are central. In the more urban pastoral setting, with a proliferation of institutions, markets, diversification and investment, institutionalised support and collective crisis management through the use of newly important technologies are seen. Contrary to the assumption that the moral economy is waning due to social stratification and individualisation, the thesis finds that moral economies persist, and new forms are emerging. These enhance flexible response to shocks and crises. The thesis offers three substantial contributions to understanding pastoralists' livelihood trajectories and ways moral economies evolve, for whom and with what consequences when managing uncertainties. Firstly, through a qualitative longitudinal approach, working from a classic ethnographic account and assessing changes and continuities over 45 years, the study contributes to a better understanding of pastoral settings in Northern Kenya. Comparing moral economy practices in two distinct settings, remote and near urban, and among social groups, young/old, wealthy/poor, women/men, the thesis uncover the inequalities within pastoral societies and spatial geographies. These inequalities reveal that the 'grass' (pastoral production) was not wholly resilient. It depends on whose grass, where, and what access to survive and be resilient.

Secondly, the thesis unveils the gaps in understanding pastoralists' moral economy by revealing that moral economies are not merely linked to 'tradition', 'subsistence' in pre-capitalist societies as is sometimes assumed. Pastoralists' moral economy practices are centred on organising for 'flexible survival' under uncertain conditions. The thesis offers a more profound, culturally rooted understanding of everyday moral economy practices. It showed how they contributed to how pastoralists survive, thrive and respond to uncertainties in the past 45 years through redistribution, comradeship, diversification, and collective response to protect the livelihoods from external threats, in each case going beyond the standard, market-based capitalist relations.

Thirdly, the thesis adds to the understanding of spatial and vernacular understanding of vulnerability and responses – including the gender and generational differences between them. These deeper complexities - were often missed in externally defined aid/safety net programmes in pastoral areas. My interest in assessing how pastoralists create their safety nets and generate collective solidarities in response to uncertainties creates a greater appreciation of pastoralists' diverse moral economies and how they could be recognised and strengthened in the moves to extend social protection systems to pastoral areas.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This thesis explores changes in moral economy practices over 45 years in two pastoral settings in Isiolo County, Kenya. Making use of Gudrun Dahl's (1979) classic book, *Suffering Grass,* as a baseline, the thesis asks, *'What is the role of the moral economy ino response to uncertainty among pastoralists of Northern Kenya, and how has it changed since 1975?'*

Why is this important and why did I find these questions interesting? In 2018, I researched the politics of social protection programmes in Marsabit: a pastoral production County in Northern Kenya. This research highlighted discrepancies in programme implementation around the registration and targeting of beneficiaries (Mohamed et al., 2020). This is caused partly by the poor state of infrastructural capacity and seasonal climatic stress making it difficult to reach all the vulnerable beneficiaries in a highly mobile pastoral context. Hence, I developed an interest in knowing how 'external intervention programmes', such as cash transfers, may interact with culturally defined 'moral economy' practices, which I know about from my personal experience coming from a pastoral area.

Here, moral economy denotes redistributive practices and norms that help people manage shortages and thrive amidst uncertain livelihoods. I thought that over time, spatial and vernacular understanding of vulnerability and responses – including the gender and generational differences between them - were often missing in such externally-defined aid/safety net programmes in pastoral areas. As a result, my interest in assessing how pastoralists create their own safety nets, generate collective solidarities and engage with moral economy practices in response to livelihood uncertainties was born.

Pastoral production systems, defined as livelihoods centred on rearing of livestock for subsistence and marketing, are highly variable over space and time (Dahl & Hjort, 1976; Homewood, 2008; Lind et al., 2016). This is because of the drylands setting, with variable rainfall, market instability, frequent conflict, raiding and livestock diseases. This results in conditions of uncertainty, where people do not know the likelihood of future outcomes (Scoones, 2019). Uncertainties may manifest in the form of 'shocks' - a situation of sudden unforeseen events - or as 'stresses' - a long-term variation in conditions, which creates states of vulnerability. Various responses have emerged in pastoral systems to live with (coping) and from (productive use of variability) uncertainty (Scoones, 1994; Krätli & Schareika, 2010).

The responses include pastoralists' own adjustments through customary knowledge and practices, such as adaptive mobility, breeding management, economic diversification, and culturally accepted forms of distribution in the form of 'moral economy' practices (Dahl, 1979; Bollig, 1998; Homewood, 2008;

Khalif, & Oba 2010; Naess, 2013; Achiba, 2018). Pastoralists' responses to live withand from uncertainty exists alongside various interventions to address vulnerabilities. These interventions include settlement, provision of relief food, social protection in form of livestock insurance, cash transfers among others (Hogg, 1983b; Kilby, 1993; Janzen, et al., 2016; Bageant & Barrett, 2017; Asfaw & Davis, 2018; Carter et al., 2018).

Taking 1975 and the fieldwork that Gudrun Dahl documented in her book, *Suffering Grass*, as a baseline, the thesis explores the transformation of moral economy practices in response to livelihood uncertainties. *Suffering Grass* provides an understanding of how changing post-Independence politics and the economic integration of Northern Kenya affected pastoral livelihoods in the 1970s and how, in turn, these changes manifested in transforming local moral economy practices, such as labour relations and livestock redistribution. Dahl noted that pastoral livelihoods were threatened due to integration into independent Kenya and the severe cut in primary subsistence resources (livestock, pasture, and labour) because of the Shifta war of 1969. Despite these challenges, pastoralism thrived through breed management, labour organisation and investment in social relationships (Dahl, 1979).

Studying moral economies longitudinally challenges the mainstream generalisation that the moral economies are disappearing and are being replaced by the capital economy (Ensminger, 1992, Bollig, 1998). A longitudinal perspective provides insight into how pastoral livelihood trajectories and moral economies evolve, for whom and with what consequences when managing uncertainties. The thesis explores the transformation of moral economy practices through time (1975-2020), between two distinct pastoral settings (Korbesa, a more remote pastoral context and Kinna, a pastoral setting that is more connected to an urban area) and involving different social groups (men/women, young/old, wealthy/poor). The findings show that moral economy practices have changed to face new challenges yet are affected by on-going processes of social stratification and structural transformation. Such transformed moral economy practices nevertheless remain central to confronting uncertainties within pastoral production and livelihoods. This introductory chapter first highlights brief overview of the moral economy concept, it then introduces the book *Suffering Grass* and provides a snapshot of the study sites and methods before outlining the dissertation structure.

1.2 The Moral Economy Concept

Moral economy ideas have attracted a great diversity of usage, sometimes creating a puzzle on what is and what is not a moral economy (Fassin, 2009; Carrier, 2018). Moral economy is a broad concept associated with redistribution, sharing, solidarity, resistance, class struggle and has generated a substantial literature. Although the term was popularised in the classic 1971 essay of E.P. Thompson, 'The moral economy of the English crowd in the eighteenth century' and James C. Scott's 'The Moral Economy of the Peasant' (1976), the concept dates back to earlier centuries (Götz 2015). Thompson applied moral economy to reveal collective mobilisation and group resistance to the food crisis and unjust practices in England. Later, Scott advanced the concept, highlighting peasants' subsistence ethics and resistance against capitalistic exploitation. Peasants engaged in social exchange and reciprocal redistribution as a principle of 'subsistence security', which, if undermined via exploitative taxation and rising land rates, resulted in a revolt.

Following Thompson's and Scott's interventions on the themes of 'moral economy', a massive body of scholarship emerged, mostly emphasising resistance, transnational movements and class struggle (Edelman, 2005; Hossain, 2009; Fassin, 2009; Palomera & Vetta 2016; Narotzky, 2016) linked to norms, values of solidarity, social goods, trust and mutuality (Arnold, 2001; Sayer, 2004; Näre, 2011; Kea, 2013; Galt, 2013; Fontaine, 2014; Mauritz, 2014; Ripoll, 2021). Enhanced collective solidarity and redistribution of wealth through religious and other customary institutions has also been central to discussions of moral economy (Tripp, 2006), while others have highlighted moral economies in relation to group identities, nationalism and redistribution of political status and resources (Lynch, 2011; Berman et al., 2016; Hughes, 2016; Hunter, 2016). In classical anthropological discourse, moral economy refers to debates about reciprocity, social relationships, and the gift economy (Cashdan, 1985; Cheal, 1989; Yan, 2012).

In pastoral studies, moral economy ideas centre on livestock redistribution and reciprocity often between male associates (Torry, 1973; Dahl, 1979; Potkanski, 1997; Ensminger, 1992; Bollig, 1998; Moritz, 2013), customary women's rotational exchange and savings (Pollard et al., 2015, Khalif & Oba, 2018), exchanging credits/loans on the basis of trust (Lyon &Porter, 2009; Galvin, 2008; Nori, 2010) and social insurance, especially around social-reproduction events like funerals (Dercon et al., 2004; Aredo, 2010). Within pastoral studies, two strands of debate emerged. One argued that the notion and practices of moral economy are potentially dissipating due to the integration of pastoralism into the market economy and the increasing social stratification among pastoralists (Swift, 1989; Ensminger, 1992; Bollig, 1998; Schultz, 1998). In contrast, the second strand argues that the practices associated with moral economies adapt to changing livelihoods and contexts, and moral economies persist but in new forms (Hoddinott et al., 2009; Khalif, 2010; Moritz et al., 2011; Hao et al., 2015; Iyer, 2016).

Moral economy practices may not have 'disappeared' but may have changed to face new challenges and equally be affected by continuing processes of social differentiation. Furthermore, as mentioned by Swift (1989:49) 'breaks in the moral economy and abrogation of claims by the government, are a crucial cause of vulnerability', and so relevant to thinking about social protection and assistance in pastoral areas. In order to enhance development responses in pastoral areas, it is therefore worth investigating the changes and continuities in moral economy practices in response to continued uncertainties and vulnerabilities around livestock production, including drought, conflict and mobilising limited labour for livestock management. As pastoralism changes and social stratification increases, what new moral economy practices emerge in response to new social, cultural and political arrangements (due to urbanisation, market expansion, political change, religious convertion, changing gender roles and household structure)? To explore this, I take a broad view of moral economy, not restricted to unequal, gender-biased livestock transfers, which is often the focus of the literature on pastoralism, but I widen the scope to multiple relationships based on kinship, religion, friendships, and partnership that facilitate transfers of material resources, and cooperation to enhance livelihoods in the face of uncertainties. To this end, a longitudinal analysis of moral economy, responding to uncertainty through time, space and social difference is crucial. I now turn to introduce the baseline study for the longitudinal approach, *Suffering Grass*.

1.3 Introducing Suffering Grass and Study Goals

Suffering Grass is an ethnographic account of livelihood and subsistence of Waso Borana pastoralists in Northern Kenya's Isiolo County, undertaken between 1974-75 by anthropologist Gudrun Dahl. The primary study areas were Isiolo, Kinna, Kulamawe, Duse and Dadach Lata (Korbesa). Dahl presented the book in two main sections: animal husbandry and the internal organisation of pastoralists' livelihood and the effect of two major external forces on the structure of the community. The two forces are community integration into independent Kenya and the severe cut in the primary subsistence resources (livestock, labour, and pasture) because of the Shifta war of 1969. The Shifta war emerged due to the Borana's effort to join Somali secessionists, which the independent Kenyan government curtailed through counter-insurgency measures. The Shifta war resulted in severe livestock losses among the Borana (Hogg, 1983; Khalif, 2010; Whittaker, 2014). According to Khalif, Borana pastoralists have never recovered fully to reach the pre-Shifta livestock levels. Acute drought followed the Shifta war and intensified pastoralists' vulnerability (Dahl, 1979; Hogg, 1983; Swift, 1993). Therefore, 1975 is significant as the study was undertaken at a time of major conflict, drought, political and economic changes that spawned multiple uncertainties for pastoral production.

The book is titled *Suffering Grass* to highlight the predicament of pastoral production and pastoralists who were 'squeezed' between the central Kenyan government and the nationalists' interests of the Somali (1979, 29). Despite these pressures and changes subjected to the Borana, Dahl noted some degree of resilience and wrote *'even if many of the stalks of the suffering grass have been broken, its roots have so far shown a certain resilience, and the cattle economy is still a link of continuity'* (1979,

29). This means that pastoral production was seen to withstand shifts in political economy, environmental hazards, and governance pressures in post-colonial Kenya. Examining changes and continuities in pastoral livelihood 45 years after *Suffering Grass* can illuminate whether pastoralism continues to be buoyant and how diverse people experience and live with evolving uncertainties via diverse networks and bonds that support livelihoods.

The book maintained that pastoralists survived via two practices: animal husbandry and external livelihoods support. The animal husbandry involved livestock management through mobility, herd splitting and herd diversification. It also consists of labour management through large family compositing, camp collaboration and investing in social ties through redistribution. The external support included dependence on government and charitable organisations for relief and economic diversification (casual jobs, being members of the salariat and holding administrative positions). Both animal husbandry and external support were unpredictable and unequally distributed due to outmigration of productive labour, severe livestock loss and insignificant infrastructure for economic diversification and international aid (Dahl, 1979). Dahl ended her book by asking: *'will there still be resilience in the suffering grass? I would hope so but can see no clear answer'* (1979, 268).

Answering this question 45 years on is not straightforward. It depends on whose grass is suffering, where, and with what consequences? The capacity to be resilient is highly differentiated across households and within pastoral sites due to varying access to and control of resources. Pastoralism thrives with secure access to resources such as livestock, labour, pasture, information, and water to withstand unstable social, economic, and ecological conditions (Dahl & Sandford, 1978; Hogg, 1992; Niamir-Fuller & Turner, 1999; Homewood, 2008). People exploit, redistribute, and control these resources to be resilient. However, there are cases where people face food shortages amidst conditions of plenty due to loss of entitlement, as noted in studies of vulnerability (Sen, 1981; Swift, 1989). Mobility to exploit natural resources is curtailed by factors including security, borders, and control of the labour force, among other factors (Scoones, 1993; Eriksen & Lind, 2009; Butt, 2016). Notably, claims over resources to respond relate to access to assets which is often a political process, and this varies across social groups and through space and time (Swift, 1989; Longhurst et al., 1986; Lind, 2003; Lind et al., 2009).

This study posits that observing how uncertainties and responses evolve in a distinct pastoral production setting and among different social groups provides a framework to understand pastoralists' livelihoods trajectories and patterns of resilience. The qualitative longitudinal approach, working from a classic ethnographic account and assessing changes and continuities over 45 years will hopefully contribute to a better understanding of pastoral settings in Northern Kenya.

1.4 Introduction to the Study Area and Research Processes

The research took place in Isiolo County in Northern Kenya. Isiolo provides an ideal setting to study uncertainty, moral economy, and changes in pastoral livelihoods. It is a predominantly pastoral production area with variable environmental conditions; thus, the area experiences a series of droughts, seasonal floods, animal disease, conflict, and market volatility. To counter these challenges and to enhance pastoral 'resilience', there have been massive investments including a proliferation of NGOs and state projects, especially in the aftermath of the Shifta war, which left the region highly impoverished and devastated (Hogg, 1983, 1992; Swift et al., 2001; Amutabi, 2005; Khalif, 2010; Commack, 2016). These unique features of Isiolo have also attracted wider studies; for example, on livestock development projects, people and pastoralism and the politics of drought (Dahl & Sandford, 1978; Swift & Omar 1992; Hogg, 1985).

However, in most cases, the focus has been a 'snapshot' project where longitudinal aspect is often missed and yet, development is about structural changes and transformation of society and economy. This background and the availability of the ethnographic account of the Borana pastoralists documented in the book *Suffering Grass* provided me with an exceptional opportunity to undertake a multi-sited longitudinal study among the same community that I was born and raised in. The map below highlights the study area.

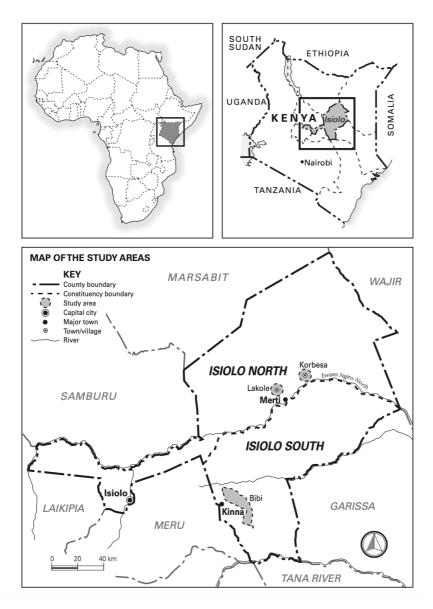


Figure 1.1: Map Showing Study Sites: Isiolo County Credit: Developed by John Hall with guidance from the author

The primary study sites are Kinna and Korbesa (former Dadach Lata) and two nearby camps in each site (Bibi and Lakole). Both Kinna and Korbesa were sites that Dahl studied in the 1970s. However, Dahl did not provide a comparative analysis of the study site and only mentioned the camps and places she visited for study. In her time, all pastoral villages looked similar consisting of satellite camps and semi-permanent structures near missionary centres apart from Isiolo central, which served as the administrative and trading centre (Dahl, 1979; Hjort, 1979). Through time, there have been massive changes in pastoral areas due to shifts in political economy, land-use change, rise in population, climatic events, and 'modernity'. These changes are experienced differently across pastoral settings, resulting in diverse trajectories and uncertainties, influencing pastoralists' responses and moral economy practices over the last 45 years. It is against this backdrop the thesis examines moral economy practices in Korbesa – a customary and far from town pastoral setting and compares with Kinna- a more urban linked pastoral setting with better infrastructures and market connection.

I began the research process by revisiting and thoroughly reading the book *Suffering Grass* to understand what pastoral livelihoods were in the 1970s. This was followed by a visit to Stockholm to meet the author, Gudrun Dahl. Visiting Dahl was instrumental as it provided a clear guide on places she visited, the contact details for her field research assistance, and some photos that helped in comparing the historical evolution of the study areas. Thereafter, I moved to the field and spent the first three months conducting historical events reconstruction and sampling the study population through a community mapping exercise. The mapped community structure produced the household clusters for each site. I then randomly selected 24 households for a deeper narrative biographical interview. The research methodology is in three significant phases. Phase one involved establishing the study's longitudinal baseline through participatory event mapping, key informant interviews, focus discussions and elite interviews. The second phase involved in-depth narrative case studies, semi-structured livelihood interviews, photo-voice, and feedback seminars. The third phase included archival research, thematic data organisation and analysis.

1.5 Dissertation Structure

Following this introductory chapter, chapter two situates the moral economy concept in the wider literature. The chapter examines the framing of and responses to risk and uncertainty in pastoralists' studies. It later offers significant theoretical underpinning of the moral economies in diverse disciplines and how the concept has evolved through time and space. This chapter offers a broader definition of moral economy in pastoral context as: a comprehensive set of both traditional and recently created networks of relations centred on collective and redistributive transfer of values and resources and based on forms of solidarity, which help people survive and prosper, including under conditions of uncertainty. Chapter three presents methodological processes, positionality, ethical issues, and limitations.

Chapters four to eight present the dissertation's empirical materials starting from outlining events generating uncertainties, reflecting on the moral economy found in the *Suffering Grass* and two placebased moral economy practices found in Kinna and Korbesa. Chapter four evaluates the events that generate uncertainties in pastoral production through a combination of historical reconstruction events, *Suffering Grass*, and ancillary data. The finding in this chapter suggests that uncertainties are generated through changes in structural factors, including in shift in political economy (governance, market and politics), environmental factors (rainfall/drought and land-use changes) and changes in everyday practices (institutions, religion, and modernity). The chapter ends by arguing that uncertainties and responses to uncertainties are experienced and managed differently across time, space and social framework depending on social relations and ties, market connection, infrastructures, and availability of diverse economic and institutional opportunities. Chapter five reflects on the findings in the *Suffering Grass* and situate the moral economy practices that sustained pastoral production in the 1970s. It established a baseline for the longitudinal study by combining the findings in the *Suffering Grass* and triangulated them with historical interviews, key informant interviews, participatory timeline, and archival materials. It identified three themes around which moral economy centred in the 1970s. They include livestock management, labour organisation and investment in social ties via redistribution.

Chapter six examines changes and continuities in the three moral economy themes in a remote pastoral setting, Korbesa, with a limited market, far from Highland Kenya and a poor road condition. Unlike extant literature that anchored moral economy exclusively on livestock transfers, often between male associates, this chapter goes beyond, illuminating the forms of moral economy practices that emerge in the context of intensified insecurity and livestock raids, how have the moral economy practices changed or persisted since 1975, and for whom. The chapter found that, like in the 1970s, moral economy centres on livestock redistribution, labour sharing and resource collaboration. However, the study observed a significant change in moral economy practices around gender relations and technology use, which was not the case in the 1970s. The chapter highlights the role of moral economy practices in enhancing comradeship for adaptive mobility through flexible labour sharing and responsiveness to drought and insecurities via redistribution, although differentiated by gender, wealth, and age.

Chapter seven assesses the moral economy practices that emerge in a settled form of pastoralism in Kinna, south of Isiolo, bordering Kenya's highland counties, including Laikipia, Meru and Isiolo central. The chapter evaluates forms of moral economy practices that emerge in a more sedentarised setting in which livelihoods have diversified parallel to the growth of small towns and their connectivity with broader markets, politics, development NGOs, and the spread of technologies. Unlike 1975 and the remote pastoral Korbesa, this chapter observed new relationships, some of which constitute local moral economy practices. This includes commodification of labour, farmer-herder relationships, and intrahousehold diversification replacing customary household labour pooling. The chapter also revealed moral economy relationships that emerge around collective technology, embodying collective solidarity and mutual support to respond to raids and insecurities.

Finally, the significance of institutions (state, NGOs, and religion) influenced how social groups engage in various moral economy practices such as *Harambee*, saving clubs, inheritance, and *Zakat*. The chapter concludes by arguing that there is no singular, linear moral economy. Such practices arise through manifold relationships and strategic investments to navigate uncertain livestock production. Chapter eight synthesises the empirical findings presented in chapters four, five, six, and seven and explores how the response to uncertainty and moral economy practices have changed over the past 45 years (1975-2020), between the two spatial geographies (Kinna and Korbesa), and within the social groups (men/women, young/old, wealthy/poor). Revealing considerable changes as well as continuities, this chapter shows the significance of moral economies (collective and redistributive practices) in responding to uncertainty. The chapter identifies five types of moral economy practice. In the more remote pastoral setting, with intensified insecurity and limited State and institutional presence, practices of redistribution and comradeship are central. In the more urban pastoral setting, with a proliferation of institutions, markets, diversification and investment, institutionalised support and collective crisis management through technologies are seen. Following Knight, institution refers to a 'set of rules that structure social interactions in particular ways. He emphasised that 'for a set of rules to be an institution, knowledge of these rules must be shared by the members of the relevant community' (Knight, 1992, 2).

Contrary to the assumption that the moral economy is waning due to social stratification and individualisation, this chapter contends that moral economies persist, and new forms emerge enhancing flexible responses to shocks and crises. It compares the significant themes in the works of classic moral economies around collective mobilisation, sense of identity for survival and collective solidarity against a crisis. It argues that rather than thinking about moral economies as 'traditional' practices, they have been re-invented and adapted for new contexts as pastoralism evolve and new uncertainties emerge. The chapter further adds a new dimension to moral economics, linking the above five typologies to the broader moral economy literature and pastoral studies.

Chapter nine concludes the thesis and highlights the significant contributions of the thesis to the moral economy in pastoral studies and broader moral economy debate, including the work of founding scholars like E.P Thompson, James Scott, and others. It also offers methodological contributions to the study of pastoralist's moral economy, adding to a deeper understanding of structural conditions and livelihoods trajectories through a longitudinal lens. The chapter ends by acknowledging pastoralists' moral economy as a practice that persists even if they change and remain central to responding to uncertainties in the contemporary settings. It should be central to tackling vulnerabilities in pastoral production and thinking about social protection in these areas. The thesis now moves to chapter two to situate the key research variables (pastoralism and uncertainty, moral economy and response to uncertainties) in the broader literatures.

CHAPTER TWO: PASTORALISM, UNCERTAINTY AND MORAL ECONOMY

2.1 Introduction

There has been continuing severe poverty, insecurity, migration dynamics, changing climatic conditions, land fragmentation and increasing uncertainty across the pastoral drylands (Homewood, 2004; Shanguhyia, 2005; Little et al., 2008; Eriksen et al., 2005; Broch-Due & Sanders 1999; Guttal & Monsalve, 2011; Butt, 2016; Debelo, 2016; Arunachalam & Shenoy, 2017, Scoones, 2020). Despite these global pressures, pastoralism persists in the highly variable climatic and social-economic world. Various responses have emerged in pastoral systems to live with (coping) and from (productive use of) uncertainty (Scoones, 1994; Krätli & Schareika, 2010). The responses include pastoralists' own adjustments, herein 'internal strategies' including adaptive mobility, breeding management, economic diversification (Dahl, 1979; Campbell, 1990; Niamir-Fuller, 1999; Khalif, & Oba 2018; Moritz et al. 2013; Lind et al., 2016; Butt, 2016; Achiba, 2018; Scoones 2021), and culturally accepted redistribution in the form of 'moral economy'. I define moral economy as a *comprehensive set of traditional and recently created networks of relations centred on collective solidarities and transfers of values and resources to help people survive and prosper, including under conditions of uncertainties.*

In addition, externally-driven assistance, comprising settlement, provision of water, social protection, and market are other forms of intervention responding to shocks and stress in pastoral systems (Hogg, 1983b; Kilby, 1993; Swift et al., 2001; Fratkin et al., 1999; McPeak &Little, 2006; Barret et al., 2008; Korf et al., 2015; Barrientos et al., 2015; Janzen et al., 2016; Lind et al., 2016; Carter et al., 2018; Janzen & Carter, 2018; Sabates-Wheeler et al., 2021b). *How do all these responses combine? and what is the particular role of moral economy now and in the past?* This research explores the role of moral economy practices as central to pastoralists' internal strategies to live with and off variable conditions. This is important because 'developmental' interventions (such as livestock markets, livestock insurance, contingency planning, and safety nets) frame drylands' challenge in terms of risk, aiming to provide fixity, security and stability constructed for stable environments (Scoones, 2019; Scoones & Stirling, 2020), whereas drylands are highly uncertain. Further, and of concern here, too often, local embedded moral economy practices are overlooked in development planning and programming.

Moral economy practices are often more adaptable, flexible, and appropriate to pastoral settings than many external interventions. This is not to glamorise the moral economy practices as the only flexible means to survive, because, like other strategies, moral economy practices are highly stratified among diverse pastoral groups. I hypothesise that the moral economies continue to exist alongside an array of external/internal responses and play a crucial role in helping pastoralists offset the effects of variability. The forthcoming sections elaborate on the framing of, and response to risk and uncertainty in pastoral scholarship. It then elucidates the significant theorisations of the idea of moral economy in diverse disciplines, including in pastoral settings. Doing so offers a central analytical framework for the thesis on how broadly defined moral economy practices evolve and adapt to new realities, especially in pastoral settings.

2.2 Pastoralists' Responses to Risks and Uncertainties

Pastoral production systems, defined as livelihoods centred on rearing of livestock for subsistence and marketing (Sabates-Wheeler et al., 2013; Lind et al., 2016), are highly variable over space and time. Variable rainfall, market instability, frequent conflict, raiding and livestock diseases (Hogg, 1987; Bollig 1990; Markakis, 1994; McCabe, 2004; Homewood 2008; Greiner 2013; Kagunyu & Wanjohi 2014; Nori 2019) contribute to conditions of 'uncertainty,' where people do not know the likelihood of future outcomes or *state of the world* (Cashdan, 1990; Scoones, 2019). Uncertainties may manifest in the form of 'shocks' - a situation of sudden unforeseen events - or as 'stresses' - a long-term variation in conditions, which creates states of *vulnerability*, especially due to seasonal stress (Longhurst et al., 1986; Swift, 2006; Devereux et al, 2012). Uncertainty is distinct from 'risk', where future conditions are known or can be estimated (Scoones & Stirling, 2020). In dryland pastoral settings, such a condition is not realised and the future remains unknown, yet many a time, challenges are seen through the lens of risk, resulting in a set of inappropriate managerial interventions (Scoones, 2019).

Due to drylands' variable conditions and the increasing poverty manifesting as pastoral vulnerability, there has been rising interest in risk assessments and mitigation research (McCabe, 1997; Barrett et al., 2001; McPeak, 2006; Lybbert & McPeak, 2012; Chantarat et al., 2013; Barrientos et al., 2015; Begeant & Barrett, 2017; Asfaw & Davis, 2018). The bulk of these studies advocate 'risk management' contingency planning and drought mitigation measures via livestock market and offtake, livestock insurance, cash transfers and other climate 'smart' interventions. Thereby, this leads to the conceptualisation of risks faced by pastoralists on the basis of 'objective exposure', 'subjective perception', 'ex-ante mitigation' and 'ex-post coping' capacity (Barrett et al., 2001:1; Gebru et al., 2003; Luseno et al., 2003; Dose et al., 2008). Much of this literature fail to recognise that dryland variability is complex and interconnected and cannot be narrowed down to risk exposure, perception and response alone. For instance, pastoralists are known to respond to drought through mobility (Homewood, 2008; Krätli & Schareika, 2010; Goldman & Roismena, 2013) Butt, 2016), but this is not just an adaptive response to risk, but an active exploitation of variability to enhance production (Nori & Scoones, 2019a; Krätli & Koehler-Rollefson, 2021; Tasker & Scoones, 2022).

Failure to understand pastoralists' responses to uncertainties generated by variable conditions have led to many inappropriate policies and interventions. For example, those interventions influenced by Hardin's notion of the 'tragedy of commons' promoted sedentarisation and privatisation (Dahl, 2019). The outcome is that traditional patterns of pastoral mobility are constrained due to border demarcation and development corridors (Homewood, 1995; Bedelian & Ogotu, 2017; Alders, 2020; Postigo, 2021). Conceptualising drought as a predictable event and hence managing through a rational economic decision-making process might be inappropriate and could lead to what Stirling (2007) referred to as 'closing down to risk'. Interventions centred on risk management rather than embracing uncertainty include fixed water point development, rangeland fencing, single location market initiatives, standardised, risk-targeted social assistance programmes and insurance programmes of different sorts. However, as argued in Caravani et al. (2021), there is need to shift development and humanitarian efforts to *embracing uncertainties*, especially in an unstable context than providing standardised support, which is often the case with pastoral systems.

Pastoralism is an adaptive and flexible livelihood and a high reliability infrastructure (Roe et al., 1998; Roe, 2020) suited for productive use of non-equilibrium rangelands (Behnke., et al 1993). This high reliability perspective views pastoralists not as risk averse but as active managers of uncertainty. Therefore, uncertainty in pastoralism is considered as 'a way of life', and variability as an opportunity (Krätli & Jode, 2015). Further, anthropological analysis of uncertainty adds that risks are historically and culturally constructed through individual perspectives and holistic societal practices (Halstead & O'Shea, 1989; Shipton, 1990; Cashdan, 1990). Specifically, Cashdan highlighted the difference between uncertainty and risks. Uncertainty as '*lack of knowledge about state of the world*' (1990_2), while risks as '*unpredictable variation in some ecological or economic variable*' (Cashdan, 1990_3). Borrowing from Cashdan, McCabe applied the concept of risk on Maasai livelihood strategies, however, as other studies, he argued for 'coping' strategies as means of living with a risky livelihood (McCabe, 1997).

Many studies describe pastoralists' response simply as 'coping' strategies often adopted in sequence to manage food shortages and chronic poverty due to adverse climatic and social events (Corbett, 1988; Campbell, 1990; Cashdan, 1990; McCabe, 1990; Butt, 2011). Yet, sequential coping is a passive approach meant for more stable circumstances and predictable events. On the contrary, in pastoral areas uncertainties are unpredictable, complex, and overlapping; thus, ingenuity and active enlistment of resources is fundamental without necessarily following a fixed coping sequence, as multiple resource and practices must be combined.

The current study evaluates the complexities and the interconnectedness of diverse variable conditions in the drylands through temporal, spatial and social economic difference among pastoralists, and assesses the responses, not just as 'coping' but as more active engagement with variable conditions. Recently, pastoralism, resilience and development have become prominent in research and policy making in the drylands of Africa (Gray et al., 2002; Galvin, 2008; Shiferaw et al., 2014; Catley, 2017; McPeak & Little, 2017; McReak & Little, 2017; McReak, 2018; Osman et al., 2018; Quandt, 2019; Little & McPeak, 2020). The recommendations from this scholarship, in most instances, emerge from a single 'snapshot' study. However, resilience is a dynamic concept occurring over time, and development is about structural change and the transformation of social and economic relations. Konaka & Little (2021) acknowledged a significant need to embrace diverse livelihood contexts and relationships across different pastoral systems for 'resilience' to emerge. This means that a longitudinal approach to livelihoods research, especially in various contexts, and the relationships between diverse social groups is fundamental in understanding the 'resiliency' of pastoral systems, as this study aims to achieve.

Through time, pastoralism has experienced global change and 'development', which has reconfigured the traditional response mechanisms due to expanding market, economies, and development corridors. Responses are also conditioned by structural changes, including changing terms of trade, in-migration, land fragmentation/grabbing, and availability of weapons for herders and cattle rustlers (Katsuyoshi & Markakis, 1994; Aklilu et al., 2013; Abbink et al., 2014; Bersaglio & Cleaver, 2018). All these structural changes may influence how different people (men/women, young/old, rich/poor) experience variability (shocks/stresses). This in turn may result in different livelihood trajectories, whereby some people are able to make use of variability as an opportunity, while others continue to become more vulnerable. The adaptive capacity of different pastoral groups to variable production has led to the emergence of different pathways of pastoral livelihood, including continuing with 'traditional' transhumant pastoralism, increasing commercialisation, diversification away from pastoralism, and leaving pastoralists' livelihood diversification as a strategy to manage uncertainties in pastoral production. In return, I compare how the new portfolio of intrahousehold income earning opportunities has replaced the customary household labour diversification observed by Dahl in the 1970s.

2.3 Livestock Diversification and Response to Uncertainty: The Role of Intra-household Resources Reconfiguration and Collective Responsibilities to Survive.

Livelihood diversification is integral to rural livelihood approaches and enhances food security and survival. Traditionally, African peasants, including pastoralists, are considered static, resistant to change, and rooted only in animal production and peasant farming (Bruceson and Jamal, 1997). However, through a process of 'de-agrarianization' and de-pastoralization, rural African have moved

from a subsistence economy to a diverse economy, including migrating to urban centres and participating in multiple income-generating activities aimed at reducing poverty (Bryceson and Jamal, 1997; Bryceson, 2000a; Ellis, 2000b; Caravani, 2018). Livelihood diversification is defined as a widespread process which involves *'maintenance and continuous adaptation to a highly diverse portfolio of activities in order to secure survival and improve living standards'* (Ellis, 2000a, 290). In pastoral contexts, Little and colleagues acknowledged the significant lack of a uniform definition of diversification compared to agrarian studies. They defined pastoral livelihood diversification as a *'pursuit of any non-pastoral income-earning activity whether in rural or urban areas'* (Little et al., 2001, 403).

Among the east African pastoralists, diversification has been on the rise since the early 1970s due to changes in the region's structural, social and economic conditions. In his seminal paper, Ellis clarified the concept of livelihood diversification as encompassing four significant elements (Ellis, 2000b). First, he noted that spreading income activities into multiple ventures is not confined to rural communities; it is a broader livelihood strategy practised across a diverse spectrum. Secondly, livelihood diversification is considered 'pervasive' and 'enduring', showing that the various activities are spatially distributed between different wealth groups and serve the community at all times. Thirdly, he argued that the livelihood concept embodies 'non-economic' survival characteristics, including the socially differentiated networks and relationships that regulate resource use and access. And finally, livelihood diversification, the thesis argues that pastoral household diversification goes beyond mere economic transactions and includes the social relationships and collective decision-making around the portfolio of events within the households to enhance survival and livelihood continuity contributing to what I defined as a moral economy.

Several studies have posited push and pull factors as the significant determinants of livelihood diversification among pastoralists. As for push factors, pastoralists are forced to diversify due to adverse risks resulting from seasonal stress, insecurity, population pressures, declining per capita stock holdings, privatization of shared resources, and land alienation for alternative production (Ellis, 2000a; Little et al., 2001; McCabe, 2005; McPeak and Little, 2006; Catley et al., 2016). On the contrary, pastoralists are attracted to diversify due to proximity and access to market, modernization and growth of urban centres, improved transport and communication network, sedentarization and education opportunities (Ellis, 1998; Ellis, 2000b; Fratkin, 2001; McPeak and Little, 2006; Catley et al., 2016; Loison, 2015; Achiba, 2018). The most common opportunities for diversification in pastoral areas include farming, businesses, petty trading, wage employment, and service provision, including motorcycle transport and rental properties. These diverse economic opportunities have resulted in the

emergence of four pastoral pathways, including practising traditional nomadism, expanding into trade, substituting pastoral economy with other income, and abandoning pastoralism for an alternative livelihood (Catley et al., 2016).

Livelihood diversification choice is socially and economically differentiated between men and women and wealthy and poor herd owners. The wealthy herdowners diversify to escape risk and accumulate wealth to protect their livelihoods. At the same time, the more impoverished livestock owners engage in petty income-earning activities to meet consumption needs and overcome the challenges of livelihood failures (Little et al., 2001). Equally, most women in sedentary pastoral camps and small towns engage in income-earning activities to counter the increasing demand arising from education needs, food, and social reproduction events like funerals, sickness and weddings. Although with significant stratification and unequal wealth accumulation, livestock diversification has contributed to economic growth, food security, access to the market, increased employment and provides safety nets for low-income families, including women (Ellis, 2000; Catley and Aklilu, 2013; Livingstone & Ruhindi, 2013; Laison, 2015; Achiba, 2018). On the contrary, it has resulted in gender, and generational inequality, increased impoverishment, reduced herd mobility and weakening of community safety nets (Niamir-Fuller, 1999; Fratkin and Roth, 2005; Lind and Letai, 2013; Nunow, 2013), especially as some social commodities including milk and labour is commoditized and removed from the customary redistributive resources.

Despite the observed weakening community safety net arising from the stratified livelihood diversification, there are elements within the household, including labour relationships and redistributions, that drive diversification through what Ellis termed as 'non-economic' survival (Ellis, 2000a). Traditionally, pastoralists diversify household labour by splitting households into satellite camps and village centres, the father and the sons' units, and the co-wives' homes. This strategic diversification of household units served the herd owners with labour needs to manage the herds and spread the risk of keeping livestock in a single division. Today, pastoral households are deploying different members into different non-pastoral economies to access income for commoditizing livestock management needs. Although diversification into multiple economic activities by pastoral families implies financial coping strategies, the magnitude of household solidarity to encourage income redistribution from the portfolio of economies encompasses collective moral economies for survival, at least within the household's context.

Externally, the long-term relationships and symbiotic arrangements that enhance continuous and reliable market access, livestock feeds and labour, even during tough times define moral economies, a substantial survival strategy. This is important because, even if the resources are commoditised, it is not always available due to insecurity among Borana and the neighbouring groups, sometimes resulting

in market closure. In such a case, pastoralists need to negotiate access by activating relationships and trust that has been built overtime with their economic friendship network. Since Moral economies' primary aim is to promote norms and values that enhance survival, such network and portfolio of incoming earning opportunities are central. I now turn to the moral economy in the global and pastoral contexts.

2.4 Moral Economy in the Global and Pastoral Context of East Africa

Over the past two centuries, the term' moral economy' has been used in great diversity of ways, frequently creating a muddle on what is and what is not moral economy. The term was popularised in particular through a study of group resistance to food crises and collective mobilisation against market exploitation in England in early 18th Century at the time of popular action in the classic paper *The Moral Economy of the English Crowd in the Eighteenth Century* (Thompson, 1971).

Thompson argued that

the 'rioters' were 'grounded upon a consistent traditional view of social norms and obligations, of the proper economic function of several parties within the community, which taken together, can be said to constitute the moral economy of the poor' (1971, 79).

The main argument raised is the importance of shared 'norms' that enhanced protest against capitalistic exploitation, as underlying moral economy of the poor crowd.

Later, the moral economy became central to the work of Scott (1977), in the *Moral Economy of the Peasant*. This work focussed on Vietnam and Burma on how peasants deployed the 'safety first' principle to preclude impoverishment and falling below subsistence thresholds. Although Scott introduced a new dimension of 'reciprocity' to the understanding of moral economy, the underlying principle was resistance to and confrontation of capitalist systems. Unlike Thompson's crowd rebellion, Burmese and Vietnamese peasants' moral economy was mixed with subsistence and reciprocity, and 'hidden' forms of resistance. As re-examined by Fassin, the peasant moral economy depicted 'values' in addition to the norms and customs of resistance highlighted by Thompson's work (2009). Fassin expanded the scope of the moral economy from the historical (pre-capitalistic) and class (dominated) society and re-introduced values and emotions into the debate. He defined moral economy 'as the production, distribution, circulation, and use of moral sentiments, emotions and values, and norms and obligations in social space' (2009, 37).

As Scott and Thompson, Fassin's moral economy was centred on norms, values and customs but shifts the case from the traditional and the intimidated groups to modern social contexts, including youth protests and labour migrations in France. He also retraced moral sentiments and emotions that drove the humanitarian era in the 1990s. He termed it a 'compassionate moment' to counter the marginalisation and inequalities caused by the Western nations on the less privileged societies and to create a 'just world'. Subsequently, the moral economy also became central to the work of Edelman (2005) in examining the emergent *transnational movement* against the WTO. Edelman expounds on the economic liberalisation facing today's peasants due to the global shift in the economy compared to the 20thcentury peasants. Like his predecessors, Edelman's moral economy centred on collective mobilisation and resistance against capitalistic exploitation and unfavourable terms of trade. Ideas of moral economy were therefore centred on questions of *class and unequal capital accumulation* (e.g., Palomera & Vetta, 2016; Kofti, 2016).

Palomera and Veta challenged the classic moral economy centred on market, morality and resistance and examined unequal accumulation that arises in the market-morality nexus. They posited that 'capital accumulation is structurally inscribed in the everyday dynamics of social reproduction' (2016, 11). Class and gender intersect in mobilisations against injustices and inequality, with questions of social justice and dignity at the centre (Narotzky, 2016). Narotzky evaluates the recent uprising in Spain due to rising living costs and the dwindling essential services provision due to structural adjustment policies undermining citizens' wellbeing. In this case, grievances and demand for a decent life unite people to form alliances for insurrection. Despite resistance and class struggles, significant moral economy variables, including social capital investments, trust, social goods, and reciprocity are crucial, she argues.

Fontaine (2014), who writes about traditional European peasants, claimed that the moral economy plays a crucial role in the discourse of '*self-help'*, *social networks, credit* and trust in response to poverty. Fontaine proposed the need to rethink and shift the paradigm in poverty studies from the traditional patron-client relation to a more focused on 'horizontal' social solidarity of 'brother/sisterhood', rooted in norms and values of society, as a route to offsetting hardship in times of crisis. Such moral economies based on norms, values and obligations of redistributive solidarity are evident in some settings, including Islamic societies (Tripp, 2006; Caravani et al., 2021). For instance, Tripp, in his writing about Islam and moral economy, argued that *zakat* as rooted in the moral obligation of Muslims, aid in preventing impoverishment and serves as social solidarity to reduce the gap between the poor and the wealthy. In Islamic culture, economic stability is enhanced through redistribution (*Zakat* and alms) and shunning exploitation by negating interests (*riba*) on loan. Here, economies function contrary to resistance and rebellion as the guiding principle against exploitation.

Narotzky and Besnier (2014) distinguished two forms of economy, one based on capital accumulation and another centred on *values and hope* for living. They define this latter as *economy*- 'the forms of

human interaction that make different kinds of resources available, although often unequally, through social relations of production, distribution, and consumption' (2014, 1). Here Narotzky and Besnier reveal *social investment* values in economic interaction. Social relationships, trust and mutuality as moral economy are also central to studies of economic dynamics within households (Näre, 2011; Kea, 2013; Galt, 2013; Ripoll, 2021). Näre's study of migrant and domestic care relationships in Naples, Italy (2011), argued that moral economy norms embody highly *personalised* relations characterised by *unwritten moral contracts* based on *negotiations*, and shared duties that depend on gender and cultural intersections (2011, 401). Gendered and cultural codes are a significant element in shaping intrahousehold moral economy centred on negotiations and labour redistribution, such as in kinship-based *labour cooperation* between landowners and the poor family members in Nicaragua's Matagalpa Highlands (Ripoll 2021).

Moral economy is also conceptualised as collective norms that guide exploitation of *social goods* and *common goods* (Arnold, 2001; Sayer, 2004; Mauritz, 2014). Arnold critiqued the dominant moral economy account of resistance embedded in pre-market society. He used water as an example in the Southwest United States and rice in Japan as *social goods* that provide deeply valued identities and relationships for a collective action (2004, 91). On the other hand, Sayer examined the relationship between moral order, economic practices, and *social goods*. He opened the discourse to all forms of social exchange, including market/non-market, embedded/disembedded, formal/informal through cultural-political-economy analysis (2004, 2). Like Galt's and Ripoll's *double-sided* moral norms, Sayer acknowledged that some moral economy relationships *'might be deemed immoral, or as domination disguised as benevolence and fairness'* (2004, 2). However, the same relationships based on moral norms and cultural ethics could produce *'unprecedented economic responsibilities for and towards others'* (2004, 12). Building on Arnold and other theoretical framings, Mauritz posited that moral economy is a system of practices that guide people's commitment to the ethos of common goods for long-term social sustainability (2014, 2).

The idea of the moral economy is also used to recognise ethnic identities, nationalism, belonging, and national claims (Berman et al., 2016). They defined moral economy as an '*element of culture (customs, beliefs and practices) that normatively regulate and legitimise the distribution of resources such as wealth, power and honour or status in society*' (Berman et al., 2016, 4). The emergence of a politicised ethnicity is suggested through a moral economy lens of belonging, national claims and distribution of political status and resources (Lynch, 2011; Hughes, 2016; Hunter, 2016).

The moral economy debate could not be complete without highlighting reciprocity, gifts, and redistributive practices (Mauss, 2002 Weissner, 1982; Cashdan, 1985; Cheal, 1989; Yan, 2012),

sometimes framed as an 'economy of affection' (Hyden, 2007). Anthropological accounts often used gift economy and reciprocity interchangeably (Mauss 2002, Sahlins, 1972). As cited in Yan, Mauss argued that gift exchange is characterised by an obligation of giving, receiving, and returning (2012, 4). However, unequal relationships often emerge as the givers accumulate prestige while the recipient becomes debtors until they return the gift (Narotzky & Moreno, 2002; Yan, 2012). Cheal elucidated the 'myth' about the gift economy by highlighting that the gift economy is not only a characteristic of ancient traditions or insignificant in a capitalist context, and the gift economy is moral (1989, 5). Cheal contends that gifts sustain kinship and friendship relationships due to moral and emotional values attached to the gifts. Yan (2012) also frames the moral economy around gift and reciprocity. Yan elucidated two forms of gift, ceremonial- given on holidays or in a rite of passage, and non-ceremonial as a general exchange for expression of gratitude or extending help (2012, 1). Single individuals could exchange the ceremonial gift, or it could be shared collectively as the case of bride-wealth in many societies. Yan acknowledged the unequal, gendered power relations that emerge from vertical giftgiving between clients and patrons, especially among non-western societies. As this brief review shows, the idea of moral economy is associated with collective norms and values embedded in pre-and postmodern engagement with the capitalistic market. Moral economies have been seen to be the spur for resistance and rebellion, as well as collective solidarity around class, gender, and other ethnic identities. Moral economies are also central to the redistribution and sharing of resources and labour as well as widespread practices of gifting and exchange. The literature shows that moral economies are not confined to pre-capitalist 'traditional' societies of the past but are essential to all settings today, both in the North and the South.

In sum, moral economies foster solidarity, reciprocity and redistributive norms, always stratified according to varied dimensions, but such practices help guide sharing of resources between diverse social groups, cultures, and institutions. The values and norms central to moral economies are embedded in different cultures, sometimes influenced by institutions (political, economy, religion), gender, and forms of modernity due to changing times. Following this literature, this thesis contends that moral economy is a fundamental tool to survive uneven resource access through redistribution, it assists in investment in social relations for future security, and it affords livelihood protection through collective norms, which help in confronting uncertainties generated by variable conditions. I now turn to the understandings of moral economy in pastoral settings of East Africa.

Ideas of the moral economy have been touched on by nearly all the ethnographic accounts of pastoralism in East Africa, but often in a fragmented way and focusing almost exclusively on livestock redistribution, mutual assistance, and reciprocity (Torry, 1973; Spencer, 1973; Dahl, 1979; Potkanski, 1997; Moritz 2013). Redistribution is assumed to be undermined by integrating pastoral livelihood into

a market economy and is potentially declining and eroding (Ensminger 1992; Schultz 1998; Bollig 1998; Lybbert et al., 2004; Huysentruyt et al., 2009; Hurst et al., 2012). Furthermore, Swift 1(989:49) mentioned that *'break down in the moral economy and abrogation of claims by the government, are a crucial cause of vulnerability'*, meaning that the moral economy has been eroding or breaking down, leading to pastoral vulnerability. To Swift, this breakdown is caused partly by the governing institutions that affect people's access and entitlement to resources for survival.

Equally, Ensminger (1992) maintained that traditional institutions for mutual help are diminishing due to continued and increasing economic and social stratification among pastoralists. This finding is supported by Dahl's 1974-1978 study among the Borana of Northern Kenya. Further, Bollig (1998, 153) argues that reciprocal exchange among pastoralists in Northwest Kenya has been declining. This decline is straining solidarity networks, turning egalitarian social networks into patron-client relationships of unequal reciprocity. Bollig, further adds that wealthy livestock owners found alternative investment ventures, therefore, invest less in the social relations that support moral economies. Despite these dynamics, others however argue that the moral economy remains central in responding to impoverishment and shocks to livelihoods (Bollig, 1998; Oba, 2001; Hoddinott et al., 2009; Moritz et al., 2011; Iyer, 2016).

For example, Iyer's work in the social network among men and women in managing risk in Uganda's Karamoja provide a contemporary perspective on how the moral economy is transforming with changing livelihoods (Iyer, 2016). The huge literature on pastoralism in East Africa highlights a wider variety of pastoralists' moral economy practices that have persisted over time, even if their forms have changed. These include the form of social security networks and asset transfers (Dahl & Hjort, 1979; Campbell, 1990; McCabe, 1990; Ensminger, 1992; Bollig, 1998; Oba, 2001; Mortiz et al., 2011; Hao et al., 2015); reciprocity and gift-giving systems for pooling risks (Cashdan, 1985; Potkanski, 1999; Lesorogol, 2009; Hughes, 2016; Aktipis et al., 2011); traditional women's rotational exchange systems (Pollard et al., 2015; Khalif & Oba, 2018; Anbacha & Kjosavik, 2018); credit arrangements centred on trust and social norms (Hoddinott, 2005; Galvin, 2008; Lyon & Porter, 2009; Nori, 2010) and social insurance in the form of 'Iddir' (Dercon et al., 2004; Aredo, 2010). For the Borana pastoralists, the moral economy practices are rooted in the customary institution of gada and further reinforced by the religious practices. The following section present a brief summary of Borana ethnography and the significant of Gada in reinforcing the moral economy relationships based on kinship, marriage network and age-set alliances.

2.5 The Borana Ethnography and Moral Economy

The Borana are the Cushitic people in the wider Oromo-speaking ethnic group found in the Semi-arid region of Southern Ethiopia's Dirre and Liben zones and part of Northern Kenya. Borana is the '*angaaf*'

first-born of the wider-Oromo-speaking group across Kenya and Ethiopia (Legesse, 1973). Through the colonial process of state formation and border demarcation, ethnic groups, including Borana, were territorialised in distinct geographical locations (Schlee, 1998). Today, the Kenyan Borana inhibit part of Marsabit (Saku), Isiolo (Waso) and Tana-river (Orma) together with their affiliate groups such as Sakuye and Gabra. Schlee has documented how some Gabra and Sakuye were assimilated into the Borana ethnic group through various rituals, coercion, and cooperation (Schlee, 1998). Despite geographical separation and divergent political experiences, the Kenyan and Ethiopian Borana remained connected through the '*Gada'* institution and kinship relations.

The Gada institution is the foundation for the social, political, cultural, and economic blueprint that governs all spheres of Borana's life. In his classic book '*Gada: Three Approaches to the Study of African Society*', Legesse summarised Gada as '*standing for the whole way of life*'. He denoted three definitions for the Gadaa. First, it signifies the eight-year era through which the Gada leader stays in power. Secondly, it refers to a specific grade through which Gada class are initiated into leadership ranks, and thirdly, it denotes a whole sum governance institution that guides the lives of all the adherents (Leggesse, 1973, 81). Four significant institutions govern the activities of Gada. This includes the leaders (Abba Gada) who assume office after every eight years. The Gada class (Hariyya) is a group of young people with a similar rank who passes through various initiation phases as warriors. The spiritual leaders (Qaalluu) conduct rituals and ceremonies for the Gada grades and connect people to the spiritual being Waaq. Finally, the general assembly (Gumi Gayo), the supreme decision-making gathering held every fourth year of the Gada period (Legesse, 1973; Bassi, 2005; Sirna, 2012).

The Gada system is primarily practised in its entirety by the Borana of Southern Ethiopia and some Oromo-speaking groups like Gujji (Legesse, 1973; Sirna, 2012). On the contrary, the Kenya Borana have outlived some significant parts of Gada practices and rituals (Schlee, 1998; Kochore, 2020). However, the lives of Kenyan Borana are still governed by the rules and regulations that were laid in the Gumi Gayo assembly of the Gada institution. The Gumi Gayo assembly is the most significant segment of the Gadaa system that touches on the lives of every Borana despite class-based statuses. It serves as the governing institution that solves significant crises and conflicts that could not be resolved at the clan level. It is the institution for passing new laws and regulations that guide inter-communal resource use and governance and settle conflict, including promoting communal cohesion (Bassi, 2005; Bedada, 2021; Biratu & Kosa, 2020; Debisa & Lu, 2022). Numerous studies praise the Gada system as an extraordinary institution that has lived through turbulent democratic times; however, it still suffers from male dominance and female participation is limited to specific context (Legesse, 1973; Baxter, 1978; Bassi, 2005; Sirna, 2012; Hinew, 2013; Aliye, 2019). The Kenyan Borana adhere to Gada practices by participating in Gumi Gayo assemblies, while the Kenyan Borana politicians seek blessings

and approval from the Gada leaders. Equally, the locals are seen expressing the significance of Gada in political songs during election campaigns (Kochore,2020).

The breakdown of Gada practices among the Kenyan Borana is due to the establishment of the nationstate and colonial border demarcation that promoted tribal boundaries through what Schlee termed 'territorialising' ethnicity (Schlee, 2013). As for the Isiolo Borana, the community I studied, colonial administrators moved them from Wajir and settled them near the Ewaso-nyiro river, hence their name 'Waso Borana'. The Waso Borana interacted with Somali- traders in major administrative centres, including Isiolo and Garbatula. These interactions influenced the lives of Borana ethnic groups manifesting into 'somalization' and religious diversification (Baxter, 1966; Aguilar, 1995). Since then, the Waso Borana converted to Islam, slowly outlived the generational-based Gada rituals, class and assemblies, and adapted to Islamic culture. Through this process of social change and assimilation, the Borana opted to politically support Somalia in a bid to annex Northern Kenya and form part of the Somalia State (Lewis, 1966). These events resulted in a famous Shifta war of 1963-1969 between the Kenyan forces and the joint guerrilla fighters, leaving the Kenyan Borana with significant livestock loss and political subjugation (Arero, 2007; Whittaker, 2014; Khalif & Oba, 2013).

Although the Kenyan Borana experienced substantial social and political change, the customary Gada ideology remains paramount in their social organisation, kinship association, and resource governance. Kinship is the defining identity to access communal resources, family support and protection from the enemies in Borana land. The kinship classification provides the foundation of how Borana people establish different bonds based on blood relations (fiita), friendship (hariyya), and in-laws (sodda). The system of Borana kinship is categorised into the primary tribe (gosa Borana), followed by the two main moieties (Sabbo and Gona) and, finally, the sub-moieties (milo-mogole). The milo-mogole sub-moieties are further categorised into a house (balbala) and the smallest unit as warra (family) (Legesse, 1973). There are fundamental rules that govern kinship and marriage relationships among the Borana. For instance, in a marriage alliance, an individual from the Sabbo moiety is only allowed to marry from the opposite Gona moiety (Baxter, 1996). This rule ensures a robust in-law (sodda) relationship with the opposite moiety, hence a continuous cycle of friendship, co-existence and collaboration. As shall be presented in chapters five, six and seven, kinship and identity are central in reinforcing the redistribution of livestock to respond to unpredictable events such as livestock raids.

Studies have advanced the significance of identities among the broader Oromo speakers through concepts like *orrommumma*, *harriyya*, and *borantiti* as a collective cultural identity and consciousness (Baxter, 1994; Schlee, 1989; Aguilar, 2011; Jalata, 2007). The Borana fundamental ideals, such as solidarity, generosity and having Borana welfare at heart, enmeshes Borantiti (being Borana). Borantiti

is revealed via participating in collective activities to protect the livelihood of fellow Borana, providing companionship and food to the Boraana in need, assisting in watering the animals and returning stray livestock to a safe abode among other virtuous ideals. Although individuals with a high degree of *borantiti* enjoy the prestige of being a 'man/woman of the people' and earn significant reputations and possibly access power and authority, *borantiti* does not always equate to power and politics; it enmeshes having Borana plight at heart, promote cohesiveness and communal solidarity. During the communal clan redistribution ceremonies, the elders assess the beneficiary by evaluating the degree of *borantiti* an individual possesses. The identity among the Waso Borana is further reinforced through Islamic principles of neighbourliness and being a guardian of fellow Muslims through sharing resources in the form of Zakat (Islamic tax) and Sadaka (alms). All these identities are crucial in responding to calamities and crises in pastoral settings by facilitating redistribution and collective solidarities, a key moral economy principle.

Notably, Gada institution regulate resource redistribution and governance through vital institutions like *buusaa goonoofaa*- cattle redistribution, and collective *dedha*- grazing block (Tache, 2008; Cormack, 2016). *Buusaa Goonoofaa* is a livestock redistribution structure often chaired by clan leaders. It deals with livestock transfer from the wealthy herd owners to the *qolle* (stockless), especially in the aftermath of calamities. As shall be presented in chapters five, six, seven and eight, *buusaa goonoofaa* is strongly evident among the Waso Borana pastoralists. The individual vetting through clan and lineage gatherings and decisions on the number of animals to be transferred remain similar to the customary practices enshrined in Borana culture guided by Gada rules. However, significant interaction arising from the emerging social philosophy of pooling resources through *Haraambee* is slowly replacing and modified the traditional operation of *buusaa goonoofaa* among the Waso Borana. As chapters seven and eight show, pastoralists continue adapting to the growing demands of town and urban settings. This adaptation often results in modifying customary institutions, such as *buusaa goonoofaa*, to suit the new life and rising need for schooling, livelihood diversification and other social reproduction events in the town setting.

In summation, although the Kenyan Borana have outlived the substantial *Gada* rituals and generationbased age set, the ideals of *Gada* continue to guide a proportionate part of their pastoral life, including redistribution and resource governance, lineage and friendship relationships and conflict resolution, thereby enhancing cohesiveness between the communities. These ideals of cohesiveness and resource sharing constitute moral economies to survive turbulent pastoral production. Adaptation to new political economy, religion, and modern life has transformed the Borana customary institutions and practices, including *Gada* systems and moral economy relationships. Despite the changes, Borana pastoralists continue to adapt and thrive through investment in new social connections, collective solidarities, institutions and redistributive moral economies as augmented by the ideals of *borantiti* (being Borana) and the survival needs in the increasingly unpredictable pastoral production.

2.6 Conclusion

Moral economy is a broad concept associated with practices of redistribution, sharing, solidarity and resistance. Going beyond a narrow definition, moral economy encompasses an array of livelihood based social and political relations; it necessarily suggests questions of class, gender, generation and identity. As discussed in relation to pastoralism in East Africa, the idea of moral economy has much relevance, and way beyond male-centric stock sharing. It is in this light that the thesis will explore how moral economy practices have changed and how they make a difference to tackling some of the main challenges of pastoral livelihoods in Isiolo, Northern Kenya, whether responding to drought, mobilising labour, or addressing conflict. I contend that, like other livelihood interventions of water provisioning, social protection, and humanitarian assistance, pastoralists' moral economy is equally central, but more flexible, and appropriate in living with and off uncertainty, although stratified.

My analysis of literature on the moral economy in pastoral areas of East Africa revealed that, although extensively mentioned, the concept has not been thoroughly examined in relation to the broader moral economy debate discussed in the literature reviewed earlier. In East African context, moral economy practices are assumed to be declining, especially around redistribution of livestock, while other studies mentioned above contend that the practices are adapting to the changing pastoral context due to shift in structural factors. To this end, it is worth exploring how moral economy practices have changed in distinct pastoral settings, for diverse pastoralists and under what conditions. Among the pastoralists of Northern Kenya, Dahl (1979) noted inequality and power relations between the giver and the stock recipient, with the recipient having to depict political allegiance or provide labour to be given stock.

Taking the broader view of moral economy, as defined above, there is a need to go beyond stock transfers as the only element of moral economy and observe the daily practices among the pastoralists such as trust, co-operation, collective defence, and social networks between groups around a range of productive and survival activities. In this study, the aim is to take this wider view and offer a more profound, culturally rooted, transforming, collectively generated set of everyday moral economy practices and assess how they contribute to the way pastoralists survive, thrive and respond to uncertainties in the past 45 years.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the methodology for answering the research questions outlined in chapter one. Dahl's ethnographic research among the Waso Borana that produced the book '*Suffering Grass*', which I briefly highlighted in chapter one, provided an excellent starting point for my research. While designing my study, I thoroughly read the book to understand the communities' background and later visited Dahl in Stockholm. Dahl conducted her fieldwork (1974-1975), in a time when pastoralism was undergoing significant political and economic changes, as shall be presented in chapter four. Combining the book's rich ethnographic account of the Waso Borana and the availability of 'development' reports undertaken by several organisations, including ILCA and the Government of Kenya (Dahl & Sandford, 1978; Swift & Omar, 1992), I was able to develop a baseline for my studies.

As explained before, I adopt a longitudinal research design (Murray, 2001; Bagchi et al., 1998), centred on a case study approach. The longitudinal study combines past studies, notably *Suffering Grass* (baseline), with historical recall interviews and ancillary data, including archival materials (mid-line), to produce a historical dataset. The empirical findings from the 2019-2021 fieldwork emerged through multiple methods, and they provide insight into evolving uncertainties and moral economy practices today. Various processes and methods were involved in deciding the study's design, selection of the study sites and study population.

This chapter first presents the background processes of reading the book, meeting the author, and settling in Isiolo. Secondly, it illuminates sampling procedures and the methods that generated primary and secondary historical data that informed a longitudinal approach through participatory event mapping and archival research. Thirdly, it highlights empirical data collection methods through indepth narrative interviews, life histories and key informant and semi-structured interviews. Fourthly, it presents the use of photo-voice as a method to understand how people experience and manage uncertainties via moral economy practices. The chapter also highlights a feedback seminar and photo-voice exhibition workshop to share the findings with the broader audiences and research participants in Isiolo and Kinna. Finally, the chapter outlines the study's limitations, ethics, and positionality.

3.2 Reading the book 'Suffering Grass' and Meeting the Author

First, reading and deeply engaging with the book *Suffering Grass* has been an essential step in understanding the broader context. Secondly, a visit to Stockholm to have a one-on-one discussion with Gudrun Dahl, the author of the book, in 2019 was instrumental. I got some raw data from her, such as the photos of places she visited, a list of research assistants, research approaches, and some papers. The photos shared by Dahl formed a significant part of the longitudinal stories of the photo-voice magazine

that we produced after our fieldwork. We also discussed practical issues around the research topic, and finally, she reviewed my research outline paper and provided great comments and suggested several readings. She was super excited that a young insider anthropologist was coming after 45 years to trace changes among the communities she studied in 1975. The photos below show a visit to Stockholm to meet Dahl, while the second photo shows Dahl's field assistant, whom I visited in Kinna.



Picture 3.1: Tahira and Gudrun Dahl, Stockholm Source: Author



Picture 3.2: Tahira and Adan Fugicha¹, Kinna Source: Author

¹ Research assistant to Dahl in 1974

3.3 Settling in Isiolo

In September 2019, I moved to Isiolo together with my family, rented an apartment in Isiolo town, and set up small rental rooms in Kinna and Merti. I reported to the County Commissioner and the County government of Isiolo to get a local license and permit for the fieldwork. In the same period, I hired a driver and organised my itinerary and logistical arrangements. Within the same month, I travelled to Kinna and Merti to meet the field facilitators and relevant authorities, including chiefs and elders, both for courtesy and to establish rapport. The field facilitator in Kinna was Mzee Badada, an elder whom we met first in October 2018 when I visited Kinna with the project team. In Merti, I worked with Mzee Bidu, a 65-year-old trusted elder known to facilitate local *d'aawa*², and he is known in all the villages within the area. As a result of being introduced by these two facilitators to elders, key informants, and authorities in the area my transition to the study sites was very tranquil.

3.4 Sampling the Study Sites and Study Population

In her study, Dahl selected various 'camps' and 'wells' to study pastoral livelihood and subsistence. Some of the camps she studied were Dadach Lata, Bibi, Duse, and a large sedentary camp in Ewaso-Ngiro (Dahl 1979, 266). I proposed to apply the same approach for site and sample selection to have a somewhat 'repeat' study. Although I succeeded in site selection (Kinna, Bibi, Dadach Lata (now Korbesa), camp selection was not possible. This is due to the long-time lapse, the mobile nature of pastoralists and growth and establishment of permanent settlement in centres and villages, which were not there in the 1970s. Settling for specific sub-sites within these places was not a straightforward process. I discussed with Dahl on how she sampled the study sites and later I followed up with Dahl's field assistants³ to revisit the sites and find possible participants in Dahl's study. It took me nearly three months to decide on the specific sites within the massively transformed camps, now pastoral villages including 'urban' centres. Finally, I succeeded by setting up a contrast between an 'urban' pastoral context and a 'rural' (more traditional) site within the two major study areas of Merti (near Korbesa) and Kinna. In Kinna, the research focused on Kinna town (urban) and Bibi (a camp outside the town), while in Merti, I focused on Korbesa and Lakole as more traditional pastoral settings, with Korbesa being a somewhat more substantial settlement.

²Institution for spreading knowledge about Islam



Picture 3.3: Bibi's Assistant Chief and the Researcher Counting Camps in Bibi Credit: Sadam Guyo Wada

I sampled the study population during participatory community mapping events with elders at each site. In this exercise, the number of households was identified through local chiefs, 2019 census reports and elders' knowledge of the region. For instance, the total numbers of households in specific study localities were: Bibi, 16; Kinna North, 8,596; Korbesa central, 2,020; Lakole, 551 (KNBS, 2019). Since it is impossible to rely on census reports for sampling, I undertook participatory community mapping with elders, chiefs, and location committees. In each site, we identified 'wealthy' (*duurees*) herd owners (defined as individuals who either own all the three livestock species camel, cattle and shoats (sheep and goats), or a herd exceeding 100 camel/cattle or flock exceeding 200 shoats. Female-headed households (defined as households managed by females either as single mothers, widows, or female livestock managers, overtaking customary roles from their male counterparts).

Young herd owners (defined as male and female below age 40 who own and manage livestock), and finally, herders with the bare minimum number of livestock to survive (defined as individuals with herds of less than ten cattle or less than 40 small stocks as the only subsistence livelihood). In addition to livestock holdings as the measure of wealth, we also acknowledged other wellbeing indicators, including diversified livelihoods, number of children sending remittances and rental premises owned in major towns. The community mapping exercise also produced lists of hired herders and people involved in other livelihoods complementary to pastoralism. These lists provided participants in semi-structured livelihood interviews to help understand the ways pastoral livelihoods are transforming and the forms of moral economy relationships that emerge to help people live and thrive in changing pastoral settings.

At each site, a list of at least thirty names was produced through the community mapping events, with the often-contested discussions helping me understand the local social, economic, and other categories important in differentiating the population. After that, I purposively sampled households according to wealth, age, and gender and triangulated the results with key informant interviews. I tried to select six households from each site across these categories. This was assisted by focus group discussions. I tried to avoid biases and selected both vocal and reserved participants in addition to the suggested names through key informant and the mapping events. In the end, the final study sample for the in-depth biographical and narrative interviews was 24, 12 from Kinna and Merti, respectively. The list that summarises details of the twenty-four participants is given in appendix XI. The entire site and household sampling exercise took place from September to November 2019.

After setting up the study sites and the potential study population, I combined multiple methods to generate data to answer the research questions. Although I only selected twenty-four households for an in-depth narrative interview, various interviews, discussions, seminars, and participatory approaches enriched the findings involving multiple research participants. In summary, the methods used include historical event mapping, key informant interviews, focus group discussions, informal chats, photovoice, and feedback seminars, as tabulated in table 3.1 below while the details about the number of interviews and the respondents' background are presented in Appendixes II to IV. Subsequently, the section that follows briefly outlines these methods.

Name	Numbers conducted	Places	Total Participants
In-depth case studies	24	Kinna, Bibi, Korbesa, Lakole	24
Semi-structured	24	Kinna, Korbesa	24
livelihood interviews			
Key Informant interviews	24	Isiolo, Merti, Kinna, Saleeti,	24
		Duse	
Elite discussion and talks	23	Stockholm, Isiolo,	23
		Nairobi, Online, Kinna, Merti	
Community and event	6	Merti, Saleeti, Kinna, Lakole,	37
mapping		Nairobi, Korbesa	
Focus Discussion	3	Lakole, Kinna, Korbesa	28
Photo-voice	3	Kinna, Merti	14
Feedback seminars	2	Kinna, Isiolo	22

Table 3.1: Summary of the Methods, Number of Participants and Interview Places

3.5 Longitudinal Research Approach

3.5.1 Primary Data Generation and the Baseline Event Reconstruction

The book Suffering Grass provided a good baseline study for a longitudinal framework. Equally, as

presented in chapter four, 1975 is a useful baseline for analysing Borana pastoralists' livelihood transformation. Immediately after the *Shifta* war (1964-1969), there was a severe drought and movement restrictions decimated herds, posing significant uncertainties, as presented in chapter four. Forty-five years after those events, livelihoods, forms of uncertainties and responses have both changed. This section highlights the processes of recollecting historical events that intensified pastoral production, resulting in diverse forms of uncertainties. First, the book *Suffering Grass* summarises the 1975 historical background of uncertain events, the response to these events, and variants of moral economies. This is followed by key historical participatory event mapping with elders across the sites. The exercise produced a series of events that bred fears, uncertainty, and opportunities for pastoral production between 1975 and 2020 among Waso Borana pastoralists. Historical event data was used to develop a calendar of drought events both for Kinna and Korbesa, and these events were instrumental for reference in individual interviews. Examples of such events will be presented in chapter four, summarising key drought moments between 1975 and 2020.

Key informant interviews with elders, pastoralist elites, government officials and Dahl's research assistants followed the historical event mapping. These interviews were instrumental in triangulating and clarifying contested years of events and tracing the most affected individuals for a deep narrative interview. Later, I conducted focus group discussions at each site with male and female pastoralists, notably from the stratified clusters of the study group. This exercise enabled me to select some potential participants for deeper life histories and case studies in addition to the randomly selected households from the mapped community structure.



Picture 3.4: Women Focus Discussion, Lakole, 2020 Credit: Ahmed Wako



Picture 3.5: Historical Event Mapping, Merti, 2019 Credit: Ahmed Wako



Picture 3.6: Historical Event Mapping, Kinna, 2019 Credit: Weli Perera

3.5.2 Secondary Data Production and the Mid-Term Stories

In addition to the fieldwork-based empirical data, the research employed archival data generation from different sources, including government offices, national archives and project reports from NGOs and local organisations. This involved visits to the livestock and agriculture departments, the National Drought Management Authority, Kenya Red Cross Society Isiolo branch, Meteorology department, Merti Integrated Development Project, National Bureau of Statistics, Isiolo peace link office, Women enterprise funds' office, and NGOs such as World Vision. I conducted key informant interviews, some semi-structured and others more casual. I have presented the summary of all interviews conducted across the fieldwork in appendix II to VII. From the department of livestock and agriculture, I analysed

trends in livestock development projects from 1975 to 2020 with three key informant officials involved in livestock projects since the early 1980s. This supplied trends in success, failures, and transformation of livestock support investment in Isiolo. The result helped triangulate various responses to uncertain events through external support projects narrated by research participants in diverse sites. Ibrahim Jarso, an officer at the Mercy Corps office, supplied different topographic maps, specific site locations and key resource areas of Isiolo, which enhanced the research data.

Unfortunately, my visit to the national archives was interrupted by Covid-19 measures, with the archives shut for an extended period. However, the collection of district development plans bulletins from the government libraries prior to Covid-19 restrictions and some online collection offered the region's basic administrative and infrastructural development understanding since 1975. Further, the recent national census of 2019 reports provided the demographic background of the study area. Livelihoods research and development reports produced every four years by every county since 1960s as the district development plans and recent, County integrated development plans, since 2013, also bridged the gap in accessing the archival material from national archives. Equally, colleagues who have researched Isiolo shared their archival collections, which were instrumental in specifying background about the study areas. Finally, various books, papers, briefings, doctoral dissertations, and project reports of the region, provided great insight into the region's mid-term stories.

I am aware of challenges of using secondary data collected for different purposes (Murray, 2001; Bagchi et al., 1998). I have tried my best to keep consistency in sourcing data from diverse sources and applied data triangulation and participant triangulation through follow-up key informant interviews and reviews. The research questions are kept broad and open to capture the critical moments of uncertainty for pastoralists. This research employed a 'retrospective' approach (Murray, 2001) to explore pastoral livelihoods trajectories over the past 45 years. I used the concept of 'livelihood trajectories' as employed by Bagchi et al. (1998), which is defined as:

'The consequences of the changing ways in which individuals construct a livelihood over time. So, the life history (an individual's own `story' of the changing livelihoods constructed by herself albeit not under conditions of her own choosing) becomes a central concept and component of the research methodology. (op.cit., p. 45)

Livelihood research tends to be most effective if different methods are combined (Murray, 2000; Scoones, 1998). As such, combinations of diverse qualitative techniques were used. The research relied on in-depth case studies, key informant interviews, semi-structured interviews with diverse livelihood groups in pastoral areas, photo-voice, and feedback seminars to generate stories about pastoral livelihood, uncertainty, and the moral economies. The next section briefly outlines some of these methods.

3.6 In-depth Household Level Interviews

I selected six households from each site using the stratified lists explained in the sampling section, which was developed through community mapping with elders, totalling 24 in-depth household level interviews. These 24 interviews provided diverse household level cases for a deeper understanding of everyday uncertainty, moral economy, and livelihood challenges. Among these, some households provided detailed life histories and trajectories of their livelihoods, thereby enriching the findings. The challenge in this exercise was difficulties in finding some participants due to seasonal movement, thus requiring repeated visits and follow-ups. I tried following up with participants in various abodes, however, in some cases, the respondents were brought to me by motorbikes due to the difficulty in accessing certain insecure places. The interviews were primarily relaxed, in situ, open-ended, and some lasted for nearly 6 hours including breaks, although others were concise.

At the beginning of each interview, I provided a thorough explanation of the context and the 1975 background by showing the books as well as sharing some stories from the Dahl's book, *Suffering Grass* and emphasising the importance of Waso Boran history for global lessons. The participants felt relaxed, and some got excited that one of their own was writing about them. The following excerpt provides an example of instances of convincing busy pastoralists to talk to me: One morning at Baba OK's residence while we were having interview, Baba OK looks at his watch and says,

'I do not have time; I need to go and oversee 'obaa' (watering the livestock). And he follows it up, 'you should pay my motorbike so that I do not miss on the obaa, you know whenever there are NGOs that come here, I am called for a day, they pay me KSHs 2000 (\$20) for that day because it is a big sacrifice, leaving my livelihood and coming to stay away the whole day'. I respond, 'I am your daughter, I am here all the way from London to learn your precious knowledge and to document it. For instance, if the sahabas (prophets' companions) did not write about the stories about our prophets would we have learnt this religion? And now, as you know all our children go to school and few people are inheriting traditional knowledge, and I am here trying to document what happened in the past 45 years, including how pastoral livelihood is operating. Isn't it precious? He smiles and says, 'absolutely true 'jiru' (life/dear), I will teach you everything and make sure you pass your exam, I will make sure to give you all the honest information so that you keep our history alive³.

3.7 Diverse Livelihood Groups' Semi-Structured Interviews

Aside from the 24 case studies, I conducted 24 semi-structured livelihood interviews with diverse groups involved in pastoralism and complementary livelihoods in the pastoral area. These include hired shepherds, motorbike operators, women's groups, charcoal producers and agro pastoralists, focusing on how they interrelate with pastoral production. These interviews centred on the livelihood threats that

³ O. K, Male, Lakole, 2020

affected non-pastoral production and how they rely on moral economies to survive. Themes covered in these discussions, including exchange of herding labours by the shepherds, joint drilling of wells, provision of care during accidents, livelihood saving clubs, and collective management of social reproduction events, including weddings, funerals and educational needs are presented in various cases across chapters six and seven.

3.8 Photo-Voice Method

I used the photo-voice method to understand the variations in uncertainty and pastoral production opportunities among young and older generations. Photo-voice is a participatory method where the participants generate knowledge of a given phenomenon or circumstance through their voice using photos. The process happened in three phases due to the Covid-19 restriction between March and October 2020.

The first phase involved an introduction to elders in early February, and their narrative was captured through my camera and presented with quotes they provided during the exercise. The second photo-voice moment was with youths in Kinna, where I provided training and left them with phones and cameras. The participants shared their photos and narratives through WhatsApp because we could not convene a face-to-face discussion due to the Covid- 19 lockdown. I conducted a final photo-voice in Merti and repeated it in Kinna with young girls and boys at both sites. The themes of the photo-voice revolved around change and uncertainties, the plight of youths, and the moral economy in pastoral production. The outcome of the photo-voice is presented on the PASTRES Seeingpastoralism.org website. The results were also presented at international conferences such as CoP 26 in Glasgow, at European University Institute in Florence, and at a PASTRES programme workshop in Sardinia. I have also exhibited the photo-voice magazine in Isiolo through a seminar I co-organised with other PASTRES team in Isiolo in March 2022 where various stakeholders, government ministries, NGOs, and CBOs participated.

Combining Dahl's photo with what I gathered from the field provided a clear picture of pastoralists' livelihood trajectories and development. Although with challenges such as broken phones and Covid-19 disruptions, photo-voice proved instrumental in engaging a diverse group of people to explain what is uncertain about livelihoods and the role of the moral economy. For instance, some participants shared a footrail of a cheetah to describe the rising wild-animal attack as a form uncertainty they live with. Equally, another participant shared a photo of collective solidarity to save a fallen bull from a well. All these complimented the data collection processes and reduced power gap between the researchers and the respondents.



Picture 3.7: Photo-Voice Team, Merti, 2020 Credit: Ahmed Duba



Picture 3.8: Photo-Voice Team, Kinna, 2020 Credit: Ahmed Duba

3.9 Feedback Workshop

At the end of fieldwork in October 2020, I organised a feedback workshop in Kinna where I gathered all the available research participants to share my findings and sought their feedback. I got good comments, insights, questions, and feedback to enrich my findings. I also organised a second feedback seminar and photo exhibition in Isiolo town in March 2022. The seminar was well attended, with fascinating questions and discussions emerging, broadening my scope in rethinking pastoralism, moral economy and social protection policies in the pastoral context under uncertain conditions.



Picture 3.9: Research Participants in a Feedback Seminar, Kinna, 2020 Credit: Ahmed Duba



Picture 3.10: Exhibition and Feedback Seminar, Isiolo, 2022 Credit: Author

3.9.1 Limitations of the Study

The principal methodological challenges faced were difficulty in accessing secondary data (1980-2000), especially during the Covid-19 lockdown and closure of archives and national institutions. However, through reliance on organisational datasets, census reports, and archival sources from researchers in Isiolo, I circumvented the challenges. Furthermore, relying on different secondary data sources affects the reliability of data. Nevertheless, caution and different level triangulation is applied to overcome this. The sampling process is not straightforward either because of the nature of pastoralists' territorial organisations and increased population, different from the earlier pastoral population.

Dahl (1979) conducted classic ethnographic research in her study and did not have a sample frame. The lack of an exact sampling procedure posed a significant challenge in deciding on the study sample for my follow-up; however, four sites were chosen after frequent deliberations and discussions with supervisors, key informant interviewees, and field facilitators.

Further, Covid-19 lockdown measures interrupted my stay in the field, and I moved back to Nairobi both for respondents' and my safety. However, these periods of lockdown between March and August 2020 were used to sort data, transcribe interviews, and conduct follow-up telephone interviews, including photo-voice, which continued remotely. I maintained an excellent virtual connection with several research participants throughout this period and wrote about their experiences with Covid-19 measures in a blogpost (Mohamed, 2020). I also got an opportunity to travel to Southern Ethiopia to attend the *Gumi Gayo* gathering (Borana political gathering held after every seven years.) I met prominent Borana elders, *abba Gada*, and traditionalists from this event. I used this chance to explore the meaning of uncertainty in Borana's customary practices. I also wrote a blog post comparing the perception of Southern Ethiopia Borana and Northern Kenya Borana on Covid-19.

Insecurity and frequent inter-ethnic ambushes along the road are common in this region, so strategic caution was considered throughout my fieldwork. I moved around with local elders/facilitators in the community, making my access and safety easy in remote areas. In addition, I altogether avoided movement at night and relied on my vehicle to move around.

3.9.2 Positionality, Ethics, and Reflexivity

The research adhered strictly to all the ethical standards and principles outlined in University of Sussex guidelines. I obtained a research licence from NACOSTI (National Commission for Science, Technology and Innovation) in Kenya. After arriving in the field, relevant permissions to access the field were sought from the Isiolo County government and the County Commissioner's office. I carried sufficient PASTRES postcards to share with authorities, respondents, and offices I visited to introduce the project.

Once in the field, I explained my research aims to facilitators, chiefs, and local elders to establish good rapport among the community. While with the research participants, I explained the principles of informed consent. All the participants agreed verbally after explaining the research purpose. Mentioning the follow up to the *Suffering Grass* book, I assured the participants that they could, at any given time, stop the interview and discontinue the discussion and that they could always change their decision to use photo/audio. I promised to securely store research data in a safe data storage system used for the research only. In presenting the data, due diligence is given to the confidentiality and anonymity of the informants (Cofelt, 2017), by using pseudonyms unless permission to use the name is sought and granted. I changed all the participants' real names into fictitious names for the 24 in-depth

narrative case study participants. I applied the changes to the first names of the participants, and on their second name, I just retained the first letter of their second name. For example, if the participant's name is Tahira Mohamed, I changed it into Fatuma, M. For the Semi-structured livelihood interview participants, I retained their first names and used the letters A, B, C and D as the initial for their second name. For instance, Mohamed Omar is written as Mohamed A. Finally, I retained their first names for the historical event participants and changed the second names to AA, BB, CC, and DD.

Although I am from the Borana region and speak a good Borana language, my identity is sometimes questioned. Every new person I meet first asks, '*Intal attin dubr gos tami*'? (Young girl, which tribe are you from?). This question got me scared during the early field access. Although I am married to a Borana, and my maternal family is Borana, my paternal name 'Shariff' gave me a different identity, which has been a liability for the research. I overcame this fear by using my third name, 'Mohamed', which does not signify any ethnic identity. I learnt a lesson that, even being an insider, there are great deals of challenges if the context involves volatile and ethnically sensitive communities.

Further, I changed my dress code from being an 'urban' girl to a more local context to not appear an outsider within my community. All this helped me overcome my fear, and I was freely integrated into the community, where people now refer to me as '*intal teen taa* researcher' (our researcher girl). Whenever elders discuss sensitive issues, I am told to take notes but not report; actually, I was able to attend the council of elders' meeting, which is never usually attended by women. My positionality of being Borana and deeper understanding of the Borana language, and my articulation to use Borana proverbs in diverse contexts helped me gain the confidence and trust of my respondents. Equally, using the book Suffering Grass to guide the respondents on how their livelihoods were reported in the 1970s and assessing changes and continuities between 1975-2020 provided an excellent participatory knowledge production platform. Being an insider anthropologist has been a great asset to the study. My anthropological training, skills of participant observation has been useful. I participated in substantial events, including weddings, fundraising, funerals, and meetings, all these events enhanced my embeddedness within the community.

The historical research approach eased power relations in knowledge production since I always referred to the 1975 baseline and the evolution of pastoralism and uncertainty from this period. As a 'learned' researcher, there was limited authority from my side to influence the knowledge produced because we were documenting historical information known only to the people themselves. People are free to share sensitive information because it is now just history. For instance, in discussing conflict and its responses, people were free to discuss how they mobilized funds to buy firearms, youths to fight, and strategies used to counter the current tensions between Borana and the neighbouring communities.

3.10 Conclusion

The chapter illuminated the methodological processes that facilitated a longitudinal research approach through a mixed-method—using *Suffering Grass* as a baseline to understand pastoral livelihood trajectories in relation to uncertainties and the role of the moral economy practices in confronting uncertainties. The chapter began by explaining sampling procedures, historical reconstruction events and various methods that aided in recording historical and contemporary data to answer the overarching research questions. Using the book *Suffering Grass* to elicit pastoralists' livelihoods in the 1970s through participatory methods, including photo-voice, enhanced a great relationship and rapport with the research respondents. Being born and raised in Borana, with a greater understanding of language, culture, and exemplary anthropological skills to conduct in-depth interviews, enabled me to conduct thorough ethnographic research.

In what follows, in Chapter 5, I establish pastoralists' livelihood, uncertainties and moral economy practices in the 1970s as documented by Dahl and complemented by historical interviews and secondary data. In Chapter 6 and 7, I present cases of contemporary moral economies in two pastoral areas, one - remote and another near urban. After that, I synthesise the findings in chapter eight, exploring how moral economies and response to uncertainties have changed since 1975, between remote and urban connected pastoralism and among social groups (wealth/age/gender).

CHAPTER FOUR: DYNAMICS OF UNCERTAINTY IN NORTHERN KENYA, ISIOLO, 1975-2020

4.1 Introduction

'Pastoralism is not a continuous/constant livelihood; you might have a full mona (livestock enclosure) in the morning, and in the evening, you might have nothing left; it is like a game where you do not know if you will win or lose⁴ (Hussein, D, 2019, Kinna).

Dryland pastoral production experiences unpredictable conditions such as drought, flood, labour shortages, market volatility and conflict. The variability generates a situation of unknown futures. As illustrated in the above quote, it is not easy to know whether the livelihood will end or continue flourishing in such uncertain conditions. To Hussein as quoted above, this variability is like a 'game', hence the importance of active, timely and strategic response to winning. The unpredictable production generates a series of sudden events, shocks and long-term stresses, constraining pastoralists' ability to live with and off uncertainty (Scoones 1994; Krätli & Schareika, 2010; Scoones, 2019). Pastoralists' ability to manage and respond to uncertain shocks and long-term stress is conditioned by drivers of change considered here as 'structural changes'. The structural changes are the changes that emerge out of shifts in political economy (governance, relations with State and non-state actors, market, politics), environmental changes (due to rainfall/drought, disease, floods, and land-use change), social changes (due to demographic shift, settlement pattern, and education), and changes in everyday practices (due to institutions, technology, and modernity). The way uncertainties have unfolded and been experienced over time is different both across pastoral areas and among different social groups.

This chapter evaluates events that generated uncertainties and how these events are manifested and affected pastoral livelihoods across time (since 1975), space (comparing Kinna and Merti/Korbesa), and among social groups. Dahl argued that, while incorporating pastoralism into the market economy, national politics, and the aftermath of Shifta-war (1964-1969), livelihoods suffered significantly, resulting in severe destitution, and reductions primary subsistence resources (land, labour, and livestock (Dahl, 1979). The thesis found that access to the changing economy, infrastructure, market, and broader services brought through 'modernity' and 'development' are highly variable and create potential opportunity and vulnerability for different pastoralists in different places. The chapter argues that uncertainty is dynamic, it affects people differently, and responses are differentiated depending on people's capacity, social networks and ability to mobilise resources through diversification and collective solidarities.

In what follows, I present an overview of Waso pastoral systems between 1975 and 2020, identifying

⁴ Hussein D. Male, Kinna, 2019

the structural factors and events that generate uncertainty and the manifestation of these events in conditioning pastoralists' response to uncertainties and opportunities. This provides a background to examining the changing moral economy practices from 1975 to 2020 and across the two sites, as shall be presented in chapters five, six and seven.

4.2 Synopsis of Northern Kenya Pastoral Systems 1975-2020: The Case of Isiolo

Isiolo County in Northern Kenya is home to Borana pastoralists and one of the dynamic rangelands of Kenya. In addition to Borana, other groups such as Samburu, Turkana, Sakuye, Somali/Gurreh, Meru and other immigrants live in Isiolo (Dahl & Sandford, 1978; Swift & Abdi 1991). Geographically, the County is situated on the edge of the wider northern Kenya region, neighbouring other counties including Marsabit to the north, Samburu and Laikipia to west, Garissa to the south-east, Wajir to the northeast, Tana River to the south and Meru County to the south-west (the Republic of Kenya, 1984). This connectedness and strategic political geography placed the pastoral production system in Isiolo as central to and competing with other livelihoods. This includes agricultural practice in the Meru foothills, significant investment in conservancies, parks for the tourism industry and large-scale external investment in the region (Boye & Kaarhus, 2011; Elliott, 2016; Mureithi et al., 2019; Mkutu, 2020).

The County covers 25,700 square kilometers and is divided into three sub-counties Isiolo, Merti and Garbatula. The ecological condition comprises arid, semi-arid and very arid covered by shrubs and some grasslands with dry and windy weather in most parts of the year (Swift & Abdi, 1991; the Republic of Kenya, 1998). The average rainfall is 400-650 mm per annum, falling in October-December and March-May (Republic of Kenya, 1976 and 2018). Pastoralists in the region rely on land, labour, water, and pasture (*marra-biisaan*) for survival. Dahl noted that *'all production assets other than livestock were somewhat challenging to control, water and salt resources were shared widely and easily accessible'* (1979, 169). Herd owners exploit the unequally distributed resources through seasonal land-use patterns via customary institution *dedha* (grazing territory) and water rationing. For the wet seasons (*ganna*), flood plains, water pans, river pools, and streams are utilised. In the dry season (*bon-adollessa*), pastoralists exploit seasonal rivers and hand-dug wells along the riverbeds. Finally, during the drought (*ola*) period, they use reserve areas near permanent waters such as borehole and wells.

Watering livestock depends on the seasons and the species of animals as different animals withstand thirst due to their biological strength and agility. Water rationing is done in *dabsu, limaalim* and *saadeen* (after one day, two days or three days). Herd owners minimise animal watering frequency in the dry season and sometimes trek animals at night to reduce dehydration. Small and large animals are watered at different times to reduce the chances of livestock stumbling on each other. Water is managed by *Abba erreegaa* (water rationing supervisor) or *Abba ella* (well owners). Such leaders are often trusted individuals within the community, and they provide an equal watering opportunity to the herd owners.

Once all the animals are watered, people fetch water for domestic use and the water trough is filled for the wild animals and wayfarers, this is the ideal customary practices happening until today. Finally, the well is covered with thorns to prevent wild animals from falling into wells. These practices of resource utilisation are still common to date.

In the 1980s, through government and development NGOs, Borana pastoralists established RUA (Resource Users Association) for governing strategic water resources in Yamicha, Urura and Duma. The establishment of the RUA institution changed the pattern of resource exploitation due to the introduction of fees for fuel and maintenance. As of 2019, the daily fee for shoats is KSHs 5, KSHs 10 per cattle and KSHs 20 per camel in all the communal borehole watering points. One government officer⁶ explains how RUA has changed the customary management of drought reserve watering points. *After 1990, the RUA structure weakened due to governance; the nominated individuals hijacked the institution, they started using facilities for their private gains. Thereafter, corruption and encroachment by the Somalis led to its collapse. 2-3 individuals run the facility as we speak now. They have promoted permanent settlement within these reserve areas and opened administrative offices and schools. People resisted and confiscated the generator, but the current governor purchased a new generator as he didn't want his political supporters to suffer.*

In the above quote, the respondent is referring to the Somali herders who have encroached the drought reserve and the failure by the committee to take action. Currently, the reserve and the borehole is under the custodian of three people, accused of favoring the Somalis because of corruption. Due to changing resource governance, encroachment of strategic resources and influx of herders, egalitarian resource sharing is constrained. These results in unequal resource access and utilisation, as shall be explored in chapters six and seven.

According to the official view, the production systems are divided according to ecological conditions and economic activities (Government of Kenya, 1974; Government of Kenya, 2018). These include *Cherab*, a plain region that stretches from Merti along the Waso River and is suitable for cattle and sheep production. The second area is *Chari*, dry scrubland south of Merti with good quality browse suitable for camel and goat production and inhibited by Borana and Somali herders (Swift & Omar 1991). The third production area is the *agro-pastoral zones* partly in Gafarsa, Kinna and Malka-daka with irrigated farming and small- ruminant production (Dahl & Sandford 1978; Swift & Omar 1991).

The fourth production sites include the *drought reserve and common grazing zones*, which borders neighbouring pastoral district/counties such as Yamicha and Kom. And the final production zone is the *urban areas and small towns*, which provides administrative, transport and marketing services. Nonetheless, the production zone does not necessarily operate as it is designated, due to contemporary

changes in land use and tenure as shall be covered in the forthcoming section.

In the early 1970s, the main towns were Isiolo and Garbatula (Hjort, 1979), while by 2020, several other towns had expanded, including Kinna, Merti, Madogashe and Kulamawe. The map below shows these production systems.

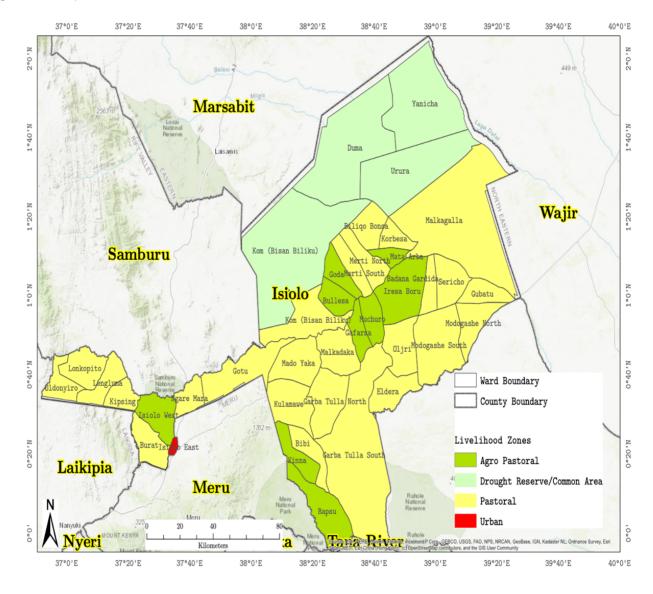


Figure 4.1: Map Showing Waso Production Systems Source: Developed by James Muthoka with guidance from the author.

In the 1970s, livelihoods were centered on livestock production as there were limited opportunities for alternative options. Options to diversify then included irrigated farming, burning charcoal, seeking administrative jobs (teachers, tax collectors and chiefs), small scale trading (*Dukas*, kiosks) and acquiring assistance via missionary and the government projects- food aid and relief (Dahl & Sandford, 1978; Dahl, 1979; Swift & Omar, 1991). According to Dahl, the need for alternative livelihoods to pastoralism arose due to two factors; 'other forms of sustenance such as alms, famine relief and missionary charity were unpredictable, and the Borana pastoralists did not have an institutionalized system of a stock alliance like Samburu and Turkana' (Dahl, 1979, 246). The institution of livestock redistribution in the 1970s was weakened by the massive livestock loss due to the Shifta war and the aftermath of the droughts, as shall be discussed in coming sections.

By 2020, livestock production is estimated to constitute 80% livelihood production and there is a remarkable expansion of other livelihood options, especially in urban and peri-urban areas (Republic of Kenya, 2018-2020). These diverse opportunities include trade (kiosk, butchery, wholesale stores, hardware, miraa, vegetable), real-estate investment (rental houses, shops, hotels and plots), commercialized livestock trade (milk, meat, hide and skin, poultry, bee-farming), transport services (motorcycle, buses) employment (government, private sector, NGOs, service industry), tourism, manufacturing, and external pastoral projects among other opportunities (Fratkin, 2013; Achiba, 2018; Republic of Kenya, 2018; Rao, 2019). From 1975 to 2020, there has been a remarkable transformation, economic expansion, and the scramble by largely external investors for frontiers in the region. Isiolo, for instance, is set to be the 'resort city' in Kenya's Vision 2030 economic development blueprint (Elliott, 2016).

There has been massive large-scale infrastructure development, including an international abattoir to export meat from the region to the Gulf countries, airport, and the LAPSSET (Lamu Port South-Sudan-Ethiopia Transport) corridor (Kochore, 2016; Mosley & Watson, 2016; Mkutu et al., 2021). These transformations carry new opportunities and uncertainties that are perceived differently across different pastoralist groups. Poor pastoralists have been pushed out of pastoralism or are barely hanging in. More significant opportunities have been opened for the wealthy and well-connected pastoralists, leading to differentiation through what Dahl termed as peasantisation, proletarianisation and marginalisation (1979, 256). These changes are similar to wider processes of de-agrarianization and de-pastoralization, a process of diversifying livelihoods into portfolio of events in a bid to survive changing political economic and social constraints and opportunities (Bryceson, 2000; Ellis, 2000; Catley, et al., 2013; Caravani, 2018). In what follows, I examine the ramification of these changes through shifts in political economy, changes in natural environment as well as social and demographic shifts.

4.3 Changes in Political Economy: Pastoralist Relationship with State and Non-state Actors

Colonial and post-colonial State and pastoralism

In the pre-colonial era, when Kenya was under the British East Africa protectorate, pastoralism in Northern Kenya, including Isiolo, was criminalised, penalised, and subjugated to various movement restriction policies impinging pastoralists' mobility. These policies included the Outlying District Ordinance 1902 and Special District Administration Ordinance 1934-both of which restricted pastoralists' mobility and granted powers to provincial commissioners to arrest, detain and confiscate livestock from pastoralists considered 'hostile' communities (Issack, 2008; Whittaker, 2012). After Kenya's independence in 1963, Borana Pastoralists in Isiolo attempted to join other ethnic groups in Northern Kenya to succeed to Somalia. Borana are among the communities in six Northern Frontier Districts (NFD) consisting of Somali and Galla speaking pastoralists who sought to secede to Somalia (Lewis, 1963). The secession attempt resulted to a guerrilla war locally known as the 'Shifta War' (Bandit war) of 1963-1969. This war led to Borana pastoralists' destitution, where the provincial administrative police held the pastoralists held in concentration camps, and their livestock confiscated or killed if they were found crossing the designated camps.(Whittaker, 2014, Branch, 2014). Borana refers to this period as Daaba -stopping. The ruling State declared a state of emergency and stopped people from passing the 10km boundary set by the authority (Arero, 2007; Khalif & Oba, 2013). The legacies of these policies continued and resulted in severe stress on pastoral economy (Dahl, 1979). The region remained under emergency rulership until 1992 when Kenya became multi-party state and various emergency rules were lifted (Issack, 2008).

The subsequent post-colonial state, governed by the late Jomo Kenyatta between 1964-1978 considered pastoralists a threat to national security due to the Shifta bandits as well as traditional nomadic lifestyle and enforced mandatory villagisation and collective punishment (Arero, 2007; Issack, 2008; Schlee and Shongolo, 2012; Khalif & Oba 2013). The various injustices, massacres, and human rights violations led to remarkable tension between State and pastoralism in the early 1970s (Anderson, 2014). When Dahl conducted her fieldwork between 1973 and 1974, the Borana pastoralists were in a dire vulnerable situation following the post-Shifta livelihood loss, forced villagisation, and long-term stress from the civil war. During this period, there were no civil society organisations, rights groups, nor information, pastoralists were left at the mercy of government relief and missionary support. Because of these threats to pastoral livelihood, Dahl named the Borana subsistence economy as a '*Suffering Grass*' for bearing the consequences of political integration pressure and marginalisation. Despite these challenges, the livelihood thrived due to the '*cohesion of cattle economy and the stirring spirit of community*' (Dahl & Sandford, 1978, 18).

Northern Kenya, including Isiolo, suffered from the implication of sessional paper no. 10 of 1965 on African socialism and its application to planning for economic development. In this sessional paper, the region was considered economically unviable and hence was subject to indiscriminate resource alienation and allocation compared to highland Kenya, thereby disenfranchising pastoralism (Issack, 2008). As a Northern Kenyan and a resident of Moyale, north of Isiolo, I shared the sentiment of exclusion and marginalisation in my childhood. We envied 'down-country' as ideal Kenya, whereas we considered our region a 'forgotten land'. Whenever we travelled from Moyale to Nairobi, we only believed we had reached Kenya when we saw the tarmac road past Isiolo.

As Dahl rightly put it, pastoralists were seen as a meagre source of cheap, unskilled labour and cheap animals for the white ranches in Kenya's highlands, therefore receiving unequal terms of trade (Dahl, 1979, 257). The political pressures, insecurities, and restricted mobilities combined with policies of economic exclusion and marginalisation intensified pastoralists' vulnerabilities and uncertainties in its relation to State and economic development in the early 1970s.

Pastoralists' relationships with non-state actors

Windows of hope opened to the broader pastoralists in Northern Kenya, including Isiolo, through a shift in Kenya's democracy to a multi-party system in 1992, under the late Arap Moi regime (1978-2002). This period ushered in civil society organisations, including Kenya Pastoralist Forum (KPF), formed by the pastoralist's activists with support from international NGOs (Markakis, 1999, 294; Reconcile, 2004). Due to the pressure from the civil society and coordination with international NGOs, Arid Lands Resource Management Project (ALRMP) was born in 1992 as the scaffold for managing the drylands, including Isiolo. KPF lobbied for pastoralists' land rights and advocated for rangelands development (Markakis, 1999). During this time, pastoral development shifted from 'food security' via relief food to rangelands and livestock development including massive investment in grazing blocks, livestock development projects, and water infrastructure (Mohamed, 2022). In the late 1990s, politicians from Northern Kenya allied and rebranded KPF to Parliamentary Pastoral Groups (PPG), attracting all the 36 members of parliament elected in the 1997 general election from other pastoral communities (Markakis, 1999). Like their predecessor, PPG played pivotal role in advancing pastoralists' need in national domain.

Nevertheless, the activities of the PPG were short-lived due to pressures from the ruling party, geopolitical and ethnic strife that were intensified by various massacres, including the Wagalla massacre of 1998 (Issack, 2008; Anderson, 2014). As such, the structure of PPG weakened, members were accused of clandestine activities, and the platform was banned by then Kenya's president Moi. Therefore, pastoralism was left at the mercy of huge infrastructures in the rangelands with intensified insecurities, ethnic rivalry, and non- existence government security infrastructures. This meant that, although there was some sunshine for pastoral production, it was short-lived. Pastoralists continued to over-exploit limited and unpredictable resources in sedentary camps near missionary and government

relief centres, and the large-scale market, irrigation, and water infrastructures were abandoned, partly due to State failure to strengthen the security in the region, hence bolstering pastoralists structural conditions and vulnerability.

The period between 2002 and 2013 ushered in a new political regime, the Kibaki era, considered a turning point for Northern Kenya and pastoralism, although with a share in political clientelism and corruption (Berman, et al 2009; Elmi & Birch, 2013). First, the creation of the Ministry of State for the development of Northern Kenya and Other Arid Lands by the grand coalition government in 2008 laid a foundation for countering underdevelopment and marginalisation in pastoral areas. The adoption of sessional paper no. 8 of 2012 on national policy for sustainable development of Northern Kenya and Other Arid Lands further bolstered pastoral development. Through these policy shifts, the National Drought Management Authority (NDMA) was born as an institution mandated with managing drought-related catastrophe and vulnerabilities (Elmi & Birch 2013). These significant changes in the political context placed pastoralists' plight at the centre for development planning. However, as with any other entity, both ministry and NDMA have had their share of programme and policy implementation challenges due to resource constraints to cover the vast pastoral regions (Elmi & Birch, 2013).

The state's development vision and pastoralism

Another significant pastoralism-state relationship is enmeshed in state's vision for economic transformation through the discourse of frontier development and resource exploitation (Kochore, 2016; Mosley & Watson, 2016; Lind et al., 2020) 'Seeing like a state' (Scott, 1998). In Kenya's Vision 2030, a flagship programme for social-economic development, the State envisions the Northern pastoral region as a future food basket for the country and the panacea for development (Republic of Kenya 2012b). For instance, Isiolo County is earmarked as a 'resort city'. The uncertainty arises due to the lack of knowledge about what this entails for the community. As one research respondent⁵ put

'we are afraid of our own government because of shift in rangelands governance. They are saying Isiolo will be a resort city, accommodating about five million people and we are about 300,000. Where will the rest of the population come from? Are we going to be replaced and displaced by other people? Where will our livestock live? We do not know what will happen to us.'

Although the development vision unleashes the social-economic potential of the region, it embodies speculative investments, forced displacement and a political economy of exclusion, especially affecting the less privileged pastoralists (Mosley &Watson 2016; Lind, et al 2020; Mkutu et al., 2021). The feelings of anxiety resulting from projected development have heightened insecurity among the five ethnic groups (Borana, Somali, Meru, Turkana and Samburu) in Isiolo (Ngige & Abdi, 2015; Elliot, 2016; Mkutu, 2019; Mkutu, 2021). The tension is evident around the supposed location of resort city in

⁵ Mohamed B. Male, Merti, 2019

Kipsin, wind energy construction in Gambela-Ngaremara strip, and the airport between Isiolo-Meru border (Mkutu, 2019; Mkutu et al 2021). These investments are a double-edged sword for pastoralists, creating opportunities for the well-connected elite but intensifying vulnerabilities for the peripheral pastoralists with limited capacity to negotiate and exploit opportunities (Lind et al., 2020).

The competing vision of the State for economic 'development' and pastoralists shrinking resource base envisage significant uncertainty for extensive livestock production dependant on the unpredictable environment. Speculative land grabs and intensified insecurities with the neighbouring groups due to the anticipation of benefits and displacement from the development corridors emerged and intensified pastoralists' structural conditions of uncertainty (Boye & Kaarhus 2011; Lind, 2017; Aalders, 2020; Mkutu et al. 2021).

Finally, Kenya steered in a new constitution in 2010, a precursor to the devolved systems of governance leading to the creation of 47 Counties. The electoral and boundaries commission designated respective County boundaries prior to the first general election under Kenya's devolved governance in 2013. Like other policy shifts, devolution is a new political transformation and continue to re-shape local perspectives in different dynamics. Here, the effect of the national political campaigns during the newly created devolved governance systems, trickle down on the local politics, sometimes breeding animosity between ethnic groups due to intense competitions over elective positions. Ethnicised political competition, conflict, and inter-county boundary strife especially in pastoral regions, have undercut the anticipated contributions of devolution to equitable resource distribution and national development (Carrier & Kochore, 2014; Boone et al., 2016; Elliot, 2016; Scott-Villiers et al., 2017; Lind, 2018; Lind, 2021).

Studies have highlighted the increased insecurities in pastoral areas during the electioneering period (Okumu et al., 2017; Scott-Villiers et al., 2017; Lind, 2018). Okumu and colleagues highlighted the changing dynamics of politically driven livestock raid among herders in Northern Kenya. In Isiolo, Borana herders saw the classic Samburu raid just a few months prior to the August 2017 general election as politically motivated. A respondent⁶ noted:

'Samburu attack of Borana is just an easy way of generating campaign resources by the politicians who finance, organise, and execute high standard raiding as we witnessed in 2017'. The government could not persecute the raiders at the expense of losing electorates. Instead, they promised compensation for the Borana herders, but it never gave any penny.

According to elders in event mapping, the current ethno-political tension has accumulated through time. However, it is highly polarised due to the resources supposed to be shared and contested claims on boundaries. In the 1970s, Dahl observed that a shift in governance created mistrust between the

⁶ H. M, Male, Isiolo, 2020

politically connected elites and the other pastoralists at the periphery. The emerging political 'elites' became the custodian of development initiatives controlling limited drylands resources such as water points, government jobs and relief resources. Today, pastoralists are still grappling with the continued process of differentiation reinforced by the changing political, economic relationships with State and non-state actors (Mosberg, et al., 2017). The debate on whether pastoralism will continue to persist amidst this remarkable shift in the political economy continues (Dahl, 1979; Schlee & Shongolo, 2012). This thesis aims to offer insight on how pastoralism continues to thrive or suffer from broader political economy transformations through time, space, and social-economic context.

Until here, the section has shown how pastoralists' interactions with State and non-state actors between 1975 and 2020 have generated different forms of uncertainties emerging from changing structural conditions. These are not sudden 'shock' events like drought or disease; instead, they are series of policy and governance shifts and transformations, resulting in long-term stresses and having major implications for pastoral production. Different periods from colonial governances, post-colonial shifts, multi-party systems, and the newly devolved governance have bred various opportunities and vulnerabilities. This, in turn, generates diverse forms of uncertainty for pastoralists, especially at the periphery. Like Dahl's observation in the 1970s, pastoral livelihood is destabilised through integration into national political economy discourse, creating different classes of pastoralists, including peasants, proletarians, and marginalised groups (Dahl, 1979, 256). Nonetheless, pastoralists' response to these changes differs across time, spatial geographies, and social-economic background, as shall be explored in chapters five, six, and seven. In the section that follows, I evaluate how changes in the biophysical environment add to pastoralists' uncertainties in livestock production.

4.4 Changes in the Biophysical Environment

Rainfall pattern, drought, and flood

Isiolo is in Kenya's Northern Arid and Semi-Arid (ASAL) region. However, on the southwest, it stretches towards Meru County. There are three ecological zones, arid, semi-arid and very arid, out of which 95% is considered arid and only 5% lie within the semi-arid area (Republic of Kenya, 1978). The rainfall pattern is highly variable across spatial geographies and across time. The area receives rainfall in two seasons, *ganna* (long-rain), which ensues between March-April, and *hagayya* (short-rain), which falls between October and December. The climatic condition is often very dry, hot, and windy (Swift & Omar, 1991) and the average temperature is 29.0 C. The geographical placement influ ences the amount of rainfall received. The semi-arid areas proximate to Nyambene Hills North of Meru County, such as Kinna, Burat and Bula Pesa, receive annual rainfall between 500mm to 670mm. On the contrary, the Northern, Eastern and Western regions bordering Wajir, Marsabit and Samburu Counties, receive less than 300mm annual rainfall (Republic of Kenya 1979; Swift and Omar, 1991). The figure below

present annual rainfall received in selected years⁷.

Average Annual Rainfall Pattern	1974- 1978	1984- 1988	1994- 2004	2004- 2008	2008- 2012	2012- 2018	2018- 2022
	405mm	550mm	680mm	540mm	450mm	500mm	470mm

Table 4.1: Annual Rainfall Variation 1974-2022

Source: compiled by the author from Isiolo District Development Plans

The annual rainfall pattern presented across 1975-2020 is highly variable. Some years recorded a rise in rainfall and a decrease in others. Between 1994 and 2004, there was an extreme weather event, El-Niño, which resulted in massive flood in the entire Northern region (Little et al., 2001). In general, herders acknowledged the changing climatic condition due to delayed rain or absence of rain and continued temperature rise, a pattern highlighted in the wider literature (Hogg, 1985; Aklilu & Wekesa, 2001; Gray et al., 2002; Dose et al., 2008; Jillo & Koske, 2014; Quandt & Kimathi, 2017). In the two respective study sites, pastoralists acknowledged repeated dry periods as the key uncertain event they are living with. Compared to the 1970s, the frequency has increased from 2-4 years to yearly dry season or complete absence of rain (*ola*). The following table summarises key drought moments experienced since the 1970s between Kinna and Merti.

Year	Merti/Korbesa	Kinna		
1976	Ola ¹⁰ Eldas (Eldas)	Ola Arba (Elephant poaching)		
1980	Ola Mchele (rice)	Ola Dukuba (disease)		
1984	Ola midan dimo (yellow maize)	Ola Katitini (Katitini)		
1987	Ola Kauro Charfana	Ola Park (National Park)		
1992	Ola Kinna (Kinna)	Ola Tiite/park Ola (Flies and tick)		
1992-1995	Adolessa (prolonged dry)	Adolesa (Prolonged dry)		
1996	Ola Bisan dimo (red water flood)	Ola Bisan Dimo (red water drought)		
1997	El-niño	El-niño		
2002	Ola Awaye (Awaye)	Adolesa (Prolonged dry)		
2005-2006	Ola istaaga (stopping)	Ola tiite guracha (Black flies)		
2008-2009	Ola Qillisa (Qillisa)	Ola Buqe (Buqe)		
2011	Ola qufaaha (coughing outbreak)	Ola Sheeku/katitini (Sheeku/Katitini)		
2013-2014	Ola Kurtubale (LSD-disease)	Ola Katitini (Katitini)		
2015	Ola d'eebuu (thirsty)	Ola Shaba (Shaba)		
2017	Ola Moyale (Moyale)	Ola Turkana (Turkana)		
2019	Ola Chaffa (flood)	Ola Galana (River)		
2020	Adolesa (prolonged dry)	Adolesa (prolonged dry)		

Table 4.2: Events Calendar, Merti and Kinna, 1976-2020

Source: Compiled by author from participatory event mapping exercises⁸

⁷ In presenting long-term changes in environmental, social, and demographic pattern, I use Merti and Kinna as the reference sites. This is to counter insufficient data pertinent to Korbesa. Korbesa is a small, remote location, under Merti ward, and as such has minimal reports compared to Merti.

⁸ Ola means absence of rain or a drought season. It is either named after the place where animals were

Waso pastoralists name each dry year by the places where they take the livestock, the help they receive to counter the drought or the event that follows dry period such as disease, flood or raids. In Merti, the 1976 drought was ola Eldas (a place where animals trekked), 1984 was ola midaan dimo (yellow maize) - relief food distributed by the government and 1996 was ola bisaan dimo (the red water flood) along the Waso river. Drought results from a sudden shock that arises due to the failure of projected rain in hagayya or ganna (short or long rainfall season). It could also be long-term stress due to changes in vegetation cover to an unexpected prolonged dry period (bon-hagava). Combined with the movement restriction policies and insecurity from changing political economy discussed in section 4.3, repeated prolonged dry periods severely undermined pastoral production in Isiolo (Dahl, 1979d; Hogg, 1980; Hogg, 1985; Huho & Kasonei, 2014; Kagunyu et al., 2016). All the twenty-four in-depth household interview participants mentioned changing climatic conditions, especially the absence of rain/drought (ola), as the key uncertainty affecting their livelihood. Pastoralists have been living through multiple drought events. However, measures including land enclosures for conservancies and privatisation restrict mobility to exploit the patchy resources in the rangelands. The Maasai pastoralists present similar accounts in Tanzania, where the combination of restricted mobility to use the rangelands exacerbates the effect of the drought, resulting in highly differentiated adaptative capacities (Goldman & Riosmena, 2013; de Wit, 2020).

The drought's intensity and outcome are determined by other externalities, including insecurity and access to crucial resources (hired labour, diversification, technology), as shall be discussed in chapters six and seven. Drought is not just a rainfall deficit; it is augmented by the factors that inhibit pastoralists' mobility from exploiting strategic resources due to insecurity arising from ethno-political tension in the region, thereby creating uncertainties for different people. One such extreme event that amplified the drought was the Samburu livestock raid from the Borana in 2017, as shall be presented in chapter six. The raid happened in a strategic reserve area called Kom, which borders Samburu, Marsabit and Isiolo, forming a triangle between these neighbouring Counties. Pastoralists from these three Counties and the neighbouring Wajir County converge in this triangle under heightened insecurity amidst droughts (Mkutu, 2005). An elderly participant⁹ in a historical event mapping explained the insecurities and tensions that intensified drought events:

'Waso is rich in resources, and the flowing river helps livelihood flourish. However, we could no longer move freely to places like Kom, Sabarwawa and Yamicha due to fear of a raid from the Samburu-Rendile alliance and encroachment by the Somalis. There is an area known as Banane, about 14Km from Garbatula, with a flowing river that flows from Madogashe. Dogodias have claimed and conquered the area, and Borana could no longer graze there.

taken for refuge, or after any disease, or external support received during that year. I only paranthesise the place and event name.

⁹ Musa, K. Male, Merti, 2019

Now, the Kore and others have taken Kom. It has reached a point of 'arr'aabii ilkaam jiddu yaaseenee' (the tongue has gone in between teeth). Let nobody lie to you that we are dying of drought. Drought is not a concern because we have been surviving for ages; what worsens drought is insecurity because it has affected our movement. Enemies (Nyap) surround us from all corners, and this affects our safe movement to exploit vast resources in the rangelands'.

Extreme weather events such as floods augment pastoralists' vulnerability, especially after the dry period (Little et al., 2001; Huho & Kosonei, 2014). In the 1970s, studies noted flood events destroying the irrigated farming along the river near Malka Daka and Gafarsa (Dahl, 1979; Hogg, 1985).

According to elders in historical interviews, flood events follow all the significant droughts due to the overflowing of the Waso River and the showers that pour from Meru and Nyambene hills. For instance, a devastating flood followed the 1992 drought. It killed livestock that were trekked to North of river Waso from Kinna area, as such the drought was named '*ola Kinna*'. In addition, pastoralists named the 1996 drought '*ola bisaan dimo*' (red water drought) due to the extreme flood known as '*fac*'aaha bisan dimo' (red-water flood) along the Waso river. Pastoralists in both Kinna and Merti considered this event a very acute moment in their history of livelihood production.

Subsequently, the El-Niño flood that followed in 1997 further endangered pastoralists' livelihood (Tanui & Ali, 1998; Karanja et al., 2001; GoK, 2014). Several research participants from Korbesa noted profound livestock loss during the event. Ola K¹⁰ noted, '*As a family, we had 500 goats which survived the 1996 drought. We received rain and came back to Waso. The rain was followed by the El-Niño flood that killed 450 goats from our family'.*

Another respondent, Dima H¹¹ was left entirely stockless due to the aftermath of El-Niño. Lately, floods have caused havoc in pastoral areas, especially around the Waso River and Irressa Boru region of Isiolo (Quandt & Kimathi, 2017; Jebet, 2017; Wairimu, 2019; Peninnah, 2020). Flood follows the extended drought period due to changing climatic conditions, and it causes double threats to pastoral livelihoods. In the 2017 flood, Ali J¹², herd owner in Korbesa, lost 30 calves to the flood while trekking livestock from Moyale back to Korbesa.

The section has revealed that uncertainties are generated by changing climatic conditions resulting in variable rainfall patterns, drought, and floods. These events worsen due to insecurities that hinder pastoralists' mobility. In addition, the political economy of accessing strategic resources through

¹⁰ Ola K. Male, Lakole, 2019

¹¹ Dima H. Male, Lakole, 2020

¹² Ali, J. Male, Korbesa, 2020

alliances and economics might influence the outcome of managing these adverse events. Different pastoralists, wealthy/poor, young/old, male/female, manage them differently, as shall be highlighted in chapters six, seven, and eight. In the section below, I explore changes in land use and how these changes influence pastoralists' uncertainty in livestock production.

4.5 Structural Changes in Land Use

As elsewhere in Africa, the land use pattern in Isiolo has shifted due to the changes in climatic conditions, a shift in political economy, changes in tenure and the rise in human population (Toulmin & Quan, 2000). New land uses emerged including national park enclosure and conservancies, land tenure reform, large-scale investment corridors, and the introduction of invasive species in the rangelands. This section explores how the above changes in land-use patterns generate both livelihood uncertainty and opportunity for pastoral production through time 1975-2020, across space (Kinna-Merti) and among social groups (wealthy/poor).

4.5.1 National Parks and Reserves

The Meru National Park (MNP) sits on 884 square kilometres and borders the south-west of Isiolo County. The park enclosures include Meru, Kora and Bisanadi reserve. There are two other national reserves in Isiolo, Shaba Game Reserve and Buffalo Springs. The Meru National Park was gazetted as a National Park in 1966 under Legal Notice 4756 of 1966 (Sitieni et al., 2014, 324), while Bisanadi was gazetted as a National Reserve in 1997 (UNESCO, 2010). Bisanadi reserve is a remarkable drought grazing corridor for pastoralists in the southern part of Isiolo due to the strategic perennial Bisanadi River. The river borders Isiolo County and the Meru National Park, hence, the area is protected, and grazing beyond the border is restricted. In 2000, the park was rehabilitated through the African Development Bank, resulting in the fencing of some sections and wildlife species importation (World Bank, 2002). Although pastoralists have lived with wild animals without borders and movement restrictions, establishing park and reserve borders has constrained pastoralists' access to strategic resources. Dahl noted that the enclosures and subsequent loss of the Bisanadi Reserve meant a 'loss of security for cattle herders' (Dahl, 1979, 264).

Notably, participants in the historical event mapping events noted several challenges arising from the national park and reserve enclosures for pastoralists, agro-pastoralists, and wildlife. First, during the 1970s post the Shifta war, few people resorted to elephant poaching to earn a livelihood. These poachers were not all pastoralists but involved a well-armed cartel from other parts of Kenya and across the borders. Elders noted that the poachers paid pastoralists about KShs. 400-500 for every 8kg of ivory tusk in good condition. Later, the few pastoralists in hunting re-invested money into livestock and abandoned poaching due to game hunting restrictions in the 1980s (Barnett, 1998). Studies have also reported significant wildlife population decline in Meru's protected areas between 1977 and 1992 and

a rise in wildlife population from 2002 onwards (Otuoma, 2004). However, due to significant antipoaching laws enshrined in the Kenya Wildlife Conservation and Management Act (2009), there has been significant reduction in wildlife poaching in the region (Vellanueva et al., 2009). Although the park is fenced and the wildlife protected, pastoralism bears the brunt of exclusion.

As mentioned by Dahl and reported in other pastoral studies of the region, the development outcome of restricted access to conservation areas under the guise of promoting sustainable land use for human and wildlife conservation does not always result in a balanced outcome (Dahl, 1979; Baxter & Hogg, 1989; Galaty, 1999; Homewood et al., 1995; Thompson & Homewood, 2002; Adams & Hutton, 2007). There are always cases of exclusion and unequal access through bribes and power dynamics between the elite, wealthy herd owners and the poor herd owners (Homewood & Thompson, 2002; Schrijver, 2019). Yaq¹³, a cattle owner in Kinna, noted, *'we pay KShs 500 per cattle and graze in hidden places within the park; however, sometimes it becomes risky as rangers are reshuffled, and the new rangers demand more payment. If we had good leadership, there should be means of accessing these resources without fear and bribes'*. On the contrary, other pastoralists in Kinna recounted park restrictions, inhumane treatment, and livestock massacre by the park rangers as the inherent uncertainty they live with. Out of the twelve in-depth narrative interviews in Kinna area, eight respondents have had negative interactions with park rangers. During the 1984 drought, several pastoralists opted to graze in the Meru National Park because of the severity of the drought. Hasso¹⁴, a participant in the event mapping recounted:

'The only water point proximate to good pasture was bisanadi, bounding Kinna and the park. W, therefore, went into the park as there was no pasture elsewhere. The park rangers used helicopters and sprayed chemicals on our animals. We lost 118 cattle and remained with five only. It was devastating to bear the outcome of the Shifta war, the subsequent droughts topped with park restriction'

Apart from park restrictions, even in drought conditions, pastoralists must deal with the impact of wildlife-livestock and human conflict (Otuoma, 2004; Sitienei, et al., 2014). Out of the twelve household-level interviews in Kinna, nine households have suffered significant livestock loss to hyena, lion, and cheetah. The dilemma in this conflict intensified due to the lack of compensation from the Kenya Wildlife Service (KWS) for the livestock lost to wild animals. Pastoralists repeatedly lamented the uncontrolled rise in hyena and elephant populations, destroying riverine farming and attacking the livestock.

¹³ Yaq, A. Male, Kinna, 2020

¹⁴ Hasso B. Male, Kinna, 2019

Asha¹⁵, a respondent in the narrative interviews, reiterated, *'if the sun accidentally set and your livestock are not in their respective enclosures, expect nothing to return. Both sun and hyenas compete; you need to be back before sunset'*. Aside from the livestock-wildlife interface, the park provides a 'risky' opportunity and last resort to survive droughts. Pastoralists in Kinna have named 1984, 1987, 1995 and 2017 droughts as *'park ola'* (park drought), referring to the park as a pasture refuge area. Grazing in the park is illegal and risky, but sometimes, pastoralists get access by bribing and negotiating with the rangers. However, such arrangements are often available only to the wealthy and well-connected herd owners.

4.5.2 Conservancy Establishment

Addition to national parks and reserves, there has been an emerging land use called 'community conservancies'. According to the Kenya Wildlife Conservation association, conservancies are 'land managed by an individual landowner, a body of corporate, group of owners or a community for wildlife conservation and other compatible use' (KWA, 1). As of 2020, there are eight 'community' owned conservancies in Isiolo County supervised by NRT (Northern Rangelands Trust), an institution that governs conservancies in coastal and Northern Kenya (NRT, 2020). There are also four proposed conservancies in Isiolo - Cherab, Sericho, Garbatula and Kinna wards (NRT, 2021). The first conservancy established by NRT in Isiolo was Biliqo Bulesa (2007), occupied by the Borana. Biliqo Bulesa located in northern part of the County, in the Chari - with the best quality browse is suitable for camel and goat production. According to NRT, the community manages the conservancies through sustainable wildlife conservation, eco-tourism, and peaceful relationships with their neighbours (NRT, 2013). Local, national police reserves (home guards) and youths from the community are trained and provide security to the conservancy community. The figure below shows the conservancies in Isiolo, while a table showing more detail is presented in appendix I.

¹⁵ Asha, O. Female, Kinna, 2020

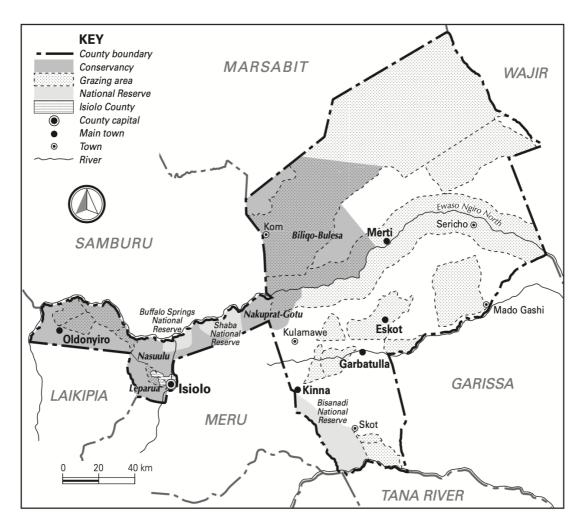


Figure 4.2: Conservancies in Isiolo.

Source: Developed by John Hall with guidance from the author

There are differentiated and highly contested positions on the establishment of conservancies in Isiolo (BCE & WPF, 2019; Mureithi et al., 2019). Although there is a 'successful' case of conservancy operation in the neighbouring region (Mureithi et al., 2019), Borana pastoralists often perceive conservation differently. First, herd owners in Isiolo feel insecure about the increase in armed conservancy rangers and vehicles for surveillance, a factor associated with intensifying livestock raids (Mkutu, 2020; Mkutu, 2008; Bersaglio & Cleaver, 2018; Shetter et al., 2022) and the proliferation of small arms (Schilling et al., 2012; Oba, 2013; Auma, 2015).

Secondly, some conservancies are exclusively owned by a single community, such as Bulesa Biliqo, owned by the Borana and Oldonyiro, owned by the Samburu. Such private ownership results in exclusion from significant resources in conservation areas. In a community historical interview, an elder¹⁶ noted, *'we had kuro bisaan owwo (hot water spring), which has a medicinal effect, but now it*

¹⁶ Isa, A. Male, Merti, 2019

falls under the protected areas in the Bulesa conservancy nobody is allowed to use it. The park rangers constantly guard it.' Thirdly, conservancies share strategic borders and rivers with the neighbouring community. Such restriction and movement control within the conservancy areas results in dispossession and exclusion to exploit natural resources for survival. Furthermore, there has been increased shift to camel production in Isiolo (Kagunyu & Wanjohi, 2014; Mwaura et al., 2015; Watson et al., 2016; Volpato & King, 2019), and since conservancy enclosures covers the most suitable browse area of Chari, there is a high potential for exclusion and limited pasture access for the rising camel population in the County. Although some herd owners support the arrival of armed guards and surveillance equipment as a route to reclaiming land that had previously been affected by conflict, others view the conservation as a hidden agenda to disposes pastoralists off their lands.

The evolving land use through conservancies and the changing political economy in the region, topped with the changing climatic conditions discussed in sections 4.3 and 4.4, intensifies pastoralists' vulnerability and livestock production uncertainties. Pastoralists in our study sites, Kinna and Merti, have experienced livestock raiding and insecurity as the main uncertainty they live with. In Merti, pastoralists experienced a massive livestock raid in 2017, resulting in the death of eight people and the loss of 10,000 cattle and 7000 shoats (Mkutu, 2020). Although there were livestock raiding prior to conservancy establishment, pastoralists associate the rising frequency and the magnitude of raids with the political economy of conservation, rising number of armed rangers and the changing conflict pattern and political strife. This account is justified in recent studies about the politics of livestock raiding and the unintended role of conservancies in fuelling the tension between rangeland users (Butt, 2012; Greiner, 2012; Bersaglio & Cleaver, 2018; Noor, 2019; Mbaria, 2019; Schetter, et al., 2022). As Dahl posited, pastoralism is, until today, suffering, but the outcome of these events is highly variable, as shall be discussed in chapters six and seven.

4.5.3 Competing Claims and Changing Land Tenure

This section explores the evolving land tenure regime and shifting land use in Isiolo and how this, in turn, generates livelihood uncertainties for pastoral production. I begin this section by presenting an excerpt from an interview with a chief in Kinna. Early Monday morning on February 9th, 2020, I visited chief Qampe¹⁷ in his office to understand the historical administrative changes in Kinna. I met the chief in a tiny office near the District Commissioners' office. There was a feeling of tension on the chief's face, and I asked him, why are you tense? He replied

¹⁷ Qampe, S. Male, Kinna, 2020

'It has been a tough weekend. The tussle and the fight between Borana and Meru will never end. I am following up with the arrest of nine Borana men concerning occupying the disputed land. Anything can happen; we are so afraid of these land issues; we are not ready to lose this land; they have GPS coordinates of the lands they claim. They claim that Qanchoradi is the last border point for Kinna. This GPS is just manufactured by men'

I requested the chief to elaborate on the continuous narrative about competing land claims and changing tenure. This discussion is essential as it captures the unfolding events generating uncertainty raised in historical mapping with elders. Box 4.1 contains the excerpt from the interview.

Box 4.1 Interview Excerpt with Chief Qampe

Interview excerpt: Chief Qampe, February 2020, Kinna

'In 1993, I was in Garbatulla high school, and the small town known as Kiutene along the highway was not there. It was just a bushy area that provided an entry road to Kinna. My mother used to trade in goats, and we used to walk through that way to the Kameruru market in Meru. All these places belong to Isiolo County, but Merus have claimed it, becoming a significant issue. This tension is escalating due to highway development and the claim of strategic land along the road. The Merus are stronger than us, and they have better representation in government than us. Since the boundary issues are the national government's interest, Merus may benefit more because they have good government hands'.

'What is the name of the disputed land? This land is known as 'Yakbarsadi in Kulamawe, and Kulamawe falls under the Kinna division. Besides, the government brought GSU (General Service Unit) personnel to live in this disputed area and relocated people from Yakbarsadi to another place. Another claim is on a place known as station 9 (locally called Harkeen Booti) under Eskot location, Kinna ward. Individuals from Aulian have placed landmarks and beacons to benefit from the anticipated LAPSSET project. These Aulian use force and kill people; they cause fear and make the Eskot market inaccessible for the Borana. Again, the Aulian are in a fight with the Borana over water and pasture needs'.

This excerpt uncovers the tension that exists between ethnic groups over changing land tenure and exclusion from strategic development corridors. It begins with claims and contestation over the boundary between the Borana and Meru settled farming groups bordering southwest Isiolo. The origin of the Borana-Meru land issue emerged due to injustices committed during the 1968 Land Adjudication Act when the national government reviewed the colonial boundary through a commission led by the late land minister Jackson Ngaine from the Meru district. According to Borana elders, there was no Borana representation in the commission as people were villagised to counter the 1964-1969 *Shifta* insurgency. This claim is re-emphasised by Somo¹⁸, an officer involved in legal cases between Meru-Isiolo land issues. Somo noted, *'the Isiolo-Meru boundary dispute originated from historical injustices*

¹⁸ Somo, D. Male, Isiolo, 2020

committed by the Land Review Commission in 1968'. As expressed in the chief's interview, legacies of historical land injustices still engender inter-ethnic tension and restrict pastoralists' mobility and access to the strategic market.

Historically, land in Isiolo is under communal use, held and freely used by the community as trust land apart from the gazetted and protected areas (CoK, 2010; Malicha, 2019). In 2016, the land tenure was enacted under article 63, section 5 of Kenya's 2010 Constitution, bringing all unregistered, communally owned lands under the trusteeship of the County government (Republic of Kenya, 2016). In Isiolo, all the unadjudicated/unregistered land is therefore held in trust by the County government, and any transfer should be in consultation with members of the public (Republic of Kenya, 2016). Contrary to these provisions, there have been arbitrary land adjudication changes through legal Notice no. 150 (Karoney, 2019). According to this notice, all the community lands aside from the gazetted areas such as national reserves, Isiolo holding grounds, Kenya Defence Forces School of Infantry and Combat Engineering, Isiolo Township and Resort City, are adjudicated (Malicha, 2019). As expressed in the chief's interview, such legal measures declaring community lands to be adjudicated and militarizing communal land disenfranchise marginal pastoral communities. It affects pastoralists' ability to claim and exploit land, an essential resource for a productive livelihood.

As presented in section 4.3, speculative land grabbing and rising tensions between communities over the anticipated development corridors adds to pastoralists' uncertainties (Boye & Kaarhus, 2011; Lind, 2017; Aalders, 2020; Mkutu et al., 2021). Chief Qampe has confirmed this claim and the devastating impact of limiting pastoralists' access to market and key livestock grazing corridors due to intensified insecurities over anticipated development projects. Such contestation is also seen in areas around the LAPSSET corridor, Isiolo airport and earmarked resort city areas (Chome et al., 2020; Elliot, 2020; Enns & Bersaglio, 2020; Huka, 2021; Boru, 2021). For pastoralists, all these changing land tenures and the movement control manifest in structural vulnerability undermining access to resources. The response to these movement restrictions through enclosures and displacement for development corridors is differentiated among the pastoralists because adaptation to these processes is political (Eriksen & Lind, 2009; Lind et al., 2020) and involves power dynamics between the rich and the poor (Thompson & Homewood, 2001). Dahl (1979) observed that introducing changes in the pastoral area often manifests into class dynamics. Today, such class struggle is evident with pastoral elites becoming more privileged, acting as 'custodians' while benefitting from a different land and investment deals (Okumu et al., 2017; Bersaglio & Cleaver, 2018; Enns & Bersaglio, 2020).

4.5.4 Introduction of Invasive Prosopis juliflora Species in the Rangelands

In 1980, Action Aid, through a FAO and Government of Kenya project, introduced a drought-resistant plant species *Prosopis juliflora* locally called *mathenge*, to Cheraab plains in the Merti sub-county.

Prosopis was introduced to curb desertification and promote drought-resistant species in Kenya's ASALs (Maundu et al., 2011; Obonyo et al., 2017; Huho & Omar, 2020). There have been both positive and negative outcomes of this intervention, but the negative results outweigh the intended benefit of the species (Maundu et al., 2011; Wasonga et al., 2016; Huho & Omar, 2020). In Isiolo, *Prosopis* has encroached on the swampy riverine areas of the entire Merti sub-county region. In all the event mapping exercises in Merti, elders and the younger pastoralists believe that *mathenge* brings massive threats to pastoral livelihoods. Isa¹⁹, a participant in the event mapping, said, 'we will lose entire Waso grazing land to Mathenge. It has taken our farming scheme, encroached on our homestead, and the livestock is losing the grazing lands. People will forget that there was once pastoralism practised in this region. This mathenge will displace us.'

Research participants repeatedly lamented the challenges associated with the expansion of *Prosopis*, making some places inaccessible due to the shrub thicket. First, the shrub has encroached on residential places and attracted wild animals both during the day and at night. While I was in the field, I saw several trails of cheetah and lion in front of my hotel compound. Residents believe that wild animals are approaching homestead areas due to the spread of *Prosopis*. Secondly, the seeds from the shrub are sugary, and when consumed by the goats, they cause tooth decay and significant mouth disease. Thirdly, there are cases of donkey disease locally referred to as *katika* (tear apart). The disease causes stomach discomfort in donkeys, and in the worst cases, it leads to deaths. Elders believe that it is caused by consuming the seeds of *Prosopis*. Finally, the shrub has encroached on the small-scale irrigated farming scheme along the river, and many people have lost their livelihoods. Abdullah, a community volunteer noted that because of these challenges, pastoralists raised their concerns in a vulnerability assessment session conducted by the Kenya Red Cross Society (KRCS) in 2018.

The vulnerability assessment seminar conducted in Korbesa resulted in an exchange tour to Baringo, where *Prosopis* is converted into commercial charcoal. Abdullah²⁰, a participant in the exchange tour, said *'the tour changed our perception of the shrub from 'curse' in the range to 'potential' resource'* Participants in the tour learnt that *Prosopis* can be transformed into *adu* (construction poles), charcoal and feeds for the drought. The Kenya Red Cross established a livelihood group in Korbesa for charcoal production. However, the failure to secure a licence from NEMA (National Environmental Management Authority) sabotaged the effort as charcoal burning is illegal according to the Kenya Forestry Management Act of 2016 (Republic of Kenya, 2016). Although there is potential to utilise *Prosopis*, the infrastructure to support such an initiative is not yet achieved. For pastoralists, the uncertainty arises due to the speedy *Prosopis* growth and riverine encroachment inhibiting access to

¹⁹ Isa H. Male, Merti, 2019

²⁰ Abdullah T. Male, Korbesa, 2020

production areas and the insecurity from a wild animal attack, even during daylight.

4.6 Changes in Social-Economic Structure

Between 1975 and 2020, there were significant changes in pastoralists' social organisation, as residential patterns shifted from camp to permanent settlement. Traditionally, pastoralists organised their settlement patterns into sparsely dispersed territorial and clan-based camps. In the 1970s, the only town with a sizeable, concentrated population was Isiolo town, which served as the district's administrative and trade centre (Hjort, 1979; Republic of Kenya, 1988). Pastoralism was the primary livelihood in the broader district, supplemented by small scale agriculture along the rivers and other irrigated farms (Swift & Omar, 1991). This section compares how social structures, including administrative units, settlement and education, demographic factors (livestock and human population), and livelihoods have transformed between 1975 and 2020. It also evaluates how these changes and associated practices manifest into different forms of uncertainties and opportunities for pastoralists and subsequently affects pattern of labour organisations and resource redistribution.

4.6.1 Changes in Administrative Units

In the 1970s, Isiolo Central was the principal administrative and trading centre that hosted vital government services for the entire district that covered a landmass of 25,605 and a population of 30,195 (Republic of Kenya, 1980). The district was divided into three main administrative divisions: Isiolo, Merti and Garbatula. These three divisions are divided into 16 locations, each with chiefs and assistant chiefs. Within small locations and sub-locations, pastoralists lived in camps organised into clan-based or spatial territorial patterns of *olla* (neighbourhood), *arda* (collection of neighbourhoods) and *dedha* (larger grazing territory for *arda* and *olla*) (Swift & Omar, 1991).

According to reports, the district was inhabited by Borana speaking pastoralists (Gutu, Wata, Sakuye, Gabra and Garri), Samburu, Turkana, Merus and a few Somali (Harthi and Isaaq) who came to settle in Isiolo town as traders (Dahl, & Sanford, 1978; Swift & Omar, 1991). Merus were immigrant workers in government ministries, schools, and the police department. In addition, other Somalis (Aulian and Dogodia) from the neighbouring Garissa and Wajir districts immigrated and permanently settled around Madogashe and Kom. Through time, the administrative unit changed, and today, Isiolo is a County with three sub-counties (districts) and ten wards (divisions), see appendix VIII and IX.

In the 1970s, Kinna was only a sub-location under Garbatula location, and Korbesa was a sub-location under Merti location. Today, Kinna has expanded to a ward (division) with six locations and twelve sub-locations. Similarly, Korbesa grew to a location status with three sub-locations. Such a remarkable rise in the administrative units reveals how Isiolo has been expanding due to population growth and boundary-making changes because of a shift in political systems, as discussed in section 4.3.

4.6.2 Changes in Settlement Pattern and Education

Traditionally, Borana pastoralists lived in camps, divided into the main family in the villages and the herding family in the bush (*war fora*). According to Swift and Omar (1991), the settlement pattern could be based on clan or spatial organisation. The clan organisation involved people of a given clan settling in a camp with extended families. The spatial organisation involved several clans residing in a neighbourhood (*ardha*) (Dahl & Sandford, 1978; Swift & Omar, 1991). Due to irrigation schemes introduced in the early 1970s to counter post-Shifta destitution, permanent settlement and trading centres emerged in Kinna, Malkagala, Irresa Boru and Sericho, each with a handful of permanent mud houses. In addition, other settlements emerged near missionary centres established to provide relief food to the stockless pastoralists in Garbatula, Merti and Korbesa. The customary settlement based on bush camps (*war fora*) and main house (*war gudda*) changed.

The introduction of schools in Isiolo began during *Daaba*, especially near the concentration camps²¹ in Merti, Sericho and Garbatula. In 1974, there were seventeen primary schools dispersed within the sublocations and two secondary schools, one located in Garbatula and another in Isiolo central (Republic of Kenya, 1976). By 2018, the number of schools in the entire County was 160, ECDE (Early childhood development education -118 public and 42 private), 125 primary schools (108 public and 17 private), 25 secondary schools (17 public and eight private), two youth polytechnics, four tertiary institutions and two vocational education and training centre (Republic of Kenya, 2018). All these learning institutions, especially primary and secondary, are spread throughout the County, while the tertiary and vocational training are in Isiolo town, aside from a non-operational vocational training in Merti.

The expanding administrative units, permanent settlement in urban centres and increasing education have altered the customary pastoralists' social organisation, gender roles, household labour and residence pattern (Witsenburg & Roba, 2004). This, in turn, influences livestock management practices, such as mobility and gender relations, due to the outmigration of productive labour forces either for education or alternative jobs in urban centres. Herd owners often face the dilemma of tending the animals in the bush, staying in town for children's education, or hiring external herders to manage the livestock, all influencing diverse moral economy practices through collaborative labour sharing or resources redistribution to counter shortages. Women must often balance child-care roles, animal welfare and town needs. Hiring a labour force is often the case in the more urban setting, especially for the better off pastoralists. Collaboration is apparent in a more remote pastoral setting with limited access to hired labourers, as shall be seen in chapters six and seven.

4.6.3 Changes in Human and Livestock Population

²¹ These camps are designated places commonly known as daab, to allow pastoralists to live and graze their animals during the Shifta war between 1963-1969. See Khalif and Oba, 2013.

Like the changing administrative units and the pastoralists' settlement structure, the human and livestock population have increased significantly since the 1970s. As presented earlier, pastoralists were sparsely populated in satellite camps across the three administrative divisions. The only area with a sizeable population was Isiolo Central, which served as the region's administrative centre and the missionary, irrigation, and trade centres. The following two tables show population growth trends from 1979 to 2019 in the district and the two study sites.

Table 4.3: Population Trend, Isiolo, 1969-2019

Human population	1969	1979	1989	1999	2009	2019
Isiolo District	30,195	43,487	70,078	100,861	143,294	268,002

Source: Compiled by author from District Development Plans and the KNBS census reports

Human Population	1979	1989	1999	2009	2019
Kinna	1,200	5,350	7,133*	14,618	27,216
Merti	7,000	13,349	15,771*	20,341	47,206

Table 4.4: Population Trend, Kinna and Merti, 1979-2019

Source: Compiled by author from KNBS census reports and Isiolo District Development Plans

Table 4.4 shows a noteworthy increase in population from 30,195 to 268,002 between 1969 and 2019. Equally, the population in the two sites have significantly increased, as shown in Table 4.6. In Kinna, the population rose from about 1,200 to 27,216, while in Merti, it expanded from 7,000 to 47,206. The rise in population results from the expansion of settlements and urban centres. During the first three decades, 1969-1989, the population trend increased by about 2.5%. However, between 1989 and 2019, the average annual population growth rate is about 4.4%. Several factors could explain the changing population trends. Between 1969 and 1989, the changing political-economy factors discussed in section 4.3, including a shift in governance, movement control and outmigration, constrained population growth. Studies suggest that the population growth observed between 1989 and 1999 was from the inmigration by the Samburu, Meru, and Turkana and some Borana returnees who emigrated to Somalia and Ethiopia during the Shifta war (Hjort 1979; Swift & Omar, 1991).

Between 1999 and 2019, the population trend doubled every ten years. This increase is associated with a rapid influx from the neighbouring Counties, especially herders from Garissa, Wajir, and Marsabit, due to relatively better climatic conditions. According to elders in historical interviews, the remarkable threat that Waso pastoralists face today is the influx of livestock and humans from neighbouring counties. Several drought reserves, including Yamicha and Kom, are now permanent settlement locations, with chiefs and schools due to rapid population and encroachment of the reserve. This in turn

undermines the customary Borana resource governance. The other significant factor is expanding the farming group from Meru encroaching on the disputed lands between Isiolo and Meru Counties, as discussed in section 4.5. Equally, the availability of market, infrastructure, schools, and proximity of Isiolo to central Kenya and Nairobi attracts investors and pastoralists from the region to reside in Isiolo as traders, herders, or employees (Hjort, 1979; Gargule, 2018; Republic of Kenya, 2018).

Finally, proposals under LAPSSET for a 'resort city' to be developed near Isiolo as well as related plans to establish the town as the development hub for the Northern has contributed to population growth (Watson et al., 2016; Elliot, 2016). These expansions and rapid increase in population significantly push pastoralists to the periphery, potentially displacing them from the prime lands. A respondent²⁴ in Isiolo explained:

'In 2000, I had about twenty camels grazing at an open field near Kambi Garba. My herd increased, and I was able to school all my children to university, sell milk to market in Nairobi and build several houses in Isiolo town. However, in 2018, an investor came and fenced the entire field to construct a resort. Now we don't have anywhere to graze; we move between Gambela and Kipsing in Isiolo County to negotiate with Turkana herders. We are squeezed from all the corners due to private development and rapid rise in livestock and human population'.

Like the human population, the number of livestock has also increased between 1979 and 2019. The Table below shows this trend.

District/Sub	Cattle	Sheep	Goats	Camel	Donkeys
Isiolo Total	201,900	210,000	192,000	25,000	3,200
Garbatula	124,600	128,000	140,000	22,500	1800
Isiolo Central	18,000	47,000	30,000	300	1000
Merti	59,000	35,000	32,000	2,200	400

 Table 4.5: District and Division Livestock Population 1979

Source: Compiled from District Development Plan 1979-1983

Table 4.6: County and Sub-County Livestock Population 2019

County/Sub	Cattle ²²	Sheep	Goats	Camels	Donkeys
Isiolo Total	271,589	854,725	1,030,005	148,859	33,692
Garbatula	135,671	491,857	607,921	82,312	17,531
Isiolo Central	50,299	111,613	175,883	21,728	6,739
Merti	85,628	251,255	246,201	44,819	9,422

Source: KNBS 2019: Distribution of livestock population by type

Tables 4.5 and 4.6 show varying livestock populations. As for cattle, compared to other livestock

²² These are places where pastoralists were held during Shifta war movement restriction and emergency rulership in Northern Kenya, Isiolo.

species, there is a minimal increase. On the other hand, the numbers of small stock have increased significantly, almost totalling about two million. There is also a significant rise in camels from an initial 25,000 to nearly 150,000 in the entire County. Several factors could account for this trend. But before that, it is important to acknowledge the significant challenges of counting mobile pastoralists and livestock, and so such livestock census data must be used with caution. As for the trend, the slow growth rate in cattle could relate to the challenges of cattle production in the region. First, the factor that accounts for slow growth rate in cattle is the frequent livestock raiding among the Borana and the neighbouring herd owners and increased livestock commercialisation. Secondly, herd owners noted that cattle do not withstand drought compared to small-stock and camels. All the twenty-four in-depth narrative interview participants had small stock in their livestock species or have had to diversify into small stock later in their production. Darmi²³, herd owner in Kinna noted:

'After the 2017 drought, I sold fifteen cattle and purchased goats. I decided to purchase goats because they are good, easy to manage and less likely to die from disease compared to cattle. Through my herding life, I realised that goats withstand hardship more, little pasture suffice them, they reproduce quicker and easy to sell for any significant needs. Therefore, I have reduced chances of losing all the cattle and replaced with goats'

As Darmi noted, there are various needs that necessitate a shift to small stock, including, drought and disease mitigation, productive needs, and ease of marketing for any significant needs such as school fees, paying hired herders, or other bills. Although the numbers of small species have risen, compared to the span of the time (45years) and the faster gestation cycles in goats, the population has not grown significantly. Camels are also on the rise primarily due to their ability to withstand drought and the increasing commodification of camel products (meat and milk) for the growing market in urban populations (Kagunyu & Wanjohi, 2014; Mwaura et al., 2015; Watson et al., 2016; Lamuka et al., 2017; Volpato & King, 2019). In the 1970s, the Sakuye specialised in camel production but lost their livelihood during the Shifta war. Studies have shown that the Sakuye, (Borana speaking Cushitic group) have not been able to recover fully from the event and instead became agro-pastoralists, traders, and town dwellers (Dahl & Sandford, 1978; Swift & Omar, 1991). Today, camel production is largely by the peri-urban Somalis, Gurreh and Borana especially around Chari, Boji and Kulamawe area.

Thirdly, there are rising livestock diseases across the region (Ikikor, et al., 2020; Omondi et al., 2021). According to research participants especially around Kinna, *dukub-gandhi* (trypanosomiasis), *shilmi* (East Coast Fever- ECF), and *kurtubale* (lumpy-skin disease-LSD) are the most common diseases that affect cattle species. Elders relate the rising cattle disease to the frequent tsetse infestation from the

²³ Darmi, D. Female, Isiolo, 2020

habitat near the parks and the rivers. In addition, there are significant seasonal diseases that erupt following drought, such as ECF, treated by spraying the animals on a weekly basis. During rainy seasons, contagious diseases such as *silisa* (black quarter disease - BQD) and ECF are common among cattle, as evidenced elsewhere too (Homewood et al., 2006). Dr Mohamed, a veterinary doctor in Kinna, noted that the migration of unvaccinated animals from across the border to Waso areas, especially in dry seasons, has resulted in the transmission of diseases such as *hoyale* (FMD), pneumonia, RVF (Rift-valley fever) and PPR (*finno*).

Earlier ethnographic accounts of Isiolo (Dahl and Hjort, 1976; Dahl, 1979) and other development reports (Dahl & Sandford, 1978; Swift & Omar, 1991) did not provide a full account of animal diseases that affected livestock in the 1970s. There was only passing mention of goats and sheep as significantly affected by CBPP (Dahl & Hjort, 1976, 239; Dahl, 1979, 50). Notably, all the twenty-four in-depth interview participants mentioned livestock disease as the challenges that affect their livelihoods. The differentiated access to veterinary medicine, weekly animal spraying and timely treatment helped the wealthy herd owners manage diseases. This research found that there is only a single veterinary officer in Kinna and Merti respectively, intensifying livestock disease management. In addition, geographical distance from health facilities, and untimely disease mis- diagnosis affects animal. Pastoralists acknowledged that they purchase medicines from private agrovet²⁴ kiosks and treat their animals, without consulting veterinary officers.

In addition to the limited veterinary health facilities, the study observed that general health centres are minimal, especially in the remote regions. For instance, in the 1970s, there was only a single district hospital, two health centres located in Isiolo central and Garbatula, and five dispensaries spread in Sericho, Erasaboru, Kinna, Bulesa and Oldonyiro (Republic of Kenya, 1980, 51). By 2018, the number of healthcare centres include three tier 3 centres, 51 dispensaries and 36 community health unit (Republic of Kenya, 2018, 25). Despite the expansion in healthcare systems, the study did not establish the spread of Community Animal Health Workers (CAHW), that is present in the neighbouring pastoral Counties (Cinnamond & Eregae, 2003).

Until here, the section has shown significant changes in human and livestock population both of which have different implication for pastoralism and experience of uncertainties among pastoralists. As for the increasing livestock population and cross-boundary movement, there is spread of disease which are detrimental for livestock and sometimes result in market closure as witnessed in the outbreak of RFV in Isiolo and Meru (Afognon et al., 2017; Jebet & Muchui, 2018). Secondly, due to the shrinking land base and competing use, the increasing livestock and human population compete with limited resources

²⁴ Shops selling veterinary products

and sometimes this result in violent conflict and livestock raiding (Krätli & Swift, 1999; Homewood et al., 2004; McCabe, 2004; Schilling et al., 2012; Sharamo, 2014; Auma, 2015). Different pastoralists respond to these variable diseases, insecurity and rising population pressures differently depending on their resources and network as shall be presented in chapter six and seven. In the next section, I explore the final social-economic changes: livelihood transformation and technologies.

4.6.4 Development, Technology, and Livelihood Change

During a key informant interview in Isiolo, I asked Duba²⁵, is there any resilience in pastoral production since Dahl's study in the 1970s? He responded:

'When Dahl and Hogg conducted their fieldwork in early 1970s, pastoral economy was depleted, people were just surviving on relief, no development, no elites, no service, and we were very poor. School was introduced during daaba and people were beginning to enrol as adult students. There was no Borana who owned any building in Isiolo, aside from few Indians and Somalis (Harthi and isaaq clan). When Richard came back in 2000 to work for DFID, he was extremely shocked. People have built up their livestock, business were flourishing, manifold NGOs projects emerged, infrastructure developed, educated elites and civil society was coming up and pastoral economy was booming. Despite many challenges people survived and by this there was some good deal of resilience.'

Dawud's response covers the pastoral transformation both in software (pastoral elites, civil society) and hardware development such as economic change and infrastructure development. In the 1970s, pastoralism was the primary livelihood supported by minimal agriculture and small shops in towns (Dahl & Sandford, 1978, Hjort, 1979). Today, Isiolo is an economic hub for Northern Kenya and there are numerous livelihood options supported by transforming technology and highway connecting major towns. Improvement of road network including Isiolo-Marsabit highway, recent Isiolo-Madogashe road and other commissioned large-scale infrastructures adds to the growth of Isiolo (Kochore, 2016, NETIP, 2020). Equally, spread of communication and transport technology (automotive, airport, mobile phones, and mobile money) and commercialisation of livestock products (livestock market, abattoirs, commercial milk market) creates multiple livelihood options for the residents. As stipulated by Dawud, all these services were not there in the 1970s and pastoralism was nearly collapsing. What then does this transformation mean for pastoralists?

First, technological spread, diverse livelihoods and market connections are centred near urban areas and major towns such as Isiolo Central. However, pastoralists in more distant areas benefit minimally from the evolving technologies and development via diverse social networks in towns.

Secondly, the availability of market and rising urban population creates opportunities for the near-urban

²⁵ Duba, T. Male, Isiolo, 2020

pastoralists to diversify into various trades (milk, meat, poultry) and other opportunities. Equally, with increased decentralisation and concentration of development NGOs and government services in near urban areas, some degree of stratification emerges between the urban-remote dichotomy. This observation is supported by Swift 1989 who noted that '*the urban poor exercise effective claims on the government for preferential assistance, in a way poor rural people generally cannot*' (Swift, 1989:46). It is therefore imperative to know how different pastoralists (men/women, young/old, poor/wealthy) differentiated by spatial geographies experience and respond to changing pastoral livelihood, technologies and associated forms of uncertainties and opportunities.

4.7 Conclusion

This chapter has shown that pastoralists have lived with various forms of uncertainties associated with structural change (shifts in governance, movement controls), changes in the biophysical environment (drought, flood, disease), shifts in land tenure (investment, park, and conservancy enclosures), and socio-economic changes (settlement, demography, technology, and livelihoods). The frequency and effects of interacting uncertainties have changed, where pastoralists deal with multiple events simultaneously. Today, pastoralists live in constant fear of disease, floods, and movement control. The rising population and subsequent pressures on the limited resources and the cost of commodified livelihoods further exercarbate pastoral production. As a result, pastoralists must utilise new ways of adapting to uncertainties and changing livelihoods. Compared to the 1970s, pastoralists have diverse economic opportunities and social relations to spread risks and live with and off uncertainties. As discussed in subsequent chapters, people's responses to uncertainty are closely entwined with diverse moral economy practices. The next chapter examines moral economy practices in 1975, drawing on a close assessment of *Suffering Grass* and data gathered from historical interviews and archival material. Chapters six and seven then review contemporary moral economy practices in Korbesa (remote, pastoral area) and Kinna (near-urban pastoralism).

CHAPTER FIVE: PASTORAL LIVELIHOOD STRATEGIES AND REFLECTION ON 'SUFFERING GRASS': WHAT WAS THE ROLE FOR MORAL ECONOMY?

5.1 Introduction

'Will there still be resilience in the suffering grass? I would hope so but can see no clear answer' (Dahl 1979, 268)

In her seminal study *Suffering Grass: subsistence and society of Waso Borana*, Dahl posed the question above to highlight whether the Waso Borana pastoral system would continue to be buoyant amidst political, environmental, and economic turbulence. Answering this question is not straightforward. It depends on whose grass is suffering, where, and with what consequences? Equally, the capacity to be resilient is highly differentiated across households and within pastoral settings due to varying access to and control of resources. Following Dahl's book, this chapter establishes a longitudinal baseline for the study, identifying the diverse forms of moral economy practices that sustained pastoral production in the mid-1970s²⁶. The chapter asks:

- a) What were the pastoralists' strategies in enhancing 'resilience' in the 1970s?
- b) What forms of moral economy emerged to help pastoralists live with changing uncertainties?
- c) How were the moral economies differentiated across social dimensions?

The chapter combines multiple methods, notably using *Suffering Grass* to develop a baseline, coupled with secondary data and triangulated with people's recollections, biographies, and historical interviews. The aim is to understand the contours of what constituted moral economy in the 1970s (and how it was differentiated by location (Kinna and Korbesa) and by social group (wealth, gender, age) in response to diverse forms of uncertainties. This will enable a comparison with more current practices of moral economy, as explored in subsequent chapters. This chapter finds that in the 1970s, key uncertainties faced by pastoralists included drought, shortages of labour due to outmigration and state policies after the Shifta²⁷ war (including restrictions on movement), and militarisation resulting into loss of livelihoods. Equally, pastoralists managed these events through three fundamental moral economy practices, notably linked to extensive livestock production, including livestock management, labour organisation and livestock redistribution. In addition, there was minimal external support through irrigated farming, government and charitable organisations' relief food, and economic diversification.

²⁶ Mid-1970s was the year that Dahl conducted ethnographic research among the Waso Borana pastoralists and published the ethnographic work in her book *Suffering Grass* in 1979. Therefore, my research assesses the changes and continuities from 1975 to 2020 starting from the period when dahl conducted her fieldwork, thereby generating 45 years' livelihood trajectories.

²⁷ The Shifta war was the seccessionist war that erupted to curtail the attempt by Kenya's Northern Frontier District to secede to Somalia after Kenya's independence.

In the section that follows, I provide a brief recap of Dahl's Book *Suffering Grass* and later discuss the above three moral economy practices.

5.2 Brief outline of Suffering Grass and the Moral Economy Practices

Suffering Grass is an ethnographic account of the subsistence economy of Waso Borana in Northern Kenya and is organised into two main parts. The first part focuses on animal husbandry and the internal organisation of pastoralist livelihoods. The second part addresses the effects of community integration into what was then a recently independent Kenya as well as the severe restrictions in access to primary subsistence resources (livestock, pasture, and labour) resulting from the Shifta war of 1969 (Dahl, 1979). At the time, the government curtailed Borana's effort to join Somali secessionists in counter-insurgency measures, which resulted in severe livestock losses. The acute drought of the early 1970s followed by the unfolding consequences of the Shifta conflict intensified the vulnerability of pastoralists (Dahl & Sandford 1978; Hogg, 1987; Khalif 2010; Guyo, 2017). The consequences were grave. Dahl and Sandford (1978) estimate that the Sakuye²⁸ group were left complete stockless. They noted that some 20% of the population was pushed to practice irrigated farming, some into urban poverty, and the remaining population depended on government' relief.

Despite all these challenges, the 'cattle economy provided a resilient base for social cohesion and impressive spirit of community' (Dahl & Sandford 1978, 18). However, this cohesion was weakened by political-economic changes, such as shift from colonial to post-colonial governance and integration into market economy, which resulted in an unequal ability to endure the animal production threats (Dahl, 1979, Hogg 1985). According to Khalif (2010), livestock holdings of Borana pastoralists have never fully recovered. As presented in chapter two, there are many studies on pastoralists' livelihood strategies; here, the thesis is mainly concerned with transforming pastoralists' moral economies practices in responding to diverse uncertainties. The study employs moral economy practices as a comprehensive set of traditional and recently created networks of relations centred on collective and redistributive transfer of values and resources, and based on forms of solidarity, which help people survive and prosper, including under conditions of uncertainty (Chapter two).

I argue that combining pastoralists' own moral economy practices with external support such as market, social protection especially cash transfers and livestock insurance (Jensen et al., 2017; Asfaw & Devis, 2018; Carter et al., 2018; Janzen & Carter, 2018; Caravani Et al., 2021) in adaptive ways helps pastoralists navigate uncertainties that impinge on production. However, access to support is highly stratified and differentiated among the pastoralists and across pastoral areas. Despite this differentiation, moral economy practices play a pivotal role to help pastoralists live with and off livelihood uncertainties.

²⁸ Sakuye is Borana speaking Cushite found in Isiolo and Marsabit Counties of Northern Kenya.

A detailed discussion of the Dahl text, combined with in-depth historical interviews across Isiolo, I identified three core themes that were central to pastoral practices in the 1970s, and constituted forms of moral economies to which I now turn to. These approaches are a) livestock management, b) labour organisation and c) livestock redistribution.

5.3 Livestock Management

As presented in chapter four, pastoralists of Northern Kenya inhabit rangelands that experience multiple, intersecting uncertainties including erratic rainfall, wildlife encroachment, animal disease, and the influence of State policies. Livestock management techniques are central for making productive use of variable circumstances. Livestock management involves all the practices for enhancing continued production amidst environmental, ecological, political, and human-caused turbulences through intricate caring relationship with the animals, flexible movement, and ensuring access to water and resources. This section reviews how pastoralists managed livestock during the 1970s. Specifically, three techniques are highlighted: adaptive mobility, herd splitting, and specialised care of animals. Each is presented respectively below.

5.3.1 Adaptive Mobility

Livestock composition among the larger Borana-speaking pastoralist groups is diversified: Boranas keep cattle, the Sakuyes keep camel while the Gabras rear small stock (Dahl & Sandford, 1978). However, things changed after the Shifta war, which left many living in a state of destitution. Boranas started rearing small stock while some shifted to keeping camels for milk and to haul baggage (Dahl & Hjort, 1976). All the 'three with sweet milk²⁹' (*saddeeen aanaan miyaa*) exploit different pastures, and are affected by varied livestock diseases, necessitating differentiated care. Again, as presented in chapter four, Waso drylands receive unreliable and variable rainfall, increasing the importance of moving herds to exploit patchy resources. Adaptive mobility refers to the strategic movement of herd owners, livestock, and livestock products either for a shorter or longer period to exploit resources (pasture, water, market) and other opportunities in the rangelands, while reducing risks. The movement is adaptive because it is always flexible and modified according to the needs and the possible threats that pastoralists encounter.

According to Dahl (1979), Waso pastoralist practised semi-nomadism, which involved increased livestock movement whereby humans settle in camps and only shift bases for security and hygiene purposes. In the 1970s, pastoralists considered diverse factors when planning livestock movements. This included fertility (milk production and fattening needs of different breed), health factors (presence of parasites such as: ticks, and insects), soil and vegetation context (the colour of the soil, texture,

²⁹ Borana herders refer to cattle, camel and shoats as 'three with sweet milk' because they provide a near-continuous supply of milk due to their biological differences.

mineral and salt content of water) and cacti trees for shades (Dahl & Sandford, 1978). Pastoral mobility was more than the cyclical movement of herds. It required a high degree of planning by livestock managers that were experienced with the intricacies of a highly variable landscape; hence, livestock managers in Waso Borana could be likened to be *'high variability professionals'* (cf. Roe, 1998). Sometimes rangelands insecurity inhibits such planning, and pastoralists move opportunistically.

Adaptive mobility is part of Borana customs of livestock management and is passed on from the older generations to the young herders. These customs are embedded in local knowledge and practices of managing and adapting to variable climatic conditions (Naess, 2013). Dahl also noted, '*The dietary preferences of different animal species, and each plant's nutritious content, veterinary utility, and development cycle are observed and transmitted as part of the Boran cultural heritage*' (Dahl, 1979, 48). Although some of these heritages are central to livestock management, they change and adapt to new realities, as living with uncertainty is not a linear and static process. Recent studies have also demonstrated the significance of local ecological knowledges as central to forecast whether conditions, plan and manage climate crisis (Oba, 2009; Naess, 2013; Kagunyu et al., 2016; Dedefo et al., 2020).

Throughout my historical interviews, pastoralists emphasised the importance of mobility to exploit uneven drylands resources. Pastoralists named most of the drought after the places they trekked the animals or other events experienced alongside the dry periods. For instance, the 1976 drought was named *ola Eldas*, and 1984 named *ola midan dimo* (yellow-maize drought), referring to Eldas, a place where livestock subsisted, and the yellow maize they received as government's relief food in 1984. Critical understanding of rangeland, including the security and safety of various places and the availability of water and pasture, is a fundamental part of livestock mobility. Traditionally Borana elders designate grazing *dedha* (block) for *hawich* (milk stock) and *fora/guyeesa* (dry stock) seasonally, and animals are moved strictly within the *dedha* to avoid competition and overgrazing. The seasonal calendars among the Borana pastoralists are *ganna/agaya* (wet/long-rain), *bon/adolessa* (dry season) and *ola* (absence of rain, or drought).

In these three seasons, pastoralists graze animals in different places as specified by Borana traditional *dedha* council. In the wet season, animals are fed near temporary surface waters like pans, streams, and flood plains. In the dry season, riverine swamp and hand-dug wells are used, and in the absence of rain, pastoralists resort to permanent ground water sources such as permanent wells and boreholes. Sometimes this mobility pattern was constrained by the encroachment of Somali and Samburu herders (Dahl, 1979, 55). Despite this, pastoralists practiced different forms of movement facilitated by the common property rights among the Borana. The table 5.1 below summarises the types of pastoral mobility.

Table 5.1: Pastoral Movement types³⁰

Movement types	Activity	
Seasonal	Livestock mobility to specific sites based on the seasons to exploit reserved pasture and water for each season: Wet season, dry season and drought.	
Daily	Everyday trekking to camps-water and camp-pasture	
Transfers	Transfer of <i>fora</i> herds to <i>hawicha</i> , <i>hawicha</i> to <i>fora</i> and across households	
Shifting camps	Change of camps for hygiene purpose and security	
Migration	Change in settlement pattern 'bush-town' migration	
Surveillance	Pasture surveillance and security scouting	

Source: Author's own compilation drawing on Dahl and Sandford (1978)

The table summarises pastoral mobility into six interrelated patterns: the seasonal movement involves livestock mobility to specific *dedha* to exploit reserved pasture and water for each season. Daily movements entail everyday trekking to water and pasture sources, and the movement depends on the abundance of the resource. However, female herders fetch resources for young and sick animals and otherwise cared for them near the sedentary camps to minimise their mobility. Transfer of the herds and flock between *hawicha* and *fora* camps involves shifting calving animals from *fora* to *hawicha* to calve near camps. Such movement ensures that the calves are managed accordingly by the female members of the households, and the cow continues to provide milk. Similarly, a dam is moved from *hawicha* camp to fora for mating and access to good fodder throughout pregnancy

Pastoralists occasionally shift camps and livestock enclosures for hygiene and the spread of parasites and insects. In the rainy season, the livestock enclosure would get muddy, and the mixture of the dung and the mud forms what Borana calls *c'anc'aan*. In such cases, it became essential for the camps to be changed frequently to avoid foot rot, especially among the small ruminants. The shifting of camps is also due to insecurity and the need for camp members to collaborate by moving together and providing *waheel* (comradeship). *Waheel* is a fundamental principle in Borana moral economy of pooling resources and labour, as will be explored in chapter six. Migration between centres and bush camps (or *war-gudda*, referring to main camp/house), entails another type of mobility. Pastoralists would migrate from 'bush' camps to village centres for a variety of reasons including to access schooling, relief food and a dispensary while keeping the livestock in the bush. Finally, surveillance movement of the herd managers involves scouting pastures and the security of the rangelands to plan strategic mobility before drought onset.

³⁰ Key informant interviews with Isa H, Merti, 2019, complimented by Dahl, 1979

Echoing Dahl, mobility is an essential part of livestock keeping strategies in that it helps pastoralists reduce risks and maximise the opportunity to navigate unreliable resources. Sometimes, a well-planned movement results in severe loss due to differences in climatic conditions and unexpected uncertainties. During *Ola Kinna* in 1992, herds from Merti areas trekked to the Kinna-Kula Mawe zone, and Borana pastoralists lost considerable livestock to tsetse infestation and raiding due to the fight between Borana and Aulian. In the 1970s, social practices and reliance on donkeys and camels as carriers facilitated movement. Since pastoralists moved cyclically, cooperation with trusted families, kin and camp members to access labour and *waheel* was instrumental. In these relations, moral economy helped pastoralists manage labour constraints as well as find safety that enabled movements to areas that were insecure. In the next section, we observe how pastoralists dispersed or split livestock to navigate rangelands insecurity and exploited limited resources.

5.3.2 Herd Splitting

'By dividing a family's holding into spatially separate units, loss due to narrowly located causes can be minimised. It is not only the rainfall that is patchy and unpredictable; another hazard to the herd is also local in their incidence. Some relate to the Borana's interaction with neighbouring people, such as the risks of raids from the Samburu, whose cycle of age- grade customs and ceremonies cattle rustling is essential. Others are 'ecological', such as the risk of predator attacks or infection by disease' (Dahl 1979, 50).

As captured in the above quote, Borana pastoralists practiced herd splitting into diverse units to spread risks and ease management tasks. Herds were split into the *hawicha-guyeesa* unit, young-old animals, weak-strong, cattle-camel herd, and the small flock. Such splitting enhanced proper labour assignment, and the administration of diverse livestock needs and threats. In 1976, there was a severe drought in Waso, referred to as *'Ola Eldas'* (Elda's drought). In this event, many livestock trekked to Eldas while others dispersed within Waso. Musa³¹, a participant in a historical-narrative interview, reiterated the importance of herd dispersal as a critical management strategy. Musa noted

'There was a severe drought in 1976, and the people were extremely impoverished. Our livestock holding and the labour force was not strong. We needed plans to save this limited livestock. Our father had mala mar' (discussion) with our olla (neighbour). Then they decided to combine our herd with Ilman Jaldeesa Wako Sora, Wako Tadicha and Salad Hapicha and formed four kaar (unit) cattle. They divided herds into specific guyeesa, hawicha and some (jajjabo) strong animals. The one kaar of strong herds dispersed to Eldas, two kaar of hawicha taken to Charri and one kaar of guyeesa spread to Chaffa. After the drought, our family lost all the herds in Eldas, 22 cattle out of 55 in Charri and only lost two calves from the hawicha in Chaffa'.

³¹Musa K. Male, Merti, 2019

Musa's family reduced the risk of total livestock loss by dispersing and joining forces with other herd owners to maximise the labour needs for long-distance trekking. Although they lost all the livestock in Eldas, the remaining herds continued to provide subsistence and capital to the family. According to Dahl, Waso pastoralists practised other forms of herd dispersal by splitting father and sons' units and separating households in a polygamous family setup. Fathers kept the respective homes in a very distinct ecological zone to minimise the risk of accumulating all the livestock in one location. Both forms of dispersal were possible due to cooperation with neighbours and family organisations into polygamous arrangements. Through such collaborations, pastoralists manoeuvred through the 1976 drought, exploited labour, and saved the livestock as in Musa's case. Having presented the significance of herd splitting, we now elaborate on specialised livestock care to manage uncertainties in the 1970s.

5.3.3 Specialised Livestock Care

'Ijolle qaabeet wal dabaarsee' (child upbringing differs due to the care received)

Dahl dedicated an entire chapter to 'the rhythm of pastoral livelihood' in her book *Suffering Grass*. This chapter revealed how pastoralists' daily and seasonal practices were adapted to livestock management through various labour divisions among household members in a camp. In a key informant interview, Isa³² stated a proverb, '*Ijolle qaabeet wal dabaarsee*', which means parenting differs due to the level of care, affection, and nourishment received by the child. According to Isa, this applies to livestock rearing as well. As such, we can argue that the livestock which receives maximum care and nourishment in their respective season will withstand threats to animal production, unlike animals that receive less attention. Among Borana pastoralists, livestock care revolves around decisions concerning animal husbandry, herding and the distribution of animal products within the extended family (Dahl, 1979). These livestock caring roles are divided among the household members.

Firstly, the father essentially decides on animal husbandry.³³ Such plans involve: capitalising on female breeding stock; allocating livestock for different user rights; and deciding any stock exchange. The firstborn sons undertook herding management under the close supervision of the father. This task involved *'understanding herding task and tactics including movement planning, gathering information on soils, disease, quality of pasture and assigning roles to the younger members of the herding family'* (Dahl, 1979, 90). Finally, women engaged in the household domain of milk management and redistribution. Women's role also included tending to the young calves, sick animals and cleaning the calf and cattle pen for hygiene (Dahl, 1979; Dahl, 1987).

Proper livestock supervision, care, and women's involvement in livestock management are central to surviving drought and drylands' insecurity. Numerous participants in historical interviews emphasised

³² Isa, H. Merti, 2019.

³³ Summarised from Dahl, 1979 and combined with my historical interviews.

the importance of substantial livestock care as the vital aspect of survival in unpredictable conditions. This care is highly specialised and gendered as females were called 'mothers of livestock' (Hertkorn et al 2005, 18), while the Borana referred to women as milk managers. In a historical interview, Kaddubo³⁴ noted, '*the livestock which always survives hardship are the ones cared for by the women and herded by the owners with the help of extra herders*'. This means that proper and intimate livestock care is achieved by collaborative practices, which is not possible with a limited family labour force and a lack of female herders' participation. As summarised in the saying '*ijolle qaabeet wal dabaarsee*', the extent and quality of care received by the livestock determines the strength of the animals to withstand the said threats. However, access to such specialised labour was interrupted by pastoralists' movement to villages as well as outmigration to 'down country' Kenya in search of alternative livelihoods.

The above section attempted to bring together pastoralists strategies around livestock management to overcome variabilities. These strategies were adaptive mobility, herd splitting, species diversification, and specialised livestock care, via collaborative labour support and specilisation. In all these strategies, the role of moral economy remains central in enabling pastoralists to manoeuvre through diverse livestock needs despite the unfavourable and variable conditions. Now, we move on to elaborate how labour management enhanced pastoralists survival in the 1970s to overcome the challenges they lived with.

5.4 Labour Administration

The importance of labour management in pastoral economies cannot be over-emphasised. All the livestock protection strategies, including mobility, diversification, dispersion, and specialised care, cannot happen if there is not enough labour. After daaba *in* 1969, Waso pastoralists suffered severe livestock losses, and most of the productive labour force migrated to 'down country' Kenya to look for alternative livelihoods. Outmigration deprived the dwindling pastoral economy of the essential labour required for rangelands exploitation (Dahl & Sandford 1978; Hogg, 1985; Hogg, 1987). Dahl dedicated four chapters of *Suffering Grass* to pastoral labour organisation and administration. In chapter four she explored *livestock and labour* to explain strategies of pastoral labour maximisation through various approaches. Chapter five gave details on the decision on livestock herding and the husbandry role of the father and the son. While chapter six defined the role of *mothers and milkmaids* as the household milk managers and chapter seven described how *kin and camp cooperate* to expand pastoral labour needs.

It is not surprising that these different forms of labour arrangement were discussed in four separate

³⁴ Kaddubo, J. Merti, 2019.

chapters, revealing the significance of labour in animal production. Access to labour is highly differentiated by wealth, family size and spatial geographies. My interviews on strategies to overcome drought, disease, and other sources of variability centred on labour. Borana herders met labour needs by strategising and pooling several households and camps to make livestock management viable. Dahl noted that '*Viability is not only a question of balancing herd size and the size of households but also the level at which this is done; the richer in stock and people, the more viable is the pastoral households' (-1979, 75).* Waso Borana pastoralists embraced the following labour administration for various tasks in the 1970s³⁵:

- a) Household-level strategies: marrying several wives and expanding to a large family, dividing livestock species among each household, joining households' herds, and sending the excess family to look for jobs.
- b) Cooperation and labour pooling: joining camps to expand labour need and inviting son-in-law to live with the new bride's patrilineal family.
- c) Recruiting trusted clients in exchange for annual heifer.
- d) Fathers delayed autonomy and livestock inheritance to sons to enjoy long-term control and access specialised labour.

The wealthy stock owners essentially applied these strategies because it is through the wealth that family members were fed and catered for. For instance, in a historical interview, a respondent³⁶ noted 'among our community, wealth is measured not only by the number of livestock an individual owns, but it is also measured by the number of the household member the father commands, as such, wealthy Borana men marry several wives and increase their status and provide sustainable labour'. In contrast the poor combined their few animals with wealthy families and lived symbiotically through patron-client relationships here, aside the labour relation, the low-income partner pay allegiance to the wealthy family and vote for them in the local administrative position (Dahl, 1979). This section discusses selected strategies of labour administration mentioned above and how rich and poor households deployed them. The aim is to reveal how different wealth groups lived with labour deficits in pastoral production in the 1970s and what role moral economy played in such practices.

5.4.1 Household Labour Arrangement

Defining pastoral households is not straightforward; aside from the nuclear family (mother, father, and the children), some homesteads have several camps belonging to extended families living in the same compound but with different shelters (Dahl & Sandford, 1978; Dahl, 1979; Swift, 1991). The extended bomas often belonged to the married daughters and sons, grandparents, divorced or widowed father's siblings (Swift and Omar, 1991). Some husbands in a polygamous marriage may combine all the

³⁵ Huqa D. Male, Kinna, 2020

³⁶ Jaba, W. Male, Kinna, 2019

households in a single camp, while others disperse separate families to spread risks to various places. Household members are the principal source of labour for livestock management due to their increased attachment and trust in caring for livestock because it is their *handura* (navel-nuclei herd). Trusting livestock care with household members is cheaper and more manageable as there are specialised roles for every member, including the younger child introduced into herding life as early as six years of age (Dahl, 1979; Dahl & Hjort 1976). Fathers are usually the household managers and control livestock farming decisions and calculate whether the given households meet labour need for animal care. If a household has a deficit of labour, options available included marriage (marrying additional wives), adopting 'sons' from relatives, and splitting the polygamous unit and locating different sub-units in proximity to particular niche settings for specialised livestock management and inviting poor dependents to become part of household in return for labour. To oversee all of this, the male head of household would take an '*executive*' role in the livestock sphere (Dahl & Hjort, 1976).

According to Borana tradition, firstborn sons should be the replica of the father and the only heir of the property. Fathers aspired to get sons, and if they were unlucky and did not get one, then they would adopt one from a relative who has several sons, or they would marry several wives to increase their chances. Although girls were also crucial in the livestock management sphere, they belonged to their husband's family once married. Equally, marrying several wives or allowing sons to marry was *a 'form of converting accumulated animal surplus into labour resources*' (Dahl, 1979, 76). This means that '*the bride wealth cattle are transformed into labour resources by accessing immediate labour from the new wife and the future children she will bear for the family*' (ibid.). Through polygamous marriage, male pastoralists invested in social relations. This is because Borana regard '*sodda*' (in-laws) highly. These relations exceed even blood bonds and expanding such networks raises a man's status. Several Borana sayings emphasise the importance of in-law relations. As the Borana saying goes, '*obole dowwe sodda dowwu daadabe*' (you can refuse your siblings, but you can never refuse anything to the in-laws).

Therefore, a large family both provides the labour required for livestock management and also privileges the family to access support from the extended relation such as *sodda* as mentioned above. Until here, the section elaborated how fathers organised family labour through strategic division. They did this by marrying several wives and allowing sons to marry to access a distinct household to manage the livestock. The fathers also joined households' herds under one unit to exploit the extended labour. The young and the women were assigned young animal care roles by households' heads. Nonetheless, in the 1970s, it was impossible to rely entirely on household labour due to limited household members and livestock inequality resulting from outmigration and post-Shifta impoverishment. This inequality was true for low-income herd owners whose members moved out to seek an alternative livelihood. In such cases, families collaborate with other camps or join the wealthy family through what Dahl called '*daha*'. The next section presents how low-income and wealthy families invested in camp collaboration

to survive.

5.4.2 Camp Cooperation or Entering Daha Partnership

Pastoralists depend on labour for specialised herding techniques, which depends on 'herder's levels of agility, prowess, physical strength, and experiences' (Dahl, 1979, 72). Sometimes, a household labour composition might be inconsistent due to the lack of age and sex structure required for livestock management. Pastoralists overcome such inconsistencies by merging herds and exchanging labour from different households through 'entering into daha' (1979, 70). Dahl argued that in a nominally viable production, the varied task should be performed by diverse people, and this cannot be left to the households' members alone. This is true because livestock management in different seasons require specialised attention, cooperation with other camps or partnering with 'daha' of junior herd owners. Herd owners joined camps to enhance drylands security against predators, attain company (waheela), and create an opportunity to pool milk, meat, and information. The proliferation of small arms in post-Shifta war intensified insecurity, especially from the Somali herd owners in the neighbouring districts. Equally, Samburu herders were threats to Borana, and hence collaboration between camps was fundamental for waheela and defence against killings and livestock raids.

Further, in the 1970s, pastoralists, especially in the Northern part of Isiolo, inhabited areas inaccessible to government services, including the security department. Cooperation helps in well digging, lifting fallen animals, and collecting feeds when livestock could no longer move due to severe drought conditions, as presented in chapter six. Furthermore, specialised livestock management strategies such as herd diversification and species dispersion to fora and hawicha become manageable when people cooperate. Therefore, camp collaboration helped households to navigate labour shortages required for livestock management and exploit unpredictable ecology due to adverse climatic conditions and other insecurities. Sometimes, it is impossible to meet all the livestock needs through camp collaboration or through reliance on household members. This is especially true for wealthy and influential herd owners who integrated pastoral livelihood into new administrative roles such as councillors, chiefs and teachers in the emerging Isiolo town. Such individuals engaged in absentee herd ownership, and therefore, employing trusted clients becomes an option. However, hiring clients create unequal ground for lowincome families with unviable family members and the inability to hire clients. The following section outlines how pastoralists relied on employed herders and the moral economies in such relationships. It also explores how the low-income families managed despite the inequality that existed due to differentiated access to labour.

5.4.3 Employing Trusted Herders

In the 1970s, herd owners met supplementary labour demand by employing 'trusted' clients or herders, but on a very limited capacity and by handful herdowners only: as the practices of hiring labourers was

not very common. Hiring labour was the last resort simply because '*animals are better spent building up family labour resources through bride wealth than employing herdsmen*,' (Dahl 1979, 78). Some households turned to hiring herdsmen following the loss of livestock during *daaba* and the drought of 1976 and 1982. These events left many herd-owners destitute, and since finding alternative livelihoods are not always easy, some people resorted to herding for wealthy families in exchange for an annual heifer. This was equivalent to KSHs 50 per month and some food and clothes occasionally (Dahl 1979, 8; Dahl & Sandford, 1978).

Employing herders relieved the family of the immediate labour needs, but challenges with such an arrangement were prominent. Dahl explained, '*there are problems of over-milking, falsely eating small stock by declaring them sick, and increased cases of complete theft and loss because animals are mobile and edible,*' (Dahl, 1979, 77). Similarly, for the herd owner to pay an annual heifer in exchange for labour, the productivity of the said heifer is transferred to the hired clients, who are sometimes not trustworthy and poorly managed the herds. In such cases, some herd-owners preferred adopting labourers and incorporating them into the family as clan members or as sons-in-law to enhance trust and proper herd management. Trusting family members with herds is less effort and safer because such individuals own a share of the stock. Research participants expressed the importance of care and daily surveillance to scout seasonal diseases and general animal wellbeing for a productive livelihood, suggesting the significant of extensive labour pool.

However, like Dahl's observation, the challenge of hiring labour overrides the benefit, especially if the owners were not always available for thorough supervision. Huqa³⁷ mentioned, 'the hired labourers mismanage the animals and sometimes do not administer the medicine you send for the animals. They sell the medicines and let the animals die. There is also a risk of over-milking and malnourishment of the young animals due to poor feeding. Sometimes, these herders are involved in theft schemes and share from the sale of stolen livestock. I have personally witnessed herders killing young animals and report to the owners that the animal died a natural death'. Various labourers were hired to manage the livestock despite these challenges, especially in severe dry periods. Compared to the 1970s, hired labours are very common today especially in urban setting and could be a monthly or daily 'Kibarua' (hiring) to collect animal feeds and help lift fallen stock as shall be presented in chapters six and seven. In summary, this section attempted to explore how pastoralists galvanised labour resources to facilitate livestock management practices such as mobility, herd dispersal and specialised care. The findings have shown how large family composition through intermarriages and inviting son-in-law to live together with the wife family have provided the much-needed household labour, collaboration with other camp members or entering partnership with low-income family through *daha* and finally reliance on hired

³⁷ Dahl defined stock associates as 'those men within an individuals' primary network with whom social ties are strong enough to permit the possibility of begging or demanding domestic animals to cover a temporary shortage of milk stock or an acute need for reproductive livestock capital' (Dahl 1979, 173)

client for an annual heifer. Equally, pastoralists re-invested in social relations through diverse forms of livestock redistribution to cement the bond between families, hired herders, and partners for a long-term sustainable relationship. In the following section, I present forms of livestock redistribution and their role in cushioning families in hardship times.

5.5 Livestock Redistribution

Pastoral scholarship has documented social network and redistributive solidarity as ways of encouraging more reliable livestock production in variable rangelands (Oba, 1991; Ensminger, 1992; Bollig, 1998; Waller, 1999; Tache, 2008). Dahl dedicated a chapter on the 'ethos of resource redistribution among Waso pastoralists' in *Suffering Grass* (Dahl, 1979, 167). The book divides the redistributive practice into two parts. First is collective solidarity, which involves the larger clan, and the second is the individual risk-sharing formula termed 'stock association' (Dahl, 1979, 172). In collective clan redistribution, the principle remains with clan elders as the initiators of the process. According to Dahl, collective clan redistribution dropped partly *'due to diminishing livestock property after daaba destitution*' (op cit. 183). Moreover, individual risk-sharing and alliance building create inequality where the giver expects the recipients to show political loyalty.

Despite the decline in redistribution, especially after post-Shifta war destitution, and the inequality that emerged between the poor and the wealthy herd owners, redistributive transfers were central to how pastoralists survived. However, such redistributive practices are changing and adapting to the new pastoral systems, as shall be presented in chapters six and seven. Dahl identified stock associates, clan redistribution and other household transfers. Deriving from her categories and combining my findings, I describe three categories of redistributive transfers: a) permanent transfer, b) temporary exchange, and c) life cycle transfers. The classification helps answer the question on the forms of moral economy that helped pastoralists in the 1970s manage livelihood loss due to drought and post-Shifta war destitution, as presented below.

5.5.1 Permanent Transfers

During Dahl's study, pastoralists exclusively relied on animal production aside from minimal diversification through irrigated farming, small kiosks, and involvement in administrative jobs. However, livestock formed the foundation of every household apart from those who were stockless. According to Borana, individuals without cattle (*gutu*) were despised as being lesser Borana. Again, pastoralists survived erratic environmental hazards and recovered herds by adopting strategies such as mobility, dispersion, and diversification. These strategies are only possible if the herd owner is rich in livestock and has sufficient labour. According to Dahl, '*richness in labour forces and the capacity to recover from livestock loss is enhanced through investments in other forms of relations and livestock*

exchange, such as stock associates ³⁸. Although Dahl singled out stock associate as an investment for future survival between individuals in a network, permanent livestock transfers is more widely practiced in Borana. These transfers are not coherently presented in the *Suffering Grass*, but they formed what Dahl documented as Borana livestock redistribution. Three types of permanent transfers are evident: transfers as part of a) individual stock alliance (gift), b) clan redistribution (*hirba*), and c) *Zakat*.

Firstly, stock alliance is defined as the 'transfer of irrevocable rights to specific animals and their offspring' as a gift' (Dahl, 1979, 173). In my research, participants referred to such practices as an investment in livestock enclosures (mona) in anticipation of future exchange. It also refers to participating in hirba³⁹ to help people survive shortages or manage the crisis as obligated in religious and Borana traditions. Although Dahl emphasised male-centric alliances, permanent livestock transfers are not fixed to people in stock alliances alone, but they feature as part of other socially and culturally defined obligations. These obligations emerge from alliances (marriage-sodda, friends-jaala, agemate-harriya), blood relationships and lineage (milo-mogole), neighbourliness (ollomitti) and finally, religious connection. All these relationships are activated during crisis, and the received transfer depends on individuals' identity, generosity, and participation in wider Borana welfare. Still, more importantly, it is the idea of providing qulaamo (first aid) and protecting the name of the Borana and Islam that people exchanged livestock permanently.

Secondly, transfer through *hirba* is facilitated through an institution called *buusaa goonoofaa*. Dahl did not mention either *hirba* or *buusaa goonoofaa* in her book; instead, she used 'clan redistribution' as a term referring to restocking the *qolle* (impoverished). She observed that Borana pastoralists had annual clan redistributive practices. In these events, the lineage elders review the community's vulnerability and organised redistribution for the impoverished. Sometimes, the *qole* initiates the collective clan redistribution by presenting their needs to the respective clan leader, who passes it over to the larger lineage council. In such a case, the clan evaluates the causes of the poverty and the *qolle's* character. This assessment involves review of poverty, whether caused by nature or an individual's negligence. If the former is true, such a person is restocked depending on their household's number. According to Dahl, such an individual is at least given '*ten cattle composed of pregnant cows, milk animals, and an ox*' (1979, 174). However, due to the decline in livestock numbers in the 1970s, such collective clan redistribution was very low. Like the stock associates, the clan redistributions favoured male pastoralists. In the 1970s, livestock as a capital was only accessible to the male herders, as fathers were the husbandry managers and controlled the livestock sphere (Dahl & Hjort 1976; Dahl &Sandford, 1978; Dahl, 1979).

³⁸ Hirba is borana word which refers to 'help' or 'support' through redistribution

Thirdly, Borana practised permanent livestock transfers through *Zakat*. *Zakat* is the fifth pillar of Islam and involves wealth transfer from the affluent to the specific recipient identified in the Quran. It is compulsory upon individuals whose property, including (livestock, farm produce and wealth) has exceeded the *Nisab* (taxable) threshold to pay *Zakat*. Eight specific *zakat* recipients are named in the Quran chapter nine verse sixty (Chap 9:60). They include (poor, needy, wayfarer, *zakat* collectors, revertees, debtors and those on the way of Allah). Dahl observed *zakat* redistribution among the Waso pastoralists through what they termed as 'taka' or the Muslim tax (Dahl,1979, 175). Although she documented the threshold for *zakat* payment, the pastoralists adhered less to the principles of *Zakat*. She argued that '*stock gift through (Zakat) is replaced by a gift of money, a hoe and a bag of seeds or consumer items such as food and clothes*' (Op cit. 175). Equally, Dahl, noted that pastoralists transferred *zakat* gifts to Islamic teachers, neighbours and the Muslim converts and less as part of collective clan solidarity.

Until here, the chapter has presented permanent forms of livestock transfers through stock alliance (gifts), clan redistribution (*hirba*), and *Zakat*. As observed in (Dahl, 1979; Tache, 2008; Santos & Barret, 2011), redistribution is unequally distributed, sometimes favouring the well-off due to their capacity to invest in numerous relationships of stock alliances. Low-income families were sometimes excluded because they could not sustain 'investment' into the redistributive cycle. Corroborating these writings, the chapter noted, despite some inequalities, there were other means through which the low-income and vulnerable families were incorporated into the exchange. Thus, vulnerable individuals within the community were not entirely left out. They were supported through religious or traditional Borana institutions. However, the support was minimal, and sometimes temporary, therefore bringing us to our second category, temporary livestock transfers.

5.5.2 Temporary Livestock Transfer

The temporary livestock transfers involve using a particular animal for a specified or unspecified period. Dahl classified the temporary transfer under '*stock patronage*' or '*stock clientage*', which differs from the stock alliance because the giver transfers the animal for temporary use as a loan. There are two forms of temporary livestock transfers: *dabare* and *amesa*. *Dabare* refers to the transfer of livestock and the right to use the animal's male and milk products for an undefined period until the owner asks for the animal to be returned. On the contrary, *amesa* refers to the right to use a milk stock for the said animal's milk period. Usually, the recipient keeps all the male produce of the *dabare* stock and save the female produce for the owner and return upon request. Dahl noted that the *dabare* exchange served two purposes: to relieve the recipient of the temporary shortages while the giver accumulates social capital and gains political allegiance for the emerging local administrative and political positions such as councillors, chiefs and government officials.

Contrary to Dahl's argument, my research found no single case of political commitment involved in the temporary livestock transfers. This is because, pastoralists who have exchanged dabare transferred the animals to their relative, widows, and orphans living in their area. What motivates the transfer of dabare is the ideals of being Borana and showing borantiti, not in the sense of authority, but to enhance the identity of being a Borana and be able to secure support from the broader communities when befallen by calamity. As such, there is no allegiance and political rewards between the giver and recipient because, both the givers and the recipients are bound by their relationships and customary norms.

Further, *dabare* transfers in the 1970s revealed the unequal relationship between the giver and the recipient '*because the animals could be recalled anytime while the recipient is ignorant of such times*' (Dahl, 1979,181). Although inequalities existed in all forms of exchanges among the pastoralists, the transfers also served the vulnerable group among the extended Borana herders. My research found that in the 1970s, pastoralists extended *dabare* and *amesa* animals to the weak, widows, orphans and the disabled with no livestock or milk stock for subsistence. Like other forms of moral economies, both temporary and permanent livestock transfer helped pastoralists manage shortages in times of uncertainty. Equally, the transfer of *dabare* might be influenced by the need to disperse the animals in different places to counter insecurities in the region. Chapter six will elaborate on how the herd dispersal helped pastoralists managed livestock raids. Livestock transfer through *dabare* and *amesa* are influenced by social relations, the ideals of '*borantiti*³⁹, and the anticipation for future security. Aside from the permanent and temporary livestock exchanges between stock associates and alliances, Borana pastoralists recuperated herds through various life-cycle gifts that enhanced households' economic foundations, as described below.

5.5.3 Lifecycle Transfers

Life-cycle related redistribution refers to animals gifted to individuals at different critical moments in their lives, such as at birth, marriage etc. It begins at birth, where a male child was given *handura*⁴⁰ herds to help establish a nuclei animal for his future production. Fathers transferred such an animal through a ceremony. They place the child's umbilical cords remains on a given animal, seven days after the child is born. The animal is then branded with a specific mark, and all the future production of the marked animal will belong to the given child. In addition to *handura* gifts, the male child was also favoured with other animals during name-giving, after the first shave and when they first moved to herd the livestock. The second form of life-cycle transfer is the animals given to the bride (*meher*) by the groom, in addition to a few gifts from the bride's father. The animals gifted on this occasion are meant

³⁹ Being ideal Borana: having values advocated by Borana traditions such as generosity, hospitality, neighbourliness and other good virtues of human welfare.

⁴⁰ Navel-nuclei herd given to individuals after birth to establish their first herds.

to help the married woman have access to a milk cow and not face any shortages after moving from the maternal home. Thirdly, livestock transfer occurs during the father's demise as *d'aal /miraath* (inheritance). On this occasion, family elders separate any loaned and *handura* from the entire herds and transfer the remaining animals to the firstborn sons.

In the 1970s, both *handura* and the inheritance favoured the male child and the female accessed only bride-wealth animals. Dahl summarised such inequality by arguing that '*Borana egalitarianism implies that all male members of the society should be given equal access to material resources*' (Dahl, 1979, 175). The *handura* animals could range between 2-3 cows but remained under the fathers' guardianship. Delayed intra-household livestock transfers were an essential practice to retain continued household labour, the need to disperse livestock widely and the absence of alternative livelihoods for investment (Dahl, 1979). On the contrary, the bride-wealth animal is a four-year-old heifer today as it was in the 1970s and hence bride-wealth remains unchanged. However, my findings observed that the bride has a right to transfer her *meher* livestock to her maternal family or leave the animal with her husband's family without any repercussions. As shall be presented in chapter seven, intra-households transfer and re-investment tops the transforming pastoral livelihood, especially in urban areas. All three life-cycle transfers, *handura*, inheritance and bride-wealth are systems through which individual access and accumulate livestock in different moments of their development. Although, it favoured males more than females, such transfers were and remain evident in all the households with livestock even if only few animals.

5.6 Conclusion

This chapter has presented moral economy practices that existed in the 1970s as a way of developing a baseline to analyse changes over time. The chapter argued that pastoralists' ability to withstand and manage livelihood threats is enhanced by social-cultural practices rooted in intimate livestock management (adaptive mobility, dispersal, and specialised livestock care), labour organisation (household labours, collaboration and hired labour forces), and redistribution (stock alliances, temporary transfers and life-cycle gifts). All of these strategies were as crucial in sustaining pastoral livelihood in the 1970s as they are today. Through familial and camp collaboration, access to labour facilitated adaptive mobility and herd splitting, enabling the herd owners to exploit the unpredictable rangelands successfully. However, access to labour, livestock and other livestock management practices was differentiated between wealthy and low-income families and between male and female pastoralists.

As such, pastoralists relied on different relations to overcome unequal access. For instance, wealthy herd owners accessed labour through cooperation and partnership with low-income families while providing milk and shelter for such families. The association mutually served the rich and the low-income herders.

On the contrary, livestock redistribution was biased against the female and younger herders as the males dominated the livestock sphere. Wealth differences also favoured the wealthy herd owners to expand their livestock labour pool through intermarriages, redistribution and investing in social ties. The poor were sidelined, although they could also survive by pooling their resources or partnering with the affluent, as mentioned above. Therefore, 'grass' was not resilient for all. Rather, resilience depended on the social relations, spatial geographies, wealth, and other aspects of identity.

Although Dahl did not specify the moral economy practices based on study areas, including Kinna and Korbesa, my analysis of moral economy practices in the 1970s, following historical interviews, revealed similar practices in the two regions. Compared to Korbesa, alternative livelihood options such as irrigated farming, mining, and minimal livestock trade in the Kinna area helped pastoralists re-invest into animal production after experiencing losses during the Shifta period and subsequently during droughts. The mid-1970s were an instrumental time among the pastoralists in Northern Kenya due to severe livestock losses, which affected redistributive practices across networks. The aftermath of the Shifta war and the failure of livelihoods to subsequent drought unmasked significant inequalities, with some pastoralists excluded from redistribution.

Unlike today, pastoralists had few options to diversify aside from settling in missionary centres to receive relief food, limited farming along riverbeds, and few irrigated schemes. Other pastoralists moved to nearby towns to seek casual work opportunities. In addition to social practices through moral economy relationships, a settlement near missionary centres and moving to small towns for casual work incorporated pastoralists' response to uncertainties in the 1970s. The foundational trajectories of pastoral livelihoods in response to uncertainties began to evolve through time and space.

In the following two chapters, I will compare how different social groups (young/old, wealthy/poor, male and female) navigate everyday forms of livestock production uncertainties through moral economy practices in Kinna and Korbesa.

CHAPTER SIX: KORBESA AND LAKOLE: MORAL ECONOMIES IN 'REMOTE' PASTORAL PRODUCTION

6.1 Introduction

This chapter presents the role of the moral economies in managing everyday uncertainties in two remote pastoral areas of Merti sub-county, Korbesa and Lakole. The chapter aims to contrast how moral economy practices have changed since 1975, when Dahl conducted her studies. Today, Korbesa and Lakole are in many ways akin to traditional pastoral settlement of the 1970s, albeit with a higher population, permanent settlement structures and surrounded with intensified insecurities. Cases from Korbesa and Lakole are drawn to answer the following research sub-questions:

- a) With intensified insecurity, land-use change, and drought frequencies, what forms of moral economies emerge to help pastoralists survive?
- b) How have moral economies transformed in relation to 1975?
- c) Who has access to support through the moral economy?

Unlike extant literature that anchors moral economy on 'fixed' traditional techniques embedded in kin and clan livestock redistribution (Ensminger, 1992; Bollig, 1998; Anderson & Broch-Due, 1999; Waller, 1999), this chapter goes beyond exploring how the moral economy has changed through time (1975-2020), space (Korbesa-Lakole) and within social groups (wealth, gender, age). By doing this, the chapter contributes to a nuanced understanding of what role moral economy plays in managing uncertainties in distant, small pastoralist settlements.

Korbesa, a spiritual point of slaughtering a sheep, was formerly known as Dadach Lata, named after a cactus tree near the Waso River, which Dahl visited during her research. Today, Korbesa looks like a similar pastoral centre with one primary school, mosques, a 'deserted' missionary structure, and irrigated farming along the river. However, look closer and one sees evidence of significant change, including increased population as well as settlements that have grown in size since Dahl's research in the area. However, livelihoods in Korbesa still centre on livestock production, even though there are now more kiosks and a butchery. In addition to Korbesa centre, my research also examines a nearby village, Lakole. Lakole is a predominantly pastoral production area that was recognised as an administrative centre in 2000. The nearest 'town' to Korbesa and Lakole is Merti: the sub-county headquarters, some 24 KM away along poor roads. Residents of Korbesa travel to Merti to purchase vegetables, sell livestock as well as seek transport options to Isiolo. Figure 6.1 shows the two sites, the neighbouring villages, and the strategic boreholes for drought reserves.

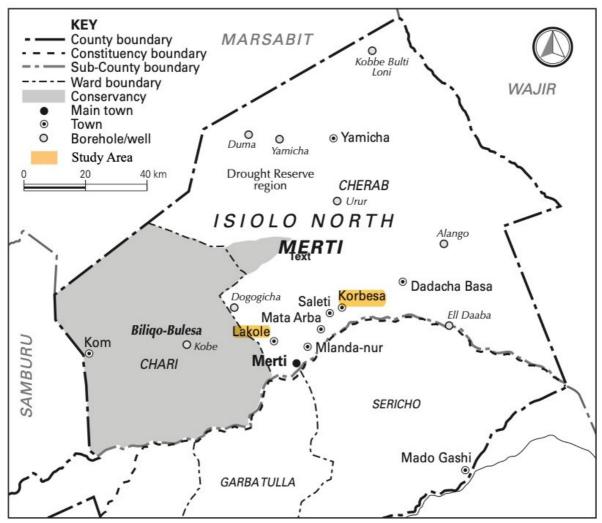


Figure 6.1: Isiolo County Map showing research areas: Korbesa and Lakole

Source: John Hall with guidance from the author

Like the 1970s, moral economy practices in Korbesa and Lakole today centre on livestock redistribution, labour, and resource collaboration. Korbesa and Lakole provide a contrasting focus to Kinna, a sizeable town that is nearer the central Kenya highlands. The chapter first presents a brief background of Korbesa and Lakole, describing the uncertainties in these areas, before then moving on to consider how pastoralists manage and live with uncertainty through the support provided from moral economies.

6.2 The Historical Context of Korbesa and Lakole

I begin this section by presenting comparative photos showing former Dadach lata (Korbesa) and Merti as studied by Dahl in the 1970s and today's photo during my fieldwork. The photos reveal how the introduction of schools and missionary centres attracted permanent settlement from the traditional temporary encampment.



Picture 6.1: Dadach Lata Primary (Dahl, 1974)



Picture 6.2: Korbesa Primary- Former Dadach Lata Primary, (Mohamed, 2020)



Picture 6.3: Dadach Lata Camps, (Dahl, 1974)



Picture 6.4: Korbesa Town (Former Dadach Lata), (Mohamed, 2020)



Picture 6.5: Merti Catholic Mission Centre-Macci Centr, (Dahl, 1974)



Picture 6.6: Merti Catholic Mission Centre (Mohamed, 2020)



Picture 6.7: Merti Town (Dahl, 1974)



Picture 6.8: Merti Town (Mohamed, 2020)

In 1975, a last resort for impoverished pastoralists to survive was to move to Isiolo town (Dahl, 1979, 25). As documented in Hjort (1979), the only centres in the region that could be characterised as a 'town' were Isiolo and Garbatula, a missionary centre. There were many other settlements dotting the region, including pastoral settlement camps (like Korbesa), small missionary relief centres, and irrigated farming sites along the river. Yet, the population of these widely scattered settlements was small, consisting of few mud houses and traditional Borana Boma (Dahl & Sandford, 1978). The primary activities consisted of operating small-scale kiosks; in Isiolo town, other available work consisted of being a night watchman, work linked to missions and mosques (Hjort 1979, Dahl and Sanford 1978). By 2019, several centres and villages had emerged across the County, including Korbesa. In the 1970s, Korbesa was largely a pastoral settlement that had grown up around a missionary centre. Yet, since then, it has experienced significant growth, as the sections that follow detail.

6.2.1 Korbesa

In the 1970s, there was no clear and consistent report of the population of sedentary camps (Dahl, 1979; Sandford & Dahl, 1978). However, Swift (1991) estimated that earlier Waso Borana camp consisted of 1-12 households and each household with an average of seven people. Korbesa began to grow in 1972, when pastoralists moved from Dadach Lata and settled in a slightly distant place away from the original camps, due to frequent flooding of river Waso. Settlement in Korbesa was also enhanced by establishing a missionary hub referred to as the Macci Centre (shown in the photo) and the irrigated farming scheme along the riverbed. Macci Centre was constructed by Catholic and Methodist mission at the outskirts of Korbesa to provide relief food and spread Christianity in the region. The centre attracted several impoverished and ex-pastoralists (see Mario, 1995; Dahl, 1979, 247). Although there was a school and religious centre in Korbesa as early as the 1970s, it is still underdeveloped due to its distance from major towns, and the poor condition of roads that connect Korbesa to the main A2 and B2 roads as well as Isiolo town.

In 1973, the government affirmed Korbesa a sub-location and appointed Mohamed Koricha as the first assistant chief. The same year, the government opened Korbesa primary, and pupils from surrounding villages such as Salleeti, Mata Arba and Mlanda-nur enrolled in Korbesa primary. The school was just an open place under the cactus tree and some traditional mud structures as shown in picture 6.1. With partial support from Action Aid, an international NGO, Korbesa residents constructed corrugated iron-roofed classrooms in early 1976. The same year, a severe drought locally known as '*Ola Eldas*' left many pastoralists without herds. In the aftermath of the drought, Action Aid introduced irrigated farming along the riverbed in the 1980s. People started farming maize, cowpeas, sweet potatoes, tomatoes, cabbage, and bananas among others.

Since Borana pastoralists were not feeding on vegetables and grains, Action Aid organised cookery training. People changed their diets to include vegetables and grains alongside milk. Other organisations, including CIFA and FAO, provided farm equipment and seeds. They organised cross village farming competitions to promote interest in agriculture. In time, the Korbesa irrigation scheme grew. Some farmers trekked with their produce to Wajir, investing their surplus in purchasing livestock. In 1991, a flood destroyed large areas of the scheme. Only a few people continued with farming, while others returned to pastoralism. Later, the 1997 El Nino rains that extended into 1998 destroyed the remaining few irrigated clusters, and farming stopped altogether for a long period until it was reintroduced through Kenya Climate-Smart Agriculture Project (KCAP) in 2017.

By 2019, the population of Korbesa had swelled to 4,349 (KNBS, 2019). Pastoralism remains the dominant livelihood despite the introduction of farming and the emergence of other opportunities following the growth of the town. Cultivation is affected by frequent flooding of the Waso River as well as the spread of *Prosopis juliflora* along the riverbeds. Although Korbesa has grown into a small

town with the vestiges of town-life seen elsewhere in Kenya (such as a mission centre, *dukas*, an administrative chief), life remains difficult and far removed from the largescale investments in infrastructure and services seen elsewhere in Northern Kenya. As one respondent explained:

We mainly depend on livestock rearing; Korbesa has not grown like Merti town, where you can find everything. We are not advanced as our neighbouring community; to an extent, we do not have any wholesale shop aside from small retail dukas (shops). From Korbesa to Bassa⁴¹, no single person owns a vehicle. We depend on a single colonial car called 109⁴², brought by ferenji (white colonialists or missionary staff) in the 1960s. This car is not always available due to continued breakdown. Hiring a motorbike is expensive, travelling from Korbesa to Merti is KSHs 1000 (10\$). Generally, people in this town are not ilbah (modern). Even the richest in livestock do not want to build a concrete house. It is only a few herders and two families whose daughters worked as an AP (administrative police), and another one who was a county minister during the Doyo regime who have built a nice concrete house.⁴³

While Korbesa remains a small town, it still provides a focus in the area for pastoralists from other even smaller settlements and pastoral encampments, such as Lakole, to which I now turn.

6.2.2 Lakole

[•]*Although we have settled in Lakole, we still practice our nomadism and traditional livestock management; we keep both our hawicha (milk stock) and fora (dry stock) herds distinctively*^{*44} (Omar, B, 2020).



Picture 6.6: Dadach Lakole⁴⁵ (Mohamed, 2020)

⁴¹ See map presented above

⁴² The car's image is presented in appendix VII

⁴³ Boru T. Male, Korbesa, 2020

⁴⁴ Omar B. Male, Lakole, 2020

⁴⁵ Dadach Lakole is a twin cacti tree after which, Lakole is named. In Borana Lakole means twins, while dadach means cactus



Picture 6.7: Lakole Village, (Mohamed, 2020)

Lakole did not exist as a settlement area in the 1970s, when the area was an open dry season grazing zone for herd owners that were mostly from Merti. Through the support of IIRR⁴⁶, the government settled pastoralists from Wama in Lakole in 2000. According to the 2019 census, there are 145 households in Lakole and an estimated population of 551 (KNBS 2019). Lakole is a sub-location of Merti Sub- County, and an assistant chief based in Merti serves the area. The main livelihood is pastoralism, and there is no alternative economic activity. There is no electricity, no *Mpesa*⁴⁷ shop or any other kiosk. The closest centre to purchase food, medical supplies, and access water is Merti town, about 12 km from Lakole. The area is served by a single mobile primary school for grades one to four, while the upper primary education is only accessible in Merti and other towns. The settlement structures in Lakole are tiny mud houses roofed with a corrugated iron sheet and a traditional hut used as a kitchen or guest room. There are no concrete or plastered houses like those found in Korbesa. Although they have permanent structures, residents of Lakole keep the *hawicha* (milk stock) near their homestead and move with them in the dry season to Dogogicha borehole 14 km away from Lakole. This practice is like the livestock management strategy of herd splitting presented in chapter five.

While life in Lakole in many respects is similar to what Dahl described in the *Suffering Grass*, there are a number of important new developments, including the shift to semi-permanent structures and proximity to motorcycle transport and other services in Merti. The study combines Lakole and Korbesa cases to analyse how changes and continuity in pastoral productions influence responses to uncertainty through moral economy dimensions.

⁴⁶ International Institute for Rural Reconstruction

⁴⁷ Mobile money application used to send and receive money provided by the mobile phone network supplier Safaricom sss

Since livestock production is the dominant livelihood in the region, the research explores the roles of the moral economy in managing tensions around livestock production. In doing so, the following section briefly recaps some of the key uncertainties in the region.

6.3 Livestock Production Uncertainties

Pastoralists in Korbesa and Lakole exploit a similar grazing niche divided into seasonal *dedha*⁴⁸. The region borders Samburu and Wajir Counties from the North and South. The relationship between Borana and groups in neighbouring counties has fluctuated since the colonial period, with many tensions centred on the demarcation of administrative boundaries, as detailed in chapter four. Research participants repeatedly emphasised the influx of livestock from neighbouring Samburu and Dogodia as a threat they live with. Musa K.⁴⁹, notes

Today I am in constant fear of losing this land: Waso and worry about our livelihood due to encroachment and false land claims. We are surrounded by 'nyap' (enemies) from Dogodia (Wajir), Korre (Samburu) and Rendile from Marsabit. Waso is rich in resources, and the flowing river helps the livelihood flourish. However, the influx of outsiders is depleting our resources, threatening our livelihood, and increasing insecurity.

Musa's sentiments are echoed in various interviews on livestock raids and armed clashes between Borana and Samburu due to disputes over the strategic Kom^{51} triangle. Heightened tension is usually experienced in this triangle, especially in drought season, as evidenced in 2017 Borana-Samburu livestock raid (Mkutu, 2020; Haro, 2020). This raid by the Samburu resulted in the death of eight Borana herders, 10,000 cattle and 7000 shoats. In the northern part of the region, the drought reserve called yamicha is encroached upon by the Dogodia herders from the neighbouring Wajir County, raising tension between the Borana and Dogodia communities. However, unlike the Samburu clashes, the Boranas resolve conflict with the Dogodia through an institutionalised system of negotiation and compensation called *qakhe*⁵⁰⁵². As presented in chapter four, the Northern part of Isiolo, including Merti and Korbesa, is considered severe arid, with unreliable and erratic rainfall. The average annual rainfall in the region ranges between 150mm to 250mm annually (Republic of Kenya, 2002 & 2013).

Several studies point to recurring drought as the most prominent aspect of variability that affects livestock in the region (Dahl & Sandford, 1978; Hogg, 1985; Swift, 1988; McCabe, 1990), which is confirmed by study participants in historical event mapping. Participants indicate that droughts now happen on a yearly or bi-annual basis, pointing to deterioration in conditions since the 1970s, when

⁴⁸ Grazing territory

⁴⁹ Musa, K. Male, Merti, 2019

⁵⁰ Kom is a drought recovery area that borders Marsabit, Samburu and Isiolo, forming a 'triangle' between these three Counties

drought conditions were experienced every four years.⁵¹

Considering that livestock production is the primary livelihood, the adaptive use of the unstable environment through mobility remains the core strategy to survive. Such movement within the rangelands is limited due to insecurity, conflict, and border restrictions for conservation and reserve purposes (Homewood, 1995; Fratkin & Mearns, 2003; Campbell et al. 2009; Adano et el. 2012). Labour shortage remains an important constraint due to the outmigration of the young people to towns for schooling and to look for work. The labour shortage, in combination with insecurity, heightens the need for pastoralists to cooperate and rely on *waheel* (escort/comradeship) to survive.

Although the State established the national reserves as early as 1979 (Mkutu, 2008; Mkutu 2020), the recent adoption of the conservancy model in the rangelands adds to fear and the threat of rangelands exploitation due to competition and an armed conflict between conservancy rangers and the pastoralists as well as dispossession (Bersaglio & Cleaver 2018; Mureithi et al. 2019). Conservancies are institutions established to preserve wildlife, enhance collective rangeland management, and promote eco-tourism and are often found in the rangelands occupied by the pastoralists (Mkutu, 2020, 7). In Isiolo County, the first conservancy is Biliqo Bulesa, established in 2007 occupied by the Borana. It borders Kom spring, a strategic resource for livestock owners in the region. Other conservancies include Nasuulu (2011), Nakuprat-Gotu (2010), Leparua (2011), and Oldonyiro (2016) (Mkutu 2018, Mkutu 2020). These conservancies border the Ewaso Nyiro River shared by Borana, Samburu, Turkana, and Somali. Communities converging to use the shared resources along the conservancy borders sometimes engage in armed conflict. The rise in the armed rangers in the conservancy areas contributes to ethnic strife and intensifies livestock raiding (Campbell et al. 2009; Mkutu, 2018). In what follows, I provide brief outline of livestock raiding context in pastoral settings.

Livestock Raiding Among the Pastoralists

Livestock raiding is a longstanding form of social herd recuperation practised by pastoralists communities, especially around the severe dry season or sometimes even during rainy season (Hendrickson et al., 1996; Witsenburg & Adano, 2009; Schilling et al., 2012). Livestock raiding occurs between two or more groups with everchanging relationships, sometimes cooperating to attack common enemies or diverging relationships due to competition over limited resources. Pastoralists follow strategic plans and processes to attempt raiding, sometimes weighing the potential cost and benefit. Traditionally, they seek permission and approval from religious leaders who predict the sequel of the event and advice the warriors accordingly. After that, they organise the raiding team consisting of young, energetic and tactful warriors who undertake a tacit investigation on the potential prey, identifying the best place, route and time for raiding. Finally, the actual raiding event is orchestrated through a strategic organisation, with some individuals participating in violent raiding while others move the livestock to safe places. Before the proliferation of small arms and weapons, the raiding groups used spears and arrows as their firearms, and animals trekked for a long distance, sometimes

⁵¹ *Qakhe* is an institution that guides compension of loss of lives through 'blood money' or livestock transferred to compensate lives lost between communities.

risking potential retaliation from the enemies.

Among the pastoralists, raiding has been a persistent practice, although changing in context and intensity. In East African pastoral productions, four factors explain the prevailing raiding practices among livestock owners. Firstly, raiding was a customary practice to balance the environmental disequilibrium and livestock loss to adverse effects, including droughts, floods, diseases and inadequate resources. In this case, pastoralists organise inter-ethnic war to recuperate the herd and replace the loss resulting from these ecological stresses (Gulliver, 1955; Hendrickson et al., 1998; Gray et al., 2003; McCabe, 2004). Secondly, raiding served as a significant political milieu, especially as a rite of passage for the age set groups to be graduated into adulthood and be crowned for triumphing given warfare (Lamphear, 1992). Thirdly, some pastoral communities, including Samburu, Pokot and Turkana, practice raiding due to motivation ensued by social reproductive events, including weddings and the resulting demand for high bride wealth and prestige (Bollig, 1990). Fourthly, the changing geo-political and economic transformation, including livestock commercialisation, and tension around anticipation to benefit from infrastructure development, exacerbate livestock raiding and violent conflict (Shilling et al., 2012; Mkutu, 2008). This commercialised, political and violent raiding constitutes 'predatory raiding' (Hendrickson et al., 1996). The predatory raiding intensifies due to the proliferation of small arms and the shifting land use governance that restrict pastoral mobility and access to strategic resources.

Borana herd owners rely on a customary reconciliatory institution called *qakhe*-compensation for loss of lives, which helps unite and restore relationships post raid events. The cost of livestock paid for such compensation is shared by the wider Borana clans as a form of moral responsibility, hence constituting a moral economy to protect clan identity. Unlike the customary practices of restoring peace between the conflicting parties, the intensities and the frequency of large-scale commercialised raiding and involvement of third parties inhibit community reconciliation. To this end, livestock raiding remains fundamental uncertainty in today's pastoral economy resulting in perpetual insecurity, loss of livelihoods and subsequent animosity between pastoral communities.

In summary, key uncertainties affecting livestock production includes drought (and their increasing frequency), conflict with groups in neighbouring counties, and the establishment of conservancies, which has also aggravated conflict risks in the region. Demographic growth, happening alongside the growth of small towns and the out migration of young people to larger towns and urban areas in search of work, strain the labour market and availability of workers to help with herding, trekking and other tasks associated with livestock production. Although the State and other organisations introduced farming as an alternative to livestock production, the flooding of the Waso River has destroyed farmlands and pushed people back into pastoralism. Indeed, pastoralism is very much the backbone of the local economy and provides a livelihood for most of the area's population. Returning to the question we posed at the beginning of the chapter, how then, do pastoralists live with and off intensified insecurity, shifts in land-use, and frequent droughts? Case studies presented in the following sections provide some insight.

6.4 Pastoralists' Strategies in Managing Uncertainty 1975-2020 in Remote Pastoral Areas

Amidst the pressures and trends detailed above, pastoralism and the ability of pastoralists to manage uncertainty persists. Further, moral economy remains critical for how pastoralists survive, despite changes in practices, who is involved and who benefits. This section assesses the role of moral economies in relation to recovering herds as well as managing shortages of labour necessary for livestock production, amongst other work. A particular focus is developed on livestock raids that affected Korbesa in 2017, to uncover the contrasting experiences of better-off and poorer families in recovering from the shock. In respect to livestock redistribution, as well as labour pooling, practices are compared with the 1970s to assess the extent and type of change (if any) that has occurred.

6.4.1 Livestock Redistribution in Managing Raids

Pastoralism thrives on livestock sharing and redistribution as a vital survival strategy. This is captured by the Borana proverb 'hooriin dumaansaa naamum aarraa qaabuut boor dabaa' (livestock is like a cloud, those who have today might lose tomorrow). The saying emphasises the uncertainty of livestock production alluding to the need for social solidarities as a way to manage the loss. Pastoralists overcome the boom-bust livestock production cycle by investing in social relationships through gifts and exchanges to help rebuild herds after experiencing a loss. Livestock redistribution among Borana is guided and driven by four socially embedded imperative relationships. These relations are *milo-mogole* (kinship bonds, families and clan-lineage), religion (the ideals of being Muslim), *ollomiti* (neighbourliness), and *jala-sodda* (friends, in-law and agemates). Through these relationships, continued livestock transfers, solidarity and social bonds are enhanced for a prolonged period. To aid comparison with the redistributive practices documented in Chapter 5, the section below assesses redistributive transfers that are permanent and temporary.

6.4.1a Permanent and Temporary Livestock Transfers in Post-Raid Recovery

'When Kore raided Borana livestock in 2017, I gave out seven cattle, six raad (cows) and one jibich (a bull) to people who are not of my blood relation. I also gave several small stocks; I gave out because of borantiiti, further influenced by generosity as a Muslim. I visited each family in Korbesa, gave my sympathy, and told them to come for livestock in my enclosure. Although you cannot give to everyone, we try reaching out to those we can⁵².

In 2017, Samburu raided large-scale livestock from Borana in Korbesa, as presented in chapter four. This event resulted in the death of eight Borana herders and left many without herds. The government proposed compensation for the lost livestock; yet, until 2021, there was no evidence of the compensation. The wealthy herd owners recovered by recalling their *dabare* (loaned animals) and

⁵² Ali J. Male, Korbesa, 2020

received *hirba* (restocking) from friends and other Borana. On the contrary, the poor, with no loaned animals to recall, received minimal help from neighbours and clan members. The wealth variations influenced how pastoralists recovered and managed the crisis. The following two cases in boxes 6.1 and 6.2 reveal the variations in restocking and post raid recovery. Case one; presents Boru, a wealthy, male herder while case two represents Asha, a low-income widow from Korbesa.

Box 6.1 Case One: Post Raid Livestock Recovery: Wealthy Herd Owners Experience

Post-raid livestock recovery: Wealthy family's experience

Boru Tadi, was among the first people to permanently settle in Korbesa in 1973. Boru lost 320 cattle during the 2017 raid. The cattle belonged to Boru, his brother and Guracha Dima, a cousin. Boru is from *fuleele's oditu* clan, and in Korbesa, there are only a few *Oditu* compared to other major clans such as *Warjida, Digalu*, and *Karayu*. He received eight *hirba* cows from close friends in Korbesa and other parts of Isiolo. According to Borana, close friends include in-laws and people of similar age-group who share herding resources such as labour and pasture. In addition, Boru recovered ten *dabare* herds from the ones he gave to his relatives, including his brother-in-law, a widow aunty, and a poor orphan neighbour in Korbesa. However, Boru asked his *dabare* owners to retain the livestock, although he marked ownership, but left recipient to continue caring for the animals. Such arrangements helped Boru to disperse his animal, while the recipient continue benefiting from the animal, at the same time providing labour. It is allowed for the *dabare* recipient to keep all the male produce and one female stock on request and return the remaining.

Box 6.2 Case Two: Post Raid Livestock Recovery: Low-income Families' Experience

Post-raid livestock recovery: Low-income families' experience

Asha, A. a widow lives in Biliqi about 2KM from Korbesa in a small house with her aged bedridden mother-in-law, her co-wife Rahima, and Rahima's son with his five children. Asha's husband, Adi, died thirty years ago and left the family with ten cattle and a donkey. Asha is from *nonitu* clan, and *nonitu* is the fourth largest clan after *warjidda*, *digalu* and *karayu* in Korbesa. In 2017, the families herd reached 30, but all the animals in Kom were stolen in the Samburu raid. The family remained with the six *hawicha* (milk stock) kept near the home. Unlike Boru, Asha's family does not have any *dabare* livestock to recover. The only help Asha received was one heifer from Abdi, her lineage member in Merti. While Asha's co- wife Rahima received a *dabare* cow after going to her *milo* (clan) for support. When I asked Asha why they did not receive much help, she responded, '*The people who suffered livestock loss are all from our neighbourhood, as such not easy to receive help. However, when our son married seven years ago, we received much help. The larger Borana participated in a fund-raising, and we managed the wedding cost'*

6.4.1b Variation in Dabare

Access to moral economy support such as restocking is determined by livestock wealth and investment in social ties. This is important because wealthy herd owners invest livestock in as many *mona* (enclosures) through stock 'friendships' and 'associates' (Dahl, 1979), while the poor herd owners cannot afford such investments. Equally, wealthy herd owners can disperse their excess livestock through *dabare* to diversify the risk of total loss. *Dabare* serves both as a social asset and helps in livestock recovery in times of loss, as presented in chapter five. Still, lack of wealth does not entirely exclude poor pastoralists from redistributive ties. However, poorer pastoralists typically are helped only in the aftermath of a major shock such as the 2017 raid when the poor and women were assisted, as seen in the case of Asha's co-wife. During this event, the victims got support from outside Korbesa, and the help depended on the clan ties and requests extended by the victims.

Secondly, Dahl argued that exchange through *dabare* is meant to accumulate social capital and enhance political allegiance or create unequal relationships between the exchange parties. According to her, the givers were often wealthy individuals who sought to strengthen their livelihood through access to political and administrative positions extended to Northern Kenya in the 1970s. According to Dahl, people who want such a position build a base of wider population support through giving and expected the recipients to vote for them in an election. Although these phenomena might have existed back then, my research found that political allegiance was less important in redistributive (and, specifically, *dabare*) practices. *Dabare* givers transferred the animals to neighbours and close relatives who were vulnerable, with no expectation of being supported for political office. Rather, *dabare* exchanges are influenced by notions of *naassu borantiti* (the humility of being Borana) as well as a sense of religious obligation and social cultural responsibilities towards vulnerable family members. Contrary to Dahl's observation, today, the politicians publicize their identity through participating in Harambee and other forms of redistribution, as shall be illuminated in chapter seven. Dabare transfer remain everyday redistributive and normative practices within the local context, detached from political influence

However, while the practice of *dabare* is not directly linked with the search for political allegiance and support, it is not entirely divorced from the culture of influencing public opinion and pursuit of political office. Adjusting to broader changes in society requires individuals to secure some form of identity and belongingness to benefit from collective communal support. In the above case, the respondents referred to *borantiti* (being Borana) as the drivers for participation in livestock redistribution. Here, the giver does not expect any immediate return from the recipient, such as political allegiance as depicted by Dahl, but rather, it reinforces their identity as Borana and Muslims. Depicting an identity of *borantiti*, grants individuals' access to institutional support such as *Harambee*, as shall be presented in chapter seven. For an individual to access more extensive Borana support or even political seat, clan elders evaluate their character, including whether they have *borantiti* or stood for and with the communities'

welfare through wealth and physical strength. The *borantiti*, in this case, mainly involve presenting Borana plights in the broader political economy of the region and not participating in pastoralists' everyday survival in the bushlands through livestock transfers, including *dabare*.

Thus, *dabare* serves a similar purpose as it did in the 1970s, providing a temporary relief to the recipient and spreading risks for the giver without involving political allegiance. *Dabare* transfer remains unchanged from the original forms and principles, where the recipients keep the male produce and return all the female produce on request. Sometimes, the recipients sell the male produce and purchase recuperative female herds. According to the Islamic principle, *dabare* herd cannot be *halaal* (lawful) for the recipient unless the complete transfer right is given by the owner. As such, even if the *dabare* owner dies, the recipients must return the animals to the heirs of the deceased.

6.4.1c Variations in Hirba

According to the Borana principle of *borantiti* (being Borana), whenever an individual faces a crisis or any livelihood shortfall, it becomes the responsibility of close relatives, neighbours, clan members, and colleagues to provide *qulamo* (first aid). In the livestock domain, *qulamo* refers to immediate restocking of the affected individual by providing *hirba*, *dabare* or material assistance. *Hirba*, is a Borana word that means 'support', similar to how our heels offer support for standing upright. Borana pastoralists extend such help to all the social groups, including the wealthy or poor, young, or old, man or woman. Traditionally, such assistance was organised through the institution of *buusaa goonoofaa*⁵³. In the 1970s, the lineage elders transferred wealth from the affluent Borana and redistributed it to individuals affected by the calamity, as presented in chapter five, section 4.1. Contrasting the traditional clan-based restocking, transfer via *hirba* in post raid recovery reveals three significant identities and relationships which enhanced redistribution: a) individual *naasu* (pity) or friendship ties, b) borantiti (being Borana) and Islamic identity and c) larger Borana support.

First, as Boru's case shows, there was no collective clan redistribution; instead, Boru received eight cattle from other Borana clans. He noted, 'I did not receive any animal from my Fulele clan, even though I am the wealthiest among Fulele and always pay livestock on behalf of Fulele for the larger Borana event'. His case reveals how livestock redistribution is not limited to within an individual's clans but also connects individuals across a broader network and *naasu*. However, as acknowledged by the study participants across the sites, *naasu* alone could not legitimise redistribution; instead, investment in friendship and redistributive networks does. As such, although lineage members are central in providing support, extending reciprocity to individuals across wider networks provides more certainty, as seen in Boru's case. Nonetheless, the lineage identity provides support, albeit minimal, for

⁵³ Institution for livestock redistribution among the Borana

low-income families with a limited network, as seen in the case of Asha and her co-wife.

Secondly, the principle of *ollomitti* facilitated livestock redistribution. According to Asha, the family failed to recover much because the raid affected Korbesa more than other areas of Isiolo. As such, redistribution through neighbourhood ties was impossible. In the Borana worldview, the concept of *ollomiti* is emphasised, as presented in several proverbs. For instance, '*Ollommafii duudaan ejjanii*' (it is with the support of the neighbours and the backbone that we could stand). Another one '*Ollomaan waal d'aalaa oonaan waalii buusaa*' (from being neighbours, inherit from each other, and redistribute to the furthest settlement). This saying means that the neighbours have maximum right on each other equal to heirs. According to Islam, a faith followed by the Waso Borana pastoralists, neighbours include forty houses from left to right and front to back. Like the Borana principle, Islam also emphasises the concept of neighbourliness through several prophetic sayings. The prophet (peace be upon him) said, '*Gabriel kept on commending the neighbour to me so that I thought he would make an heir*⁵⁴' This prophetic saying alludes that angel Gabriel, who conveyed the revelation from God to Prophet Muhammad, kept commanding the Prophet on the significance of upholding the neighbour and sharing resources with the neighbours. To this extent, the Prophet feared that neighbours were part of the family and could share the wealth, similar to how heirs inherit from their immediate families.

As encapsulated in the opening quote of this section, Ali's participation in restocking the raid victims was influenced by Borana as well as Islamic identity. Although it is impossible to assume the exchange as influenced by religious and social obligations only, these institutions play crucial role, especially when restocking people because they are neighbours or fellow Muslims. As will be explored more deeply in chapter seven, religious commitment and understanding among the pastoralists has deepened compared to the 1970s, and pastoralists justify participation in *Zakat* (Islamic tax) and daily alms as constituting part of their religious obligations. Unlike other moral economy practices, *Zakat* and religiously motivated redistribution is not stratified between wealthy and poor nor female and male. By this, I mean pastoralists of diverse social backgrounds could activate support through religious identity, especially in urban centres where visits to the mosques and participating in religious gatherings is more ubiquitous.

Thirdly, the 'larger Borana' aspect complements the help people rely on in response to shocks like raids, especially in areas where support from the state is limited. The more extensive Borana assistance is vital when immediate support from *milo* (clans), *olla* (neighbours) and friends/in-laws (*jaalaa-sodda*) is not sufficient. It becomes obligatory for the wealthy and able Borana herd owners to help the victim

⁵⁴ Narrated Abdullah ibn Amr ibn al-'As: Mujahid said that Abdullah ibn Amr slaughtered a sheep and said: Have you presented a gift from it to my neighbour, the Jew, for I heard the Apostle of Allah (peace be upon him) say: Gabriel kept on commending the neighbour to me so that I thought he would make an heir? - Sunan Abu Dawood, 2446

of the raid with rebu (response), horii (wealth) and humn (physical) support.

A case in point is the Galgallo family from Lakole and Merti, who participated in post raid recovery through *rebu* (responding to attack) and livestock redistribution (*hirba*). Ibrahim Galgallo⁵⁵ participated in *rebu* by organising motorcycles and people with firearms to respond to the raid and recover the stolen livestock. Unfortunately, Samburu raiders outnumbered the Borana team and killed eight Borana and injured three others, including Ibrahim. Ibrahim nursed a gun injury for several months, and communities helped him with hospital bills. He also received some cash to sustain his family as he convalesced. Secondly, other Galgallo families helped redistribute livestock to selected victims. Osman Galgallo, Ibrahim's elder brother, gave *saa'a dorroba* (a pregnant cow) to his uncle's friend (*harriyya Abuya*). Equally, Mohamed and Adan Galgallo gave out a heifer each. The Galgallos gave cows to their *Dambitu* clan members and gave eight goats to the larger Borana clans from *Sabb* and *Gona*. When asked what motivated the Galgallo's to give livestock, Osman⁵⁶ responds, '*it was out of 'naasu' (pity)*, *Korre (Samburu) took all their livestock, and as their fellow humans, we need to stand by them.*'

Finally, the frequency of livestock transfers has increased compared to the 1970s. According to Dahl, '*It is mainly on total loss that a Boran pastoralist can expect help with animal capital*' (Dahl 1979, 184). Today, animals, especially small stock, are exchanged frequently due to the rising demands of modern life, including the need to foot school fees and other school expenses. Further, Dahl observed that '*traditional forms of stock redistribution have in many cases been put out of operation*' (op cit. 185) due to stock loss in the aftermath of the Shifta war and the severe drought condition. The limited livestock holdings, especially of cattle, meant there were reduced levels of livestock transfers for a period in the 1970s. Since then, the number of livestock holdings and species diversification among the Borana has increased. Hence, livestock transfers are more frequent through *hirba, dabare*, and other transfers, especially during weddings, funerals, sickness, and other life-cycle events. Equally, intensified insecurity and livestock production uncertainties make livestock transfers a priority for pastoralists' survival; although skewed towards the wealthy herd owners, redistributive practices are commonplace even in the form of cash and other support.

The section has shown variation in livestock redistribution across three dimensions. First, there has been significant decline in the collective clan solidarity redistribution through *busaa goonoofaa*. Instead, pastoralists rely on individual pity, *borantiti*, *ollomiti* and Muslim ideals to suit the changing pastoral economy. Secondly, the more comprehensive Borana support surpasses traditional limited, clan-based redistribution; therefore, it is essential to portray the above three identities to access Borana support.

⁵⁵ Ibrahim G. Male, Merti, 2020

⁵⁶ Osman G. Male, Lakole, 2020

Finally, the frequency of livestock redistribution has increased compared to the 1970s due to evolving pastoral livelihoods and the rising demands of 'modern' life, such as the need to pay school fees, diversified diets and the subsequent needs to purchase food, transport costs, credit for mobile phones and veterinary drugs for livestock production. Equally, compared to the 1970s and in the aftermath of the Shifta war, people have more livestock, increased diversification into small stock, easy to exchange for cash or transfer to individuals, hence, considerable livestock transfers. All these developments result in shifting moral economy relationships and investment in diverse economies, as shall be elaborated in chapter seven, the near urban pastoralism. The following section presents the second pastoralists' livelihood strategies through labour mobilisation and resource coordination in managing uncertainty.

6.5 Labour Management

Labour is a central part of the pastoral economy for livestock care, rangeland exploitation, and defence in the face of insecurity. As detailed in Chapter Five, in the 1970s Borana addressed labour shortages primarily through three avenues: through adopting children, marrying several wives and cooperating with sons-in-law. Much has changed since then. Out of the twelve household interviews conducted in Korbesa and Lakole, only two families were polygamous. Equally, all the research participants had their children either in schooling and college, or working, either as *boda-boda* operators, as hired herdsmen, or engaged in formal employment for better-off households. Through time, the pastoral settlement pattern has changed from the traditional encampment of *warr-gudda* (main family) and *warrfora* (camp family) to permanent settlements, typically in small towns. These changes have made it even more challenging to address labour shortages. *How then do pastoralists access labour in these changing times? And how have access to labour differentiated by wealth, gender, and generation?*

6.5.1 Forms of Labour Orientation

The chapter uses three case studies to answer this question. Case one is of young low-income herd owner Dawud⁵⁷; case two is Chaltu⁵⁸, a wealthy old female herd owner and case three is Asha⁵⁹, an old low-income widow. The three cases reveal how pastoralists galvanised different strategies to counter labour and resources shortages in managing drought. By analysing these three cases, the finding established three labour orientations: labour and resource pooling, alternate herding, and *itti-hirkaat* (leaning on others). The section first presents the three cases and then discusses the labour arrangements that emerged from these before concluding with a reflection on changes between the 1970s and what is observed today.

⁵⁷ Dawud J. Male, Lakole, 2020

⁵⁸ Chaltu D. Female, Korbesa, 2020

⁵⁹ Asha A., Female, Korbesa, 2020

Box 6.3 Case Three: Alternating Herding Relationships

Alternating herding relationship

Dawud lives in Lakole with his wife and seven children. He inherited a cow and 40 sheep from his father in 2011. Currently, he has a total of sixteen cattle and a few shoats (sheep and goats). Dawud discontinued his firstborn son (Yakub) from grade six to help manage the shoats. To manage his animals, Dawud noted 'I combined my cattle with my brother Abdullah's, and we work alternating times. I also have a few goats, which I manage. Sometimes my son grazes them, so we do not depend on any hired labourers'. Dawud narrates how he survived drought through alternate herding relationship and resource pooling. He reiterated

'In the 2017 drought, I herded a few hawicha (milk stock) in Lakole, while my brother Abdullahi went to Moyale with guyeesa (dry stock). I decided to move to Kuri, where there was good pasture. However, due to an attempt by Samburu raiders, we left Kuri and came back to Dogogicha. Some cattle ultimately refused to drink from Dogogicha well due to high salinity, and the situation worsened. As a result, three of us jointly hired a motorcycle for KSHs 1000 10\$) to get four 20litres jerrycans for each of us, and when the situation aggravated, I begged the wealthy herd owners for help'

Dawud lost one calf while his brother Abdullah lost four goats.

Box 6.4 Case Four: Labour and Resource Pooling

Labour and resource pooling

Chaltu lives in Korbesa town with her husband and seven children. She accumulated livestock from five cows she received from her father, uncle, and husband. Chaltu's family subsist on livestock and a small kiosk in Korbesa. Chaltu provides details of how she managed two different droughts. She recounted:

'We had more than 30 cattle and went to Qumpatee near Chaffa around Galan in 2006 drought. We dug maddo (hand-dug well) with the other four herd owners for seven consecutive days and nights. Men were involved in well-digging tasks, while women cooked enough meals to sustain the team. We slaughtered four goats and cooked food, including beans, maize, and tea. We all settled here because there was plenty of pasture, and we got water from the well. However, lions and elephants have encroached on this area, and despite their threats, we stayed. As the proverb goes, 'iltii liiqimsaa agaartee lubbu hiinbeetu' (the eyes that have seen sustenance, does not realise any danger associated with such food). Chaltu lost three goats to a lion and three calves to drought.

In 2017 drought, Chaltu jointly hired a motorcycle with Halakhe⁶¹, and they sent their two sons for a pasture survey by each contributing KSHs 1500 (15\$). The son returned and said '*Mother, there is nowhere to go, no pasture*' Then Chaltu and Halakhe decided to stay in Rahmat Sao. They jointly hired another motorcycle to purchase livestock feeds and enough grains from Merti town to sustain them. During this drought, Chaltu lost two calves while Halakhe lost 3calves.

⁶⁰ Halakhe is a Borana *badole* (lost). *Badole* refers to Borana from Marsabit County because of the interaction with other Borana speaking groups like Garri, Gabra, and Borana from Ethiopia. So, Waso Borana in Isiolo consider Borana's from Marsabit County as lost.

Box 6.5 Case Five: Itti-hirkaat

Itti-hirkaat

Asha is a widow who lives in Biliqi, an outskirt of Korbesa with her bedridden mother, co-wife Halima, her sons' wife and five grandchildren. Their livelihood is livestock production; however, Asha's family lost their animals to 2017 raid. Asha narrates how they managed the 1996 drought. She said:

In this period, people dug wells, and our animals were watered freely by our neighbours; again, a man called Bilaali Halo invited us to live in His Olla (neighbourhood) here in Biliqi, and that is why we left Korbesa and came to stay here. Bilaali is not my blood relative, but we come from the same clan Nonitu. After we migrated to Biliqi, he joined our cattle with his children's herds and started herding for us and we only lost a cow. The herding support provided me with an opportunity to visit Isiolo and seek sadaka (alms) to ease our survival. The sadaka were in food, clothing, and cash from Muslims and general Merti migrants to Isiolo and Nairobi. When I returned from those trips, I got something to sustain the family for about a month. With the help of the Bilaali family, our herd increased, and we also got milk animals at home Sometimes when there was excess milk, I made ghee and sent it to Merti to anyone who had a relative in Merti. They sold and brought me the money

Pastoralists disperse livestock, access rangelands security, and afford rising commoditised livestock management through resource and labour collaboration. For instance, cases three and four reveal how Chaltu and Dawud managed different droughts by cooperating in well-digging and pooling resources to purchase water and feeds. Such cooperation serves many purposes. First, collaboration helps reduce the intensive labour required to dig the well and overcome limited access to hired labour. Water sources in Korbesa are sparse and sometimes encroached on by neighbouring pastoralists. Again, the water in Dogogicha well used by Lakole pastoralists is saline, and livestock often refuses to drink it, as shown in Dawud's case. Herders look for other options like digging wells along with the riverine pools.

Secondly, insecurity from wild animals and neighbouring pastoralists threatens pastoral livelihoods, as evidenced by the Samburu raid and the lion's attack on Chaltu's herds. Pastoralists rely on *waheel* (comradeship) to find safety in numbers and thus be able to access rangelands that would otherwise be off limits. Although Chaltu is wealthy and can afford to purchase or hire a motorcycle herself, she opted to cooperate with Halakhe to access *waheel* and minimise costs. Equally, Dawud joined three other herd owners to hire the motorcycle and sometimes begged for water from the wealthy herd owners. These two cases reveal that despite wealth, age, gender and other differences, comradeship (*waheel*) is an essential moral economy practice that helps pastoralists survive in unpredictable environments. Such practices resonate with a Borana proverb, *Boraani walii waheelaa ammalee walii wareegaa* (Borana are escort/companions for each and feed one other). Unlike the moral economy of redistribution with visible inequality, cooperation benefits different social groups. Collaborative practices differ from Kinna's more individualised approach, as will be seen in chapter seven.

Thirdly, Dawud's case showed how pastoralists can share herding work in shifts. Dawud and his brother Abdullah alternatingly took turns herding the cattle, which allowed each of them time to be near family and tend to other responsibilities. Both Dawud and Abdullahi practised classic herd management such as dispersion, adaptive mobility, and specialised care through shift-based labour arrangements. This practice requires pastoralists to capitalise on each other's labour and get an opportunity to spend time in the villages with their families. Bonds with kin or close associates such as in-laws are essential relationships to establish. The alternate herd managers should consider every herd their own and provide the utmost care. Alternate herding relations help the wealthy and low-income herders differently. The wealthy herd owners in Lakole practice shifting herd management combined with hired labour to manage many animals. Since trusting livestock entirely to the hired labourers is difficult due to potential mismanagement and theft, the herd owners manage in shifts. On the contrary, poor livestock owners practice alternate herding relationships to counter the unviability of their animals to be managed exclusively and meet herding labour deficit.

Cooperation is skewed towards the wealthy and young livestock owners by pooling resources for survival. However, vulnerable families have limited investment resources, such as Asha in case three. *What forms of solidarities exists to incorporate such families?* Low-income families with 'unviable' livestock units are sometimes offered help by wealthier herd owners in what is locally known as *itti-hirkaat* (leaning on other). *Itti-hirkaat* involves providing labour support to manage livestock for the widows, orphans, disabled, impoverished and other vulnerable groups or inviting such families to correside with their clan members or relative as seen in Asha's case. Such a practice existed even in the 1970s and endures to this day. In all the twelve household interviews, everyone (wealthy/poor, male/female) have at some point benefitted from *itti-hirkaat* in managing an unviable livestock unit. Aside *itti-hirkaat*, Asha's case reveals the utilisation of different web of relationships to overcome labour shortages and productively navigate uncertain livelihoods. Unlike standard begging on the street, with the possibility of being bypassed, Asha visits her emigrant friends and relatives in Nairobi and Isiolo to gain support, especially using her identity as a Muslim widow, increasing her chances of receiving help.

First, Bilali, a clan member, provided a labour assistant. Then, the neighbours helped water the animals, while general Muslims and immigrants from Merti provided *sadaka* (alms). Finally, her neighbour's relative in Merti helped sell ghee. Through mobilising these diverse networks, Asha was able to sustain the family despite being poor, widow, old and with limited household labour. This embodies the significant role of moral economy around clans, neighbours and religion (being Muslim). All these are essential relations that, when activated, help people to survive. However, such support is not always available. It depends on values such as kindness and generosity advocated by Islam and Borana traditions, hence the importance of identity.

To this point, the three cases reveal that pastoralists' moral economy is non-linear and non-static; it embodies multiple collaborative and caring relationships such as the provision of livestock labour, market network and alms even to the vulnerable among the community. This finding challenges the narrative that only the well-off can benefit from moral economy practices, which are often livestock oriented and male centred. Although the poor are excluded in numerous networks due to their inability to invest, they were sometimes offered help, as discussed above. Having established forms of pastoralists' collaboration, the next section explores variation in such practices between today and the 1970s and contrast with more urban settings.

6.5.1 Variation in Labour and Resource Cooperation: 1975-2020

Although today's cooperation resonates with pastoral practices of camp collaboration of the 1970s, there are significant changes. As opposed to family and lineage collaboration in the 1970s, pastoralists invest in relations with Borana and herding groups from neighbouring counties. For instance, in Chaltu's team of labour and resorce pooling, there is a *badole* (lost): a Borana from Marsabit County considered lost by the Waso Borana; such cooperation helps pastoralists exploit inter-county resources by banding together safely. There was no strict boundary demarcation before 1969, and pastoralists were free to move. Today, conservancy borders restrict movement to certain areas, and herders from neighbouring areas encroach on key grazing reserves, all of which complicate patterns of mobility. Moreover, due to a shift in land governance and political changes, as presented in chapter four, intercounty boundary tensions emerged and created uncertainty for pastoralists mobility. Therefore, making a collaborative link with pastoralists from the neighbouring Counties provides a potentially safe environment to flexibly exploit variable resources and attain security in areas that are known to be insecure.

Another significant change from the 1970s is the deployment of technology such as pooling resources to purchase water from water bowsers, hiring motorcycles for pasture surveillance and purchasing feeds. These practices were not evident in the traditional camp collaboration practices that Dahl observed. Due to the distance of Korbesa and Lakole from towns and the rising cost of motorised transport, pastoralists collaborate to minimise individual costs and to benefit from the services.

The study observed significant dynamic of women engaging in moral economy practices. Contrary to Dahl's observation of female livestock domain as restricted to care and milk management, women herd owners are more commonplace. Chaltu's case provides such an example where she collaborated with Halakhe for pasture surveillance, discontinued her son from schooling, just like Dawud and banded with other herd owners to overcome several drought events. Further, participants in community mapping interviews and focus discussion emphasised on women's remarkable role in herd management. For instance, Kaddubo noted, *'the livestock which always survives hardship are the ones cared for by*

the women⁶¹'.

Women's caring roles cannot be over-emphasised. In Chaltu's case, women played complementary roles such as making meals, collecting feeds, tending sick animals, and helping fallen animals stand. At the same time, the men engaged in well-digging and other strenuous activities. According to participants that were interviewed in Korbesa and Lakole, women were actively involved in helping manage livestock during droughts in 2009, 2011 and 2017. Women take up the husbandry role to meet the livestock management deficit left by the family's permanent settlement in the expanding village centres. Town settlements and the subsequent emergence of markets, schools, and other institutions have profoundly influenced women's engagement in the livestock domain, especially in 'urban' pastoral setting as shall be presented in chapter seven.

6.6 Conclusion

With intensified insecurity, land-use change, and more frequent droughts, this chapter asked what form of moral economies emerged to help pastoralists survive? Moreover, how have moral economies transformed since 1975? Compared to the 1970s, numerous challenges influence moral economy practices even in this remote pastoral area. These include the high population, the shift in pastoral settlements, persistent drought, livestock raids, and wildlife encroachment, as presented in section 6.3. All these changes influence the pattern of household labour, resource redistribution, and capacity to respond to various crises among different social groups. Despite these challenges, pastoralists managed their livelihoods through traditional practices like adaptive mobility, species diversification and specialised care. In addition, pastoralists survived the boom-bust moments through permanent and temporary livestock transfers via hirba and dabare, as presented in section 6.4.1.a. Finally, pastoralists survived by galvanising webs of relations and collaborative networks to overcome labour and resource constraints. These mobilisations include resource pooling through hired motorised transport and well-digging cooperation, shift-based herd management, and itti-hirkaat, as presented in section 6.5.1.

Like the 1970s, pastoralists in Korbesa and Lakole respond through livestock redistribution and collaborative practices. However, there is a visible transformation in the two practices. First, the research found no linkages between livestock transfers and political allegiance as regard to political administrative office, as argued by Dahl. Politicians use different campaign avenues to secure support and publicize their agenda and the normative livestock transfer like *dabare* has no political influence, especially in the village centres. As one respondent⁶² noted, 'we only see these politicians during campaign season; they run their affairs from Nairobi and occasionally visit Isiolo; they never care about us, we do not need them to feed us, nor ask them to protect our animals. We would have preferred if our children got bursaries for school and, in return, helped us manage our lives, but even that is

⁶¹ Kaddubo, J, Male, Korbesa, 2019

⁶² Roba, D. Male, Lakole, 2019.

difficult to get; we are on our own and by God's grace'.

To this end, political allegiance could be accessed by promising bursaries and participating in Harambees and not necessarily by transferring livestock to vulnerable communities. Although the ideals of sharing livestock bestow honour on the giver for depicting *borantiti*, prestige does not always result in winning political positions, but provides wider protection. For instance, in Kenya's just concluded 2022 general election, the Borana community in Isiolo strategized and nominated five candidates for the national position. However, out of the five leaders selected and backed by the Borana council of elders, only one candidate secured the seat, and the rest won by the opposition group.

Exchanges are often facilitated through identities and ideals of belongingness via borantiti, ollomitti and being Muslim; these redistributive practices are in part anticipatory, helping to firm up bonds with diverse people whose support can be drawn on in times of distress. Furthermore, the significance of such identities has been reinforced through religion and changes in the broader political economy, as will be detailed further in the following chapter. In today's Isiolo, political participation has transformed beyond recognising what it looked like in the 1970s. It involves negotiated 'democracies' between the major clans in the region (Lynch, 2007).

As such, it has no direct influence on livestock transfers between herders. Secondly, there is no collective clan-based annual review to restock the impoverished, as observed by Dahl in the 1970s. However, lineage, family, friends, in-laws, and agemates participate in restocking post raids and in the wake of wild animal attacks. Thirdly, today's pastoralists survive by galvanising services brought through modernity, such as motorcycles for pasture surveillance, feeds, and water trucks to manage animals in the dry period. Women's role has also evolved from caregivers and milk managers to livestock husbandry managers contrasting their roles in the 1970s.

In summary, customary redistributive practices for livestock and labour persist but with significant changes. The changes are evident in gender relations, modernity-due to the influence of Islam and the use of transport technologies such as motorcycles. However, the roles of these moral economies remain the same and are central to pastoral production. It enhances the ability to practice adaptive mobility through flexible labour orientation in an area with a limited market, State presence, poor road infrastructures and prone to adversities. It augments responsiveness to droughts and insecurities, enhances stock recovery, and reduces vulnerabilities. The study notes the differentiated ability to galvanise labour and livestock resources among social groups, wealthy/poor, young/old, and male/female. The wealthier herd owners benefit more than low-income families due to their stratified capacity to invest in redistributive cycles. Despite the variations, the study emphasises multiple moral economies that some low-income and vulnerable families navigate through comradeship, leaning on

others, and daily alms and solidarities brought by today's institutions.

The ramifications of these institutions (religion, modernity) and others on traditional pastoralists' moral economy could be different in 'urban' areas, with better infrastructures and connections to the market. Unlike Korbesa, life in Kinna is shaped by its proximity to neighbouring towns, State institutions and development projects, and hence the possibility of new relationships that emerges to sustain pastoral production, as the forthcoming chapter highlights.

CHAPTER SEVEN: KINNA TODAY: THE MORAL ECONOMY AND URBAN PASTORALISM: WHAT HAS CHANGED SINCE 1975?

7.1 Introduction

This chapter presents pastoralists livelihood and the emerging moral economy practices in Kinna – an area where more settled forms of pastoralism predominate. Here, herd owners live in town while partners and hired herders manage the livestock in a nearby grazing camp called Bibi. Kinna was Dahl's study area in the 1970s to document the subsistence economy of Waso Borana pastoralists that produced the book *Suffering Grass*. The chapter explores how moral economy practices have evolved in a pastoral setting that has transformed into a growing town. The images in Figure 7.1 and 7.2 point to the degree of transformation that has taken place: new infrastructure (electricity, road, and mobile phone networks), the accessibility of motorised transport, increased population, and the development of markets and market infrastructure.

Against a backdrop of profound change, this chapter considers evolving responses of pastoralists to uncertainty and the role of moral economy practices within these. In addition to the research questions detailed in Chapter one, other specific questions for this chapter include:

- a) What forms of moral economy emerge in a more sedentarised setting in which livelihoods have diversified in parallel to the growth of small towns, State institutions and development NGOs and greater connectivity with wider markets and politics?
- b) What is the role of new technologies in pastoralists' responses to uncertainty?

The findings indicate that new settlement patterns, and the sedentarisation of most people in and around town, have significant implications for livestock management practices of herd splitting, adaptive mobilities and specialised care. Secondly, there are diverse economic activities and marketing opportunities in town, creating space for young women and men to engage in various activities and support pastoralism. Finally, the concentration of State institutions, religion, and development NGO projects results in institutionalised and formalised assistance systems through saving clubs and Harambee among the pastoralists. The above three features of town (sedentarisation, diverse economies and concentration of State and NGO projects) present new forms of social relationship, some of which are constituted locally as a moral economy. For instance, due to settlement in town centres, pastoralists build relationships with hired herders in the bush and the motorcycle service providers to link town-bush families. This new form of relationship forms part of today's moral economies. Therefore, moral economy practices in this region are very different from those in the 1970s.

The chapter argues that pastoralists' access to various supports through the moral economy is highly stratified by wealth, gender, and generation. This stratification is associated with diverse forms of uncertainties, opportunities, and vulnerability. Unlike Korbesa, where the moral economy is based on collective solidarity and livestock redistribution, the moral economy in Kinna emerge out of a more individualised, cash-based collection of practices requiring pastoralists to cultivate relationships through partnerships and diverse institutions. The chapter first introduces Kinna and the typical livelihood uncertainties in the region. It then discusses forms of moral economies that emerge and ends with evaluating the role of pastoralists' moral economy in managing uncertainties.

7.2 The Historical Context of Kinna 1975-2020

Kinna is an administrative ward in Isiolo south constituency under the Garbatula sub-county. The town was affirmed administrative sub-location in the 1950s; and it became a full location in 1979. However, Borana pastoralists lived in Kinna since the 1920s⁶³. In 1953, the colonial administrators appointed Hajj Waqo Wario as the first assistant chief (Dahl, 1979, 243). Kinna is a semi-arid region of the County receiving annual rainfall between 400mm to 650 mm (Republic of Kenya, 2002). Pastoralists integrated farming into their livelihood in the early 1940s, owing to their interaction with neighbouring Meru farmers and the favourable ecological conditions that permit some cultivation (Republic of Kenya, 1974). According to elders, Kinna was a traditional pastoral *dedha* (grazing territory) for Isiolo south due to its proximity to grasslands Meru; however, due to Tsetse infestation, it was only exploited in the dry seasons. Kinna is also endowed with resources, including wildlife, as it hosts Bisanadi National reserve and borders Meru National Park (Isiolo County 2013). Further, the proximity of Kinna to Meru and other urban centres provided a trading opportunity for Borana pastoralists with '*some permanent settlement*' (Dahl and Sandford, 1978, 34). The Map below shows Kinna, and the neighbouring farming and reserve areas mentioned above.

⁶³ Key informant Tintima (Among the first settlers in Kinna and the Hayyu (attorney) of Garbatula)

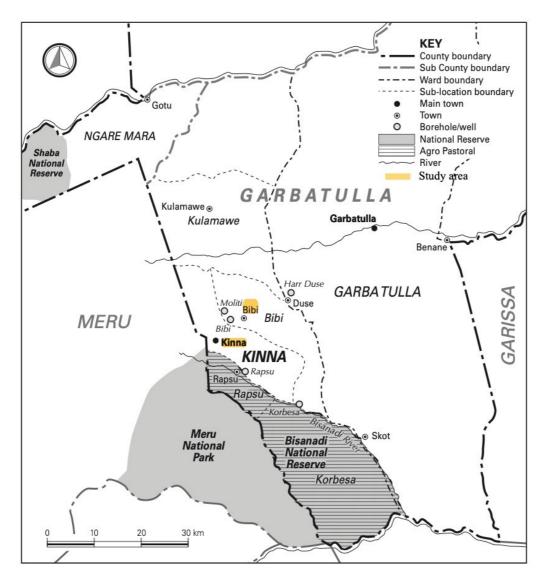


Figure 7.1: Map showing the Study Areas: Kinna and Bibi

Source: Researcher with support from John Hall

In the aftermath of the Shifta-war 1967-1969, Borana pastoralists were severely impoverished, and their livestock were significantly diminished. This shock resulted in outmigration for wage labour, while the government and aid agencies rehabilitated the ex-pastoralists in irrigated farming clusters (Dahl, 1979; Hogg, 1987; Khalif, 2010). In Kinna, the scheme was opened at Rapsu and Bisanadi River with highly mechanised technologies than other schemes in Isiolo (Dahl, 1979, 217). In late 1984, the Africa Muslim Agency constructed a mosque and madrassa. The need for stones for madrassa construction attracted many ex-pastoralists to mine stones and other minerals, including blue sapphire in the Duse area. The remaining group fed on the relief food, while others engaged in ivory poaching to survive post-Shifta destitution. These diverse wealth-generating activities revived the growth of Kinna centre and attracted Borana from neighbouring regions to settle in the area.

Kinna was also a livestock trading hub for the region but highly affected by highway banditry (Dahl, 1979; Khalif, 2010; Sharamo, 2014; Guyo, 2017). From a small pastoral centre, Kinna has grown into a sizeable town with an improving road infrastructure, connections to the national electricity grid, ready access to motorised transport, and market facilities. By 2020, the population of Kinna had swelled to 27,216, while the population of wider Isiolo County was 268,002 – a ten-fold increase compared to the 2,515 total population recorded in the 1970s (KNBS, 2019). Due to these services and the immediacy of Kinna to Isiolo and other urban areas, there is a high concentration of State projects, development agencies and NGO programmes (MID-P, 2020). The following photos shows the transformation Kinna and the surrounding 'towns' between 1975 and 2020.



Picture 7.1: Kinna 'Town' (Dahl, 1974)



Picture 7.2: Kinna Town, (Mohamed, 2020)



Picture 7.3: Bibi (Dahl, 1974)



Picture 7.4: Bibi (Mohamed, 2020)



Picture 7.5: Duse Manyatta (Dahl, 1974)



Picture 7.6: Duse Town (Mohamed, 2020)

In 1974, there were 17 primary schools spread across the entire district and only two secondary schools, one in Isiolo town and another in Garbatula (GoK 1974-1978). Today, there are two secondary schools and twelve primary schools in Kinna, out of which eight are public, while four are private schools. The number of children above three years attending or have attended and dropped out of school in Kinna is 16,509 (KNBS, 2019).

Following the changes in local economy and diversification of livelihoods, people are increasingly pursuing individualised strategies. Herd owners are taking part in all sorts of petty trade and casual work, the proceeds of which they use to meet immediate cash needs, and not necessarily to invest in a family herd. Equally, labour has been commoditised – this provides options for those who can afford to hire labour to hep manage livestock, or for other tasks. For the poor, this is less of an option and, indeed, many seek casual work opportunities to make ends meet. This is how differentiation has become

manifest, in the unevenness of options and opportunities as livelihoods diverge in different directions for the wealthy and those who are poorer and intersecting in various ways with age and gender differences. In what follows, I briefly highlight forms of livestock production uncertainties that affects pastoralists in these changing economies and livelihood options.

7.3 Livelihood Production Uncertainty in Kinna 1975-2020

This section recaps the key uncertainties influencing livestock production in Kinna. Pastoralists in this region live with a shrinking land base and border restrictions due to strategic reserves and parks borders. The Meru National Park, founded in 1966 and Bisanadi reserve gazetted in 1979 (UNESCO, 2010), are strategic conservation areas for Isiolo district and formed a drought reserve grazing corridor for Borana (Dahl, 1979, 264). Park restriction and the subsequent game hunting in 1977 (Barnett, 1998) interfered with the traditional pattern of livestock mobility for Waso herders. Dahl noted Bisanadi and Shaba conservation areas in Kinna region as '*drought reserves the loss of which has involved a loss of security for the cattle herders*' (–1979, 264). Elders recounted park restriction and the resulting livestock loss to park rangers as a fundamental crisis. For instance, Waqo⁶⁴ described, '*In 1995, we took our herds to Meru National Park, it was the only place with pasture, but infested with Gandhi and shilmi (tsetse and ticks*). Moreover, the park warden killed our livestock by spraying the animals with some chemicals through a helicopter. My family went into the park with 501 cattle, and only 160 survived'. The Map presented on page 112 shows the location of Kinna and the surrounding park borders.

Pastoralists are pushed to negotiate access by bribing park rangers or purchasing corn harvest from Meru farmers, while the poorer herdowners struggle. Besides these restrictions on mobility, other challenges include wild-animal attacks and tsetse infestation. Out of the twelve households interviewed in Kinna, eight have lost livestock to attacks by hyenas and cheetahs. Besides, there has been increased tsetse infestation in elephant habitat, especially in forested areas along the rivers, the same habitat for livestock grazing, especially in dry periods. The tsetse infested habitat in turn, cause trypanosomiasis or what locals call *dhukub-gandhi*. All the twelve households in Kinna prioritised trypanosomiasis and East- cost-fever as the prominent livestock disease affecting their animals. Elders expressed that it is through livestock-wildlife interaction that the two diseases topped livestock uncertainty in the region.

Kinna experiences persistent and prolonged dry periods. Several studies detail the repeated drought as the prominent variability which affects livestock in the region (Dahl & Sandford, 1978; Hogg, 1985; Swift, 1988; MCcabe, 1990; Mossberg et al., 2017). The dry situation is often exacerbated by resource competition from the neighbouring Somali pastoralists from Garissa County and the expansion of land under cultivation by farmers from Meru. Limited resource competition often translates into tribal skirmishes between Borana, Aulian and Abudwaq from Garissa County, affecting livestock mobility

⁶⁴ Waqo, J. Male, Kinna, 2019

and market. This conflict is fueled by the better road network, access to motorised transport and proliferation of small firearms (Sharamo 2014; Guyo, 2017; Mkutu 2020). Similar to Korbesa in the 1970s as well as today, pastoralists in Kinna live with labour shortages for productive livestock management. The deficit is intensified by the increasing schooling generation and the town settlement pattern as established in the introduction section. Pastoralists overcome variable labour shortages in a differentiated way through hired clients, partnerships, while the low-income families rely on limited household members or *itti-hirkaat*.

The aftermath of Shifta destitution impaired the town's growth, which forced many pastoralists into irrigated farming, outmigration, gemstone mining, and poaching, all of which generated income to reinvest into pastoralism. Against this backdrop, moral economies and the related practices also transformed as people respond to the changing pastoral livelihoods and the uncertainties of livestock production elaborated further in the forthcoming section.

7.4 Pastoralists' Moral Economy in Managing Uncertainty: 1975-2020 in Urban Pastoral Setting

Establishing connections and networks, motivates moral economy practices, as seen already in Korbesa and Lakole. Yet, differentiation in practices is important to consider against a backdrop of wider transformation happening in the economy, livelihoods and lives of Kinna's population. Access to emerging opportunities is unequally distributed, generating a class of wealthier herd owners that enjoy extensive opportunities to expand and deepen their social ties. In contrast, the poor, while still nurturing moral economy ties, receive patchier and thinner support, as detailed below. This section reflects on these changes, while focusing on three dimensions of moral economy practices in Kinna: a) individualisation, commoditisation, and economic diversification, b) collective technology mobilisation, and c) institutionalised support. These are addressed in turn, with case studies used to illustrate significant elements.

7.4.1 Individualisation, Commoditisation, and Economic Diversification

As observed in chapters five and six, collaborative labour facilitates herd dispersal, specialised care, and adaptive mobility; all central to navigating dryland's uncertainty. Unlike the 1970s, when extended family members provided livestock management and care in a closely knitted livestock and human settlement (Dahl, 1979), today, the settlement patterns and the family structures have changed. In Kinna, herd owners live in town while the animals are grazed in respective *dedha*, such as Bibi, Bule, and Andadu. The practice of expanding household labour through polygamy is no longer evident in Kinna. Out of the twelve case study households in Kinna, none were polygamous. Further, all households had their children either in school, employed or operating *boda-boda* to earn a livelihood. Hence, household members are more fragmented and not pulled together to provide labour to split and move herds. Unlike Korbesa, there is pool of herders for hire that can be employed to help with livestock tasks,

among other work. The proximity to Meru and Maua provides access to cheaper herding services compared to the furthest places like Merti, where the population is low and mainly consists of Borana. Eight of twelve case study households in Kinna hired Meru herdsmen, either on a contractual or monthly basis, to manage the livestock. The four who did not hire herders were not in a position to afford hired help, and either tended their own few livestock or practised *itti-hirkaat* (relying on others). Such families graze their animals in and around town. The remainder of this section answers the first question on the moral economy forms that emerge in individualised and commodified urban pastoralism. It does so by presenting two case studies to reveal how evolving social organisation, commoditised labour and economic diversification help navigate animal production uncertainties. The first case is Badada⁶⁵, a wealthy male herd owner in Kinna, while the second is Darmi⁶⁶, an affluent female herder.

Box 7.1 Case six: Commoditised Labour and Farmer-Herder Relationship

Commoditised labour and farmer-herder relationship

Badada is one of Borana *Jallaba* (elders) in Kinna; he is the chairperson of Kinna *dedha* and heads the security committee. Badada is named after a town in western Kenya, Barbara, to which he migrated in 1978 in the aftermath of the Shifta conflict. He established a butchery and business to support his livelihood until he returned to Kinna in 1995. Throughout his stay in Badada, he left livestock in Kinna in the custody of his brother-in-law and cousin Boru. Badada lost livestock to raid and drought while away from Kinna. In 1984, Badada had 90 cattle and lost 70 to the drought; later, he sold the cattle and purchased goats. In 1993, Aulian raided Kinna, and Badada lost 300 goats; and in the subsequent Aulian war of 1995, he lost all his 40 remaining goats to raids. In late 1995, Badada decided to return to Kinna to purchase livestock, constructed rental shops, and a residential house in Kinna town. To manage the livestock, Badada 'partnered' with Mzee Dulach, and they worked together for 25 years. Badada assists Dulach's family in town, provide food ration to him but does not pay salary because Dulach keeps his few livestock in Badada's camp and benefits from veterinary supplies, feed, and herding support from seasonal contractual labours.

Aside from partnering with Dulach, Badada hired labourers to manage the difficult seasons. According to Badada, hiring labour cost is KSHs 5000 (50\$) with an additional monthly costs of food rations which includes; one and a half packet of maize (36kgs) of maize flour, 15Kgs of sugar, two packets of tea leaves, and daily motorbike cost to visit the livestock in the bush. In a month, Badada spends KSHs 17,300 (173\$) for the hired herder and the subsequent cost of sustenance. During the 2017 and the 2019 drought, Badada went an extra mile to support the livestock and prevent losses. He narrates, 'once the drought comes, I plan strategically and purchase feeds near a water point and therefore reduce cattle trekking distance. ...I bought 'shamba' (corn-farm harvest and grass) in Meru just about 10KM from Kinna... In 2017, I used KSHs 107,000 (1,007\$) while in 2019, I used KSHs 103,000 (1,003\$) to purchase the corn farm. I go to the Meru farmers and ask them to count the corn (because they always make the corns ready), and we seal the deal. We have been working with them since 2014 and have established good relations. In both 2017 and 2019, I did not lose any animal to drought as I was present to supervise and manage, while when I was in Badada, I used to send money for people to manage the livestock. However, it was devastating as I continually lost everything'

⁶⁵ Badada B. Male, Kinna, 2020

⁶⁶ Darmi D. Female, Kinna, 2020

Badada's case (Box 7.1) shows that, even in commoditised labour and individualised economy, access to hired labour is insufficient for individuals to survive uncertainties; rather, investing in social relations with partners, hired herders and apparent supervision that generates reliability is paramount. Sometimes, even being 'present' and relying on older people for livestock management could result in unprecedented loss. In June 2021, an unknown number of Meru burglars raided Badada's camp and drove away thirty cattle while an old poor herding partner was managing it. After a swift response, Badada's family and friends recovered twenty-two cattle in Meru National Park, and the remaining were recovered later. The burglary case demonstrates the challenges of more individualised production despite the investment in partnerships and hiring labour. On the contrary, the collective and communal labour management practices provide more certainty, as seen in Korbesa, where comradeship (*waheel*) allows herders to graze in insecure areas. Due to the setting in Kinna, investing in exchange relations with Meru farmers to access feeds in a period of scarcity is fundamental for survival. Establishing such connections requires both financial might and trust between partners and farmers and between herd owners and the hired herders. Such relations entirely exclude the poor unless they take part in a partnership such as exists between Dulach and Badada.

Badada's arrangement with Dulach is similar to cooperation strategy observed by Dahl and presented in chapter six among the pastoralists in Korbesa. This finding suggests that social relations are fundamental to survive an unpredictable environment, even in circumstances where labour is seemingly commoditised, and livelihoods are highly individualised. Even though hiring labour is transactional, social ties and bonds are established between the herd owners and clients through the giving of gifts and incentives. This is important because hired herders could be inexperienced, old, or otherwise unable to provide care for livestock.

Pastoralists need to balance the cost of hiring herders, the experience level and the trust. For Badada, Dulacha is somehow old but has exemplary livestock management knowledge and trust; as such, he could guide the younger, inexperienced Meru herders. Furthermore, with the changing social organisation, where herd owners stay in town and the livestock kept in the bush with hired herders, and the intensified livestock raid facilitated by transport technology, herd owners in the Kinna region are vulnerable, as seen in Badada's case. Therefore, investing in good relations with hired herders is of central importance.

Due to the absence of clan and familial arrangements, pastoralists invest in relations even with potential 'enemies', like the symbiotic arrangements that exist between Badada and Meru farmers or bribing park rangers to access grazing inside protected areas. The practice of negotiating access to resources with the neighbouring agricultural group, conservation entities and with fellow pastoralists, including cross-border regions, is common among the pastoralist of Eastern Africa and the Sahel (Thébaud &

Batterbury, 2001; Bogale & Korf, 2007; Mwangi & Dohrn, 2008; Beyene, 2010a; Beyene, 2010b; Daniel, 2018; Pas Schrijver, 2019). Through these negotiations and cooperation, pastoralists are able to break the barriers of private enclosers and restrictive land tenure, even in the context of violent conflict areas.

The chapter argues that through flexible arrangements, pastoralists navigate and meet the livestock needs. Yet, such flexibility is unequally distributed as the poor without free labour services or the capacity to purchase maize farms are left out. As one poor herder explained⁶⁷, *'it is easier for the wealthy people to survive because they can sell animals and manage the difficult times or even hire extra labourers to manage the situation. While when poor like us are affected by disease or drought, it is difficult to recover because the cost is too high, and we cannot sell the little animals we own.' This reveals the reality for most low-income herd owners who cannot sustain livestock capital in difficult moments due to the rising commodified livestock production, especially in the urbanising pastoral context such as Kinna. Despite the differentiated and individualised livestock management ability, flexible social relations between wealthy-poor, farmer-herder, and male-female engagement are crucial.*

In the 1970s, fathers were executive livestock managers. They decided where to disperse the livestock, what animal to transfer, and to whom, while the female and young adults' roles involved livestock care. This means that livestock management practices were fixed and passed on from generation. Moreover, fathers delayed livestock transfer to exercise husbandry roles and control household labour for a prolonged period. As presented in chapter five, this delayed transfer was due to extensive household labour needs and lack of economic opportunities for diversification. In today's Kinna, pastoral demographic patterns, settlement, and social organisations have changed, affecting traditional livestock practices. Equally, pastoral livelihood evolves through time and space due to market, commodification and development of institutions there by transforming how these pastoralists generate reliability in navigating uncertain production. The upcoming case study of Darmi⁶⁸ presents how transforming pastoral livelihood reconfigures intra-household diversification, bargaining and investment. It indicates that pastoralists' moral economy is dynamic and involves galvanised relationships to benefit from the evolving social-economic opportunities.

⁶⁷ Yahya, D. Male, Kinna, 2019

⁶⁸ Darmi D. Female, Kinna, 2020

Box 7.2: Case Seven: Intra-household Economic Diversification

Intra-household economic diversification

'If in town, you either must own a shamba (farm) or business to support the cost of livestock management'

Darmi is a 60-year-old widow who lives in Kinna town while her livestock is based in Bibi. She has seven children; five are married while two unmarried sons live with her. In 1997, she separated from her first husband, took her *meher* (bride-wealth) cow, which she sold for KSHs 15,000 (150\$). She used the money to purchase clothes and traded between Isiolo and Mandera. She later shifted to livestock trade, as well as begun selling miraa and opening a small eatery. In 2006, Darmi got married to her second husband, and due to the regular dry seasons, she stopped the livestock trade and opened a shop in Kinna. Her husband objected to the idea of Darmi opening the shop, but she responded, *'if we do not have a business, how can we support the livestock? The money could all be lost, but business will remain to support us for long'*. In the 2009 drought, Darmi took ten cattle home to manage alongside her business. She purchased feeds, bought water, and hired two herders to help her husband later explained to one of the prominent Borana elders, *'even women can be useful in times of hardship, were it not for my wife, we would not have managed this drought'*.

Through her business and livestock proceeds, Darmi used KSHs 270,000 (2700\$) to construct lodge rooms in her residential compound; and bought two-acre farmland in Rapsu, where she farmed bananas and watermelon. In 2011, Darmi lost her husband, and she continued managing the livestock and the side businesses. In 2017, Darmi sold fifteen cattle and purchased goats. She reiterated 'goats are good; they can survive drought more than cattle; little pasture suffices them. I was afraid to lose all the cattle, so I diversified into goats, and now I have 150 goats and 50 cattle'. Due to the intensive livestock care, Darmi hired labourers to manage the livestock, and each month she pays a total of KSHS 17,000 (170\$) for four herders, two for cattle and two for the goats. Contrasting delayed intrahousehold animal transfer, Darmi gave handura to all her children, and she purchased a motorcycle for her two sons, Kiyya and Juma.

She bought the first motorbike in 2017 while the second in 2019. Kiyya and Juma use the bike to visit the livestock and provide transport services in Kinna as an alternate livelihood source. Moreover, Juma purchased thirty goats from the motorbike profit. Darmi praised that *'the bikes are from the livestock money and now it is also bringing wealth, so, having livestock is wealth over wealth'*. In 2020, Darmi was not involved in other businesses but depended on the returns from the lodge, motorbike and paid the herders by selling few goats every month.

Darmi's case shows that the power and gender dynamics within the household have shifted as women and young people have assumed more po in economic activities and decisions concerning where to invest surplus. These changes are further accompanied by shifts in livestock management. In Darmi's case, she has hired labour as well as purchased feeds to support a herd. Investing in a motorbike has meant that Darmi can monitor the health of herds that are kept outside of town.

Instead of investing in a collective community moral economy, individual pastoralists build networks by reconfiguring household labour and spreading members to undertake various tasks to protect livestock production. These practices contrast the customary household labour division, often dominated by males controlling livestock sale management by dispersing households' units into diverse localities. Today, the same household members engage in multiple economies, sharing responsibilities and making collective decisions on the welfare of their livelihoods, as seen in Darmi's case. Although commodification and commercial relationships are involved in such transactions, the element of the moral economy emerges in how families share responsibilities and the cost of managing livestock through opportunistic diversification, remittance sharing, and strong social relations built on trust. Therefore, it is not diversification into multiple economies that matters; it is the process through which families negotiate, plan and allocate resources that create moral economies to survive unpredictable livestock production.

Despite being in town, women establish emotional and caring relationships with animals. Darmi moved ten cattle to her homestead in Kinna town to provide specialised care, supplying feeds and veterinary support to the severely malnourished animals. Darmis' case reveals that responding to livestock uncertainty requires collective responsibilities between herd owners, hired clients, and household members, including young and female herders. In another interview, a female respondent, Haarufa⁶⁸ noted that '2009 was the first ola (drought) where women suffered most. They left their childcare role to manage the livestock and overcome the severity of the drought'. Four out of the five female interviewees in Kinna have moved to save the animals in different dry periods. Women's role in livestock care has evolved alongside changes in settlement patterns and the limited options for some households to hire herders. This shows that specialised, gendered, and emotional livestock care is crucial and central to embracing uncertainty in pastoral areas.

Thus far, the discussion has looked at strategies to meet labour needs for managing livestock. The changing social organisation, new settlement patterns (shift to staying in town), and livelihood diversification have been experienced differently, with socio-economic status, age and gender all influencing outcomes. Those who are better-off with the capacity to hire labour and cultivate ties with Meru farmers have fared better, maintaining the ability to support livestock while also diversifying into other activities. Equally, women's involvement in managing livestock has evolved as they too now visit herds in grazing zones and move animals to key resource sites during droughts. Unlike the 1970s, and in contrast to more remote pastoral settings like Korbesa and Lakole, moral economy practices among pastoralists in Kinna are less about livestock redistribution and labour cooperation, although these practices still exist. Instead, the moral economy has pivoted to focus on cultivating relationships that are important to increasingly individualised livelihood pursuits, helping people diversify and protect livelihood through collective solidarities. A moral economy rooted in cementing individual ties and opportunities helps pastoralists in town to confront uncertainties. Now, I turn to the second question and evaluate the relationship of technological transformations with moral economy practices as a response to crisis.

7.4.2 Town, Technology, and Moral Economy

As presented above, the moral economy in 'town' differs from the classic moral economy centred on

livestock and labour redistribution, affecting how different social groups engage with pastoralism and confront uncertainty. Town-life entails greater access to education, markets, and technology. Since primary education is compulsory in Kenya, every family enrolls their children in schooling. As presented in section 7.2, the number of children above three years attending school in Kinna is 16,509 (KNBS, 2019). Further, all of the households in Kinna interviewed for this research had enrolled their children in school. As a generation of young people in pastoral areas, in particular those in and around growing towns, have spent many years in the school system, they have grown distant from the everyday work entailed in managing livestock. As the lives of young people transform, so have their networks and the sorts of connections they establish as part of their own moral economies. In relation to these shifts, ready access to transport as well as the spread of mobile phone technology are important to understanding young people's networks and moral economy practices. The following section presents how motorised technology re-connect young herders into pastoralism, navigate mobility and livestock raids.

Motorcycle transport in Kenya is called '*boda-boda*', originating from Kenya-Uganda cross border motorcycle transport in the early 1990s (Nyachieo, 2015 & Amone, 2021). While transport options in Borana in the 1970s were mainly confined to using donkeys and camels, the availability of *boda -boda* transport has grown exponentially in the region over the past decade. It remains an activity that mostly young men get involved in, particularly those from better-off households who invest it as an alternative income generating activity, as seen in Darmi's case 3.1.1. *Boda-boda* enables people in town to visit livestock in the bush, to access markets and facilitates the movement of herds, such as ferrying the young and sick animals during migration and help deliver water and other essential animal requirements. According to elders in FGD, every able herd owner invests in a *boda-boda* to provide services to the animal or as a transport service business to link towns to the fora. Abdi⁶⁹, a participant in FGD, commented on the significance of the *boda-boda* industry in the pastoral economy:

'Pastoralist's mobility has completely changed due to the spread of motorcycles. We trekked for days to reach water and pasture sites, but now 70% of pastoralists own motorcycles, or others rent or beg to get services. Bike accesses all the impassable road networks, we use it for milk transportation, abuuru (pasture surveillance), rebu (response to attacks), and can carry up to four people. When we change camps, we use bikes to carry ilmole (young animals), and in one crate, we put about twenty ilmole. It serves as an emergency 'ambulance'; we can take those bitten by snakes to hospital, and our sick and young animals no longer die of thirst because motorbikes can transport water to the furthest distance in Waso.'

While modern motorised transport like *boda-boda* is of vital significance, as Abdi explains, access to the service is uneven, stratified by geography, wealth, and gender dimensions. First, *boda-boda*

⁶⁹ Abdi, A. Male, Kinna 2020

transport is cheaper and more accessible in Kinna than Korbesa due to the proximity of Kinna to Meru and Isiolo towns and the comparatively good road network in Kinna, both of which have meant that the number of *boda-boda* operators in Kinna has multiplied. On the contrary, Korbesa is far from urban centres located about 230kms from Isiolo, and accessible only through the use of poor roads.

Secondly, ownership of *boda-boda* is still concentrated amongst those who are better off, and as an income generating activity that is embraced by young men. For poorer households, the distance between town and herds kept outside of town is still a hardship to endure, as Rahma's case illustrates⁷⁰

Box 7.3: Case Eight: Stratification through technological access

Stratification through Technological Access

I arrived in Bibi at 8 a.m, and at that time, cows were returning from *waare* (morning pasture), which is believed to have good moisture content and nourishes the cows before they are milked. I met Rahma, who had few plastic jerricans she brought from town to collect milk. Her husband Guyo was busy looking for *gaadi* (rope) ready to tie the cows for milking. There were not many cattle, and the few there belonged to the three families camped in Bibi. I grabbed some stone and sat near Rahma as we observed men getting ready to milk.

I asked her, 'Will you milk the cow, too?' She responded, 'I can do the milking, but now I am tired; I just arrived from town to collect milk, and I need to go back to sell so that we get some cash to use for the day. Every good season, I come to collect milk from Bibi and sell it in Kinna town. I usually

leave my baby with the neighbours because the older siblings are all in school. I would like to use a motorbike to bring the milk to town, but the cost is high, it might consume all the money I earn for the day. Even when I consider the option of hiring a bike to bring milk, I still pay, and since we only get small milk, we cannot afford to pay extra for motorbikes'

Rahma cannot afford to buy or rent a motorcycle, and thus she walks to Bibi to collect milk as whatever she gets from the sale of the milk cannot suffice their daily needs. Since Rahma's husband Guyo manages the livestock, they both do not have time to engage in alternative livelihoods and only depend on livestock production. However, for Guyo to ease livestock management, they live with three other herd owners so that their livestock can be viable for *yaasuum* (to be herded) and attain security. On the other hand, Rahma received childcare support from an older woman in her neighbourhood, freeing her time to collect milk from Bibi, which she sells in Kinna. Her case highlights the moral economy bonds that are important to poorer households, notably help with childcare. Among the Borana, older women providing childcare is a common practice that the younger women with children enjoy. In fact, there is a general saying which means 'children are raised by the community', meaning that it is the community's collective responsibility to participate in childrearing via numerous supports. Finally, Rahma's family

⁷⁰Rahma J. Female, Kinna, 2020

cooperated with other herders to strengthen their security and access rangelands that are insecure. Such collaboration reveals a continuity of classic moral economy even in town settings.

Despite this differentiated access, motorised transport has transformed pastoral mobility and generated new moral economy ties. First, *boda-boda* connects remote pastoral villages to towns, enhances marketing, and serves as the easiest form of transport in the bushlands. *Boda-boda* operators deliver animal feeds, veterinary supplies and charge mobile phones for the herders. During social events like weddings and funerals, or in the event of accidents, the operators rely on *boda-boda* cooperatives and clubs for loans, protection, and solidarity.

Access to *boda-boda* and communication networks has strengthened ways of dealing with crisis, at least for the more proximate areas to town such as Kinna, as responses to a large raid in Duse (near Kinna) in 2017 shows. In 2017 April, bandits broke into Kinna ward and raided livestock in Duse. Duse is a sub-location within Kinna ward and is about 15KM from Kinna town. The bandits killed one woman and a child and drove several cattle and small ruminants away. The news swiftly reached Kinna town due to mobile network communication. Kinna elders and local community security coordinators mobilised many able men and young motorbike owners to respond to the raid and recover the livestock. Everyone who owned a firearm or motorcycle provided free services, and the team took varied routes, countering the attackers and successfully recovering all the stolen livestock. Two Borana fighters and several bandits died during the incident.

This incident happened the same year when Samburu raided Borana in Korbesa region, which resulted in the death of eight Borana herders, the loss of 10000 cattle and 7,000 small ruminants as presented in chapter six. However, unlike Korbesa, the 2017 Duse attack was successfully countered due to the effective mobilisation of response teams facilitated by swift communication and transport networks in Kinna. On the contrary, the Korbesa raid was not successfully managed partly due to the event's intensity and delayed response; *rebu* (response) team arrived at the scene at 9:30 a.m., while the event happened at 4:00 a.m. Such a delay could be due to the poor road terrain and limited transport options compared to Kinna. Transport and communication technology in pastoral areas substantially helps in collective mobilisation to respond to threats, especially in areas with access to good road networks. While the raiders successfully drove away herds in the Korbesa incident, the victims received *hirba* and *dabare* to rebuild their herds. In Kinna, technological mobilisation and collective response through *humn* (physical response) and *hoori* (wealth by fueling bikes, organising firearms) helped Kinna herders to respond quickly, repulse the attackers and recover the livestock. In both cases, local solidarities and mutual assistance were crucial to responding to crisis.

The cases highlighted here show how moral economy practices, although shifting, continue to thrive in pastoral settings characterised by profound changes in settlement patterns, economic activities and

social organisation. Redistributive practices and other expressions of solidarity have not vanished as Kinna has grown into a sizeable town, one that is more closely knitted into wider markets and politics. Yet, inequalities abound, and this is also evident in the sorts of ties that are cemented through mutual support and redistribution. Increasingly individualised livelihoods have meant that moral economy ties are similarly focused on leveraging support across individual networks – a contrast with the moral economy practices seen in Korbesa and Lakole, where ties bind household members and neighbours into a wider network of support, one that is more reminiscent of customary moral economy ties. The next section reflects on the influence felt by the increasing presence of the State institutions, organised religion (Islam) and NGOs, and how these intersect with changing moral economies in Kinna.

7.4.3 Institutions and Moral Economy

'Harambee has consumed the traditional buusaa gonoofaa. People find it easier to request for an 'investment' in children education than a request for a heifer as the letter is considered begging while the former as a livelihood support⁷¹

Among the Waso Borana, customary and religious institution formed foundation for livestock and resources redistribution. There are two forms of institutionalised transfers as embedded in Borana cultural beliefs and Islamic practices. The first is '*buusaa goonoofaa*' - '*institution of cattle redistribution*' (Bassi 1990 in Tache 2008, 206) to restock individuals affected by sudden shock such as raid or drought (Oba, 2001). The *buusaa goonoofaa* transfer is obligated by the clans and lineage elders, and participation in such an exchange is compulsory on clan members (Tache, 2008). The second transfer is called *Zakat* (wealth tax) obligated by Islamic faith. Chapter five presented how Borana practised collective clan redistribution and *Zakat* as the institutionally driven permanent transfers. This section shows the increasing presence of state institutions, as well as the expanding activities of NGOs and religious centres that have influenced, transformed, or modified traditional moral economies. Specifically, here I focus on the emergence of institutionalised transfers through *harambee* (associated with the spreading influence of the State), saving groups or 'saccos' (associated with NGOs) and *Zakat*.

7.4.3 a. Is Harambee Replacing Traditional Buusaa Goonoofaa?

Harambee is a Swahili term that translates to 'pulling together' (Mbithi & Esipisu, 1977; Chieni, 2011), initially used by veteran politicians calling people to pull resources together towards social and economic development. Since its inception, the concept has evolved beyond social economic development to include collective self-help institutions such as '*marro' and* 'merry go round' especially among rural women (Mbithi & Esipisu, 1977; Brochu-Due, 1983; Jivetti & Edwards, 2010; Coppock & Desta, 2013; Maikuma, 2020). In pastoral settings, the concept is applied to fundraising for social-

⁷¹ Haagaro, B. Female, Bibi, 2019

economic development such as education, medical bills, weddings, and establishing livelihood for vulnerable individuals including orphans, the disabled, and those affected by calamities. Although there is *Harambee* fundraising even in remote pastoral areas like Korbesa, the magnitude and frequency are more notable in urban centres like Isiolo and Kinna. The prominence of *Harambee* in towns is associated with the extension of the State's presence and, alongside this, the culture of politics in Kenya more widely. For instance, Kinna has produced the Member of Parliament for Isiolo South since the early 1980s. The study observed *Harambee* in two contexts; as a substitute to *buusaa goonoofaa* for the wider community, and as the emergence of saving clubs (*Marro*) especially among women and young people, as elaborated in the following cases. The first case is Mama Nusra⁷², a widow in Kinna town, who acquired livelihood through *Harambee*, while the second case is Hale⁷³, from the women's savings club, an institution to enhance women's cooperation to manage social, economic challenges in town.

Box 7.4: Case Nine: Livelihood Support through Harambee

Livelihood support through harambee

Mama Jillo lost her husband in a plane crash in June 2006, leaving behind five orphans. Her husband was former police and came from the Awatu clan of Borana. Compared to other major clans in Kinna, such as Jidda-maliyu and Dambe-non, Awatu is a minor clan. Through formal *Harambee*, the community raised KSHs 470,000 (4,700 \$). With this money, Mama Jillo constructed lodge rooms and a conference centre on their plot in Kinna town. Today, Mama Jillo's centre is among the few accommodations in Kinna, and the family continues to earn a livelihood from the investment. In an interview, she noted, '*Although sometimes there is low season, we have not faced shortages thanks to God, we are happy we have continued sustenance. I schooled my children with the income from the lodge to help manage the few livestock we own. This hotel has also given us an identity, and we could get a loan from anyone within Kinna and outside because the steady income guarantees loan repayment'.*

When asked who facilitated the Harambee, 'we were in shock; we never even had a chance to request community support. However, Baba Jillo's haariyaa (friends/colleagues) had a meeting and decided to organise the event without involving us in any plans. During the event, former MP Abdul Bari was the guest of honour, and the fundraising happened in October 2006. She ends the discussion by saying, 'we are grateful to the entire people of Kinna who stood with us and made sure that I do not struggle to raise the children. I am a living example of how communal support help people survive'.

As the opening quote of the section shows, today, pastoralists value economic and educational investment more than livestock redistribution. To this end, *Harambee* is an institutionalised form of support that is of equivalent significance (or, for some, like Nusra, of greater importance) to *buusaa*

⁷² Mama J, Female, Kinna, 2020

⁷³ Hale, D. Female, Kinna, 2019

goonoofaa. In Nusra's case, and like many harambees, the fundraising was explicitly associated with local politics through the presence of the area Member of Parliament (MP). In the word of one Abdikadir⁷⁴, 'waar siiyaasaa kajeeluuti buusaa goonoofaa qaajeelchaa' (the political aspirants are the ones who strengthen the buusaa goonofaa). This means that those aspiring political positions seek publicity through participation in several Harambees. As such, the magnitude of Harambee support depends on including the larger Borana, other tribes and politicians from the diaspora. The publicity and the legitimacy of Harambee through political participation contrast with buusaa goonoofaa and create barriers for the low-income families without political ties. This does not mean non-political Harambees are not significant; the extent of support differs.

Despite the ceremonial difference and the political dimensions, there are similar features between *Harambee, buusaa goonoofaa* and community support through *hirba*. First, Nusra's fundraising was initiated by her husband's *haariyaa*, clan members, and the larger Borana participated, just like how friends and associates provided *hirba* as detailed in chapter six. Secondly, the event resonates with *buusaa goonoofaa* practices, where lineage elders review the urgency of the incident for approval. According to the *buusaa goonoofaa* principle, the lineage elders analyse individuals' participation in Borana welfare, generosity and severity of the matter. If such an individual is found to be prominent in participating in communal welfare through *humn* (physical) and *hoori* (wealth), then the date for *Harambee* is set, and the individual's immediate clan take charge to organise the event and contribute significantly towards the kitty. Nusra noted that the organisers took the initiative, raising a substantial amount of funds that enabled the family to construct the lodge.

When I enquired about Jillo's (deceased) background, elders pronounced him as abba *iyyeesaa* (poor people's father), meaning, Jillo took people's plight seriously and showed solidarity in community affairs; as such, his family received outstanding support through *Harambee*. Although we could assume that Jillo's Harambee was partly influenced by the presence of an area member of parliament as a guest of honor, there was insignificant involvement of government officials in the organisation of the event. According to Jillos' wife, the entire Kinna community stood with them during the most challenging moment of their lives. Aside from the inequality in the magnitude, low-income families have managed to school their children through universities and colleges, paid medical bills, and accessed livelihood support. In Kinna, people have received *Harambee* of up to one million and seven hundred thousand shillings (170,000\$) and three hundred thousand shillings (30,000\$) on the lower side. Organising a *Harambee* is intensive, requiring the elders' validation, publicity, and holding a ceremony, which is costly, especially for the low-income families with limited connections to those who are better off. For those who are poorer, an alternative to *harambee* is saving clubs, as Hale's case (box 7.5) shows.

⁷⁴ Abdikadir, B. Male, Kinna, 2020

Recently, there has been an extensive move towards sustainable food systems and development through livelihood support grants and entrepreneurial development, especially for rural livelihood groups (Anyango et al., 2007; Kagunyu et al., 2017; Mwinzi, 2020, Bostedt et al., 2021). The 'sustainable' development projects encouraged livelihood group formation, especially among the marginal groups like women and youth, to access grants and financial services (Allen, 2006; Anyango et al., 2007; Jivetti & Edwards, 2010). In Isiolo, there has been extensive livelihood group formation (Kagunyu et al. 2017; Khalif & Oba 2018); however, owing to inadequacy and time-limited nature of the support from the government and the NGOs, the groups' economic activity is not sustainable.

Equally, due to pastoralists' ability to galvanise collective networks, the group members reconstituted their 'livelihood' groups into a saving SACCOs and clubs. These groups maintain long-term socialeconomic ties even after the end of the intended government or NGO project and help members to counter the seasonal and temporal external support via State and development NGOs. This livelihood support has been essential for women to generate reliable support by investing in localised networks that allow diversification, as the following case in box 7.5 detail.

Box 7.5 Case Ten Women's Rotational Saving Clubs

Women's rotational saving clubs

Around 9 a.m., I met Hale, who had collected some sacks to go to Rapsu to bring tomatoes and capsicum to Kinna market. Hale is the chairperson of the Kinna *dedha* women group, consisting of women who live in Kinna town and pursue diverse economic activities. Her family depends on livestock and a small garden in Rapsu. She explains that the Kinna *dedha* women group serve women both for economic empowerment and social support. Usually, the group have a weekly meeting hosted in Halima's boma, but people bring sugar and tea leaves on a rotational basis to make tea for the group. During the meeting, every member pays KSHs 200 (2\$), divided into three different saving purposes. First, they save KSHs 100 for a monthly rotational kitty known as *marro* and give to members based on urgent needs. Secondly, they contribute KSHs 50 for social event kitties like funerals, weddings, and illness. Finally, KSHs 50 is saved permanently for future investment. Through this savings, the group purchased rental utensils like large saucepans, chairs, and tents. The group lease these items during political campaigns, weddings, and fundraising ceremonies, or lend them free for funeral activities.

The Kinna *dedha* group that Hale belongs to reveals different forms of savings, investments, and solidarity in response to social reproduction events like funerals, illness, and weddings. First, saving groups are central strategies to survive the fragmented town life, as evidenced in Ethiopia's *Iddir-* a social insurance for funeral and livelihood support (Hoddinot et al., 2009; Aredo, 2020). Besides the benefit of social cohesion, Halima's group members are able to amass funds to invest in their economic activities. The emergence of women's saving clubs was documented in (Khalif 2010; Anbacha & Kjosavic, 2018), called *marro*. In this case, women exploited social-economic spaces to access livelihood support and development grants through NGOs and State projects. As presented in chapter six, section 2.0, NGO proliferation in pastoral areas dates back to the 1970s through settlement, food

aid, and irrigation clusters, most of which failed due to unsustainable approaches (Hogg, 1992; Amutabi, 2005). Corroborating the pastoralists saving clubs discussed here, initiatives such as VSLA (Village Saving and Loan Association) promoted by CARE international has helped rural communities somehow overcome challenges of accessing sustainable microfinance for livelihood support (Allen, 2006; Anyango et al., 2007).

Having demonstrated the influence of State politics (Harambee) and development projects (saving clubs) on pastoralists' livelihood, I now assess how religion modify moral economy practices among pastoralists in urban settings.

7.4.3.b. Religion and Moral Economy: The Role of Zakat, Inheritance and Sadaka

Like the traditional cultural practices, Islam influences wealth redistribution as discussed in chapter five. Unlike other individualised moral economies, religiously motivated redistribution like Zakat (wealth tax) and *sadaka* (alms) aims to break the barriers between the wealthy and the poor. These institutions have enabled the poor, orphans, women, and vulnerable groups to access support. Unlike the 1970s, where support was considered unpredictable, today, Imaams in pastoral areas organise collective Zakat in response to livelihood shocks resulting from persistent drought. According to Imaam Hassan, they began collective Zakat to improve the impact of Zakat on the beneficiary. Instead of giving one or two livestock to individuals, it is encouraged to give a more significant number to lift the beneficiary from destitution. Despite the attempt to collectively redistribute *zakat* animals via mosques, pastoralists prefer to transfer them individually to their impoverished members. According to elder Isaaqo, poor people pre-book the Zakat animals from their wealthy relatives and as such, collecting Zakat via mosques is challenging. Despite the minimal participation, some mosques succeeded in facilitating collective Zakat and helped establish a livelihood for the vulnerable people. The role of the Mosques is to provide a platform for people to bring their animals and the mosques redistribute to the zakat recipients as enshrined in Quran. However, herd owners prefer to transfer zakat animals to their individual relatives. The following excerpt from an interview with Imaam Hassan⁷⁵ highlights this argument.

'Ilm (Knowledge) about zakat implementation has been improving over time. Zakat is given by nearly all the pastoralists, primarily according to the owner's plan, either to their poor relatives or friends. About eight years ago, the Imaams in Merti area gathered and decided to start a collective Zakat through mosques. We held meetings in all the mosques and encouraged the communities to bring their Zakat to their adjacent mosque, which will be redistributed. During the first three years, people gave out many livestock, but the quantity has reduced over the last two years. The reduction could be people due to rising dependency and poverty among families. In this case, herd owners prefer to directly

⁷⁵ Imaam H. Male, Merti, 2020

transfer the animals to their preferred family members and dependants than giving to the mosque to redistribute on their behalf. In 2019, Jamia mosque collected 25 goats and two cows. We redistributed the animals to six families depending on the extent of the hardship. One of the recipients lost many goats to hyenas, and we restocked him. We also gave to an orphan family; the family later sold the animals and built a small residential shop in town.

This year (2020), we received only six goats, one cow and one camel. We gave out six goats to 3 individuals, sold the camel and the cow, purchased goats and redistributed them to five other needy and poor people. The beneficiary targeting is transparent and participatory through consensus with village leaders and mosque committees. Merti is a small town, and everyone knows who genuinely needs help'.

To assess the significant of Zakat redistribution, I followed up with an individual who established his livelihood from a single goat received as Zakat in 1998 after the Elnino rain. Mzee B.⁷⁶ narrated, '*I received one goat from my friend Isaqo as Zakat, gave to my wife who lost all her animals during the heavy rain of 1997. She cared for that single goat, and it later reproduced, sometimes with twins. My wife used produce from that goat to school our children and sustained the family for quite a long time. Sometimes she sold the male produce and purchased female produce to increase the production.'*

The two narrations show that although on a smaller scale, Zakat payment has been essential in enhancing livelihood support, especially for the vulnerable group in the community. Aside from Zakat, there are other forms of religiously motivated transfers, including inheritance and mahr- bridewealth or, in recent terms, 'indirect dowry' as explained in the study of Orma in Tana River (Ensminger & Knight, 1997).

Box 7.6 below presents an excerpt from an interview with Kinna's Jamia mosque Imaam⁷⁷ to highlight how mosques influence livestock transfer institutions and compare todays' *Zakat* with Dahl's findings in the 1970s, as presented in chapter four. The section ends by exploring the role of Islam in shaping traditional life-cycle transfers such as inheritance.

⁷⁶ Mzee B. Male, Merti, 2020

⁷⁷ Imaam D. Male, Kinna, 2020

Box 7.6 Case Eleven: Redistribution via Islamic Institution

Redistribution via Islamic institution

I met Imaam Derow in Jamia Mosque's Kinna office just after the *Dhuhr* (noon) prayers in February 2020. Our discussion covered the spread of Islam and the institutions of wealth redistribution among the Borana. He noted 'I lived in Kinna for about forty years and serving imaam for the past thirtyseven years. When I came here, people were impoverished; to an extent, it was challenging to access kaffan (a white piece of cloth for shrouding the deceased), and the bodies were buried in sacks. There was only Jamia mosque, a mud-walled and iron-sheet roofed structure. In the 1980s, we received support from the Africa Muslim Agency to construct a bigger concrete mosque. As of today, we have twenty-two mosques in Kinna ward alone. We deliver knowledge on zakat payment through mosques' halaqa (gatherings), khutba (Friday sermons) and in the month of Dhulhijja (12th month in the Hijri calendar) to encourage people to give to the rightful people. People have embraced Zakat and redistribute all types of animals. Some give to relatives, hired Muslim herders, and families are keenly supporting each other through Zakat.

Every Friday, we collect sadaka and use the money for various supports. We have managed to construct mosques in other parts of Kinna, supported the orphans, and built rental houses that generate an income for running the mosque activities. On miraath/d'aal (inheritance), I recently handled a case of a widow who had no child but possessed plot, cattle, and goats. The widow was survived by a sister and had no heir. Now, the husband's brother wants to inherit the wealth; however, there is no sharia prescription for them to inherit, and the widow's sister should inherit all the wealth. The case became complicated, and the families' appealed to Qadhi's court in Isiolo'

As inferred by Imaam Derow, the spread of Islam in Kinna was influenced by the Africa Muslim Agency, as well as interaction with Somali, and the local *d'aawa*⁷⁸ in the 1980s. The spread of Islam has influenced the pattern of livestock ownership and redistribution through institutions such as inheritance (*miraath*) and *Zakat*. For livestock, the following two tables summarise zakat value on camel, cattle and small ruminant as documented by Dahl in the 1970s and as presented today in the Mosques in Kinna and Korbesa.

Number of animals owned	Required animal size of offering
Cattle	
30	One ox 2-4 years old
60	One heifer 3-4 years old
100	Two heifer 3-4 years old
Sheep and goat	
35	One goat or sheep
60	Two goat/sheep
100	Three goat/ sheep
Camel	
10	One small bull, calf or two sheep/goat
25	One heifer two years old

⁷⁸ Institution for spread knowledge about the Islamic religion

Adapted	from	Dahl	(1979,	175)	

Table 7.2 Zakat Th	reshold on Catt	le, Camel, and	Shoats (2020)
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Number of animals owned	Required animal size of offering	
Cattle		
30-39	One calf, one-year-old male or female	
60-69	Two calves of 2-year-old each male or female	
100-109	Three calves 1-year male, and two females calve of	
	2	
	years	
Sheep and goat		
40-120	One goat or sheep	
120-200	Two goat/sheep	
200-399	3goat/ sheep	
Camel		
10-14	2goats or sheep	
20-24	3goats/sheep	
25-35	1year old she-camel	
46-60	3-year-old she-camel	

Adapted from Jamia Mosque, Merti, Imaam's record 2020

The above two tables present the number of animals herd owners give upon reaching a certain livestock threshold. For instance, upon every 10-14 camel, the owner must provide two sheep or two goats. Moreover, above every 40 camels, the owner gives a three-year-old she-camel. The threshold is corresponding to what Dahl documented in the 1970s, but sometimes, there are slight alterations in the number of animals. The difference is due to scholarly opinions and differentiated understanding of the religious text. Today, Mosques and religious institutions document the *zakat* thresholds, and it remains standard across all Islamic jurisprudence and texts. However, Dahl (1979) noted that the adherents converted animals into grains and redistributed to a relative instead of the live animals. In my study, all the wealthy pastoralists whose livestock attained the required *zakat* thereshold have given out in its full due, mostly in livestock and no cases of grain substitutes.

While the traditional Borana belief systems have laid down inheritance rules, the adoption of Islam has transformed this transfer, including who gets what and how much. According to the traditional Borana inheritance rule, only the first-born sons inherit wealth from the father and girls are never allowed to inherit. This form of inheritance is still practised in Southern Ethiopia among traditional Borana beliefs (Tache, 2008). Today, women could access and accumulate wealth as depicted in the inheritance case presented by Imaam, transforming the classic male-centric livestock transfers, reported in Dahl (1979,175).

Three significant dynamics are apparent from this review of the increasing presence of the State, Islam and NGOs in Kinna. First, *Harambee* substitutes the *buusaa goonoofaa*, not in all cases but for some area residents. Secondly, the emergence of development NGOs and government projects by promoting group creation to access grants and finance for livelihood support has provided a model for people to emulate and form new groups or reconstitute previous groups into saving saccos and self-help groups. This, in turn, results in groups with similar interests banding together to generate reliability through savings to manage the commodified and individualised pastoral livelihood. Although the group creation is influenced by NGOs and government project, the functioning and the continued support outside group activities reveal some moral economy practices. Among the Waso Borana, rotational savings group incorporates social solidarity that surpasses savings and include collective labour exchange during weddings, funerals, and sickness. These groups act as a backbone for community's social security, especially for women of diverse backgrounds by providing loans and other forms of solidarities.

Thirdly, *Zakat* has modified classic livestock inheritance, generating space for women to accumulate and access wealth. Although Islam was prominent among Borana even in the 1970s, the rise in population and concentration of mosques in urban centres create an opportunity for people to somewhat access support. This means that, being in town open up opportunities for people to create safety net either through mosques, livelihood groups, or engage in petty trade and create network of relations to rely on for support. The three institutions modify or replace customary moral economy practices and influence how women and young people engage with pastoralism in town.

7.5 Conclusion

This chapter presented moral economy practices that emerge in a setting where herd owners stay in town while the hired herders manage the livestock in the neighbouring dedha. It evaluates the moral economies that arise in towns characterised by ease of access to new technologies, the presence of State and religious institutions, and diverse economic activities. Unlike moral economy practices observed in Korbesa centring on livestock redistribution, new moral economy practices are emerging in Kinna. While some are rooted in traditional practice, others have been formulated in response to the commodification of labour and the increasingly individualised nature of livelihoods. In conclusion, three themes emerge.

First, wealthy pastoralists survived by establishing relations with Meru farmers and hiring herders. Here, the moral economy emerges through incentives and building trust for a longer-term relationship; hence, it differs from the general economic transaction. Although these relationships are transactional, it carries extra features meant to instill trust and continuity between the two parties. This is important because in the context of frequent uncertainties and livelihood vulnerabilities, it is fundamental to have a long-term network and reliable access to resources, including labour and feeds. As such, pastoralists go beyond commoditized relationships and establish stronger bonds driven by norms and values in order enhance reliability to confront uncertainties. Equally, other pastoralists adapted intra- household economic diversification to meet the costs of managing livestock. Here, the moral economy emerges through galvanising household members to engage in various income-generating activities to cover costs such as purchasing feeds and paying hired labourers. It is the shared responsibilities and duties to collectively contributes remittances and other income from diverse economics to save the livelihood that embodies moral economy. It embodies what Ellis referred to as 'non-economic' aspect of social relations that regulate resource use and access to ensure survival (Ellis, 2000a). It differs from the traditional moral economy of mobilising household members to generate much-needed income that is then invested in sustaining the herd.

Secondly, new technology – particularly mobile phones and motorbikes – has enabled new ways of responding to uncertainties, such as raids, while also providing means to connect people and places. As shown in the case of responding to the Duse livestock raid, phones and motorbikes have helped people swiftly manage a crisis. This response embodied solidarities and mutual support as a significant moral economy feature among the pastoralists. Thirdly, the chapter revealed the significance of institutions (State, NGOs, and religion) influencing how women and other social groups engage with pastoralism. Harambee has emerged as a social development practice replacing the traditional institutions of livestock redistribution (*buusaa goonoofaa*). Pastoralists participate in fundraising for social events like education and livelihood support to adapt to transforming town life while continuing livestock production. Unique relationships have transpired through livelihood groups and saving clubs to enhance steady support and solidarity.

Finally, religious institutions and the concentration of mosques in 'towns' have reconfigured support through alms, Zakat and livestock inheritance. Unlike the unequal commodified and individualised strategies, institutions provide more collective and reliable support, sometimes accessible even to poorer families who are excluded from other moral economy relationships and exchanges. Unlike the 1970s, and in contrast to remote pastoral settings, the moral economy among pastoralists in Kinna is less about fixed, controlled household labour and livestock redistribution; instead, it emerges via diversified social and economic relationships. Moral economy practices arise through multiple relationships, and strategic investments are often stratified among individuals and are fundamental in navigating variable animal production.

In the following chapter, I elaborate on the distinction between the moral economies of the 1970s and today, the moral economy of remote pastoral settings and in an urban context, before I highlight the forms of the pastoralists' moral economies in managing uncertainties.

CHAPTER EIGHT: SPATIAL, TEMPORAL, AND SOCIAL CHANGES IN THE MORAL ECONOMY: HOW DO PASTORALISM, UNCERTAINTY AND THE MORAL ECONOMY INTERSECT?

8.1 Introduction

The thesis has explored the role of the moral economy in response to uncertainty and how these have changed since 1975 (chapter 5), between two contrasting sites: Korbesa (chapter 6) and Kinna (chapter 7) and within social groups (male/female, young/old, wealthy/poor). Transformations in political economy (governance, market, politics, investments), in the environment (land-use change, insecurities, and animal disease), and in pastoral practices (due to institutions and modernity) have all given rise to new forms of uncertainty. Reflecting across the preceding empirical chapters, this chapter explores how moral economies changed, for whom and with what consequences for how uncertainties are managed.

Exploring how responses have changed over the past 45 years (1975-2020), between two different pastoral sites and considering key aspects of social difference including age and gender, provides insights into whether moral economy practices are persisting, being reinvented, or are eroding in the face of transforming conditions. The assumption in many studies is that moral economy practices have diminished, been eroded or otherwise replaced as economies in pastoral areas transform through the spread of capitalistic relations. I argue that it is misleading to view moral economies as being in an inevitable slide to irrelevance. Rather, moral economy practices endure albeit exhibiting important shifts. While revealing considerable change (as well as continuities), the thesis shows how collective and redistributive practices remain essential to how pastoralists manage uncertainties. Core livestock management via adaptive mobility, herd dispersal, specialised care, labour organisation and redistribution are continuous practices today, as was the case in the past. While changes emerged through gender, technology, and economic diversification, resulting in an institutionalised and commodified moral economy, these changes are still rooted in social ties.

The following section elucidates the drivers of changes and continuities in moral economy practices in terms of temporality, spatial and social differences. As shown across chapters four, five, six and seven, these factors are: social (settlement and demography), environmental (drought, land-use change and insecurities), economy (diversification and market) and modernity (institutions, technology and infrastructure). In doing so, I offer a summary of moral economy practices before elucidating a typology to understand current existing moral economy practices. The discussion finishes with a reflection on what role moral economy plays in confronting uncertainties.

8.2 Variation in Moral Economies 1975-2020

'We had a solid social cohesion; people lived in small camps where the plight of the weak was visible. The elders were authoritative, highly respected by the clan members and ensured clan redistribution to qolle. Today, people are self-centred, fragmented, and the plight of the marginal group is not visible, until they speak. Even if calamities befall, it is just a phone call to sympathise and send money, but we are not near empathy and care⁷⁹

In the 1970s, pastoralists lived with environmental (drought, flood) and political-economic turbulences (post-Shifta war destitution, movement control, market integration). As expounded in chapter four, the two uncertainties resulted in livestock reduction and labour outmigration. In that period, the social organisation facilitated moral economic relationships through labour and livestock redistribution. As reported by Dahl, pastoralists designed their settlement pattern in a clan and camp-based territorial organisations (Dahl, 1979; Swift, 1990). While the larger *arda* (settlement) consisted of clan and lineage members. Pastoralists' camps involved extended families, sometimes involving in-laws, co-wives, and married sons. Such closely knitted territorial organisations facilitated livestock production practices through adaptive mobility, specialized care, and redistribution. As encapsulated in the opening quote, camp settlement enhanced social cohesion and redistribution, with elders playing significant roles.

Through time, and as presented in chapter four and the historical context of chapters six and seven, the pastoral social organisations have transformed with increasing population, permanent settlements in centres and the emergence of towns. This transformation shifted the moral economy ties from exclusive lineage members to involve cross-ethnic (Dogodia, Meru, *Badole* Borana) group, resulting in strategic alliance and partnership for survival as explained in chapters six and seven. Secondly, male elders played significant roles as livestock redistribution facilitators, while fathers coordinated livestock and labour mobilization within the households. Today, both in remote and urban linked pastoralism, redistribution is enforced by *naasu* (pity), *ollomitti* (neighbourliness), religion, and *milo-mogole* (clan lineage) and elders play limited role. Instead, extensive Borana participated in redistribution as presented in post raid recovery in chapter six. Over time, these identities are reinforced through modern institutions, (religion and Harambee philosophy), which were less significant in the 1970s, since social and kinship ties formed foundational livestock management. The influence of these institutions on the specific social groups, especially women and younger generation will be elaborated below.

The shift in social organisation is apparent in how households address their labour needs. In the 1970s, fathers as household heads took executive decisions over when and where to move livestock, with women/girls caring for young animals near the homesteads, and young boys herding livestock under

⁷⁹ Fatuma, H. Female, Isiolo, 2020

the direction of their fathers. However, due to schooling, outmigration for labour and involvement in diverse economic activities, especially in and around towns, households lack a steady supply of labour. Instead, as presented in chapters six and seven, shift-based herding collaboration, reliance on hired herders and partnership evolved to aid mobility, herd splitting, and specialised care. Further, new technologies (mobile phones, *mpesa*, motorcycle), that were non-existent in 1970s, have reconfigured pastoral practices significantly. Mobile technology and motorised transport have enhanced effective communication, adaptive mobility linking pastoral products to markets. However, social-economic change, technology and urbanisation are experienced and exploited differently depending on spatial geographies, social-economic and gender backdrop, as the following section expound.

8.3 Variations in Moral Economies: Kinna and Korbesa

The structural factors discussed above manifest in variable opportunities and vulnerability, influencing how different people in diverse geographies experience and confront uncertainties. Through multiple case studies, the thesis has demonstrated that moral economy practices persist but change due to spatial geographies, technology deployment and social-economic differences. Concerning geographic differences, the moral economy in Korbesa is visible across two themes, livestock redistribution and labour organisation around water and herd management. In Kinna, the moral economy practices are assessed in relation to economic diversification and the commodification of labour, the availability of institutionalised forms of redistributive support and the influence of new technologies. However, even in Korbesa and Lakole, there is some commodification and deployment of technologies, but on a smaller scale, and the dominant feature is collaboration and redistribution. This section analyses how and why diverse moral economy patterns emerge in the two settings.

With respect to Korbesa and Lakole, more remote pastoral settings that more closely resemble the settings that Dahl documented in *Suffering Grass*, pastoralists invest in redistribution and resource cooperation as livestock-keeping is the primary livelihood. Redistribution is fundamental to aid pastoralists to recuperate herd losses resulting from large scale livestock raids and lack of State infrastructure to counter such events. All three livestock redistribution practices, including permanent (*hirba* and *Zakat*), temporary (*dabare* and *amesa*) and life-cycle transfers (*handura, meher* and inheritance), are apparent. While Dahl reported a decline in livestock redistribution due to post-*Shifta* war stock loss, many have recovered herds since then and there has been a significant rise in livestock transfers, especially in small stock. These animals are transferred as *sadaka*, support for wedding, medical bills and covering education costs. In terms of labour, Korbesa herders encountered shortages due to emigration of productive labour for schools and other opportunities in towns. Unlike Kinna, Korbesa and Lakole are far from neighbouring areas with large populations and, thus, there are fewer people available to hire as herders. Instead, herd owners countered such a deficit through flexible cooperation via shift-based herding, collective water management, and shared technology exploitation. In all three forms of

cooperation, social ties between individuals were fundamental.

While shift based herd management involved close relatives and in-laws, water management and shared technology occurred between individuals from neighbouring Marsabit and Wajir Counties. Such cross-County and cross-ethnic relationships point to nascent forms of cooperation and collaborative practices that extend beyond a single clan. Pastoralists invest in such relationships to enhance the options and flexibility to use resources across the Counties despite the presence of administrative borders. As presented in chapter six, pastoralists survived by galvanising a web of relations and collaborative networks. These mobilisations include resource pooling for pasture surveillance and well-digging cooperation to minimise rising livestock management costs, but also to access comradeship in confronting rangelands insecurity. By banding together, pooling resources and jointly hiring trucks and motorbikes, pastoralists could minimise livestock movements, especially in severe dry periods, and instead transport water and fodder to where animals are kept, thus avoiding the need to move to more distant and insecure grazing areas. Therefore, the moral economy in Korbesa and Lakole resonates with traditional practices observed in the 1970s.

As for Kinna, pastoralists navigate restricted access to protected areas, persistent dry periods, animal disease and insecurity. Kinna is proximate to 'down country' Kenya, with improved infrastructure and institutional presence, as presented in the historical context in chapter seven. The geographical difference and the evolving 'urban' opportunities, including the market for diversification, mobile, and transport networks, generate new social relationships and form today's moral economy. The moral economy in Kinna is less about fixed, controlled household labour and male-centric livestock redistribution. Instead, it arises via commoditised, diversified social-economic relationships, institutionalised support and technology mobilisation for adaptive mobility and collective action to counter livelihood through hired clients, farmer-herder relationships, and partnership. Such relationships transcend commodification and generate steady support in countering labour and fodder shortages. This is unlike the normal transactional relationship because it is the long-term trust and access to the reliable supply of feeds and labour amidst shortages and constraints that generate reliability to respond to uncertainties.

In regard to diversification, pastoralists exploit assorted market and economic opportunities to cover the cost of hiring partners, purchasing farms, negotiating access to grazing in parks through bribing guards and accessing technology. This assertion is echoed by a research respondent⁸⁰ who noted, *'if you are in town, you need to have a business, or shamba/farm to meet livestock management cost*'. In Kinna, pastoralists diversify their livelihood to mining gemstone, irrigated farming, livestock market, *boda-*

⁸⁰ Darmi, Female, Kinna, 2020

boda transport business, small scale trade and employment in various institutions. These diverse opportunities have reconfigured households' economic relationships, influencing how men, women and young people engage with pastoralism. As presented in chapter six, diversification unveiled intrahousehold power dynamics between men and women herd owners. A snippet from an interview with a female herder substantiates this observation. Darmi, a participant whose case was presented in chapter seven narrated:

'When I separated from my husband, I sold my meher cow, started numerous businesses one after another, traded clothes, miraa (khat), and livestock. Later, I married Boru, my second husband, and continued the livestock trade. Sometimes, I joined other traders, hired a lorry, and ferried goats to market in Nairobi, however repeated drought disrupted livestock trade and I stopped. I opened a small shop in Kinna from the livestock proceed, but my husband objected, noting that we use all the money for livestock management cost. However, I reminded him, if in town, we should have a long-term backup business that support the rising animal production cost. Despite his objection, I established the shop in 2001, and since many Dogodias were in the Kinna region, the market was a boom.

Then when the 2007 drought hit us, I moved ten weak cows to our home and left my husband to manage the rest in Tharaka. I used some money from the shop, purchased feeds, water, medicines, and paid the hired herders both the monthly and kibarua (contractual) who collected urbu (acacia pods) and bird nests for animals. We successfully managed this event and received rain in November. After a short period, conflict arose between Borana and Safar, and I lost all my Dogodia customers. Hence, I closed the shop and invested in miraa (khat) trade, where I loaned miraa to askaris, and they paid every end month. We managed to live a productive pastoral life through all these activities by holding animals with the right hand while the left hand dealt with diverse economies'.

Darmi's story reveals intra-household bargaining and struggles to diversify, despite the objection from the husband. The case also expounds on how livestock wealth is used to diversify into other economic activities that generate a surplus while meeting the rising cost of commoditised livestock management. The female space in the livestock domain is prominent in today's pastoralism due to the shift in the traditional pastoral and social organisation. Today, pastoral households live in centres with a rising population, schooling generation and growing social reproductive events such as weddings and funerals. These changes result in amending fixed traditional roles and redistributive practices; instead, pastoralists must adaptively engage with new realities, as shown in Darmi's case. Darmi hired a lorry to ferry the livestock to Nairobi, while in chapter seven, she purchased a motorcycle for her son Juma for trading and daily livestock supervision. Whilst these technologies facilitate adaptive mobility, linking pastoral products to market, and daily livestock surveillance, they have also increased livestock theft, as presented in Badada's case, chapter seven. Despite the cons and pros of technology, collective mobilisation and swift response to livestock forays embodies today's pastoral moral economy, especially in connected urban settings.

The final moral economy practices in Kinna arise from institutional influences on the traditional livestock redistribution. As presented in chapter seven, pastoralists' interaction with institutions (State, NGOs and religion) corroborates shifts in moral economy in three dimensions. First, the modern, social-economic philosophy of *Harambee-* pooling resources for development, modified and to some extent replaced traditional livestock redistribution. Here, pastoralists in town invest in *Harambee* institutions to counter livelihood shortages, access education and social support. Secondly, NGO-driven livelihood group formations have enhanced networking between groups for steady social-economic support. As shall be presented in section 8.4, such networking has been essential for women and young people in pastoral areas to generate livelihood to preclude uneven livestock access. Thirdly, religion has helped modify the traditional livestock inheritance and provided space for women to access and accumulate wealth.

Despite the individualised and capitalistic nature of towns, pastoralists depend on the socially embedded collective response to mobilise labour, security, and fodder for the livestock. In the following section, we elaborate on how moral economies vary among the social groups through time and space.

8.4 Variation in Moral Economy Practices among Social Groups

In response to Dahl's question as to whether the grass would be resilient or not, in chapter five I argued that the answer depends on whose grass was suffering, where, and bearing in mind the consequences on pastoral livelihoods. As explained in the above section, distinct moral economies evolved through time and across space depending on the infrastructural and institutional resources. Similarly, different groups, male/female, young/old, and wealthy/poor, exploit diverse moral economies and sometimes activating numerous social ties to survive variable pastoral production. As maintained in chapter five, pastoralists thrived by controlling, exploiting, and redistributing strategic resources, including water, pasture, labour, information, and livestock. However, access to these resources is unequally distributed between the social groups due to loss of entitlement and adaptation as a political process (Swift, 1990; Lind, 2003). This means that the emergent infrastructures, institutions, and technology resources create opportunities for the wealthy herd owners to diversify and survive, while the poor struggle to make ends meet. As presented in chapters six and seven, despite this broader stratification, all the social groups endured different uncertainties by utilising diverse moral economy relationships. This section raises six points in relation to social difference and moral economy practices.

First, as for the livestock redistribution, the household's lifecycle transfers persist in both settings. All the twenty-four household interview participants accumulated initial livestock through *handura*, bridewealth or inheritance. Simultaneously, these participants have also transferred *handura* to their

household members at different moments. While *handura* and inheritance favoured the male gender in the 1970s, today, women benefit from this transfer in equal measure due to shifts in social organisation and interaction with institutions, as presented in chapters six and seven. Boru⁸¹, a respondent in Korbesa, expounded on this; he said: '*We believed that girls belong to their husbands' family once they are married. This is exemplified in the Borana congratulatory phrase on the birth of a male child '<i>hiinguudaat, haad'aa abba buulfaat*, (he will grow up, and take care of the parents) *while, the birth of a girl, 'issileen naamuumaa, ammaalee naamuum biiyaa'* (she is also human, and belongs to other people). This phrase alludes that the boys carry the family name and property forward, while girls belong to their marital family. Through time, such perception has changed, and girls contribute to the family's growth through remittances, building herds, and caring for the younger siblings and hence, parents transfer *handura* to girls.

Regarding temporary and permanent livestock transfer through *hirba* and *dabare*, wealthy pastoralists redistributed more livestock as social assets and supported the vulnerable community members. As observed in chapter six, *dabare* recipients were mainly widows, orphans, and disabled. Since livestock production is the primary livelihood, *dabare* transfer is practised in Korbesa and Lakole but less in Kinna. Although studies noted significant inequality between the givers and recipients, this thesis suggests that *dabare* transfer is essentially influenced by the desire to spread risks, the ideals of *borantiti* and *naasu* (pity), and minimal unequal relation exists. Moreover, inequality between the poor and the wealthy arose in redistribution through *hirba*, as presented in chapter six, in the 2017 post raid recovery. Boru, a wealthy male herder, received eight *hirba* cows, while the poor widow, Asha, received one cow. The inequality arises due to the differentiated ability to invest livestock in various *mona* (enclosure). As presented in chapters six and seven, contrasting the male-dominated redistribution in the 1970s, female herd owners redistributed and received livestock on various occasions, revealing significant gender dynamics to livestock accumulation and management.

Secondly, the availability of hired herders (and means to pay for this), manifest in a new type of inequality among the pastoralists. While the wealthy herd owners in Kinna hired clients in combination with cultivating ties with farmers and partners, the wealthy in Korbesa practised shift-based herding, resource pooling and minimal hired labour. On the contrary, as presented in chapters six and seven, the poorer herd owners in both settings survived through *itti-hirkaat*, partnering, or living independently. In this case, the poorer who are unable to pay for hired labourers relied on moral economy ties to meet significant labour needs. Simultaneously, some wealthy and low-income herders discontinued specific children from schooling to access family labour. Further, Korbesa pastoralists, both wealthy and low-income, outlived through collaboration, either for water management, well digging, or pasture surveillance.

⁸¹ Boru, T. Male, Korbesa, 2019

In Kinna, the study observed commoditised and individualised labour relations due to advanced opportunities, although substantial partnership exists. For instance, as presented in chapter seven, Badada endured the drought moment by hiring labourers, purchasing corn field harvest from Merus, and established long-term labour relations with his herding partner Dulach. On the contrary, as presented in chapter six, women (Chaltu and Asha) and young men (Dawud and colleagues) benefitted from resource collaboration in confronting different droughts and wild animal attacks. The labour variation in the two settings results from the uncertain geographical differences and the economic opportunities, including access to resources. In summation, different pastoralists accessed labour via commodification, comradeship and *itti-hirkaat* depending on their wealth, age, and gender. Social relations enhanced steady support in all these practices, even in urban pastoralism, with potential for exploitation and stratified accumulation.

Thirdly, pastoralists, both men and women, and across wealth groups, are diversifying into alternative livelihoods. Generally, female-headed households engaged more in diversification, while older males practised minimal diversification. Out of the nine female participants, five practised diverse economic activities. In comparison, out of fifteen male participants, only four have diversified into non-pastoral activities, aside from a few low-income men who engage in menial work for survival. Few strands could be suggested as regard to this observation. As Haagaro⁸² noted, *'naamuu uuffuumaat c'iibraat'* (everyone carries their burden), meaning that the town's nature is individualised. Linking this to the weakening social fabric in the town setting, female herders invest more in diverse economies to provide steady support and manage evolving pastoral livelihood. Equally, women do not own livestock capital as men; they invest in other economies to generate cash for daily social life in town. We could therefore note that, crisis and uncertain moments in towns put more pressure on women, as animals are inaccessible, and some husbands are unreliable, hence more gendered diversification. Such trends influence customary moral economy of redistribution and enhance investing in social economic networks to navigate unpredictable livelihood.

On the other hand, young people in pastoral regions diversify differently depending on their wealth, education, and broader connection. The following two distinct experiences illuminate this variation. Sadam⁸³, forty years old, comes from a wealthy background, although his *handura* herd is still with the father. His father, Abdullahi, was among the wealthiest herd owners during *daba*. Despite his family's affluence, Sadam began accumulating livestock in his twenties through various means. He noted '*I* always had a vision to own livestock'. During school holidays, he herded people's livestock or trekked

⁸² Haagaro, B Female, Kinna, 2019

⁸³ Sadam, A. Male, Kinna, 2020

livestock to the market and saved money. While in form two (high school), he dropped out of school and started livestock husbandry. As of 2020, he owned 200 goats, 47 sheep, 20 cattle and two camels. Sadam engaged in various activities to expand his livelihood and his herd is managed by his son together with two hired labourers. He noted 'whenever I visit the livestock in Bibi, I collect firewood and sell in town for KSHs 500 (5\$). In a good season, I supply milk to mabiltu (customer). I also have good relationships with local politicians, who provide financial support when visiting Kinna. Sadam works as an interlocutor whenever there is a vaccination campaign or veterinary research, as he owns a motorbike, hence providing good network. Recently, by selling forty goats in addition to bank savings, Sadam built a residential house in Kinna.

On the contrary, Haro⁸¹⁸⁴, 41 years, a returnee from Nyeri, narrates his livelihood journey 'While I was young, my father emigrated to Nyeri to work as a night guard due to post Shifta destitution and the severe droughts in the 1990s. Later, when I was thirteen, my father died, and since he was stockless, I did not inherit any livestock. Instead, I worked as a farm boy as I was not schooling. In 2003, I decided to return to Kinna to establish a livelihood. I began a small garden in Rapsu and farmed vegetables, and from the farms proceed, I purchased goats. I also engage in menial work, including charcoal burning, plastering houses, and digging latrines. I then established my family in Kinna, and now I have seven children, three in primary, two school dropouts, and the remaining two are labourers. As of today, we have 23 goats, which my wife manages. I also purchased two cows and gave them to Ali, as itti-hirkaat. Whenever we do not have any income, I take a loan from shops to feed my family. For instance, yesterday, I sold charcoal for KSHs 3000 (30\$), paid KSHs 2000 (20\$) loan to Rashid's shop and got my family maize flour'.

The two cases reveal the realities of young herd owners with discrete status and privileges and how such a divergent background influences livelihood diversification, resulting in unequal pathways. The outstanding pattern in both cases is the conduit back to pastoralism. Sadam is privileged due to his educational background and substantial network with NGOs, access to motorbikes and market connections, thereby, livestock accumulation via diversification. On the contrary, Haro is a returnee, uneducated, non-affluent family background, but diversified through menial work and farming. In both cases, social relations with different networks enhanced diversification pathways. Haro accessed herding support from the wife and Ali, and lives on loans from Rashid's shop. This means that, despite more individualised and unequal pathways, low-income families rely on traditional support to exploit the emergent economy and diverse opportunities in town settings.

Fourth, the spread of technology in pastoral areas has profoundly influenced pastoralists' engagement with uncertainty. As presented in chapter seven and Sadam's case above, technology access and

⁸⁴ Haro, G. Male, Kinna, 2019

utilisation are skewed towards wealthy and young, educated herders. Although the poor could not afford motorcycle, they still accessed through pooling resources for joint hiring and begging, as presented in chapter six. On the flip side, as presented in chapter seven, Badada's case, the study observed rising livestock burglary due to expansive motorised transport. Moreover, the response (*rebu*) team recovered Badada's stolen livestock along Kinna-Meru Road, as they were ferried in a Probox car. Although Badada is a wealthy herder, with hired clients and partners, he still faced livestock burglary from Meru raiders but received support from the Borana response team. These team included friends, families, neighbours, and *haarriyya*, in Kinna *dedha* providing support by fueling the bikes, going for *bua horii* (in search of stolen livestock), and protecting the remaining animals. The study maintains that, unlike other more individualised practices, collective mobilisation provides more certainty, sometimes even to the low- income herders who are often excluded. Such collective mobilisation and solidarity facilitated via comprehensive technology, forms essential moral economy practices among the pastoralists.

Fifth, as presented in chapter six, newly important institutionalised forms of redistribution, through *Harambee*, *Zakat* and saving clubs provide alternatives to customary moral economy practices. As for *Harambee*, both the wealthy and the low-income families have benefitted; however, individuals with diaspora connection, political influence, and a 'good' face among the community benefit massively. Here, a good face means individuals possessing the ideals of *borantiti*, such as standing with the community in hardship, responding to the crisis through *humn* (physical) and *horii* (wealth), and participation in redistribution. As such, the low-income families, without the means to meet these ideals, might be neglected. Nonetheless, there are cases where such low-income families received support, although substantially lower, compared to others. With regards to saving clubs, as presented in chapter six, young, mostly educated and females, primarily single or independent, benefitted through banding together for steady social support in the more individualised urban settings. Through such saving initiatives, different moral economy relationships and forms of solidarities emerges, and aid group members overcome different social reproduction events and economic difficulties.

Finally, the thesis presented numerous accounts highlighting religious influence on different pastoralists' moral economies. We can extend case three, chapter six to provide an example. Here, Asha, a widow, galvanised different relationships in towns and received help from Muslims. She noted, 'Herding help from Bilali's family provided me with an opportunity to visit Isiolo and Nairobi to seek sadaka in food, clothing, and some cash to ease our survival. In Isiolo, I received sadaka from general Muslims and immigrants from Merti. On returning from these trips, I get something to sustain the family for about a month' Asha's case reveals how the weak (low-income orphans and widows) rely on town networks and mosques to earn a livelihood. Another substantial religious influence on the moral economy practices, especially for women, is through modification of inheritance institutions as

presented in chapter seven, allowing women to inherit wealth, contrary to classic, first-born sons as the sole family's heirs. Finally, *Zakat* (Islamic tax), although practised annually, continues to evolve and accommodate the rising vulnerable community members, including the orphans, widows, disabled, and single mothers thus attempting to fill the rising wealth stratification.

So far, the chapter has presented variation in the pastoralist's moral economies between 1975-2020, across two distinct pastoral settings, Korbesa and Kinna and among social groups wealthy/poor, male/female and young/old. In comparing 1975 to today, the chapter observed continuity in traditional livestock management practices through adaptive mobility, herd splitting, and specialised care. Further, redistribution of livestock and labour are principal strategies in confronting uncertainties. However, depending on place and social difference, these strategies have transformed, adapting to new realities. As presented in section 8.2, the transformation is visible through a shift in social organisation, gender relations, modernity due to Islam, political economy, and technology deployment. Although changing and stratified among different groups, the moral economy practices remain central to pastoralists' livelihood. The table below summarises the pastoralists response strategies to various uncertainties, and later discusses forms of moral economy practices that emerges to help pastoralists adapt and use variable conditions as opportunities.

Pastoralists Response	1970s	Korbesa	Kinna
Livestock management	Mobility Dispersal	Mobility (use of	Mobility (use of technology)
	Specialised care	technology) Dispersal	Dispersal
		Specialised care	Specialised care
Livestock redistribution	Permanent	Permanent	Permanent Lifecycle
	Temporary Lifecycle	Temporary Lifecycle	
Labour organisation	Household members	Shift-based cooperation	Hired herders
	Camps cooperation Itti-	Hired herders	Itti-hirkaat
	hirkaat	Itti-hirkaat	
Diversification,	-Settlement in	-Resource pooling to share	-Farmer-herder ties
commodification, and	missionary centres for	the cost of hiring water	-Diverse economic
technology	relief food and	tracks,	opportunities associated
	outmigration for wage	-Joint hiring of motorcycle	with small town growth and
	labour	for pasture surveillance and	proximity to larger markets
	-Limited access to non-		-Individualised deployment
	livestock activities and	-Small-scale trade	of technologies
	technology	(butchery, kiosk) by	
		wealthy herd owners	

Table 8.1 Summary of Pastoralists Response to Uncertainties

Institutionalised	Zakat	Zakat	Zakat Harambee
redistribution			Marro

By critically analysing the above variations as they emerged in the empirical chapters, including chapter five (pastoralists' practices in the 1970s), chapter six, the moral economies in a remote pastoral setting and chapter seven, the moral economy in urban-connected pastoralism, five response strategies to confront uncertainties can be discerned among the Borana pastoralists of Northern Kenya (Table 8.1). These responses are facilitated through moral economy relationships that enhance safe mobility, redistribution and collaboration. As for the remote pastoral setting, with intensified insecurity, limited institutional and State presence, traditional practices through livestock redistribution (hirba, dabare), and labour collaboration (comradeship and alternate livestock management) persist and form the foundational moral economy practices akin to the 1970s.

Although there is a penetration of State and project support through settlements, food aid, and irrigation, the infrastructural capacity has limited the success. Hence, livestock production remains the predominant economy. Therefore, the moral economy is centred on redistribution and comradeship for continued herd recuperation and security. On the contrary, the moral economy practices in Kinna are visible via three dimensions, a) commodification, diversification and individualisation, b) technology deployment, and c) institutionalised support. The three dimensions arise due to Kinna's proximity to the urban network, market, and institutional influence on the pastoral economy.

Depending on wealth, gender, social networks and education, different pastoralists can adopt different strategies to manage the livelihood variability. As presented in chapter two, moral economy practices vary in usage through time (pre-modern/modern times), space (North/South), and pastoral context. The chapter highlighted that moral economy had been used as a tool for resistance and rebellion, collective solidarity around class, gender and ethnic identities, and the norms that guide redistribution, gift sharing, and labour relations among diverse people. Building on this manifold usage of the moral economy as a tool for solidarity and collective action, the thesis argues that moral economy practices differ across cultures and are influenced differently due to interaction with institutions (religion, market, politics), changing times and the forms of livelihood challenges experienced by diverse groups. These moral economic relations, institutionalised support, and forms of solidarities to confront a moment of crisis such as raids (chapter seven). To this end, the following section elucidates five significant practices that emerged as pastoralists' moral economies in confronting uncertainties.

8.4 Pastoralists Forms of Moral Economies in Confronting Uncertainty

This section more deeply explores the five categories of moral economy practices introduced in the preceding section. Dahl did not consider the moral economy as an independent variable or term;

however, related practices and concepts are discussed. Among these forms are the importance of social relations, stock redistribution, labour cooperation and Islamic Zakat (Dahl,1979). By extending the findings in Dahl, ancillary data (McCabe, 1990; Ensminger, 1991; Potkanski, 1997; Bollig, 1998; Oba, 2001; Khalif, 2010; Iyer, 2016) and my empirical material, the thesis illuminate the evolution of pastoralists' moral economies. My approach to evaluating moral economy practices significantly differs from these studies and offers a longitudinal perspective on how moral economies change through time, within spatial geographies and among diverse social groups, as explained in the preceding section. In doing so, this thesis challenges the notion that moral economy and related practices are singular, fixed, male- centric, and in inevitable decline in Northern Kenya and elsewhere (Dahl, 1979; Cashdan, 1985; Lamarchand, 1989; Berry, 1989; McCabe, 1990; Fratkin & Roth, 1990; Ensminger, 1991; Potkanski, 1997; Bollig, 1998; Moritz, 2013; Hao et, al. 2015). The thesis maintains that pastoralists' moral economies are dynamic, involves multiple ties and transforms due to spatial and social infrastructures, and remain central to how different pastoralists confront uncertainties.

Using the various empirical cases in chapters six and seven and the variation discussed in section two, I argue that moral economy among the Borana pastoralists is not about unequal patron-client-based livestock exchange. It involves cooperation, investment, and redistribution between parties, sometimes embracing potentially excluded members such as low-income and vulnerable groups via institutions and collective crisis management. To this end, I propose five possible dimensions to understand how different livelihood trajectories through time (1975-2020), space (remote-urban) and social groups (male/female, young/old, wealthy/poor) bred diverse moral economies in confronting uncertainties. As discussed in chapters six and seven, these moral economies include normative redistribution, comradeship, the moral economy through diversification, institutionalised moral economy and the moral economy of collective defence. The first two practices of redistribution and comradeship highlight traditional practices, while the last three reveal the modification and evolution of new moral economies, as elaborated below.

8.4.1 Normative Redistribution and Solidarities

A *normative redistribution* is a transfer embedded in social-cultural norms and values that enhance certain subsistence thresholds. Traditionally, Borana considered livestock production the only livelihood, where everyone ought to access livestock, either for capital accumulation or as subsistence norms. Individuals without livestock are considered *qolle* and despised, and the people earned the ultimate Borana identity through *gutu* (cattle ownership). Borana herders initiate livestock accumulation from birth through life-cycle transfers such as *handura*. Although favoured the male children compared to the girls, such life-cycle transfer established male child's nuclei herd from a young age. Secondly, as discussed in chapters five and six, whenever a person faced a shortfall, there were mechanisms to enhance recuperation through permanent (*hirba*) and temporary (*dabare* and *amesa*)

redistribution. Corroborating Scott's analysis of South-East Asia's subsistence ethics, the normative redistribution among the Borana, through social values and obligations, ensures that all social groups, male/female, wealthy/poor, young/old, access livestock. However, the transfers' enormity depends on the boom-bust cycle of pastoral production and the social relations among the individuals.

Close families, lineage members and associates practised the normative transfers. Although these redistributions exist especially in remote pastoral areas compared to urban centres, there is a significant transformation. As opposed to families and lineage members as the foremost contributors, the larger community restocks affected individuals, as presented in chapter six, the post-raid recovery case. Again, another normative principle transpires through neighbourliness (*ollommitti*), officiating redistribution. The significance of the *ollommitti* principle is highly praised among the Boran via proverbs. For instance, '*ollomaafi duudaan ejjaani*' (we could only stand by the support of backbone and neighbours), and another '*oonaan waalii buusaa, ollaan waal d'aalaa'* (redistribute according to the furthest neighbourhood but inherit from the closest neighbourhood). Research participants in Korbesa and Lakole notably emphasised the ideals of *ollommitti* as an outstanding factor facilitating transfers.

Although studies summarised pastoralists' redistribution into patron-client based transfers, often practised by male herders (Dahl, 1979; Ensminger, 1991; Bollig; 1998; Potkanski, 1997; Moritz, 2013), this study provides a deeper and more profound understanding of pastoral moral economies. It does so by dissecting the incredibly rooted social relations and the vernacular understanding of what enhances redistribution, for whom, where, and with what outcome. With multiple cases presented in chapter six and discussed in section 8.1, the thesis has shown that diverse social groups, including the wealthy, poor, young, old, widows, and other vulnerable groups, have benefitted from normative redistributions via *hirba, dabare*, and life-cycle transfers. These findings challenge the notion that pastoralists' moral economy is fixed to classic male-dominated transfers, often skewed towards the wealthy. Although the wealth differences determined the extent of support, the social obligation and normative values described above provide access, even for the marginal group. Today, the normative moral economy exists even in 'urban' pastoral settings. However, it is transformed and, in some cases, substituted by newly important institutionalised types of redistribution, as presented in the coming section.

8.4.2 Moral Economy of Comradeship

This form of the moral economy works as a system of pooling resources (labour/livestock/water) for a transient relief due to shortages or confronting a given shock. Unlike the normative moral economy driven by 'obligatory' norms and values, the moral economy of partnership is all about self-interest and mutual benefit for all the parties involved. Here, the participants are guided by their own informal and temporary rules, and they can exit anytime. As presented in chapter six, such collaboration occurred between wealthy/poor and young/old to enhance collective well-digging, water management, and rangeland security exploitation through shared technologies. Individuals in this network cooperated

with diverse groups, depending on the event.

Unlike the classic normative case, where families and lineage formed principal players, the moral economy of partnership transcends the borders to enhance strategic alliance formation. An example of such a scenario is presented in chapter six, where Chaltu, a female herder, cooperated with a Borana *badole* from Marsabit County to access security (*waheel*/comrade) and exploit cross-County resources.

In the 1970s, comradeship comprised camp collaboration, joint migration and pulling extended family labours through marriage arrangements. Due to the rise in population and shift in pastoralists' social organisation presented in chapter four and the historical context of chapters six and seven, such kinbased collaboration has transpired into flexible alliances and partnerships with friends, families, and outsiders, sometimes even with a potential enemy. The significant role of comradeship or partnership is to confront temporary challenges and variable conditions. As the Borana says, *hooriin aab nyaat* (livestock consume the owners), meaning that the livestock owners could exploit the most hostile environment to ensure livestock survival; hence pastoralists collaborate, even with enemies, to manage shortages. Today, shared technology for rangeland surveillance, water trekking, and camp migrations presents a new dimension to traditional camp collaboration. This means that, through time, even in the remote pastoral region, with limited infrastructure and State presence, pastoralists cooperate to access modern technologies such as motorcycles and water trucks, adapt to the changing times.

Moral economy through comradeship is fundamental for pastoralists to navigate limited infrastructure, market, learning institutions and access town services. Pastoralists exploit social relations through relatives, friends, and town-ties to access these services. For instance, women in Lakole cooperate in hiring a motorcycle for milk transportation. Once the milk is delivered, town ties sell the milk and return the money, grains, or other essential items. Similarly, rural families accessed accommodation for school children and work opportunities in major towns in exchange for gifts like ghee, milk, and live animals for a long-lasting relationship. The following section turns to moral economy dimensions that emerge in and around towns through diversified social-economic relationships.

8.4.3 Moral Economy through Diversification

*'We managed to live a productive pastoral life by holding animals with the right hand while the left hand dealt with diverse economies*⁸⁵*'*

As presented in section 2.3, livelihood diversification is a fundamental strategy for pastoral households to enhance food security and overcome social-economic constraints. I arrive at livestock diversification as a component of moral economy practices for three reasons. First, compared to household-level strategies documented in the Suffering Grass, presented in chapter five, there is a considerable transformation in labour configurations. Traditionally, the moral economy practices emerged on how

families diversify labour forces to enhance livestock mobility, species diversification and herd dispersal. On the contrary, due to the increased commoditisation of pastoral practices, including herding labour and technology deployment, pastoralists are diversifying their economies to access the rising cost of production. Therefore, in comparing pastoral livelihood strategies of the 1970s to today, diversification is considered an adaptive response to manage uncertainties replacing customary household labour orientation to economic expansion.

Secondly, there is a 'non-economic' component of diversification, including social relations, norms and values that regulate income distribution and access. For instance, the case studies presented in chapter seven on women and intra-household diversification illuminated the power dynamic and the transforming gender relations that defined how pastoralists survived in a more urbanising setting. Equally, the opening quote of this section alludes to 'we', meaning that it is not one person who diversifies; instead, it is a combined effort by individuals within the family that pull resources and share remittance to manage the livelihood. Thirdly, diversification espouses the moral economy practices defined in this study as a network of relations based on trust that enhances access to resources for survival in the face of uncertainties. I argue that pastoralists establish external connections through economic ties and symbiotic relationships in order to generate a reliable flow of goods, including feeds, labour and market access to survive unpredictable pastoral production. Therefore, it is not diversification into multiple economies that matters; it is the process through which families negotiate, plan, build trust, and allocate resources that create moral economies to survive unpredictable livestock production.

As encapsulated in the opening quotes and presented in section 8.2, being in town propagates diversification to meet the rising commodified livestock management practices. Chapter six explained how wealthy herd owners invested in hired labourers, purchased maize farms and practised intrahousehold diversification to enhance steady labour, resources, and income to protect against livestock loss. While large-scale accumulation and diversification are often adopted by wealthy and male herders, resulting in dispossession, as argued in Caravani (2018), examining Borana herders highlights multiple scenarios. Among the Borana, diversification and accumulation create economic differentiation and remarkable inequality; however, they do not entirely exclude the female and low-income herders. Concerning gender dynamics, as presented in Darmis' case in section 8.2, females play a crucial role in holding families together by investing in various economic relationships and ensuring continued livestock production. As for low-income families, diversification into all forms of income-generating activities, especially in 'urban' settings, forms a foundational survival strategy. This is well presented in Haro's case in section 8.3, where he galvanised different relations to survive. Haro returned to Kinna from Central Kenya to struggle in his community, where he received labour support for his two cows and accessed loans from the shops to feed his family. At the same time, he engaged in manifold livelihood-earning opportunities and re-invested the proceeds into pastoralism.

Having highlighted moral economy through diversified investment, I now elaborate on moral economies that sprout due to institutional influence.

8.4.4 Institutionalised Moral Economy

Institutions refers to a 'set of rules that structure social interactions in particular ways. Knight emphasised that 'for a set of rules to be an institution, knowledge of these rules must be shared by the members of the relevant community' (Knight, 1992, 2). The institutionalised moral economy is social and redistributive practices that arise due to pastoralists' interaction with formal institutions such as State, religion, and development projects via NGOs. Although Borana pastoralists have interacted with the above institutions even in the 1970s, the implication is more profound today due to urbanisation, shift in political economy and over-time development, as presented in chapters four and seven. Due to pastoralists' unique approaches of flexible and strategic alliances to live with unpredictable livelihood,

these institutions have re-inforced social relations and solidarity cycles. Pastoralists are slowly replacing and substituting their customary institutions such as Ibuusaa goonoofaa with more adaptable support like Harambee that suits today's pastoral livelihood and social evolution. Like the traditional normative moral economy, the institutionalised forms are driven by specific values, norms, and obligations. However, the differences arise due to reinforcement of these norms through 'formal' and 'informal' codes. As presented in chapter seven and synthesised in section 8.2, the thesis offers three institutionalised domains: Harambee (pooling resources for social development), marro (saving clubs) and Zakat/alms (Islamic tax). First, *Harambee*, a conventional nation-building philosophy through social solidarity, is dominant in East Africa, notably Tanzania, as ujamaa (Kimambo et al., 2008) and Kenya (Chieni, 2011). Harambee has trickled in pastoral areas but a different context altogether. As presented in chapters four and five, the shift in political milieu from the colonial government, post-colonial rule, and the recent devolved governance manifest into diverse realities in pastoral settings. For instance, our study site Kinna has produced the Member of Parliament for Isiolo South since the early 1980s. Hence, national politics manifest in the local context via Harambee and political campaigns. Pastoralists have adapted Harambee as a livelihood support institution to leverage survival in evolving times. As presented in chapter seven, the Kinna community have established a commercial lodge and conference centres for the late Jillo's family through Harambee, embraced by the area Member of Parliament as the chief guest.

Besides livelihoods support, *Harambee* has been fundamental in helping families with medical bills, school fees, weddings, and other social reproduction events, which have become expensive, partly due to modernity and the cost of the rising population. The thesis argued that *Harambee* had substituted the traditional livestock redistribution institution *buusaa goonoofaa*, but the mode of operations is unchanged. As presented in chapter seven, beneficiary validation and collective clan involvement corroborate the traditional *buusaa goonoofaa*. On the contrary, legitimising *Harambee* through politicians, publicity via social media and diaspora involvement adds a new dimension and innovative moral economy, especially in urban-connected pastoralism.

Secondly, livelihoods group formation to access temporary grants and aid has been the 'development' paradigm in rural economies to enhance sustainable food systems (GoK, 2014; Mwinzi, 2020). The proliferation of these development NGOs and State projects transpires into diverse realities for pastoralists. For instance, in Kenya's Women Enterprise Funds (WEF), women group register a trading entity to access the funds; once the fund is disbursed, the group share the money, and only a few women invest in a business (Mwinzi, 2020). As presented in chapter seven, such groups maintain long-term social ties through saving clubs (*marro*) for steady support to counter the seasonality of the external grants and projects. Although the NGO group model provides a platform, it is pastoralists of diverse background, including, those with inadequate education and income that retain the group to access safety nets for survival. The livelihood group and saving clubs have been fundamental for women and

young people with limited livestock access in managing everyday turbulences, including shortages, accidents, school fees, and daily needs, forming new moral economies.

Thirdly, Waso Borana pastoralists practice Islamic religion that guides the adherents' everyday routines, including redistributive techniques such as inheritance, bride-wealth, and wealth tax in the form of *Zakat* and *sadaka* (alms). Although *Zakat* existed even in the 1970s, the prominence and the reflective understanding are not as popular as today. The purpose of *Zakat* is to transfer wealth from the rich holdings to the vulnerable groups. For instance, in Kinna, there are twenty-two mosques compared to a single mosque in the 1970s. Chapter seven presents that such an expansive religious institution has influenced livestock redistribution and accumulation patterns through inheritance, *Zakat* and alms. Like the normative redistribution, religiously motivated transfer (*Zakat*) is obliged by compulsory religious norms and values; however, these norms vary significantly. In *Zakat* dispensation, religious text (Quran) predetermines the recipient category, the transfer time, the type of the species, age, sex and the number of the animals. Again, the givers' livestock must reach a certain threshold (*nisab*) that has stayed for a full lunar year.

Pastoralists have institutionalised general support as *sadaka* (alms). In Islam, *sadaka* involves physical, financial, social, and moral support to individuals facing challenges, whether Muslim or non-Muslim. Today, pastoralists justify giving daily alms in cash, live animal, food, and general support as *sadaka* (alms). However, as presented in section 3.1, general support existed among the Borana through the principle of *ollomitti* (neighbourliness) and lineage membership. In the 1970s, Dahl considered *sadaka* a last resort, unpredictable and available only in town. Today, the expansive pastoral population and concentration of mosques and religious institutions in town allow low-income families to access support, although minimal and short-lived. The adherents participate in *sadaka* to fulfil social and religious responsibilities, and there are no immediate expectations like comradeship and diversification. Therefore, institutions provide a more collective and reliable support, sometimes accessible even to the excluded low-income families.

Thus far, the section has presented the role of institutions in transforming and replacing traditional support systems among pastoralists. The study observed an intersection between the newly invented institutionalised systems with moral economies of comradeship, and normative transfers. First, the saving clubs and *Harambee* corroborate the moral economy of comradeship, where diverse individuals, sometimes with similar interests, band together to survive the turbulent moment. However, a striking difference exists between the two due to formal meetings, contributions, and officialised networks, contrasting temporary collaboration to leverage shortages in comradeship. Secondly, redistribution through *Harambee* and religious institutions matches the normative transfers significantly. All three transfers are driven by certain norms, values, and philosophies embedded in traditional institutions,

politics, and religion. However, the novelty arises due to the 'formal' practices and intensive 'ceremonial' aspect of *Harambee*, presided by politicians and broader networks, contrasting linear clan-based support. To this point, the chapter has presented two moral economies arising from pastoralists' interaction with the market and institutions. In the following section, I present the role of identity and collective mobilisation in countering threats.

8.4.5 Moral Economy of Collective Defence and Protection

This moral economy refers to the galvanisation of resources in responding to a crisis, including skirmishes, livestock raids, accidents, and social events like funerals, all meant to protect and defend the identity and communities' social welfare. Unlike other moral economies that centre on redistribution alone, this moral economy practice involves a form of defence mechanism against any threats to pastoralists' livelihood. Among the Borana, livestock is both an identity and a form of wealth, which is protected. Loss of livestock to humans and wild animals is considered damage to the entire Borana and not an individual forfeiture. Whenever *nyaap* (enemies) raid Borana livestock, the elders do not ask whose livestock. Instead, they swiftly organise the *rebu* (response) team because Borana's wealth is lost. As such, crisis relating to burglary, disruption of market and grazing pattern is a communal predicament, and every sound Borana must respond either with *humn* (physical), *maal* (ideas) or financial resources. The collective response to the crisis is guided by the Borana proverb *Boranai walii waheela* (Borana are companions/escorts for each other). This is fundamental because herd owners live with constant uncertainty, and hence emergency and reliable crisis management professionals are valuable for unwavering livestock production.

Unlike other voluntary moral economies via comradeship, diversification, and institutionalised support, the moral economy of collective defence is to some extent 'mandatory' upon the members. Moreover, if only a few individuals secure the moments, then the responsibility of the larger Borana is relieved. However, suppose there is a complete failure from the community in countering the threats. The elders convene a communal gathering (*kor goossa*) to impose a fine on the responsible *dedha* (grazing cluster) for the negligence. The collective solidarity in protecting the wealth and the Borana identity remains a crucial priority even in rising individualised and commoditised production. Although collective disaster response has been the traditional strategy, the study has not established any accounts documenting collective mobilisation as a moral economy.

Throughout twenty-four in-depth narrative case studies, every household that suffered livestock loss to raid and wild animal received assistance via *rebu* (collective response). The collective response team include close neighbourhood and *dedha*, especially young, tactful, and skilful elders. Today, technological proliferation via transport, road and communication network has enhanced pastoralists' collective response to livelihood threats, especially for the more proximate areas to town, as seen in

Badada's livestock recovery case in chapter seven. Unlike other stratified redistributive moral economies that exclude diverse social groups, the collective defence moral economy provides solidarity despite social-economic differences. Until here, the section has presented five moral economies in managing uncertain livestock production through normative redistribution, comradeship, investment through diversification, institutionalised moral economies, and the moral economy of collective defence and protection. These five typologies form the foundational collective and redistributive pastoral practices for confronting uncertainties. The first two practices are pertinent to the remote pastoral areas with limited State presence, market, and infrastructure connection. The last three practices sprouted from urban-connected pastoralism with diverse economic opportunities and institutions. The following section highlights how these moral economies intersect with uncertainties and the broader practices elsewhere.

8.5 Pastoralism, Uncertainty and the Moral Economies

The thesis shows that moral economies today are not just about redistributing livestock for production, but rather involve a range of solidarities and relationships of mutual support for living with uncertainty. The chapter argues that pastoralists respond to uncertainty via five moral economy practices. Although these practices could overlap, they still help pastoralists at different moments, such as to overcome shortages through redistribution, mutual help and institutionalised support, or help in diversification by establishing trust and friendships and providing security via collective defence against threats. The following section highlights pastoral moral economy in relation to broader moral economy discourse in literature and the possible lessons we could derive.

First, pastoralists' moral economies relate to Scott's (1977) subsistence ethics that argues for a sense of identity of peasant producers against exploitation by the landlords and unfair taxes from the State. Thereby creating logic and ethics of moral economy that helped peasants survive. Equally, among the Borana, identity is a crucial unifying factor in creating norms for redistributing resources and collective livelihood protection. In the 1970s and today, identities around families, clans, religion, and in-laws are fundamental to redistributive transfers that support pastoral responses to the boom-bust nature of livestock production cycles. The reciprocity element brings out the common feature between peasant and pastoral moral economies; however, significant differences emerge. The peasant's moral economy engages with unpredictable livelihoods. The probability of surviving raids, drought, disease, and other threats is unknown; hence, multiple moral economy practices are activated rather than leaning into only a singular practice. Notably, these identities and norms have extended into a range of non-subsistence relations around markets and engagements with State and NGO-influenced projects such as saving clubs.

Secondly, in the *Moral Economy of the English Crowd* (Thompson, 1971) argues that mobilisation

emerges out of moral outrage and confrontations with the authority. According to Thompson, in 18th century England, poor men especially used moral economy to resist 'unjust' market practices such as inflated prices and hoarding. The pastoralists' moral economy practices emerge from consolidated relationships between diverse people in different places via comradeship and diversification, and there is less mobilisation against perceived injustices. Among the Borana, there is less confrontation with the authorities, and the struggles are associated with overcoming the threats of livestock production. It involves countering everyday struggles, manoeuvring restricted borders, accessing commodified livestock management, and countering labour and resource constraints. This practice counters the moral economy founded on resistance, as seen in Thompson's (1971) English crowd. However, the mobilisation of the crowd remains central in both moral economies; as for the Borana, mobilisation results in pooling resources to overcome shortages or protect the livelihood from the external enemies through collective solidarities. To this end, the chapter maintained that pastoralists' moral economy is driven by survival necessity and minimal resistance against capitalistic exploitation, as is elsewhere.

Thirdly, as discussed in chapter two, the moral economy is centred on how collectivities around access to State resources and markets are often based on ethnic identities (Berman et al., 2016). According to these authors, ethnic identities and recognition provide entry into the moral economy club and access to the government's resources (power, wealth, and status), sometimes transpiring into conflict due to a potential exclusion. The thesis shows a collective form of moral economy centred on identity (as pastoralists, Borana, and Muslims), which is articulated in dealing with conflicts such as livestock raids and access to grazing blocks. As presented in the moral economy of collective defence, pastoralists collectively counter threats as influenced by the ideals of borantiti to protect their livelihood. Here, ethnic identity, especially among the herders, is for defending the livelihood and providing support and not a passage for national claims and resistance.

As regards interaction with the State, the political philosophy of *Harambee* is used as a social movement and moral economy platform for governance, as seen in Tanzania's '*ujamaa*' (Kimambo & Hyden, 2008). Pastoralist elites and politicians use the moral economy to legitimise and popularise their identities via *Harambee* participation and gain political support. In contrast, ordinary pastoralists have adapted *Harambee* philosophy as an institution for social support through fundraising for the funeral, medical bills, school fees and livelihood support, all meant to respond to everyday uncertainties. Due to State presence and the manifestation of national politics in the local context, pastoralists have inherited the *Harambee* philosophy amending their traditional institution for livestock redistribution into everyday fundraising for social-economic survival. Despite the controlling nature of the State, as shown in chapter four, resulting in structural conditions of uncertainties, pastoralists have instead inherited the positive influence of the institution such as *Harambee* due to interaction with the State in contemporary settings. Fourthly, past pastoral studies primarily focussed on livestock transfers/redistribution, mainly on male, wealthier livestock holders resulting in unequal patron-client relationships (Dahl, 1979; Ensminger, 1992; Hodgon, 1999a; Moritz et al., 2011). These redistributions are often considered to decline due to the transition into a capitalistic economy and diversification away from pastoralism (Ensminger, 1992; Bollig, 1998). The thesis argues that pastoralists' moral economy is not limited to livestock transfers between vertical patrons and clients; it embodies a whole set of mutual support relationships, connecting recipients and givers around the need to live with and on uncertainty.

8.6 Conclusion

This chapter weaved together findings from the empirical chapters covering moral economy practices in the 1970s and those present today in Korbesa and Kinna. Like in the 1970s, even today, in everyday life, pastoralists struggled with uncertainties that emerged due to changes in political economy – including governance and institutions as well as environmental factors, including drought, floods, and land-use change. These uncertainties unfold in various ways for different social groups (men/women, wealthy/poor, young/old) in the two settings, Korbesa (remote) and Kinna (urban pastoralism). The chapter highlighted that both today and, in the past, moral economies remain central to how pastoralists exploit variable drylands, although with significant changes and continuities. Fundamental livestock management via (adaptive mobility, species dispersal, specialised care), labour organisation, and redistribution are continuous practices today and, in the past, particularly in Korbesa. The chapter uncovered modification in these traditional practices and the surfacing of new moral economy practices via technologies, institutional influence, and gendered relations – particularly in and around large and growing towns like Kinna.

The chapter presents five categories of moral economy practices among the Borana pastoralists of Northern Kenya. In the remote pastoral setting, with intensified insecurity and limited State and institutional presence, the moral economy is centred on redistribution and comradeship. In the urban connected pastoralism, moral economies emerged through diversification and investment in social-economic relationships, institutionalised support through Harambee and saving clubs, and collective solidarities for defence against livelihood threats. Nonetheless, all five practices intersect and could be combined by different social groups depending on wealth, gender, and geography. The scale of emergent moral economies, especially around institutionalised support, is more evident in urban pastoralism due to interaction with modern institutions such as schools, mosques, and State institutions. Of equal importance, moral economy practices in a pastoral setting are not confined to livestock transfers between better-off male herders and clients. Pastoralists express moral economies via numerous relationships, some rooted in kinship ties, religious networks, neighbourliness and economic relationships arising from the market, institution and social changes.

The thesis highlights new ways of thinking about multiple moral economy practices and how they intersect. Rather than thinking about moral economies as 'traditional' practices, they have been

reinvented and adapted for new contexts as new uncertainties emerge. They remain basic practices of redistribution and solidarity. However, as pastoralism changes, new forms emerge, embedded in new social, cultural and political arrangements (urbanisation and new forms of household organisation, the spread of Islam and changing gender roles). Today's moral economy embodies diversified social-economic relationships that have been made more complex through technology, access to markets, and institutional forms relating to the State and organised religion. It also demonstrates the significance of forming strategic alliances to access resources across borders. The chapter expounds that different individual exploit numerous relationships to respond to uncertainties. For instance, the poor cobble support from social ties embedded in lineage, neighbourliness or by leaning on the affluent members and access resources to manage shortages in the face of uncertainties. Again, those pastoralists who could not afford the rising cost of motorcycles for water trekking and pasture surveillance pool their limited resources and hire motorised transport jointly.

Again, pastoralists navigate uncertainties by upholding collective group identity and providing livelihood protection. These practices reveal pastoralists' exceptional practice in living with and off uncertainties. It suggests that managing or responding to uncertainties requires multiple relationships based on collective solidarities and flexible diversification. Equally, responding to uncertainties encompasses caring relationships with animals through labour pooling and redistribution of resources to counter boom-bust cycles.

CHAPTER NINE: CONCLUSION

9.1 Introduction

To conclude, it is important to recall my interest in undertaking the PhD journey. As mentioned at the beginning of chapter one, in 2018 I was involved in research that explored the politics of implementing the Kenyan government's National Safety Net Programmes (NSNP) in Marsabit County. The fieldwork began in April, coinciding with the long rainy season. During this period, the whole country, including Marsabit, received ample rainfall making the road terrain in many parts of the county impassable. Coupling the seasonal stresses and pastoralists' transhumant-mobile nature with the understaffed and an under-resourced county development office in Marsabit, targeting the supposed 'universal' pension under Kenya's NSNP was jeopardised. I still recall a comment by an officer who noted, *'targeting mobile pastoralists is difficult especially during recertification as they cannot be traced. Equally, it worsens due to frequent insecurity in some areas. Now, events like floods make it harder to move around'.*

This experience raised many questions in my mind. How do pastoralists survive despite being at the periphery, with historical marginalisation, far from state presence, experiencing erratic climatic conditions and insecurity? How have numerous aid programmes intersected with pastoralists' various practices to survive? Besides social protection provided by the state, does solidarity network through clans, family and religious networks help pastoralists to not only survive but possibly thrive. From 2019, the PASTRES programme provided me with an opportunity to explore these questions. The central question explored in this thesis is the following: *What is the role of the moral economy in response to uncertainties among the pastoralists in Northern Kenya, and how has it changed since 1975?* In what follows, I recap the main findings and give an overview of the study's contributions.

9.2 Summary of the Thesis Findings

The thesis explored how the moral economy practices have changed over time (1975-2020), between two pastoral settings (Kinna and Korbesa) and among social groups (men/women, young/old, wealthy/poor). Between 1975 to 2020, the study explored how pastoralists deal with intersecting events that generate uncertainties in livestock production and pastoral livelihoods. These events arise due to changes in environmental factors (drought, animal disease and floods), structural changes in land use (conservancy, national parks, encroachment, and invasive species), social changes (population pressures, settlement pattern, education, and livelihood transformation), and shifts in political economy (governance, markets, politics). The thesis established that combinations of these events undermine pastoralists' mobility, exclude them from strategic resources, constrain household labour forces, and enhance conflict over limited resources. These events are experienced and confronted differently depending on spatial geographies, access to resources and social networks, as presented in chapters five, six and seven.

Unlike many resilience and social protection interventions that frame uncertainty as risks Caravani et al., 2021), resulting in a straightforward, managerial model for interventions, the study established that uncertainties – where future outcomes are not known – are central to pastoral contexts and forms everyday business for all pastoralists, even though their dynamics and impacts affect people differently. As discussed in chapter four, it is not always a single event or shock-like a drought (or flood) that affects pastoralists. However, manifold structural conditions also generate long-term stresses on pastoral systems. In the 1970s, pastoralists grappled with destitution after the Shifta-war of 1969, resulting in the loss of livelihoods and the productive labour force due to out-migration. After that, a combination of policy shifts such as settlement, movement restrictions, and militarisation through conservation undermined pastoral mobilities. Until today, pastoralists are grappling with the ramification of all these factors. Modern economic policy shifts that aim to 'develop' the forgotten frontiers are displacing pastoralists and creating competing claims over land use, frequent conflict, and insecurities through infrastructure development, the expansion of conservation areas. Hence, winners and losers emerge depending on people's networks and their capacities to manoeuvre.

However, despite questions raised about the resilience of pastoralism even 45 years ago, the thesis uncovered that pastoralism persists as the primary livelihood amidst diverse pressures, albeit in very uncertain conditions. This is possible due to pastoralists' ability to combine extensive livestock management through herd mobility, dispersal and diversification, developing organised labour arrangements to enhance production and investing in social relations via redistribution and solidarities to support each other during harsh times. These practices, although changing, have been continuous from the 1970s to today. External assistance via livelihood support (market development, water provision, farming) and humanitarian aid (food relief and social protection schemes) have also contributed to pastoralists' survival. However, as discussed in chapter four, such interventions create significant inequality, sometimes enhancing vulnerabilities due to the political economy of exclusion and dispossession.

In contrast to the 1970s (chapter five), the thesis identifies a broader array of everyday practices of moral economy that are crucial for pastoralists in different settings. In the more remote pastoral setting (Korbesa in the Merti area), with intensified insecurity and limited state and institutional presence, practices of redistribution and comradeship are central- (chapter six). In the more urban pastoral setting (Kinna and surrounds), with a proliferation of institutions, markets, diversification and investment, institutionalised support and collective crisis management through technologies are seen (chapter seven). Contrary to the assumption that the moral economy is waning due to social stratification and individualisation, the thesis finds that moral economies persist, and new forms emerge, enhancing flexible responses to shocks and crises. In the light of these findings, the study provides three contributions in relation to methodology, conceptual/empirical, and policy implications.

9.3 Methodological Contributions

Studying moral economies longitudinally through three dimensions - of temporality (1975-2020), spatial geographies (Kinna and Korbesa) and within diverse groups (wealth/gender/age) - adds to a deeper understanding of pastoralists' structural and everyday conditions of vulnerability and opportunity. As opposed to a snapshot from single timeframe studies, which often miss out on the possible ramifications of change and continuities, a longitudinal approach reveals diverse livelihood trajectories. To the best of my knowledge, such a comprehensive, longitudinal approach to understanding pastoralists' moral economy in relation to uncertainty is a novel contribution to the region's scholarship.

By observing changes and continuities in pastoralists' moral economy practices (1975-2020), the thesis provides a nuanced understanding of whether moral economies are modified, re-invented, persist, or eroded in relation to structural changes and key events seen in the pastoral systems studied. Comparing moral economy practices in two distinct settings, remote and near urban, and among social groups, young/old, wealthy/poor, women/men, the thesis uncover the inequalities within pastoral societies and spatial geographies. This shows that individuals with networks, diverse, and stronger social ties recover and receive better help. These inequalities reveal that the 'grass' (pastoral production) was not wholly resilient. It depends on whose grass, where, and what access to survive and be resilient.

9.4 Conceptual/Empirical Contribution to Pastoralists Moral Economy Concept

Although extensively mentioned, the moral economy concept has not been examined in depth in Northern Kenya's pastoral scholarship. The focus has been on the community's livestock redistributive practices, assumed to be declining due to increasing social stratification and market integration (Dahl, 1979; Ensminger, 1992; Bollig, 1998; Schultz, 1998; Oba, 2001). There is a need to go beyond redistribution as the only element of moral economy and observe the diverse daily livelihoods practices among the pastoralists. This research has aimed to fill this gap by elaborating on pastoralists' moral economies through a 'vernacular' understanding of its meaning from the diverse social and economic backgrounds through time and space. The thesis has shown that moral economies are not static but encompass multiple relationships between individuals. It has revealed how different livelihoods trajectories, institutional influence and market connections modify and create new forms of moral economy relationships. Therefore, moral economies are not a fixed set of 'traditional' practices linked primarily to livestock redistribution, often between wealthier male herders. However, moral economy practices involve flexible cooperation, collective defence, and redistribution of resources, a crucial element in confronting uncertainties.

This study has identified five moral economy practices that are essential in responding to different forms of uncertainties. *Normative redistributions* - a form of transfer entrenched in Borana cultural

norms and values and enhance subsistence thresholds through permanent and temporary livestock transfers. The *moral economy of comradeship*: pooling strategic resources (water/labour/livestock) for short-term relief and survival. The *institutionalised moral economy* - redistributive practices that emerged due to pastoralists' interaction with institutions like the State, religion and development projects. Such redistribution modifies customary practices such as *buusaa goonoofaa* into *Harambee* and saving clubs (*marro*). The *moral economy through diversification* - investment in social relations and diverse economies in anticipation of protecting the livelihoods. It involves diversifying households' economies and establishing ties with hired labourers and associates through incentives and building trust. The *moral economy of collective defence and protection* - collective mobilisation to protect and defend pastoralists' livelihoods from any form of threats.

The study challenges the assumption that moral economies disappear as economies become incorporated into capitalist circuits and communities become more 'modernised' within reach of the State, 'development' and institutions (politics and religion). As highlighted in chapter seven, such incorporation modifies customary practices such as *buusaa goonoofaa* (institution of livestock redistribution) into a 'modern' political philosophy of pooling resources (*Harambee*) for social development. Due to the nature of pastoral production, which is suited to confront uncertainties daily, flexible and reliable support is fundamental. The thesis, therefore, engages with the broader moral economy discourse beginning with Thompson's notion of resistance and collective mobilisation against food price injustices (Thompson, 1971) and the peasants' reciprocity to attain safety in the capitalising market (Scott, 1976). While these studies focus on mobilisation around alternative economic arrangements, among the pastoralists, mobilisation is visible mostly around responding to a crisis that threatens livelihoods.

Therefore, pastoralists' moral economy practices are centred on organising for 'flexible survival' under very uncertain conditions. This is achieved through practices of redistribution, comradeship, diversification, and collective response to protect the livelihoods from external threats, in each case going beyond the standard, market-based capitalist relations. Moral economies are embedded in social relations centred on kin, clan, neighburliness, and friendship. Although class difference emerges through moral economy practices in pastoral areas, some institutionalised norms governed by religion and Borana customs ensure continued support and solidarities during a crisis. However, the pastoral moral economy is not just linked to 'tradition', 'subsistence' in pre-capitalist societies as is sometimes assumed. The practices remain central to responding to uncertainties of different sorts in quite different contemporary settings.

9.5 Development Policy and Practice

Chapters six and seven have highlighted how different men/women, wealthy and poor, generate reliable

livelihoods amidst restricted park enclosures, insecurity, and repeated dry periods via combining diverse and multiple moral economy relationships, sometimes even with a potential enemy. This means that despite more differentiation in society (by wealth, gender and age) and new contexts (urban connections, technology, diverse economies), moral economy practices persist but in new forms and should not be dismissed by aid and development programmes and should be central to thinking about social protection in pastoral areas. Conway and colleagues defined *social protection* as a '*public action in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given polity or society*' (Conway et al., 2000, 5). Relating to my experience with Kenya's NSNP as a form of universal social pension, it is imperative to open up a discussion on the interaction between social protection and uncertainty, especially in pastoral contexts. How do pastoralists' moral economy practices intertwine with the social protection interventions such as cash transfers and livestock insurance?

As presented in chapter two, there has been increasing interest in managing poverty and climate-related risks and catastrophe that results in vulnerable conditions. These interventions often aim to enhance people's 'resilience' to adverse climatic events such as drought, disease and loss of livelihood. Manifold humanitarian and development agencies embrace social protection as a systems and programmes that can address chronic needs through routine, predictable support and long-term intervention, especially in the drylands of Africa and other parts of the world (Conway et al., 2000; Deveruex, 2002; Jensen et al., 2019). Equally, social protection has been a critical intervention during the recent Covid-19 pandemic across the globe, with studies advocating it as the longer-term solution to preventing vulnerabilities. There are two forms of social protection in pastoral areas: social assistance, such as cash transfers and social insurance, such as livestock insurance (Jensen et al., 2017; Asfaw & Davis, 2018).

Studies have praised these interventions as promoting household resilience to 'exogenous' shocks, improving food security, improving general household wellbeing, and reducing chronic poverty (Barrientos et al., 2005; Chantarat et al., 2013; Devereux & Tibbo, 2013; Asfaw & Davis, 2018; Carter et al., 2018; Janzen & Carter, 2018; Sabates-Wheeler et al., 2021b). On the contrary, challenges of social protection include flaws in targeting procedures, considered expensive intervention, gender blindness, especially in a patriarchal culture dominated by wealthy male herd owners, and static intervention meant to respond to calculable risks (Devereux, 2002; Sabates-Wheeler & Devereux, 2010; Begeant & Barrett, 2017; Janzen & Carter, 2017; Carter et al., 2018).

Although very minimal, studies such as Takahashi and colleagues have examined the effect of formal insurance on informal transfers such as *dabare* and concluded that index insurance re-inforces informal transfer. Their findings maintained that informal transfers could only cushion household-level risks and serve less for a covariate event. However, as shown across chapters five, six, and seven, a long-term investigation of how pastoralists evolve safety net and solidarities reveal that informal solidarities,

although stratified, help pastoralists respond to significant events such as drought and livestock raids. As opposed to Takahashi et al. (2019) which assessed *dabare* as a form of informal transfers, the current study explored diverse informal pastoralists' networks and how they intersected and deployed across geographies, time, and social groups.

In summary, although the positive outcome of cash transfers and social insurance is overemphasised as enhancing resilience, the complexity of adapting such transfers in a very unpredictable setting such as pastoral areas are ignored. As the thesis has shown, resilience depends on whose livelihood is suffering, where and with what implications for confronting uncertainties. The thesis opens up an understanding of pastoralists' structural conditions of uncertainty and the roles of social solidarities and moral economies in managing livelihood threats. Such an understanding creates a greater appreciation of pastoralists' diverse moral economies and how they could be recognised and strengthened in the moves to extend social protection systems to pastoral areas. Such efforts to establish broader and deeper access to social protection for pastoralists have much to gain from considering how existing redistribution practices offer a safety net to survive unpredictable livelihoods.

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Appendices

Name	Community	nunity Year	
Biliqo Bulesa	Borana	2007	Chari
Nasuulu	Samburu, Turkana, Somali, Borana	2011	Burat
Nakuprat Gotu	Gotu Borana, Turkana		Ngare-mara
Leparua	Maasai, Turkana, Samburu, Borana	2011	Burat
Naapu	Samburu, Turkana	2018	Oldonyiro
Nanapisho	Samburu, Turkana	2018	Oldonyiro
Nannapa	Samburu, Turkana	2018	Oldonyiro
Narupa	Samburu, Turkana	2018	Oldonyiro

Appendix I: Table Showing Conservancies in Isiolo

Appendix II: List of Semi-Structured Livelihood Interview Participants

Number	Name	Gender	Place	Livelihood
1.	Rashid A.	М	Kinna	Bee farmers
2.	Nura A.	М	Kinna	Boda-boda
3.	Abdinur A.	М	Kinna	Boda-boda
4.	Huqa A.	М	Kinna	Charcoal Producer
5.	Asli A.	F	Kinna	Trader
6.	Mama A.	F	Kinna	Catering and hotel
7.	Abubakar A.	М	Korbesa	Boda-boda
8.	Waqo A.	М	Korbesa	Hired Herder
9.	Hussein A.	М	Dogogicha	Hired Herder
10.	Hussein B.	М	Lakole	Hired Herder
11.	Mahad B.	М	Kinna	Hired Herder
12.	Nura B.	М	Kinna	Hired Herder
13.	Mohamed B.	М	Kinna	Hired Herder
14.	Hassan B.	М	Kinna	Hired Herder
15.	Mohamed B.	М	Dogogicha	Trader
16.	Ibrahim B.	М	Dogogicha	Boda-boda
17.	Abdirizak C.	М	Dogogicha	Boda-boda
18.	Huqa C.	М	Korbesa	Charcoal producer
19.	Halima C.	F	Kinna	Agro pastoralist
20.	Mariam C.	F	Kinna	Agro pastoralist
21.	Mama C.	F	Merti	Agro-pastoralist
22.	Safia C.	F	Isiolo	Camel milk
23.	Mama D.	F	Isiolo	Camel meat
24.	Ali B	М	Merti	Teacher

Numl	perName	Gender	Place	Date
1.	Mohamed A.A.	М	Merti	20/09/2019
2.	Halima A. A.	F	Merti	20/09/2019
3.	Hassan A. A.	М	Merti	20/09/2019
4.	Halakhe A. A.	М	Merti	20/09/2019
5.	Isaaqo A. A.	М	Merti	20/09/2019
6.	Mwalim A. A	М	Saleeti	09/10/2019
7.	Mzee A.A.	М	Saleeti	09/10/2019
8.	Kaduubo AA	М	Saleeti	09/10/2019
9.	Halima A. A.	F	Saleeti	09/10/2019
10.	Bidu B.B.	М	Saleeti	09/10/2019
11.	Oloo B.B.	М	Korbesa	14/11/2019
12.	Hussein B. B.	М	Korbesa	14/11/2019
13.	Abdi B.B.	М	Korbesa	14/11/2019
14.	Kana B. B.	М	Korbesa	14/11/2019
15.	Ibrahim B. B.	М	Korbesa	14/11/2019
16.	Gollo B. B.	М	Korbesa	14/11/2019
17.	Halkano B. B.	М	Korbesa	14/11/2019
18.	Abdirahman B.	М	Korbesa	14/11/2019
19.	Asli B. B.	F	Nairobi	16/12/2019
20.	Asha B. B.	F	Nairobi	16/12/2019
21.	Adan B. B.	М	Nairobi	16/12/2019
22.	Shana C. C	М	Nairobi	16/12/2019
23.	Halkano C. C.	М	Kinna	4/10/2019
24.	Abdullah C.C	М	Kinna	4/10/2019
25.	Saar C.C	М	Kinna	4/10/2019
26.	Hassan C.C	М	Kinna	4/10/2019
27.	Ali C.C	М	Kinna	4/10/2019
28.	Hassan C.C	М	Kinna	4/10/2019
29.	Sama C.C	М	Kinna	4/10/2019
30.	Edin C.C	М	Kinna	4/10/2019
31.	Nura D. D	М	Lakole	15/11/2019
32.	Haro D. D	М	Lakole	15/11/2019
33.	Abdikadir D.D.	М	Lakole	15/11/2019
34.	Roba. D.D	М	Lakole	15/11/2019
35.	Hassan D. D.	М	Lakole	15/11/2019
36.	Hassan D. D	М	Lakole	15/11/2019
37.	Adan D. D	М	Lakole	15/11/2019

Appendix III: Table Showing Participants in Historical Event and Community Mapping exercise

Kinna	Names	Gender	Age	Wealth
1.	Darmi D.	F	0	W
2.	Asha O.	F	Ο	Р
2. 3. 4. 5. 6. 7.	Rahma J.	F	Y	Р
4.	Yahya A.	М	Y	Р
5.	Sadam A	М	Y	W
6.	Eliyas B.	М	Ο	W
	Hadija B.	F	Ο	W
8.	Shake H.G.	F	0	М
9.	Jaba W.	М	Ο	W
10.	Huqa G F	М	Y	Р
11.	Hussein D.	М	Y	Р
12.	Guyo H.	М	Y	Р
Lakole				
1.	Omar B.	М	Ο	W
2. 3. 4. 5.	Ola K.	М	0	W
3.	Dawud J.	М	Y	Р
4.	Dima H.	М	Y	Р
5.	Bochol J.	F	Y	Р
6.	Hagaro D.	F	Ο	М
Korbesa				
1.	Chultu D.	F	0	W
	Asha G.	F	0	Р
2. 3. 4. 5. 6.	Wario H.	М	Y	Р
4.	Halima A.	F	Y	Р
5.	Boru. T.	М	0	W
6.	Ali J.	М	0	W

Appendix IV: Case study participants (pseudonyms)

Appendix V: Administrative Divisions, Locations, and Sub-Locations 1974-1978

Divisions Locations S	Locations	Sub-locationsIsiolo Township, Kambi GarbaOldonyiro, SimitiGarbatulaGafarsaErasaboruGubatuMadogasheKulamawe		Total sub locations
Central	Isiolo Central			4
Garbatula	Garbatula			9
Merti	Merti	Sericho Bulesa Korbesa	Kinna Duse	3
		Kom		

Source: Compiled by Author from Isiolo District Development Plan 1974-1978, 1978-1983.

Sub-county (District)	Wards (Divisions)	Locations	Sub-locations
Isiolo	Wabera	2	4
	Ngaremara	4	7
	Oldonyiro	4	6
	Bula pesa	4	8
	Burat	1	3
Sub total		15	28
Merti	Chari	4	10
	Cherab	5	13
Sub total		9	23
Garbatula	Garbatula	7	11
	Kinna	6	12
	Sericho	6	14
Subtotal		19	37
Grand Total	10	43	88

Appendix VI: Administrative Sub-County, Wards, Locations, and Sub-Locations 2019-2020

Source: Compiled by author from the 2019 housing census, Volume II, Distribution of Population by administrative unit



Appendix VII: Transport Service from Merti Town and Neighbouring Village