ANALYSIS OF INSTITUTIONAL DYNAMICS AND THEIR INFLUENCE ON LIVESTOCK EXPORT TRADE IN THE BERBERA CORRIDOR OF SOMALILAND

AHMED M. MUSA (BHR, MPA)

A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN DRYLAND RESOURCE MANAGEMENT

DEPARTMENT OF LAND RESOURCE MANAGEMENT AND AGRICULTURAL TECHNOLOGY

FACULTY OF AGRICULTURE

UNIVERSITY OF NAIROBI

DECLARATION AND APPROVAL

This thesis is my original work and has not been presented for award of a degree in any other university.

25/8/2020

Ahmed Mohamed Musa — Date

This thesis has been submitted with our approval as the University supervisors:

25/08/2020

Dr. Oliver Vivian. Wasonga — Date

Department of Land Resource Management and Agricultural Technology, University of Nairobi

25/08/2020

Prof. Dr. Tobias Hagmann — Date

Department of Social Sciences and Business at Roskilde University, Denmark

26/08/2020

Dr. Nadhem Mtimet — Date

International Livestock Research Institute (ILRI), Nairobi, Kenya

26/08/2020

Dr. Oscar K. Koech — Date

Department of Land Resource Management and Agricultural Technology, University of Nairobi

DEDICATION

This work is dedicated to my wife Nawal Abdullahi Jama, my beloved daughter Fatima Ahmed Mohamed, my mother Hinda Jama Ahmed and my family at large for their moral support and sacrifice during my study.

ACKNOWLEDGMENTS

First, all praise belongs to the almighty Allah and his beloved prophet, Muhammad (pbuh). I would like to sincerely thank my supervisors, the task of writing this dissertation has been onerous and this work would not have been possible without the continuous support, inspiration, helpful comments and critique of my supervisors: Dr. Oliver Vivian Wasonga, Professor Tobias Hagmann, Dr. Nadhem Mtimet and Dr. Oscar Koech. I must say that I could not have better and more friendly supervisors and I have immeasurable gratitude for you always.

Special mention to Tobias Hagmann and Finn Stepputat for not only funding my Ph.D. study through the Governing Economic Hubs and Flows Somali East Africa (GOVSEA) research programme but also providing support, connections and valuable comments. I am indebted to you for trusting and believing in me. With your support, I was able to fulfil my dreams of earning my doctorate degree and becoming a better researcher and scholar.

I want to acknowledge Professor Jesse Njoka and his team in the African Dryland Institute for Sustainability (ADIS), university of Nairobi, for managing my scholarship funding, providing administrative support and office space whenever I needed it. I also acknowledge the staff of the Faculty of Agriculture, specially from the Department of Land Resource Management and Agricultural Technology (LARMAT) for their support throughout the study.

Many thanks to the research participants who offered me their valuable time and volunteered information and their views. Despite their busy schedule, many of them allowed me to sit with them for an extended period of time, and still spared time for me during the many revisits. Through their connections, I was able to meet with other research participants whom I needed.

The final acknowledgment goes to my family and friends. To my wife who has been patient during my prolonged absence and busy schedule; we were blessed with our first child during my thesis write up and you spent many sleepless nights taking care of our daughter while I concentrated on writing. I share with you all the success. Thanks to my other family members and friends who may not be mentioned individually.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ACRONYNMS AND ABBREVIATIONS

BBC	British Broadcasting Corporation
BNAHQ	Berbera National Animal Health Quarantine
BOL	Bill of Lading
CHAP	Centre for Health and Animal Production
CVB	Customs Valuation Book
ESCAS	Exporter Supply Chain Assurance Systems
ESOLT	European Union's Enhancing Somali Livestock Trade
FEWS NET	Famine Early Warning Systems Network
FGD	Focus Group Discussions
FMD	Foot and Mouth Disease
FAO	Food and Agriculture Organisation
FOB	Free on Board
FSNAU	Food Security and Nutrition Analysis Unit
GDP	Gross Domestic Product
GLS	Generalised Least squares
HoA	Horn of Africa
IGAD	Intergovernmental Authority for Development
ILO	International Labour Organisation
IMF	International Monetary Fund
KSA	Kingdom of Saudi Arabia
LC	Letter of Credit
LDA	Livestock Development Agency
LHGs	Livestock Holding Grounds
LMIS	Livestock Marketing Information System
NFD	Northern Frontier District
NIE)	New Institutional Economics
NRA	National Range Agency
PPR	Peste des Petits Ruminants
RVF	Rift Valley fever
SDF	Somaliland Development Fund
SEIVQMC	Saudi–Emirates International Veterinary Quarantine Management Company
SGS	General Society of Surveillance

SHSA	Somali–Hellenic Shipping Agency
SLCCIA	Somaliland Chamber of Commerce, Industry and Agriculture
SNM	Somali National Movement
TAD	Transboundary Animal Diseases
UAE	United Arab Emirates
UNDP	United Nations Development Programme
US	United States
USAID	United States Agency for International Development
USC	United Somali Congress
VBUQ	Veterinary Berbera United Quarantine
VIF	Variance Inflation Factor
WOAH	World Organization for Animal Health
WTO	World Trade Organisation

ABSTRACT

In the last four decades, Somalia's economy has evolved from a centralised economy under socialist institutions to a largely stateless and deregulated economy that has attracted interest from scholars. Some scholars have greeted the post-1991 'stateless' economy with optimism and, in the case of livestock trade, used rapid expansion in the volume of livestock exports as an indication of exceptionally performing sector in the absence of formal and state institutions. Over the years, inconsistent insights and accounts on the performance of the economy have been put forward by scholars and practitioners. The divergence in the narratives is largely attributed to a combination of factors such as the unconventional and informal nature of the Somalia/Somaliland economy and lack of systematic studies. With exception of a few cases, debates on post-war stateless economy have been based on anecdotal evidence, generalisations and assumptions about the performance of the economy and, of course, differences in ideological orientations.

The foremost purpose of the thesis was to analyse institutions, formal and informal, and their influence on the export livestock trade in the Berbera corridor. Like many other pastoral communities in the Horn of Africa (HoA), livestock is the mainstay of Somalia's economy. However, unlike many pastoral communities, Somali livestock trade is export oriented. Therefore, knowing that Somalia lacked key state and formal institutions since the breakdown of the central state, it is critical to understand how institutions influence the performance of Somalia's livestock export trade, and particularly in the Berbera corridor, which is Somalia's main livestock export route.

To empirically investigate livestock trade in the Berbera corridor, the study combined different qualitative and quantitative methods. Different types of interviews (informal, key informant and oral histories) were conducted with over 120 research participants. Those interviewed included former and current livestock traders, exporters, veterinary professionals, policy makers and local officials, brokers, transporters fodder traders and other service providers. The qualitative data focused on past and current formal and informal institutions in the livestock trade, influence of institutional dynamics on the export livestock trade and experiences and expectations of actors in the livestock export trade. In addition, participant observations, stakeholder analysis and focus group discussions were employed for this study.

Qualitative information was complemented with statistical analysis on the influence of selected factors, mainly institutional, on small ruminants (sheep and goats) and cattle transacted for the purpose of export in Hargeisa, Burao and Togwajale terminal markets. The quantitative data analysis was based on Livestock Marketing Information System (LMIS), a database hosted by the Somaliland Chamber of Commerce since 2007. Several factors perceived to influence the number of livestock traded for export in the three study markets were analysed for a period of ten years, from 2008 to 2017. They included the influence of the number of livestock exporters active in the study markets, market location, border closures, Australia's' suspension of livestock exports to Saudi Arabia which is the main market for the Somali livestock exports, ban on livestock imports from Somaliland imposed by the importing countries, establishment of quarantine stations in Berbera and the Hajj season.

Qualitative and quantitative information was supplemented with comprehensive review and analysis of existing literature relevant to the study of analysis of institutional dynamics and their influence on livestock trade in the Berbera corridor. The review draws on three bodies of literature. First, literature on institutional economics which emphasises the role of institutions in the economy. Second, literature on Somalia's stateless economy which highlights the governance of the Somali economy after collapse of the central state. Third, literature on livestock trade in the Horn of Africa. Both grey (reports and surveys) and scholarly literature were reviewed.

This study reveals findings that are contrary to the prevailing understandings in Somalia's post-war stateless economy in several respects. First, in contrast to the literature that stresses the positive performance of Somalia's stateless economy, the findings show that livestock export trade in the Berbera corridor suffers from absence of state, hence lack of formal institutions and regulations. Institutions that had collapsed in 1991 and whose absence negatively affects the performance of Somalia's livestock export trade include quality control institutions responsible for management of holding grounds, vaccination and certification of export livestock; ,), financial institutions such as commercial banks and international shipment institutions that facilitate shipping through issuance of documentations. Examples of market failures that resulted from the absence of these institutions include perpetual livestock import bans and rejections, breach and lack of contract enforcement, increased fraudulence in the import markets and cashless and dollarized livestock trade in both local and international markets. In addition, the findings show the limitations of the informal institutions that have been credited to the performance of Somalia's stateless economy. The informal institutions consequently fall short of reducing risks, harassment and, fraud in the international livestock trade.

Second, the findings also show that while informal institutions complemented formal institutions in the livestock export before 1991, their role was only prominent at the beginning of the value chain (from the producer to the terminal market), while the role of formal institutions was prominent at the end of the value chain, from the market to the exit from port of Berbera. After 1991, however, informal institutions filling the vacuum left by the formal institutions became responsible for the entire value chain.

Third, contrary to the understanding that, in the absence of centralised state authority, Somalia's post-war economy is 'duty-free' and untaxed, the findings reveal the multiplication of taxes and tariffs on livestock trade in the Somali territories since 1991. This is due to the multiplication of de facto states and state-like authorities. This has increased the cost of doing trade while livestock traders shift the tax burden to the already disadvantaged livestock producers. The findings highlight the interplay between post-1991 states and state like authorities in Somalia that seek to maximize livestock revenue and traders who attempt to minimize taxation. The state authorities attempt to capture these 'revenues on the hoof' by both coercive and consensual means, shifting livestock trading routes and fluctuating animal trading volumes thus producing different taxation patterns across the Somali territories.

Fourth, rangeland management institutions had collapsed in 1991 and this was followed by a de facto privatisation of the rangelands including former public holding grounds for export livestock. Livestock productivity and body conditions greatly depend on rangelands. Due to the changes in the rangeland management such as absence of export livestock holding grounds and grazing reserves, export livestock feeding systems has changed. Because of the increased cost of fodder from private farms and absence of proper state oversight, the role of Somaliland state is limited to taxing fodder. As a result, livestock exporters compromise proper resting in holding grounds and feeding of livestock for export which negatively affects animal body condition hence the competitiveness in the international markets.

Finally, results from statistical analysis indicated that Hajj season, number of livestock exporters active in Hargeisa, Burao and Togwajale terminal markets, establishment of quarantine stations in Berbera and average monthly price of livestock in the terminal markets have significant and positive influence on the volume of livestock transacted for export in the study markets in the Berbera corridor. Livestock ban imposed by the importing countries has significant negative influence on the monthly volume of livestock transacted for export in the study markets. The findings also show that suspension of Australia livestock export (an important small ruminants exporter to KSA), border restrictions imposed by Ethiopia (the main source of livestock transacted in the study markets) and drought do not have a significant influence on the monthly volume of small ruminants transacted for export in the study markets. These findings contrast two main assumptions held about livestock exports from Somalia/Somaliland. First, that Australia is a key competitor of Somalia in livestock export to KSA, hence trends in the volume of Australia's livestock exports influence the volumes of Somali livestock exports. Second, that drought significantly affects the volume of livestock exports from Somaliland.

The study concludes that overseas livestock export trade has been curtailed by absence of state and formal institutions. The results of this study reveal that functional state institutions in the greater Somalia are still absent or now re-emerging though fragmented and weak, while Somaliland has not been successful to gain international recognition neither to build strong economic institutions. The unstable relationship between Somaliland and the Federal Government of Somalia is a major challenge to the proper institutionalisation of the livestock export in the Berbera corridor. The study recommends that the Somaliland government needs to ensure stringent animal health standards and practices by improving and upgrading the infrastructure, assessing the performance of its veterinary services and identifying the gaps, undertaking continuous training of the public and private veterinarians and implementing a certification system, and a livestock traceability system. Somaliland policy makers should recognise that formal institutions such as commercial banks are indispensable in the international trade, therefore, reinstating and establishing such institutions will formalise the trade and reduce risks. Finally, in order to increase the competitiveness of livestock exports in the study corridor and sustain exports throughout the year, there is a need to modernise livestock trade which currently remains traditional and emphasize value additions along the entire livestock export value chain, including fodder for livestock export. Such interventions including institutionalization, may open up new opportunities such as new markets.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background

Long before the advent of the modern state institutions, Somalis were engaged in a meaningful domestic and international trade. In the 19th century, Zeila, Berbera, Heis, Meit and Bulhar were export-import ports in the northern Somali territories (now Somaliland) (Pankhurst, 1965; Samatar, Salisbury, & Bascom, 1988). The ports were major meeting points for pastoralists, merchants, sailors, and caravanners (González-Ruibal & de Torres, 2018) and gateways that connected the Horn of Africa and the Arabian Peninsula. Pankhurst (1965) reported that between 1875 and 1876, livestock exported from Berbera to Aden was 65,000 sheep and goats and 1,100 cattle. Cruttenden (1852 cited Pankhurst, 1965) also reported that in the year 1852 between 4,000 and 5,000 camel caravan left Berbera to Harar, Ethiopia. Several factors that linked Somalis to the outside world included Somali's control of key seaports along the Red Sea which served for landlocked territories such as Ethiopia.

The Somali pastoral-based economy and Somali's early *tacabirr* (traveling abroad) were other key ingredients for their internationally oriented trade. As stated by Geshekter (1985), some *tacabirr* travellers were never to be seen again, some had returned to Somaliland with wealth while others came back with entrepreneurial skills. Gordon Waterfield, a British journalist described Somalis as 'greater traveller [s] and a good trader [s]' (Waterfield 1944 cited in Geshekter 1985). It can be therefore said that the geographic and social factors that linked Somalis to the international economy in the 19th century are useful for the understanding of the contemporary Somali economy.

Before the advent of colonialism, Somali were stateless pastoralists. European explorers described Somali economic hubs such as Berbera as violence-ridden marketplaces where no form of government institutions provided social order and regulated trade (Pankhurst, 1965). In the absence of government institutions, informal institutions provided some order and protection. *Aabaan* (protectors in Somali), for example, was an important institution that provided security to foreign traders. As reported by Pankhurst (1965), strangers to the Somali territories chose *Aabaan* who acted as guard and guide to their clients from Berbera's residents However, according to travellers as a result of the absence of state institutions, trade in the Berbera port suffered from a lack of trading standards which led the local and foreign traders to fraud on each other. This is an indication of the limitations of informal institutions, a limitation that many scholars and practitioners who credited the performance of 'stateless' economy to the informal institutions seem to overlook.

With the advent of the British colony to Somaliland, in the second half of the 19th century, to secure fresh meat for its military garrison in Aden (Samatar *et al*., 1988, p.84), livestock exports had increased while Berbera overtook Zeila to became the principal port.[1] To facilitate the emerging colonial economy, the British colony introduced formal institutions. For example, *Ilaalo* (colonial protection police) replaced the *Aabaan* institution (Samatar *et al*., 1988). In the Somali livestock trade, formal and informal institutions complemented each other since then, much like in other social spheres. The indigenous trust-based credit system between livestock producers and merchants, *fariqiya and franco valuta* were informal financial institutions that ran parallel with the formal financial institutions before 1991 (Samatar *et al*., 1988; Green & Jamal, 1987; Mubarak, 1997). F*ariqiya* was a financial practice where foreign livestock exporters retained a negotiated percentage of the livestock money with them and paid to Somali traders outside the commercial bank. While *franco valuta was* a financial practice where commodity traders accepted livestock hard currency not repatriated through the government commercial bank in the Gulf countries. In this arrangement, the government used the money to finance commodity imports while they paid livestock traders cash in the country.

There are divergent views on Siad Barre's military rule with some blaming the regime for the worst state repression in the Somali history, while others believe the military government implemented most of the developmental projects, including those that were aimed to improve pastoral economy. However, the development projects were state-centred, the main interest of the government being to link the pastoral system to the market economy for the benefit of the urban economy, mercantile class and the state (Bradbury, 1996). The military government embraced socialism (*Hantiwadaag*) in 1970 and the first move of the socialist state was to bring finance, production, and insurance sectors under the control of the state. However, Siad Barre gave assurance to the pastoralists that the state will not interfere with their pastoral production (Laitin & Samatar, 1984). From 1980, Somalia left socialism and embraced capitalism. Some scholars linked crisis in the livestock export sector during the late 1970s and 1980s to the institutional problems including state interventions (Mubarak, 1997; Leeson 2007; Little, 2003).

The breakdown of Somalia's central government in 1991 and the subsequent absence of state institutions have earned Somalia's economy descriptions such as 'stateless', 'duty-free shop', 'unregulated', 'tax-free', 'free-market' and 'extremely laissez-faire'. Some scholars emphasised the performance of the stateless economy and credited informal institutions (Mubarak 1997, Little 2003; Leeson, 2007). However, some questions that have not been addressed adequately include: How could informal institutions coordinate complex overseas livestock export trade that is involved by state institutions and regulations at the end tail of the market chain? How could a deregulated livestock economy that lacked the appraisal of international regulatory bodies succeed in the international markets? How do informal institutions with voluntary enforcement govern an economy that requires strict enforcements for quality controls to meet certain health and quality standards? How do informal institutions govern an economy engaged in by opportunistic actors? How does Somalia's stateless economy in the modern day different from the pre-colonial stateless economy which was characterised with fraud and deception?

In answering the impact of the collapse of state institutions on the Somali economy, particularly livestock trade, scholars and practitioners perpetually provided contradictory narrations. For example, one account states that 'Somali economy [including livestock] has suffered more from the violence of the civil war and recurrent droughts than from the collapse of state institutions' (Mubarak, 1997, p. 2027). Another account is that 'Somaliland's livestock export trade suffer[ed] from institutional crisis and totally unregulated environment' (Gaani, 2002, p. 50). Concerned by scholars and practitioners' recommendations on policies based on 'faulty' analysis in the Somali economy, Jamal (1988, p. 204) warned that faulty prescriptions might do more harm to the economy. To achieve a better understanding of the post-1991 Somali economy, this study aims to undertake a detailed analysis of formal and informal institutions in livestock export trade in the Berbera corridor.

1.2 Statement of the Problem

Livestock exports from the port of Berbera originate from Somaliland, south-central Somalia and eastern Ethiopia (see Holleman, 2003; Eid, 2014) and contribute to livelihoods of millions of people in the rural and urban areas in the Horn of Africa. Despite this remarkable contribution of livestock trade to the regional economy, the trade takes place in areas of limited statehood or stateless. The collapse of Somalia's central government in 1991 has not helped the situation. Overseas livestock export trade to the Arabian Peninsula has faced many challenges that undermine livelihoods, resulting in volatile incomes. This fact is attested by the triple bans of 1998, 2000 to 2009 and 2016 to present that Kingdom of Saudi Arabia (KSA), which is the most important market, imposed on livestock exports from Somalia ports and the stagnation of year-round livestock exports to KSA (see Holleman, 2003; Mugunieri *et al*., 2014).

It is true that in the aftermath of Somalia's state collapse and before the 1998 ban, livestock exports from Berbera exceeded pre-1991 levels as reported by Little (2003) and Holleman, (2003). It is also true that the increase in the volume of livestock export does not tell the whole story. In large measure, the absence of effective institutions since the breakdown of the central government in 1991 have contributed to the many woes that have faced Somalia's overseas livestock export trade. In the absence of state institutions, key aspects in livestock export such as proper feeding and quarantines have been compromised. The private sector has taken over the implementation of animal health standards and certification and this has left importing countries with no option but to ban livestock exports from Somalia ports. Also, due to the fragmentation of the central state and subsequent multiplication of public authorities in Somalia, numerous political administrations have emerged and levy different taxes and policies on livestock trade. Despite the multiplication of states and state-like entities in the territories of the erstwhile Somali Democratic Republic after 1991, Somalia remains stateless due to the absence of a functional central state. The post-1991 states and state-like authorities remain defacto and lack international recognition. Gaani (2002) rightfully stated that Somaliland's livestock export trade had suffered from 'institutional crisis'.

The informal institutions have filled the vacuum left by the absent or ineffective formal institutions by providing some structure, mainly at the local level, but they fell short in facilitating sustained and competitive livestock export trade. Glaring shortfalls include poorly regulated animal health, quality standards and welfare. As a result, livestock export trade in the Berbera corridor has become characterised by coordination problems such as lack of contract enforcement, especially in international markets and fraudulent practices. Furthermore, privatisation of export livestock health inspection and certification to livestock exporters have shifted accumulation in the livestock export trade and gave birth to oligopolies. With the exceptions of Gaani (2002) and Mugunieri *et al*. (2008) who studied institutions in livestock export trade in the Berbera corridor, there have been no systematic and comprehensive studies on institutions in the livestock trade in the Berbera corridor since the collapse of Somalia's central government. Therefore, this study is the first of its kind to provide an empirical investigation and analysis of institutions in the livestock export trade in the Berbera corridor since 1991.

1.3 Justification of the Study

The Horn of Africa is a global leader in the live animal trade. The value of annual exports of animal and animal products from HoA, including cross-border trade between HoA countries has been estimated at around US$ 1 billion (Catley, Lind, & Scoones, 2012). Somalis are the driving force behind large-scale livestock export trade in the region (Leonard, 2008; Majid, 2010). Somali livestock trade is concentrated on three corridors: Ethiopia-Somaliland-Arabia corridor (Berbera corridor); south-central Somalia-Puntland-Arabia corridor (Bossaso corridor) and south-central Somalia-Kenya corridor (Garissa corridor) (Tempia *et al*., 2010). Among these three corridors, the Berbera corridor is the leading one in the overseas livestock exports. However, no comprehensive study and analysis have been done on the Berbera corridor to understand the governance of livestock trade hubs and flows in the context of absence or limited state authority. This study attempts to fill this gap by undertaking a comprehensive analysis of the governance and operation of livestock trade in the Berbera corridor since 1991. The findings and recommendations are important for policy makers in the region who legislate and regulate livestock trade, as well as researchers and development practitioners who are interested in livestock trade corridors. In addition, the information generated by this work should be of special use to the actors in the livestock trade.

This study has also relevance for the continental, regional and national visions including Africa's agenda 2063, the Intergovernmental Authority on Development (IGAD)'s protocol on transhumance and Somaliland's 2030 vision. Initiatives two 'formulation of African commodity strategy' and three 'establishment of African continental free trade area' of agenda 2063 inspire to enable African commodities to integrate into the global value chain and to promote Africa's position in the global marketplace. IGAD's protocol on transhumance envisions coordinated effort between the IGAD countries to enable pastoral communities and their economy to easily move along corridors by removing strict cross-border controls and defective policies. While Somaliland's vision 2030 aspires to transform the agricultural sector including livestock through research and extension. Since agriculture, including livestock trade, remains a core sector of Africa, IGAD and Somaliland's economies, the findings and recommendations from this study are expected to contribute to the understanding and provide solution of the governance challenges that the pastoral livestock sub-sector faces to integrate into the global value chain and markets.

Besides the policy contributions, this study has academic significance in a number of ways. First, the discussion on the performance of the economy in the absence or limited role of formal and state institutions contributes to the global debates, especially between libertarians and anarchists who persistently question the role of the state in the society and specifically in the economy and proponents of state and its interventions in the economy. Second, at continental level, there is a growing interest and discussions among academics on institutions and economic governance of corridors in Africa. The study adopted the corridor and institutions approaches as its main analytical frameworks, and therefore makes significant contributions to both global debates between libertarians and anarchists on the one hand and proponents of state on the other and literature on corridor governance. Thirdly, the thesis contributes to the scholarly discussions and understanding of Somalia's stateless economy. Unlike other studies that use imported consumer goods and service sectors to analyse Somalia's stateless economy, this study focussed on livestock export trade.

1.4 Overall Objective

The broad objective of this study was to analyse the dynamics of formal and informal institutions in the livestock export trade in the Berbera corridor of Somaliland since the collapse of Somalia's central state in 1991.

1.4.1 Specific Objectives

The specific objectives of this study were to:

I. Analyse the effects of the breakdown of formal institutions in Somalia in 1991 and the post-war institutions (formal and informal) on livestock trade in the Berbera Corridor.
II. Analyse the taxation and resource extraction practices from the conveyance of livestock trade to Somaliland's port of Berbera.
III. Analyse value chain of fodder for livestock export trade in the Berbera corridor following the collapse of rangeland management institutions.
IV. Determine the factors influencing livestock exports from Somaliland terminal markets through Berbera port.

1.4.2 Research Questions

I. How have changes in institutions (formal and informal) in the aftermath of state collapse affected livestock trade in the Berbera corridor?

II. How do different administrations that have emerged in the Somali territories extract revenues from livestock trade en route to Berbera port for export? What is the implication of revenue extraction practices on livestock trade?

III. How does fodder production and market for export livestock trade in the Berbera corridor work since the breakdown of rangeland management institutions?

IV. What factors influence livestock traded in Hargeisa, Burao and Togwajale markets and exported through Berbera port?

1.5 Conceptual Framework

In the Somali peninsula, trade of commodities, including livestock, flow in and out along specific corridors in and out of the peninsula (Umar & Baulch, 2007). To empirically study and analyse the governance of Somali economic hubs and flows, Hagmann and Stepputat (2016) suggested a corridor approach as a methodological and a conceptual tool. They defined a corridor as a 'trans-boundary geographic space of economic, political and social relations in which we can observe: i) the flow of commodities, capital and people; ii) the exchange of value, namely goods and credit; and iii) different regulatory authority governing flow of goods and people, as well as exchange value' (Hagmann & Stepputat, 2016, p. 31). In this case, the commodity under discussion is the livestock for export and its flow to economic hubs (markets and ports). While the actors under discussion are those involved in the livestock export trade such as fodder suppliers, fodder vendors, different types of livestock traders, trekkers, transporters, different types of brokers, veterinarians, slaughters and consumers (Mahmoud, 2008; Eid, 2014).

Institutions are integral part of value chains and therefore their interactions with the actors and other components of the market is expected to play a major role in influencing the performance of livestock trade. Although there is a plethora of definitions for institutions, they generally refer to the formal and informal constraints that structure the interaction between people (North, 1990). Informal institutions include culture, tradition, values, norms, practices, religion and customs while formal institutions include policies, procedures, legal regulations, contracts, laws, property rights, and meta-institutions such as democracy and authoritarianism which influence other institutions (North 1990; Williamson, 2000; Rodrik, 2000; Casson, Della Giusta, & Kambhampati, 2010). Informal institutions impose constraints on the formal institutions, while the two influence the governance structure (Williamson, 2000). Mugunieri *et al*. (2008) conceptualised institutions in the Somali livestock trade as formal and informal rules, practices, procedures and structures that govern livestock trade and the organisations that are involved in the trade. Institutions and their quality influence economic (trade) performance (Acemoglu & Johnson, 2005; Miguel, Gertler, & Levine, 2006; Casson *et al*., 2009). Therefore, this study conceptualised the performance of livestock trade in the study area as an outcome of the interactions between the economic actors, economic hubs and institutions (their absence, presence and effectiveness), as illustrated in Figure 1.1.

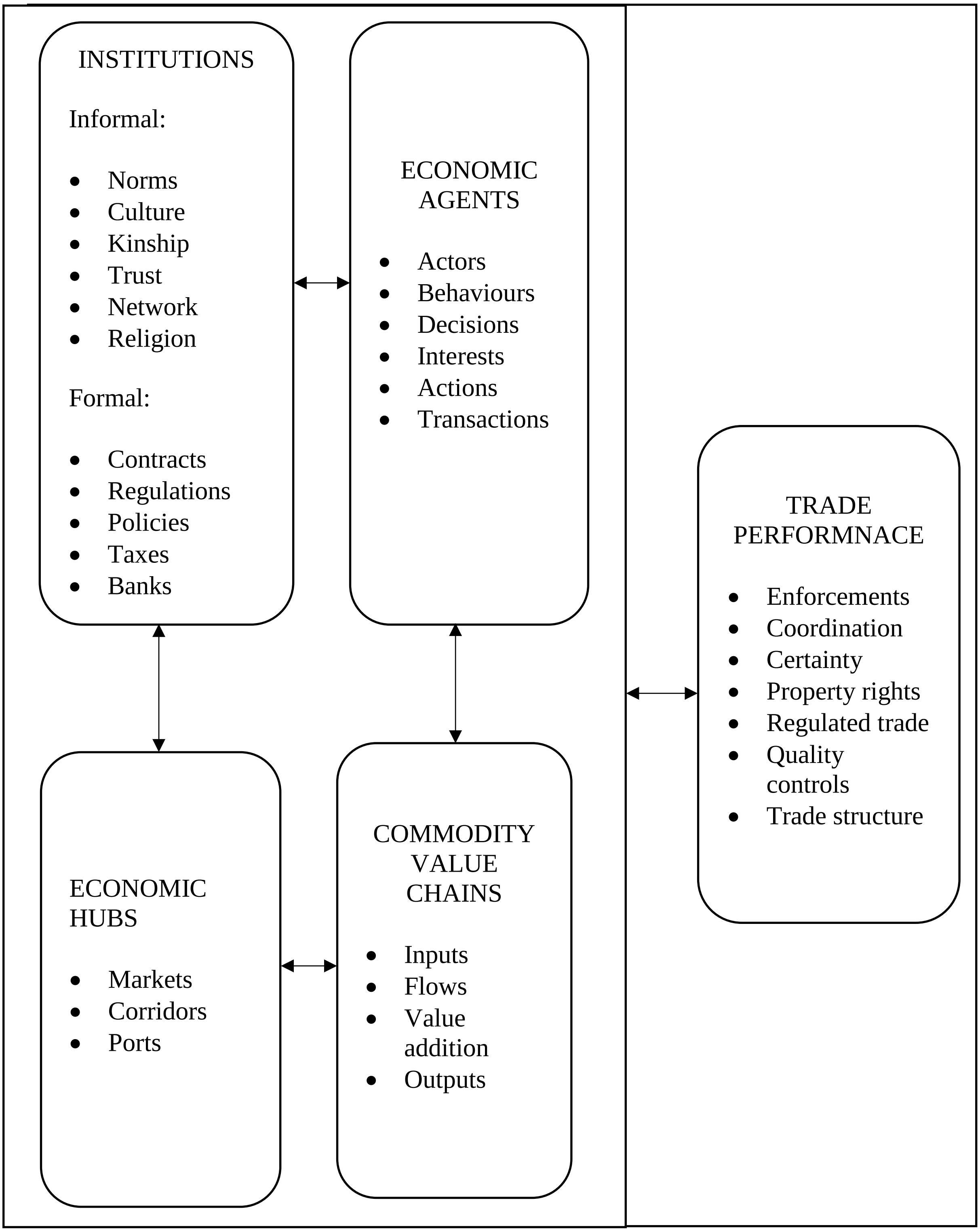

Figure 1.1: Interaction between institutions, economic hubs, economic agents, and commodity value chains and their influence on trade performance

1.6 Research Limitations

Limitations experienced in this study were associated with the research design, and the data collection. With respect toresearch design, fieldwork was carried out in Somaliland's Hargeisa, Burao, Togwajale terminal markets and the port of Berbera. However, the bulk of livestock transacted in the study markets originate from outside Somaliland and is exported to different markets in the Arabian Gulf countries. This transnational nature of livestock trade has been challenging as it might have required travel to different sources of livestock outside Somaliland and to the different import markets which was not practical both in time and budget. To overcome this challenge, the study made use of interviewees such as brokers (*dilaal,* pl. *dilaaliin)* agents (*wakiil*, pl.*wakiilo*) transporters (*gaadiidley*) and livestock traders (*ganasade,* pl. *ganasato*) who are well conversant with livestock trade in the study area.

Concerning data collection, there were a couple of limitations including difficulty of accessing secondary data from government officials either because the data was considered confidential or systematic data was not available. For example, attempts to access data on the volumes of livestock export from Berbera port and Ministry of Planning was not successful. Ministry of Livestock did not share data on livestock diseases, which they considered as confidential and sensitive, while the Ministry of Finance did not share systematic data on revenues from livestock exports which some officials said did not exist, while others considered the data to be confidential. To overcome this challenge, the study relied on secondary data from Somaliland Chamber of Commerce and FSNAU, which are available to the public on their websites. It is also important to note that due to the many woes and predicaments such as bans that export livestock faced after 1991, many research participants were hesitant to discuss about animal health issues. For example, instead of explaining the current practice by the government, the interviewed officials from the Ministry of Livestock simply described the internationally acceptable animal health and certification standards. To overcome this challenge, rapport was built with animal health professionals by joining them in their *khat* (stimulant shrub) chewing sessions to win their trust and assure them of anonymity of the volunteered information.

CHAPTER TWO

LITERATURE REVIEW

2.1 Livestock Based Economy in the Horn of Africa

Horn of Africa (HoA) is one of the world's regions with the highest concentration of livestock population and, at the same time, one of the world's poorest regions (Knips, 2004). The agricultural sector contributes a major share to the HoA countries' gross domestic product (GDP) with livestock being an important contributor to all countries (Knips, 2004) (Table 2.1). Livestock trade is an important economic activity in the HoA, the value of annual exports, including cross-border trade, has been estimated at US$ 1 billion (Catley, Lind, & Scoones, 2013). Livestock trade has created links between Somalia, Ethiopia and Kenya borderlands (Majid, 2010) and between the HoA and the Arabian Peninsula. In the HoA borderlands, the government presence is weak, or absent in the case of Somalia, and the trade policies are ambiguous (misinterpreted and selectively implemented) and this makes the distinction of what is formal and informal or official and unofficial challenging (Little, Tiki, & Debsu, 2015). As earlier reported by Little (2005), the ambiguity of the cross-border livestock trade is a source of great difficulty for researchers who intend to gather data.

Due to the importance of livestock economy in the HoA countries and based on the assumption that increased commercialisation of livestock is important for economic development and poverty reduction, various donors have allocated a substantial amount of money into livestock marketing in the last three decades (Aklilu & Catley, 2009). Also, in this period, HoA countries including Ethiopia, Kenya and Djibouti developed a renewed interest in the export of live animals (Aklilu, 2008; Eid 2014). Despite increased desire to access lucrative import markets in the middle east, HoA countries face numerous challenges, mainly institutional. For example, livestock diseases, high cost in obtaining permits and movements and disturbance of trade routes by the government officials have been cited as some of the constraints to Kenya's desire to increase livestock exports (Irungu *et al*., 2014).

Table 2.1: Contribution of agriculture and livestock to the GDPs of the Horn of Africa countries.[2]

Country	Year	GDP (billion USD)	Share of Agriculture in overall GDP	Share of Livestock GDP in agricultural GDP (%)	Share of Livestock GDP in overall GDP (%)
Djibouti	1980	- -	- -	86.3	- -
	1990	0.5	3.3	89.5	3.0
	2000	0.5	3.7	84.7	3.1
Eritrea	1980	- -	- -	- -	- -
	1990	- -	- -	- -	- -
	2000	0.6	17.1	57.5	9.7
Ethiopia	1980	- -	56.1	36.8	20.6
	1990	5.1	49.3	39.1	19.3
	2000	7.5	52.3	32.5	17.0
Kenya	1980	5.6	32.6	49.4	16.1
	1990	8.4	29.1	53.3	15.5
	2000	9.9	19.9	52.4	10.4
Somalia	1980	- -	68.4	88.0	60.2
	1990	- -	65.5	82.5	54.0
	2000	- -	- -	88.2	- -
Sudan	1980	4.3	32.9	54.1	17.8
	1990	4.8	32.8	65.5	21.5
	2000	9.9	37.2	61.8	23.0
Sudan	1980	- -	72.0	24.2	17.4
	1990	4.1	56.6	20.9	11.8
	2000	7.7	42.5	19.8	8.1

Source: Knips, 2004

In Somalia, the livestock sector contributes 40% of the overall GDP (FAO, 2012). Somalis are collectively the driving force behind the largest livestock export trade in the HoA but face monumental institutional-related challenges that thus affect livestock value chain in the entire region (Leonard, 2008). For instance, one source of these problems is the informality of livestock exports such as shipping livestock across the border without letters of credit or formal contract arrangements and through clan- relations (Costagli, Mugunieri, & Wanyoike, 2017).

As evident from Table 2.1, livestock production is a dominant source of livelihood in the Greater Horn of Africa. In addition, pastoralists, who rear most of the livestock in the region inhabit the borderlands and engage in economic activities such as livestock trade. The Policy Framework for Pastoralism in Africa therefore highlights the importance of cross-border livestock trade in the Horn of Africa with Somalia and Sudan exporting to the Gulf, while Ethiopia exports to Somalia.[3] However, one major challenge facing trade and access to markets arise from the border management due to institutional and policy related gaps. The African Union (AU) has acknowledged this challenge and in order to ensure efficient and effective cross-border movement, the member states have signed the Convention of Cross-Border cooperation, also known as the Niamey Convention, in 2014.[4]

2.2 State Dynamics in Somalia and their Influence on Livestock Export Trade

Prior to colonisation, Somalis were described as a stateless society bounded together by ethnicity and shared way of life (Lewis, 1961). The colonialists induced the state system (bureaucratic and hierarchal organization) into the stateless society and this had shaped the territorial, political, economic structure of the Somali society (Bradbury, 2003). The concept of state does not have a precise definition but generally it is understood that states 'exist to provide a decentralized method of delivering political (public) goods to persons living within a designated parameters (borders)' (Rotberg, 2003, p. 3). Rotberg further illustrates that states provide public goods such as security, dispute resolution through judiciary system, regulate the mores and norms of the society, provide enforceable rules, security of property, inviolable contracts, education, health, money and banking systems. This implies that states provide institutional context, that is to say, political institutions held to characterize modern states (Hay, 2005). States can be categorized as strong, weak or failed depending on the bundle of public goods they provide (Rotberg, 2003, p. 4).

This study adopts the Weberian definition of state which 'still dominates contemporary state theory' (Hay, 2005, p.7). Weber defines state as a modus operandi: a continuous political organization that employs means of physical force and coercion to uphold its legitimate use of monopoly (Weber 1921/19978, p.58), implying a set of institutions with dedicated personnel. This observation has been taken up and developed by a diverse group of neo-Weberians, new-statists and institutionalists' which emphasize that the state exercise power independent and autonomous of non-state forces' (Hay, 2005, p. 8). State model of governance was introduced to Somalia/Somaliland with the advent of colonialism in the 19th century. Starting from 1960, the colonial state was replaced by a sovereign Somali state which collapsed in 1991.

2.2.1 Livestock trade under the colonial state: increased commodification and institutions (1884 to 1960).

In the absence of state institutions, informal institutions such as the '*sawaaqis*' (livestock trekkers) and *Abaan* (local security) facilitated Somali domestic and international trade (Pankhurst, 1965; Geshekter, 1985; Samatar, *et al*., 1988). In the northern Somali regions (now Somaliland), the main Somali sub-tribes that controlled key trade routes were the Gudabuursi and Essa. They controlled the Harar-Zeila trade route and Haber Awal, Haber Jelo and Haber Gerhajis Isaaq clans who controlled Berbera trade route (Cruttenden, 1849). However, in this stateless society, the economy was characterised with violent clan feuds and fraudulent practices (Cruttenden 1849, p.51; Pankhurst, 1965).

The British Empire gradually started its eventual 75 of years presence in the northern Somali territories (Somaliland British Protectorate) in 1884 after signing agreements with tribal chiefdoms. The establishment of colonial administrations changed the structure of the stateless Somali society by introducing state institutions (Samatar *et al*., 1988; Samatar 1989).[5] Protecting the key strategic ports and gateways along the Red Sea and securing meat supply for its military garrison in the Gulf of Aden were two primary purposes that attracted the British to Somaliland (Millman, 2013). British Somaliland was a small, nomadic and poor territory that could not raise enough revenues, therefore, it was not the British desire to transform people in British Somaliland into 'something other than what they were': Muslim, nomadic and tribal society (Samatar, 1989; Millman, 2013, p. 6).

The Somali tribes in British Somaliland were mainly nomadic pastoralists, only a few supplemented pastoralism with crop farming for local consumption, but when it came to international trade, frankincense, live animal and hides and skins were the main pastoral products they exported (Kittermaster, 1932). The Somali production and trading, however, remained traditional as the Somali tribes resisted to adopt to value-added measures. Harold Baxter Kittermaster, Governor of the British Somaliland Protectorate, described that in the production, people resisted any value-added measures such as animal inoculation, especially when they had to pay for it (Kittermaster, 1932).

To secure customs duties on the exports and imports, as a source of revenue for running Somaliland, the British took control of the coastal areas where it established small and cost-effective administration (Samatar, 1989). As reported by Ram (1981), before the establishment of the Harar-Djibouti railway between 1898 and 1913, much of the Ethiopian trade passed through Berbera, Zeila and Bulhar ports generating £29,000 for the British protectorate annually. Initially, the British wanted to secure the Somali costs but the livestock which attracted them to Somaliland was beyond the cost, therefore, the British protectorate had to secure both the coast and the trade routes (Samatar, 1989). To achieve this, the British established rural police force (*Ilaalo*) to replace the informal *abaan* (Samatar *et al*., 1988). And with this, the British generally succeeded in protecting the security of the ports and trade routes (Samatar, 1989).

The advent of the British administration influenced livestock export trade dynamics. According to Samatar *et al*. (1988), livestock trade shifted from coastal towns to emerging markets, including Burao and Hargeisa, in the interior, while livestock marketing changed from seasonal (during the annual Berbera trade fair) to throughout the year. Other changes that influenced the increase in livestock exports included the increased role of Somali merchants in the livestock export after foreign merchants who controlled livestock exports left Somaliland in 1940 following the British and Italian conflict and the opening of the Saudi Arabia market in 1950 by the Somali merchants (Samatar *et al*. 1988) (Figure 2.1). Increased livestock exports pleased the British administration who raised more revenues. For example, the Revenues from exports and imports accounted for 80% of the colonial administration income between 1955 and 1959 (Samatar, 1989).

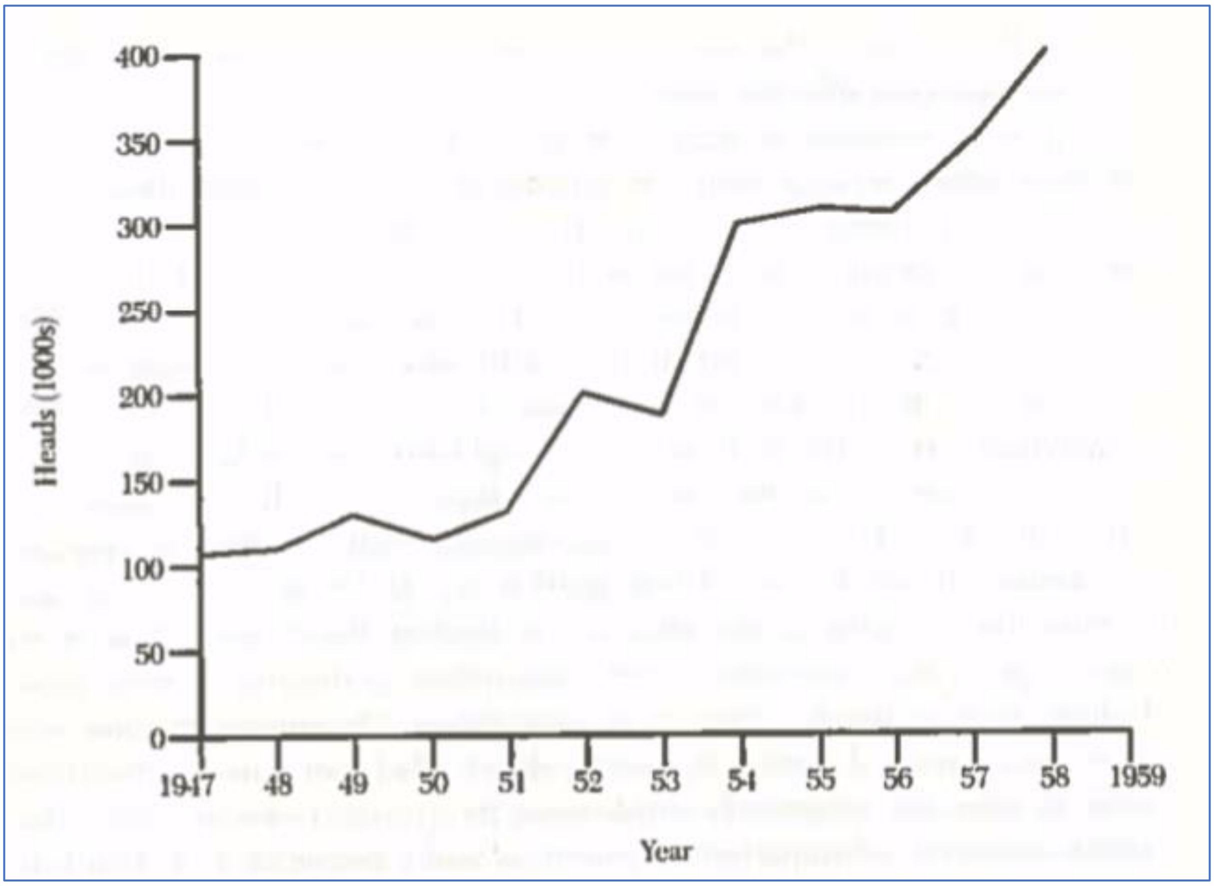

Figure 2.1: Volumes of livestock exports from British Somaliland during 1947 to 1959

Source: Colonial Office, Annual Reports (cited in Samatar, 1989)

Samatar (1989) raised two important questions; first, what was it that had contributed to the significant increase in livestock export in the absence of state involvement in livestock production? Second, why drought did not seem to have an effect on livestock export? Despite acknowledgment of absence of data, a number of plausible explanations that Samatar (1989) gave included; absence of major disease outbreaks and droughts, increase in livestock population, sharp increase in livestock prices and generally commodities after World War II and oil boom in the Arab countries and increase of Muslim pilgrims to Saudi Arabia towards late 1950s. However, other than increased livestock trade without colonial state footprint, no other economic development took place during the colonial period.

2.2.2 Institutions and trends in livestock trade during postcolonial state (1960-1990)

Key features of livestock trade in the post-independence period were a continuation of those during the colonial period. For example, the penetration of state and its institutions in the pastoral production remained limited, pastoral tribes continued to resist state policies and interventions, livestock export continued to be mainly driven by non-state actors and institutions while the policies of the postcolonial state were more oriented towards increasing livestock exports, the main source of hard currency. To understand livestock export trade under the Somalia state, two important periods to look at are the period of the civilian government (1960-1969) and military government period (1969-1991).

British Somaliland unconditionally united with the Italian Somalia and the two territories formed the Somali Republic in 1960 (Hansen & Bradbury, 2007). The Somali Republic inherited a colonial administration that had a very weak relationship with the rural producers and that relied on revenues generated through direct and indirect taxation on pastoral products, livestock and banana exports (Samatar 1989).[6] However, in the first nine years, the state did not give attention to the development of the pastoral economy because tension had started between the two entities i.e British Somaliland and Italian Somalia. It is also important to note that the civilian government did not openly embrace neither socialism nor capitalism, two competing economic systems at the time (Laitin & Samatar, 1984). During this period, livestock exports continued and competed with banana exports as Somalia's principal export (Samatar, 1989).

Military officers led by Siad Barre took power in Somalia in 1969. The military government embraced socialism (*Hantiwadaag*) in 1970 and the first move of the socialist state was to bring key private sector such as banks, factory production and insurance companies under the control of the state but not the pastoral production as Siad Barre gave assurance to the pastoralists that the state will not interfere with their pastoral production (Laitin & Samatar, 1984). With the support of multiple donors, the socialist/military government implemented ambitious developmental projects including the construction of new ports, holding grounds and seasonal grazing reserves, chiefly to increase livestock marketing throughout the year.

Kuwait Arab fund, United Nations Development Programme (UNDP), the United States Agency for International Development (USAID) and the Food and Agricultural Organization (FAO) supported the Somali government to implement the Northern Rangeland Development Project (1975) in the northern regions (now Somaliland) while a similar Central Rangeland Project (1977) was implemented in south-central Somalia. Both projects created, among other things, grazing reserves and holding grounds in the pastoral areas (Laitin & Samatar, 1984). Also, in 1974, Somalia enacted cooperatives development law with the aim of supporting the nomadic sector to promote range management. During the 1974 drought which hit the northern regions (Somaliland), the government made drought-affected pastoralists sedentary by creating agricultural cooperatives. Besides, rangeland management projects, the socialist/military government adopted a comprehensive approach in its livestock development programmes by implementing water provision, animal veterinary care, and marketing projects across key livestock production zones and trade corridors in the country (Najim & Briggs, 1992). Table 2.2 summarises some of the major livestock development projects that the Somali government implemented or planned to implement before its collapse

Table 2.2: Summary of major livestock development programmes under Siad Barre regime (1970-1986)

Project/programme	Deliverables	Quantity	Location
Short term development programme (1968-1970)	Earth reservoirs Shallow wells Deep boreholes	75 100 100	Country wide
Rinderpest Eradication campaign (1970s)	Cattle vaccination	90% of cattle vaccinated in 1975	Country wide
Infrastructure (1970s)	Construction of Deep-water ports	3	Berbera, Kismayo Mogadishu
Animal care (1972)	Vaccine production	11,714,850 doses	-
Short term development programme (1968-1970)	Earth reservoirs	40[7]	Livestock trade routes
Five Year Development (1974-1978)	Earth reservoirs Shallow wells Borewells	750 150 200	-
Interriverine Development Project (1970-1976)	Holding grounds	-	-
-	Grazing reserves	183 units[8]	Nationwide
Establishment of National Range Agency (1976)		-	National
Establishment of National Shipping Line (1974)	-	Chattered livestock carriers	National
Establishment of Range Training School (1979)		-	Burao
Declaration of Range Development and Management Act (1979)	-	-	National
Northern Range Lands Development Project (1976-1985)	grazing reserves	-	Northern regions (Somaliland)
Five Year Development (1982-1986)	Earth reservoirs Shallow wells Deep boreholes	500 250 250	-
Five-year development plan 1982-1986	Permanent spray races Mobile dips Mobile sprayers	20 50 400	For small stock Cattle
Central Rangelands Development Project (1980-1986)	grazing reserves, boreholes etc.	-	Mudug, Galgadud, and Hiran regions

Source: Adam (1985) and Najim & Briggs (1992)

The implementation of these ambitious and modern projects to improve animal production and exports led to sarcastic reference that the government treated animals better than Somali citizens who many of them did not have access to potable water (Little, 2003, p. 42). However, some of these projects were largely successful while others were mismanaged, albeit most projects were mismanaged towards the 1980s when government institutions showed cracks that proceeded their collapse (Najim & Briggs, 1992; Little, 2003). Obvious mismanagements included that clans allied with the Barre regime received preferential access to water facilities and seasonal grazing zones (Little, 1996; Little, 2003; Leeson, 2007). Initially, as a result of the livestock sector developmental programmes, including the successful implementation of the rinderpest eradication campaign in the mid-1970s, the volume of cattle export had increased from 36,000 (heads) in 1960 to 100,000 in 1980s (Najim & Briggs, 1992). See Figure 2.2. In this period, Berbera port had also emerged as the leading port in live animals' exports (especially sheep and goats) globally (Brayden, 2001 cited by Holleman, 2003).

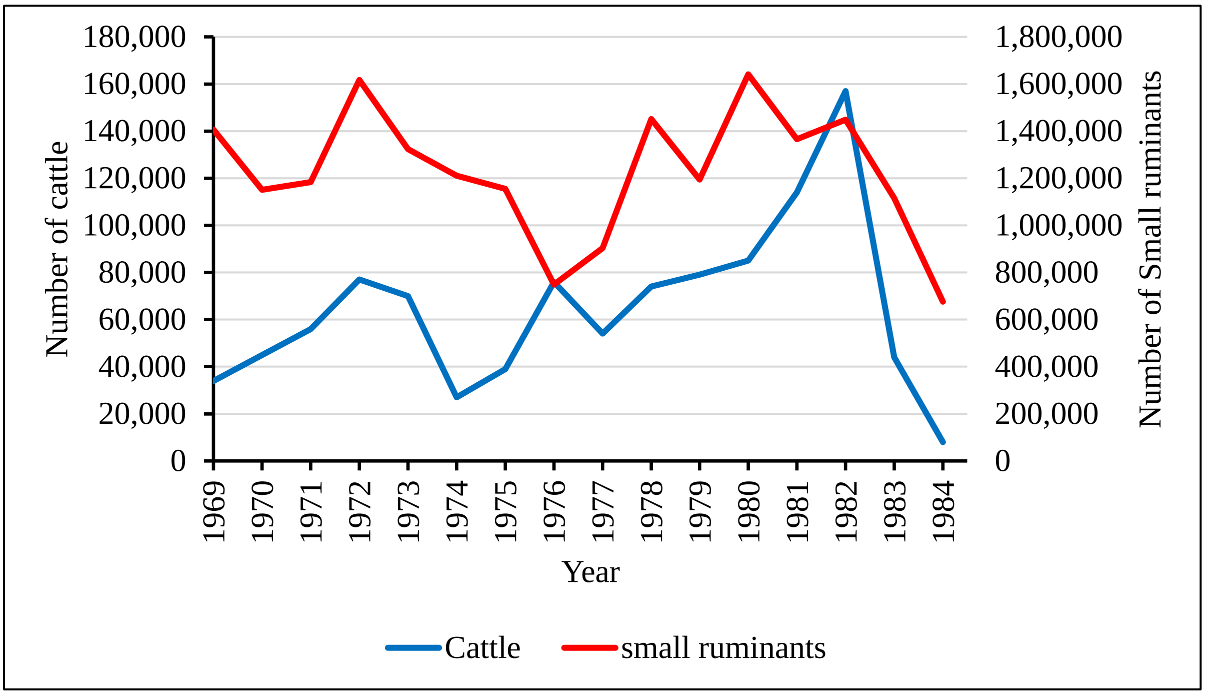

Figure 2.2: Livestock exported from Somalia to the Gulf countries during 1969-1984

Source: Author's own analysis based on data from John Holtzman and Central Bank of Somalia (cited in Samatar *et al*. 1988)

Figure 2.2. shows a decline in livestock exports in the early 1980s. Scholars disagree on the interpretation of the decline. Some scholars interpreted the decline as stagnation of livestock exports due to poor government policies (Holtzman, 1982; Mubarak, 1996). Other scholars such as Samatar *et al*. (1988, p. 94) state that the decline did not mean 'absolute decline in Somali exports as a whole' and neither that other livestock exporting countries outcompeted Somalia exports since the decline started long before other livestock producing countries such

as Australia entered the KSA market. One plausible explanation for the decline could be the imposition of livestock bans by the KSA in this period.

Despite the rinderpest eradication campaign initially convinced the importing countries that Somalia’s cattle were free from rinderpest disease, KSA imposed a ban on Somalia cattle exports claiming that it discovered rinderpest disease in 1983 (Jamal, 1988; Marchal, 1996). A claim that Somalia refuted, believing it had a political motive (Najim & Briggs, 1992) since KSA was against Somalia’s socialist policies and also made efforts to reduce the dependence of the Saudi market on high price livestock exports from Somalia. Other than cattle exports from Somalia which KSA banned from 1983 to the time of this writing, 2019, the few bans imposed by KSA on Somalia livestock exports did not last more than a few months. For example, KSA imposed a ban on small ruminants in late 1983 and lifted early 1984 (Jamal, 1988). Arguably, Somalia's government polices including improvement in animal health through nation-wide livestock vaccination campaigns, treatment and reconditioning of animals in the quarantine station in the holding grounds and final checking of animal health before exit in the Berbera quarantine facilities contributed to reduction of the unfriendly KSA bans on Somali livestock exports.

It is important to note that scholars do not agree on the impact of government policies on the export livestock trade. Some state that the nationalisation and unfriendly government policies negatively affected the export sector (Mubarak, 1997; Little, 2003; Leeson, 2007). Others see that livestock export was not considerably affected by the nationalisation as it was conducted in free-market setting (Samatar *et al*., 1988; Jamal, 1988). A good case in point is that Samatar *et al*. (1988) reported an increase in the number of livestock merchants in Hargeisa and Burao markets from 60 in 1973 to 254 in 1983, most of the new merchants who moved to the livestock exports were entrepreneurs who had been affected by the nationalisation policy. Jamal (1988) also reported that when state fixed and controlled export livestock price, through the commercial bank, still the producers, exporters, and importers freely negotiated on the livestock price. Jamal continued to state that, unlike other African countries that established marketing boards that controlled prices for agricultural products, Somalia did not have a marketing board for its livestock trade. In contrast to the understanding that livestock exporters did not make profits due to the state controls in livestock prices in the 1970s and 1980s, Samatar *et al*. (1988) reported that despite commercial bank controlled livestock prices through

LC, livestock exporters who operated in Hargeisa and Burao markets and exported through port of Berbera made profits up to the late 1980s.

2.2.3 Livestock trade after the collapse of the state (from 1991 onwards)

After the collapse of the government, livestock development projects such as grazing reserves, holding grounds, animal certification, and vaccination fell in private hands. Gaani (2002) rightfully stated that any progress made on the development of rangelands, livestock production and marketing since the colonial period had been reversed after 1991. The question, therefore, is what statelessness situation means for the livestock exports in the Berbera corridor, the most vital and historic Somali trade corridor. This is the question that this work intends to contribute to. Some scholars seem to have romanticised the impact of the collapse of ‘repressive’ and ‘restrictive’ state on the Somali economy, including livestock (Mubarak, 1997; Little, 2003; Leeson, 2007). These accounts are based on the observation that in the wake of state collapse, Somali livestock exports did not collapse but continued. For example, Somalia cattle exports in the southern corridor re-directed towards Kenya and doubled between 1991 and 2000 (Little, 2003) (Figure 2.3).

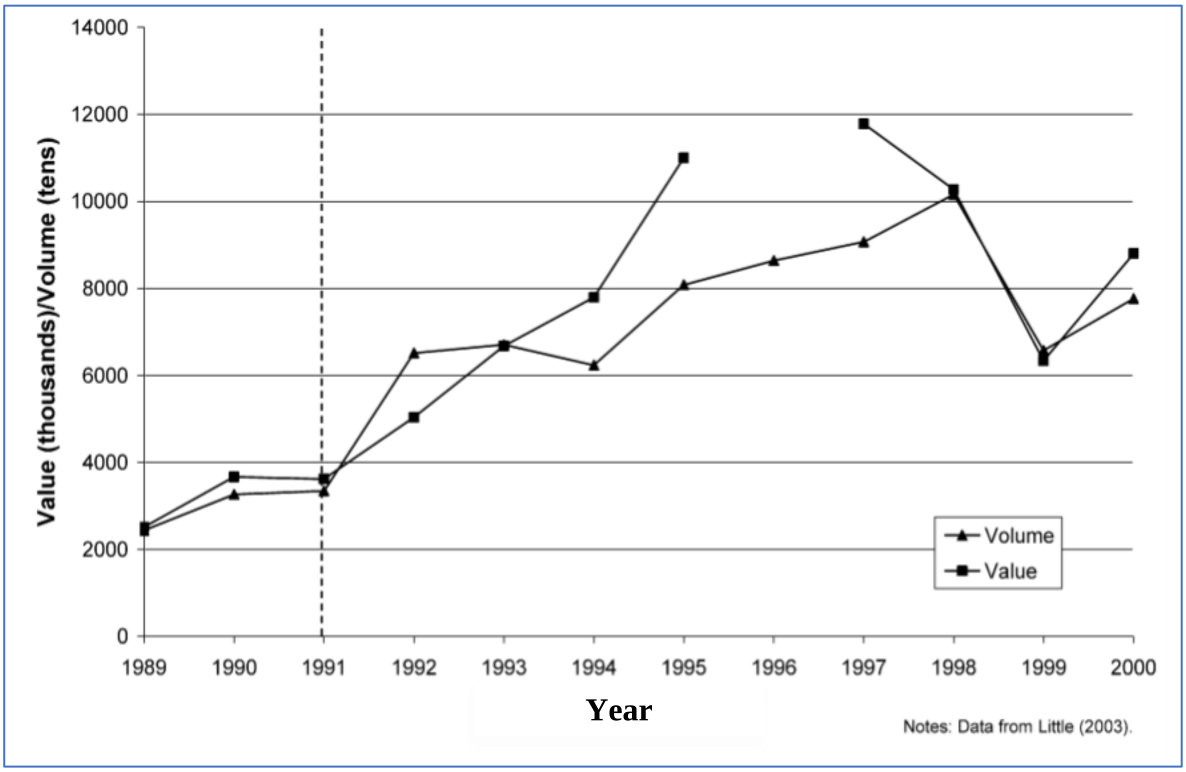

Figure 2.3:Volume and value of cross-border livestock trade between Somalia and Kenya from 1989-2000.

Source: Little, 2003 cited in Leeson, 2007

livestock trade in the Berbera corridor (Ethiopia-Somaliland-Arabia) also seems to have benefited from the state collapse. Six years after the resumption of livestock exports from Berbera, the volume of exports exceeded pre-war records in 1997 (Holleman, 2003; Little, 2003; Leeson, 2007). However, whether an increase in volume was/is an indication of performing livestock export sector, as interpreted by some scholars and practitioners, is an issue that warrants a cautious response. It is worth noting that in the past twenty-eight years, since the breakdown of Somalia's central state, ban on overseas livestock exports from Somalia (including Somaliland) has remained in effect for almost half of the time (1998 to 2009 and 2016 to 2019) (also see Mtimet *et al*., 2015). Other important questions such as what factors are behind the increase in livestock exports or the conditions in which the increase in export volume took place and who has benefited from the reported increase in export volumes, or generally post-war livestock exports, remain inadequately addressed.

Some scholars and practitioners have overemphasized the performance of Somalia's stateless and unregulated economy. Mubarak (1997, p. 2030) states that in many ways disappearance of state institutions was a blessing for the markets. He further states that the Somali economy suffered more from droughts than from the absence of state institutions. Similarly, Leeson (2007, p. 689) stated that statelessness opened up opportunities for the Somali progress due to 'renewed vibrancy in critical sectors of Somalia's economy'. In contrast, Gaani (2002, p. 50) states that 'Somaliland livestock export trade suffered from institutional crisis and an unregulated environment'. Mugunieri *et al*. (2014) also stated that Somaliland livestock export is characterised with an underdeveloped legal framework and higher transactional costs. One source of such inconsistency could be due to limited research in the Somali economy resulting to some researchers making assumptions that could be inconsistent in revealing the truths.

After 1991, Somaliland economy quickly recovered from the war and towards the late 1990s, the volume of exports and imports through the Port of Berbera were twice as high as before the war period in 1988 (Ahmed, 1999). In 1997 an estimated 2.8 million heads of animals (Figure 2.4) were exported through the port of Berbera (Holleman, 2003). What triggered this increase is a question that has not been adequately addressed. As previously mentioned, since the colonial period increase in export livestock trade had little connection with the presence or absence of state interventions or policies. More importantly, only a few researchers such as Gaani (2002) linked the uncontrolled increase in livestock exports after 1991 with shocks such as the ban on livestock exports that later affected the livestock exports from Somalia. Consequently, there are two premises that need to be considered and understood. Firstly, between the 1970s and late 1980s most livestock exports through the port of Berbera originated from the Somalia interior due to the closure of Somalia-Ethiopia border. Secondly, after 1991 over 50% of livestock exported through the port of Berbera were coming from Ethiopia. In view of these, it can be argued that there was no significant increase in real Somalia's livestock exports through Berbera. Rather Somalia/Somaliland has become a transit route for livestock exports from the neighbouring countries, especially Ethiopia.

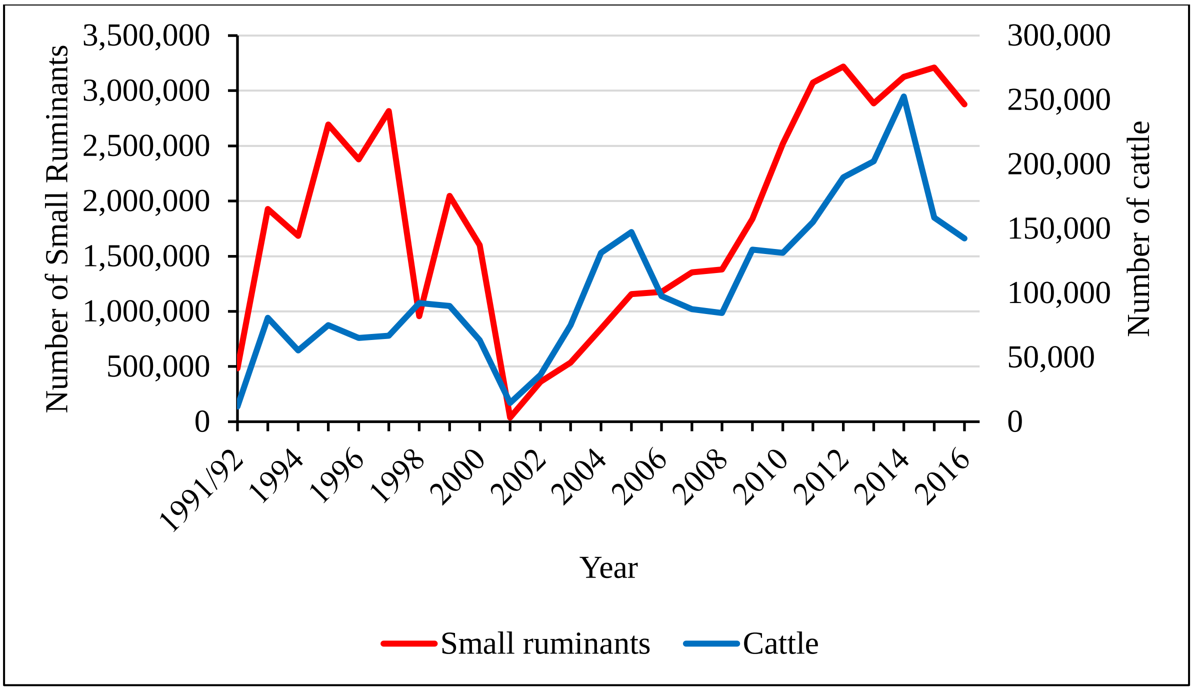

Figure 2.4: Livestock exported from Berbera port to Arabian Peninsula markets after the breakdown of central government (1992-2016).

Source: Author's own analysis based on data from Holleman 2003 and Somaliland Ministry of Finance (2018).

As rightfully stated by Bradbury (2003, p. 16), 'in the absence of government, Somalis suffer the indignities of statelessness with restrictions on their ability to travel internationally'. If Somalia's people live with the disadvantages of statelessness, how has Somalia's international trade has overcome these disadvantages and restrictions? Is it not the same Somalis whose international travel have been restricted that are behind the international livestock trade?

The first major shock that served as a litmus test for the stateless livestock exports took place in 1998, six years after the collapse of the central government. Livestock importing countries imposed a ban on livestock exports from Berbera due to the Rift Valley Fever (RVF) disease outbreak resulting in a 64% reduction in the volume of livestock exports (Gaani, 2002). The ban affected all livestock originating from the Horn of Africa (Knips, 2004). The importing countries imposed a second ban on livestock exports from Somalia ports in 2001 resulting to a 98% drop in the volume of livestock exports from Berbera, from 2 million heads to only 50,000 heads (Eid, 2014). As livestock trade has become unregulated after 1991 risks have increased. A veterinarian interviewed by Gaani (2002, p. 50) reported that 'out of seventy livestock traders whom he used to offer services, only nine are now in business and they are all close to bankruptcy', due to challenges arising directly from the unregulated environment.

A study on the political economy of livestock policies in Somalia reported that all key policy-making actors agreed that lack of regulations, most importantly in animal health and certification, is the most important policy issue facing Somalia's livestock exports (Leonard, 2008). Some researchers argue that it is the unregulated environment that has attracted livestock exports from Ethiopia to Somaliland. For example, Little et al. (2015, p.413) reported that importers prefer Somaliland and the port of Berbera due to the absence of 'bureaucratic red tapes and costs. It is also believed cattle markets moved from Ethiopia to Togwajale market in Somaliland, due to Ethiopia's government policies such as confiscation of contraband animals (Umar & Baulch, 2007; Eid, 2014). State policies can indeed influence the direction of livestock flow, but it is also true that non-state factors such as the physical and environmental factors influence the direction of livestock flow by modulating the cost of doing trade.

In summary, the cost of livestock trade has increased due to the higher risks in the livestock exports including that traders export livestock in the absence of commercial banks, letters of credit and insurance systems as also observed by Drysdale (2000). In the absence of commercial banks and letters of credit, Somaliland livestock traders exported livestock without price guarantees and accepted whatever price their Arab partners offered (Gaani, 2002). Gaani also argued that uncontrolled livestock exports from Somalia ports triggered the woes in Somalia livestock exports in the import markets in 1998 and 2001. Most of the challenges that have faced Somali livestock trade and, the HoA in general, are institutional related. Therefore, the key questions are: do state and informal institutions really matter in the economy? And which institutions matter? The next section reviews the literature on the debates and theories on the role of formal and informal institutions in the economy.

2.3 Evolution of Institutional Theory in the Economy

Hess (2004) reported that in contrast to the mainstream economists, who emphasised less on the institutions, Karl Polanyi at his time was one of the pioneers in conceiving the role of institutions in the economy and called his approach as the substantive. Polanyi criticised that seeing the market economy as rational (one that is independent of the man and his environment) is a fallacy (Jessop, 2001). In summary, Polanyi rejected the assumptions (such as rational economic men and self-regulating markets) held by classical and neoclassical economists about the market and trade and he argued that the rise of laissez-faire in the 19th century disembedded markets and trade from its institutional context. Like Polanyi, regulationists reject the assumptions held by the classical economists and suggest that institutions have a role in economic structure and facilitation (Jessop, 2001).

Classical and neoclassical economists assume ‘rational’ and ‘self-centred’ behaviour of market actors who rationally calculate their gains. Therefore, they advocate free market and are opponents of state interventions (policies and regulation, among others) in the economy which they assert that it can produce market imperfections. Few economists, however, accepted the notion that modern economics broke away from institutions. Majority of economists assert that the role of institutions (particularly nonmarket institutions such as social relations) still exist in the modern economics and not lesser than the role of social institutions in the pre-capitalist markets only that it has become subtle (Granovetter, 1985). Since the late 1970s, different economists have developed a new interest in the economic analysis of institutions and this has since become what is known as the new institutional economics (NIE) (Granovetter, 1985). New institutional economics (NIE) incorporated the theory of institutions in economics and abandons the assumption of ‘institution free theory’ held by neoclassical economics (Williamson, 1975; North, 1993; Williamson, 2000). Institutions are required to guide reasonable behaviour of the economic actors, reduce the cost of transaction, negotiation and monitoring, give confidence to the economic actors and become solution to the coordination problems (Loasby, 2001). Fraudulent and anti-competitive behaviours lead to market failures (Rodrik, 2000).

Market institutions, non-market institutions and political institutions are three types of institutions that are important for market economy. Important market institutions include contracts, property rights, regulations, insurance and trust to mention a few. Markets are the most important institutions in the capitalist economies and are arenas of social interaction where coordination problems can arise unless there are institutions to solve them (Beckert, 2009). Other than the market institutions, economy is also embedded in non-market institutions such as social relations and trust which sometimes produce desirable outcomes such as social cohesiveness and other times undesirable outcomes such as use of public office for a private gain (Rodrik, 2000, p.5-6). There are also political institutions; in modern society, the state is an important political institution that can shape the institutional environment and according to the contractarian perspective, state institutions evolved through social contract between the society and the state as the former delegates the latter for social order and protection and because of these government institutions have become important in modern world (Casson *et al*., 2010). Democracy and authoritarianism are other higher-level institutions that influence political, economic and social institutions of a country (Rodrik, 2000).

2.4 Research Gaps

The fall of Siad Barre's military government in 1991 made Somalia the first stateless country in modern history. Despite some state institutions re-emerging in Somaliland and Puntland, they 'remain weak at best' (Leeson, 2007, p.695). Livestock export is the most important economic activity in the stateless Somalia and is concentrated on three corridors: Berbera corridor (Ethiopia-Somaliland-Arabia trade route), Bossaso corridor (South-central Somalia-Bossaso-Arabia trade route) and Southern corridor (South-central Somalia-Kenya trade route) (Tempia *et al*., 2010). Berbera corridor is one of the major arteries for the Horn of Africa livestock trade (Umar & Baulch 2007).

The book by Little (2003) titled '*Somalia: Economy Without a State',* gives in one the publications that gives a detailed of stateless livestock trade in the Somalia–Kenya corridor. However, the Berbera corridor has never received systematic scholarly attention on how trade is conducted under conditions of statelessness. Berbera corridor is not only different from the Southern Somalia- Kenya corridor in terms of geo-economics but significantly differ in the size and nature of trade. Little (2003) rightly cautioned against generalisation in the Somali case. Therefore, this study has empirically investigated "stateless" livestock trade in the Berbera corridor after 1991 and in doing so expected to contribute to the scholarly knowledge of economies in stateless Somalia and similar areas of limited statehood.

Since the collapse of central government institutions in Somalia, studies (largely reports), focused on livestock trade in the Berbera corridor. However, in these studies institutions received little attention except (Gaani 2002) and Mugunieri *et al*. (2008). The former study focused on regulations in livestock trade while the latter was an appraisal of institutions supporting in Somali livestock trade.

Another important gap is that due to the scant systematic and detailed studies on stateless livestock trade in the Berbera corridor and blanket generalisations of observations made from non-livestock economy to the livestock trade despite the two are dissimilar, there are few policy options available for policy makers and development economists and partners. As cautioned by Jamal (1988), faulty analysis of the Somali economy can lead to faulty policy prescriptions.

The current study, therefore, not only builds on existing body of literature but also fills an important gap by analysing how absence of central state institutions (policies, regulations, banks, certification, holding grounds, vaccination) affect export livestock trade in the Berbera corridor and the role (and the limits) of informal institutions (norms, traditions, practices, procedures, kinship) that facilitate the trade in the absence of formal institutions. Furthermore, this study presents a wide range of policy options and recommendations based on empirical evidence for policy makers in Somaliland that can have wider applications for livestock trade in the Horn of Africa conducted under conditions of stateless or limited statehood.

CHAPTER THREE

FROM TRUST TO OLIGOPOLY: INSTITUTIONAL CHANGE IN LIVESTOCK TRADE IN SOMALILAND AFTER 1991

Abstract

From the 1980s Somalia was in the grip of a looming civil war and formal institutions were weak and corrupt, which affected livestock exports. Livestock exports from northern Somalia, now Somaliland, resumed in the early 1990s in the absence of formal institutions and by late 1990, they were back in full swing. Some have made assumptions about the performance of informal institutions in the economy by interpreting the rapid expansion of livestock exports from the port of Berbera in the absence of formal institutions to be an indicator of a performing post-war export sector. This study employs an institutional approach, informed by in-depth interviews and personal histories across a wide array of actors in the livestock export trade. Informal institutions have provided governance in the livestock export trade in the absence of formal institutions. However, coordination problems and other crippling challenges that have confronted livestock export since 1991 attest to the fact that informal institutions cannot be a substitute for formal institutions in the complex international trade. Somaliland had reinstated some formal institutions by the mid-1990s. However, the role of these institutions in the international livestock export trade is very limited due to their political status. Meanwhile, in the domestic economy, the interaction between formal and informal institutions has restructured the post-1991 livestock export trade.

Keywords: Institutions, informality, livestock trade, Somaliland, state

3.1 Introduction

Central government institutions vanished in 1991 following the fall of the Siad Barre regime. Since then, the role of government institutions in the livestock export trade has been virtually non-existent or relatively ineffective where they have been revived.[9] Despite this, Somalia's post-war economy, including livestock export, has been treated by some as a poster child of an exceptional case of an economy that has thrived in the absence of formal institutions (Mubarak, 1997;Little, 2003; Leeson, 2007). The increase in the number of livestock exports has been cited as a case in point of a remarkably performing post-war livestock economy (Little, 2003, p. 37–38; Leeson, 2007; Powell, Ford, & Nowrasteh, 2008). The performance of the post-war economy has been accredited to the deregulated and *laissez-faire* liberal markets that have emerged in the aftermath of the collapse of central government institutions (Mubarak, 1997; Leeson, 2007).

Leeson, for example, proclaimed that in terms of economic development, Somalia provides an experiment in how 'anarchy' may be superior to 'predatory' government institutions (Leeson, 2007) while Powell et al. (2008, p. 856) say that 'the Somali experience …provide[s] insight to the robustness of markets when states collapse'. Mubarak (1997, p. 2028) argues that Somalia's post-war economy suffered more from recurrent droughts than from collapse of state institutions. In the case of livestock export from Somaliland, where Somali livestock export is most concentrated, it can be argued that libertarian scholars overstressed the performance of laissez-faire markets in post-war Somalia, based more on casual observations than on any critical evaluation of the post-war livestock economy including marketing facilities, veterinary care and animal welfare.

Analysts who lauded Somalia's post-war economy fall into two camps: first, US libertarians and select economists who found pleasure in the idea of a stateless and liberalised economy as they saw it happening in Somalia, including Somaliland. Second, academics who studied certain segments of the real economy in Somalia and who saw that there is and was a huge contrast between international discourses and stereotypes that Somalia's stateless economy is not functioning and their observations of a functioning economy which they used as a plausible evidence to counter stereotypes of a failed post-war economy. The interviews I conducted with a wide array of actors in Somaliland's livestock export trade fail to conform to any of these scholarly accounts. Those interviewed stressed that post-war livestock export is characterized by coordination problems, uncertainty, lack of proper health inspections and quality control and oligopolistic, profiteering, export merchants. As a result, the year-round commercial export of small ruminants, the most important species, has collapsed, Somalia's livestock has lost its dominance in the KSA market to other livestock-exporting countries in the Horn of Africa, and accumulation from livestock has shifted to small number of large oligopolies while informal fees and customs duties charged on livestock exports have increased. Those interviewed believed that the ineffectiveness or absence of formal institutions has contributed to these woes. Some were nostalgic about the role formal institutions played in livestock export before 1991.[10] This scenario is best exemplified by the following quote from a livestock exporter who had been in the business since 1954 and who quit the business in 1991 due to the changes in the terms of trade in the post-war period:

> Before the collapse, Somalia commercial bank facilitated livestock export. The bank was based in Mogadishu and had branches in Hargeisa and Burao cities. Through a Somali *wakiil* [agent] in Saudi Arabia, Somali and Arab traders established relationships and negotiated livestock prices. The Arab importer, then, sent LC [letter of credit] through the commercial bank. Upon receiving the LC, the bank advanced 50% of the livestock money to the Somali exporter in Somali shillings. Somalia used the FOB [Free on Board] shipment system in its livestock export. In the FOB, the Somali exporter loaded the livestock; the shipment company issued a Bill of Lading [BOL] and sent the original copy to the Somalia commercial bank while it gave a duplicate copy to the Somali exporter and the chamber of commerce. From the moment the shipment company issued the BOL, livestock ownership was transferred to the Arab importer and the Somali exporter claimed the remaining 50% of the money from the commercial bank which was paid in US [United States] dollars…it took few days to get the money... these arrangements had collapsed in 1991 and the terms of trade have completely changed since then. I quit the business because it was no longer what I knew; it became chaotic with greater risks and uncertainties.[11]

The quote above sums up the role that formal institutions such as the commercial bank and shipment agencies played in livestock export before 1991 and how these formal institutions induced cooperation between economic actors and reduced uncertainties and risks. After 1991, livestock export relied on informal institutions or ineffective formal institutions. In the light of the prevailing understanding that Somalia's livestock export has done extraordinarily well in the absence of formal institutions and the assumptions made about the optimality of informal institutions, the objective of this chapter is to empirically investigate livestock export from northern Somalia, now Somaliland, with special emphasis on the effects of post-1991 institutional changes (both formal and informal) on the livestock export trade. As stated by (Helmke & Levitsky, 2004, p. 726), 'good institutional analysis requires rigorous attention to both formal and informal rules.'

This chapter argues that Somaliland's post-1991 livestock export has faced a host of crippling challenges and a lack of development which threaten its competitiveness and sustainability and that these problems are in large measure a product of absent or ineffective formal institutions. The chapter also argues that despite Somaliland's reinstatement of some formal institutions, export livestock trade remains largely informal and stateless, and not supported by state/formal institutions such as banks, contracts and enforcement. Other primary roles such as export livestock health inspection have been delegated to the private sector, while the mandate for national livestock disease surveillance and vaccination has been taken over by international non-governmental organisations. Finally, the chapter argues that despite informal institutions providing governance in the post-war livestock trade, they fall short in the complex overseas livestock trade.

To support these arguments, this chapter identifies and analyses formal and informal institutions in the export livestock trade. Livestock export from Somaliland is distinctively different from other post-war Somaliland economic sectors. First, unlike other key economic sectors such as import, remittances, telecommunications or the domestic livestock trade, livestock export to the Arabian Peninsula countries, KSA in particular, is regulated by formal institutions of the receiving countries.[12] Second, there are international standards and guidelines that govern livestock export and which are monitored and appraised by international institutions. The Somalia/Somaliland livestock export trade should be understood in this context. In its analysis of institutions in Somaliland's livestock export, this study finds useful and adopts an institutional analysis approach (Assaad, 1993; Meagher, 2007) to focus on formal and informal institutions in livestock export trade after 1991, their emergence and persistence, the interests they serve, the interaction between the formal and informal and their impact on the livestock export trade.

This analysis has three overlapping contributions: first, it bridges the gap between scholarly discussions of post-war economy in the absence of formal institutions and the lived experience shared by the people on the ground in the study area. Therefore, it contributes to the literature on formal and informal institutions in Africa. Second, the analysis is relevant for development economists and policy practitioners in Somaliland and elsewhere in Africa to understand the potential and limits of formal and informal institutions in economic growth and development. Third, livestock exports from Somalia take place along three corridors, two sea corridors (Berbera and Bossaso) to the Arabian Peninsula across the Gulf of Aden and one land corridor to Kenya (Tempia *et al*., 2010). Based on a detailed field study on cattle trade in the Somalia-Kenya corridor, Little (2003) pioneered the analysis of Somalia's stateless livestock economy. However, the livestock trade Berbera corridor, overseas corridor, is not only different from the Kenya corridor, regional land corridor, in terms of geo-economics but also differ in the nature of trade, the actors and institutions. In his book, Little (2003) cautioned against generalizations on the Somali post-war economy, therefore emphasizing the need for more localized studies. In view of the foregoing background, this chapter analysed institutional dynamics and their influence on export livestock trade in the Berbera corridor.

3.2 Material and Methods

3.2.1 Study Area

Somaliland is located in a semi-arid area in the north of the equator with irregular rainfall that is unevenly distributed in space and time, and ranges from 100-450 mm per annum.[13] It consists of three main topographic zones: the coastal plains, coastal range and *Haud* plateau.[14] The study area has four seasons: two dry seasons and two rainy seasons (Ministry of Planning, 2016). The first dry season (*Jilaal*) normally last for 3 months, December, January and February, while the long rains (*Gu*) occur in March, April and May. The second dry season (*Hagaa*) occur in June, July and August, and the short rains (*Deyr*) fall in September, October and November.[15] These seasons influence livestock production, vegetation and overall economic performance. Pastoralism and agro-pastoralism are the two main livelihood activities in Somaliland. Small ruminants (sheep and goats) and larger ruminants (cattle and camels) are the primary livestock species reared in the area, with over 20 million livestock population as reported in 2013.[16] Unlike other pastoralist groups in Africa where subsistence economy is stronger, Somalis are engaged in substantial livestock export both cross-border trade in the Horn of Africa and overseas exports to the Arabian peninsula (Abdullahi, 1990). Small ruminants (sheep and goats) constitute the bulk of livestock exported from Somalia. For example, out of three million heads exported through the port of Berbera in 2014, 98% were small ruminants (Ministry of Planning, 2016). Cattle are the second most exported species after small ruminants. Notably, not all livestock traded in Somaliland's Hargeisa, Burao and Togwajale markets and exported through its principal port of Berbera originate from within its borders. The predominately pastoral and agro-pastoral land-locked Somali and Oromia regions of Ethiopia had historically relied on the port of Berbera to access international markets.

3.2.2 Study Sites

The study selected Hargeisa, Burao and Togwajale markets as its primary study sites. Hargeisa and Burao markets emerged during the colonial period and remained dominant terminal markets in the export livestock trade in the Somali peninsula (Samatar *et al*., 1988) and are mainly for small ruminants' trade. The Togwajale cross-border market emerged in 2000 and has become a dominant cross-border trade market which specialises in the cattle trade. In the Berbera corridor, live animal exports from the pastoral and agro-pastoral areas in land-locked neighbouring Ethiopia, south-central Somalia and Somaliland flow to the port of Berbera for export to the Arabian Gulf states (Figure 3.1).The selection of the three markets was based on the previous knowledge in the study area and a literature review that provided a baseline on the markets and their specialisation, market participants and trade routes. The selected markets are the only terminal markets in the study area. A terminal market is a 'final market where buyers take the animal out of the pastoral trading system through purchase by agents [of exporters] who truck or ship animals overseas' through ports of exit (Umar & Baulch, 2007, p. 21). A large number of animals for export from the bush, primary and secondary markets in Ethiopia, south-central Somalia and Somaliland are transported or trekked mainly along mainly specific trade routes and transacted in the terminal markets. Large-scale-livestock traders (middle traders, individual exporters and export companies) operate from the selected markets. Other key actors in the livestock trade value chain such as different types of brokers, transporters, service providers and regulators are also found in the selected study markets. Livestock markets '*seylado'* are places of interaction, relationships, transactions, timeframes, routines, procedures, norms, rules and regulations (cf. definition of a marketplace in Bestor, (2001) and Musa and Schwere (2019).

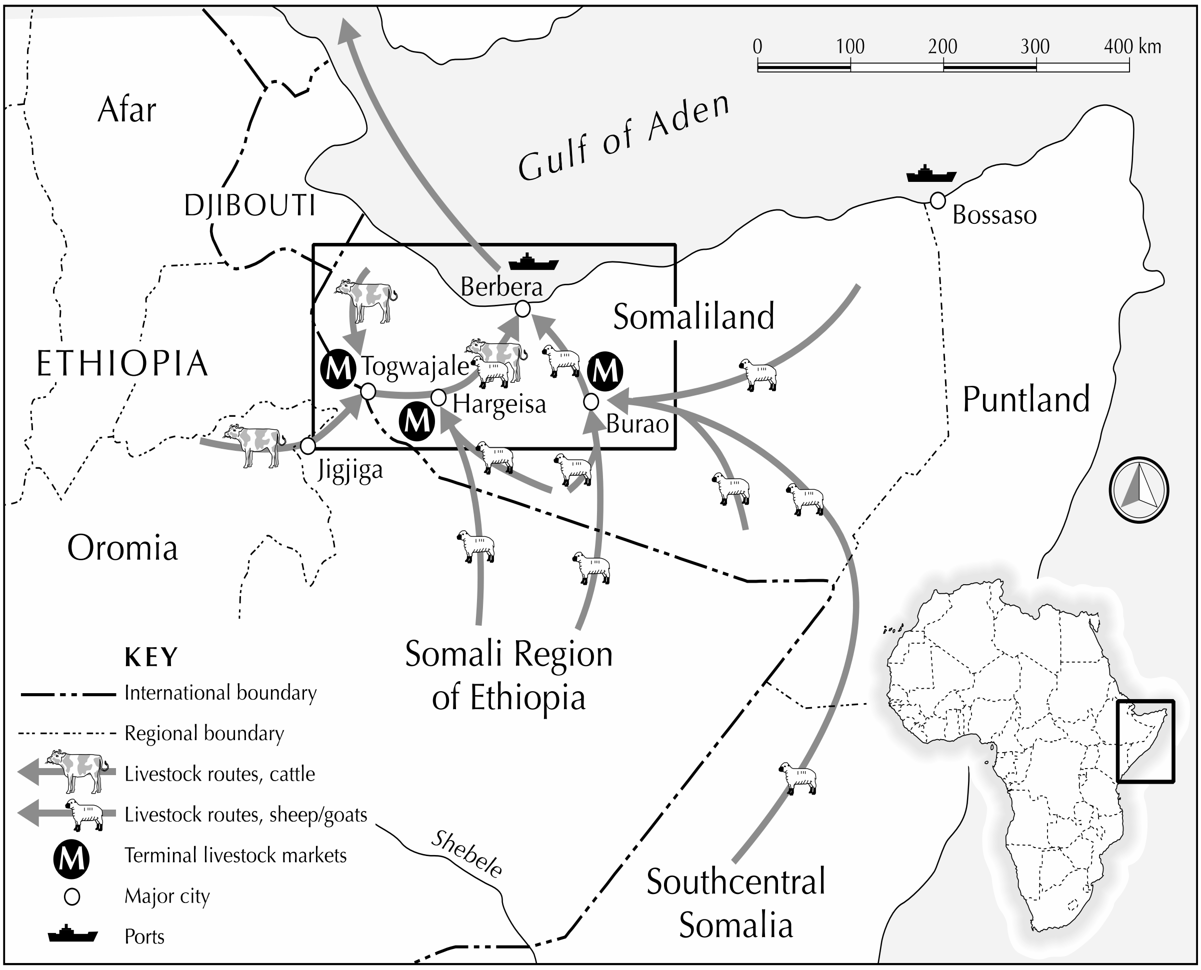

Figure 3.1: The study markets and feeding corridors

3.2.3 Sampling Procedure

A combination of purposive and snowball sampling techniques was employed for this study. Purposive sampling was used to select the study sites, studied livestock species, the data collection periods and research participants. In qualitative research, participants and cases are selected using purposeful sampling because the researcher has reasons to believe that selected participants and cases can yield rich information for the study (Patton, 1990). Regarding the sites, the purposive selection of the markets was based on their specialisation and geographic location. The cross-border Togwajale market is a daily market that is located in the border between Somaliland and Ethiopia and attracts cattle from Somaliland and the Somali and Oromia regions of Ethiopia.[17] Both legal and smuggled cattle are sold in the market, therefore it was possible to interview market participants that are involved in the cross-border trade and study institutions and governance of cross-border cattle trade.

Hargeisa market is located in the Somaliland capital and attracts livestock from the Somali regional state in Ethiopia and Somaliland. Hargeisa market specialises in small ruminants' trade and has operated in its current location since the mid-1970s. Burao is located in the second capital city of Somaliland and attracts livestock from Somaliland, Somali regional state in Ethiopia and south-central Somalia. Like the Hargeisa market, the Burao market specialises in small ruminants and has operated in its current location since the mid-1970s. In addition, the port of Berbera was selected as it is the principal port of exit for livestock exports in the Berbera corridor. This study focused on small ruminants and cattle, because these are the two most traded and exported types of livestock in the study markets.

Actual study was preceded by a reconnaissance survey that involved interviews and observations at Hargeisa, Burao and Togwajale markets. The pre-field visit guided important decisions on selection of the study sites, animal species and data collection methods. As Blommaert and Jie (2010) stated, pre-fieldwork preparation is important to understand possible contexts in which objects occur and lowers risks during the main fieldwork. Finally, to study institutional dynamics and their influence on livestock export trade in the study sites, the period after 1991 was selected as the main study period because this is when Somalia's central state collapsed and since then Somali economy has been characterised with statelessness or weak statehood. Purposive sampling was also used to select key informants including traders, brokers, transporters service providers and local officials on livestock trade routes for interviews on institutions and their dynamics and influence on livestock export trade.

Snowball technique was used to sample participants including former livestock traders, service providers and government officials. Snowballing or 'chain-referral-sampling' starts with initial subjects selected based on convenience, then the initial subjects recruit other subjects that qualify as research participants (Heckathorn, 2011). Purposive sampling was used to make the initial contact which was requested to recommend a second contract. The chain referral useful not only for recruiting research participants but also for building trust with research participants.

3.2.4 Methods

This chapter used a quantitative approach. The research question on institutional dynamics in the last three decades could best be studied with qualitative methods. Understanding complex research phenomena and reconstructing institutions in the Somali economy and their effects while considering different perspectives, history, personal background and socio-economic status of the research participants that could form the basis for the interpretation of the data, required qualitative methods (Creswel, 2009). In addition, qualitative methods provide a way to achieve ‘thick description’ which is describing the phenomenon under study in sufficient detail as a way of achieving external validity by allowing others to evaluate the extent to which the conclusion drawn from the described phenomenon is transferable to other times, settings and situations (see Geertz, 1973; Lincoln & Guba, 1985).

Different qualitative data collection methods such as interviews (key informant, informal and oral histories), focus group discussions, stakeholder analysis and participant observations were employed. For the interviews, a hundred and twenty different interviews including informal,

This chapter is informed by three months of intensive field investigation carried out in Hargeisa, Burao, Togwajale and Berbera towns and markets between March and May 2018. Fifty-seven different types of interviews including key informant, oral histories and informal interviews with a wide range of actors in the livestock export trade was conducted for the chapter. Those interviewed included different types of middle livestock traders (*Jeeble*, *faashle* and *caashoqushi*), exporters (*shirkad),* different types of brokers (*dilaal, ga'an jare)*, agents (*wakiilo)*, transporters, veterinary professionals, investors, livestock market authorities, the Chamber of Commerce and relevant government officials from different occupations such as former Ministers, Ministry of Finance and Customs Department, Directors and Heads of Departments, Berbera Port Authority, heads of Hargeisa and Burao markets and the management of animal quarantine stations (Table 3.1). The interviewees represented different clans in the livestock trade, livestock trade corridors and species.

Table 3.1: Informant interviews conducted for chapter three

Interviewed informants	Location (n= number of interviews)
Government officers (former and current)	Hargeisa (n= 3)
	Burao (n=2)
	Togwajale (n=1)
	Berbera (n=1)
Veterinary professionals	Hargeisa (n=2)
	Berbera (n=1)
	Togwajale (n=1)
Livestock exporters (former and current)	Hargeisa (n=4)
	Burao (n=1)
	Togwajale (n=4)
Middle traders	Hargeisa (3)
	Burao (3)
	Togwajale (4)
Brokers (*dilaal*)	Hargeisa (n=3)
	Burao (n=4)
	Togwajale (2)
Transporters	Hargeisa (n=3)
	Burao (n=2)
	Togwajale (n=1)
Oral histories	
Former livestock exporters	Hargeisa (n=3)
Veterinary professional	Hargeisa (n=2)
Senior broker/wakiil to jeeble	Burao (n=1)
Informal interviews	
Livestock broker (dilaal)	Hargeisa (n=2)
Livestock producer	Hargeisa (n=2
	Burao (n=2)

The interviews were conducted in the study sites. However, during the interviews, a multi-sited approach was employed to understand the mobility of livestock and what happens in the livestock trade routes, corridor, and import markets outside the study markets. According to Burawoy *et al*. (2000), if one wants to deeply understand the transnational phenomenon, then she or he must embrace the mobility of things. Transnational dynamics influence livestock export trade in Somaliland and therefore, confining data collection to the study markets without considering what happens outside could have meant missing important information. Research participants were well informed about issues outside the livestock markets that influence dynamics in the markets and generally livestock export trade.

Most of the observations on how livestock actors conducted on their daily business, the institutions that supported them and constraints they faced were made in the morning hours, while most of the interviews were conducted in the afternoon when the interviewees had a break from the business transactions in morning hours. The interviews were conducted in Somali language and most of the time immediately transcribed into English, mainly, in order to reflect on the data and compare it with other interviews. After every market visit, the day's observations were compiled and reviewed to determine the need to follow up with interviews.

For this chapter, the interviews were triangulated with one focus group discussion conducted for a group of ten female cattle traders (known as *caashaqushi*) in the Togwajale market. Triangulation is important to corroborate empirical evidence from the study and to provide a comprehensive analysis of the research problem. The discussion focused on the experience of female traders and gender-specific challenges. Focus groups capitalise the discussion between research participants and are often used as a quick and convenient way to collect data from several people simultaneously (Kitzinger, 1995). The chapter was also conducted one stakeholder analysis in the Hargeisa market for a group of ten livestock brokers (*dilaal*). The one-hour workshop was conducted at the office of the Hargeisa municipality in Hargeisa market and focused on actors and their roles and institutions in the livestock trade. Finally, qualitative methods were supplemented with extensive review of literature of reports and published research.

Key informant interviews were conducted with actors who were deemed to have a specialist knowledge on the institutions in the export livestock trade while oral histories were conducted with interviewees who have been in the livestock trade for over fifty years. Interviews were great source of information in the present and past governance in livestock trade. During the morning hours, the interviews were carried out in the livestock markets and government offices while in the afternoon hours interviews were conducted at the tea shops. Interviews were supplemented with participant and non-participant observations in the markets, one focus group discussion participated by twelve female traders (*cashaqushi*) in Togwajale market and one stakeholder analysis participated by twelve brokers in Hargeisa market. Data collection focused on institutions in the livestock both before and after the breakdown of the central state and the influence of institutional dynamics and their influence on export livestock trade in the Berbera corridor. In addition, relevant literature on institutions, stateless economy and livestock trade was identified for analysis to complement the findings.

3.2.5 Data Analysis

Preliminary qualitative data analysis began in the field and continued throughout the research process. Interviews and notes from field observations were transcribed and emerging patterns were reflected on. However, the extensive qualitative data analysis was carried out upon completion of the fieldwork. Data analysis involved transcription of qualitative information gathered from key informant interviews, oral histories and focus group discussions and their importation to NVivo 11 qualitative data management software. The NVivo software was used to read and code the data. Coding involved creating categories and sub-categories based on the patterns and themes that emerged from the data. All emerged categories and sub-categories were exported to MS Word and the output was compiled under respective objectives. Then a detailed description and interpretation of the output were performed while effort was made to identify similarities and differences between the resulting data. The resultant output was synthesized to derive conclusions and formulation of recommendations (Figure 3.2.). The analysis of empirical data was complemented with analysis of identified relevant literature.

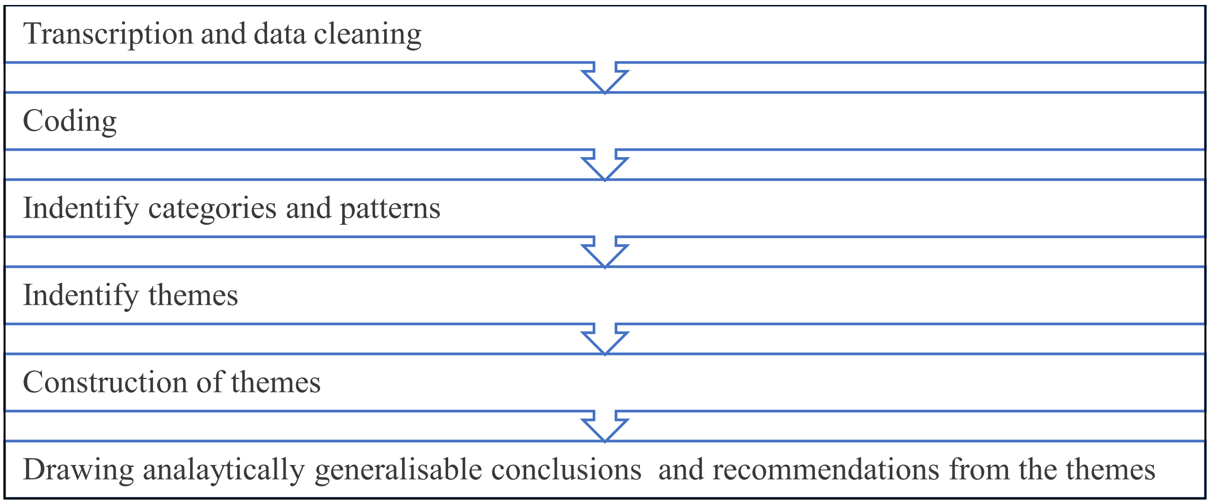

Figure 3.2: Inductive qualitative data analysis procedures

3.3 Results and Discussion

3. 3.1 Formal or Informal? Conceptualising Institutions in Livestock Trading

In contrast to orthodox economists, many heterodox economists and a wide array of other social scientists such as institutional economists, economic geographers, economic historians, sociologists and anthropologists have grown interested in the role of institutions in economic governance and performance (North, 1990; Zukin & Dimaggio, 1990; Amin & Thrift, 1995;

Staber, 1996; Hess, 2004; Granovetter, 2005; Aoki, 2007; Beckert, 2009). Consensus on the interest of institutions has not been matched by consensus on their definition (Nabli & Nugent, 1989b, p. 1334; Helmke & Levitsky, 2004). The standard definition is that formal and informal institutions structure and coordinate human interaction by constraining or enabling behaviour (Nabli & Nugent, 1989a; North, 1981; North, 1990; Helmke & Levitsky, 2004). However, due to the intimate relationship between formal and informal institutions in Africa, and probably elsewhere in the world, the distinction between formal and informal institutions is not always clear-cut (Assaad, 1993; Meagher, 2007; Little *et al*., 2015).

This study adopts (Helmke & Levitsky, 2004) definition that formal institutions are laws, rules, procedures and policies that are 'created, communicated, and enforced through channels widely accepted as official' while informal institutions are 'socially shared rules, usually unwritten, that are created, communicated and enforced outside officially sanctioned channels' or that are not widely accepted as official as stated by Helmke and Levitsky (2004). The authors further suggest distinguishing of informal institutions from weak formal institutions and institutional behaviour from non-institutional behaviour. In the former, they argue that weak institutions (i.e. ineffective in their enforcement and compliance) mean absence of 'stable or binding rules' but this does not necessarily mean informal institutions are present. In the latter, they argue that in order for a behaviour or practice to be considered as an institution it must conform to 'established rules or guidelines', violation of which can trigger sanctions.

In post-war Somalia/Somaliland, distinguishing formal from informal institutions is even more blurred because formal state institutions are not necessarily widely (or internationally) accepted as formal while other institutions such as quarantine stations have been created by the government but are self-enforcing. Moreover, financial institutions such as *hawala* have not been created by the government, neither are they enforced by the government through accepted channels. Therefore, according to the adopted definition, which tries to capture as much information on formal and informal institutions as possible, both quarantine stations and *hawala* and their ilk are treated as informal.

Formal and informal institutions have complemented each other in Somalia's livestock export since the colonial period (Samatar *et al*., 1988). Despite institutional pluralism in the livestock trade, informal institutions such as the trust-based credit systems have played a critical role at the beginning of the value chain (from producer to marketing) whereas formal institutions such as veterinary care, letters of credit, taxation, quarantine and certification have been concentrated at the end of the value chain, once the livestock reaches the local markets until export. The greater formalization of the latter stage in the value chain has largely been driven by the demands of the import countries for quality livestock and also to show compliance to the sanitary procedures of international trade organizations such as the World Organisation for Animal Health (WOAH).[18] A key component of WOAH's international livestock trade sanitary requirements is controlling transboundary animal diseases (TAD) (Thomson *et al.*, 2004) which require animals to undergo quarantine for a period of two–three weeks. Wealthy Gulf countries require livestock-exporting countries to place their animals in quarantine for two–three weeks against TADs including foot and mouth disease, Rift Valley fever, or peste des petits ruminants (PPR) (Joosten, Muzira, & Mintesnot, 2017). In addition, pre-1991 formal institutions played an important role in livestock production and marketing development, though their capacity became increasingly weak in the post-Ogaden War period.

Since 1960, the relationship between Somalia and neighbouring Kenya and Ethiopia had been unfriendly due to the conflict over Northern Frontier District (NFD) and Ethiopia's Ogaden territories. Post-independence conflicts such as the '*shifta* war' in NFD and the Somalia and Ethiopia war over the Ogaden in 1977/78 had interrupted cross-border economic activities, both formal and informal. The border situation changed again after 1991 when livestock export from Somaliland largely started to depend on cross-border trade with eastern Ethiopia (Majid, 2010; Little *et al.*, 2015). This cross-border trade takes place along specific clan-controlled corridors where informal institutions such as guarantors, protectors and informal credit systems, which are founded on trust facilitate flow of livestock to the markets (Umar & Baulch, 2007). However, in the post-war period, overseas livestock trade has also largely become informal.

3.3.2 Pre-war Livestock Trading: Complementarity, Constraints and Criticism

To better understand the discussion on the post-war changes of institutions in the livestock export trade in Somaliland, we must take a closer look at pre-war institutions in Somalia. Scholars who studied Somalia's economic performance, including livestock exports, mainly focus on four periods, starting first with the civilian government period (1960 to 1969). In this period, British Somaliland and Italian Somalia, having gained independence in 1960, united to form a civilian government which was overthrown by Siad Barre in 1969 (Leeson, 2007).

Laitin noted that though some Western scholars saw emerging democracy in Somalia, civilian government institutions were weak and corrupt, for example, ‘most custom duties from Berbera were pocketed by civil servants’ (Laitin, 1976, p. 453). Secondly, under Siad Barre, scholars focus on two periods: the socialist period (1970 to 1979), and the post-Ogaden War period (ca. 1980 to 1990). Lastly, the post-war period takes in the time from 1991 to the present (Laitin, 1976; Samatar, 1987; Samatar *et al*., 1988; Mubarak, 1997; Little, 2003; Leeson, 2007).

3.3.2.1 Institutional performance and trade performance (1969 to 1979)

After a bloodless military coup in 1969, Siad Barre embraced scientific socialism as a development approach, purportedly to end the rampant corruption and poor economic performance of the civilian government (Powell *et al*., 2008). Arguably, this period was the better part of Siad Barre’s regime as major economic development projects were undertaken. Some critique the government’s increased interventions in the economy. However, overall government interventions in the livestock export trade were minimal. As Samatar (1987, 369) explains, the government was unable to control the livestock export trade: the personal relationship arrangements in the trade, government’s fear that interventions would interrupt its main source of foreign exchange and the hostility of KSA, the most important market, to socialism were three factors that explain why livestock export trade remained less affected by interventions of the socialist government. Some of the most ambitious developmental policies and programs to improve livestock production and marketing were implemented in this period.

Discussions on several ambitious and largely effective livestock development projects including the development program of 1971–1973 and the five-year development program of 1974–1978 are found in Najim and Briggs (1992). Extended veterinary services to treat contagious diseases, improvement of animal marketing by establishing livestock marketing infrastructure including the creation of new primary markets to bypass the profiteering of intermediaries between producers and purchasers, the construction of deep water ports such as Berbera and Kismayo, the establishment of 183 grazing/seasonal reserves and holding grounds, quarantine and reconditioning services for livestock exports and the establishment of a national shipping line to improve transportation of livestock and overcome stagnation in livestock export are some of the ambitious and largely effective government policies and development programs implemented in this period. In 1979, the Somali government partnered with a Greek shipping company to establish Somali–Hellenic Shipping Agency (SHSA) which introduced livestock carriers chartered by KSA (Najim & Briggs, 1992). The improved livestock transport, veterinary care and the upgrading of the port of Berbera increased the number of livestock exports and reduced livestock deaths during transport (Najim & Briggs, 1992). Despite slow growth in small ruminant exports and devastating droughts in this period, Somalia remained the leading small ruminant exporter to KSA (Table 3.2).

Table 3.2: Number of small ruminant imports to Saudi Arabia by country 1970–1981

	Livestock heads exported to Saudi Arabia per year					
Country	1970	1971	1972	1973	1974	1975
Sudan	148,705	972,93	112,996	164,885	202,552	91,195
Somalia	778,910	951,066	1,293,284	930,347	806,453	1,002,231
Djibouti	32,369	23,536	20,716	-	2800	6,000
Jordan	-	-	-	-	-	1,355
Syria	-	-	-	-	-	12,662
Australia	2,500	33,560	5,010	9,550	8,000	49,307
	1976	1977	1978	1979	1980	1981
Sudan	137,945	254,700	733,776	387,494	623,853	884,476
Somalia	730,178	514,529	1,422,855	1,150,832	1,247,533	1,155,449
Djibouti	3,336	92,327	3,897	6,200	-	32,383
Jordan	9,425	3,479	4,129	23,349	118,455	618,380
Syria	8,687	23,326	50,745	222,740	149,436	561,685
Australia	189,826	602,716	1,082,426	1,058,559	1,194,020	1,764,940

Source: Holtzman 1982, cited in Samatar, 1987

In the period under discussion, livestock export trade to KSA faced challenges around differences between formal and informal prices. Somalia nationalized its banks in 1975 and foreign currency was restricted to tackle the devaluation of the Somali shilling. Between 1973 and 1981, the Somali shilling was tied to the US dollar (Jamal, 1988, p. 246). However, in the 1970s the value of the Letter of Credit (LC) for export livestock was lower than the price agreements between Somali exporters and Saudi importers (Samatar, 1987).[19] The *Dabadheer* prolonged drought in 1974 was another event that affected livestock production; the numbers of Somali livestock population reduced due to the higher mortality rate of livestock caused by the drought, which in turn reduced the supply of livestock and as a result prices significantly surged. Between 1978 and 1982 the export price (in US dollars) of sheep and goats increased by 47 per cent (Jamal, 1988). Due to higher livestock prices and increasing competition from other livestock-producing countries such as Sudan and Australia, the Somali government, concerned about the loss of foreign exchange from livestock, fixed lower livestock prices (Samatar, 1987). Samatar *et al*. (1988, p. 94) describe how 'a Saudi client wires to the Somali Commercial Bank a letter of credit worth 'X' number of sheep and goats valued at $42 each. The Somali Commercial Bank then advances 50 per cent of the value of the letter of credit in local currency (shillings) to the Somali merchant…'. However, there was a price difference of US$15–30 per head of small ruminant, depending on the grade, between price fixed by the bank and the price negotiated by the Somali exporter and Arab importer.[20] This led to the emergency *farqiya* arrangement in the 1970s.

Despite the government-fixed price of livestock, livestock exporters still made profits. Livestock exporters were able make profits from the *farqiya* arrangement described below (Samatar, 1987, p. 369; Samatar *et al*., 1988, p. 96). The relative profits in the export livestock sector attracted non-livestock businessmen affected by the nationalization and consequently the number of livestock exporters active in Burao and Hargeisa markets increased from 60 before nationalization to 254 after nationalisation (Samatar *et al*., 1988, p. 94). The significant increase in the number of livestock exporters is an indication of limited government red tape and absence of oligopolies in the export livestock sector before 1991.

Farqiya (meaning 'difference' in Arabic) was an informal financial arrangement that started in the 1970s due to the above constraints.[21] Somali and Arab traders negotiated prices that were higher than the official price per head of animal. The Arab trader wired a letter of credit of the official livestock price to the Somalia Commercial Bank while retaining the difference between official price on the letter of credit and the negotiated price, which he paid directly to the Somali trader in Saudi dollars after livestock was sold (Samatar *et al*., 1988).The *farqiya* arrangement was a precondition for the Somali exporter to supply 'quality' livestock to the Arab trader.[22] However, the only reported defaults in the overseas livestock trade before 1991 took place in the *farqiya*. Commenting on this, a former livestock exporter noted, 'if the Arab trader did not make the expected profits or made a loss, he blamed the Somali trader for supplying poor quality livestock and consequently defaulted on the *farqiya'*.[23] As *farqiya* transactions were informal and not legally enforceable, the Arab importer knew that he could get away with defaulting on his partner. Beckert (2009) observed that expecting the exchange partner to default causes a problem of cooperation in the trade. Arguably, the case of Somali informal economy teaches us that informality and cooperation problems in overseas trade are closely associated.[24]

3.3.2.2 Post-Ogaden war period (1980 to 1990): institutional and economic crises

After a fallout with the Soviet Union due to the 1977/78 Ogaden War between Somalia and Ethiopia, Siad Barre abandoned socialism in 1980 (Powell *et al*., 2008, p. 658). Siad Barre accepted International Monetary Fund (IMF) and US trade liberalization policies (Powell *et al*., 2008). Mubarak (1997) states that in this period, Somalia lacked consensus on development policies. As a result, inconsistent and erratic macroeconomic policies confused the domestic market and government policies lost influence and credibility, which led to the emergence of parallel informal institutions. IMF economic reform policies failed in Somalia as in most other African countries (Jamal, 1988). Notable institutional crises that faced Somali livestock export in this period were the devaluation of the Somali shilling, a ban on livestock imposed by KSA and unreliable livestock transport that increased trading costs. Consequently, the profitability of livestock exports plummeted.

Regarding devaluation, from the early 1980s there was a huge difference between the official exchange rate of the Somali shilling offered by Somalia Commercial Bank and the informal exchange rate on the street (Jamal, 1988; Mubarak, 1997). In the mid-1980s, the commercial bank exchanged US$1 for 86 shillings for the Somali livestock exporters while in the informal market $1 was exchanged for 150 shillings, a difference of 64 shillings per dollar (Samatar *et al*., 1988). As argued by Samatar *et al.* in the mid-1980s Somali livestock exporters were still able to make profits from livestock as they exchanged the 50% of their hard currency from livestock that the commercial bank paid in dollars on the informal market. The profits from livestock export started to dwindle by the late 1980s after 'Saudi importers demanded that Somali exporters pay them a commission from the *Farqiya,* and by 1986, Somali livestock exporters who had Letter of Credit (LC) were reluctant to buy livestock from Burao and Hargeisa markets (Samatar, 1987, p. 248).[25]

Another heavy blow to Somalia's livestock exports was the KSA ban on Somali livestock in 1983 due to health concerns (Samatar, 1987; Jamal, 1988). Najim and Briggs (1992) argue that the ban was political as KSA, unhappy with the dominance of Somali livestock in its markets and relatively higher prices of Somali livestock, wanted to shift to Australia. KSA lifted the ban on small ruminants gradually after one year while the ban on cattle remained in force (Samatar, 1987). The ban on cattle remains today and no Somalia/Somaliland cattle are exported directly to KSA. Cattle exports shifted to Yemen and despite the significant reduction in the number of cattle exports, dropping from 157,000 head in 1982 to 40,000 head in 1983 (Jamal, 1988), as of 1987, 'cattle trade was better than small ruminants as cattle holding grounds were full while small ruminant holding grounds were empty' (Samatar, 1987, p. 370). Finally, by the late 1980s, the decline in SHSA services led to a crisis in livestock transport. Samatar (1987) has described the problem in the livestock transport system as follows:

> When livestock ships docked, livestock traders moved their livestock from the hinterlands to Berbera for export, but they did not have assurance that the ship could hold all their livestock. Those who were unfortunate to have their stock left behind often suffered significant losses as result of difficult coastal climatic conditions. No merchant was immune to this potential catastrophe.

Somalia faced serious economic and institutional crises in this period; however, as argued by Jamal (1988: 246) some of these were 'African problems' that faced most of the post-colonial African states. Despite formal institutions becoming weak towards the mid-1980s, they still largely regulated overseas livestock trade, especially small ruminants to KSA. As Helmke and Levitsky (2004: 723) remind us that 'weak formal institutions do not necessarily imply the presence of informal institutions. By the late 1980s economic crisis and growing popular discontent with the government of Siad Barre led to the formation of clan-based armed movements including the Isaaq-dominated Somali National Movement (SNM) and Hawiye-dominated United Somali Congress (USC) (Leeson, 2007). This conflict 'culminated in full-scale war in 1988' when the SNM launched an offensive against government forces in Hargeisa and Burao cities (Gundel, 2002). The government forces responded with brutality, leading to the destruction of Hargeisa and Burao and the deaths of more than 50,000 people (Gundel, 2002).

3.3.3 Post-war Livestock Trading: Continuity, Emergency and New Constraints

Shortly after the SNM took control of the northern Somalia regions from government forces, a process of reconciliation between clans in northern Somalia started, culminating in the declaration of Somaliland on May 18, 1991 (Balthasar, 2013). The SNM chairman, Abdirahman Ahmed Ali Tuur from the Isaaq/Garhajis clan was selected as interim president (Bradbury, Abokor, & Yusuf, 2003). Livestock export through Somaliland's port of Berbera resumed in June 1991 with the support of informal institutions. The post-war economy 'fell back to the informal market institutions' that were in place or had emerged before the war (Mubarak, 1997, p. 2030). The subsequent sections focus on the continuation, emergence, optimality and new constraints faced by informal institutions in the post-war livestock trade.

During Tuur's interim government from 1991 to 1993, livestock export was conducted in the complete absence of functional formal institutions as the interim Somaliland administration was unable to restore functioning state institutions. In an interview conducted with one of the first livestock traders who exported to export to the Arabian Peninsula after the war, the respondent elaborated on how the post-war livestock trade resumed as quoted below:

> It was my first time in the livestock export, I exported 20 goats with the first boat that left Berbera in June 1991. The vessel carried 650 sheep and goats. We exported the livestock to Dhubab, a coastal village in southern Yemen. Since Dhubab did not have a port, we unloaded livestock from the vessel onto motorboats. I did not have a contact in the import market, no contractual arrangement existed either, or a banking system to repatriate livestock money. I had travelled with the vessel. After I arrived, someone introduced me to an Arab trader in Dhubab. I stayed at his house while he sold the livestock. We could not be paid cash because there was no dollar currency in Dhubab, while we could not accept the currency that was in use in southern Yemen. In addition, Dhubab was a military base for the Southern Yemen separatists. The military took whatever number of livestock they wished. We also paid informal fees to local mosques and for rubbish collection. We used the remaining money to buy used sacks and jerrycans/barrels, candies, biscuits and yeast from the local stores and imported them to sell to consumers in Somaliland urban settlements and in the refugee camps in east Ethiopia.[26]

This testimony highlights two key features of the post-war livestock export from the port of Berbera: first, the informal nature of livestock export and the total absence of formal institutions as no commercial bank, letter of credit, bill of lading or free on-board arrangements were involved in export trading. Consequently, harassment started with the post-war informal export and risks were transferred from the Arab importers to the Somali livestock traders, something that has persisted until today. Second, it suggests a change in the key actors in the livestock export to the Arabian Peninsula. A new breed of low capital and less experienced post-war exporters, mainly from the Garhajis clan, resumed livestock export to Yemen. In so doing they replaced the high capital and more experienced pre-war livestock exporters, many of whom did not resume livestock export. The decision of pre-war livestock exporters not to resume livestock export had been influenced by a combination of factors including loss of capital. One former livestock exporter noted, 'the war broke out in the northern regions when a cargo ship that carried sugar for me docked in Berbera. I fled to Mogadishu and I lost millions of dollars in this ship while I lost millions in the Somalian banks since the government collapsed'.[27] In addition, many of the pre-war exporters were elderly men nearing retirement age who lacked the flexibility and energy to engage in 'chaotic', risky and 'unregulated' post-war livestock export.[28]

Formal and informal institutions already complemented each other during livestock exports before 1991. Key informal arrangements in the livestock trade were *farqiya* and informal foreign exchange and credit arrangements (Jamal, 1988; Samatar *et al*., 1988). *Farqiya* immediately collapsed in 1991 due to the collapse of government price controls. *Franco valuta,* an informal system that was mainly important for imports but also facilitated the repatriation of *farqiya* money back to the country, had weakened gradually due the evolution of *hawala* institutions. The *franco valuta* persisted in the early 1990s when, in the absence of *hawala*, small-scale livestock exporters to Yemen gave their cash to commodity importers in Yemen who used the cash to buy imported goods and paid cash to the small-scale exporters in Somaliland. The emergence of informal institutions proves the resourcefulness of the Somali traders when confronted with challenges. In addition, the discontinuation of *farqiya* and *franco valuta* after state collapse point to the fact that that some informal institutions emerge out of circumstances and can disappear when the circumstances that led to their emergence in the first place, change.

Informal credit systems in livestock trade developed in the 1940s and persisted throughout the years. Those livestock traders who did not have sufficient capital to buy livestock used kinship linkages to buy livestock on credit from producers, exported it in the overseas markets and paid their creditors once the livestock money returned back to the hinterlands and after they had deducted their costs and profits (Samatar *et al*., 1988, p. 86). Through these credit arrangement merchants transferred risks to the producers (Samatar *et al*., 1988). After 1991, the so-called *soo-adeyn* ('cashing commodities') practice became common. For the livestock trade, this meant that a merchant buys livestock on credit from middle *jeeble* traders, transports it to the overseas export markets and pays the creditors once cash has returned to Somaliland while retaining a profit/commission. In the local markets *jeeble* middle traders gathered livestock from producers in primary or secondary markets on credit and sold them to *ganasade* or merchant exporter on credit. The *jeeble* and *ganasade* made arrangements with local food store owners who gave producers staple food items on credit. Either *jeeble* or *ganasade* acted as guarantors for the store owners. The *ganasade* then exported livestock to Yemen markets and delegated a Yemeni *wakiil* to sell the livestock. The Yemeni *wakiil* then sold the livestock to Yemeni slaughterers on credit, with the livestock payment to be made once cash was collected from the Yemeni creditors.[29] This credit-based system facilitated livestock trade despite limited access to capital of both Somali and Yemeni traders, hence it led to a series of economic transactions in which no cash changed hands.

In the early 1990s livestock exports from Berbera destined for the Yemeni coastal towns of Dhubab, Mokha and Taizz where Somali livestock exporters bought essential consumer items from stores on credit using the *soo-adeyn* practice, Yemeni *wakiilo* acted as a guarantor for the Yemeni store owners. Somali creditors in the value chain waited for their money for months, sometimes years and at times it was never paid back.[30] Somaliland livestock exporters started to export to the port of Jizan in KSA, around 1992. In Jizan, the *soo-adeyn* informal credit practice did not change substantially over time with the exception that Arab traders paid US dollars to the Somaliland traders.

After cash returned into the livestock trade, Somaliland livestock traders confronted the challenge of repatriating livestock money back to Somaliland. At the beginning the *ganasade* or *haraas* (livestock attendants) who travelled with the livestock vessels transported the cash themselves. A former livestock exporter explained this risky money repatriation as follows:

> After the livestock was sold in Jizan, I used to come back with the vessel and carried US$150,000 to 200,000. I tied the money onto my waist to protect it from water… there were no banks that regulated our cash, no taxation, no remittance…carrying such a huge amount of money was risky in both KSA and Somaliland. However, it was profitable because livestock trade was the only economic activity in Somaliland that generated such huge amounts of US dollars [hard currency].[31]

It is important to point out that in the livestock export trade corridors serve a dual purpose: first, the corridors facilitate movement of livestock from the hinterlands to the economic hubs (ports and markets). Second, corridors facilitate movement of cash and/or commodities back to the hinterlands (Figure 3.3). Nori (2009, p. 112) describes the Somali corridors as 'parallel conveyer belts that take out local (pastoral) products and bring in consumer goods.' The author also mentions that due to ecological conditions, different corridors have different economic specializations. Regarding livestock, Figure 3.3 illustrates that Togwajale and Kismayo are corridors in the hinterlands that specialize in cattle due to their proximity to cattle production zones while other corridors specialize in small ruminants. However, the movement of cash/commodities is a common denominator among the corridors.

It is a common practice to truck commodities back to the hinterlands along the corridors using the same trucks that transported livestock out. Close interactions between livestock and commodity flows offers a plausible explanation for why many of the institutions in livestock trade discussed here are relevant for an institutional analysis of commodity trade. In addition, it explains why many of the livestock traders/exporters are also commodity traders/exporters. Cash is rarely physically moved in the corridors as livestock traders either use cash from livestock to buy consumer commodities or wire the cash through formal/informal financial systems.

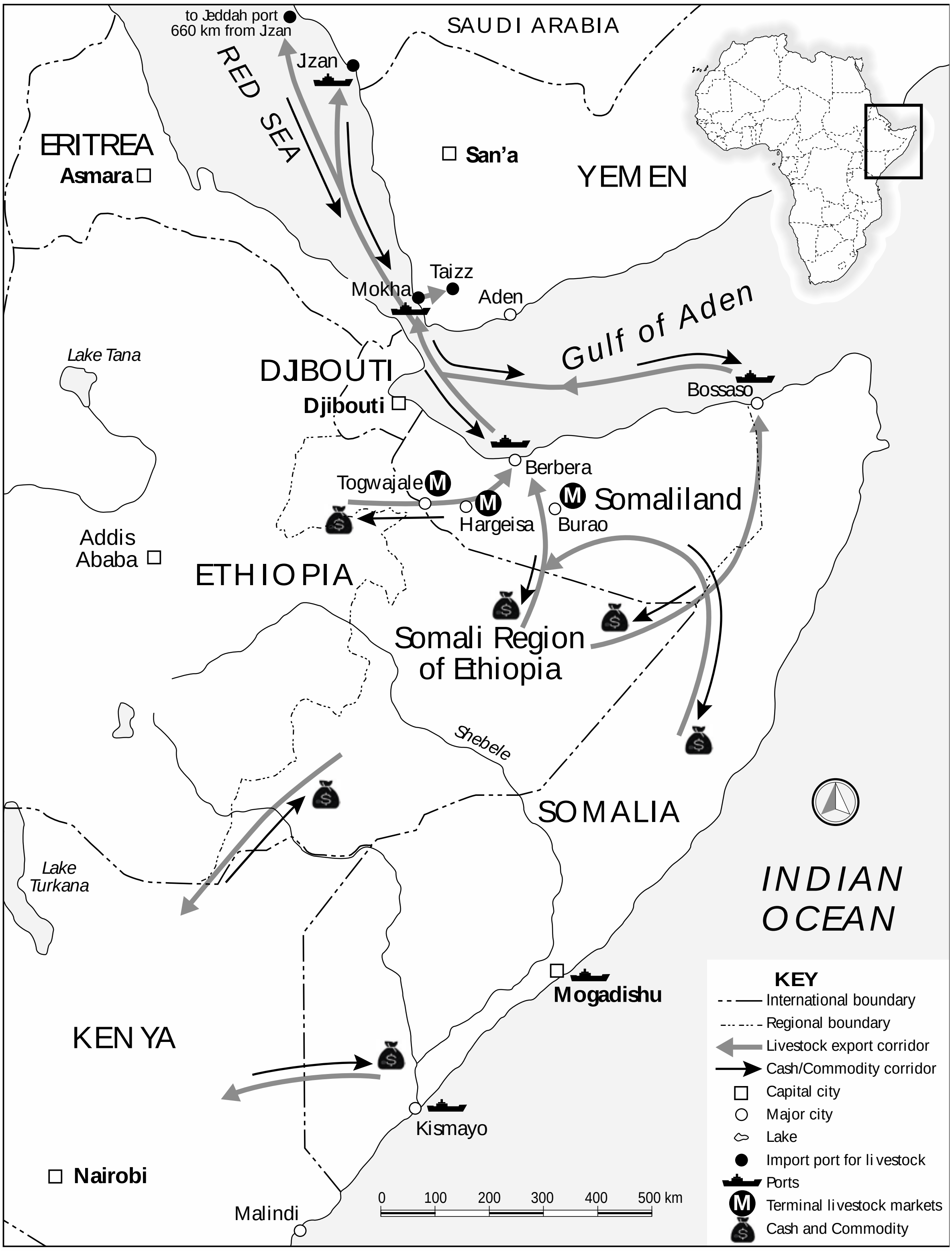

Figure 3.3: Livestock export trade, cash and commodity corridors in the Somali territories

As the volume of livestock exports to Jizan increased in the early 1990s and the repatriation of cash became more difficult, Somali entrepreneurs started the contemporary *hawala* system, which facilitated the repatriation of hard currency from livestock exports to the Arabian Peninsula.[32] The *hawala* (an Arabic word meaning 'transfer') is a financial mechanism where *hawala* dealers transfer values of money through networks to facilitate international trade and, in its classical form, it predates the medieval period of Islam (Ballard, 2005). The contemporary Somali *hawala* started in the early 1990s during the civil war by *hawala* dealers, mostly trusted business associates and agents, who largely communicated through military radio equipment (*taar*) that fell into civilian hands after 1991 (Lindley, 2009). The emergence of *hawala* facilitated the repatriation of hard currency from livestock, and to this day *hawala* remains important for the backflow of livestock money (Iazzolino, 2015).

Livestock exporters faced challenges after the 9/11 terrorist attacks in the US, which brought about additional due diligence on international money transfers: sums of more than US$ 20,000 transferred to Somalia or Somaliland has been subject to due diligence.[33] In the Saudi value chain, livestock traders wire money through Djibouti banks as a consequence.[34] In the Yemen value chain they break down financial volumes into smaller denominations of $10-20,000 and wire through different *hawala* companies under different names.[35] Though international banks are absent in Somaliland (Iazzolino, 2015), since 2010 some *hawala* companies have promoted their services by establishing Islamic commercial banks such as Dahabshil and Salaam. However, these banks do not handle LCs and they are also constrained by due diligence policies of international banks and the absence of internationally recognized formal state institutions in Somaliland. Notably, local banks remain to a large degree unregulated as the Somaliland central bank is unable to regulate the private banks (Musa & Horst, 2019)

Despite an increase in the number of livestock exports in the 1990s, two main bottlenecks have limited this growth. First, low stocks of capital by Somali livestock exporters, and second, the limited availability of maritime transport as livestock carriers or cargo ships were reluctant to come to Berbera, due to high risk, and they have had to use smaller vessels. As of the mid 1990s one key informal institution that has facilitated livestock export trade and which developed out of the trade relations is *mu'amala* (in Arabic, meaning 'good conduct evolving from economic transactions'). The *mu'amala* is a trust-based and self-sustaining personalized institution that evolved as a result of repeated transactions and good conduct exhibited by trading partners across cultures and geographic boundaries.

Before *mu'amala* develops, transactions are typically characterized by uncertainty and risks as some traders let their partners down for short-term gains. Once *mu'amala* develops among trading partners it benefits the individuals that are known for good *mu'amala* in the form of trust, reputation and access to informal credit. After repeated transactions, those who have become known for good conduct are trusted with more informal credit. Being trustworthy and the benefits that come with it is an incentive to sustain good conduct, said one livestock exporter who, based on *mu'amala,* buys cattle from Ethiopia and has been dealing with one Arab livestock trade partner in Yemen for decades.[36] Meijerink (2011) states that when adopting a certain behavior has a payoff, the institution will be self-sustaining. *Mu'amala* is not kinship-based as it can develop between cross-cultural, cross-clan and transnational exchange partners. A cattle exporter explained how *mu'amala* works for him:

> If an economic actor is known for his good conduct and is trustworthy, that is a form of social capital because you will be trusted with livestock on credit. *Mu'amala* was not affected by the civil war in the country. Based on *mu'amala,* I take credit from livestock traders from different clans in and outside Somaliland. Let alone Somalis, I buy livestock on credit from Oromo traders in Ethiopia because we have *mu'amala*.[37]

The development of the institution of *mu'amala* between individual Somali and Arab traders gave Somali livestock exporters access to informal credit advances that replaced the formal credit advances that the Somalia Commercial Bank gave to livestock exporters before war. After several successful transactions, Arab livestock traders started to advance funds to their cash-strapped Somali partners to buy livestock for cash while they also bought some on *soo-adeyn* credit. Besides demonstrating the Arab traders' trust in those Somali traders who had exhibited good behaviour, the cash advance was also a means for Arab traders to influence increased supply of quality livestock since traders who supplied good quality animals preferred receiving cash rather than selling on credit. I asked a former livestock trader how the *mu'amala*-based advance payment worked and he responded: 'In 1993 we were cash-strapped, our Arab trade partner trusted us and sent US$20,000 to buy livestock… I was a middle-level exporter, but larger exporters received larger sums of advance from their Arab trade partners'.[38] The critical question that emerges here is: what facilitated the cooperation between international economic actors in the absence of formal institutions that could have structured their interactions?

Economists and sociologists have widely discussed the social mechanisms that facilitate cooperation between actors when state or formal institutions that guarantee cooperation are absent (Akerlof, 1978; Granovetter, 1985; Beckert, 2009). Economists consider that cooperation exists because individual actors are rational. For example, based on the prisoner's dilemma in game theory, economists posit that two economic partners will collaborate because repeated transactions will change the incentive structure of economic partners, making cooperation a rational strategy (Axelrod 1984 cited in Beckert, 2009). From a sociological perspective, embedded institutions such as networks, trust and social capital facilitate cooperation between exchange partners. For instance, Granovetter (1985) highlighted that personal relations ('networks') 'generate trust and discourage malfeasance' in economic transactions. In the post-war Somaliland livestock export trade, livestock traders were able to establish long-distance and cross-cultural business networks, which facilitated informal credit systems. Cooperation between actors and sustaining the informal credit system were driven by both economic and social incentives. However, as we shall see in the following section, there are still risks surrounding long-distance and cross-cultural informal trade transactions that rely on *mu'amala.*

3.3.4 Defaulting on and Sanctions of Informal Contracts

As the below quote conveys, informal institutions sanction defectors. Somali lineage plays an important role in the trust among Somalis because of the 'knowability' and 'social control that comes with lineage' (Carrier & Elliott, 2018, p. 8). In agreement with Simons (1995), Somalis have a social system in which information is quickly transmitted through social networks and it is through this information flow that economic agents learn quickly who is trustworthy to do business with and who is to be avoided. Voluntary information sharing among Somalis makes it difficult for defaulters and fraudulent malpractice to go unnoticed. Hence an incentive for economic actors who are willing to stay in the business is to do the right thing in order to protect their name.[39] Sometimes those who have a good reputation to lose will even pay creditors who have been defaulted on by their immediate relatives. For instance, a livestock exporter interviewed in Hargeisa narrated how he paid a huge amount of money when his son failed to pay credit:

> My son in Dubai is a car broker. Some people in Hargeisa and Ethiopia sent him money through *hawala* to buy cars for them but he defaulted on them and could not account for US$250,000. The people complained to me. I asked him

> what happened, and he said he did not know where the money went. I was not aware of their transactions, neither had they signed formal contracts but to protect my reputation I had to pay the creditors. Since I am not the one who took the credit, I negotiated everyone to give me 10–20% discount depending on their financial status and our relationship. I paid 80–90% of the money to every creditor. I did not have cash, but I sold land and a house to pay the creditors.[40]

Institutional economists hold the assumption that individuals are motivated by self-interest and that they pursue their interest at the expense of others, causing a cooperation problem. For this reason, formal institutions are important because they regulate behaviour and promote stable and structured relations (North, 1990; Williamson, 2000). Livestock export from Somaliland demonstrates that the absence of formal institutions such as legal contracts and enforcement has increased risks, uncertainty, harassment, defaults and fraudulence in the livestock trade after 1991. Although informal institutions such as the trust-based *mu'amala* are an incentive to constrain behaviour of individual actors who have an interest in staying in the livestock trade, there are others, mainly Arab traders in the import markets, that have defaulted on huge amounts of money and then quit the business for good.

Table 3.3 presents some examples of the cases of failure to pay for livestock delivered by Somali traders to Arab *wakiilo*. This problem has been further compounded by the fact that most of the Somaliland livestock traders do not have valid travel documents and are unable to track down the Arab *wakiilo* who default on them. Nor can they raise the problem with Somaliland institutions, which are not recognized internationally, and which lack established contact with their Arab counterparts. For the above reasons, livestock defaults remain unreported.[41] These accounts, on the one hand, paint a clear picture of the coordination problems (risks and lack of enforcement) in the post-war livestock export that is not coordinated by formal institutions and, on the other hand, illustrate the limited role informal institutions can play in the complex international livestock trade.

Table 3.3: Examples of livestock exporters defrauded by their *wakiilo*

Abbreviated names of exporters for anonymity	Livestock species	Nationality of defaulter	Number of livestock (head)	Year
HG	Camel	Egypt	1,200	1998
HG	small ruminants	KSA	10,000	1999
JAA	small ruminants	Yemen	2,000	2006
DA	small ruminants	Yemen	920	2006
DA	small ruminants	Yemen	920	2006
MAS	Cattle	Yemen	100	2014
AA	small ruminants	Yemen	1,500	2015
AACo	small ruminants	UAE	12,000	2015
AACo	Cattle	UAE	4,000	2015
WTTWM	Cattle	Yemen	20	2016

Source: Key informant interviews (n=10)

In case of default, Somaliland business actors rely on informal institution called *mu'salaha*, meaning 'mediation' or 'reconciliation' in Arabic. As reported by Irani and Funk (1998); and Irani and Lebanon (1999), *Mu'salah (*reconciliation) or *Sulha* (settlement) are two related and age-old conflict resolution practices that have their origins in Arab culture and Islamic *Shari'a* and can be effective ways to deal with conflict in Muslim communities. Under *mu'salaha* system, if a debtor fails to pay his creditor, a committee of trustworthy traders volunteer to mediate. They listen to all parties, establish the truth and the cause of default and make a decision. If the defaulter is trustworthy and known for good *mu'amala* but cannot pay his creditors because of force majeure, it is common that the committee fundraises some of the money, the defaulter also sells whatever assets he has, while the creditors may relinquish proportion of the money as a way of forgiveness. In this way the reputation of the defaulter remains somewhat intact. However, if the defaulter is not a person known for good *mu'amala* and he cannot pay his creditors, the committee forwards their judgement to the formal Somaliland judiciary.[42] Traders who care about their reputation sell off their assets such as house or land to pay their creditors to safeguard their good *mu'mala* reputation.[43]

Mu'salaha is an informal dispute settlement institution that is common in Somaliland markets. First, it is more effective than the formal adjudication process: no matter how complicated a business dispute is, it does not take more than few committee sessions before a final settlement is reached. Within the formal judiciary, cases are filed as civil cases and, most of the time, they drag on for years, which is costly to the disputing sides. Second, *mu'salaha* works because it operates as a collective insurance mechanism. It effectively ensures against business risks since the prominent businessmen in every economic sector play a role in conflict settlement while reputation can give access to informal credit.

Unlike *mu'amala,* which as indicated is cross-cultural and transboundary*, mu'salaha* has a 'spatial' limitation. If the defaulter is an Arab, then *mu'salaha* becomes meaningless. As a livestock exporter noted: '*mu'salaha* was not applicable to the Arabs but worked well among the Somali traders. In the early 1990s when livestock was imported to Jizan and Mokha, the Arabs robbed many Somali livestock traders.[44] Portes and Sensenbrenner (1993) remind us that non-universalist ethical orientations promote cooperative behaviour between members from the same ethnic group, but not for outsiders. Just as Arab defaulters got away with cheating on their Somali business partners, Somalis could also get away with cheating on their Arab exchange partners.[45]

The conclusion that emerges from this is that informal social control and sanctions have less far-reaching implications for the cross-cultural overseas actors. This observation is in line with the concept of 'institutional thickness', which emphasizes that social and cultural factors tend to be stronger in the local context (Hesse & Rodrigue, 2004, p. 174). Since the collapse of the intermediary role of Somalia's commercial banks, Somaliland livestock traders export livestock without prior payment, instead delegating designated Arab *wakiilo* in end markets for protection, to sell the livestock and to collect livestock money from creditors in exchange for commission. However, in the absence of formal safeguarding institutions, it was common in the mid-1990s and 2000s that some *wakiilo* failed to return livestock money. This still happens in Yemeni markets and has increased since the civil war broke out in in 2015.[46]

Interviewed former livestock exporters stated that default was not common before 1991 since livestock was exported through LCs. Somaliland exporters cited the different reasons that *wakiilo* have given for their failure to return the money. These include failure to collect money from slaughterers who bought livestock on credit; *wakiilo* refusing to pay agreed livestock money or selling livestock at lower than the agreed price, and in protest for lack of profit or poor livestock quality. Some *wakiilo* request a second livestock shipment before they will return the money for the first shipment and then fail to return all the money. Meanwhile, Yemeni *wakiilo* have claimed that livestock was confiscated by KSA authorities at the border as they were trying to smuggle it into KSA, a claim that Somali livestock traders could not confirm independently.[47]

The reasons cited for default indicate coordination problems that confront traders, and which arguably arise from the informality in overseas livestock marketing. This is probably different from the cross-border trade within the Horn of Africa since, often times, actors involved in cross-border trading belong to the same tribe or clan in the borderlands or trade is based on cross-border networks and hence relies on socially embedded institutions to minimize coordination problems and other risks. One former livestock exporter stated that the only defaults before 1991 took place in informal *farqiya* arrangements where the Arab importer was unhappy with the quality of the animals supplied or did not make expected profits. Quality or 'value problem' is a market coordination problem that arises when market actors assign different values to goods of certain classes (Beckert, 2009). The value of livestock in the study area is influenced by informal and 'indigenous livestock grading' which Somaliland market participants are well versed in (Wanyoike *et al*., 2015). This study argues that the value problem in livestock trade is indeed a coordination problem in the overseas livestock trade and was a main cause of default in the post-war period. Although value attributes of livestock constructed by market actors can facilitate market transactions, uncertainty arising around the value of livestock is one of the main reasons that Arab traders cite to justify their harassment of their Somali partners.

Not only had the banking institutions that facilitated international trade collapsed after 1991, but also export livestock health regulatory institutions such as veterinary services, holding grounds and quarantine stations. Although these institutions had been poorly run from the mid-1980s, their total absence in the post-war period worsened the situation, in particular in the export livestock trade. This is especially true of the formal veterinary institutions whose absence hurt livestock exports in northern Somalia. It has allowed import countries to bully exporters and reject many animals based on their own veterinary facilities and at times unsubstantiated decisions.

3.3.5 Animal Health Regulation After War: Privatization, Competition and Monopoly

Livestock require veterinary care at production and export stages. As mentioned previously, Somalia implemented ambitious and largely successful livestock development policies and programs in the 1970s and 1980s as reported by Najim and Briggs (1992). However, from the mid-1980s the economic and political crises in the country affected the operation of these policies and programs; they continued to exist but were poorly run. Most importantly, government was responsible for and entrusted with veterinary services and decisions on livestock health in the hinterlands and quarantine facilities. After 1991, this role was taken over by private veterinary professionals, which often consisted of former government veterinary officers and graduates, as well as donor organizations. By the early 1990s, these private professionals ran the operation of three centres that inspected export livestock in Berbera, each associated with a particular clan family in terms of its ownership and clients.

Clan-based livestock health inspection was the first indication of the lack of monopoly in livestock veterinary care. Since then institutional pluralism in livestock health regulations has led to institutional incongruence and competition between several regulatory facilities.[48] Evidence from Somaliland suggests that rivalry and lack of coherence between institutions of public authority with economic interests led to undesirable outcomes such as discrediting one another.[49] In the case of livestock export, many research participants believed that competition between the private institutions that regulate animal health has contributed to the recurrent livestock bans.

The Centre for Health and Animal Production (CHAP) was the largest private regulator in the 1990s. Two other private export livestock health regulatory associations existed in Berbera. CHAP was dominated by traders and veterinary professionals from the Habar Yonis, a sub-clan of the Garhajis clan family. The Edagale, a second sub-clan of Garhajis, and Awal clan traders and veterinary professionals each had their own regulatory institution. Commenting on this, a former CHAP member said, 'there were three clan-based regulatory institutions, but CHAP was the largest because most of the livestock exporters were from Habar Yonis'.[50]

The Centre for Health and Animal Production (CHAP) inspected livestock health on a commission basis per head of animal, which was paid after livestock was sold and money had returned.[51] As explained below, the per head animal commission was an incentive for private veterinary practitioners to inspect livestock strictly in the absence of state monitoring and inspections.[52] When a group of people have an interest in adopting a certain behaviour or when adopting certain behaviour has a payoff, it makes institutions self-sustaining (Meijerink, 2011). Both exporters and CHAP veterinary practitioners had an interest in regulating animal health in the absence of formal regulatory authority. CHAP professionals inspected export livestock for brucellosis using an antigen test since they did not have laboratories.[53] Commenting on effective animal inspection without third-party monitoring, a former CHAP member pointed out, “for the first seven years, from 1991 to 1997, no livestock that CHAP inspected was rejected on health grounds by the importing authorities… since our commission was based on per head of animal that was sold in the import markets. This was an incentive to ensure that no animal was rejected on health grounds”.[54]

Similar observations about the reasonable efficiency of brucellosis testing in this period have been reported by Gaani (2002). In addition, due to the absence of formal regulatory institutions, livestock veterinary care and welfare were compromised. The Livestock Development Agency (LDA) under the Somali Ministry of Livestock regulated animal veterinary care and welfare before the war while the Somali–Hellenic Shipping Agency (SHSA) was responsible for livestock transport to overseas export markets. In the pre-war period, livestock for export were rested and treated in government holding grounds in the hinterlands and along livestock trade corridors (Gaani 2002, p. 70). Since 1991, livestock has been directly moved from the hinterlands to private holding yards in Berbera where livestock traders keep livestock for the minimum time possible before shipping to avoid incurring costs (Gaani, 2002).[55]

From Berbera overloaded vessels transported livestock to the Arabian Peninsula markets. When heavy rains or storms occurred livestock exporters or attendants occasionally had to dump livestock into the sea to reduce the overload and the risk of vessels capsizing. Commenting on this, a former livestock exporter said, ‘I dumped livestock twice into the sea in 1993; first time 80 animals and the second time 110 animals… it was painful to dump my money [livestock] into the sea but I had to do it to save some animals’.[56] Livestock that showed outward signs of illness were also dumped at sea so that they would not be spotted by regulatory authorities in import ports.[57] As explained in the following section, ships were introduced into the post-war livestock transport after 1994, but animal welfare was still compromised in the sense that livestock was not fed properly and ships were overloaded.

In the absence of any formal veterinary and disease surveillance service, new diseases were reported in Somaliland (Gaani 2002). By the late 1990s, import countries in the Arabian Peninsula had imposed a ban on livestock exports from the Horn of Africa due to fear of Rift Valley fever, a disease that was new to Somaliland according to veterinary professionals. Two devastating bans hit Somaliland in 1998 and 2000 (Holleman, 2003; Majid, 2010). This chapter argues that the bans affected livestock exports from Somaliland/Somalia mostly due to the absence of formal institutions in at least two ways: First, no recognized state institutions existed that could lobby on behalf of Somali livestock exporters in the import countries, especially KSA, for review or lifting of the ban. This role was earlier played by Western-funded projects such as the European Union's Enhancing Somali Livestock Trade (ESOLT) initiative.[58]

Second, the absence of formal health inspection institutions and the weak oversight and enforcement of post-war formal institutions have been a concern for import countries' livestock health regulatory bodies. This argument is further supported by the fact that the ban did not devastate Sudanese livestock exports to the Saudi market in the way it ravaged Somalia/Somaliland exports. In fact, Djibouti took advantage of the ban imposed on Somalia/Somaliland livestock and temporarily emerged as a key livestock exporter to KSA. In 2007, 2008 and 2009 Djibouti set a new record by exceeding Somalia in small ruminant exports to KSA (Table 3.4), a position previously held by Somalia/Somaliland.[59] Sudan livestock exports to KSA occur throughout the year, peaking during the *hajj* season (Joosten *et al*., 2017). These changes in international livestock trading between the Horn of Africa and the Arab Peninsula raise important questions. If not for the lack of formal/state institutions, what other factors offer a plausible explanation for Sudan's overtaking of Somalia/Somaliland as leading livestock exporter or for Djibouti to temporarily emerge as a key livestock exporter to KSA? How could a livestock ban come to ravage Somalia/Somaliland livestock exports or cause Somalia/Somaliland's year-round livestock exports to collapse? The importance of formal institutions in livestock export growth is, for instance, demonstrated by the success of Ethiopian government institutions in eradicating rinderpest, which boosted its international livestock exports (Aklilu & Catley, 2014).

Table 3.4: Small ruminants imported to Saudi Arabia from 2000–2017

	Livestock head exported to Saudi Arabia per year					
Country	2000	2001[60]	2002	2003	2004	2005
Sudan	876,813	76,057	1,372,035	1,333,623	1,930,175	1,090,055
Somalia	2,401,021	-	-	-	-	-
Djibouti	18,419	-	-	-	-	-
Jordan	284,269	76,059	106,732	135,129	120,023	144,800
Syria	648,248	394,906	1,805,487	1,237,607	2,192,033	2,915,670
Australia	431,215	1,516,897	1,803,401	1,476,536	-	1,161,351
	2006	2007	2008	2009[61]	2010	2011
Sudan	1,084,409	773,532	601,330	1,595,724	1,777,395	2,723,514
Somalia	-	5,500	-	535,382	1,947,469	2,994,453
Djibouti	-	1,963,436	1,587,344	1,049,923	261,134	205,631
Jordan	437,809	-	18,534	81,712	93,125	269,492
Syria	1,993,115	1,714,443	1,181,278	462,848	602,278	352,682
Australia	1,184,397	-	852,081	630,206	264,088	23,928
	2012	2013	2014	2015	2016	2017
Sudan	3,655,953	3,898,784	4,936,084	5,792,365	4,837,963	4,822,791
Somalia	3,044,911	3,199,513	2,871,976	1,778,520	2,803,572	1,609,649
Djibouti	466,712	350,979	467,026	332,998	131,092	596,106
Jordan	284,535	458,223	501,959	548,393	248,193	284,535
Syria	257,789	152,212	99,524	32,330	-	-
Australia	-	-	-	-	-	-

Source: Author's compilation from General Authority for Statistics, Kingdom of Saudi Arabia.[62]

Kingdom of Saudi Arabia conditioned the lifting of the prolonged ban from 2001 to 2009 on the privatization of livestock health inspection and a certification to reliable institutions. This also indicates a lack of trust in post-war state institutions on the part of the importing countries. Following WOAH and import countries' recommendations for proper and reliable livestock health inspection and certification, international companies showed interest. A former senior government officer interviewed stated, 'the General Society of Surveillance (SGS), a multinational export–import inspection, certification and quality control company, approached Somaliland to inspect and audit Somaliland livestock export in mid-2000.[63] The SGS secured acceptance from KSA authorities, but could not conclude an agreement with Somaliland'.[64]

Finally, Somaliland allowed an influential Saudi livestock importer to take over livestock inspection and certification.[65] The Arab importer invested and commissioned the Saudi–Emirates International Veterinary Quarantine Management Company (SEIVQMC), locally known as 'Al-Jabiri', in September 2009 and recruited two Somaliland livestock exporters who had been trading before the ban, namely Adan Ahmed Diriye 'Baradho' from the Garhajis and Ali Warabe, from the Habar Awal, to be his *wakiilo*. The rest of the Somaliland livestock exporters had to supply livestock to Al-Jabiri. Those who insisted on exporting themselves also had to use the Al-Jabiri facility to certify their livestock.[66] For example, the sons of Abdi Awad 'Indhadero', from Habar Jelo, who together with Ali Waarabe had dominated livestock export before the ban, had to either supply livestock to SEIVQMC or use the facility to export livestock. Al-Jabiri was, thus, not only an animal health inspection and certification facility but a monopolistic exporter of livestock from Berbera (Eid, 2014).

Somaliland's post-war livestock export trade has not been free from politics in the domestic and international markets. The politics of quarantine stations took centre stage in the Somaliland presidential elections in 2010 (Eid, 2014). The Kulmiye party, which had Ahmed Mohamed Mohamoud 'Silanyo' from Habar Jelo as their presidential candidate, promised to break the Al-Jabiri monopoly once elected. In August 2010 President Silanyo broke the monopoly with a presidential decree that allowed the Berbera National Animal Health Quarantine (BNAHQ) as a second quarantine station (Caraale, 2010). BNAHQ, locally known as 'Indhadeero' was owned by Mohamed Qa'id Sa'eed 'Al-Yassir', a Saudi livestock trader, who recruited Indhadeero's sons from the clan of the president to be his *wakiilo*. And in 2015 a third quarantine facility, Veterinary Berbera United Quarantine (VBUQ), locally known as 'Iska Abinta' ('resisters') was commissioned.[67]

These quarantine stations play two main roles: they export livestock to KSA and they regulate the export trade by visually inspecting and blood-testing each head of export animal for trans-boundary diseases such as foot and mouth disease (FMD), brucellosis and Rift Valley fever.[68] One may wonder whether the quarantine stations regulate themselves properly. Interviewed veterinary officers stated that the quarantine stations at times compromise the standard animal quarantine (incubation) period to reduce costs, "the standard incubation period is 11, 14 or 21 days, depending on the type of disease. For example, the incubation period for foot and mouth disease (FMD) is 14 days, but livestock are kept in the quarantine stations in Berbera for a period quite shorter than the standard period since both exporters and quarantine operators/investors aim to minimize the cost".[69]

In addition, some livestock traders and brokers in Hargeisa and Burao markets believed that livestock bans have become political, partially because of the competition between quarantine investors/livestock exporters. Commenting on this, a senior broker said, "Al-Yassir established a quarantine station in Djibouti since he was outcompeted in Somaliland, but he still operates his quarantine station in Somaliland. Al-Yassir and Al-Jabiri are bitter rivals, we believe that sometimes quarantine stations export sick animals to attract collective Saudi punishment, knowing that their competitor will lose more than they do".[70]

Field interviews, including with key policymakers, expressed concern that the 2016 ban on livestock exports from Somalia, including Somaliland, was imposed after Saudi authorities found Rift Valley fever in livestock that left Mogadishu. Those interviewed held the view that the shipment was made with malicious intention to attract collective punishment, since a ban would affect most livestock exports from Berbera.

The involvement of Arab quarantine investors in Somaliland's livestock export trade further restructured livestock trade in the Berbera corridor. First, Somaliland livestock traders lost control over livestock export to KSA, which they had held since the 1940s.[71] Second, the oligopolistic exporters/quarantine station investors now control livestock prices and create barriers to entry and development. During fieldwork, the price of small ruminants in Hargeisa and Burao markets was, on average, US$60 per head, a price that middle-*jeeble* traders were not happy with and that was lower than what the informal livestock price had been in the late 1980s.

For instance, during the 2018 *hajj* season, middle-*jeeble* traders tried to negotiate for higher prices by withholding livestock supply from Burao market. But because of the oligopolistic exporter, they had limited options and they finally had to release the livestock to the markets. Commenting on this, a middle-*jeeble* trader who supplied livestock to Burao market said, 'this is the peak *hajj* season but still the price is low, there has been only Al-Jabiri in the market, Indhadeero and Iska Abinta entered the market in the last three weeks but this has not changed the prices'.[72] An Al-Jabiri senior broker (*ga'anjare*) stated that the *hajj* livestock price is determined by the Islamic Development Bank in Jeddah.[73] Third, the quarantine stations changed patterns of accumulation in livestock export by not only making profits from the inspection fees but also from the animal exports. The quarantine fees started at US$7.50 for small ruminants and $21 for large ruminants. During data collection in 2018, the quarantine fee (excluding the cost of feed during the quarantine) was $5.50 for small ruminants and $14.50 for large ruminants .[74] Towards late 1980s, quarantine (including feeding) fee was roughly $4 per goat (Green & Jamal, 1987). Fourth, the involvement of Arab traders represented the genesis of the *shirkad–jeeble* (company–middle trader) system, which replaced the pre-war *ganasad*e-*jeeble* (merchant–middle trader) system. In the new *shirkad–jeeble* system, Arab traders together with their Somali *wakiilo* (agents) represent the 'company'. Two types of middle traders: *faashle* (those buying livestock supplied by producers in the secondary markets) and *jeeble* (those who go out and collect livestock from the hinterlands) sell livestock to the company in the secondary markets (Musa & Schwere, 2019). The new arrangement, visible in the Saudi value chain, has both benefits and problems. The benefits include that the companies, in particular Al-Jabiri, buy livestock with cash, which reduces credit, barter-trade and default in the import markets.

However, the new arrangement, as mentioned, has created oligopolies that accrue profits in the form of quarantine fees, commissions and profits from sales. The new system has scaled up livestock trade as the companies buy large quantities from middle traders and no longer from producers. Hence, one rarely sees producers who have supplied their livestock to the secondary markets. Those who have supplied livestock still sell to *faashle* middle traders who sell to companies for a profit. To eliminate the role of intermediary *jeeble*/*faashle,* companies have tried to penetrate the hinterlands and buy livestock directly from producers in primary markets. However, the clan-based livestock trade system has become a challenge to compete with middle traders.[75]

Despite their establishment, quarantine stations did not provide a lasting solution to livestock bans of Somali livestock, neither did they provide increased access to new markets. In fact, over the last couple of years, livestock exports from Somaliland to KSA have become seasonal, mainly taking place during the *hajj* period.[76] There are different quality requirements in the commercial value chain that operates 10 months of the year as opposed to the sacrificial value chain that is in place during the other two months of *hajj* (Mtimet *et al*., 2015). Livestock exports increase with the increase of *hajj* pilgrims. In addition, oligopolies in livestock export (i.e. quarantine investors/livestock exporters and their *wakiilo*) have become entrenched, creating market barriers and resisting developments in the animal health regime including quality improvements as interest groups fear increased cost or profit losses. Well-informed people interviewed for this study reported that a planned revival of two important livestock holding grounds (LHGs) along livestock export trade routes in Somaliland failed due to resistance from livestock exporters/quarantine investors, among others. Commenting on this, a senior government officer who was aware of the said project explained that:

> The donors allocated around US$5 million to revive Qoladay and Aroori holding grounds in Burao and Hargeisa. This would have been the most sensible livestock development project since 1991. The plan was that each holding ground is fully equipped to provide veterinary care for livestock exports, including health inspection and vaccination. However, Qoladay has completely failed while Aroori was fenced but it is not in operation. The failure of this project was partially caused by livestock exporters and quarantine investors/operators who resisted because they do not want to comply with standard livestock export procedures, which they believe would increase the cost of doing trade.[77]

Foreign actors within these livestock oligopolies are able to influence the decisions of the governments and health inspection authorities to limit entry, as we have seen in the case of KSA. This acts as a major constraint for any new, outside, investors. Two ambitious investments, which aimed at establishing animal fattening farms and abattoirs in Burao failed due to these market entry barriers. Commenting on this, one interviewed investor said:

> We are a group of Somaliland and Malaysian investors. We wanted to transform livestock export by establishing fattening farms and a modern meat factory in Burao. One major challenge we faced was the competition from actors. Livestock industry is a cartel industry; local and international livestock traders fought to ensure that this facility does not come into existence. There are market barriers imposed by oligopolies in every economic sector in Somaliland. Local stakeholders are manageable because you either give them shares or ask them to be suppliers or use other mechanisms, but we do not have control over international actors who range from individuals to countries.[78]

The two above quotes convey two important characteristics of Somaliland's post-war livestock export business. First, livestock exporters/quarantine investors have contributed to the absence of regulations such as the implementation of standard animal health and caring, fearing that regulations will negatively affect their relevance, continued existence and profit making. Second, economic interest groups have taken advantage of the weakness of state institutions and the absence of regulatory oversight of the economy. As Menkhaus (2003) reminds us, powerful political and economic interest groups in Somalia have contributed to state weakness, which they see as an opportunity for profit making rather than a problem to be solved. The following section details the emergence of oligopolies in the context of weak state institutions and how the interaction between formal and informal institutions has restructured livestock trade.

3.3.6 Re-emerging State Institutions and the Birth of Oligopolies

The case of quarantine stations described above indicates two things about the political economy of Somaliland's post-war livestock trade. First, state interventions including fiscal policies such as tax exemptions, the requirement that livestock exporters exchange a certain percentage of livestock profits at a low exchange rate with the central bank and higher export livestock levy eventually gave birth to an export oligopoly. Second, interactions between economic interest groups (both in export and import sectors), as well as between the latter and the Somaliland state restructured the post-war livestock economy.[79] Unlike the rest of Somalia, Somaliland reinstated some state institutions that partly regulated the local economy only four years after the collapse of the central government. By 1995, Somaliland's newly established central bank was opened, a new currency was introduced, customs were in operation and the government had raised US$10 million in revenue (Bradbury, 1997). The Ministry of Finance and the Ministry of Livestock are other institutions that were created.

To reinstate state institutions, Mohamed Ibrahim Egal, Somaliland's second president who replaced Abdirahman Tuur, took advantage of the support of the clan-based pro-government bourgeoisie (Balthasar, 2013). However, despite the fact that Somaliland reinstated state institutions immediately after the collapse of central government, it is important to highlight that these post-war state institutions differed from pre-war state institutions in at least three ways. First, unlike pre-war state institutions, post-war state institutions have limited jurisdiction and cannot impose or enforce regulations beyond the domains of their territorial stronghold, in this case Somaliland. The absence of a central state responsible for the health of livestock from all of Somalia's ports is a challenge that confronts post-war livestock exports. This is important because Saudi import bans are collective and affect all Somali ports and territories. Second, post-war government institutions retreated from their international obligations as they have not been recognized by governments of importing countries or do not maintain diplomatic relations with international organizations that regulate health and other standards pertaining to livestock exports. Consequently, livestock traders are not protected from the arbitrary decisions of regulatory authorities of importing countries. Meanwhile, locally, post-war state institutions were unable to develop or invest in the livestock sector due to poor budget allocations. As argued by a former government minister, key production ministries responsible for livestock, agriculture and fishery receive modest budget allocations. For example, in 2000, the budget of Somaliland's Ministry of Livestock accounted for 0.7% of the national budget, which was entirely consumed by operational and personnel costs (Gaani, 2002). As of 2019 the ministry was among the lowest funded in the national budget and ministry budget spending has not changed.[80] Third, the revival of state institutions did not translate into a revival of relevant livestock policies. For example, the Livestock Quarantine Act, the Animal Health Strategy, the National Animal Welfare Strategy, the Animal Production Strategy, the Animal Disease Emergency Preparedness Plan and the Sanitary and Phytosanitary Strategy that are key policy documents for livestock export either exist only in draft form or are absent.[81]

An interviewed meat factory investor lamented how his factory had been delayed for eight years due to the absence of financial, health, insurance, and quality control regulations in Somaliland livestock while those of Somalia are not functional: "we started our investment in 2010. Our investors are from Malaysia, which should have been the main market of our chilled meat. However, lack of recognized state institutions and absence of regulations has been and still is a challenge. We had to hire an expert to draft some national policies".[82]

Due to changes within Somaliland's formal institutions after 1991, interactions between formal and informal institutions transformed from, largely, a competing to a complementary relationship because informal institutions have taken larger roles and more space at the expanse of formal institutions.

Somaliland's revived state institutions resurrected some of the trade practices and policies that had been critiqued when they were in place during the Siad Barre government. For example, livestock exporters had to exchange a certain percentage of export livestock hard currency with Somaliland's central bank, which offered very low exchange rates between USD and Somaliland shillings. Livestock exporters were also required to hold ownership of properties in Hargeisa and Burao towns to get trade licenses.[83] Furthermore, Somaliland introduced multiple taxes on livestock exports; the Ministry of Finance introduced a custom valuation book (CVB), which is a long list of traded items and their tax rates, in the mid-1990s.[84] The CVB imposed a new duty on export livestock, which has been collected in Somaliland shillings.[85] In addition to export livestock duty, Somaliland introduced an export duty levy while numerous local municipalities and administrations also collect taxes from livestock exports. Export duty levy is the highest livestock tax and is collected in US dollars.

In the absence of a formal commercial bank, Somaliland did not control foreign currency earned from livestock trade. In 1997, a new government directive required livestock exporters to exchange US$7, $15 and $18 with the central bank for small ruminants, cattle and camels, respectively.[86] However, the problem was the official exchange rate offered by the central bank was much lower than the informal exchange rate. In 1997 the official exchange rate was 1,500 Slsh while the informal rate was 6,500 Slsh.[87] The rationale behind the new directive was that the government wanted to claim a share of the hard currency from livestock export. Livestock exporters did not resist the new directive because they were loyal to President Egal while at the same time they believed that the revenue was important for state-building and the demobilization of militias.[88] The government and livestock exporters agreed that the export duty levy replaced the exchange directive in late 1990s. The government started to collect a livestock duty levy of US$2, $11 and $15 for small ruminants, cattle and camels, respectively, on top of the export livestock duty.

Interaction between the formal and informal institutions in Somaliland has structured livestock trade. As evident from the example of the quarantine stations, the politics of livestock exports has taken centre stage in Somaliland in recent years and has given birth to oligopolies. The post-war political economy of livestock exports highlights the degree to which livestock trading is a key economic activity and source of foreign exchange and that whoever controls livestock export in the Berbera corridor enjoys economic and political weight. Three dominant Isaaq clan families – the Habar Awal, Habar Jelo and Garhajis – became political and economic rivals in post-war Somaliland. Most of the Garhajis economic and political actors were loyal to president Tuur while many Habar Awal and Habar Jelo businesspeople and politicians supported Egal. This rivalry had both political and economic motivations and ensued from the 1994 war in Somaliland, as Egal wanted to break the Garhajis' opposition (Balthasar, 2013, p. 228). The Garhajis felt that they had been economically and politically disenfranchised by Egal, who built the Somaliland state through clientelism (Bradbury, 2008; Renders & Terlinden, 2010).

Following the 1994 civil war in Somaliland, a new class of merchants from the Habar Awal and Habar Jelo clans, who had access to state power, rose to dominate Somaliland's post-war economy. These merchants controlled the import and export sectors and for the latter replaced the Gahajis export merchants who had controlled livestock export from Berbera before and after the war until 1994. Egal secured the support of the Habar Awal and Habar Jeclo business class during the Borama Conference of 1993. Afterwards, the business class provided loans to Egal, which he used to build state institutions and print Somaliland shillings in October 1994 while businessmen accumulated wealth through tax exemptions (Renders & Terlinden, 2010; Balthasar, 2013). In the 1990s Habar Awal tycoons including Ibrahim Abdi Kahin 'Ibrahim Dheere' and Jama Omaar 'Omaar' relocated to Somaliland from neighbouring Djibouti and dominated the profitable import sector while Ali Ibrahim 'Ali Waraabe' from Habar Awal and Abdi Awad 'Indhadeero' from Habar Jelo dominated livestock export.[89]

Ali Waraabe and Indhodeero did not have much capital while livestock export was unprofitable due to the high duty levies imposed by Egal. But they made arrangements with Ibrahim Dheere and Omaar, both commodity importers, to barter imported goods such as rice, flour, oil and sugar for livestock in the hinterlands. This is how their arrangement worked: Ibrahim Dheere and Omaar imported consumer goods, mainly from Thailand. Ali Waraabe and Indhadeero took consumer goods from Ibrahim Dheere and Omaar on credit (*soo-addeyn*) and bartered them for livestock, which they exported to the Arabian Peninsula, in particular KSA. Ali Waraabe and Indhadeero transferred the earning of livestock sales back to Ibrahim Dheere and Omaar through Djibouti banks. Ibrahim Dheere and Omaar then used these funds to buy consumer goods from Thailand and handed these over to Ali Waraabe and Indhadeero, who again bartered these consumer goods for livestock. Ali Waraabe and Indhadeero did not make substantial profits from livestock, rather they made their profits from the imported commodities which they bartered for livestock.[90] This implies that in Somaliland's post-war economy, export livestock and import commodity trading have become so intertwined that their interconnection needs further research and analysis.

The arrangement between livestock exporters and commodity importers has restructured livestock export in a number of ways. First, it marginalised Garhajis livestock exporters, albeit most of the middle-*jeeble* traders were Garhajis who lost their dominance in livestock export from 1994 to 2000, before the ban. Whether this economic marginalization was an accidental by product of the 1994 war or systematic and state-engineered by the Egal administration is a question beyond the scope of this study. Second, the volume of livestock exports increased and exceeded pre-war levels as reported by Little (2003) and Holleman (2003). However, this increase mainly took place because the Ali Warabe and Indhadeero companies had increased livestock exports in order to generate hard currency for the import of the consumer goods from which they generated their main profits. This increase was also assisted by cargo ships that began operating from the port of Berbera, replacing the smaller boats that the Garhajis traders used to transport livestock before 1993. To attract cargo ships to Berbera port, Ibrahim Dheere paid the insurance of the first cargo ship that came to Somaliland after the war from his own pocket (Phillips, 2013. Third, since livestock exports were unregulated, Ali Warabe and Indhadeero oversupplied livestock to the import markets. The uncontrolled supply which some exporters described as ‘dumping’ (*daadin*) could, in fact, have caused some of the problems that Somali livestock export faced in the post-war period (Gaani, 2002).

From the foregoing account, institutional crisis has contributed to the challenges facing Somalia’s livestock export since late 1980s. In addition, the state that Somaliland reinstated in the post-war period has been weak, lack efficient bureaucracy and has fallen short of promoting strong institutional environment which is important for international export trade. The of this study suggest that strong and functional institutions are paramount for a sustained and improved livestock export. This is consistent with previous studies, whichreported that countries with better institutions tend to trade more internationally (Dollar & Kraay, 2002; Berkowitz, Moenius, & Pistor, 2006; Faruq, 2011).

3.3.7 Conclusion and Recommendations

3.3.7.1 Conclusion

The formal institutions collapsed with the breakdown of the central state in 1991 in Somalia, implying that livestock export trade from port of Berbera to the Arabian Peninsula resumed in early 1991 in the total absence of formal institutions. The informal institutions have therefore been playing the important missing role of state institutions in livestock trade within Berbera corridor.

The increase in the volume of livestock exports from Somaliland's port of Berbera after 1991 has given the impression of a performing post-war livestock export trade in the absence of state or other formal institutions. However, livestock export trade has faced numerous challenges that arise from the absence of formal institutions. Even though Somaliland reinstated some state institutions over time, the lack of international recognition of the state has undermined their role in the international livestock trade. In addition, institutions that would have been specifically crucial for livestock export have not been revived, therefore livestock trade remains mostly stateless. Informal institutions that filled the vacuum left by state collapse have generally fallen short of regulating economic actors and establishing relationships with formal institutions, including those of the importing countries

As a consequence of the absence of state institutions and the limited role of the informal institutions, Somaliland's post-war livestock export trade has been characterized by coordination challenges such as a 'value problem' (potential difference between the buy and seller on the quality of the animal), defaults in livestock payments, poor animal health and welfare, harassment of Somali traders in the international markets, oversupply of livestock to international markets, collective punishments through livestock bans and oligopolies. Hence, the sheer increase in the number of livestock exports does not provide a full picture of dynamics and problems underlying livestock trading. The current institutions in post-war Somalia and Somaliland should not be interpreted as substitutes for formal institutions. Somali political entities should acknowledge that unlike other economic sectors, livestock export needs strong and functional formal institutions. In practice, while the role of informal institutions in the local value chain of livestock exports is commendable, this study has demonstrated that formally recognized institutions are indispensable in the international trade, in particular to attract investors willing to diversify from the relying only on the KSA market, exporting other livestock species besides small ruminants.

3.3.7.2 Recommendations

- To prevent Saudi Arabia's non-discriminatory bans on livestock exports regardless of the port of origin, Somalia's post-1991 authorities need to avoid the politicisation of this important source of income and livelihood and find new ways to coordinate the reinstatement of functional formal institutions in export livestock trade.
- Important financial institutions that must be reinstated include commercial banks and credible institutions that control the quality of the export livestock.
- In order to facilitate livestock export, the government of Somaliland should formulate and implement policies including Livestock Quarantine Act, Animal Health Strategy, National Animal Welfare Strategy, Animal Production Strategy, Animal Disease Emergency Preparedness Plan and the Sanitary and Phytosanitary Strategy that are key for livestock export trade. Currently, these policies either exist only in draft form or are absent.
- Somaliland and the Federal government of Somalia need to agree on non-political independent institutions and policy frameworks that facilitate livestock export trade.
- The policymakers have to deliberate and decide what form of state can promote social and political institutions that may lead to desired economic outcomes such as improved and sustained livestock exports.

CHAPTER FOUR

REVENUES ON THE HOOF: LIVESTOCK TRADE, TAXATION AND STATE-MAKING IN NORTHERN SOMALI TERRITORIES

Abstract

This chapter considers the relationship between livestock taxation and local state formation dynamics in northern Somali territories. While the literature recurrently acknowledges livestock's economic importance in the Somali territories, its significance as a source of revenue for administrative and political entities has been overlooked. Drawing on fieldwork in Somaliland's main livestock markets and the Berbera corridor as well as existing studies on taxation and territorialisation in Somalia, this chapter highlight the interplay between public administrations that seek to maximize livestock revenue and traders who attempt to minimize taxation. State attempts to capture these 'revenues on the hoof' by both coercive and consensual means, shifting livestock trading routes and fluctuating animal trading volumes thus produce different taxation patterns across the Somali territories. In addition, the chapter highlights that, on the one hand, in contrast to the fiscal sociology which emphasises the role of institutionalised representation in revenue raising as essential feature of the nexus between taxation and state building, many of the taxes collected from livestock were not approved by the Somaliland house of representative neither did representatives ratify the legal existence of most of the taxing authorities. On the other hand, the successful capture of revenues from livestock trade by different administrative levels has significant implications for increased local revenue generation by the post-1991 Somali administrations.

Keywords: Livestock trade, taxation, state building, Somaliland, Somalia

4.1 Introduction

Taxation is a key process in state making as permanent administration and coercive capacity require enduring sources of revenue (Schumpeter, 1991; Tilly, 1985). Historically, the taxation of trade has constituted a crucial source of revenue for state makers, not least on the African continent (Mann, 1988; Cooper, 2002; Schouten, 2019), and the Somali inhabited territories in East Africa are no exception to this pattern. Here, pastoral production and livestock trade provide a livelihood for a majority of the population (Little, 2003), but as this chapter shows, livestock trade also provides significant revenue for the authorities of an increasing number of state, sub-state, state-like and rebel-held entities that have emerged since the collapse of the central Somali state in 1991.

This chapter explores and analyses the taxation of Somali livestock trading by focussing on livestock that is exported via Berbera port, the main port of the Republic of Somaliland, to the Arabian Peninsula. The annual export of 3-4 million head of goats, sheep and cattle (IGAD 2016) depends on the pastures of the Haud (Holleman 2003; Desta *et al*., 2011), a semi-arid plateau that spreads out across parts of what is now Somali Regional State in Ethiopia, south-central Somalia, Somaliland and Puntland. Livestock production and trading in Somali East Africa is inherently transnational, moving across state, clan and ecological boundaries to access seasonal pastures, water points and markets. A study in Somaliland's Burao market reported that some 50% of livestock in the market originated from Somali Regional State in Ethiopia and 15% from south-central Somalia (FSAU 1998 cited in Holleman, 2003). While livestock movement for pasture and water is free, livestock movement for trade is subject to multiple attempts at taxation and levying fees by state and state-like actors on their way to Berbera and other export ports.

While some authors have considered the impacts of the breakdown of the Somali state on the economy (Mubarak, 1997; Little, 2003; Leeson, 2007; Powell, Ford, & Nowrasteh, 2008), there has been little investigation into the effects of post-1991 state fragmentation on the economy, into how the multiple public authorities that have emerged in the territory of former Somalia affect livestock trade through their taxation practices. In fact, the causal relations between Somali (post)-war economies and state formation dynamics remain opaque (Hagmann & Stepputat 2016).[91] Rather than being a land of 'duty free' and extreme laissez faire where business can operate without having to pay taxes to the state as some observers including US libertarian economists have suggested (Webersik, 2006; Leeson, 2007), economic transactions in Somali East Africa are characterized by multiple forms of both consensual and coercive taxation and fees. The following analysis of livestock trading in northern Somali territories provides an entry point to understand how the mundane political economy of fees and taxes that underpins Somali economies provides both livelihoods for populations and revenues for public authorities.

By mapping shifting taxation practices along the Berbera livestock trading routes, this chapter highlights relations between livestock trade and public authorities. The chapter shows that unlike other economic sectors, taxation of livestock trade in the Somali territories has increased in the last two decades owing to the multiplication of sub-state and state-like entities that generate revenues from livestock flows. This raises questions as to how taxation and state building are related in the Somali territories and demonstrates the need to further investigate this relationship. However, how this relationship develops in Somalia and other state building contexts is far from being straightforward and is, according to some scholars, poorly understood (Keen, 2012).

Generally, taxation had an enormous, albeit differential, influence on modern European state formation. As Schumpeter (1991[1918]) argued, the novelty of 'tax states' emerged on the basis of regularized tax levies on the private sector and private incomes, which financed wars, administration, infrastructure and increasingly public services. Moreover, Schumpeter's approach implies that tax states, more than other types of states, will tend toward accountable, representative government, since taxpayers will demand some reciprocity in their relationship with the state, thus forging a fiscal (social) contract.[92]

Schumpeter has inspired a 'new fiscal sociology' (Keen, 2012), including applied literature on taxation in Africa, which is permeated by the assumption that reciprocity in the taxation relationship can help develop liberal democracy as well as building state capacity.[93] This assumption is also behind the 'rentier state' literature that argue that states that depend on resource or strategic (e.g. aid) rents – rather than broad-based taxation - develop 'pathological' forms of state, as Moore (2004) describes it. As Meagher (2018) has discussed, new fiscal sociology also inspires recent writings that recommend taxation of the extensive informal economies in Africa and elsewhere, based on the argument that people will start making demands on the government and hence develop a kind of fiscal citizenship.

While analysis of this chapter will gauge if, and in which way, taxation of livestock trade involves reciprocity, the chapter will also argue that taxation itself might contribute to the authority of the taxing entities. As Hoffmann et al. (2016) observed in the Democratic Republic of Congo (DRC), when armed groups use the repertoire of signs, discourses and technologies of taxation, which is recognizable as one of the 'languages of stateness' that states speak, they also perform a kind of legitimacy associated with the state (Hansen & Stepputat, 2001). Hence their 'right to tax'.

Finally, the chapter considers Olson's (1993) argument that 'stationary bandits' tend to be less predatory in their taxation than 'roving bandits' because the former will try to avoid depleting their tax-base in the long run. Olson does not believe in social contracts but sees the tax-relationship as based on mutual self-interest. However, the chapter will argue that Olson considers only sedentary populations, while this chapter looks at traders who move through a number of checkpoints set up by different 'stationary', territorial Somali authorities.[94]

The first section provides a short overview of the political economy of livestock trade in the northern Somali territories. Subsequently, the chapter highlight the fragmentation and emergence of new political and territorial entities in Somali East Africa after 1991. The following section unearths the taxation of livestock by multiple public entities in Somaliland and offers selective comparative insights into livestock taxation in neighbouring Puntland, South-central Somalia and the Somali Regional State in Ethiopia. Next section identifies key analytical issues and dynamics that emerge at the intersection of livestock taxation and local state building. The objective of this chapter is to analyse the taxation and revenue extraction practices from livestock heading to Somaliland's port of Berbera for export.

4.2 Materials and Methods

4.2.1 Study Sites

Data collection for this chapter was conducted in Hargeisa, Burao and Togwajale terminal markets. Livestock sold in the studied markets originate from Somaliland, Ethiopia and South-central Somalia and used specific corridors and routes to the terminal markets and the Port of Berbera. In discussion with livestock traders (*jeeble*), agents (*wakiilo*) and transporters (*gadiidlay*) main livestock trade corridors, routes, taxation points and taxing authorities along these routes were identified. The study focused on Gashamo-Burao and Gashamo-Hargeisa corridor which connects the Somali regional state in Ethiopia to Burao and Hargeisa markets. This corridor is used by livestock that has originated from five regions (Goday, Qarbidahare, Wardheer, Fiiq and Dhagahbur) of the Somali regional state in Ethiopia. Most livestock from South-central Somalia is also transported on the Gashamo-Burao corridor (see Figure 3.1). Due to the transnational nature of livestock, as explained in section 4.2.4, this study used a multi-sited approach to examine conveyance of livestock and taxation points and authorities. Multi-sited is a methodological approach that is widely used when studying geographically dispersed phenomenon such market flows, commodity chains and international institutions (Muir, 2011).

Data collection was carried out from the terminal markets, however, from traders, transporters and agents, it was possible to understand livestock taxation outside the study sites. Although the "term multi-sited ethnography usually refers to the practice of an ethnographer undertaking research in, and between, several physical locations as part of a single study, it is also sometimes used to describe investigation of a single location that is explicitly conceived of as part of a larger context that exceeds the boundaries of the field site" (Muir, 2011, p. 14).

4.2.2 Sampling Procedure

This chapter used the same sampling procedure as Chapter Three. Purpose sampling was found to be useful in identifying and selecting key informants such as livestock traders, brokers, transporters that operate in the main livestock trade corridor and routes and taxing authorities in Somaliland. Each corridor is dominated by specific clans, therefore, those interviewed from the Gashamo-Burao and Gashamo-Hargeisa corridors were from Isaq and Ogaden Somali clans while those interviewed for the South-central Somalia-Somaliland corridor were from Hawiye, Isaq and Ogaden clans who were well informed about taxation and fees levied on livestock from Ethiopia and south-central Somalia en route to Somaliland terminal markets and the port of Berbera. Further purposive sampling considered Somaliland government officers from the revenue collection institutions such as the Ministry of Finance and Customs Authority and Finance Officers who represent Hargeisa, Burao and Togwajle municipalities in the three terminal markets.

4.2.3 Methods

This chapter draws on forty interviews with key actors who are involved in the supply of livestock to the study terminal markets or in livestock taxation. Those interviewed included brokers, agents, livestock exporters and transporters (Table 4.1). Also, Interviews were guided by semi-structured questions that focused on livestock trade routes, taxation practices along each route, the dynamics of livestock taxation, the views of actors in the livestock trade on taxation and the relationship between taxation and state formation in the Somali territories. Interviews were triangulated with observations and analysis of documents such as taxation receipts. Interviews, document analysis and observations were carried out in Burao, Hargeisa and Togwajale terminal markets between March and August 2018. Relevant literature was also identified for analysis to inform this discussion of the findings.

Table 4.1: Informant interviews conducted for chapter four

Interviewed informants	Location (n= number of interviews)
Government officers (former and current)	Hargeisa (n= 4)
	Burao (n=1)
	Togwajale (n=2)
	Berbera (n=1)
Livestock exporters (former and current)	Hargeisa (n=2)
	Burao (n=1)
	Togwajale (n=2)
Middle traders	Hargeisa (4)
	Burao (4)
	Togwajale (2)
Brokers (*dilaal*)	Hargeisa (n=3)
	Burao (n=4)
	Togwajale (2)
Transporters	Hargeisa (n=3)
	Burao (n=3)
	Togwajale (n=1)
Oral histories	
Senior livestock traders and agent for South-central Somalia traders	Burao (n=1)

4.2.4 Data Analysis

The analysis here followed the same procedure as Chapter Three data analysis (see figure 3.2) because both chapters draw on qualitative fieldwork. Interview transcripts were imported to NVivo qualitative data management and analysis software and emerging patterns, categories, convergencies and divergencies were coded. The analysis and coding were guided by the research objective to unravel the complexities in livestock trade, taxation and state-making in the Somali territories. The resultant categories and sub-categories were compiled into thematic areas that were subjected to in-depth interpretation and synthesis to drive conclusions and formulate recommendations. This was complemented with analysis of relevant literature.

4.3 Results and Discussion

4.3.1 The Political Economy of Somali Livestock Corridors

The power structure and dynamics of livestock trading corridors are important for the understanding of taxation practices. Cross-border livestock trade is an important economic activity in the Somali ecosystem and takes place along particular corridors such as the historic 'Ethiopia-Somaliland-Arabia' trade corridor (Teka & Azeze, 2002; Umar & Baulch, 2007;

Kefale, 2019), the Somalia-Kenya corridor (Little, 2003; Tempia *et al*., 2010) and Bossaso and Somaliland-Djibouti corridor which assumed greater economic importance after 1991 (see Majid, 2010). These corridors are 'transboundary geographic spaces of economic, political and social relations' where flow, exchange and the governance of livestock and derived capital can be observed (Hagmann & Stepputat, 2016, p. 31–32). In addition, Somali trade corridors are dynamic, adapting to changing economic, political and climatic circumstances and are under the jurisdiction of multiple de facto and de jure public authorities which compete to influence the 'circulation of objects' (Stepputat & Hagmann, 2019).

In the northern Somali territories, the economically important Ethiopia-Somaliland-Arabia trade corridor developed centuries ago and funnelled pastoral commodities to Zeila and Berbera ports in the bay of Aden (Pankhurst, 1965; Umar & Baulch, 2007). Hargeisa and Burao markets in Somaliland had emerged during the colonial period and became centres of pre-capitalist pastoral economies (Samatar *et al*., 1988). Livestock export was oriented towards Berbera since late 19th century due to its strategic location *vis-à-vis* the Middle East markets, Aden in particular.[95] Somalia-Ethiopia hostilities in the 1970s and 1980s disrupted trade with Ethiopia but after 1991, Berbera benefited from the gradual re-opening of trade routes (Ahmed, 1999).

The bulk of livestock in Somaliland markets and for export originates from outside Somaliland, mainly from Somali Regional State in Ethiopia and south-central Somalia (Holleman, 2003; Majid, 2010; Eid, 2014). However, four important caveats are in order when discussing cross-border livestock trading. First, official statistics on the scale of trade do not exist on the Somaliland side.[96] Second, cross-border trade is sensitive due to Ethiopia's long-term policy of controlling cross-border trade as well as attempts to capture more revenue from it (Stepputat & Hagmann, 2019). Third, the ownership of livestock crossing the border for trade is contested. Key informants in terminal market stress the seasonality of herd movements across the international border to access pasture and water points; for them, the livestock is mostly (ethnic) Somali.[97] Fourth, livestock trading corridors are, both in northern Somalia and in other parts of Somali East Africa, deeply entangled with the import of commodities (Kefale, 2019; Musa, 2019).

Actors in the livestock trade operate in national, sub-national and clan corridors. Three actors, who are specialists in the operation of livestock trade, make up the force behind cross-border livestock trade: the *Jeeble* (middle traders), *dilaal* (brokers) and *gadiidlay* (transporters). These three actors play complementary roles in the supply of livestock to the terminal markets and ports, and they all deal with revenue-claiming state and sub-state authorities who control sections and nodes in the corridors.

The *jeeble* traders purchase animals from producers in the bush markets and animal yards (*xero*) in their clan enclaves or from other *jeeble* in primary and secondary markets and truck (small ruminants) or trek (cattle and camel) to Hargeisa, Burao and Togwajale markets where they sell to exporters.[98] The *jeeble* is an old institution that emerged in the livestock trade arrangement in northern Somalia (now Somaliland) in 1970s, mainly to improve efficiency of livestock supply (Samatar *et al*., 1988). At the time of data collection, hundreds of *jeeble* traders (mainly from the Isaaq clan) had become responsible for approximately 80% of livestock sold in Somaliland markets. Apart from their increased market participation, the *jeeble* class has been characterized by the emergence, since 1991, of female *jeeble*. During the armed conflict in the early 1990s in Somaliland, female *jeeble* joined the export livestock trade because male *jeeble* were confined to their clan territories out of fear of revenge.[99] However, since then the proportion of female *jeeble* declined due to their limited access to social and financial capital in a male dominated sector. During fieldwork, a dozen of female *jeeble* operated in the study markets.

Dilaal or Dallaal, which means 'intermediary/broker' or 'intermediary's commission' in Arabic, is an important profession in livestock trade and often related to *jeeble* and exporters through kinship.[100] The *dilaal* plays several roles including linking *jeeble* and transporters, giving the latter money to pay taxes along the way, disseminating market information to *jeeble*, selling livestock for *jeeble*, collecting payments, and clearing transaction expenses including tax (Musa & Schwere, 2019). Little *et al*. (2015, p. 407) stated that *dilaal* 'maintain[s] important social and economic networks across multiple international boundaries.' Senior *dilaal* also double up as *wakiil*, or 'agents' (in Arabic) for *jeblee* traders from their own clan outside Somaliland and are thus important actors in cross-border livestock trade. *Jeeble* do not transport livestock from the hinterlands without first consulting with *dilaal*. Musa and Schwere (2019) observed in Somaliland's terminal markets that 'among the countless phone calls of *dilaal* are also inquiries from potential future clients from Somaliland, Puntland, Somalia, and Ethiopia who want to know about the state of the market, prices and logistics in order to make informed economic decisions.' There are also senior *wakiil* who work for the livestock exporting companies.[101]

The *Gadiidlay* emerged as livestock trucking was introduced into livestock trade in the early 1970s when it became important to supply large numbers of livestock in the short time span of the *mowsin* (the Hajj season of maximum eight weeks). Trucking reduces travel time between Hargeisa and Berbera from four-five days to three-four hours (Samatar *et al*., 1988, p.92). Livestock exported from the Somali ports originate from far-flung pastoral areas, sometimes up to 500 kilometres away from the ports (Majid, 2010, p.5). Therefore, trucking is critical factor for the timely supply of livestock, especially in the Hajj season. Since the mid-1990s, second-hand Nissan trucks, imported from Dubai, have dominated the Somali transport sector, first smaller six-ton trucks and later larger eight and twelve-ton trucks. The carrying capacity of these trucks range from 150 to 400 head of small ruminants or 20-30 heads of cattle, depending on animal size and weight and truck capacity.

With the increased dependence on truck transport, cross-border livestock trade became faster, but lost some of its flexibility as it became more difficult to avoid checkpoints along the main roads. Conflicts and cross-border restrictions affect most commodities that are dependent on road transport (Little, *et al*., 2015). Apart from providing transport services, transporters take care of the negotiation and payment of taxes and fees to different authorities along trade corridors, collect tax receipts and give accounts to the traders or *dilaaliin* who contract the trucks.[102]

Since most trucks shift between transporting livestock and transporting imported commodities, access to both Ethiopia and Somaliland is important. Most of the livestock is trucked from Ethiopia to Somaliland, while the trucks bring consumer goods back the other way. Transporters prefer serving areas where they quickly can get a return load. Both Ethiopia and Somaliland require transporters whose trucks operate across their borders to register their trucks and obtain number plates in order to avoid exorbitant taxation but also for security reasons. At the time of fieldwork, however, Somali truck-owners faced challenges in obtaining Ethiopian number plates due to higher cost and red tape.[103]

In the last decade, quarantine facilities, run by private or public-private-partnerships, have been established in Berbera, Bossaso, Jigjiga and Djibouti to build confidence in the receiving countries in animal health and thereby attract livestock for export. Djibouti took advantage of the Saudi's 1998/2000 ban on Somali livestock exports and established quarantine station and animal certification regulations (Majid, 2010). A US$ 6 million quarantine station was inaugurated in August 2004 (Afrol News, 2009). Somaliland, concerned with the influence of Djibouti in livestock export and the loss of revenue, outsourced its animal certification and quarantine facilities from a well-known Saudi livestock trader, who by 2009 had constructed a quarantine facility in Berbera (Eid, 2014). This US$ 5 million station was owned and operated by the Saudi-Emirates International Veterinary Quarantine Management Company (SEIVQMC).[104] The decision to grant exclusive livestock exports rights to SEIVQMC was contested in Somaliland, which lead to two additional export/quarantine station companies: Berbera National Animal Health Quarantine (BNAHQ) and Veterinary Berbera United Quarantine (VBUQ) (Musa, 2019). Since then, SEIVQMC (also known as Al-jabiri) invested in a quarantine station in Bossaso (Puntland), while another quarantine station was established in Kismayo, Jubbaland, (BBC, 2017). However, unlike quarantine stations in Somaliland and Puntland, 'Djibouti has the definite advantage of internationally recognised government' (Umar & Baulch, 2007, p.37).

4.3.2 Multiplication of Political Entities and Taxing Authorities

Numerous national and sub-national, autonomous and contested political entities have emerged in Somalia following the collapse of the central government in 1991 (Hagmann & Hoehne, 2009). This multiplication of public authorities and the creation of more or less durable mini-states has arguably been driven by three factors, which are, in chronological order; the experience of central state collapse in the early 1990s, post-war bottom-up state formation processes (after the mid-1990s) and the gradual federalisation of Somalia after 2004.

After independence in 1960 and the unification of the former British and Italian territories in the same year, the euphoria of independence made Somalis forget their group differences (Lewis,1967]). Many of the Somali elite and urbanite class lived and invested in Mogadishu, the capital city, while their clan territories remained marginalised or neglected by the central government. In the aftermath of civil war, many of the former Mogadishu residents retreated back to their 'home', clan territories (Hoehne, 2016) and those in the north and north-east regions (Somaliland and Puntland respectively) used clan as an organizing principle to provide civil order (Leonard & Samantar, 2011). The returnees hoped to find protection from the brutality, but they found no proper infrastructure and services in their clan territories. This experience undermined trust in a centralised system and reinforced the importance of localised systems. This post-1991 re-definition of territory had a lasting impact on territoriality in Somalia (Bradbury, 2003; Hoehne, 2016).

Second, Somaliland unilaterally declared independence from Somalia in 1991 and used bottom-up reconciliation and institution-building that relied on local actors and revenues for state-formation (Bradbury, 2008; Bradbury, *et al*., 2003). This effective state building strategy served as a paradigmatic case in as much as other clan and political constituencies sought to emulate the Somaliland example. Puntland, for example, adopted a bottom-up state formation process like Somaliland's in 1998 (Hoehne, 2009). Since then dozens of political entities, some short lived and others more durable, emerged in southern and central Somalia.[105] Notably, no central state authority was able to create post-war territorial authorities and rights. Instead whoever claimed territorial rights and defended them became a de facto state (Hoehne, 2016, p.1380). Third, since 2012 the internationally recognized Federal Government of Somalia has been, with support of donors, implementing a federal political system, which led to the creation of federal member states Galmudug, Jubbaland, Southwest and Hirshabelle between 2012 and 2016. These entities set their own revenue collection policies.

These competing and at times overlapping state and state-like Somali administrations have struggled to generate inland tax revenue. In the case of Somaliland and Puntland, the bulk of public expenditure has been raised through the taxation of livestock and commodities leaving and entering Berbera and Bossaso ports. Contrary to Somaliland whose state-building process progressed with little foreign aid in the 1990s (Eubank, 2012), the Mogadishu based administrations often relied heavily on international funding. In the past decade, Somali administrations have managed to expand their tax revenue by increasing the taxation of small and medium enterprises and utility operators and have benefitted from growing customs revenue. Federal, regional, municipal and local administrations collect various taxes, both regular and irregular, while *al-Shabaab* taxes overland transport and businesses in its areas of operation (UNSC, 2018). In addition, recent trends show that Somali entities are expanding their revenue base by turning into rentier states, a case in point being the leasing out of Berbera port and airport, Bossaso port, Mogadishu port and airport and Hobyo port to United Arab Emirates, Turkey and Qatar, respectively. Taken together, Somali administrations bear both characteristics of 'tax states' and of 'rentier states' (Moore, 2004).

The territorial logic of these public administrations counteracts the more networked logic of Somali commodity and livestock trading, which encompasses the entire Horn of Africa as well as Arabian, Asian and European nodes (Majid, 2010; Carrier & Lochery, 2013; Little, 2013). Arguably, livestock trade has been most affected by the multiplication of new (sub-) national state entities in the Somali territories. Unlike other economic activities, livestock trade is oriented towards export markets – such as the Arab Gulf states in the case of the Berbera corridor or Nairobi in the case of the corridors from Jubbaland to Kenya. The livestock trading corridors pass through numerous hubs and territories claimed by various tax-levying public authorities. These are best understood as autonomous or semi-autonomous political entities that exercise power including revenue collection (Lund, 2006), targeting in particular strategic hubs (market towns, sea- and airports) and connections (roads, rivers etc.).

The competition over territories, resources and people that can be taxed has led to a proliferation of local administrative units and boundaries over time. For instance, in Somaliland and Puntland competition between corporate clan groups manifest itself in the creation of sometimes overlapping regions and districts with local revenue collection rights. In the case of Somaliland, former president Dahir Riyale Kahin created six new regions and 14 districts by presidential decree in 2008 while his successor, Ahmed Silanyo, created one new region and seven new districts.[106] [107] This increased the number of regions in Somaliland territories from five before 1991 to thirteen in 2019.[108] Some of these new administrations were created in territories claimed by Puntland which created two new regions and several districts in the same territories in 2003 and 2010. Puntland increased from three regions in 1998 to eight regions of which four overlap with territories claimed by Somaliland.[109] The competition between Somaliland and Puntland over these 'grey zones' causes double taxation (Hoehne 2015).

Neighbouring Ethiopia established a decentralized type of ethnic federalism after 1991 (Chanie, 2007). Ethiopia's Somali regional state from where a significant number of livestock originates became self-administrated by Ethiopian-Somalis in the early 1990s (Hagmann, 2005). Like Somaliland and Puntland, Ethiopia's Somali regional state created an increasing number of districts over the past two years in a bid to satisfy local demands for self-governance. The creation of local governments, predominantly based on clan boundaries, as well as increasing commodification interrupted or slowed down pastoral mobility patterns in eastern Ethiopia (Korf, Hagmann, & Emmenegger, 2015). For example, in 2016, the regional parliament approved the creation of two new zones and over thirty new districts (Araabinews, 2016). According to informants in Somaliland, after the creation of the regional *liyu* or special police in 2007, the previously porous Ethio-Somaliland border was gradually subjected to stronger controls, resulting in an increased taxation of trade by the authorities of Somali Regional State in Ethiopia.

4.3.4 Livestock Taxation in Somaliland and Beyond

This section takes a closer look at livestock taxation laws and practices in Somaliland. It also briefly consider taxation by other administrations in the catchment area of Berbera port, including Ethiopia, south-central Somalia and Puntland. The regulation of revenue collection in Somaliland, as well as in other Somali administrations, are dispersed in its constitution, laws, presidential and ministerial decrees, policies, and other regulations, and the overall revenue collection system is therefore marked by some ambiguity (Haas, 2017). In Somaliland in the early 1990s, multiple, relatively weak local and central authorities competed for revenue collection in the absence of laws and regulations of revenue collection.[110] It was only after the Constitution of 2001 (Somaliland Law, 2001) and approval of the Tax Unification Act (*xeerka midaynta cashuuraha*) by the Somaliland parliament in 2002, that the administration started to regulate revenue collection in earnest. Article 14 of the constitution states that the imposition of taxes and duties should be based on the interest and wellbeing of the society. Therefore, no taxes and duties that have not been determined by law shall be collected. Article 34 of the constitution states that citizens should promptly pay taxes and duties imposed on them, while article 54 outlines the legislative powers of the House of Representatives, including the imposition of taxes, duties, and other schemes for raising revenue (Somaliland Constitution, 2001).

Nevertheless, the history of state-building in Somaliland has left traces in how different sectors are being taxed. In the early 1990s, President Egal took loans from major businessmen, in the import sector, which was to be paid through tax exemptions (Balthasar, 2013). Since then, it has become a political culture in Somaliland that the government turns to major businessmen and companies for loans which makes the state beholden to them (Phillips, 2013). Remittances and telecommunication are major economic sectors in Somaliland, but the former is tax exempted, while the latter arguably is undertaxed (Phillips, 2013; Musa & Horst, 2019). Unlike these economic sectors, livestock trade has become an important source of tax revenues,[111] including sales tax, transit tax, export tax, customs duties and supplementary commissions on livestock trade.[112]

4.3.4.1 Contested livestock taxation in Somaliland

Revenues from livestock have been important for Somaliland's state building project, but at the same time a source of a friction that potentially weakens statehood by contributing to revenue sharing grievances and marginalisation. The section illustrates the scenario by looking at grievances in Hargeisa and Burao municipalities, which host terminal livestock markets. They started taxing livestock in mid 1990s, like several other local authorities along the road to Berbera that taxed bypassing livestock trucks. The action arguably deprived the under-resourced central government of the opportunity to raise revenues for state-building and security.[113] To remedy these kind of problems, Article 11 of the Tax Unification Act defined the amount of taxes[114] and distributed tax collection powers as follows: the Ministry of Finance was to collect export tax at the Berbera port, while local municipalities would levy sales tax in the marketplaces. However, the controversial part of the law has been article 14, stating that local municipalities of districts which host national customs will get a 10% budget supplement (*kab*) from the overall duty collected by the Ministry of Finance in the customs. In this case, Burao and Hargeisa municipalities do not qualify for the 10% budget supplement while Berbera does, as the host of the customs in the port.

During an interview on this subject, the Mayor of Burao expressed his dissatisfaction with the Somaliland tax code. In his view, article 14 was politically motivated because, first, President Egal, whose clan family is from Berbera, privileged the port city in terms of revenue generation; secondly, at the time the law was passed, the Somaliland government considered Burao as peripheral, lacking the kind of government reach and presence that could make revenue collection possible.[115] Whether or not the allocation of customs and taxation offices were politically motivated, it is true that Somaliland's most important post-war customs posts-Kalabeydh and Berbera-are in territories dominated by the Habar Awal clan family to which the former President Egal belongs. As Balthasar (2013) states, Egal's control of revenues from Kalabeydh Berbera customs was key to the survival of his administration. In the absence of sufficient revenue redistribution, there is a perception among Somaliland clans that existing tax and customs regimes disproportionally benefit Habar Awal inhabited areas.

To overcome this revenue collection crisis, Egal administration drafted the Tax Unification Act (*xeerka midaynta cashuuraha*) which the Somaliland parliament passed in 2002. Article 11 of the new law delineated tax collection powers as follows: The Ministry of Finance was to collect export tax at the Berbera port, while local municipalities were to levy sale tax in the marketplaces. The article also unified the amount of sales taxes.[116] However, the controversial part of the law has been article 14, stating that local municipalities of districts which host a national custom will get 10% budget supplement (*kab*) from the overall duty collected by the Ministry of Finance in the customs. In this case, Burao and Hargeisa municipalities do not qualify for the 10% budget supplement while Berbera does, since exported livestock is taxed at the port of Berbera customs.

In the mid-1990s, at the time when Egal's administration was giving tax exemptions to other key economic sectors, as mentioned above, his administration introduced two similar taxes, albeit different in their wording, on livestock exports, an 'export duty' and an 'export duty levy'. The export duty, derisory in amount, is collected in Somaliland shillings and has remained unchanged since it was introduced.[117] An export duty of 52, 348 and 480 Somaliland Shilling is levied per head of small ruminants (goats and sheep), cattle and camel, respectively.[118] The breakdown of these figures include inspection fees, administration tax and export duty. The more important export duty levy consists of US$2, US$11 and US$15 per head of small ruminant, cattle and camel, respectively.[119] The rationale behind this duty levy was that the government wanted to claim its share of hard currency since no central bank controlled such transactions (Musa, 2019). The livestock export duty levy raises the third highest tax revenue in Somaliland after import duty and sales tax as demonstrated in Table 4.2.

Table 4.2: Somaliland tax revenue for 2014 to 2016

Types of tax	2014 ($)	2015 ($)	2016 ($)
Import duty	33,974,174	38,580,554	42,789,253
Sales tax	9,436,335	11,047,906	12,824,049
Livestock levy	8,889,735	9,902,373	7,705,805
Export duty	65,589	248,733	74,667

Source: Somaliland Ministry of Finance (2018)

At Loya Addo customs, at the border with Djibouti, export duties on livestock are higher than in Berbera (US$4, US$15 and US$20 on small ruminants, cattle and camel, respectively). According to interviewed livestock exporters and customs authorities, the reason is that Somaliland wants to influence traders to export their livestock through Berbera port.[120] In general, it seems that the tax imposed by Somaliland on livestock exports has been significantly higher compared to those of the erstwhile central Somalia. In the late 1980s export taxes were 'derisory' in amount, although a number of quasi-official and ad hoc administrative charges were collected by different parastatals towards late 1980s (Green & Jamal, 1987).

In addition to the central administration, local authorities in Somaliland charge various taxes and fees at terminal livestock markets (Burao, Hargeisa and Wajale) and roadblocks along the trade routes.[121] At the time of fieldwork, Hargeisa and Burao municipalities each collected a sales tax of SolSh 2,000 (US$0.2) per head of small ruminant. According to municipal representatives in Hargeisa and Burao markets, the volume of livestock sales in these markets ranges from 5,000 to 40,000 heads every day, depending on the season. Consequently, market authorities would derive between US$1,000 and US$8,000 per day from livestock taxation.[122] Depending on the livestock source and route, between four and five local administrations at border entry points and along trade routes each charge a transit tax of SolShs 1,500 (US$ 0.15) per animal.[123] In other words, depending on the truck size, each truck would pay a total of between US$30 and US$50 for a single journey through the four to five local administrations located along the main livestock trading routes in Somaliland.[124]

These taxes affect traders differently, before the livestock arrives at the terminal markets, it is the middle *jeeble* traders or the producers who shoulder the tax payments at multiple checkpoints, while from the terminal markets to the port (where tax rates increase) wealthier livestock exporters shoulder the tax burden. But the taxes also point to ambiguities in the taxation system as different ministries define taxation practices. As the municipal official in charge of Burao market pointed out, "the Ministry of Finance is not privy to the taxation practices of the local municipalities, which fall under the jurisdiction of the Ministry of Interior. Local councils set their revenue and expenditure sources independently from the Ministry of Finance." [125]

There is also a debate on the legality of the multiple taxation practice since the local administrations that have been created after 2008 have not been ratified by the parliament; therefore they do not benefit from national budget transfers, although they are not (legally) authorized to impose taxes either.[126] In addition, as the official mentions, local municipalities issue transit receipts for the livestock they tax, which indicates that other municipalities along the road should not tax the same livestock. However, it is common that local municipalities ignore transit permits and tax passing livestock within their jurisdiction. For example, Burao district's taxation department issued a 'transit' permit for livestock that has been taxed in Burao market, while Sheikh district, which is located between Burao and Berbera, levied its own livestock tax.[127]

In addition to local municipalities, the regional branches of several national ministries also collect revenues at the livestock markets. The Ministry of Livestock has veterinary posts in the terminal markets in Hargeisa, Burao, and Togwajale, and issues certificates of veterinary inspection for a fee after visual inspection of livestock for export. Furthermore, the Ministries of Finance and Education, Burao's general hospital, and Burao University, share a budget supplement (*kab*) of 640 Somaliland Shillings (US$ 0.064) per head of small ruminant sold for export in Burao market.[128] The rationale behind the budget supplement is that regional branches of national ministries in the periphery regions do not receive enough budget transfers from their headquarters in Hargeisa, where most of the budget is spent. In addition, interviewed transporters stated that they pay *birqaad/xadhigfur* (fees for opening the roadblock) at the checkpoints manned by police along livestock trade routes; this payment is derisory in amount and subject to negotiation.

4.3.5 Taxing livestock from southern Somalia and Somali Regional State in Ethiopia

As mentioned earlier, some 15% of the livestock exported through Berbera port originates from south-central Somalia, mainly Beletweyne and Guriel secondary markets. According to interlocutors, livestock from these markets is taxed both by the Hirshabelle and Galmudug administrations that have jurisdiction over these markets, and by al-Shabaab. The former two collect US$120 and US$150 per twelve-ton truck of livestock respectively, while al-Shabaab collects an equivalent of US$70 per truck. Al-shabaab taxes livestock both in bush and primary markets in Southwest State in Bay and Bakool regions and livestock *en route* to Beletweyne and Guriel markets.[129] A livestock exporter based in Hargeisa stated that compared to other taxing authorities, al-Shabaab applies a modest tax rate.[130]

Livestock trucks from south-central Somalia to Somaliland use two routes: either the tarmac road that connects Somaliland and Puntland crossing from Burtinle district of Puntland and entering Somaliland from the contested Lasanod town; or via Somali Regional State in Ethiopia, crossing Galgudud region at the border between central Somalia and Somali Regional

State. On the tarmac road, Puntland levies customs duties of US$3 per head of small ruminant at Burtinle between Galkayo and Garowe, which means that Puntland authorities derive between US$1,050 and US$1,200 per 12 ton truck, depending on the number of livestock on board.[131] Due to high levels of taxation levied along this trading route only trucks without Ethiopian number plates use this route. A *dilaal* from central Somalia explained to us that trucks with an Ethiopian number of plates use the cheaper route through Ethiopia where a truck encounters 4-5 checkpoints, paying only US$500 in total.[132]

Finally, as pointed out, an estimated 50% of livestock sold in Hargeisa and Burao markets and exported through Berbera port originate from within Somali Regional State in Ethiopia. The usually smaller eight-ton trucks that carry livestock from the Somali Regional State to Somaliland pay 1400 birr (US$45) at each collection point. Pointing out that checkpoints are not only a cost in money, a transporter on this route told that 'on average I spend 30 minutes at every revenue collection point. The authorities carry out animal headcount, sometimes I negotiate for discount. Consequently, this delays me three hours: one and half hour on the Ethiopia side and one and half on the Somaliland side of the border.'[133] Due to bottlenecks in obtaining Ethiopian legal number plates of vehicles, Ethiopia's Somali Regional State authorities have been trading number plates of damaged or out of service trucks at lower fees and at times allowed unregistered Somaliland trucks to cross the border.[134] However, the Ethiopian Revenue and Customs Authorities, at the federal level, who conduct impromptu operations in the Somali Region, often impound and expropriate trucks and their loads, even after truckers have paid their taxes and fees to the Somali Regional State.

4.3.6 Livestock Revenues, State Formation and Social Contracts

This section delves into some of the questions that were raised in the introduction about the kind of relations that different taxation practices have produced in the case of Somaliland. Here, in the absence of foreign aid, revenues from livestock exports have been an integral part of the state building process since the early 1990s (Forti, 2011). Somaliland faces challenges in how to properly tax key sectors of its economy (Musa & Horst, 2019). However, it becomes evident that Somaliland, and most of other authorities outside Somaliland, have successfully extracted revenues from livestock. This revenue is crucial for sub-national administrations that receive marginal or no budget transfers from the national governments to run their operations and provide public services such as local governance and security.

The question is what kind of relationship taxation builds between taxpayers and authorities. From the contractarian viewpoint, consensual taxation contributes to state-building through reciprocation, but this was not the kind of relationship that traders depicted in their dealing with Ethiopian authorities. In fact, it seems that a very unfriendly taxation relationship persists between Somali livestock traders and Ethiopia's central government as has been reported in other studies Eid (2014) and Stepputat and Hagmann (2019) as well. Two factors in particular have contributed to this fraught trade relationship. First, during the colonial era when Ethiopia took control of the Haud area, based on the Anglo-Ethiopian treaty in 1897, it imposed taxes on Somali pastoralists who wanted to access Haud for grazing, and often looted their livestock (Mohamed, 2004). Secondly, the traders consider the bulk of livestock crossing the border as a Somali asset and therefore in general resist Ethiopia's federal government attempts to make claims on their livestock.

In the case of Somaliland, traders give a critical, yet slightly more positive depiction of their tax relationship with authorities. During the Siad Barre government, livestock traders in northern Somalia complained that they did not see any benefits of the taxes they paid, whereas they were even less likely to see such benefits after 1991 (Little, 2003). However, most of the traders interviewed for our study did not complain about the multiple fees and taxes levied by various public administrations in Somaliland. A plausible explanation of this phenomenon could be that most of livestock traders interviewed were from the Isaaq clan that supported the Somaliland Nationalist Movement as well as the state-building project in the1990s. As Moore (2004) suggests, even coercive taxation is feasible when governments enjoy 'the type of legitimacy attached to movements that have achieved independence …. through armed struggle.' For example, a livestock exporter known for his role in Somaliland's peace and state building process stated that the exporters tolerated the above-mentioned government policy in early 1990s which required that they exchanged a certain percentage of hard currency through the central bank, at a very low exchange rate. Later, livestock exporters negotiated a fixed 'export duty levy' because they knew that such revenue was important for building an administration and demobilizing militias that were extorting traders and paying modest salaries to a central army (Hoehne, 2015).[135] Nevertheless, livestock exporters today are critical of the Somaliland administration. They complained that the government spends minimal funds on supporting the livestock sector, especially livestock markets and the trade. In addition, in exchange for the tax livestock traders paid to Somaliland authorities, they do not get protection from unfair trade practices in the international markets. Owing to this lack of protection, interviewed livestock exporters perceived that livestock trade remains stateless (Musa, 2019).

Apart from services and protection, one can argue that Somaliland reciprocate taxes on trade in non-material ways. For example, the Ministry of Livestock has health posts in Burao, Hargeisa and Togwajale markets and in the port of Berbera, which are tasked to inspect animal health and issue a certificate of veterinary inspection. According to the procedure, veterinary professionals visually inspect all sold animals in the markets and request that animals that show signs of sickness are removed from the herd before they move on to Berbera, or, while in Berbera, before being moved to the holding yards. However, it was common in the markets and Berbera that veterinary professionals issue certificates and collect fees without inspection taking place. Removing livestock from the herd would not please exporters as mentioned by interviewed veterinary professional.[136] It was observed that in both Burao and Hargeisa markets, there were cases where head of markets issued certificates of veterinary inspection on behalf of the veterinary officers who were absent. Furthermore, despite the importance of implementing stringent animal health standards, Somaliland officials are reluctant to follow through, knowing that import/export actors could shift to other ports with less stringent policies. Given the potential negative effects in the export markets, this is an example of what Tendler (2002) calls the 'devils deal', where in this case fees are reciprocated through lax regulation.

An important question concerns the returns that taxpayers receive from the taxing authorities. From the contractarian viewpoint of taxation one way that taxation contributes to state formation is through the contractual reciprocation between taxpayers and taxing authorities. As highlighted by (Hoffmann *et al*., 2016) in the context of the DRC, taxation establishes a relationship based on mutual obligations and rights between taxpayers and taxing authorities. In the case of multiple taxation of livestock in northern Somalia, this dynamic plays out as follows. First, one cannot deny that taxing authorities in Somaliland (both at national and sub-national levels) have successfully provided security from mid 1990s from rouge actors and militias that would have otherwise extorted the economic class. Therefore, revival of taxation system at local and national level is important for security provision. Evidences show that tax revenues from livestock was critical to Somaliland's early state formation and establishment of state institutions including security providers (Jhazbhay, 2008) since by taxing imports and exports, Somaliland leaders were able to demobilise militias by formally engaging and paying modest salaries to security service providers (Hoehne, 2015). However, it is also true that considering limited territorial jurisdiction, Somaliland, like other Somali entities, could only provide protection and security in those towns and places that are commonly considered its strongholds and where state presence is more developed and less contested. For example, Somaliland administration has not been able to protect livestock exporters from harassment and bullying in the overseas markets. For this reason, despite paying taxes to Somaliland, livestock exporters held the perception that Somaliland fell short to provide them protection in the international markets, and in the absence of a central state that could provide 'territory-wide governance' many insisted that livestock export remains stateless (Musa, 2019).

Finally, if we look at taxation as a performance, it is notable that all taxing Somali authorities in this study, including al-Shabaab, issue pre-printed receipts for the taxes they collect, which, according to Prud'Homme (1992) would not be the case for predatory regimes. The receipting indicates the accountability of tax collectors to an authority; hence it points to the legitimacy of the practice as well as a more consensual tax relationship, consensual in the sense that livestock traders collect the receipts and add the cost to the animal price while freeing themselves from harassment.

4.3.7 Conclusion and Recommendations

4.3.7.1 Conclusion

Due to the increased access to motor vehicles, livestock trekking to the main markets and ports has declined and transportation of livestock has become faster. However, due to the increased dependence on truck transport, livestock trade lost some of its flexibility as it became more difficult to avoid checkpoints along the main roads where taxes and fees are collected.

In the absence of coordination between different authorities that control livestock markets, ports and trade corridors, livestock transporters, on behalf of the livestock traders and brokers, play the role of paying taxes, negotiating for tax reductions, collect tax payment receipts and account to the livestock traders.

Key structural changes that took place in 1991 included the breakdown of Somalia's central government and the introduction of ethnic federalism by the neighbouring Ethiopia. Consequently, the numerous and at times overlapping authorities that have emerged in both countries aim to raise enough revenues and this has increased taxation on livestock trade which is a key economic activity in the region.

Some of the taxes are legally ambiguous but represent a 'practical norm' that is widespread and accepted. Whereas the capture of revenue on the hoof is a relatively simple, low-cost form of taxation for these authorities, it has added tax-burdens to livestock traders which, in the end cascades down to the producers.

Livestock taxation contributes to state-building when taxation in considered a state function. The study shows that all Somali authorities issue pre-printed receipts for fees they collect, implying some sort of accountability of tax collectors, and hence some legitimacy and more consensual practice between taxpayers and taxing authorities. However, in contrast to the expectation that taxation gives voice to the taxpayers, this depends on the power of the taxpayers. Taxation may only give voice to the major livestock exporters who are also the owners of quarantine facilities, but less so to the middle *Jeeble* livestock traders who are fragmented and pay taxes not the central state but regional and district authorities.

While tax payment to all states in Somalia's territories seemed surprisingly consensual, there has been laxity in enforcement of veterinary standards, which may be interpreted as a kind of reciprocity of the tax collectors to taxpayers.

4.3.7.2 Recommendations

- Administrations that have emerged in the Somali territories after 1991 need to reform their taxation practices and policies so that multiple taxation on livestock exports is reduced or eliminated.
- Somaliland should provide services such as improving marketing infrastructure and better governance to the livestock traders in exchange for the taxes they paid to the government.
- Multiplicity of taxation increased the amount of time that trucks ferrying livestock spend on checkpoints. To overcome this challenge, there is a need for one-stop administrative centres for livestock taxation.

CHAPTER FIVE

FROM REGULATION TO DEREGULATION: VALUE CHAIN ANALYSIS OF FODDER FOR LIVESTOCK EXPORT IN SOMALILAND

Abstract

Horn of Africa is among the world's leading regions in live animal trade that include cross-border and overseas trade. Whereas there have been numerous studies on livestock trade in the region, this has not been matched with interest in fodder for livestock trade, yet fodder and livestock trade are inseparable economic activities. Using the case of in the Berbera trade corridor, a key route for overseas livestock trade from the Horn of Africa to the Arabian Peninsula, this study analysed the fodder value chain, focussing on production, trade, actors, livestock feeding regimes and institutional dynamics and their influence on fodder production and trade. Findings from this study show that the central government of Somalia regulated rangelands and the utilisation of rangeland products before its breakdown in 1991. Since the collapse of the central government institutions, pastoralists and agro-pastoralists turned to the rangelands as a source of livelihood and fodder production and trade has become an important economic activity in Somaliland. Fodder production and supply in Somaliland are not organized, and coupled with high demand, especially at the peak of livestock export, often leads to scarcity that adversely affect the livestock trade. Finally, the deregulated rangelands have provided an opportunity for the fodder to emerge as an economic activity that many actors depend on for livelihoods.

Keywords: Fodder, institutions, livestock trade, holding grounds, regulations

5.1 Introduction

Horn of Africa (HoA) is a global leader in live animal exports (Joosten, *et al*., 2017). Like many other Sub-Saharan Africa economies which are dependent on a single export commodity, Somalia export depends on livestock (Darkoh, 1997). Livestock exports constitute 80% of the country's foreign exchange earnings (FAO, 2012). An estimated 3-4 million heads of goats, sheep, cattle and camels that are annually exported through the port of Berbera (IGAD, 2016) require thousands of tons of fodder.

Fodder is an integral part of livestock production and trade, and therefore the reason why it has become a high-value rangeland product since the collapse of the rangeland land management institutions in Somaliland. As reported by ILO (2011), livestock trade has triggered increased fodder commercialisation. Despite the increase in fodder commercialisation, productivity is still far below the market requirements, mainly because production is dependent on small-scale seasonal spate irrigation. Consequently, the low supply coupled with high demand results in high fodder prices, especially during the Hajj season when livestock export peaks. The high cost of fodder and scarcity lead to poor feeding of export livestock, and this affects animal body condition, thus making them uncompetitive in the international markets (Ministry of Planning, 2017).

Fodder trade in Somaliland owes its origin to the flop of the holding grounds and grazing reserves upon collapse of central government in 1991. Somalia's military government nationalised the rangelands in 1975 with the introduction of land tenure law which made private ownership of land illegal (Bradbury, 1996). The only form of private ownership of land that the military government permitted was the agro-pastoral cooperatives based on tenure, which were established to promote sedentarization of the pastoralists. Dozens of public holding grounds and grazing reserves of between 250 and 1000 km square each were established across the country (Najim & Briggs, 1992). The grazing reserves, under the National Range Agency (NRA), had the purpose, inter alia, to reduce morbidity and mortality of livestock during the dry season while the holding grounds, under the Livestock Development Agency (LDA), were meant to facilitate livestock trade by providing yards for holding animals awaiting sale or transport upon purchase. Table 5.1 shows some of the national grazing reserves and holding grounds that existed in the northern Somalia regions (now Somaliland).

Table 5.1: Former grazing areas and holding grounds in Somaliland

Reserve Area/Holding Ground	Region	Total Area (km squares)
Aroori[1]	Togdheer	354
Tuuyo	Togdheer	610
Ban cawl	Togdheer	386
Baayaal	Togdheer	835
War cimran	Togdheer	240
Gubad xariir	Togdheer	296
Qool caday[2]	Maroodi-jeex	388
Dhamal	Maroodi-jeex	367
Ununuf	Maroodi-jeex	64
Daba-dillac	Salel	227
Osloli	Awdal	227
Gacan libaax and Bookh	Sahil	169

Source: Ministry of Environment and Rural Development (2016)

Following the collapse of the central government in 1991, rangeland management institutions ceased. The national grazing reserves and holding grounds fell in the private hands as the local communities reclaimed their nationalised lands while parts of the national grazing reserves were privately enclosed by individuals. The collapse of the government rangeland institutions and regulations marked the beginning of a deregulated rangelands and rangeland products across Somaliland/Somalia. This has prompted the emergence of fodder production and trade as an important economic activity that a dozen of actors depend on for livelihoods. This chapter presents an analysis of fodder production and trade associated with livestock export, in relation to the institutions whose breakdown led the emergence of fodder commercialization .

5.2 Material and Methods

5.2.1 Study Sites

Data collection for this chapter was conducted in Hargeisa, Burao and Togwajale markets. Also, the data collection involved field visit in selected fodder production sites outside Hargeisa, Burao (Beerta and Beerato) and Togwajale.

5.2.2 Sampling Procedure

In order to map the value chain, trends and institutions in the commercial fodder for export livestock, the study used a combination of purposive and snowball sampling (Babbie, 1992).

[1] Holding ground
[2] Holding ground

This was important to identify and interview those who have specialised knowledge in the fodder trade. Purposive sampling was also used to select the study sites. Purposive sampling strategies were conducted based on the believe that the selected individuals, organisations and sites had the required information.

5.2.3 Methods

This study was primarily qualitative and involved semi-structured interviews, field visits to different fodder production sites and a review of literature. Those interviewed included key actors in the fodder trade in Somaliland such as fodder vendors, fodder producers (both private enclosure owners and cooperatives), transporters, fodder wholesalers, livestock exporters and brokers, officers from the Ministry of Livestock and Ministry of Environment and fodder production cooperatives in Beerta and Beerato areas in Togdheer region (Table 5.2). The interviews were guided by semi-structured questions that focused on fodder producing areas, actors in the fodder value chain, fodder prices, fodder institutions and factors that affect fodder production and utilization. Interviews were conducted in Hargeisa, Burao and Togwajale livestock markets between April and March 2019. Out of the thirty three interviews, ten were key informant interviews which lasted between thirty minutes to one hour. The interviews were supplemented with field observations and review of literature.

Table 5.2: Informant interviews conducted for chapter five

Interviewed informants	Location (n= number of interviews)
Government officers	Hargeisa (n= 2) Burao (n=1) Togwajale (n=1)
Livestock exporters (former and current)	Hargeisa (n=2) Burao (n=1) Togwajale (n=2)
Fodder traders/producers	Hargeisa (n=3) Burao (n=3) Togwajale (n=2)
Brokers (*dilaal*)	Hargeisa (n=3) Burao (n=2) Togwajale (2)
Transporters	Hargeisa (n=2) Burao (n=2) Togwajale (n=3)
Oral histories	
Retired fodder trader/broker	Hargeisa (n=1)

5.2.4 Data Analysis

Interviews were transcribed and imported into to NVivo qualitative data software. In order to bring structure of the data from interviews and understand fodder trade, analysis involved coding with NVivo and identifying patterns, categories and themes and the relationship between them (see Hilal & Alabri, 2013). In addition, in-depth description, interpretation and synthesis were carried out to drive conclusion and recommendations (see Chapter Three). Nvivo was preferred because qualitative data analysis tends to be systematic and thorough (Bazeley, 2007).

5.3 Results and Discussion

5.3.1 Fodder Production in Somaliland

Somaliland climate is arid with rainfall pattern varying in terms of frequency and amount among regions (Mirreh, 2017). The eastern and southern regions of the country have a bimodal rainfall pattern with two distinctive rainy seasons and two dry seasons. The rainy seasons are *Gu* (April to June), the main rainy season when about 60% of the annual rains are received, and *Dery* (October to November), the lesser rainy season that constitute about 40% of the annual rains (Mares, 1954; World Bank, 2006; Mirreh, 2017). The two dry seasons are *Jilaal* (January to March) and *Xagaa* (July to September) (Godiah *et al*., 2014). In the western regions, *karan* rains occur from July to September, connecting *Gu* and *Deyr* seasons (World Bank, 2006; Ministry of Planning, 2012). The eastern and southern regions receive about 200 mm of rainfall per annum, the western regions receive up to 450 mm, while the Golis mountain range receives more than 500 mm of rainfall per annum (Gilliland, 1952; Ministry of Planning 2012; Mirreh, 2017). The agricultural land constitutes only 10% and is mainly found in the western regions, while the rest, excluding settlements, are considered as rangeland that mainly produces forage (Mirreh, 2017) that supports extensive livestock production.

The leading commercial grass production areas in Somaliland are Beer east of Burao and Beerato, Gatiitaley, Xaaxi, and Qaloocato all under the Oodweyne district, South of Burao (Figure 5.1).[137] These grass producing areas lie in the southern side of Golis mountain escarpment, between the littoral region and the *Haud* plateau, and benefit from the seasonal floods originating from the escarpment. The escarpment is between 4,000 and 7,000 feet above sea level and receives relatively higer annual rainfall due to its elevation (Mohamed, 2004, p. 535). Long '*wadis*' (dry rivers beds) that originate from the escarpment form drainage systems that water the foothills and support vegetation growth in these areas (Brandt & Brook, 1984). There are also small-scale commercial grass producers in Xabaale, Ubaale, Meygaagta, Xadhigxadhig, Sharma Arke and Jab Dhurwa in Southern Hargeisa.[138] Commercial sorghum and maize stalks are produced in the agro-pastoral Gabiley and Awdal regions in the west of Somaliland.

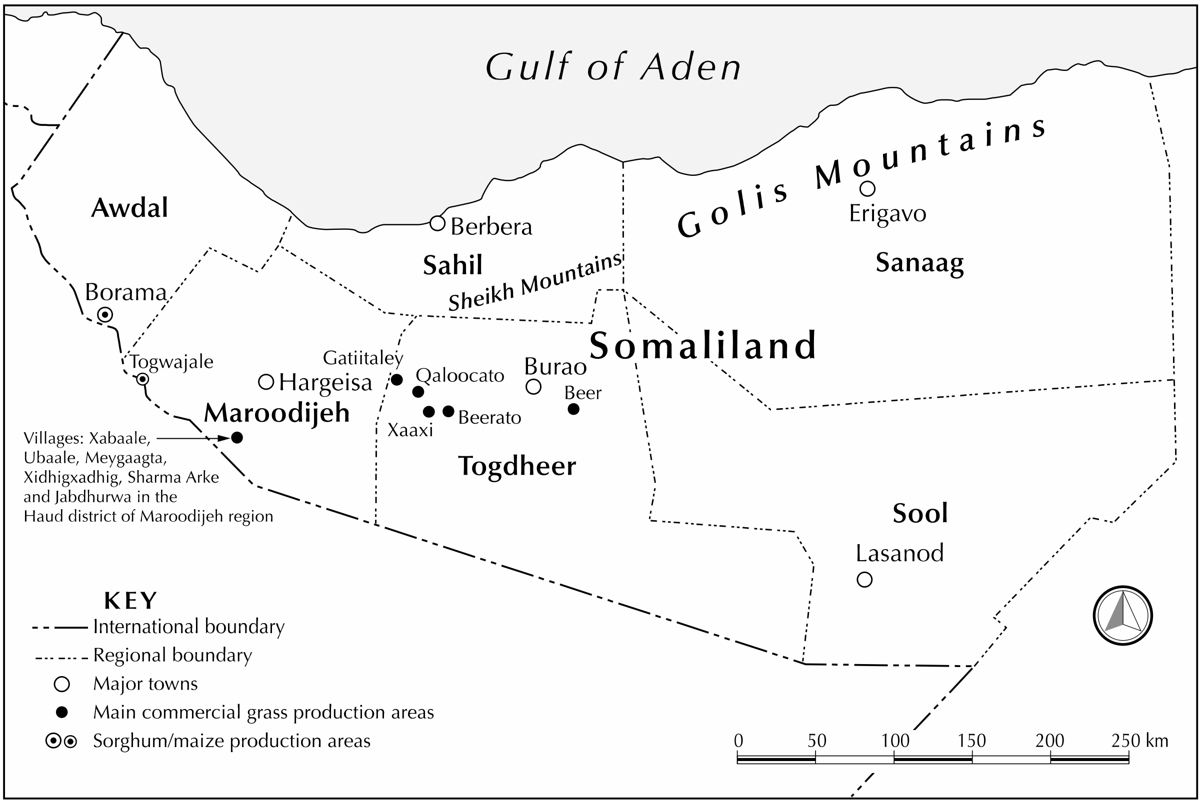

Figure 5.1: Main fodder production areas in Somaliland

Fodder production depends on spate irrigation during the rainy season and this makes production seasonal and generally climate sensitive. Livestock production and specifically body weight therefore fluctuates with variations in forage availability. The seasonality in fodder production makes it difficult to sustain all year-round fodder supply. Livestock exporters have however devised strategies to cope with fodder scarcity including fodder importation, renting fodder farms in advance, while at times livestock ships carry fodder from the import markets.[139] Somaliland government reported that fodder for export livestock is sourced from Ethiopia (Ministry of Planning, 2017). However, during fieldwork of this study, there was no fodder sourced from Ethiopia was sold in the local markets. In 2010, Ethiopian restricted fodder exports to Somaliland mainly to discourage informal livestock exports. However, Ethiopian authorities argued that the ban was imposed due to the shortage of fodder in the country (Eid, 2014).

5.3.2 Privatization and Deregulation of Fodder Production in the Rangelands of Somaliland

The breakdown of formal rangeland regulations in 1991 constituted a turning point in the commercialisation of fodder in Somaliland, introducing an era of privatisation and deregulation in fodder production and utilisation. Previous agricultural cooperatives turned to fodder production and started supplying fodder to the private holding yards, while enclosures and privatisation of the rangelands, inter alia, for fodder production have become common (Gaani, 2002). The successive administrations implemented privatisation and nationalisation policies in the rangelands. The national grazing reserves and holding grounds established by the military government after nationalisation of the rangelands in 1975 (Bradbury, 1996) were aimed at to increasing access to pasture and water throughout the year in order to improve animal body condition and reduce mortality and morbidity during dry season (Samatar, 1989; Najim & Briggs, 1992). Grazing reserves and holding grounds were part of several major projects funded by donors and the World Bank between 1977 and 1985 (Ayan, 1990).

Holding grounds were used to assemble and condition livestock awaiting export. Commercial fodder production was very limited before 1991, only the agricultural cooperatives were allowed to produce limited fodder for livestock on board ships to overseas destination markets.[140] Most of the grazing reserves and public holding grounds such as Qooladay and Aroori were located in the northern regions (now Somaliland) due to the concentration of Somalia's livestock export in Hargeisa and Burao markets and the port of Berbera.[141] The holding grounds were established along routes traversed by commercial livestock traders (Little, 2003).

Although the holding grounds were not free from critique including that they caused overgrazing (Darkoh, 1997), their collapse in 1991 reversed any positive impact (Gaani, 2002). In the absence of holding grounds, the private sector took over the services such as vaccination, watering and quarantining initially provided in the government owned holding grounds. Livestock exporters established their own private holding yards where they now assembled and feed a large number of commercial livestock waiting for health inspections and shipment.

Recent attempts by the Somaliland government and development partners to revive Qooladay and Aroori holding grounds near Hargeisa and Burao respectively failed. In 2014, Somaliland

Development Fund (SDF) planned for the revival of Qooladay (20,000 hectares) and Aroori (10,000 hectares) holding grounds, both located in two important livestock trade routes. Referring to the plan to revive holding grounds, a senior SDF officer interviewed for this study stated that, "the two holding grounds would have the capacity to handle 50% of livestock exports from Somalia and were planned to hold 450,000 small ruminants for three weeks at a time. In addition, all services for livestock export, including fodder production, would have been available".[142] The revival of the holding grounds was however met with resistance by the local community, private holding yard owners and politicians.[143] This resulted in the suspension of the Qooladay project, while Aroori, which was established at a cost of two million dollars, has been out of service.[144] Interviewed senior Ministry of Livestock officer commented on the operational capacity of Aroori holding ground as follows, "the holding ground is 100 square kilometres [10,000 hectares], 40% of the holding ground has been allocated for commercial livestock and 60% for seasonal grazing reserve. In addition, eight hectares have been allocated for fodder production and in 2016, 40 loads [240 tonnes] of grass was harvested. However, the holding ground is closed due to challenges in operating it".[145]

The case of Aroori holding ground reminds us of the many paradoxes in the Somaliland livestock trade interventions. Despite the important role of holding grounds in facilitating livestock exports through the maintenance and improvement of animal body condition, and provisions of measures to meet international quarantine and health standards, livestock exporters resisted their revival. The exporters who also own private Berbera quarantine station and holding yards feared that holding grounds would increase the cost of trade and reduce the fees that currently accrue to them from their private facilities. Some politicians from Berbera had an economic concern that if holding grounds were moved from Berbera to Burao and Hargeisa, then Berbera would lose the revenues from livestock exports and hosting private holding yards and quarantine stations. The local communities who took over the control of previously government holding grounds after 1991 viewed the revival of holding grounds was used as a pretext to grab their land by powerful individuals while they also resisted the idea that livestock accumulated from different sources in and outside Somaliland will be grazed in what they see as their communal resources.

The transition of former crop cooperatives into fodder production has boosted commercial fodder production in Somaliland. In the wake of the 1974 prolonged (*dabadheer*) drought, the government of Somalia, as part of its sedentarisation project for the drought-afflicted people, established and supported agricultural cooperatives.[146] The cooperatives mainly produced sorghum and maize crops.[147] Adam (1985) reported that the cooperatives were institutions meant to foster collective participation in the economy. However, even though crop farming remained the second most productive sector after livestock, crop prices were very low due to government policies and uncontrolled supply of food aid into the local markets (Mubarak, 1997). After 1991, despite the absence of government controls, crop prices remained low while the price of fodder increased. This became an incentive for Beerta and Beerato cooperatives to focus on fodder production. Currently, each community has several active cooperatives with each cooperative consisting of around 70 farmers who together own 300-400 hectares.[148]

Another important change in Somaliland rangelands is the increase in private (illegal) enclosures. According to a World Bank report (2018, p. 53), ‘large tracks of productive, once-communal grazing areas, especially in fertile depressions that benefit from floods and slowly receding water to regenerate grasses, have been fenced for rainfed crop and fodder production during the wet season’. Gaani (2002, p. 24) reported that ‘Somaliland is faced with a predicament as the livestock trade cannot progress without the fodder from the enclosures and the traditional pastoral system cannot survive and expand when pastoralists are denied access to large chunks of grazing land’.

The role of the government of Somaliland in fodder production is limited to taxation. At least four types of taxes are collected from fodder by different government institutions. Tax is collected at the checkpoints along the Berbera road, except for “garbage collection fee” which the local municipalities collect in the markets to clean fodder residues. In the absence of state regulations, the grass is harvested at the *doog* stage (before seeding), which results in depletion of the soil seed bank and therefore undermining regeneration of pastures. In addition, both producers and livestock exporters keep fodder under the sun which results in nutrients loss. Concerned by the effects of unregulated fodder production on the environment and livestock quality, interviewed former livestock exporter stated that he created a private regulatory institution in the mid-1990s but it did not last long due to resistance from livestock exporters and unwillingness of the government to enforce the new regulations.[149] However, in the absence of formal regulations, the role of private regulators is still important. For example, cooperatives in the Togdheer region reported that they do not cut immature grass, rather they allow pasture to mature and shed off seeds. This is however not the case with the individual producers or ‘illegal’ enclosure owners who reportedly harvest immature grass.[150]

5.3.3 Types of Fodder and Feeding Regimes for Livestock destined for Export

Prior to collapse of central government in Somalia, livestock for export were assembled in the public holding grounds in the vicinity of Hargeisa and Burao where they were kept for the standard quarantine period. However, since 1991, small ruminants for export are normally moved from the secondary markets and assembled in private holding yards in Berbera where they are kept for two to three days before shipment.[151] Thereafter, it takes two days to transport the livestock by sea to Jeddah port in KSA, which is the main destination for small ruminants exports. This makes a total of five days during which livestock destined for export require feeding. Interviews with key informants revealed that the commercial livestock feeding system is based on Somalia veterinary code. According to this code, exporters need a six-ton truckload of fodder to feed 1,000 small ruminants, 200 cattle and 100 camels for 24 hours. Small ruminants are fed with dry grass all the time and cattle are fed with sorghum or maize stalks while in the holding yards and grass during shipment.[152] Based on this feeding regime, every 1,000,000 small ruminants would require 30,000 tons of grass or 5,000 six-ton trucks of grass from the time they are purchased to delivery in KSA.

On average, Somaliland exports 2,000,000 small ruminants per year, which demands for supply of at least 60,000 tons of grass per year to feed the livestock on transit. These findings confirm a report from Ministry of Livestock that estimated that between 2010 and 2018, export livestock consumed 50,552 tons of grass every year (Ministry of livestock, 2018). The estimations imply that a small ruminant consumes 5 kg of dry grass in 24 hours, while a cow and a camel require 15 kg and 23 kg of fodder, respectively in 24 hours period. Interviewed informants believed that in practice livestock exporters disregard the feeding standards and generally underfeed the animals due to the high cost of fodder and lack of strict government oversight.

In Somaliland, livestock for export are fed on dry grass (C*aws*), sorghum and maize stalks (B*uushe*) and wheat bran (C*alaf*).[153] Small ruminants are fed with grass all the time, while cattle are fed with sorghum or maize stalks and wheat bran before shipment. All livestock are however fed on dry grass while on board the ship because sorghum and maize stalks are bulky and therefore take up space in the ship meant for livestock.[154] Although there are different types of grasses that vary in, among other properties, biomass, preference, palatability, and nutrition, these differences do not influence pricing. A plausible explanation is that different grass species are not baled separately, but rather as assorted bunch.

Fodder and livestock traders were found to be familiar with more than a dozen of grass species (Table 5.3). Grass wholesalers and retailers, however, could not sell grass according to species since each truckload or bale could have several types. The interviewed participants ranked *Cynodon dactylon* (*Daris*), *Chrysopogon aucheri* (*Dareemo*) and *Sporobolus marginatus* (*Dixin*) as the most preferred grasses, in order of preference. The preference was based on palatability, leaf size, biomass and animal preference. A grass retailer in Hargeisa market said that:

> Despite difference in species quality, we do not separate between different species because different types of species grow in the same farm. The floods will carry different seeds and producers cut the grass without separating it into species. But there are species that animal do not feed well or species that change colour if they come into contact with water… *Daris* [*Cynodont dactylon*] and *Xoogweyne* [*Chrysopogon aucheri*] are the most preferred because you see [she grabs a handful of *Cynodont dactylon*] it is has high weight (biomass) and is very palatable.[155]

From the quote, producers do not control the type of grass in their farms, rather grass that grows in their fields depends on the type of seed dispersed by floods. In addition, regardless of their difference in nutritive value, different grass species are priced together.[156] Besides grass and sorghum and maize stalks, wheat brans are another form of commercial fodder, which is normally imported from Ethiopia and used as alternative feed during shortages of sorghum and maize stalk shortages. According to the Ministry of Planning (2015), Somaliland imported 2,287 and 2,010 sacks (50 kg) of wheat brans from Ethiopia in 2013 and 2014 respectively. Though most wheat bran is imported for commercial purposes, there are also non-profit organizations that import wheat brans during drought and distribute free of charge to the drought-affected pastoralists to feed their animals.

Table 5.3: Common types of commercial grasses in Somaliland

Scientific name	Somali name
Cynodon dactylon	*Daris*
Sporobolus marginatus	*Dixin*
Chrysopogon aucheri	*Dareemo*
Cenchrus somalensis	*Gudoomaad*
Enneapogon elegans	*Caws-cad*
Aristida papposa	*Majeen, maadh*

Source: key informant interviews (n=10)

Unlike grass production that involves low costs, there are substantial costs attached to production of sorghum and maize stalks, which include land preparation (tractor hours), sowing and weeding. Overall, there is limited value addition in fodder value chain in Somaliland.

5.3.4 Fodder Value Chain in Somaliland: Actors and their Roles

Despite the absence of data on the contribution of rangeland products to Somaliland's GDP, it is believed that since the breakdown of the rangeland management institutions, rangelands have become a source of high-value products such as charcoal and fodder. Fodder is one of the high value rangeland products due to its indispensable nature for the millions of livestock exported annually through port of Berbera annually. To reiterate, fodder production was not an important economic activity before 1991, but it has emerged as a new source of livelihood since then.157 This section gives an account of actors in the fodder value chain. It is important to note that unlike livestock trade where the role of actors in the value chain is highly differentiated and well known (Umar and Baulch 2007), the role of actors in the fodder value chain overlaps as many actors play more than one role, especially at the marketing stage (Figure 5.2).

Input/services	Types of production	Processing	Marketing	Consumption
ACTORS: • Producers (Production, farm ownership) • Tractor owners (Ploughing) • Labourers (weeding, fencing, spraying) • Inputs (seeds, watering, pesticides	• Individual enclosures • Cooperatives • Individual farmers	• Harvesting (choppers, bailers)	• Transport (trucks; donkeys) • Suppliers (wholesale or retailers). • Service providers (brokers, loaders and off loaders)	• Livestock exporters, quarantine owners, holding ground owners) • Domestic livestock owners) • Commercial camel farm owners • Slaughters • Traders to restore animal body condition

Figure 5.2: Actors and their roles in the fodder value chain

Fodder producers are either former agricultural cooperatives or owners of enclosures. They grow fodder during the wet season under spate irrigation conditions. Unlike the production of sorghum and maize stalks that require inputs such as seeding, ploughing, weeding and spraying, grass production is not capital intensive as grass producers do not use inputs to improve production but rely on self-generating seeds. Another difference between grass and sorghum and maize stalks production is that the former serves a single purpose (fodder), while sorghum and maize can be grown for food and stalks used as fodder after harvesting grains, or at times grown only to be used as fodder. When grown as fodder, it is cut after 3 months and before it yields grains which normally takes 5-6 months.[158] Due to the increasing demand for fodder, there is an increasing trend of farmers preferring fodder production than grain production.

The transporters are important actors in the commercial grass value chain in Somaliland. Other than transport, some are also wholesalers of grass sourced from the private enclosures or the open range and agro-pastoral farms. Field interviews and observations reveal that it is common that truck owners/operators hire several 'legal' and/or 'illegal' enclosures from their clan dominated areas at the beginning of the rainy season to reserve pasture, which they later harvest and sell to retailers in Hargeisa markets or livestock traders. Six-ton trucks dominate the grass transport (Figure 5.3), while twelve-tone trucks transport sorghum and maize stalks due to their bulkiness. In the Togwajale market, donkey carts transport sorghum and maize stalk to the market (Figure 5.4). Low-income *jeeble* cattle traders buy fodder to maintain the body condition of their stock for a few days before sale or to feed cattle purchased in the day.

Figure 5.3: Shamaboo track/wholesale of grass in Hargeisa market

Figure 5.4: Supply of sorghum/maize stalks in Togwajale market

Exporting companies are large-scale livestock exporters and are formed by a few livestock export merchants and are the main buyers of commercial fodder (Umar & Baulch, 2007). After 2009, the companies in livestock exports from Berbera took the form of oligopolies that comprise Arab quarantine investors who are also livestock exporters and their Somali agents (Musa, 2019). These companies in the livestock export had replaced the Somali merchants who had been dominant in the livestock export since the 1940s as reported by Samatar (1987). The companies dominate small ruminant trade in the Somaliland-Saudi trade route. Through their agents, the companies buy fodder directly from the large scale fodder producers in Beerta and Beerato. The agents are responsible to ensure reliable fodder supply to the holding yards in Berbera and the livestock carriers.[159] The agent contacts the leaders of the fodder production cooperatives to agree on the number of trucks needed, the price and then arrange for transport.

Commenting on this, a senior company broker said, “reliable fodder supply is very important because no livestock is moved to Berbera unless the grass has already been received in the holding yards and livestock carriers”.[160]

Export Merchants are large-scale individual traders just below the level of the *shirkad* (Umar & Baulch, 2007, p. 25). *Ganasato* traders are concentrated on the Yemen and Oman trade routes and are mainly trade in cattle. The cattle merchants mostly purchase sorghum and maize stalks to feed their livestock while in the holding yards in Togwajale and Berbera. They buy the fodder from small-scale agro-pastoral producers in Gabiley and Awdal regions through brokers or wholesalers. Cattle traders also use wheat brans, imported from Ethiopia as fodder supplements especially during the season when sorghum and maize stalks are scarce.

Wholesalers normally transport grass, using trucks each carrying a load of 130 bales (*xidhimo*), to Hargeisa and Burao markets and sell it to retailers (pl. *awsley*) who sell the grass to livestock owners in the urban areas or butchers.[161] One of the *Awsley* commented that: “we buy grass from wholesalers in 130 bales then we repackage into 80 larger bales”.[162] Only female traders engage in grass retailing, a job that males disdain.[163] On the other hand, only men engage in retailing of sorghum and maize stalks in the Togwajale market where they transport the stalks with donkey carts from farms on both sides of the border and in the vicinity of Togwajale and wait for their customers in the market surroundings. The stalks are used by livestock traders to feed livestock in their holding yards (*hero*). Field interviews showed that sorghum and maize stalks are measured using *xadhig* (a rope of 16 forearms (*suxul*)), and any bale of sorghum or maize that 16-forearm length rope can tie is a *xadhig*. A full 12-ton truckload is four xadhig, while *jaqal* is half *xadhig* or a full load of a donkey cart.[164]

Choppers (pl. *jarayaal*) are a group of men usually between four to seven who cut fodder under different arrangements. One arrangement is that sorghum and maize stalks producers and some individual grass producers use g*uus* (community help) to carry out chopping whereby they pay a negotiated fee to the choppers. Another system, common in the cooperatives, is that fodder producers pay choppers half, the monetary value, of every full truck of fodder they chop. Commenting on this, a key informant said, “the cooperatives hire local labourers to chop the grass when it is ready, half of the price of every truckload of grass is taken by the labourers, hence payment is shared between these two groups”.[165]

Loaders (pl. *hamaaliin*) are a group of men who bale fodder, and load or offload fodder trucks. They are available in the fodder farms, markets, and the holding yards. The number of loaders/off loaders is usually small. For example, there were only four *hamaaliin* in the Hargeisa market and they had a small association of which only its four members could load or off load fodder.[166] In the farms, the choppers who bale fodder also act as loaders while the holding yards in Berbera use their labourers to load and offload fodder delivered by trucks .[167]

Brokers (*dilaaliin*) mediate between the wholesalers and buyers (retailers, companies, camel farms). Due to the interdependence between livestock and fodder trade, it is common that livestock brokers are also fodder brokers. The brokers have the contacts of the farm owners, wholesalers and transporters and they make phone calls to arrange for transportation of fodder to the holding yards in Berbera and to the livestock carrier.

The actors claim different fees for their services. Table 5.4 presents an overview of the average fees/commissions that different actors claim from commercial fodder trade

Table 5.4: Fees paid to various services in fodder value chain

Service	Average Fee (US$)	
	Grass	Sorghum/wheat stalks
Transport to Berbera	100-200[168]	-
Bailing[169]	62-75	-
Chopping	62.5	-
Loading	22.5[170]	39.0
Offloading	12.5	18.75
Brokerage	18.5	-
Ploughing		6.5
Weeding		121
Sowing		17
Government taxes (per load)		
Tax collected by the Ministry of environment	12.5	37
Tax collected by the Local municipality	8.75	12.5
Transit fee	6.25	3
Garbage collection	2.5	-

Source: Kew informant interviews (n=10)

5.3.5 Trends in Fodder Prices in Somaliland

In Somaliland, fodder price is influenced by the season. The price is lowest at the end of the wet season when a six-ton truckload costs US$300 and 7kg bale is US$ 6. The price is highest during the peak of the dry season when the price of a truckload of grass from costs between $500 and $1000; it is cheaper to buy from cooperatives than private enclosures. In addition, during the dry season the cost of a 7kg bale increases to US$15. Somaliland requires over 60,000 tons of grass for small ruminants' export annually. This implies that livestock exporters spend, depending on the season, between US$3 and 5 million on fodder per year. The lucrative fodder trade during the dry season attracts wealthy businessmen who import fodder from from other countries such as the United Kingdom and Holland. Commenting on this, a grass retailer interviewed in Hargeisa livestock market stated that, "during the drought of 2016, there was an acute shortage of fodder; Omaar [Somaliland's leading commodity importer] imported fodder from the United Kingdom and sold high-quality hay to livestock exporters and the demand was high".[171]

5.3.6 Conclusion and Recommendations

5.3.6.1 Conclusion

Fodder is indispensable in the export livestock trade. Prior to the war in Somalia, fodder production was not an important commercial activity. In the wake of the collapse of national holding grounds and grazing reserve areas, farmers and private enclosure owners turned to fodder production to supply livestock exporters. Fodder production in Somaliland is however not organized and involves little investment or value addition.

Fodder production fluctuate with season, thereby leading to importation of fodder from countries such as the United Kingdom by businessmen to bridge the deficit during the dry season.

Since fodder trade emerged as major economic activity in Somaliland, it has attracted many actors. However, unlike livestock trade where the role of actors in the value chain is highly differentiated, the roles of actors in the fodder value chain overlap as many actors play more than one role.

Since the collapse of state rangeland management institutions in 1991, the role of the state in the management of rangelands has been limited to taxation. In the absence of state regulations, grass is harvested at the *doog* stage (before seeding), which results in depletion of the soil seed bank and therefore undermining regeneration of pastures. Inadequate state presence in livestock export trade has also led to livestock exporters compromising proper feeding of livestock, especially those for export. This act is mainly linked to fodder scarcity normally experienced at the peak of livestock exports.

Attempts to regulate fodder trade or restore holding grounds by the government failed due to resistance from a number of actors including livestock exporters. Despite these challenges, fodder production remains a profitable economic activity due to high demand and insufficient supply.

5.3.6.2 Recommendations

- The government of Somaliland and the private sector should invest in upgrading fodder production from the seasonal spate irrigation to reliable irrigated production that would ensure supply throughout the year.
- Regulations are needed for proper fodder harvesting and animal feeding before export which is not only important for animal quality and marketability but also for animal welfare.
- This study calls for scientific evaluation of the nutritive value of different grass species and studies to inform value addition of fodder in the country.
- The government should address the challenges that led to the failure of revival of holding grounds.
- There is need to revive the holding grounds through involvement of key stakeholders including local communities, livestock traders, private holding ground owners and politicians who have a stake in the current privatized arrangement. Such intervention will require, as a prerequisite, an understanding of the factors that led to failure of the previous attempts to revive them.

CHAPTER SIX

FACTORS INFLUENCING LIVESTOCK EXPORTS IN SOMALILAND'S TERMINAL MARKETS

Abstract

Livestock export from Somaliland to the Arabian Peninsula countries is an important economic activity and the main source of Somaliland's foreign exchange earnings. Multiple regression time series analysis of secondary data was used in the study to determine factors that influence the monthly volumes of small ruminants (sheep and goats) and cattle traded for export in Hargeisa, Burao and Togwajale terminal markets. Results show that Hajj season, number of livestock exporters active in the markets, market location and livestock ban imposed by the import countries are the main factors that influence the monthly volume of livestock transacted for export. Further, the results indicate that though drought does not influence volume of small ruminants it has an influence on the volume of cattle. Also, the implementation of quarantine stations was found to have significant influence on the volumes of livestock exports. Finally, border restrictions imposed by Ethiopia do not influence the volume of livestock transacted for export in the study markets. Most of the factors found to have influence on monthly volume livestock transacted for export were institutional and policy related, hence can be addressed through requisite regulatory, institutional and policy reforms in consultations with stakeholders.

Keywords: Cattle and small ruminants export, livestock ban, quarantine stations, Somaliland, terminal markets

6.1 Introduction

Livestock trade is one of Horn of Africa's (HoA) economic success stories (Little *et al*., 2015). This indicates that agricultural sector, and in particular livestock industry, is potential to the economic growth in the Sub-Saharan Africa (Diao, Hazell, & Thurlow, 2010). It is estimated that the value of livestock export, including cross-border export between HoA countries, is US$1 billion (Catley *et al*., 2012; Little *et al*., 2015). The region's proximity to the Arabian Peninsula markets, world's largest market for live animal trade (Knips, 2004) offers a potential opportunity for live animal exports. Majid (2010) reported that livestock export from Somalia, including Somaliland, is the largest concentration of live animal export in the World. Live animal export is vital for Somaliland's economy contributing 85% of export earnings, 30% of the GDP and employs 70% of the population (Mugunieri, 2016).

Due to the imposition of repeated livestock export bans by the Arabian Peninsula countries, and recurrent droughts, Somaliland has experienced boom and bust cycle in livestock export volumes, therefore making the country's macro economy volatile (Ministry of Planning, 2017) Many times, drought could affect Somaliland more than the Eastern Ethiopia, and therefore given that 50% of the animals (mainly sheep and goats) exported through Somaliland's port of Berbera come from the Somali region of Ethiopia, the numbers exported may not be significantly affected despite the drought experienced in Somaliland. The repeated bans on livestock exports from Somalia presented an opportunity for other countries in the region such as Djibouti and Ethiopia to supply livestock to the Arabian Peninsula (Aklilu, 2008; Majid, 2010; Eid, 2014). In its effort to restore the confidence of the import countries, Somaliland established and privatised quarantine stations and its export livestock certification system in 2009 to a Saudi investor. Consequently, a few months later KSA lifted the protracted (from 2000 to 2009) livestock ban (Eid, 2014). At the same time, the neighbouring Ethiopia and Djibouti also installed quarantine stations (Majid, 2010; Eid, 2014). However, Saudi importers still prefer Berbera port due to, inter alia, the presence of modern quarantine stations (Little *et al*., 2015). Middle livestock traders (*jeeble*) also prefer Somaliland's terminal markets due to the concentration of larger livestock exporters (Umar & Baulch, 2007).

Togwajale, Hargeisa and Burao terminal markets in Somaliland attract livestock for export from Somaliland, eastern Ethiopia and southcentral Somalia. Although there is a great body of literature on Somalia/Somaliland's livestock exports (see for instance (Mugunieri *et al*., 2008; Negassa *et al*., 2008; Mugunieri *et al*., 2014), there is little that quantifies the factors that influence volume of livestock traded for export. Therefore, this study aimed to fill this gap by determining the factors influencing livestock traded for export from the local terminal markets in Somaliland. The findings will inform policy prioritisation and formulation in Somaliland and in the greater Horn of Africa.

6.1.1 Trends in Number of Livestock Export in Somaliland

Kingdom of Saudi Arabia (KSA), Yemen, Oman and the United Arab Emirates (UAE) are the main destinations for Somaliland livestock exports. KSA is the most important destination for small ruminants (sheep and goats) exports as 70% of the export takes place during the Muslim Hajj season (Majid, 2010). Yemen and Oman are two major destinations for cattle exports. Trend analysis of the yearly and monthly number of livestock export from port of Berbera are provided in Figure 6.1 and 6.2. The results in Figure 6.1 indicate that livestock bans were responsible for the sharp decreases in livestock export volumes. Import countries imposed several bans on livestock exports from Somalia's ports based on health grounds. KSA was responsible for most of the bans based on claims that Rift Valley fever (RVF) was detected from Somali livestock. The analysis reveal that the ban imposed by KSA had caused sharp falls in the volumes of small ruminants' export from Somaliland.

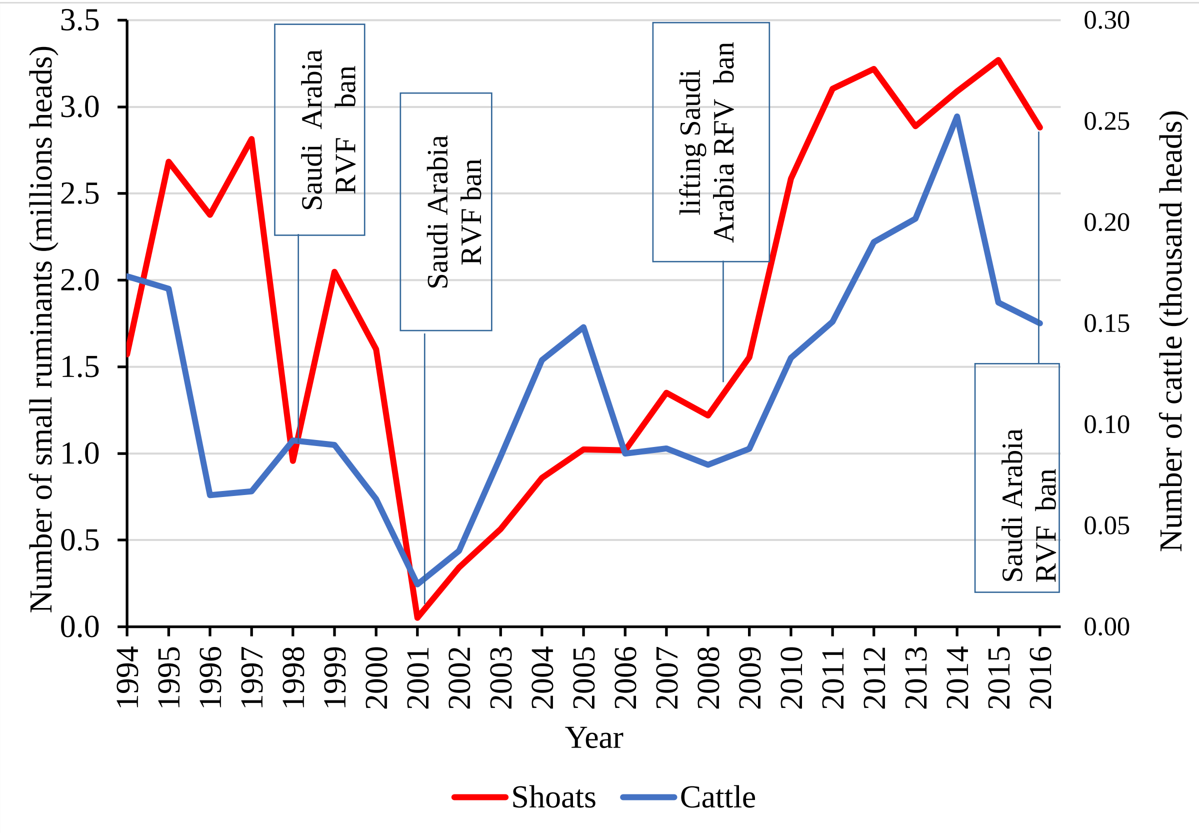

Figure 6.1: Number of small ruminants and cattle exported through Berbera port

Source: Author's analysis based on FSNAU data (1994-2016).

Figure 6.2 shows monthly peaks in livestock export during the Muslim Hajj season. Livestock export for the Hajj season starts 45 to 60 days before Eid al-Adha (festival of the sacrifice). In the example below, the Hajj period occurred between July and September and caused sharp increases in the export of small ruminants and cattle. Despite severe drought across the HoA in 2016 and 2017 (FEWS NET, 2017) livestock traders were able to mobilise millions of heads of small ruminants within a short period of time.

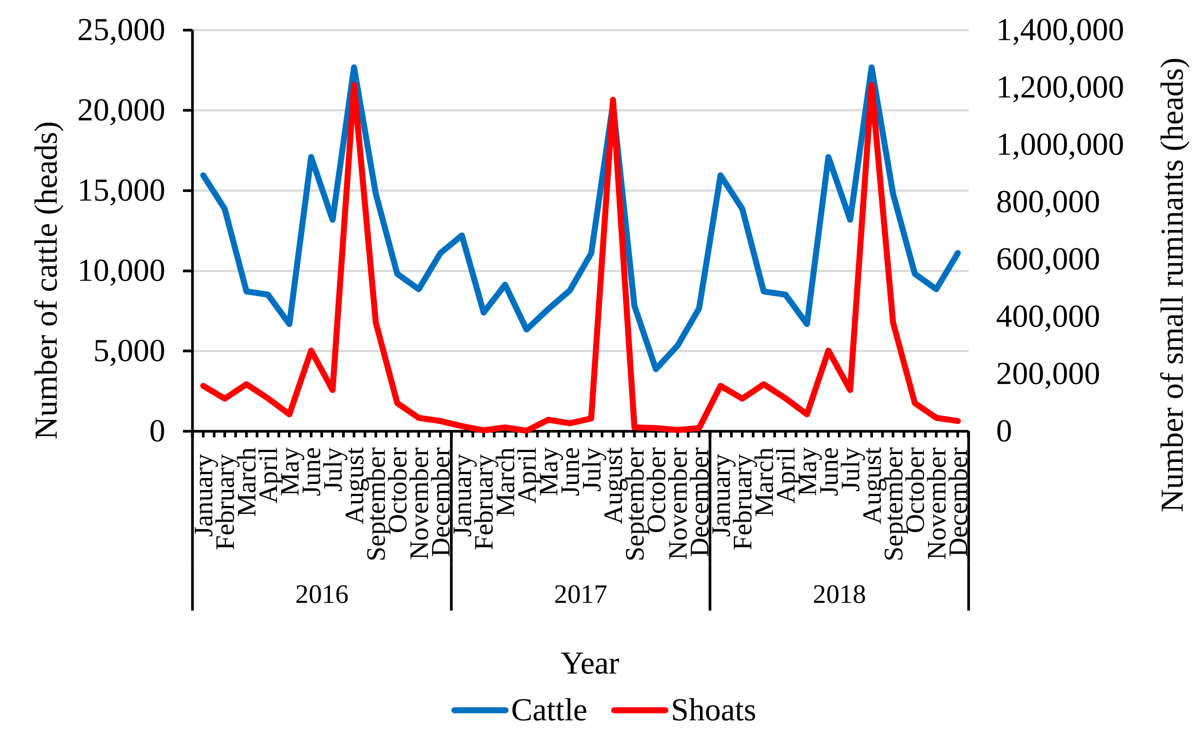

Figure 6.2: Volume of monthly livestock exports from port of Berbera

Source: Author's compilation and analysis based on data from SLCCIA (2016-2018).

Livestock export through port of Berbera stopped from 1988 after war broke out in northern regions of Somalia and resumed in 1991. Volume of small ruminants' export in late 1990s exceeded pre-war levels (Little, 2003; Holleman, 2003). However, import countries imposed two consecutive and devastating bans on livestock export due to the outbreak of RVF. First, KSA imposed 14 months ban from February 7, 1988 to May 1999 (Holleman, 2003; Majid, 2010). Volume of export recovered after the ban was lifted and increased to 2.17 million heads of small ruminants exported by the end of 1999 (Holleman, 2003). A second ban which lasted for 27 months from September 19, 2000 was imposed, this time, by all import countries in the Arabian Peninsula (KSA, Bahrain, Oman, Qatar, Yemen and the UAE) due to fear of RVF (Holleman, 2003; Majid, 2010; Eid, 2014). This ban had severe effects and reduced livestock exports from 2 million to 50,000 heads by 2003 (Eid, 2014). Except KSA, which maintained the second ban, import countries lifted the second ban after one year (Majid, 2010).

Kingdom of Saudi Arabia lifted the prolonged ban in November 2009 after Somaliland granted license to a Saudi investor who established a private quarantine station in Berbera to inspect and certify animal health before export (Phillips, 2013; Eid, 2014). During the ban on livestock export from Somalia's ports, including port of Berbera, livestock export shifted to the neighbouring Djibouti which has emerged as a competitive livestock export port since 2006 (Majid, 2010; Eid, 2014). KSA imposed a third ban on Somaliland livestock import from December 2016 (Goobjoognews, 2016) although the ban was temporarily suspended during the Hajj seasons to allow supply of livestock from Somalia ports.

Cattle constitutes the second highest population of live animals exported to the Arabian Peninsula, with Oman and Yemen being the main destination markets for cattle from the port of Berbera. Analysis from the yearly number of cattle exported from the port of Berbera between 1994 and 2016 indicate a sharp decline in 1996, 2001, 2006 and 2015. The volume of export remained almost constant between 1998 to 2000 and steep increase from 2002 to 2005 and from 2009 to 2014. Unlike small ruminants, the ban did not cause sharp declines in the yearly number of cattle exported. A plausible explanation could be that KSA, the country responsible for most of the bans, banned cattle from Somalia in 1983 due to concerns about rinderpest disease (Aklilu & Catley, 2014) and since then there were no direct cattle exports from Somalia to KSA. The increase in cattle exports from 2002 could be attributed to the relocation of cattle market from Hartasheikh market in Ethiopia, where there were trade restrictions such as ban on bulls younger than three years to Togwajale market in Somaliland where there were no restrictions (Umar & Baulch, 2007; Little *et al*., 2015).

6.2 Material and Methods

6.2.1 Study Sites

Two sets of secondary data have been used for this analysis. First data set is from Hargeisa, Burao and Togwajale terminal markets and has been captured by the Somaliland Chamber of Commerce, Industry and Agriculture (SLCCIA). The second data set of livestock exports through Berbera port has been captured by the food security and nutrition analysis unit-Somalia (FSNAU).

6.2.2 Sampling Procedure

The studied markets (Hargeisa, Burao and Togwajale), Berbera port, the study period (2008 to 2017), the studied animal species (cattle, small ruminants) and the independent variables fitted into the regression model have all been selected purposefully because these were cases that could yield in-depth analysis. The markets were selected for they have been the actual study sites and also for the availability of relevant and reliable data on livestock traded for export over the study period. In addition, the study period was selected based on the availability of secondary data and that it was during this period that key events such as livestock bans, establishment of quarantine stations, major droughts and border closures and changes in livestock the marketing system took place. The key events were the independent variables fitted to the regression model to examine their influence on the volume of livestock traded for export.

6.2.3 Methods

6.2.3.1 Secondary Data

The main secondary data set used for this study was obtained and compiled from the Somaliland Chamber of Commerce, Industry and Agriculture (SLCCIA) data captured under the livestock marketing information system (LMIS) (http://www.somalilandchamber.com/?page_id=16). Captured data included monthly volume of livestock traded in the study markets, livestock prices and livestock exporters who were active in the markets during data collection. The LMIS data was collected since mid-2007, therefore, one-decade (2008-2017) data was considered for analysis. The secondary data used for livestock export trend analysis were obtained from food security and nutrition analysis unit-Somalia (FSNAU) web page, http://www.fsnau.org/ids/trade/index.php. The FSNAU data for over two decades (1994-2017) was analysed to determine trends of livestock export trade.[172] Furthermore, extensive literature review on the pre and post- Somali economy and the role of institutions in livestock export trade was undertaken to complement the secondary data.

6.2.3.2 Determination of factors that influence monthly volume of livestock transacted for export in the terminal markets

Generalized linear model was used to estimate equation (1.1) and (1.2), this is because of the heteroskedasticity problem. We estimated one model for small ruminants and one for cattle because some explanatory variables that affect small ruminants do not affect cattle due to the difference in their value chains and import markets while there is also a significant difference in price and volumes of the two species. Variables and their descriptive statistics are presented in Tables 6.1 and 6.2.

Model specification for small ruminants transacted for export in Hargeisa and Burao market

The regression model for small ruminants was specified as below

$Y = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \beta_8 X_{8t} + \beta_9 X_{9t} + \varepsilon$……………………………………………………………………(1.1)

Where:

Y= Monthly volume of small ruminants transacted for export in Hargeisa and Burao markets

$\beta_0 - \beta_9$= the estimated coefficients for X_{it}

X_{1it} = Number of active exporters in the markets; X_{2it}= Occurrence of Hajj season; X_{3it}= Existence of livestock ban; X_{4it} = Existence of drought X_{5it}= Access to quarantine station; X_{6it} = location of the market; X_{7it}= Average monthly price; X_{8t}=Existence of Australia suspension of small ruminant export to KSA; $\beta_9 X_{9t}$= Existence of Ethiopia border restrictions

Model specification for the cattle transacted for export in Togwajale market

The regression model for cattle was specified as below:

$Y = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \varepsilon$…..……. (1.2)

Where:

Y = Monthly volume of cattle transacted for export in Togwajale market

$\beta_0 - \beta_7$= estimated coefficients for X_t

X_{1t} = Number of active cattle exporters in market; X_{2t}= Occurrence of Hajj season; X_{3t}= Experience of livestock ban; X_{4t}= Existence of drought; X_{5t}= Access to livestock quarantine stations; X_{6t}= Average monthly price; X_{7t}= Existence of border restrictions

6.2.3.3 Variables and their hypothesised influence on the dependent variable

Number of livestock transacted for export in the markets. Monthly volume of livestock traded for export in the study markets was selected as dependent variable and was estimated as the actual number of heads of cattle and small ruminants transacted in the study markets for the purpose of export to overseas markets during the period under study. SLCCIA collected monthly volume of livestock transacted for export in the study markets from 2008 to 2017.

Volume of livestock marketed was used as an indicator of market performance that is expected to be determined by multiple factors such as number of livestock exporters active in the markets, occurrence of Hajj season, ban on livestock export, existence of quarantine stations, occurrence of drought, suspension of live animal export to KSA by Australia and existence of border-restrictions by Ethiopia .

For the independent variables and from the expectations about its positive or negative effects on livestock trade, we have grouped these variables were grouped into two: variables with expected positive effect and variables with expected negative effect.

The number of active livestock exporters (*ganasade/shirkad* in Somali) in the study markets, sometimes represented by their agents (*wakiilo*), were estimated as the number of livestock traders who had purchased animals for the purpose of exporting to overseas markets during the period under study. It was hypothesised that increase in number of exporters in the markets will positively influence the number of livestock transacted as higher the number of exporters, can be an indicator of market competition, more buyers, higher demand, higher price and therefore increase in the number of livestock traded for export in the markets.

Occurrence of Hajj season. This variable was defined as a 60-day period between Eid al-Fitr (also known as Ramadan when Muslims celebrate for the end of their fasting season) and Eid al- Hajj (also known as Eid al-Adha) when Muslims celebrate on the 10^{th} day of Hajj. Adha is the practice of slaughtering/scarifying animals in commemoration of prophet Abraham (Umar & Baulch, 2007). This study used this variable as dummy having two categories represented by 0 (normal time of the year) and 1 (period between Eid al-Fitr and Eid al-Adha). It was hypothesised that the number of livestock transacted for export in the study markets would increase during *Hajj* season.

Existence of quarantine stations*;* this variable was defined as the period when official quarantine stations that inspect and certify livestock for export from Somaliland's port of Berbera were established. This variable is incorporated in the model as dummy variable having two values; period before September 2009 was assigned a value of 0 (no official quarantine stations were present to access) and 1 for period starting from October 2009 when quarantine stations were established in Berbera port. Previous studies reported increase in livestock export after establishment of quarantine stations (Khadijah & Kabue, 2012; Eid, 2014). It was hypothesised that the number of livestock transacted for export increased after establishment of quarantine stations.

Suspension of live animal export to the Kingdom of Saudi Arabia by Australia. This variable was defined as the period when Australia, key small ruminants' producer/exporter suspended its live animal export to KSA, the most important destination of Somaliland's small ruminant export. This variable was fitted into the model as a dummy having two values: 0 period before the Australia live animal export suspension and 1 for the period starting from 2012 when Australia suspended live animal export to KSA. This study hypothesised that Australia's live animal suspension to KSA will have a positive influence on the volume of small ruminants transacted for export in Somaliland since Australia is believed to be a major competitor of Somaliland livestock exports.

Average monthly price of livestock. This variable was estimated as the average monthly price of livestock transacted for export in the study markets. Price increase may have both positive and negative influence on the volume of livestock traded. First, increase in price may reduce demand in the end markets, and as a result, exporters may buy less livestock. Second, based on the assumption of increased demand in the end markets, traders and producers will market more livestock when the price is higher. In this study it was hypothesised that increase in price will lead to increase in the volume of livestock transacted for export.

Ban on livestock export. Experience of export livestock ban was defined as the period when there was an official prohibition of livestock exports from Somaliland's Berbera port by the import countries. The value assigned to this dummy variable is 1 when livestock export ban was experienced and 0 otherwise. Previous studies reported significant reduction in the volume of livestock export due to the ban (Umar & Baulch, 2007; Eid, 2014). It was hypothesised that the number of livestock transacted for export reduced during the period when there was a ban imposed by the import countries, particularly KSA which is the most important destination for Somaliland livestock export.

Occurrence of drought. This variable was defined as failure of expected rain in Somalia (all Somali regions) during the two wet seasons *Gu* from April to June and *Deyr* from October to December. The variable was incorporated into the model as dummy variable having two categories: 0 when there was a no drought (expected rain was received) and 1 otherwise.

Previous studies elsewhere in the region showed that drought had negative effect on volumes of livestock trade due to the increased rate of animal mortality and producers' effort to recover the herd they lost during drought (Ayele *et al*., 2006). In this study, it was hypothesised that drought will have negative influence on the monthly number of livestock transacted for export in the study markets.

Existence of cross-border restrictions by Ethiopia. Since 2010 Ethiopia has increased cross-border restrictions of livestock moving towards Somaliland for trade in an attempt to formalise cross-border livestock trade (Eid, 2014). This variable was incorporated into the model as dummy with two values: 0 for period before 2010 when there were limited border restrictions and 1 for the period from 2010 when Ethiopia increased cross-border livestock trade restrictions. This study hypothesised that increased border restrictions will reduce the monthly volume of livestock transacted in the study markets owing to the fact that 50% of small ruminants and over 80% of cattle transacted in study markets originate eastern Ethiopia.

Table 6.1: Descriptive statistics of variables used in the model for small ruminants

Variable	Observations	Mean	Std. Dev.	Min	Max
Number of small ruminants traded per month[173]	236	88,013	133,921	530	753,300
Number of active exporters	240	3	1.599	1	9
Monthly average price (USD)	240	57	13.990	25	82

	Dummy variables	Freq.	Percent
Location of markets	Hargeisa	120	50
	Burao	120	50
Occurrence of Hajj season	Normal season	199	83
	Hajj season	41	17
Access to quarantine	No access to quarantine	42	70
	Access to quarantine	198	30
Experience of Australia suspension of live animal export to KSA	No suspension	96	40
	Suspension	144	60
Existence of ban	No ban	66	27
	Ban		
Experience of drought	No drought	182	77
	Drought	54	23
Existence of border restrictions	Border restriction	192	80
	No border restriction	48	20

Table 6.2: Descriptive statistics of variables used in the model for cattle

Variable	Observations	Mean	Std. Dev.	Min	Max
Number of cattle traded per month	120	7,895	2,956	1,142	16,476
Number of active exporters	120	52	55	5	194
Monthly average price (USD)	120	527	137	346	963
	Dummy variables		Freq.		Percent
Occurrence of Hajj season	Normal season		100		83
	Hajj season		20		17
Access to quarantine	No access to quarantine		21		18
	Access to quarantine		99		82
Experience of ban	No ban		87		73
	Ban		33		27
Experience of drought	No drought		93		77
	Drought		27		23
Existence of border restrictions	Border restriction		24		20
	No border restriction		96		80

6.2.4 Data analysis

The LMIS dataset was used to analyse the factors that influence the monthly number of livestock transacted for export in the study markets. Using STATA 13 software package, a multiple regression analysis was performed to determine the factors that influence monthly number of livestock traded for export using time series secondary data of monthly number of livestock traded for export in the three study markets for the period from 2008 to 2017. prior to regression analysis, a number of diagnostic tests including normality, autocorrelation, heteroskedasticity and non-stationarity tests were conducted.

6.2.4.1 Test of Normality

Regression being a parametric technique in statistics relies on the assumption of normality. So, the variables under study are assumed to follow a normal probability distribution. To check for this, a simple quantile normal plot of the residuals was created. The quantile normal plot showed that the plotted points did not follow a 45 degrees line closely and was not balanced suggesting that some of the variables in the regression model were not normally distributed and therefore the log of dependent variable (monthly volume of livestock transacted for export) were used in the model instead of volume.

6.2.4.2 Multicollinearity

Multicollinearity is a case which arises when two or more variables in the regression model are highly correlated. This affects the calculation of the regression coefficients and this affects every other statistics in the coefficients table. To test for multicollinearity, the values of the Variance Inflation Factor (VIF) were computed and the results (Table 6.3) showed that all variables had Variance Inflation Factor (VIF) values less than 10 indicating that there was no multicollinearity problem in the data.

Table 6.3: Multicollinearity test

Study independent variables	VIF	Tolerance
Access to quarantine stations	3.75	0.267
Experience of drought	3.46	0.2888
Experience of ban	2.64	0.378
Occurrence of Hajj season	1.06	0.943
Location of markets	1.63	0.612
Experience of Australia suspension of live animal export to KSA	1.13	0.885
Existence of border restrictions	1.06	0.942
Mean VIF	2.39	

6.2.4.3 Heteroscedasticity

Breusch-Pagan test revealed evidence of heteroscedasticity in the model. This was corrected by using Generalised Least square (GLS) as a method of analysis in order to reduce the variance.

6.2.4.4 Non-stationarity

Non-stationarity of the time series data was tested using Phillips-Perron test (Phillips & Perron, 1988). Phillips-Perron test is preferred for non-stationarity test because it produces consistent estimators of the variance (Rapsomanikis, Hallam, & Conforti, 2003). The time series data was found to be stationary (Table 6.4). The p-value is < 0.05, confirms the time series of the volume of export of small ruminants in Burao and Hargeisa Markets and cattle in Togwajale market as stationary.

Table 6.4: Stationary test results

Small ruminant Hargeisa market				
	Test Statistic	1% Critical Value	5%Critical Value	10% Critical Value
s (rho)	-97.159	-19.863	-13.738	-11.025
z (t)	-9.919	-3.504	-2.889	-2.597
Small ruminant Burao market				
s (rho)	-94.189	-19.863	-13.738	-11.025
z (t)	-9.243	-3.504	-2.889	-2.579
Cattle in Togwajale market				
s (rho)	-42.532	-19.863	-13.738	-11.025
z (t)	-5.225	-3.504	-2.889	-2.579

6.3 Results

6.3.1 Factors affecting number of small ruminants traded for export

Results from time series regression analysis for small ruminants transacted for export in Hargeisa and Burao markets are presented in Table 6.5. The results showed that the number of exporters active in Hargeisa and Burao markets have a positive and significant effect on the monthly volume of small ruminants traded for exports (exp (0.1596914) =1.173, $P<0.01$). This implies that 1% increase in the number of exporters leads to 17% increase in the number of small ruminants traded for export in the study markets. Hajj season had a positive and significant influence on the monthly number of small ruminants transacted for export (exp (1.512559) =4.538, $P<0.01$) which indicates that the number of livestock transacted for export increases by approximate 353% during the Hajj season. Furthermore, the findings indicate that the average monthly price has a positive and significant influence on the monthly volume of small ruminants transacted for export (exp (0.0164934)=1.016, $P<0.05$), this implies that 1% increase in the price of animal leads to 1.6% increase in the monthly number of small ruminants transacted for export. The location of the market has also a positive and significant effect on the monthly number of livestock traded for export (exp (0.6434526) =1.903, $P<0.01$), showing that monthly number of small ruminants transacted for export is 90% higher in Burao market compared to Hargeisa market. Access to quarantine stations has positive and significant effect on the monthly volume of small ruminants traded for export (exp (0.7879699) =2.198, P=0.103), showing that monthly number of small ruminants transacted for export has increased 119% in Burao and Hargeisa markets since the quarantine stations were established.

The results also show that livestock ban imposed by the import countries, mainly KSA, has a negative and significant effect on the monthly number of small ruminants transacted for export in the study markets (exp(-1.550827)=0.212, P<0.01), meaning during the ban, the monthly number of livestock traded for export in the study markets decreases by 78%. Drought, Australia's suspension of export of small ruminants to KSA and border restrictions imposed by Ethiopia have negative but statistically insignificant effects on the monthly number of small ruminants transacted for export.

Table 6.5: Estimated parameters of factors affecting number of small ruminants traded for export

Log volume	Coefficient	Std. Err.	t
Number of exporters	$.1597^{***}$	.0461	3.47
Occurrence of Hajj	1.5126^{***}	.1832	8.26
Existence of quarantines	$.7880^{*}$	.4808	1.64
Average of monthly price	$.0165^{**}$	.0064	2.56
Location of the markets	$.6434^{***}$	.1322	4.87
Ban on livestock	-1.5508^{***}	.2367	-6.55
Occurrence of drought	-.2547	.1704	-1.49
Australia livestock export suspension	-.0579	.1936	-0.30
Existence of border restrictions	-.2469	.4853	-0.51
Constant	9.0097^{***}	.3848	23.41
R squared	0.630		
F-value	9,226		
Prob >F	0.000		
Number of Observations	236		

*** P<0.01, ** P< 0.05, * P<0.1

6.3.2 Factors affecting number of cattle traded for export

Results from time series regression analysis for cattle transacted for export in Togwajale market are presented in Table 6.6. The results showed that the number of exporters active in Togwajale market has a positive and significant effect on the monthly volume of cattle transacted for exports (exp (0.003096) =1.0031, P<0.01). This implies that 1% increase in the number of exporters led to 0.31% increase in the number of cattle traded for export. Hajj season has a positive and significant influence on the monthly number of cattle transacted for export (exp (0.3786207) =1.4602, P<0.01) which indicated that volume of cattle transacted for export increases by 46% during the Hajj season. Livestock ban had positive and significant effect on the monthly volume of cattle traded for export (exp (0.2834736) =1.3277, P<0.01). This showed that during ban, monthly cattle transacted for export increased by 32.7%. Establishment of quarantine stations has positive and significant effect on the monthly volume of cattle traded for export (exp (0.6302092) =0.878, P<0.1), showing that monthly number of cattle transacted for export has increased 87% in Togwajale markets since the quarantine stations were established.

Results show drought has negative and significant effect on cattle traded for export (exp (-0.2253981) =0.7981, P<0.01), this shows that cattle traded for export in Togwajale market decreased by 20% during the drought period. While border restrictions imposed by Ethiopia has negative but statistically insignificant effect on the volume of cattle transacted of export in this border market.

Table 6.6: Estimated parameters of factors affecting number of cattle traded for export

Log Volume	Coefficient	Std. Err.	t
Number of exporters	.0031***	.0007	4.46
Occurrence of Hajj	.3786***	.0678	5.58
Ban on livestock	.2835***	.0960	2.95
Existence of quarantines	.6302*	.3518	1.79
Average of monthly price	.00007	.0003	0.25
Existence of border restrictions	-.1004	.3339	-0.30
Occurrence of drought	-.2254***	.6119	-3.68
Constant	8.1585***	.1851	44.08
R squared	0.5274		
F-value	7,112		
Prob >F	0.000		
Number of Observations	120		

6.4 Discussion

The results have indicated that number of small ruminants transacted for export in the study markets increases with the number of exporters active in the markets. Exporters

(*ganasade/shirkad*) are key market actors who purchase livestock from middle traders (*jeeble*) who assemble livestock from different sources in and outside Somaliland. Exporters act as the final link in the chain between local livestock trade and import markets (FEWS NET, 2010), therefore more active exporters in the local markets increases demand. *Jeeble* traders move livestock to where concentration of exporters and demand is higher (Umar & Baulch, 2007).
In the study markets, government policies have influenced the number of livestock exporters. For example, in late the 1980s, the economic nationalisation of Somalia's government, increased livestock exporters active in Hargeisa and Burao markets from 60 before nationalisation to 254 after nationalisation (Samatar *et al.*, 1988). After 1991, the number of livestock exporters active in the study markets reduced to 4-5 monopolistic exporters (Nenova, 2004). This was mainly due to Somaliland's fiscal policies such as increase in export livestock taxation and the government requirement that livestock exporters exchange certain percentage of livestock hard currency with the central bank at a very low exchange rate. These policies discriminated against small scale traders by reducing profits and favoured for large scale livestock exporters who also engaged barter trade and made much of their profits from imported commodities. Again, after 2009, Somaliland's decision to privatise quarantine stations to livestock exporters or quarantine station owners strengthened the monopoly in livestock export after lifting of the export ban to KSA (Eid, 2014). Besides monopoly which benefits major livestock exporters in the form of economies of scale, as detailed in Chapter Four, major exporters own livestock holding grounds, in Berbera which provide health inspection services

The results indicate that Hajj season has significant influence on the number of livestock transacted for export in Somaliland's terminal markets. Findings from this study confirm the reported increase in livestock demand during this period. For example, Le Sage & Majid (2002) and Mugunieri (2017) reported that Hajj season generated huge demand for small ruminants. The number of Muslim Hajj pilgrims to KSA which has increased overtime influences the number of livestock export during this season (Samatar *et al.*, 1988; Mugunieri *et al.*, 2014) as each pilgrim has to slaughter one animal as part of the Eid al-Adha ritual (Soumaré *et al.*, 2006). Hajj is the primary driver of livestock export in the region (FEWS NET, 2010). It is worth noting that there is a difference in terms of quality and sanitary requirements between the sacrificial (Hajj season) value chain and commercial value chain to KSA (Costagli, Mugunieri, & Wanyoike, 2017). Significant increase in the volume of livestock increase during the Hajj season indicates the increasingly seasonal nature of livestock export in Somaliland.

Findings have demonstrated that ban on livestock export imposed by the import countries significantly decreases the monthly volume of livestock transacted for export in Somaliland's terminal markets. In the Horn of Africa, livestock bans are usually imposed by the import countries due to suspected or actual transboundary or epizootic livestock diseases (Aklilu & Catley, 2009). KSA, the most important destination for small ruminant export, has repeatedly banned livestock export from Somalia/Somaliland since 1998. The devastating effects of ban on livestock export was intensified by fact that Somaliland is hugely dependent on KSA market for live animal exports, 80% of small ruminants is exported to KSA (Mousley *et al*., 2015). The findings confirm those from previous studies, for example, Umar & Baulch (2007) reported that during the 2001 ban volume of livestock export from northern Somali ports (Berbera and Bossaso) fell from 3.5 million heads (of which 3.3 million was small ruminants) to 0.7 million heads (of which small ruminants accounted for 0.6 million). Eid (2014) also reported that 2001 ban had seriously affected the port of Berbera, the main export port in the region. For instance, towards the end of 2003 livestock exports from port of Berbera fell from 2 million heads before the ban to 50,000 heads which represented 98% drop on livestock exports.

Findings show that access to quarantine stations have a positive and significant influence on the number of livestock traded for export in Somaliland's terminal markets. Official quarantine station in Somaliland had collapsed in 1991 due to the civil war. Though absence of official quarantine stations did not preclude increased livestock export from Somaliland, it is believed that the absence of quarantine stations and official health standards had caused the 1998 and 2000 livestock bans (Holleman, 2003). To find a solution for the repetitive bans, Somaliland permitted a Saudi investor to establish official quarantine station in Berbera in 2009 and this had a positive influence on livestock export (Eid, 2014). Since then two more Arab investors established quarantine stations in Berbera. All Arab investors recruited former Somaliland livestock exporters (who were out of business due to the prolonged ban) as their agents (*wakiilo*). Khadijah and Kabue (2012) reported that the establishment of quarantine stations in Berbera enhanced the confidence of import countries in the health of livestock exports from Somaliland.

It is noteworthy that in the last two decades, there has been an increased effort of the HoA countries to establish quarantine stations to provide health certification for livestock export

(Majid, 2010). However, the presence of quarantine stations does not mean that HoA countries, including Somaliland, have met international livestock sanitary standards. What has rather helped is the import countries do not stringently implement World Trade Organisation (WTO) health regulations for livestock trade. This has enabled livestock traders from the HoA to export livestock without worrying much about animal traceability verification (Little *et al*., 2015). In addition, the establishment of quarantine stations did not help opening new livestock markets for Somaliland. One might plausibly argue that establishment of private quarantine stations and animal certification have not been complemented with sound government policies, regulations and institutional capacity building to increase regulatory and supervisory oversight on the private quarantine stations or implement stringent animal health standards.

Findings show that drought affects livestock trade negatively. However, the influence of drought on the number of small ruminants transacted for export was not statistically significant. There could be two plausible explanations for this phenomenon. First, the bulk of small ruminants transacted in the study markets originate from the Haud plateau, an area with environmental conditions suitable for small ruminants' production in the rangelands that covers around 119,000 square kilometres extending from south of Hargeisa (capital of Somaliland) to south-central Somalia and the Somali region of Ethiopia (Macfadyen, 1950, p. 200). Often times, the intensity of drought in the Haud varies and pastoralists migrate to areas where drought intensity is low. Second, middle traders *(jeeble*) normally aggregate livestock from producers in the Haud and release to the markets during period of high demand even when it coincides with a post-drought season. Elsewhere in the HoA, it has been reported that livestock sales increase during drought as pastoralists sell more livestock regardless of age, sex, quality in order to buy expensive grains, while livestock sale reduces after drought as pastoralists aim to recover their reduced herd size due to mass mortality and increased off take (Umar & Baulch, 2007; Aklilu & Catley, 2009; Pavanello, 2010).

Findings from this study have indicated that Australia's sheep export suspension to KSA did not have significant influence on the monthly volume of small ruminants transacted for export in Somaliland terminal markets. Since 2012, Australia suspended its sheep exports to KSA after KSA that Australia's new animal welfare standards stipulated in Australia's Exporter Supply Chain Assurance Systems (ESCAS) were impinged on its sovereignty (Maritime, 2017). Previous studies reported that small ruminant, especially sheep, export from Somaliland competes with Australia, top sheep exporting country in the world (Little *et al*., 2015). For example, in late 1980s, livestock export from Somalia to Arabian Gulf declined due to stiff competition from Australia (Mahmoud, 2010). The findings of non-significant influence of suspension of Australia sheep export to KSA on the volume of small ruminants, especially sheep, from Somaliland terminal markets could be explained by the fact that Australia's small ruminants are destined for a different consumer segment from the Somali small ruminants. Most of Somaliland livestock export is used for sacrificial slaughter during the Hajj season which is different from the commercial livestock export to KSA (Costagli *et al*., 2017) which livestock from Australia used to target. In addition, Statistics from KSA show that in the last decade Sudan has emerged to be the leading small ruminants' exporter to KSA.[174] This implies that Australia is no longer a competitor to the Somali livestock export, rather Sudan is the main competitor.

Findings from this study indicated that Ethiopia's cross border restrictions since 2010 had negative but insignificant effects on the monthly volumes of livestock transacted in the studied Somaliland's terminal markets. From 2010, Ethiopia increased its border policing to restrict livestock crossing its borders informally to the neighbouring countries, which had adverse effects on its traders and markets as Togwajale market on the Ethiopia side of the border shifted to Somaliland side (Eid, 2014). Somali community extends in eastern Ethiopia and the long border between Somalia/Somaliland and Ethiopia historically remained largely porous. However, it is noteworthy that border restrictions since 2010 increased the cost of trade as local authorities in the trade routes charge higher levies and collect other informal fees from livestock crossing the border to Somaliland.

6.5 Conclusion and Recommendations

6.5.1 Conclusion

Hajj season, livestock export ban and the number of exporters active in the study markets are three most important determinants of the monthly volumes of livestock traded for export in Somaliland. Australia is no longer the main competitor for the Somali livestock exports to Saudi Arabia and has been replaced by Sudan which is the leading livestock exporter to Saudi Arabia. In Somaliland, unique livestock export trade arrangements such as the geographic location of Berbera port, presence of major livestock exporters and middle *Jeeble* traders smoothen the effect of drought by ensuring there is supply of livestock for export even during and after drought periods in Somaliland. Quarantine facilities in Berbera had significant effect on the volume of livestock trade in Somaliland but did not open up new markets for the Somaliland livestock exports neither do they provided solution for the recurrent Saudi bans. Establishing quarantine stations at the end tail of the livestock export value chain is important but not sufficient to improve animal health while independent oversight authority and national holding grounds are missing. Ethiopia’s border restrictions had little impact to reduce the volume of livestock transacted in the Somaliland markets due to the porous nature of the border of its border with Somaliland.

6.5.2 Recommendations

- In order to realise the full potential of livestock export and make it more competitive, the Somaliland government should encourage the entry of additional livestock exporters into the business by addressing the issues related to the ownership and control of quarantine stations which creates monopoly.
- In order to restore all year livestock trade between Somaliland and KSA that has been curtailed by failure to meet sanitary standards, the Somaliland government need to ensure stringent animal health standards.
- Livestock supply to Somaliland’s terminal markets rely on cross-border livestock trade, there is need for the government of Somaliland to negotiate for transboundary agreements and formalise cross-border livestock trade with neighbouring countries particularly Ethiopia to allow free livestock movement across the countries.
- Somaliland needs to strengthen institutions to improve its oversight authority on livestock exports for improved sanitary requirements.
- To address the seasonality of livestock trade, it is important to address the concerns held by the importing countries about the health of livestock exports from Somaliland.

CHAPTER SEVEN

GENERAL DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

7.1 General Discussion

Formal institutions that were important for Somalia's economy started showing weaknesses from late 1980s and eventually ceased in 1991 in the wake of state collapse in the country. Following this breakdown, terms such as 'stateless economy', 'tax free' economy and 'duty-free' economy have been coined to describe Somalia's post-1991 economy. However, there have been disparity in accounts and contesting views about the performance of the country's post-war economy. There are those who think that the stateless economy has performed well, while others have highlighted problems such as market failures that arise out of the absence of functional state institutions. Using the case of livestock export trade in the Berbera corridor, this study aimed to empirically find out the truth and to expand understanding of what is actually happening. The study achieved this by focusing on institutional dynamics and their influence on the export livestock trade in the Berbera Corridor.

The focus on livestock is more interesting because academic literature on Somalia's post-1991 economy largely focused on the import sector, which is based on importation of consumer goods for consumption within Somalia/Somaliland or re-exportation to the neighbouring territories. Livestock, unlike the consumer goods, is an export commodity for the Somali territories. Findings presented in Chapter Four of this study show that livestock export sector is distinctively different from other post-war economic sectors. While international standards and guidelines including the need for accredited animal health certificate govern livestock exports and there are other requirements established by the importing countries, there has been no central and functional government to implement these guidelines since 1991. To meet the institutional requirements, the post-1991 Somali state authorities that control the ports of exit mimicked state interventions and procedures in the implementation of animal health and safety guidelines and animal health certification process which fell short of convincing the import countries.

In contrast to the Menkhaus's observation that Somali territories are 'the largest duty-free-shop in the world' or where the economy works without a state intervention, as U.S. libertarians once celebrated, the findings from Chapter Four and Five of this study show that the Somali territories have been characterized by a fragmentation and proliferation of overlapping and competing states and state-like authorities that make interventions such as taxation and other policy interventions complex. In addition, findings from Chapter 4, Five and Seven show observations contrary to several held assumptions about the post-1991 livestock export trade in the Berbera corridor that have been partly contributed by the anecdotal evidence and generalization of observations from other economic sectors to the livestock sector.

Chapter Four, for example gives contrast the assumptions held about the optimality of the informal institutions that have been credited to facilitate the economy in the absence of formal institutions. The findings from this chapter also demonstrate that Somaliland reinstated some state institutions few years after the collapse of the formal institutions, while it could not reinstate other key institutions. Hence, on one hand the chapter contests the assumption of statelessness in the Somali economy in early 1990s, while on the other hand indicates that despite reinstatement of some state institutions, livestock export trade largely remained unregulated up to this date. Contrary the held assumption about the tax-free livestock exports, Chapter Five explains the multiplicity of taxation on livestock trade. Furthermore, contrary the held assumption that drought, border restrictions and Australia livestock exports negatively affect the volume of livestock trade from Somali ports, Chapter Seven shows that these factors have either insignificant or no effect on the volume of livestock exports from Port of Berbera.

Findings from Chapter Four confirm the arguments from some practitioners that emphasize the problems such as market failures that have faced the post-war economy. Due to the absence of commercial banks, letters of credit and quality controls, post-war livestock export has been characterised by market coordination problems such as disagreements based on the value of livestock supplied, monopolies, uncertainties and lack of contract enforcement.

7.2 Conclusion

Livestock export trade is an important economic activity that contributes to the livelihoods of millions of people and national economies in the Horn of Africa. In the Somali territories, Berbera corridor has been the most important route, considering the volumes of trade associated with livestock exports to the Arabian Peninsula over several decades.

The role of formal institutions in livestock exports in the Berbera corridor largely ceased from 1988 when the war broke out in the northern Somalia regions. Livestock export resumed in mid-1990s in total absence of formal institutions. Informal institutions have therefore filled the void and facilitated the export livestock trade. Although the informal institutions have played a commendable role in the local livestock trade, they have limitations and have fallen short of providing solutions to market failures that have faced the post-war livestock export trade in Somaliland.

Even though some formal institutions started to re-emerge, their role in facilitating the international livestock trade has remained weak. In the absence of central government, there has been a proliferation of weak states and state-like authorities that have entrenched themselves in various way, especially through taxations that have emerged along the livestock export trade routes.

In Somaliland, the reinstated post-1991 state institutions gave birth to oligopolies that control livestock exports from Berbera port. In addition, the proliferation of different and sometimes competing administrations with economic coordination affects livestock trade in the sense that actors in the livestock trade that facilitate conveyance of livestock along the corridors and territories have to deal with constraints imposed by the absence of coordination between entities.

In the international markets, livestock exporters from Somaliland do not have protection that is provided by states to their citizens. Therefore, livestock exporters and vulnerable to irrational decisions by the authorities in the importing countries, and harassment by their trade partners.

The monopolistic livestock exporters have established quarantine facilities in Berbera and they largely self-regulate themselves. However, due to the high cost of complying with standard quarantining days, they normally shorten the period to save costs and this has negative implications on quality controls.

Due to the challenges arising from the absence of functional and recognized formal institutions, Somalia and Somaliland have lost their monopoly on livestock exports to Saudi Arabia, which is their main livestock market, as volume of livestock exports from Sudan continue to surpass exports from Somalia/Somaliland.

7.3 Recommendations

- Any attempt aimed at strengthening livestock export trade in the Berbera corridor should recognize the role played by the informal institutions and build on the foundations that has enabled them to effectively coordinate livestock trade, especially at local level.
- Somaliland government should recognize that credible and functional formal institutions are indispensable for improved and sustainable livestock export and facilitate the establishment of conventional commercial banks and export livestock quality control institutions.
- A functional commercial bank is indispensable for international livestock exports as it would facilitate letter of credit (LC) and international money transfers.
- The existing private quarantine stations in Berbera largely self-regulate themselves as government's oversight is very limited. This results quality and inspection compromises, Somaliland has to increase its oversight of the current quarantine facilities which should not be left to self-regulate themselves.
- For fair competition and to break the monopolistic livestock exporters, the government of Somaliland should separate livestock exporters from the quarantine facility owners.
- Livestock exports raise substantial revenues for Somaliland, therefore, there is a need to invest in the livestock sector by improving marketing facilities and market infrastructures to provide better services to the traders.
- Somaliland/Somalia should coordinate with the authorities in the importing countries to support livestock exporters defaulted by their Arab partners.

- The numerous administrations in the territories of the former Democratic Republic of Somalia should coordinate among themselves to facilitate livestock flow and cut down taxes, tariffs and fees they extract from livestock exports and also the amount of time that transporters spend in checkpoints for administrative issues.
- Livestock exports from Berbera port have become seasonal, export takes place during the Hajj season, mainly due to the health and quality controls concerns held by the importing countries. Somaliland need to sincerely address these concerns with the aim of reinstating confidence of the importing countries in animal quality.

REFERENCES

Abdullahi, A. M. (1990). Pastoral production systems in Africa: a study of nomadic household economy and livestock marketing in Central Somalia (Vol. 8). *Farming Systems and Resource Economics in the Tropics (Germany F.R.)*. ISBN: 3817500807.

Acemoglu, D., & Johnson, S. (2005). Unbundling institutions. *Journal of political Economy*, *113*(5), 949-995.

Adam, H. (1985). Proceedings of the national conference on Somalia's rural development strategy (1981-1990). The Jubba Hotel, Mogadishu, Somalia.

Afrol News (2009). Djibouti, Somaliland in bitter port feud. Retrieved September 25, 2019, from http://www.afrol.com/articles/23556

Ahmed, I. (1999). The heritage of war and state collapse in Somalia and Somaliland: Local-level effects, external interventions and reconstruction. *Third World Quarterly*, *20*(1), 113–127.

Akerlof, G. A. (1978). The market for "lemons": Quality uncertainty and the market mechanism. In *Uncertainty in economics* (235-251). https://doi.org/10.1016/B978-0-12-214850-7.50022-X

Aklilu, Y., & Catley, A. (2014). Pastoral livestock trade and growth in Ethiopia. *Policy brief, No. 72. Future Agricultures Consortium, Brighton.*

Aklilu, Y. (2008). Livestock marketing in Kenya and Ethiopia: a review of policies and practice. Feinstein International Center, Addis Ababa.

Aklilu, Y., & Catley, A. (2009). Livestock exports from the Horn of Africa: an analysis of benefits by pastoralist wealth group and policy implications. *Medford (MA): Feinstein International Center, Tufts University*.

Amin, A., & Thrift, N. (1995). Globalisation, institutional 'thickness' and the local economy. *Managing Cities: The New Urban Context*, *12*, 91-108.

Aoki, M. (2007). Endogenizing institutions and institutional changes. *Journal of Institutional Economics*, *3*(1), 1-31.

Araabinews (2016). Degmooyin cusub oo lagu daray ismaamulka Somalida Itoobiya (DDSI) waa kuwee [which are the new districts added to the Somali regional state of Ethiopia]. Retrieved July 29, 2019, from https://araabinews.com/degmooyin-cusub-oo-lagu-daray-ismaamulka-somalida-itoobiya-ddsi-waa-kuwee/

Assaad, R. (1993). Formal and informal institutions in the labour market, with applications to the construction sector in Egypt. *World Development*, *21*(6), 925-939.

Ayan, Mohamoud Ahmed (1990). Somalia Environment and National Efforts. IGAD, Djibouti.

Ayele, G., Jabbar, M. A., Teklewold, H., Mulugeta, E., & Kebede, G. (2006). Seasonal and inter-market differences in prices of small ruminants in Ethiopia. *Journal of Food Products Marketing*, *12*(4), 59–77.

Babbie, E. (1992). The Practice of Social Research. Belmont, CA: Wadsworth (sixth edition).

Ballard, R. (2005). Coalitions of reciprocity and the maintenance of financial integrity within informal value transmission systems: The operational dynamics of contemporary hawala networks. *Journal of Banking Regulation*, *6*(4), 319-352.

Balthasar, D. (2013). Somaliland’s best kept secret: Shrewd politics and war projects as means of state-making. *Journal of Eastern African Studies*, *7*(2), 218–238.

Bazeley, P. (2007). Qualitative data analysis with NVivo. London

BBC Somalia [British Broadcasting Corporation]. (2017). Kismaayo oo laga furay maxjarka xannaanada xoolaha [animal quarantine station opened in Kismayo]. Retrieved September 26, 2019, from https://www.bbc.com/somali/41044921

Beckert, J. (2009). The social order of markets. *Theory and Society*, *38*(3), 245-269.

Berkowitz, D., Moenius, J., & Pistor, K. (2006). Trade, law, and product complexity. *the Review of Economics and Statistics*, *88*(2), 363-373.

Bestor, T. C. (2001). Markets: anthropological aspects. *International Encyclopaedia of the Social and Behavioural Sciences*.

Blommaert, J., & Jie, D. (2010). Ethnographic fieldwork: A beginner’s guide. Bristol: Multilingual Matters.

Bradbury, M. (1996). Hostility and Hospitality: The pastoral dimensions of the Somali civil conflict. Somalia, *Unpublished Report for VetAid*.

Bradbury, M. (1997). Somaliland Country Report. London: CIIR.

Bradbury, M. (2008). Becoming Somaliland. London: Indiana University Press.

Bradbury, M. (2003). Living with statelessness: The Somali road to development. *Conflict, Security and Development*, *3*(1), 7–25.

Bradbury, M, Abokor, A. Y., & Yusuf, H. A. (2003). Somaliland: Choosing politics over violence. *Review of African Political Economy*, *30*(97), 455–478.

Brandt, S. A., & Brook, G. A. (1984). Archaeological and paleoenvironmental research in Northern Somalia. *Current Anthropology*, *25*(1), 119–121.

Burawoy, M., Blum, J. A., George, S., Gille, Z., & Thayer, M. (2000). Global ethnography: Forces, connections, and imaginations in a postmodern world. University of California Press.

Casson, M., Della Giusta, M., & Kambhampati, U. (2010). Formal and informal institutions and development. *World Development*, *38*(2), 137-141.

Caraale, M. J. (2010). Madaxweyne Xigeenka Somaliland Ka Qayab Galay Munaasibad Si Weyn Loo Agaasimay Oo Maanta Si Rasmi Ah Loogu Furay Maxrajka Xoolaha Ee Magaalada Berbera [Somaliland president attended a ceremony for launching of a new quarantine station in Berbera]. Araweelo News Network (Archive). Retrieved September 5, 2019, from https://archive.araweelonews.com/article/article-article/

Carrier, N., & Elliott, H. (2018). Entrust we must: The role of " trust" in Somali economic life. Working Paper 2018:2, Danish Institute of International Studies, Copenhagen.

Carrier, N., & Lochery, E. (2013). Missing states? Somali trade networks and the Eastleigh transformation. *Journal of Eastern African Studies*, *7*(2), 334-352.

Casson, M. C., Della Giusta, M., & Kambhampati, U. S. (2010). Formal and informal institutions and development. *World Development*, *38*(2), 137–141.

Catley, A., Lind, J., & Scoones, I. (Eds.). (2012). Pastoralism and development in Africa: dynamic change at the margins. Routledge.

Chanie, P. (2007). Clientelism and Ethiopia’s post-1991 decentralisation. *The Journal of Modern African Studies*, *45*(3), 355–384.

Cooper, F. (2002). Africa since 1940: the past of the present. United Kingdom: Cambridge University Press.

Costagli, R., Mugunieri, L. G., & Wanyoike, F. N. (2017). A rapid appraisal of the Yemeni end-market for Somali livestock exporters. Discussion Paper 34. Nairobi: International Food Policy Research Institute (ILRI).

Creswel, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. *Los Angeles: University of Nebraska–Lincoln*.

Cruttenden, C. J. (1849). Memoir on the western or Edoor tribes, inhabiting the Somali coast of N.-E. Africa, with the southern branches of the family of Darrood, resident on the banks of the Webbe Shebeyli, commonly called the River Webbe. *The Journal of the Royal Geographical Society of London*, *19*, 49-76.

Darkoh, M. B. (1997). Trade, environment and sustainable development. *Malaysian Journal of Tropical Geography*, *28*(2), 67–82.

De Waal, A. (2007). Class and power in a stateless Somalia. *Social Science Research Council*, *20*, 1–14.

Desta, S., Berhanu, W., Sebsibe, A., & Guerne-Bleich, E. (2011). Assessment of cross border informal livestock trade in Somali region. Regional initiative in support of vulnerable pastoralists and agro-pastoralists in the Horn of Africa. Addis Ababa, Ethiopia: FAO.

Diao, X., Hazell, P., & Thurlow, J. (2010). The role of agriculture in African development. *World Development*, *38*(10), 1375–1383.

Dollar, D., & Kraay, A. (2002). Institutions, trade, and growth. *Journal of Monetary Economics*, *50*(1), 133-162.

Drysdale, J. (2000). Stoics without pillows: A way forward for the Somaliland. London: Haan Publication.

Eid, A. (2014). Jostling for trade: The politics of livestock marketing on the Ethiopia-Somaliland border. Working Paper, 75. *Future Agricultures*. Ethiopia.

Eubank, N. (2012). Taxation, political accountability and foreign aid: Lessons from Somaliland. *Journal of Development Studies*, *48*(4), 465-480.

FEWS NET [Famine Early Warning Systems Network]. (2010). Cross-border livestock trade assessment report: Impacts of lifting the livestock import ban on food security in Somalia, Ethiopia, and the Djibouti borderland. Nairobi: Kenya. Retrieved September 7, 2019, from http://www.fews.net/sites/default/files/documents/reports/east_Cross%20border_2010_10_final.pdf

FEWS NET. (2017). East Africa Special Report: Illustrating the extent and severity of the 2016/17 Horn of Africa drought. Retrieved August 8, 2019, from http://fews.net/sites/default/files/documents/reports/FEWS_NET_Horn_of_Africa_June%202017_Drought_Map_Book.pdf

FAO [Food and Agriculture Organization]. (2012). Protecting Somalia's leading livelihood assets. Somalia Livestock Issue No. 1. FAO, Somalia. Retrieved from http://www.fao.org/3/a-as781e.pdf

Faruq, H. A. (2011). How institutions affect export quality. *Economic Systems, 35*(4), 586-606.

Forti, D. R. (2011). A pocket of stability: Understanding Somaliland. Occasional Paper, Issue 2. The African Centre for the Constructive Resolution of Disputes (ACCORD*)*, South Africa.

Gaani, M. (2002). Regulating the livestock economy of Somaliland. Academy for Peace and Development. Hargeisa:APD.

Geertz, C. (1973). The interpretation of cultures (Vol. 5019). Basic books.

Geshekter, C. L. (1985). Anti-colonialism and class formation: The eastern Horn of Africa before 1950. *The International Journal of African Historical Studies*, *18*(1), 1-32.

Gilliland, H. B. (1952). The vegetation of eastern British Somaliland. *The Journal of Ecology*, 91–124.

González-Ruibal, A., & de Torres, J. (2018). The fair and the sanctuary: gathering places in a nomadic landscape (Somaliland, 1000–1850 AD). *World Archaeology*, *50*(1), 23-40.

Goobjoognews (2016). Saudi Arabia bans Somali livestock again. Retrieved December 31, 2018, from https://goobjoog.com/english/saudi-arabia-bans-somali-livestock/

Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, *91*(3), 481–510.

Granovetter, M. (2005). The Impact of Social Structure on Economic Outcomes. *Journal of Economic Perspectives*, *19*(1), 33–50.

Green, R. H., & Jamal, V. (1987). Somalia: paradoxes of private prosperity, poverty pockets, volatile vulnerability and public pauperisation. A report for UNICEF.

Gundel, J. (2002). The migration–development nexus: Somalia case study. *International Migration*, *40*(5), 255–281.

Haas, Astrid (2017). An overview of municipal finance in Hargeisa, Somaliland. International Growth Centre. Retrieved from https://www.theigc.org/wp-content/uploads/2018/01/201712HargeisaMunicipalFinanceWP_Final2.pdf, August, 2019.

Hagmann, T. (2005). Challenges of decentralisation in Ethiopia's Somali region. *Review of African Political Economy*, *32*(104/105), 449–455.

Hagmann, T. (2016). Stabilization, extraversion and political settlements in Somalia. Rift Valley Institute PSRP, London, Nairobi.

Hagmann, T., & Hoehne, M. V. (2009). Failures of the state failure debate: evidence from the Somali territories. *The Journal of the Development Studies Association*, *21*(1), 42-57.

Hagmann, T., & Stepputat, F. (2016). Corridors of trade and power: economy and state formation in Somali East Africa. Working Paper 2016:8, Danish Institute for International Studies, Copenhagen.

Hansen, S., & Bradbury, M. (2007). Somaliland: a new democracy in the Horn of Africa? *Review of African Political Economy*, *34*(113), 461-476.

Hansen, T., Stepputat, F. (Eds.). (2001). States of imagination: ethnographic explorations of the postcolonial state. Durham: Duke University Press.

Hay, C. (2005). *The state: theories and issues*. Palgrave.

Heckathorn, D. (2011). Comment: Snowball versus respondent-driven sampling. *Sociological Methodology*, *41*(1), 355–366,

Helmke, G., & Levitsky, S. (2004). Informal institutions and comparative politics: A research agenda. *Perspectives on politics*, *2*(4), 725-740.

Hess, M. (2004). 'Spatial 'relationships? Towards a reconceptualization of embedded ness. *Progress in human geography*, *28*(2), 165-186.

Hesse, M., & Rodrigue, J. P. (2004). The transport geography of logistics and freight distribution. *Journal of transport geography*, *12*(3), 171-184.

Hilal, A. H., & Alabri, S. S. (2013). Using NVivo for data analysis in qualitative research. *International interdisciplinary journal of education*, *2*(2), 181-186

Hiraal Institute. (2018). The AS finance system. Retrieved July 31, 2019, from https://hiraalinstitute.org/the-as-finance-system/

Hoehne, M. V. (2009). Mimesis and mimicry in dynamics of state and identity formation in northern Somalia. *Africa*, *79*(2), 252-281.

Hoehne, M. V. (2015). Between Somaliland and Puntland: marginalization, militarization and conflicting political visions. Rift Valley Institute, Nairobi.

Hoehne, M. V. (2016). The Rupture of Territoriality and the Diminishing Relevance of Cross-cutting Ties in Somalia after 1990. *Development and Change*, *47*(6), 1379–1411.

Hoffmann, K., Vlassenroot, K., & Marchais, G. (2016). Taxation, Stateness and Armed Groups: Public Authority and Resource Extraction in Eastern Congo. *Development and Change*, *47*(6), 1434–1456.

Holleman, C. F. (2003). The socio-economic implications of the livestock ban in Somaliland. Famine Early Warning Systems Network. Nairobi: United States Agency for International Development.

Holtzman, J. (1982). The economics of improving animal health and livestock marketing in Somalia. Michigan State University, USAID/Somalia.

Iazzolino, G. (2015). Following Mobile Money in Somaliland. Research Paper 4. The Rift Valley Institute, Nairobi.

IGAD [Intergovernmental Authority for Development]. (2016). A follow-up meeting of the Regional Network for Quarantines | ICPALD. Retrieved September 25, 2019, from https://icpald.org/network-for-quarantines/

ILO [International Labour Organisation]. (2011). Conflict Analysis of Fodder and Honey Value Chain Upgrading for Togdheer Region. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-addis_ababa/---sro-addis_ababa/documents/projectdocumentation/wcms_398837.pdf

Irani, G., & Lebanon, J. (1999). Islamic mediation techniques for Middle East conflicts. *Middle East*, *3*(2), 2.

Irani, G., & Funk, N. C. (1998). Rituals of reconciliation: Arab-Islamic perspectives. *Arab Studies Quarterly*, *20*(4).

Irungu, P., Ithondeka, P., Wafula, E., Wekesa, S., Wesonga, H., & Manga, T. (2014). An Audit of Constraints and Opportunities in Kenya's Livestock Export Value Chain. *Journal of Agricultural Science and Technology. B 4, 102-120*

Jamal, V. (1988). Somalia: understanding an unconventional economy. *Development and Change*, *19*(2), 203-265.

Jessop, B. (2001). Regulationist and autopoieticist reflections on Polanyi's account of market economies and the market society. *New Political Economy*, *6*(2), 213-232.

Jhazbhay, I. (2008). Somaliland's post-war reconstruction: Rubble to rebuilding. *International Journal of African Renaissance Studies*, *3*(1), 59–93.

Joosten, K., Muzira, I., & Mintesnot, Z. (2017). Water and fodder availability along livestock trade routes in the Horn of Africa. A baseline report. FAO Regional Office for Africa.

Keen, M. (2012). Taxation and development—again. *Critical issues in taxation and development*, 13-42.

Kefale, A. (2019). Shoats and smart phones: Cross-border trading in the Ethio-Somaliland corridor. Working Paper 2019:7, Danish Institute for International Studies, Copenhagen.

Khadijah, K., & Kabue, J. (2012). Strengthening the quality infrastructure in Somaliland. A Strategy for the Livestock Industry. Report Prepared for DANIDA IV Project. Terra Nuova EA Nairobi.

Kitzinger, J. (1995). Qualitative research: introducing focus groups. *BMJ*, *311*(7000), 299-302.

Knips, V. 2004. Review of the livestock sector in the horn of Africa (IGAD countries). Livestock Sector Report Horn of Africa. Food and Agriculture Organization of the United Nations, Rome.

Kittermaster, H. B. (1932). The development of the Somalis. *Journal of the Royal African Society*, *31*(124), 234-244.

Korf, B., Hagmann, T., & Emmenegger, R. (2015). Re-spacing African drylands: Territorialisation, sedentarization and indigenous commodification in the Ethiopian pastoral frontier. *The Journal of Peasant Studies*, *0*(0), 1–21.

Laitin, D. D. (1976). The political economy of military rule in Somalia. *The Journal of Modern African Studies*, *14*(3), 449–468.

Laitin, D. D., & Samatar, S. S. (1984). Somalia and the world economy. *Review of African Political Economy*, *11*(30), 58-72.

Le Sage, A., & Majid, N. (2002). The livelihoods gap: Responding to the economic dynamics of vulnerability in Somalia. *Disasters*, *26*(1), 10–27.

Leeson, P. (2007). Better off stateless: Somalia before and after government collapse. *Journal of Comparative Economics*, *35*(4), 689-710.

Leonard, D. K. (2008). The political economy of livestock policy among the Somalis. IGAD LPI Working Paper 5. IGAD Livestock Policy Initiative.

Leonard, D. K., & Samantar, M. S. (2011). What does the Somali experience teach us about the social contract and the state? *Development and Change*, *42*(2), 559–584.

Lewis, I.M. 1961. A Pastoral Democracy. Oxford University Press, London

Lewis, I. M. (1967). Integration in the Somali Republic. In African Integration and Disintegration – Case Studies in Economic and Political Union, ed. by Arthus Hazlewood, 251-284. London: Oxford University Press

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newberry Park. CA: Sage.

Lindley, A. (2009). Between 'dirty money'and 'development capital': Somali money transfer infrastructure under global scrutiny. *African Affairs*, *108*(433), 519–539.

Little, P. D. (1996). Conflictive trade contested identity: The effects of export markets on pastoralists of southern Somalia. *African Studies Review*, *39*(1), 25–53.

Little, P. D. (2003). Somalia: Economy without state. Bloomington: Indiana University Press.

Little, P. D., Tiki, W., & Debsu, D. N. (2015). Formal or informal, legal or illegal: The ambiguous nature of cross-border livestock trade in the Horn of Africa. *Journal of Borderlands Studies*, *30*(3), 405–421.

Little, P. D. (2005). Pastoralism in a stateless environment: the case of the southern Somalia borderlands. In *Geography Research Forum*, (25) 128-47).

Little, P. (2005). Unofficial trade when states are weak: The case of cross-border commerce in the Horn of Africa. Research Paper, No. 2005/13. Kentucky, UNU-WIDER.

Lund, C. (2006). Twilight institutions: Public authority and local politics in Africa. *Development and Change*, *37*(4), 685–705.

Loasby, B. J. (2001). Market institutions and economic evolution. *Capitalism and Democracy in the 21st Century*. pp. 303-315).

Macfadyen, W. A. (1950). Vegetation patterns in the semi-desert plains of British Somaliland. *The Geographical Journal*, *116*(4/6), 199–211.

Mahmoud, H. A. (2010). Livestock trade in the Kenyan, Somali and Ethiopian borderlands. Briefing paper, BP 2010/02. Chatham House.

Majid, N. (2010). Livestock trade in the Djibouti, Somali and Ethiopian borderlands. Briefing Paper 2010/01. Chatham House.

Mann, M. (1988). States, war and capitalism: studies in political sociology. Basil Blackwell.

Marchal, R. (1996). Final Report on the Post Civil War Somali Business Class. Centre for African Stud, Paris.

Mares, R. (1954). Animal husbandry, animal industry and animal disease in the Somaliland Protectorate. 1. *British Veterinary Journal*, *110*, 411-423.

Maritime (2017). Australia, Saudi Arabia Plan to Restart Live Export Trade. Retrieved September 7, 2019, from https://www.maritime-executive.com/article/australia-saudi-arabia-plan-to-restart-live-export-trade

Meagher, K. (2007). Introduction: Special issue on informal institutions and development in Africa'. *Africa Spectrum*, *42*(3), 405-418.

Meagher, K. (2018). Taxing Times: Taxation, Divided Societies and the Informal Economy in Northern Nigeria. *The Journal of Development Studies*, *54*(1), 1–17.

Meijerink, G. (2011). New institutional economics: Douglass North and Masahiko Aoki. In S. Vellema (Ed.), *Transformation and sustainability in agriculture*, pp. 21–33.

Menkhaus, K. (2003). State collapse in Somalia: Second thoughts. *Review of African Political Economy*, *30*(97), 405–422.

Miguel, E., Gertler, P., & Levine, D. I. (2006). Does industrialization build or destroy social networks? *Economic Development and Cultural Change*, *54*(2), 287–317

Millman, B. (2013). British Somaliland: An Administrative History, *1920-1960*. Routledge.

Ministry of Planning. (2012). Somaliland National Development Plan. Retrieved August 19, 2019, from http://www.nationalplanningcycles.org/sites/default/files/country_docs/Somalia/ndp_somalia.pdf

Ministry of Planning (2016). Somaliland in Figures, 2016. Retrieved August 20, 2019, from https://www.slministryofplanning.org/images/Statistics/SomalilandInfigures2016.pdf

Ministry of Planning (2017). Somaliland National Development Plan 2017-*2021*. Hargeisa, Somaliland. Retrieved on August 10, 2019, from https://slministryofplanning.org/images/front-page/Somaliland_NDPII_Final.pdf

Ministry of livestock (2018). Somaliland Livestock Sector Development Workshop, October 20th-21st (unpublished). Hargeisa, Somaliland.

Ministry of Environment and Rural Development (2016). Status of thirteen grazing areas and their management guidelines in Awdal, Maroodijeex, Howd, Togdheer and Salel. Final report. Hargeisa.

Ministry of Planning (2015). Somaliland in figures 2015. Retrieved on July 10, 2019 from https://www.slministryofplanning.org/images/Statistics/SomalilandInfigures2015.pdf

Mirreh, M. (2017). Climate Change and Degraded Ecosystem: Pastoral Livelihood on a Crossroad. Hargeisa: Somaliland's National Environment Research and Disaster Preparedness Authority, Hargeisa.

Mohamed, J. (2004). The political ecology of colonial Somaliland. *Africa*, *74*(4), 534–566.

Moore, M. (2004). Revenues, State Formation, and the Quality of Governance in Developing Countries. *International Political Science Review*, *25*(3), 297–319.

Moore, M. (2014). Revenue reform and statebuilding in Anglophone Africa. *World Development*, *60*, 99-112.

Mousley, P., J. Ndiaye, J. Wimpey, M. Amin, C. Votava, M. Nicoli, and D. Phillips. 2015. Somaliland's private sector at a crossroads: Political economy and policy choices for prosperity and job creation. World Bank Publications, Washington, DC. Available at doi:10.1596/978-1-4648-0491-

Mtimet, N., Wanyoike, F., Godiah, L., Ndiwa, N., Wesonga, F., & Marshall, K. (2015). Effect of quality attributes on prices of small ruminants in Somaliland: A farmers' perspective using 'best-worst approach. Research Brief 50, International Livestock Research Institute, *Nairobi.*

Mubarak, J. A. (1997). The "hidden hand" behind the resilience of the stateless economy of Somalia. *World Development*, *25*(12), 2027-2041.

Mugunieri, G. L., Mtimet, N., Enock, K., Costagli, R., Gulaid, I. (2016). Saudi Arabia end-market requirements and the implications for Somaliland livestock exports. Research Report 40. International Livestock Research Institute, Nairobi.

Mugunieri, L., R. Costagli, O. Osman, O. Oyieke, A. Jabbar, A. Negassa, and A. Omore (2008). A rapid appraisal of institutions supporting Somali livestock export. Discussion Paper 14. International Livestock Research Institute, Nairobi.

Mugunieri, L. G., Baker, D., Elmi, I. I., Costagli, R., Gulaid, I., & Wanyoike, F. N. (2014). Enhancing the provision of livestock marketing information in Somaliland. Research Report 35. International Livestock Research Institute, Nairobi.

Muir, S. (2011). Multi-sited ethnography. In D. Southerton (Ed.), Encyclopedia of consumer culture (Vol. 1, pp. 1015-1015). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412994248.n375

Musa, A. M. (2019). From trust to oligopoly: Institutional change in livestock trade in Somaliland after 1991. Working Paper No. 2019:8. Danish Institute for International Studies, Copenhagen.

Musa, A. M., & Horst, C. (2019). State formation and economic development in post-war Somaliland: the impact of the private sector in an unrecognised state. *Conflict, Security & Development*, *19*(1), 35-53.

Musa, A. M., & Schwere, R. (2019). The hidden tactile negotiation sign language in Somaliland's livestock markets. *Bildhaan. An International Journal of Somali Studies*, *18*, 50-69.

Nabli, M. K., & Nugent, J. B. (1989a). The new institutional economics and economic development: An introduction. In *Contributions to Economic Analysis* (Vol. 183, pp. 3–33).

Nabli, M. K., & Nugent, J. B. (1989b). The new institutional economics and its applicability to development. *World Development*, *17*(9), 1333–1347.

Najim, M., & Briggs, J. (1992). Livestock Development in Somalia—A Critical Review. *GeoJournal*, *26*(3), 357–362.

Negassa, A., Costagli, R., Matete, G., Jabbar, M., Oyieke, S. O., Abdulle, M. H., & Omore, A. (2008). Towards improving livestock export marketing support services in the Somali context: Survey findings and implications, discussion paper 35. International Livestock Research Institute, Nairobi.

Nenova, T. (2004). Private sector response to the absence of government institutions in Somalia. World Bank. Washington, DC. Available at: http://documents.worldbank.org/curated/en/248811468302977154/pdf/802300WP0Somal0Box0379802B00PUBLIC0.pdf"

Nori, M. (2009). Milking Drylands: Gender networks, pastoral markets and food security in stateless Somalia. PhD thesis, Wageningen University.

North, D. (1990). Institutions, institutional change and economic performance. Cambridge: Cambridge university press.

North, D. (1993). The new institutional economics and development. Economic History, No. 9309002, Washington University, St. Louis.

North, D. (1981). Structure and change in economic history. Norton.

Olson, M. (1993), Dictatorship, Democracy, and Development', American Political Science Review, 87 (3), 567-76.

Pankhurst, R. (1965). The Trade of the Gulf of Aden Ports of Africa in the Nineteenth and Early Twentieth Centuries. *Journal of Ethiopian Studies*, *3*(1), 36–81.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.

Pavanello, S. (2010). Livestock marketing in Kenya-Ethiopia border areas: A baseline study. Working paper: Humanitarian Policy Group (HPG) at Overseas Development Institute (ODI). London.

Phillips, A. (2013). Political settlements and state formation: The case of Somaliland. DLP Research Paper 23. Birmingham: Developmental Leadership Program, University of Birmingham.

Phillips, P. C., & Perron, P. (1988). Testing for a unit root in time series regression. *Biometrika*, *75*(2), 335–346.

Portes, A., & Sensenbrenner, J. (1993). Embeddedness and immigration: Notes on the social determinants of economic action. *American journal of sociology*, *98*(6), 1320-1350.

Powell, B., Ford, R., & Nowrasteh, A. (2008). Somalia after state collapse: Chaos or improvement? *Journal of Economic Behavior & Organization*, *67*(3-4), 657-670.

Prud'Homme, R. (1992). Informal local taxation in developing countries. *Environment and Planning c: Government and Policy*, *10*(1), 1–17.

Ram, K. V. (1981). British government, finance capitalists and the French Jibuti-Addis Ababa railway 1898–1913. *The Journal of Imperial and Commonwealth History*, *9*(2), 146-168.

Rapsomanikis, G., Hallam, D., Conforti, P. (2003). Market integration and price transmission in selected food and cash crop markets of developing countries: review and applications. Commodities and Trade Division: Food and Agriculture Organisation (FOA). Rome

Renders, M., & Terlinden, U. (2010). Negotiating statehood in a hybrid political order: The case of Somaliland. *Development and change*, *41*(4), 723-746.

Rodrik, D. (2000). Institutions for high-quality growth: what they are and how to acquire them. *Studies in comparative international development*, *35*(3), 3-31.

Rotberg, R. I. (2003). Failed states, collapsed states, weak states: Causes and indicators. *State failure and state weakness in a time of terror*, *1*, 25.

Samatar, A. (1987). Merchant capital, international livestock trade and pastoral development in Somalia. *Canadian Journal of African Studies/La Revue Canadienne Des Études Africaines*, *21*(3), 355–374.

Samatar, A. I. (1992). Social classes and economic restructuring in pastoral Africa: Somali notes. *African Studies Review*, *35*(1), 101–127.

Samatar, A. I. (1989). *The state and rural transformation in Northern Somalia, 1884-1986*. Univ of Wisconsin Press.

Samatar, A., Salisbury, L., & Bascom, J. (1988). The political economy of livestock marketing in northern Somalia. *African Economic History*, (17), 81-97.

Schouten, P. (2019). Roadblock politics in Central Africa. *Environment and Planning D: Society and Space*. DOI: 10.1177/0263775819830400

Schumpeter, J. (1991[1918]). The economics and sociology of capitalism. Ed by Swedberg (p.99-140). NJ: Princeton University Press.

Simons, A. (1995). Networks of Dissolution. Somalia Undone, Boulder. Westview Press.

Soumaré, B., Thys, E., Berkvens, D., Hashi, A., & Van Huylenbroeck, G. (2006). Effects of Livestock Import Bans Imposed by Saudi Arabia on Somaliland for Sanitary Reasons Related to Rift Valley Fever. *Outlook on Agriculture*, *35*(1), 19–24.

Staber, U. (1996). The social embeddedness of industrial district networks. *Business Networks: Prospects for Regional Development*, 148–189.

Stepputat, F., & Hagmann, T. (2019). Politics of circulation: The makings of the Berbera corridor in Somali East Africa. *Environment and Planning D: Society and Space*, *37*(5), 794–813.

The constitution of the republic of Somaliland (Somaliland Law), 2001. Retrieved from http://www.somalilandlaw.com/body_somaliland_constitution.htm

Teka, T., & Azeze, A. (2002). Cross-border livestock trade, and food security in the Ethiopia-Djibouti, and Ethiopia-Somalia borderlands. Organization for Social Science Research in Eastern and Southern Africa. Addis Ababa.

Tempia, S., Braidotti, F., Aden, H. H., Abdulle, M. H., Costagli, R., & Otieno, F. T. (2010). Mapping cattle trade routes in southern Somalia: a method for mobile livestock keeping systems. *Revue scientifique et technique*, *29* (3), 485.

Thomson, G. R., Tambi, E. N., Hargreaves, S. K., Leyland, T. J., Catley, A. P., van't Klooster, G. G., & Penrith, M. L. (2004). International trade in livestock and livestock products: The need for a commodity-based approach. *The Veterinary Record*, *155*(14), 429–433.

Tendler, J. (2002). Small firms, the informal sector, and the devil's deal 1. IDS bulletin, 33(3), 1-15. Retrieved from https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/8640/IDSB_33_3_10.1111-j.1759-5436.2002.tb00035.x.pdf?sequence=1

Tilly, C. (1985). War making and state making as organized crime. In *Collective Violence, Contentious Politics, and Social Change* (pp. 121–139). Routledge.

UNSC (United Nations Security Council) Letter dated 2 October 2018 from the Monitoring Group on Somalia and Eritrea addressed to the Chair of the Security Council Committee pursuant to resolutions 751 (1992) and 1907 (2009) concerning Somalia and Eritrea. S/2018/1002. New York: United Nations Security Council.

Umar, A., & Baulch, R. (2007). Risk Taking for a living: Trade and Marketing in the Somali Region of Ethiopia. UN-OCHA Pastoral Community Initiative. *UN-OCHA*.

Wanyoike, F., Mtimet, N., Ndiwa, N., Marshall, K., Godiah, L., & Warsame, A. (2015). Knowledge of livestock grading and market participation among small ruminant producers in northern Somalia. *East African Agricultural and Forestry Journal*, *81*(1), 64–70.

Webersik, C. (2006). Mogadishu: An economy without a state. *Third World Quarterly*, *27*(8), 1463-1480.

Weber, M. (1925/1978) *Economy and Society: An Outline of Interpretative Sociology*, Berkeley, CA: University of California Press.

Williamson, O. E. (2000). The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, *38*(3), 595–613.

Williamson, O. E. (1975). Markets and hierarchies. *American Economic Review*, 63 (2), 316-325

World Bank. (2006). Somalia from Resilience Towards Recovery and Development: A Country Economic Memorandum for Somalia. Banco Mundial.

World Bank, W. B. (2018). Rebuilding Resilient and Sustainable Agriculture in Somalia—. Retrieved July 9, 2019, from http://documents.worldbank.org/curated/en/781281522164647812/Volume-1-Main-Report

Zukin, S., & Dimaggio, P. (1990). Structures of Capital: The Social Organization of the Economy. Cambridge University Press. Cambridge.

APPENDICES

Appendix 1: Question guide for stakeholder analysis

1. Who are the actors/institutions involved in the export livestock trade value chain? (consider both formal and informal)
2. How are these actors linked? (consider formal and informal linkages)
3. How powerful are the actors (consider source of power: legitimate or breaking laws)?
4. How have the actors/institutions changed over the last thirty years?
5. What is governance related challenges in the export livestock trade?
6. What are the causes of these challenges?
7. What are the effects of these challenges?

Appendix 2: Individual Interview guide

Institutions

1. In your opinion, tell me your views about the Somaliland livestock trade?
2. How have policies and regulations that affect livestock trade changed over the years?
3. What do you consider the effect of these changes on livestock trade?
4. Do you see that livestock trade is performing before the war or after the war? Give reasons for your answers.
5. Do you think livestock trade requires some regulations and policies to improve it?
6. If yes, what policies and regulations do you think are necessary and why?
7. What do you consider some policy or regulatory related challenges facing livestock trade now?
8. In your opinion, why those regulations and policies are missing?
9. What organizations/authorities are currently involved in livestock trade?
10. What organizations/authorities were responsible in livestock trade before the war?
11. In your opinion, would you recommend more regulations for livestock trade? Give reasons for your answer

Governance Changes in Livestock Trade

12. How is trade governed? (actors, practices, power and clan dynamics, connections and relationships (formal and informal), and gender composition, source of the livestock trade)
13. In your view, how have livestock trade governance changed over the years (actors, practices, sources of trade, connections and relationships, capital shift, clan composition, gender composition)
14. What do you consider the effects of these changes on livestock trade?
15. What do you consider governance related opportunities in livestock trade in the post-war era?
16. What do you consider governance related challenges facing livestock trade in Somaliland?
17. Do you see livestock trade governance was better before or after the war? Give reasons for your answer.
18. What would you recommend strengthening livestock trade governance?

Environmental Changes

19. In your opinion, has pastoral environment changes over the years?
20. If yes, what has changed? (consider natural changes and human induced changes)
21. What do you think caused each of the changes you mentioned? (nature or human).

22. How do the changes affect livestock trade?
23. Do you think pastoral environment was better before or after the war? Give reasons for your answers.
24. Are you aware of any changes in rangelands in Somaliland after 1991?
25. If, yes, what changes do you think happened?
26. What is the history of the changes?
27. What do you consider the cause of each of the changes?
28. Do you consider that increased livestock trade is a cause to the changes in the pastoral areas?

Semi-structured Interview for Commercial Livestock Fodder

29. What types of fodder (or hay) are the most common in this area?

----

30. Which areas producer fodder? (list in order of their importance)

Location	Region/geographic description

31. Who are the key actors in the value chain?

Actor	price
prouder	
harvester	
Porter/loader	
transporter	
Off loader/porter	
Trader price	
Consumer price	

32. What common types of fodder are produced? (list according to their commonality)

Fodder type	Description

33. What value does each actor add for how much?

----

34. What are the constraints in fodder production?

----

35. What are the opportunities in fodder production?

----

36. What institutions support fodder production (formal or informal)

----

37. What factors affect fodder production?

----

38. How does seasonality and how does this affect the value chain? (price, availability)

----

39. How much tonnes of fodder are annually produced in Somaliland?

40. What has changed fodder production since 1991? What services/activities were included to add value?

----

41. How many chains exist in fodder trade? (producer-consumer, producer, trader, consumer, producer, agent, trader consumer)

----

42. Who is the final consumer of commercial fodder or hay? (exporters, local traders, commercial animal farms).

----

43. What factors affect price of a fodder (explain each factor with examples)

Trends and Drivers of Volumes of Livestock Trade

44. Do you think volumes of livestock trade increased or decreased? Explain your answer.
45. What do you consider the cause of the increase of decrease?
46. In your opinion, what factors affect volumes of livestock trade?
47. Considering challenges such as droughts and institutional challenges, why do you think livestock trade increased?
48. What are the sources of livestock trade?
49. How do changes in the sources of livestock trade affect volumes of livestock trade?
50. Are you aware of any livestock that originates outside Somaliland?

51. If yes, where and what volumes?
52. What factor do you think affect livestock prices? (factors, causes, impacts)
53. Please rate factors that impact on livestock prices according to their level of impact.
54. What do you recommend making livestock prices stable and predictable?

END NOTES

[1] The north-western regions of Somalia (former British Somaliland) united with the southern regions of Somalia (former Italian Somalia) in 1960 to form the Somali Republic (Somalia). The north-western regions unilaterally declared independence from Somalia in 1991 but remain internationally recognised as part of Somalia. Since 1991, the north-western regions featured prominently in the literature as Somaliland. The use of Somaliland here is not an endorsement of an independent political entity.

[2] The contribution of livestock trade in the agricultural GDP have changed over the years considering that that new countries such as Sudan, Djibouti and Ethiopia have emerged as key livestock exporters due to the political instability and prolonged absence of central state authority in Somalia. However, due to absence of reliable data livestock contribution to the GDPs in the HoA countries is underestimated.

[3] See Policy Framework for Pastoralism in Africa: Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralist Communities https://au.int/sites/default/files/documents/30259-doc-pastoral_policy_framework_-_low_res.pdf

[4] See African Union Convention on Cross-Border Cooperation (NIAMEY Convention) https://au.int/sites/default/files/treaties/36416-treaty-0044_-_niamey_convention_african_union_convention_on_cross-border_cooperation_e.pdf

[5] From 1884 to 1905, the British rules Somaliland under the British government of Indian and part of Aden and it was 1905 when the colonial office took over the control over the British Somaliland Protectorate (see Kittermaster 1932).

[6] After the union, livestock exports remained the principal export in the former British Somaliland while banana exportation was the principal exports of the Italian Somalia (Samatar, 1989).

[7] Each with the capacity of 20,000 cubic meters and 6 meters depth each and protected with barbed-wire

[8] The grazing reserves were 250-1000 km^2

[9] There are two important livestock value chains in Somaliland: the export value chain and local consumption value chain. The export value chain is more noticeable because of the foreign hard currency and revenue it generates. In terms of institutions, the role of formal

institutions in export trade largely vanished in 1991 while informal institutions are challenged by the overseas nature of this value chain.

[10] Many scholars have critiqued the role of formal institutions in the economy before 1991. In the Somalia case Western observers and ordinary Somalis have, most of the time, held different views on institutions and development. For example, while Western scholars saw an emerging democracy and viable state institutions during the civilian government (1960 to 1969), Somalis perceived civilian institutions as corrupt and weak, leading to a stagnation in state formation and making military intervention all but inevitable (see Laitin, 1976).

[11] Interview, former livestock exporter, Hargeisa, March 2018.

[12] Livestock exports from Somalia/Somaliland to the Arab Peninsula were regulated before the war by both Somalia and import countries. However, before the war there was a substantial unofficial livestock export from Somalia to Kenya and, to a lesser extent, to Yemen. IMF estimated unofficial livestock exports from Somalia at US$60 million (see Jamal 1988: 33). Unofficial livestock exports from Somalia to Kenya have increased dramatically after 1991 (see Little 2003).

[13] The former British Somaliland protectorate declared to have seceded from the Italian Somalia in 1991, in the aftermath of the collapse of the Somali democratic republic led by Said Barre, to form the ‘Republic of Somaliland’. However, Republic of Somaliland’s independence from Somalia has not been internationally recognised (Hansen & Bradbury, 2007).

[14] Somaliland cost starches 850 km along the Red Sea, east-west and parallel to the coastal plains is a mountainous range (Golis) where altitude rise to 2,000 meters, South of the mountainous range and extending to Ethiopia is the a plateau known as *Ogo* with an average altitude of up to 1,200 meters and South to Ogo plateau is the Haud plateau also extending to Ethiopia with lower altitude of 500 meters (Ministry of Planning, 2016: 263).

[15] Start and end of seasons are exactly matched at the beginning or end of the months. Seasons begin either early or late of a month, therefore, when a season starts early of the month, the whole month has been considered while seasons starting late of the month, next month has been considered for the reader to be able to easily match seasons with the twelve months of the year.

[16] Ministry of National Planning & Development (Department of Statistics & Research). The estimates are based on the 1975 Somalia census of livestock population.

[17] During the 1994 civil war in Somaliland, Hargeisa market shifted to the west of Hargeisa and Burao market to Yirowe

[18] The World Organisation for Animal Health (WOAH) was formerly known as the Office International des Epizooties (OIE).

[19] Exporting livestock with a Letter of Credit (LC) was a means by which the Somali government controlled hard currency exchange from livestock. The Saudi government also demanded LCs so that Saudi importers could exact price demands from Somali importers (see Samatar 1987: 368) while it also prevented default of Saudi importers to their Somali partners and vice versa.

[20] Interview, former livestock exporter, Hargeisa, March 2018.

[21] Interview, former livestock exporter, Hargeisa, March 2018.

[22] Interview, senior livestock broker, Burao, March 2018.

[23] Interview, senior livestock broker, Hargeisa, March 2018; oral history, former/current livestock exporter, Hargeisa, March 2018.

[24] In Nairobi's Eastleigh, I have also heard that Somali traders defaulted their Chinese partners after several trust-based transactions.

[25] By then the Togwajale market did not emerge as a terminal market because the border between Ethiopia and Somalia was closed while Somalia's cattle export took place through the ports of Kismayo and Mogadishu.

[26] Interview, former livestock exporter, Hargeisa, June 2018.

[27] Oral history, former livestock exporter, Hargeisa, March 2018.

[28] Oral history, former livestock exporter, Hargeisa, March 2018.

[29] Interview, senior livestock broker, Burao, March 2018.

[30] Interview, livestock broker, Hargeisa, March 2018. It was not clear how long the Yemeni creditors (store owners) waited for their money and what happened to creditors in case animal slaughterers failed to return livestock profits.

[31] Interview, former livestock exporter, Burao, June 2018.

[32] Interview, former livestock exporter, Hargeisa, March 2018.

[33] Interview, livestock exporter, Hargeisa, March 2018.

[34] Interview, livestock exporter/*wakiil* (agent), Hargeisa, March 2018.

[35] Interview, cattle exporter to Yemen, Togwajale, July 2018.

[36] Interview, cattle exporter, Hargeisa, June 2018.

[37] Interview, cattle exporter, Hargeisa, June 2018.

[38] Interview, senior veterinary professional/ex-minister/former livestock exporter, Hargeisa, March 2018.

[39] Interview, cattle exporter, Hargeisa, July 2018.

[40] Interview, cattle exporter, Hargeisa, July 2018.

[41] This is not an exhaustive list of livestock exporters that have been defaulted on by the Arab partners, neither does it capture the Arab traders who have been defaulted on by Somali partners.

[42] Interview, cattle trader, Togwajale, March 2018.

[43] Interview, cattle trader, Hargeisa and Togwajale, June 2018.

[44] Interview, cattle trader, Hargeisa, June 2018.

[45] Interview, former livestock exporter/former minister, Hargeisa, June 2018.

[46] Interview, livestock exporter to Yemen, Hargeisa, July 2018; focus group discussion, female cattle traders/exporters, Togwajale, August 2018.

[47] Interview, livestock producer, Hargeisa, August 2018.

[48] Competition between institutions that claim public authority can be an indication of institutional incongruence (Lund 2006: 699).

[49] Not all informal institutions or institutions that claim public authority have an economic interest. For example, in the past traditional elders who claimed public authority were not part of an economic institution but a social one. Although as of late traditional elders have made use of their social position to access power and capital.

[50] Interview, senior veterinary professional/ex-minister/former livestock exporter, Hargeisa, March 2018.

[51] Interview, senior veterinary professional/ex-minister/former livestock exporter, Hargeisa, March 2018.

[52] Interview, former CHAP member/founder, Hargeisa, March 2018; Interview, former CHAP member, Burao, July 2018.

[53] Interview, former CHAP member/founder, Hargeisa, March 2018; Interview, former CHAP member, Burao, July 2018.

[54] Interview, Togdheer regional ministry of livestock coordinator, Burao, March 2018.

[55] Later, the Somaliland government introduced two days mandatory resting of livestock in the holding grounds (Gaani 2002: 71).

[56] Oral history, former livestock exporter, Hargeisa, March 2018.

[57] Interview, former livestock trader, Burao, June 2018.

[58] The EU has supported efforts to lobby for lifting the Somali livestock export ban.

[59] Figures represent livestock exports from Somalia. It is estimated that over 70% of livestock exports from Somalia are from Berbera.

[60] September 2001 Saudi Arabia and other Gulf countries impose ban on livestock exports from the Horn of Africa due to Rift Valley fever.

[61] September 2009, Saudi Arabia lifted the prolonged Rift Valley fever ban.

[62] General Authority of Statistics, Kingdom of Saudi Arabia, available at https://www.stats.gov.sa/en/214, accessed June 10, 2019.

[63] Société Générale de Surveillance (French for General Society of Surveillance).

[64] Interview, former general director, Ministry of Finance, Hargeisa, June 2018.

[65] Interview, former general director, Ministry of Finance, Hargeisa, June 2018.

[66] Interview, veterinary professional, Hargeisa, March 2018.

[67] SEIVQMC has the capacity to hold up to 500,000 animals each time; BNAHQ 250,000 and VBUQ 400,000 according to the IGAD Centre for Pastoral areas and Livestock Development available at https://icpald.org/network-for-quarantines/ accessed March 30, 2019.

[68] Interview, director of planning, Ministry of Livestock, Hargeisa, March 2018.

[69] Interview, veterinary professional, Hargeisa, March 2018.

[70] Interview, senior livestock broker, Hargeisa, March 2018.

[71] Historically, when the Asians and Europeans who controlled livestock export evacuated Somaliland following the Italian invasion and the occupation of British Somaliland during the Second World War, Somali livestock exporters took control (Samatar *et al.* 1988: 86).

[72] Interview, livestock trader, Burao, July 2018.

[73] Interview, Al-Jabiri senior broker, Hargeisa, 2018.

[74] Interview, Sahil regional ministry of livestock coordinator, Berbera, June 2018.

[75] Interview, senior broker, Burao, March 2018.

[76] Interview, Chamber of Commerce, Hargeisa, June 2018; Interview, Ministry of Livestock, Hargeisa, August 2018.

[77] Interview, Ministry of Livestock, Hargeisa, March 2018. The development organization who was responsible for the donor project expressed and shared a similar account.

[78] Interview, Tayyid Quality Meat Plant managing director and founder/former Minister of Justice, Hargeisa, March 2018.

[79] For discussion on how informal institutions influence formal institutions see Helmke & Levitsky (2004).

[80] Interview, senior officer from Ministry of Livestock, Hargeisa, March 2018.

[81] Interview, livestock specialist and development worker, Hargeisa, June 2018.

[82] Interview, Tayyid Quality Meat Plant managing director and founder/former Minister of Justice, Hargeisa, March 2018.

[83] Interview, former livestock exporter, Hargeisa, July 2018.

[84] Interview, senior customs officer, Hargeisa, June 2018.

[85] Small ruminants 52, cattle 348 and camels 480 Slsh.

[86] Interview, senior customs officer, Hargeisa, June 2018.

[87] Interview, cattle exporter, Hargeisa, June 2018.

[88] Interview, livestock exporter, Hargeisa, March 2018.

[89] Interview, former livestock exporter and senior government officer, March 2018.

[90] Interview, former livestock exporter, March 2018.

[91] Post-war in the case of Somaliland after 1991 and, arguably, in Puntland after circa 2000.

[92] Schumpeter's discussion on a tax state was more focused on income taxation

[93] See Moore 2004; 2014; Brautigam 200X and others.

[94] All Shabaab may be seen as more roving than stationary, but still depend on the control of particular nodes

[95] It takes 3, 5, 10 and 11 days for livestock that has left Berbera, Bossaso, Mogadishu and Kismayo ports, respectively, to arrive at the port of Jeddah in Saudi Arabia, the most important market for Somali livestock export.

[96] See Kefale 2019 for data on contraband confiscations by Ethiopian Customs and Revenue Authority

[97] This reflects a conception of shared Somali moral community, independently of the fact that Somali herders living in Ethiopia are, by law, Ethiopian citizens. But they don’t necessarily identify as such.

[98] Bush markets are where producers bring their livestock for trade in the settlements; primary markets are are mostly near villages where traders buy livestock and move to a secondary market; secondary markets are markets where local livestock traders meet with long-distance traders or exporters and terminal markets are final markets where livestock exporters ship animals to overseas markets (Umar and Baulch 2007: 21).

[99] Interview, livestock trader, Hargeisa, March 2018.

[100] In the 19th century, the well-known Somali poet Ismail Mire recited a poem ‘*Ooggii Horaynagu Keceen’* and complained that dilaaliin cheated him when he marketed his livestock to Burao market (Musa and Schwere 2018).

[101] Senior implies in terms of age, number of years in the profession and the size of the livestock they sell, ranging from several hundreds and up to ten thousand per day in the Hajj season.

[102] Interview, transporter in Hargeisa, Burao and Togwajale markets.

[103] Interview, transporter, Hargeisa, March 2018. As mentioned by two interviewed transport-owners legal number plate in Ethiopia could cost up to US $8,000 as of late 2018.

[104] Somaliland press cited in unpo.org, 2019

[105] The *Africa Research Bulletin* (2012) counted the announcement of 'at least thirty semi-regional states' between 2006 and 2012.

[106] Salal, Daadmadhedh, Ayn, Saraar, Makhir, Haysimo and Haud in 2008, and in 2014 Xaysimo. Once a new region was created, new districts were also created.

[107] Madaxweyne Siilaanyo Oo Digreeto Ku Magacaabay Toddoba Degmo Oo Cusub [president Silanyo created seven districts with a decree]. https://www.gobanimonews.com/madaxweyne-siilaanyo-oo-digreeto-ku-magacaabay-toddoba-degmo-oo-cusub/

[108] Madaxweyne Daahir Rayaale Kaahin oo manta magcaabay lix gobol iyo 14 degmo [president Rayale greates six regions and 14 districts], . https://somlandnor.wordpress.com/2008/03/22/madaxweyne-d-rayale-kahin-oo-maanta-magacaabay-lix-gobol-oo-cusub-iyo-14-degmo/

[109] Sool (Lasanod) Sanaag (Badhan), Ayn (Buhodle) and Hayland (Dhahar) regions of Puntland overall with Sool (Lasanod), Sanag (Erigavo), Ayn (Buhodle), Makhir (Badhan) and Haysimo (Talex) of Somaliland.

[110] Also interview, former Ministry of Finance Director, Hargeisa, March 2018.

[111] See Samatar, Salisbury, and Bascom, 1988; De Waal, 2007; Jhazbhay, 2008)

[112] There are also post-shipment resource extraction, including custom charges, labour charges, quarantine charges, and agent commission (Costagli et al, 2016.

[113] Interview, former Ministry of Finance Director, Hargeisa, July 2018.

[114] Sales tax for small ruminants is SolSh 2,000, 6,000 cattle and 10,000 camels.

[115] Interview, Mayor of Burao, April, 2015. During data collection for this study the same Mayor was still in office and publicly complained about this revenue sharing formula.

[116] Sales tax for small ruminants is SolSh 2,000, 6,000 cattle and 10,000 camels.

[117] As of 1994, the official exchange rate was US $1 for 1500 shillings and the price of small ruminants was, on average, 80,000 shillings. Somaliland shilling significantly lost against dollar over the years and as of 2018, exchange rate for US $1 reached 10,000 shillings while the price of small ruminants reached, on average, 500,000 shillings.

[118] Ministry of Finance, customs Export valuation list (2018)

[119] In Southern Somalia, livestock traders paid taxes to warlords and militias a the ports and roadblocks but the levels of taxation were still lower than before 1991 (Little 2003:8).

[120] Small ruminant traders prefer port of Berbera unless there is a ban on livestock exports from Somalia ports. For example, the 1998, 2000-2009 and 2016-present bans. In the last three years, Saudi authorities have been suspending the ban during the Hajj season to allow supply of millions of sacrificial animals. Camels exports have shifted to Djibouti since Egypt the main camel market banned camel exports from Somali ports. Cattle is exported to Yemen and Omen hence are not affected by the Saudi or Egypt bans. On small ruminants, Djibouti is Lowya Addo is higher US$2, cattle and Camel $5 per head of animal.

[121] Hargeisa and Burao markets specialise in small ruminants. 80% of livestock traded in these markets are sheep and goats, therefore, we focused on small ruminants. Togwajale border market specialises in cattle and we collected data from cattle only.

[122] This figure plummet during the export livestock ban season.

[123] This fee is locally also referred to as *qashinxaad* or garbage collection fee.

[124] Six-ton (*shamboo*) truck load has the capacity of 150-200 small ruminants. Eight-ton (*sideedboole*) truck load has capacity of 200-250 heads of small ruminants while twelve-ton (*waraad)* truck load has the capacity of 350-400 small ruminants.

[125] Interview, Burao market head, June 2018.

[126] Interview, Somaliland decentralisation and election expert, Hargeisa, 2018

[127] This quote is from an interview the first author conducted with Deputy Mayor of Sheikh district in 2014.

[128] Interview, Burao market head, June 2018. The first author observed the taxing officer issuing receipts for this commission. The public institutions do not have officers in the market, rather the local municipality collects this commission together with its sales tax.

[129] Interview, senior livestock broker/wakiil, Burao, August 2018. Al-shabaab taxes livestock trekked between Bay and Beledweyne at 0.2 per head of animal. In contrast, a recent study reported that al-Shabaab's Finance Department taxes commercial livestock at $ 5, 3 and 2 per head of camel, cattle and small ruminant, respectively, at checkpoints (Hiraal Institute 2018).

[130] Interview, livestock exporter, Hargeisa, August 2018.

[131] Interview, livestock exporter, Hargeisa, 29/07/2018; Interview, senior *dilaal/wakiil*, Burao, July 2018. In Puntland each year, over one million goats, sheep, cattle and camels of which 30% originate from South-central Somalia and 18% from Ethiopia are exported through port of Bossaso (IGAD, 2016).

[132] Interview, senior broker/agent, Burao, July 2018. The same interviewee stated that administrative posts in the Somali region of Ethiopia collect less revenues since the leadership

change in Ethiopia, referring to when the new prime minister, Aby Ahmed, came into office in April. The checkpoints are: Afar iridood, Bookh, Laandheer, Qalloocan, and Ballidhiig

[133] KII, transporter, Hargeisa, 29/03/2018

[134] Interview with female truck owner/livestock trader who bought the old truck number. The truck was expropriated in 2016

[135] Interview, livestock exporter/wakiil, Hargeisa, April 2018.

[136] Interview, veterinary professional, Hargeisa, March 2018.

[137] Interview, fodder trader, Hargeisa market, April 2019; Interview, Hargeisa, Fodder transporter, April, 2019.

[138] Interview, fodder trader, Hargeisa market, April 2019; Interview, Hargeisa, Fodder transporter, April, 2019.

[139] Interview, Somaliland Ministry of Environment/ FSNAU staff, Hargeisa, March 2019

[140] Interview, long time fodder broker, Hargeisa, March 2019.

[141] Senior officer from Somaliland Ministry of Livestock estimated that 72 of the grazing reserves were in Somaliland territories.

[142] Interview, Donor Fund Manager, Hargeisa, March 2019. Also see project documents on https://www.somalilanddevelopmentfund.org/images/docs/Project_descriptions/MoL.pdf

[143] Interview, Senior Ministry of Livestock Officer, Burao, April 2018.

[144] SDF, Hargeisa, March 2019; Interview Ministry of Livestock Senior Officer in Burco, April 2018

[145] Interview, Senior Ministry of Livestock Officer, Burao, April 2018.

[146] Interview, Beerta cooperative member, Burao, April 2019.

[147] Interview, retired fodder broker, Hargeisa, April 2019.

[148] Interview, Beerta cooperative member, Burao, April 2019.

[149] Interview, former livestock exporter/ private regulator, Hargeisa, July 2018.

[150] Interview, fodder trader, Hargeisa, April 2019.

[151] Interview, FSNAU staff/Ministry of Environment officer, Hargeisa, March 2019.

[152] Interview, senior livestock broker, Hargeisa, March 2019

[153] Wheat bran is imported from Ethiopia.

[154] Interview, cattle trade, Togwajale, March 2019.

[155] Interview, female retailer in Hargeisa market, Hargeisa, March 2019.

[156] Interview, fodder retailer in Hargeisa market, April 2019

[157] Interview, retired fodder broker, Hargeisa, April 2019.

[158] Interview, fodder trade, Togwajale market, April 2019

[159] Interview, senior broker (gacan jare) for one of the companies, Hargeisa, April 2019.

[160] Interview, senior broker (gacan jare) for one of the companies, Hargeisa, April 2019

[161] World Bank (2018 p:50) reported that each bale was 30 kilograms; Field interviews estimated each bale around 7 kilograms

[162] Interview, fodder retailer in Hargeisa market, Hargeisa April 2019

[163] Interview, male fodder broker, Hargeisa, April 2019.

[164] Interview, sorghum/maize stalk producer/retailer, Togwajale, April 2019

[165] Interview, Ministry of Livestock Consultant, Hargeisa, April 2019.

[166] Interview, loader/offloader, Hargeisa, April 2019.

[167] Interview, senior broker (gacan jare) for one of the companies, Hargeisa, April 2019.

[168] Fuel is separate from the hiring fee

[169] A six ton track carries 120 dry grass bales (wholesale), the retailers re-bale into 80 bundles. The weight of a bundle is estimated around 7 kgs.

[170] They talk half of each load and the farmer takes a half

[171] Interview, grass retailer in Hargeisa livestock market, Hargeisa, April 2019.

[172] FSNAU is a multiagency unit coordinated by Food Agriculture Organisation (FAO).

[173] There were four observations that were missing from the data on the monthly number of small ruminants transacted in Hargeisa and Burao markets for export which we treated as missing values.

[174] https://www.stats.gov.sa/en/214