

**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS**



**ASSESSMENT ON MEAT EXPORT PERFORMANCE IN ETHIOPIA;
CHALLENGES AND OPPORTUNITIES**

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LIST OF ACRONYMS AND ABBREVIATIONS

AGP	Agricultural Growth Program
CSA	Central Statistics Agency
ECC	Ethiopian Customs Commission
ECCSA	Ethiopia Chamber of Commerce & Sectorial Associations
EIC	Ethiopian Investment Commission
EMDIDI	Ethiopian Meat and Dairy Industry Development Institute
EMPEA	Ethiopian Meat Producers and Exporters Association
ERCA	Ethiopian Revenue and Customs Authority
ETB	Ethiopian Birr
FAO	Food and Agriculture Organization of the United Nations
FMD	Foot and Mouth Disease
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
KG	Kilo Gram
KSA	Kingdom of Saudi Arabia
MENA	Middle East and North Africa
MT	Metric Ton
NBE	National Bank of Ethiopia
RBV	Resource Based View
SNNP	Southern Nations, Nationalities, and Peoples' Region of Ethiopia
UAE	United Arab Emirates
USAID	United States Agency for International Development
USD	United States Dollar

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Abstract

The objective of the study is to assess meat export performance in Ethiopia; challenges and opportunities. To conduct the research the researcher used primary and secondary data. Descriptive research design with mixed approach employed in this study. Respondents who are working in the export abattoirs as manager in different departments and experts in production and export departments were selected purposefully considered their knowledge of the study and the most relevant information they had. Data was collected from 106 of above selected respondents. ECC export data was used to analyze meat export performance in Ethiopia over ten years from 2014 to 2023. It was found that meat export performance during the period was declined from 9,426 MT in 2023 from 16,485 MT in 2014 with a 3% average decline per year. In value terms 847,716 USD million generated during the period with export averaged 84 USD million. An all-time reached high of 98,456 USD million in 2017 and a low record of 63,401 USD million in 2023. In terms of export market destination, United Arab Emirates (56%), Kingdom of Saudi Arabia (34%), the remaining 10 percent of meat exported to Qatar, Hong Kong, Vietnam and other countries. To identify the main factors affect meat export abattoirs performance, Kendall's Coefficient of Concordance (W) was used to measure differences in the ranking of variables and the degree of concordance among the respondents. Accordingly Limited compliance to international standards and market requirement, Lack of capacity for cattle slaughtering facilities, Managers' attitude and global knowledge of international market, Constraint in getting qualified and trained workforce was identified as major four internal factors that affect meat export abattoirs performance in Ethiopia with mean rank of 5.68, 4.43, 4.21 and 4.18 respectively. The top four external factors identified were Presence of illegal cross border trade of live animals, Non-market oriented livestock production system, Access to limited international markets, Act of intermediary and involvement in live animal marketing with high mean rank of 8.28, 8.17, 7.99, and 7.12. Kendall's (W) test strength to judge external factors influence export abattoirs performance in Ethiopia was found strong (0.479), $w > 0$ with a significance level of 0.000. The major challenges identified were high purchase price of live animals in the domestic market, Shortage of slaughter animals' supply, Huge exchange rate difference, Seasonality and low quality animals supply with mean rank of 8.85, 8.58, 8.44 and 7.54 respectively. The major opportunities identified were Proximity to Middle Eastern countries, Ethiopian meat is derived from only grass feed livestock (no artificial hormones added), Growth in demand for meat products in the world with mean rank of 6.20, 5.75, and 5.66 respectively. It is required Government to force the proclamation that prohibits for illegal live animal trade/ smuggling at the border area so as to insure commercially viable supply of meat animals for export abattoirs. In addition production and market development required to improve export abattoirs competitiveness in the international market.

Key words: Export performance, Challenges, Opportunities

Chapter One

Introduction

1.1 Background of the study

Livestock is important sub-sector of agriculture that plays an essential role in the lives of farmers in developing countries like Ethiopia. This sector is not only ensures food security, but also increasing per capita income of small and subsistence level of farmers and also it has contribution to GDP of the country (Randhawa et al., 2018).

The livestock sector in Ethiopia plays an important position in contributing considerable portion of the Country's economy in providing export commodities like meat, meat by-products, hides, skins, and to earn foreign exchanges to the country (CSA, 2017). The sector contributes 12 percent of the total agriculture, 33 percent of Gross Domestic Product (GDP) and 65 percent of the population livelihood, and 12 to 15 percent of export earnings (FAO, 2013)

The livestock products export marketing like meat export has potential role in changing the life's of rural and urban population of the country those involved in the production, processing and marketing of those commodities and also has potential for foreign exchange earnings and GDP growth of the country (Mekonnen et al., 2022).

Ethiopia is a home to Africa's largest livestock population estimated to be around 70 million cattle, 42 million sheep, 52 million goats and 8 million camels (CSA, 2020/21). The country has some important opportunities to influence the meat and live animals industry, particularly the export sector (Amha, 2011). The number of meat export abattoirs established in the country has been in the rise. The volume of small ruminant's meat and live animals export is growing in recent years but the increased in export of meat is mainly due to the number of new export abattoirs joining the meat export sector rather than improving productivities of individual abattoirs (Tekeba et al., 2018).

The foreign exchange earnings generated from meat products export are from exports of (chilled and Frozen) goat meat, sheep meat, beef and by products to destination markets of United Arab Emirates (UAE), Kingdom of Saudi Arabia (KSA), Qatar, Oman, Kuwait, Hong Kong, Vietnam, Cambodia and Seychelles. But majority of Ethiopia's meat exports are chilled goat and sheep meat products and those export are limited to United Arab Emirates (UAE) 52 percent and Kingdom of Saudi Arabia (KSA) 41 percent and the remaining 7 percent of meat was exported to Hong Kong, Vietnam, Qatar, Oman and other countries (USAID and AGP, 2021).

As per Terefe 2008, Ethiopia's global export market share for meat is quite small that recall efforts on productivity improvement and market access findings. Even if having with large potential in livestock resources, the meat export sub sector contribution to the national economy is much below the potential (Mekonnen et al., 2022). With the huge livestock wealth inventory, the country supposed to have adequate source of livestock supply for the meat production and export sector in general and for export abattoirs in particular. In different researches, it has been stated that (Hailemariam and Dawit2008; Gezahegn and Mekonnen, 2022, Jemal, 2019), the Ethiopian meat export sector facing with various challenges that became hindrance to its export operation.

The Ethiopian live animal and meat export marketing system is operating in an environment characterized by several constraints that needs the attention and action of the government and other non-governmental development organizations (Zekariaset al., 2017). Therefore, this research is about to assess meat export performance in Ethiopia and to find out its challenges and opportunities that may provide insights to improve performance of the sector.

1.2 Statement of the problem

The largest livestock population of the country became an attractive opportunity that attracts investors to invest huge amount of money in meat export sector. An increase meat demand in the world meat market creates opportunity for Ethiopia to export its meat and meat products to different destinations mainly middle east countries. To fulfill the demand, the number of export abattoirs engaged in production and exports of meat have got increased(Gezahagn, 2019).

The export abattoirs engaged in production and exports of meat have a combined production capacity of around 200,000 ton of goat meat, sheep meat, and beef production per year (EMPEA, 2021). However, the existed meat processing facilities are operated under their full capacity. This is mainly due to lack of suitable quality and quantity of live animals and high price of live animals in the domestic market despite Ethiopia has the largest livestock population in Africa (USAID and AGP, 2021).

Meat production offers the opportunity to serve the domestic market and the rest of value chain (Reddy and Kanna, 2015). However, export abattoirs compete for getting supply of live animal mainly goat, sheep, and cattle with demand for domestic consumption and formal & informal live animal exports (Asfaw and Mohammad, 2007). The country's 80 percent to 90 percent of live animal export performed informally to Djibouti, Somalia, Kenya and Sudan (ERCA, 2017). This affects the revenue supposed to be earned from the sector which has been very low. Shortage of commercially fit and dependable supply of slaughter animals in terms volume and quality then become critical challenges for meat export markets of the Country. A review on meat and live animals price brief 01 conducted by AGP and USAID in 2021 show that the export market price of meat from Ethiopia is significantly high that makes the country uncompetitive in the export markets. The number of live animals required for high quality meat production be reduced, price of live animal in domestic market raised which is faraway go above international market prices, existence of unpredictable supply of inputs, and limitations in accessing huge export markets are amongst from the bottlenecks export abettors facing with. The informal livestock trade is very critical problem in creating supply shortage as well as quality animals reduction that results the export abattoirs to operate under-utilized capacity (Alemayehu, 2011)

Such underutilized capacity operation limits the ability of the export abattoirs not to respond for the demand and not to exploit new opportunities. It has also a strategic disadvantage that creates opportunities for competitors to capture the market and can weaken sustainability of the meat export business of the country. The share of meat and other slaughter by-products exported from the overall export commodities is very less. It's current share in the global export market for meat is quite small (Jamal, 2019).

Livestock and meat products are among the fastest growing components of the global agriculture and food industry and one of a few agricultural commodities in Ethiopia from which the country could earn foreign exchange, can expanding its output, can create significant number of employment for citizens , technology transfer and introduction of new products. With the huge livestock recourse and comparative advantage of proximity to the major country's meat export destinations, the meat export sector is in criticalchallengesthat threaten its operation. It couldn't gain the benefits from the vast resources and the opportunities it has.

As per the study conducted by Ameha 2011, Ethiopia has important opportunities influencing the meat and live animals industry particularly the export sector. Meat export firms established in the country are increased in number as well as in capacity (Tekeba et al., 2018). However the contribution of the meat export sector to national economy is much below the potentials given the country has very high potential of livestock resources.Different reports show that;(EMPEA, 2021;Wondemu and Getachew,2020; Gezahagn, 2019, and Tekeba et al., 2018); Ethiopia's meat export performance is below its capacity and market share in the international market is very low. Based on these above, it is important to look at export performance of the Ethiopian meat sector over a period of time to figure out its performance, find out the factors behind and understand the export trends to looks like.

ERCA on its report of 2017 reported that large numbers of the country's ruminants have been traditionally smuggled to neighboring countries. Illegal sale of livestock is practice with the neighboring countries of Somalia, Kenya,Sudan and Djibouti. The study conducted by USAID and AGP 2021, concluded that the meat and livestock sectors are in steady decline due to shortage of live animal supply, illegal trade, and lack of implementation of the live animal marketing proclamation. The potential to increase meat and meat products exports from Ethiopia is constrained by several of challenges. The meat export market is highly depends to KSA and UAE market. The Middle East countries are Ethiopia's traditional destinations for meat and livestock exports (Aklilu, 2008).To move the meat and meat products export market in a better position, it is important to understand theproblemsand opportunities in the sector. In order to overcome the challenges in the meat export sector and exploit the opportunities, it is required to findout and address the major challenges and opportunities in itspurposefully as per their weight

of hindering and the most favorable for export opportunities that can maximize benefits from the sector.

The meat export market in Ethiopia is operating under several constraints that need attention and necessary action by the government and other stakeholders. Even though high livestock population of the country, the export abattoirs are mainly facing with shortage of supply and low quality of animals, and high price of meat animals in the domestic market . The problem could be combination of different factors. Thus, it is important to identify major factors contributing for the problems that hindered smooth operation of the meat export market.

Previous available studies (Tadese, 2015; Nuredin 2020) have mostly focused on assessment of challenges and opportunities in live animal and meat export of the country in qualitative research approach. Those studies didn't address factors under the challenges of the meat export sector and didn't consider meat export performance over a period of time to understand position of the meat export sector. Therefore, this research conducted to evaluate the meat export performance over the last ten years to how looks like and to find out the major challenging factors that affect the meat export performance of the country as per their weight and prioritization under internal and external factors, also to find out the most favorable opportunities that can provide insights for improving the performance of the meat export sector. Accordingly, attempts done to answer the following basic research questions.

1.3 Research questions

- 1) What is the level of meat export performance during 2014 to 2023?
- 2) What are the factors that affect meat export abattoirs performance in Ethiopia?
- 3) What are the challenges of the meat export industry that became hindrance to capitalize its potential resource?
- 4) What are the opportunities of Ethiopian meat export industry?

1.4 Objective of the Study

1.4.1 General Objective

The general objective of the study is to assess meat export performance in Ethiopia, identify challenges and opportunities and come up with possible interventions that can bring benefit for sector.

1.4.2 Specific Objectives

The following are the specific objective of the study

- 1) To assess level of meat export performance during 2014 to 2023.
- 2) To identify factors that affect meat export abattoirs performance in Ethiopia.
- 3) To find out challenges of the meat export industry that became hindrance not to capitalize its potential resource.
- 4) To find out opportunities of the meat export industry.

1.5 Significant of the study

The research offer valuable insights in understanding performance of the meat export industry as a whole, factors associated with the problems that affects the performance, also offers insights of major challenges and opportunities in the meat export industry to all actors involved in the meat export sector that are government, export abattoirs, none government organizations and others. The result helps meat producer and exporters to left suggestions to improve the benefits supposed to be earned form the sector also point out status of the meat export sector for those intended to investment in the sector. In addition, it will be used as reference for other related studies to be conducted by students and also helps the researcher to develop research skill for undertaking researches in the future.

1.6 Scope of the Study

The study concerned to assess meat export performance in Ethiopia, challenges and opportunities. The research studied on meat and meat products of goat meat, sheep meat, beef and camel meat and edible offal only. Other meat product types not considered in this study.

Performance of the meat export assessed for the last ten years that is from 2014 to 2023 in terms of sales volume, foreign exchange earnings in USD and number of export market destinations. Methodologically, managers who are working in Operation, Marketing & business development, Production, Export, Finance & accounting, human resource & administration and experts in production and export operations are considered as population of the study assumed to have the required knowledge and relevant information about the study. Meat exporters who have their own meat processing and export abattoirs are considered as unit of reference. However, meat exporters who do not have their own meat processing facilities but involved in meat export under service rent from the former group were excluded in this study. Geographically targeted abattoirs were situated in (Modjo, Bishoftu, Ziway and Metehara).

1.7 Key terms

Export performance: The success or failure of the efforts of a nation to sell domestically produced goods and services in other nations markets (Zou and Stan, 1998). Export performance includes export sales which represents the foreign exchange value earnings of a country; export volume which is the proportion of export sales to overall sales, it is also considered in analyzing export performance (Katsikeas, Samiee, & Theodosiou, 2000).

Challenges: Difficulties that became hindrance for export abattoirs not to operate their operation smoothly and became bottleneck not go ahead (Getnet, 2017). The challenges are hindrances that are directly related to the export operation of the abattoirs.

Opportunities: Major favorable situation that the meat export sector can influence to expand for meat export to move for better position (Ameha, 2011)

1.8 Organization of the study

The study organized in five chapters. In the first chapter, the introduction part includes; background of the study that comprise statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, definition of terms, limitation of the study and organization of the study. In Chapter Two- Literature Review; in theoretical and empirical forms relevant to the research question reviewed. Chapter Three; research methodologies

that incorporate research approach, research design, Data source and types of data, Sampling technique and Sample size, method of data analysis and interpretation and ethical consideration of the study. In Chapter Four; results of the study, presents the survey result /findings of the study, interprets and discuss the findings in relation with literature review. Chapter Five; summarizes the study's key findings and provide conclusion and recommendations for further research or practical application.

1.9 Limitations of the study

The researcher perceived limitation in the number of respondents. The respondents of this research were selected from export abattoirs only. But if other stakeholders including animal traders and concerned government institutions would be included, more information would be gathered regarding current and critical challenges of the sector. To accomplish this, researcher got limitation on time and budget.

Chapter Two

Review of Theoretical Literature

2.1 Importance of Meat Export

Meat and other slaughter by- products being exportable food items have been contributing to the foreign export earnings and GDP growth of Ethiopia since the beginning of meat processing (Tekeba et al., 2018). The meat export industry has the opportunity to expanding its output, employment creation, technology transfer and introduction of new products. Meat export adds value by increasing the volume of total meat sales that allows exporter to sell more meat to more market destinations.

Higher meat export demand generates more GDP and household income than live animal export. Unlike export of live animals, meat and meat by products export showed an increasing trend even though its performance is less than expected from the country's potential resource (Gebregziabher and Sileshi, 2019).

According to EMDIDI 2018/19 annual report, pricing system is one of the problem of live animal export in Ethiopia. Most of live animal marketing from producer to end market was credit based, and caused for conflict between exporters and buyers. While, live animals supplied for export abattoir were purchased based on carcass based (after slaughtering), the price was mainly common at all export abattoirs, which will be changed by decision of both live animal traders and export abattoirs associations. So the pricing system of meat exporters and live animal traders is more transparent than purchase of animals for live animal export (Jemal, 2019).

Meat export is valuable industry in different criteria like, getting additional more foreign currency from the slaughter by products and leather export (Gezahagn, 2019). It contributes as input for the leather industries. From the number of live animal export, cattle accounted for 46 percent of the live animal export which contributed 67 percent to the revenue generated (ERCA, 2019). However, if the animals were slaughtered, the raw skin would be used as input for the

leather industry and generated more revenues from the sector. There is a large potential to expand Ethiopian meat exports to the Middle East if the value chain actors in Ethiopia meet export market standards (Ameha, 2011).

2.1.1 Overview on world meat production and export performance

The world meat industry is highly competitive and dominated by different countries in the export market. The country's success are mainly determined by factors such as production capacity, product quality, trade policy and access to international market contributed significant role in determining country's success. In 2022, Brazil is the largest meat export globally followed by Australia and Argentina. Beef was the higher production produced followed by poultry and pork. China and the United States of America were key export market destinations for those meat producer countries above in 2022 (FAO, 2023).

2.1.1.1 World meat production

World meat production reached 362.4 million tones (in carcass weight equivalent) in 2022. An increase of 1.6 percent registered from 2021 (FAO, 2023). As per the report all meat categories increase. Much of the expansion achieved from poultry meat output, followed by pig meat, bovine and ovine meats.

Bovine meat expanded in Asia and South America with production increased to 75.8 million of tons with 1.7 percent increased from previous year of 2021. While Ovine meat output registered as 16.7 million of tons with 1.9 percent increase that was originated from Asia and Oceania. In Brazil higher bovine production registered by a 6.22 percent increased. This is achieved due to higher supply of cattle along with high import demand. In China 3 percent production increased due to abundant supply of cattle and calves and higher carcass weight. In the United States 1.2 percent increase due to genetic and fattening efficiency and an increased domestic consumption. In European Union, a 2.3 percent bovine meat decline registered in 2022.

Ovine meat growth registered in Turkiye, China, Australia and the United Kingdom. Declined registered in Ethiopia and New Zealand. China is the largest ovine meat producer in the world for one third of the global production. Registered a 2 percent increase in 2022. Turkiye ovine

meat production increased by 26 percent reached to 605,000 tons in the same years. Reflects high domestic demand. Increased production registered in Australia as well by 7.6 percent due to high carcass weight on pasture condition. However, reductions in the herd size in Ethiopia due to poor pasture condition and water shortage led to ovine production decline (FOA, 2023)

2.1.1.2 World meat trade

Global meat trade reached 41.8 million tons in 2022, decreased by 0.6 percent from 2021, reflecting a 22 percent drop in meat imports by China. This is due to challenges of global meat production and trading environment. Apart from the challenges, exports increased from several countries in 2022, especially in Brazil, China, Thailand, the Russian Federation, Turkiye, Argentina and India. The increase is due to availabilities and competitive export prices. Among the main meat types, in 2022 bovine meat exports expanded the most, followed by poultry and ovine meats, while those of pig meat contracted.

As per FAO 2023 report, the world bovine meat trade in 2022 increased by 4.8 percent to 12.7 million tons. Ovine meat increased by 2 percent to 1.1 million tons. As per the report, higher bovine meat export shipments originated from South America. At country level, Brazil, Argentina, India, Mexico, United States registered most significant export expansion. But contractions in European Union and Australia.

In Brazil, bovine meat exports increasing by nearly 25 percent, with a 48 percent increase in shipments to China. As per the report, the depreciation of the Brazilian real against the United States dollar favored exports to other destinations, with larger volume to Egypt, the Philippines, the United Arab Emirates and Venezuela (Bolivarian Republic of), while exports to the United States and Chile declined. India export rise by around 3 percent. Malaysia registered as the second largest export destination in 2022. High international bovine meat prices led producers in Mexico to increase carcass weights and export more bovine meat, rather than exporting live animals, registering 11.2 percent increase in deliveries with the United States market absorbing 80 percent of total exports. China, the European Union and Malaysia imported more bovine meat in 2022 due to difficulties in increasing national output to meet domestic demand. By contrast,

Chile, Egypt, Japan and the Russian Federation imported less bovine meat due to lower domestic demand or increased national production.

Ovine meat export growth in 2022 registered in Australia, Kazakhstan, the United Kingdom and Turkiye due to an increase supplies have driven Australian exports to expand by 5 percent to all secondary destinations, namely Malaysia, the Republic of Korea, the United Arab Emirates, Japan and Canada. By contrast, ovine meat exports of New Zealand fell due to limited import demand from its top destinations, especially China, the United Kingdom and the United States.

2.1.1.3 Governments Policy developments of countries in the meat sector - 2022

Several governments implemented policy measures in supporting farmers and processors to cope with droughts, animal diseases, rising input costs or market disruptions. In Brazil, interest payment subsidy worth usd 241 million for support for farmers affected by drought. Indian government did for animal health and diseases control program across the country to reduce risks associated with animal health. European Union, provide aid amounts usd 551 million to assist farmers affected by market disruption, input cost and trade restrictions. Dominica republic allocate usd 12.6 million to increase livestock productivity in improving pasture quality and to advance livestock genetics.

2.1.2 Overview of Ethiopia meat production

Ethiopia has the capacity of 1,339,440 ton meat from Camel, Beef, Goat, and Sheep (FAO, 2020). However Ethiopia has been classified as one of the lowest cloed dressed weights with carcass weight average of 110 kg/head for cattle, 10kg/head for sheep, and 8kg/head for goat (Gezahegn and Mekonen, 2022). This is below the average productivity of all list developed countries (MoA, 2012; MoST, 2016).

The meat production trends rising moderately with some fluctuation. Even though the country had huge number of livestock population, the production of meat still low and contributed little to world total meat production. This was due to low off-take rates, inability to fulfill international standard, legal and illegal live animal export. Ethiopia per capita of meat consumption is 8 kg,

which is the lowest as compared to developing countries (77 kg) and developed (25 kg) (Addis, 2019)

As per CSA 2020/2021 report, the majority of meat produced in Ethiopia is Beef which was 28.9 percent followed by sheep meat of 24.3 percent, goat meat produced 15.9 percent and camel meat production was about 9.2 percent. Even though, Ethiopia is the tenth largest livestock population in the world, the production of beef, goat, and sheep meat is low and contributed only 1.7 percent of the world total meat production (CSA, 2020/2021). Meat production offers the opportunity to serve Ethiopian's domestic market and drives much of the rest of the livestock value chain (Reddy and Kanna, 2015). But livestock production system in Ethiopia is generally subsistent oriented and productivity is very low. Low productivity of the animals and absence of market oriented production systems are described as the main constraints of livestock production in the country (Eshetu and Zewdu, 2016).

Lowland and highland livestock systems have low reproductive performance and off-take, due to input constraints of feed and water to pastoral herd size and reproduction; reluctance of pastoralists to commercialize livestock because of social importance and lack of alternative assets, limited and periodic access to appropriate animal health services and competition of draught power with meat for young males lead to aged and low-quality off-take in highlands (Eyob, 2016). According to Belete2009, diseases and parasites hamper small ruminant production by causing high mortalities especially among suckling animals. Diseases and parasites cause reduction of productive and reproductive performance of small ruminant production. On the other hand, water shortage and drought occurs due to relatively smaller rainfall and shorter rainy seasons in most of goat producing areas of the country. As per Gezahegn and Mekonen, 2022, the majority of meat is produced by smallholder farmers and the pastoralists in the country. The meat produced per animal is very low as compared to the African peers due to the poor genetic background of the animals, under developed management system including feed supply, and health service.

2.1.3 Overview of Ethiopian meat export trends

There were only four export abattoirs in the year 2008/9 with annual production capacity of 30,380 ton in which 23,180 ton sheep & Goats meat, and 7,200 ton of beef meat that could generate 15.43 million USD (Gezahegn and Mekonen, 2022). In the year 2018/19 E.C., the number of export abattoirs became 11 with increased production capacity of 56,556 ton sheep & Goats, and 40,411 ton of beef meat that generate foreign currency earnings of 92.65 million USD . During 2014 to 2018, Ethiopian meat export was increased by an average of 5 percent per year(Mamo, 2019).

Meat and meat products export accounts 4 percent from the whole country's export. Live animal export took 2 percent share (ERCA, 2019). In the same year from the whole exports of livestock products 47.5 percent share is contributed from exports of meat and meat by products in which 86.7 percent gained from goat and sheep meat, 6.73 percent from beef and 6.55 percent was from slaughter by products. This shows most of the meat exports from Ethiopia is goat and sheep meat.

The export volume to Middle East countries compared to other competitors is very low (USAID 2015). The volume of small ruminants' meat and live animals export is growing in recent years but the increased in export of meat is mainly due to the number of new export abattoirs joining the meat export sector rather than improving productivities of individual abattoirs (Tekeba et al., 2018).The export abattoirs in Ethiopia have a potential of 200,000 ton of meat processing peryear are generally operating less than 10 percent of its capacity. The key issue is lack of suitable quality and quantity of live animal; despite Ethiopia have the largest livestock population. Sourcing animals from lowland pastoralist area is not working smoothly. Lack of live animal supply, illegal cross border trade, feed price inflation and drought are the main factors (USAID and AGP, 2021)

Meat and live animal export markets reflect the very challenging conditions affecting the industry as a whole. Meat export volume for beef, mutton, and goats declined from 17,447 MT in

2019 to 12,796 MT in 2020. In 2021, export recovered to 15,800 MT but it was still below the 2019 level (EMPEA, 2022)

2.1.4 Challenges in Meat export of Ethiopia

Although Ethiopia has ample potential to export its meat products to the Middle East and make further improvement to enter other markets, there are challenges that should be dealt within order to realize these benefits (Eyob, 2016). These challenges can be listed as under as per the reviewed literatures:

Lack of end market destinations:-Ethiopia is exporting meat and meat products mainly to Middle East countries that UAE is the largest importer of buying about 58 percent of the total meat exported, followed by KSA with 30 percent and Bahrain imports 4 percent ERCA 2018/19.

Shortage of slaughter animal's supply:-The export abattoirs are competing for live animals with domestic consumption and the legal and illegal (cross –border) trade (Asfaw and Mohammad, 2007). It has been observed that the live animal throughput is inadequate. Due to this reason the export abattoirs operating under their capacity (EMDIDI, 2018/19). This is apparently the result of inadequate supply of the required quality of the animals for meat processing for export market (Kefyalew, 2011). The supply problem is outlined further that the livestock number, annual off take rate and consumption level and productivity are not known sufficiently. This could be a problem in planning and designing of policies to enhance the sector's development (Nell, 2006) as cited by Wondemu and Getachew, 2020.

Technology: - Lack of capacity for cattle slaughtering facilities, cold chain facilities, processing and packaging facilities, inadequate well skilled manpower in meat technology, poor product development and diversification (Gezahegn and Mekonnene 2022)

Illegal cross border trades:-The informal live animal trade from eastern Ethiopia (Somali Region) to Somaliland represents the largest share of cross-border trade in terms of volume and value (Kefyalew, 2011). The majority of animals exported through this channel are Somali Blackhead

or fat-tailed sheep, followed by goats, cattle and young camels (ERCA, 2017/18 E.C). Sheep and goats account for the vast majority of exports to Somaliland. Some livestock is also exported informally. Annual outflow of livestock through borders (illegally) are 325,800 cattle, 1.15 million shoats and 16,000 camels (Eyob, 2016). About 20 percent of live animals are exported through official channels, and the remaining 80% are traded informally (FAO, 2019). The sources of this illegal export are Afar and Somali Regions, Borena and East Hararghe Zones in Oromia and South Omo, SNNP. About 20% of live animals are exported through official channels, and the remaining 80% are traded informally (FAO, 2019).

The immediate destinations for such exports are Djibouti, Somalia and Kenya. The livestock are mostly for re-export to the Middle East Countries from Somalia. The Djibouti's and Kenyans` re-export after meeting their domestic consumption. This loss of exportable surplus has affected the country through loss of foreign exchange, income taxes and its impact on legal livestock trade (Eyob, 2016)

Factors contributing for the increased illegal livestock trade and export are more reliable market across at the border and better price, poor market linkage, financial and non-financial advantages that includes informality, taxation, black market foreign exchange rate, lack of bureaucratic delay and clan and linguistic ties contributed large (Amha 2011). According to Sintayehu et al. 2010, factors contributing to large volumes of informal livestock trade and exports are long procedures required to export formally including export licenses, quarantine, banking clearance for remitting foreign exchange, minimum weight restrictions, and minimum price requirements.

High demand of meat in local market:-Recent years, the demand of meat in Ethiopia has become increasing (ERCA, 2018/19). When compared to export market price for goat and sheep meat was between \$5,450 and \$5.600 per ton. This is equal to 5.50 per kg (ETB 230/kg) in Addis Ababa, compared to the range of \$5-10 per kg on local markets (ETB 230-410/kg), which was significantly higher (USAID and AGP, 2021). In general, the major challenge of meat export in Ethiopia today is incompatibility of local market price which makes production cost of meat high. Government has to work on the whole policy directions to reverse (Gezahegn 2019).

Non-market oriented livestock production system;-Pastoralists consider their livestock as means of saving or capital accumulation. Livestock are sold when need arises for cash income or when shortage of feed and water occurs. There is no effort to strategically produce for the market by adjusting and planning production to market needs.Production planning in terms of time, type and quality of supply to maximize income is nonexistent due to lack of entrepreneurial awareness (traditional handling system). Further, the private sector has not yet proved its adequacy in promoting production through additional investment and creation of marketable surplus (Eyob 2016).

Limitation on maintain quality standards:-Visible limitation observed in meat processing quality to take care of competitiveness within the international market and also substitute import. Especially fulfilling SPS requirements are stifling the export of beef (Wondemu and Getachew 2020).

Policy related problems: - Limited coverage of research and development interventions on the sector, weak implementation of existing policies (USAID and AGP,2021), problem of livestock investment policies and lease proclamation, implementation of live animal trade proclamation (Gezahegn and Mekonnene 2022)

Inadequacy of infrastructure:-The sources of livestock for export are pastoral areas that are far from the center. The Afar and Somali Regions, parts of Borena in Oromiya are lowland areas forming internal boundary to neighboring countries. Further, the pastoral livestock producers are scattered through large expanse of lowland and semi-arid areas. For efficient marketing, adequate livestock markets, stock routes, resting places, quarantine stations need to be developed to allow easy access to traders for assembling and transporting livestock. However, these infrastructures are poorly developed in the pastoral areas. Further, export standard slaughterhouses are located in central areas far from surplus producing areas. In addition, transport facilities that allow adequate flow of livestock and meat are not adequately employed (Eyob, 2016).

Disease Outbreak: - The presence of livestock diseases (FMD) and lack of veterinary services aside from affecting the efficiency of production hampers export market development as a result of frequent bans by importing countries. There are livestock diseases that cause several livestock mortalities that affect production efficiency, hamper the sector export development by causing frequent bans by importing countries (Wondemu and Getachew 2020). Ethiopia has lost substantial market share and foreign exchange earnings due to bans by Middle Eastern countries due to the rift valley and FMD outbreaks (Saperstein and Farmer, 2006).

The major challenges the livestock sector faces with animal disease such as foot and mouth diseases (FMD) that is highly contagious disease that affects livestock in the country. The diseases highly affect all cattle age and breeds and small ruminants. The diseases cause severe economic losses due to reduction in animal productivity, trade restriction and disease control costs. Occurrence and outbreaks of FMD in Ethiopia influenced by different factors such as production system, geographic location, species, age of animals and season of the year. It is required to design effective control and preventive measures such as vaccination, rapid diagnostic test early warning system. It has significant impact on livestock production and trade due to reduced animal production, market access barrier, consumer confidence and high vaccination cost (Girma et al. (2023)). In Ethiopia there is no disease-free zone. Cattle illness, infection, and diseases are critical causes of stress among the standard factory of farming conditions. The government should try to create a disease-free zone and build adequate local agro vets' sales network to improve access to animal health inputs and services (Birmaduma et al. 2022).

Considering the resource the country has comparative advantage, export volume to the middle east countries is low compared to other competitors (Eshete, et al., 2018). Weak policy and weak implementation of existing policy (Reedy and Kanna, 2015). Limited business skill, weak integration, inadequate input supply (OKM international consulting, 2015). Limited financial capacity of the animal collectors and poor infrastructure escalate the price of animals and further affect the price competitiveness of meat processors. As per AACCSA 2015, limitation in meat processing quality and maintaining competitiveness in the international market and substitute imports are serious challenges in the meat value chain. The key factor constraining Ethiopia's meat

end market competitiveness in the Middle East markets are unreliability of supply and low quality of meat (USAID, 2010). Infrastructure, inaccurate market information, poor linkage between export abattoirs are among the challenges faced by cattle feed system (Shapiro et al., 2015; Jemal 2019). Absence of cost effective marketing channel, lack of coordinated supply chain are critical challenges (Hailemariam et al., 2019).

As per the study conducted by Belet et al, 2022, they concluded that Ethiopia has a huge beef cattle population. But quality and quantity of beef is very low. The beef cattle have opportunities of high demand for beef animals in the domestic as well as export markets. In contrast the beef cattle production system, diseases, shortage of feed and water, lack of veterinary services, drought, lack of market access and infrastructure, illegal animals trade, and poor genetic potential of indigenous cattle are among the limiting factors that hamper efficient beef production in the country. In Ethiopia the production and compositional quality of beef are very low compared to other African countries. USAID and AGP, 2021 also concluded that feed situation is precarious and threatening breeders, fatteners, and abattoirs alike unless measures are taken.

2.1.5 Opportunities in Meat exports of Ethiopia

Ethiopia has some of the important opportunities influencing the meat and live animals industry, particularly the export sector (Ameha, 2011). The country has large livestock population with diverse and adaptable genotypes; diverse agro-ecologies for production of different types of livestock; government interest and support to the livestock industry, increasing number of export abattoirs like (Frigorifico Boran Foods PLC/ Allana) which have the capacity of slaughtering 6,000 head of Sheep and goat, and 3,000 heads cattle per a day (Getnet 2017, Gezahagn, 2019).

Ethiopia has comparative marketing advantage, vast resource and proximity location to Middle East and GCC countries which have potential demand for meat (Getnet, 2017). There is an opportunity of a rapid growth in demand for meat products in the world (FAO, 2021). For Ethiopia meat export to Middle Eastern countries and other African destinations have been growing. It is obvious that Ethiopia has comparative advantage in terms of geographic proximity

to the Middle Eastern markets with potential for the quickest delivery time of fresh/chilled meat (Gidey, 2021). Ethiopia's lowland cattle, sheep, goat and camel breeds are highly demanded in the Middle East due to their better test and organic nature of their production. Besides the growing opportunity of meat export, there will be domestic demand due to urbanization and economic growth. Therefore, in order to exploit emerging market opportunity there is a need to improve both the quality and quantity of livestock and its product under different production system (HurissaandEshetu 2003; Asfaw et al., 2016,).

The reliable and adequate supply of quality live animals and meat has been one of the major challenges facing the meat export sector in Ethiopia. There is a need to adapt production and marketing methods to export market requirements.

2.1.6 Livestock Production and Marketing System in Ethiopia

2.1.6.1 Livestock Production System

Livestock and livestock products are the second major foreign exchange source, accounts for 12 percent to 17 percent of total foreign exchange earning of Ethiopia. The country's comparative advantage in export of meat lies in the large livestock population and geographical location in order to meet the demands of the very large animal product importers in the Middle East and North Africa (MENA) region (Jemal, 2019).

In Ethiopia, livestock production follows two major systems: the mixed crop livestock production system and the nomadic pastoral or agro-pastoral production system. The other less important, but growing, livestock production systems are small-scale per urban and urban production systems and the medium to large scale commercial livestock production systems (Shahidu et al., 2011)

The agro-pastoral system in the lowland is categorized as -pastoral production system and in highlands of the country the production system is mixed crop-livestock. Fattening system in both the systems are focus on male animal and female either infertile or have finished their reproductive cycle this shows the system is in traditional production system. In the lowland agro-pastoral system, grazing is the most common source of feed, with limited use of crop residue,

whereas in the highland system, crop residues are the most important source of animal feed (Asfaw et al., 2011)

The total number of livestock in Ethiopia is the largest in Africa. However, the number of livestock at the level of the individual smallholder farmers and pastoralists remains low. Besides the small herd size, the livestock sub-sector is characterized by multiple species and multipurpose activities, one of the lowest levels of productivity in the world, less commercially oriented production systems, low commercial market off-takes, inadequate production, marketing infrastructure, inadequate services, institutions, and support systems (Addis, 2019).

In Ethiopian, the majority of meat is produced by smallholder farmers and the pastoralists in the country. The meat produced per animal is very low as compared to the African peers due to the poor genetic background of the animals, under developed management system including feed supply, health service and likes (Gezahegn and Mekonen, 2022).

2.1.6.2 Livestock and Meat Marketing System and the main Actors

Livestock marketing operations are small scale and producers supply to the market is not based on market demand. Buyer chooses from whatever is available in the market. The live animals are transported in trucks over long distance to feedlot operators, export abattoirs or major markets. Since the supply source is far away from market destination, transportation costs associated with getting live animals to market result significant weight lose and even death; stock routes are characterized by lack of adequate feed, water and resting places. The long supply channel leads to high costs and reduce the competitiveness of the meat export (Eyob and Zewudu 2016).

The livestock from the major producing areas reaches to the final consumer or end user passing through complex channels along the supply chains (Ayele, 2004). The entire supply chain in Ethiopia is further characterized by numerous intermediaries or actors namely: brokers, collectors, agents, animal trekkers, traders, and abattoirs. This makes the supply chain unnecessarily long with increased transaction costs without significant value addition. Then the number of intermediaries handling animals determines the profit margins at every stage along the value chain. Traders buy animals based on visual assessment while meat is sold on carcass weight

basis. Transaction costs and risk associated with meat animals/meat trade are factored in the live animal price margin at all stages in the supply chain in order to minimize losses. The risks include weight loss during transit/trekking, the death of animals before slaughter and condemnation at inspection by veterinarians (Jemal, 2019).

Price of livestock is determined through bargaining at the market. Livestock producers are usually less informed about price, supply and demand situation. Suppliers (producers) are highly fragmented, while there is a concentration of major livestock buyers. This leads to noncompetitive pricing and marketing behavior (CSA, 2005)

There are several market channels through which cattle, sheep and goat, flow to final consumer in the domestic and export market. The cattle, sheep, goat marketing are very lengthy without significant value-added activities. The mixed crop livestock farming system supply to the domestic market. Whereas the marketing channel from pastoralists is supply for both domestic and export markets. The market actors may be involved in cattle only, sheep only and goat only or for all transactions (Fekadu, 2006).

In Ethiopia the legal and illegal livestock marketing systems are operating at different magnitudes. Small farmer exporters and traders are the major actors in the illegal livestock marketing system. Medium to large scale licensed exporters are dominantly operating in the system (Eyob and Zewudu 2016).

2.1.7 Government support in the industry

On August 11, 2023, the National Bank of Ethiopia (NBE) announced an amendment to Directive No. FXD/79/2022 governing the Retention and Utilization of Export Earnings and Inward Remittances (the “Amended Directive”).

This amendment was effected through the new directive for Amendment of the Retention and Utilization of Export Earning and Inward Remittance Directive No. FXD/84/2023 (the “New Directive”). The New Directive doubles the percentage of foreign currency that exporters are permitted to retain from their foreign earnings. The NBE permits exporters to retain 40% of their

export proceeds in foreign currency, twice the amount allowed under the Amended Directive. However, the retention amount for inward remittances remains unchanged at 20%.

The New Directive changed the allocation to 50% - 40% - 10% (50 percent to NBE, 40 percent to the retention account for the benefit of exporters and 10 percent to commercial banks).

The New Directive could encourage exports by introducing positive incentives.

On January 2023, NBE banned consignment method of payment for meat export and ordered to apply advance method of payment effective of 2023. The change was for eliminating the long time taken to collect FCY and risk of nonpayment from the foreign buyers. The advance payment of method is the most secure payment method for the meat exporters as the importers will pay the full amount before goods are shipped.

On March 2024, Ethiopian Investment board issued directive no. 1001/2024 to regulate foreign investors' participation in restricted import, export, wholesale and retail trade. This sector was reserved for domestic investors in which foreign investors may participate subject to conditions on the directives.

The investment area was amended to open for foreign investors which were previously reserved for domestic investors. It was intended to promote the sectors' gradual opening to willing and capable foreign investors in reducing the price of goods for consumers, and boosting the economy as a nation.

2.1.8 Factors affecting meat export performance in Ethiopia

There are several factors that influence the export performance of a company. According to the industrial organization theory, external factors that cannot be influenced by a company can determine the strategy, performance and export of a firm (Zou and Stan, 1998). These external factors can be grouped as industry characteristics that are number of competitors, predictable changes, and seasonal fluctuation, domestic market characteristics that are State promotion, business environment and foreign market characteristics (Lages, 2000). Among these, Krammer et al. (2018) emphasize that political instability or high corruption has negative impact on the firms' export performance. Regarding foreign market characteristics

administrative burden and regulation on foreign market are most of significant export influencing factors (Andrea and Beata, 2018).

Apart from external factors there are several internal factors that can be changed and improved by the companies themselves and can help them to export and increase their competitiveness (Nam et al., 2018; Ngo et al., 2016). Internal factors are the basis of the so called 'resource-based view' (RBV) of the firm. The resource-based view points out that a company consists of tangible and intangible 'resources' (assets, capabilities, processes, managerial attributes, information, and knowledge) which are used to implement strategies to improve efficiency and effectiveness. This view states that these internal organization resources controlled by the firm are the main determinants of export strategy and performance (Zou and Stan, 1998; Kaleka, 2012). In this theory, the reasons why a firm involved in international business are based on the resources available (Anil et al., 2016).

Internal factors can be grouped according to several aspects. The literature review of Leonidou et al. (2007) refined and merged internal factors into five groups, such as human resources, financial aspects, marketing, production, research and development. The authors conclude that each stimulus may have a different intensity or importance, depending on time, relative and industry contexts.

Crucial internal factors are the product quality, the product development and adjustment, or the reduction in production costs (affecting the product price). The need for innovation is essential to achieve success in export (Oura et al., 2016)

Besides the product characteristics, human resources (managers and employees) also influence the success of export. Managerial behavior can be one of the most important push factors behind export and its effects were already proved in the '80s (see Leonidou et al., 2010). Not only the managerial behavior, but the manager's characteristics have an important role in the export success. These include skills, experiences abroad and at previous firms (Lages, 2000; Mion et al., 2016). The creativity of managers plays a key role in applying best strategy (Zucchella et al., 2016). Regarding the labor force, the more specialized, qualified employees and expertise are employed

in the company, the more positive impact they may have on its export performance, as, for instance, Krammer et al. (2018), Navarro-Garcia et al. (2016) stated in their study. Love et al. (2016) detailed that foreign language skill, international business knowledge and experience, and the commitment of the employees are crucial in achieving success in export activities.

Altogether, export success is a result of the interplay of internal and external factors (Sousa and Bradley, 2008). When these factors appear in a company they contribute to better export performance, but if any or more of these are missing, the firm may fail to export.

It was identified that (Mekonnen et al. 2022) internal factors that determine meat export abattoirs performance in Ethiopia are Constraints in getting qualified and trained labor from domestic, Managers educational readiness, Shortage of working capital, Limited technology transferred from support institution. External factor identified on same study was: Existence of electric power supply interruption, Involvement and act of intermediary live animal marketing, The entrant of new investment in the sector, Presence of illegal cross-border trade of live animal, Lack of meat animal supply resulting from high domestic consumption, Coordination among meat export abattoirs, The existence of a premium price scheme for quality meat animals, The Government strongly works to stop illegal meat animal export. Major factors identified by Silesh 2019 was Lack of meat animal supply resulting from high Domestic consumption, High purchase price of live animals, High purchase price of live animals, Poor animal handling, Existence of middle men in live animal marketing, Presence illegal cross-border trade of live animal, and Seasonality and low supply of quality Animals.

2.1.8.1 Export Performance measurements

As per Katsikeas et al. (2000) and Sousa (2004) as cited by Mafalda et al., 2016, the export performance measures into economic, non-economic and generic measure.

Katsikeas et al. (2000) defined the economic measure of export performance in terms of sales related, profit related and market share related. The sales related measure of performance for the given export is export sales growth, export sales volume. The same was supported by Hussein and Mirjahnard 2011; Haghighi et al (2008), As per study conducted by

Shoham(1994) export performance in the last 5 years also can be measurement of export performance. For the market share measures; export market share and market diversification are considered as measurement of export performance Shahram et al (2013).

Concerning the non-economic measure of export performance, product related measures like new products exported and market related measure of export market penetration.

Generic measures are related with respondent's perception of attainment or failure of a determined objective. As per Katsikeas et, al.(2000) the generic measures are unrefined measures since they do not give the whole picture of the construct's domain.

2.2 Empirical literature review

Eyob and Zewdu, 2016, on their study concluded that, livestock production systems in Ethiopia are generally subsistence oriented and productivity is very low. Low productivity of the animals and the absence of market-oriented production systems are described as the main constraints of livestock production in the country. Consequently the market participation of the producer is limited (MoA and ILI, 2013)

As per the study by Adis, 2019, there is a need to adapt production and marketing methods to export market requirements. The Ethiopian live animal and meat export marketing system is operating in an environment characterized by several constraints. Despite Ethiopia having high livestock population, various internal and external factor are described under the challenge of live animal and meat marketing system in Ethiopia (Eyob and Zewudu, 2016).

As per the report by USAID and AGP 2021, the existed meat processing facilities are operating less than their full capacity due to lack of suitable quality and quantity of live animals for export market and the export abattoirs are competing withinsufficient domestic supply of live cattle, goat and sheep. Getachew et al., 2008 on their study concluded that major meat exporters are complaining of shortage of supply and inferior quality of animals (especially shoats). Adis, 2019

on his study also found that the major challenges the meat export sector in Ethiopia facing are reliable and adequate supply of quality live animals.

Ethiopian meat exporters facing with market related challenges that unable to supply demanded quantity as well as opportunistic selling. This is mainly due to seasonality of supply, lack of market structure, unable to maintain substantial market share in the global market. USAID 2010 also report that Key factors constraining Ethiopia's meat end markets competitiveness in middle eastern market are unreliability of supply and low quality of meat. The order based slaughtering of animals makes the processing plants to operate under their capacity and increasing overhead costs which leads the abattoirs uncompetitive pricewise (AACCSA,2015). Gebregziabher and Silesh, 2019 in their study concluded that live animal export has an impact on performance of the export abattoirs by limiting supply of meat animals. The export abattoirs performance is below their capacity. Getachew, 2008 also conclude that the legal and illegal export of live animals affects the meat export industries by reducing the availability of desired inputs to the industry.

Addis, 2019 on his study of Ethiopian Meat production trends, consumption and meat quality concluded that Ethiopian meat production trends rising moderately with some fluctuation. Even though the country had huge number of livestock population, the production of meat still low and contributed little to the world total meat production. This was due to low off-take rates, inability to fulfill international standard, legal and illegal live animal export. As per FAO, 2020, Ethiopia's position in world meat production of goat, sheep and beef was 1.7 percent share and she was 31th in the world in Meat export with 16,888 tons of meat.

Gezahegn and Mekonnen, on their study of Ethiopia's Global Position in Meat Production and Export in 2022 found that the major market destination for Ethiopian meat is United Arab Emirates which constitutes 55 percent share. The rest share gone to Saudi Arabia (29%), Qatar (3%), Vietnam, and Bahrain, and to Far East country (Hong Kong). Few amount of meat exported to West African countries like Nigeria having 5% share. Majority of meat production in Ethiopia is beef which have 28.9 percent from the total meat production and followed by sheep meat, goat meat and camel meat as 24.3 percent, 21.8 percent and 9.2 percent respectively. Nearly all the

existing abattoirs in Ethiopia have facilities for goats and sheep but facilities for cattle are mostly limited for local consumption and few abattoirs start export of beef recently (EMDIDI, 2021).

The large number of the country's ruminants has been traditionally smuggled to neighboring counties (Terefe, 2008). As per reports from customs authority 2017, illegal sale of livestock practiced with the neighboring county of Somalia, Kenya, Sudan, and Djibouti either for re-export or consumption purpose.

Mesifin and Binyam, 2018 on their study pointed that the Ethiopia export market in general is characterized by many challenges in the internal and external environment of the exporters. The major factors are strong international competition, high transportation costs and ineffective national export promotion programs. Moreover, Mekonen et al. 2022, who did study on determinants of meat export performance in Ethiopia found that presence of illegal cross-border trade of live animals was one of the most important external determinants faced by the export abattoirs that hindered their export performance. Similarly found that constraints in getting qualified and trained labor from domestic and limited technology transferred from support institutions were the major internal factors affects the meat export performance in Ethiopia. However, lack of meat animal supply resulting from high domestic consumption was among the external determinants scored the least importance. As per Tekeba 2018, the major challenges the manufacturing sector in Ethiopia facing with includes unskilled labor forces , limited infrastructure, external pressure from global market, low industrial research and development activities, trade logistics problems and limited promotion made on the resources and other opportunities.

However, Lelisa, 2021 his study on effect of supply determinants on supply performance of slaughter animal for meat export abattoirs in Ethiopia concluded that price of slaughter animal, illegal live animal export and broker involvement affect export abattoirs highly. Sileshy, 2019 on his study found that seasonality and low supply of poor quality animals was ranked the first most constraining factor for meat and meat products export in Ethiopia. In addition, poor animal handling has been identified and ranked the second constrained factor. Gezahegn and Mekonnen on their study concluded that poor market linkage, the failure to comply with the international

standards and market requirements are other bottle necks to the sector. The same is supported by the study of Tekeba et al., (2019).

Kefyalewu 2011 on his study pointed that the exports of meat have significantly increased with fluctuations over the years. The same is supported by Abebe et al., (2016). However, USAID and AGP, 2021 on its study conclude that meat and live animal export sectors are in steady decline due to shortage of animals supply, illegal trade and weak regulatory control. The meat export sector has remained stagnant due to lack of livestock market structure (Gezahagn, 2019).

Ethiopia has one of the largest livestock populations in Africa. But Lelisa, 2021 on his study found that sustainability of slaughter animal supply, traditional livestock production system; transportation facility and quality of slaughter animal have strong effect on supply performance in positive direction respectively. Brokers involvement in supply, price of slaughter animal and illegal live animal export also have strong effect on supply performance in the negative direction.

The meat export sector have opportunities that would the country have been benefited. Presence of large livestock population with diverse and adaptable genotypes, and diverse agro-ecologies for production of different types of livestock; proximity of the Middle East countries, high demand for meat and live animals including the domestic market are some of the opportunities that the sectors have (Ameha, 2011, Gidey, 2021, Jemal, 2019; Eyob and Zewdu 2016). Moreover, Abebe et al., 2016 concluded on their study of livestock and its products' trade in Ethiopia, the country has an advantageous position and possessing of different products and by products due to high and diverse number of livestock as compared to other African countries.

Getachew et al., 2018, on their study concluded that despite the reported high livestock population of the country, the major meat and live animal exporters are complaining of shortage of supply and inferior quality of animals (especially shoats). The problem could be because of the constraints in market information system, poor market infrastructures like road, seasonality in production, competition of the domestic and the export sector, problems in the production system, or a combination of several factors. Eyob and Zewdu on their study found that absence of market information system, supply problems, prevalence of diseases, traditional production

system, illegal export trade, inadequacy of infrastructure are among challenges of the meat and live animal marketing system.

2.3 Research Gap

Several researches are conducted related to Ethiopian meat export challenges and opportunities in a qualitative approach. Some research was also conducted on the performance of the export sector over a year, but long back before five years in different approach. Besides the challenging factor that affect the performance of the export didn't addressed in the researches.

Therefore, the researcher consider the above as a gap and conduct this research to figure out the performance of the Ethiopian meat export sector for the last ten years from 2014 to 2023 using secondary data, to found out the most to the list pressing challenged factors that influence the performance of the export based on their weight and prioritization and identify the best opportunities that could be used to improve the meat export sector performance.

Chapter Three

Research Methodology

3.1 Research Approach and Design

The aim of this chapter is to highlight the overall methodological consideration of the thesis. Accordingly it is dealing with the research approach, research design, data source and data type, sampling technique and sample size, data collection tools, data collection tool validity and reliability, and data analysis and interpretation method.

3.1.1 Research Approach

Research approach is the general strategy that is followed by the researcher. It can vary depending on the type and nature of research it may include both qualitative and quantitative methods. According to (Kotari, 2004) quantitative research approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion, whereas qualitative approach of research is concerned with subjective assessment of attitude, opinions, and behavior of individuals. In this research the researcher uses quantitative and qualitative research approach which is known as mixed approach. In this study the researcher used quantitative approach because quantitative is applicable to phenomena that can be expressed in terms of quantity. Besides, the researcher uses qualitative results to assist in explaining and interpreting the findings of a primary quantitative study analysis and the quantified secondary data too.

3.1.2 Research Design

Research design is the arrangement for collecting and analyzing data in a way that object to combine relevant to the research purpose with procedure and economy (Kotahri, 2004)

There are three main types of research designs; these are exploratory, descriptive and explanatory studies.

The purpose of this study is to assess meat export performance in Ethiopia; challenges and opportunities. Besides a descriptive research design is suitable for this study because a descriptive study is helpful when a researcher wants to look into a phenomenon in its natural contexts in order to get its overall picture instead of taking one or some of its aspects and manipulating it in a simulated or an artificial setting (Kothari, 2004). The descriptive design helps to use quantitative and qualitative approach analysis on numeric and descriptive forms of data collected from respondents.

Descriptive research design often helps the researcher to compile the findings and interpret using Graphs and charts, and also helps the reader in understanding the data distribution because it has the ability to reduce the large data to manageable forms. Narrative descriptions of small number of cases are involved. In this research description will be as a tool to organize data into patterns that emerge during analysis.

The descriptive research design can provide detail information by describing the area of study in theory as well as in reality or describe the characteristics of various variables used in the research.

3.1.3 Data sources and data type

In this research the type of data used are both primary and secondary data. According to Kothari (2004), to come up with empirical findings data should be collected from their origination. Thus, primary data are originated by the researcher for the specific purpose of addressing the problem at hand.

The study is based on both primary and secondary data. The primary data are sourced directly from the respondents through self-administered questionnaire, and interview. The study also uses secondary data which are collected from different sources. The methods of collection include visit the ECC and CSA physically, and request for the data by e-mail. The main secondary data sources in this research are Ethiopian customs commission export data, National Bank of Ethiopia annual reports, Central Statistics Agency trade data, relevant journals, books, and newspapers are sourced as secondary data.

3.1.4 Sampling technique and sample size

When population elements are selected for inclusion in the sample based on the ease of access it can be called Purposive sampling technique. It is used for selecting items which the researcher considers as a representative of the population (Kothari, 2004).

Therefore, the sampling technique employed for this research is non-probability purposive sampling technique. Managers and experts who are assumed to have the required knowledge of the study and provide the most relevant information are considered as population of the study. These managers are working in the export abattoirs as General Manager, Marketing & Business development managers, Production managers, Animals procurement managers, Quality assurance, Export and logistics managers, Finance & accounting manager, HR & administration manager, and other experts in production and export operation are considered as target population of the study. From each export abattoirs a total of 14 (8 managers + 3 in production coordination + 3 export coordination) are selected as respondents of the study. As per ministry of trade, there are 12 export abattoirs who have their own meat processing and export abattoirs in Ethiopia. Then a total of 168 respondents are considered as total population of the study.

To determine the sample size, the researcher preferred a method developed Yamane (1967) that provides a simplified formula to calculate sample size. A 95% confidence level and $P = .05$ are assumed.

$$n = N/[1+N(e)^2],$$

Where n is the sample size, N is the population size, and e is the level of precision.

Then, in this study data was collected from 118 people.

3.1.5 Data collection tools

The research mainly relied on structured questionnaire with closed-ended questions to collect primary data from samples. Majority of questions were adopted from Mekonnen et al., (2022), Shahrametal 2013, Eltetoand, 2018, and some questions were designed by the researcher. Some modifications made to align with the research topic. The questionnaire has five sections; 1)

General characteristics of the firm's 2) Internal factors affect meat export abattoirs performance in Ethiopia 3) External factors affect meat export abattoirs performance in Ethiopia 4) Challenges in the meat export sector in Ethiopia 5) Opportunities in the meat export sector in Ethiopia.

In addition to the data produced using questionnaire from the respondents, an interview was conducted with the marketing department head of one of the export abattoirs who have been longer time in the meat sector of Ethiopia. This is to support and cross check gaps.

The questioner distributed to the target population by going to their respective liaison office in Addis Ababa and accessed the respondents from their factories through their internal coordination. The data was collected during month of April 2024.

3.1.6 Method of data analysis and interpretation

Data analyzing involved in arranging and reducing the data, synthesizing, and discovering what was important. Three steps are involved in data analyzing. These are organizing, interpreting, and summarizing data.

For presenting the data collected, statistical tools such as table, bar graph, and pie chart were used. Microsoft excels and statistical package for social science (SPSS) version 25 were used for the data analysis. Respondent's perception was assessed by the use of 5 point likert scale. Thus, 5=strongly agree; 4=agree; 3=neither; 2=disagree; 1=strongly disagree were used.

The collected data analyzed using descriptive statistics (percentages) and mean ranks. The mean rank was considered as appropriate to identify the most influential to the list influential factors from the listed set of constraints.

Kendall's Coefficient of Concordance used in this study to measure differences in ranking of variables and degree of concordance among the respondents. The Kendall's Coefficient of Concordance test is a nonparametric statistical procedure used to identify a given set of

constraints or problems from the most influential to the list influential and to measure the degree of agreement or concordance among the respondents (Legender, 2010).

Kendall's Coefficient of Concordance or Kandall's W ranges from 0 (no agreement) to 1 (complete agreement);

Where; W=Kendall's value, N=total sample size, R=mean of the rank,

It is a measure of the extent of agreement or disagreement among respondents of the ranking obtained. The higher mean rank indicates the most influential factor and the major challenges and opportunities.

The responses of the interviewee analyzed and interpreted qualitatively by applying contextual explanation through reviewing related literatures.

3.1.7 Reliability and Validity test

Consistency of the instrument was examined through the inter-item consistency which uses the popular test of Cronbach's coefficient alpha. As per Namdeo and Rout (2016), the closer Cronbach's coefficient alpha is to 1.0 the greater the internal consistency of the items in the scale using the rules of thumb if the value of alpha is > 0.9 = Excellent, > 0.8 =Good, > 0.7 = Acceptable, > 0.6 = Questionable, > 0.5 =Poor, and < 0.5 = unacceptable. Thus the reliability was found at high level alpha value.

From the analysis, theCronbach α of the data was 0.819. This reflected that the collected data was valid and reliable since the value of alpha is desirable with the range higher than 0.6 (Meepol&Ogunlana, 2006).

Reliability Statistics	
Cronbach's Alpha	N of Items
0.819	39

Validity can be defined as the degree to which a certain measure correctly represents the concept of a study (Hair et al., 2011). To insure the validity of the study, the questioner was designed after an extensive review of literature. It was carefully developed and adopted based on research questions and finally evaluated by experts and a professional in the area and some modifications wastaken as per their suggestion and advice.

3.2 Ethical consideration of the study

Ethical consideration is the most important element in the research process. Confidentiality guaranteed in the research. Data was collected based on respondentswillingness and convenience. The research respects the procedure of the institutions to collect the data. The data analysis and conclusion drawn in the research are based in the accepted research practice followed through.

Chapter Four

Result and Discussion

4.1 General Information of the Firms

A total number of 118 questionnaires were distributed to the respondents who are working in the export abattoirs. As per ministry of industry there are 12 export abattoirs that have their own meat processing and export facility. Out of the total questionnaires distributed, twelve questionnaires are un-responded. So, the response rate comes to 89.83%. The response rate is quite reasonable to reflect the views of the Ethiopian meat export industry.

Table 1: Firms Characteristics

		<i>Number of respondents/abattoirs</i>	<i>Percent</i>
Year of Establishment	Above 10 years	8	66.6
	Between 5 to 10 years	4	33.3
Foreign Ownership	Yes	2	16.6
	No	9	75.0
Number of Employed person	Missed value	1	8.33
	Above 200	4	33.33
	Between 100 to 200	5	41.67
	Below 100	1	8.33
	Missed value	2	16.67
Type of export product	Goat & sheep meat	8	66.6
	Beef	0	0.00
	All above	2	16.6
	Camel meat	0	8.33
	All above	1	8.33
	Missed value	1	8.33
Local /International certificate	Yes	11	92.0
	No	0	0
	Missed value	1	8.33
Major market export destination	UAE& KSA	9	75.0
	Qatar		
	All above	3	25.0
Intention to expand new markets other than above	Yes	11	91.6
	No	1	8.33
Total		12	

The survey indicates that 66.6% of the abattoirs have been in existence for more than 10 years; 33.3 % has been in existence for 5-10 years. The above results indicate that most of the firms in this study have been in operation for considerable period of time.

On the other hand, taking a measure of strength of employment in these firms enable one to judge the levels of investment in meat export industry with regard to number of employees, it is found that 4 abattoirs (33.3%) have above 200 employees, 5 abattoirs (41.67%) have between 100 to 200 employees, while 3 firms (25%) have fewer than 100 employees.

As regards the company ownership pattern, the survey finds that 75 % of the abattoirs are owned by Ethiopians; and the remaining 16.6% owned by foreigners.

The survey found that all of the abattoirs have local or international certification. All the export abattoirs replied that goat and sheep meat are their major exportable products to UAE and KSA markets. In addition to goat and sheep meat, only one export abattoir has produced and export camel meat to KSA. 25% of the abattoirs export their products to Qatar, in addition to the KSA and UAE. Nearly 92% of the export abattoirs expressed their intention for expanding additional and new market destinations other than the GCC countries. One abattoir explained no intention to expand the markets rather than GCC countries. (Computed survey)

4.1.1 Demographic Characteristics of Respondents

Table 2: Respondents Position in the Firm

	Frequency	Percent	Valid Percent	Cumulative Percent
Managers	63	59.4	59.4	59.4
Non-managers	43	40.6	40.6	100.0
Total	106	100.0	100.0	

The majority of individuals who participated in this research have managerial positions in their respective abattoirs. Among the 106 respondents 63 of them are managers working in the

selected departments which account 59 %. The non-managers who are working in production and export coordination works account for 41%.

Table 3: Respondents total Experience in the Sector

	Frequency	Percent	Valid Percent	Cumulative Percent
Above 15 years	6	5.7	5.7	5.7
Between 10 to 15 years	59	55.7	55.7	61.3
Below 5 to 10 years	40	37.7	37.7	99.1
Below 5 years	1	0.9	0.9	100.0
Total	106	100.0	100.0	

Most of the respondents had work experience in their current positions for more than 10 year or between 10 to 15 years (56%) and 5 to 10 years (38%) and above 15 years (6%). This indicates that the respondents have better knowledge about the meat export sector and their respective companies.

4.2 Internal factors affect meat export abettors' performance in Ethiopia

The internal factors affect performance of Ethiopian meat export abattoirs; Limited compliance to international standards and market requirement, Lack of capacity for cattle slaughtering facilities, Managers attitude and global knowledge of international market were ranked high of 5.68, 4.43, and 4.21 respectively. Manager's ability to handle challenges and to explore new opportunities ranks the least internal factor that affects the Ethiopian meat export abattoirs performance. Constraint in getting qualified and trained workforce, Lack of developed technology, Shortage of working capital are ranked as the 4th to 6th internal factors identified (table 4).

The model detected that the respondents were significantly concordant in ranking the variables to find out internal factors affect the meat export abattoirs performance in Ethiopia. The assessment were statistically concordant with the coefficient of concordance strength of 0.335 ($W > 0$) at $P < 0.000$ significance level. Kendall's W is 0.335 which indicates there has been weak

agreement of judgment among the respondents of meat export abattoirs in assigning ranks attributed for internal factors. The test Kendall's Coefficient of concordance in the internal factor that affects export performance of the abattoirs indicates that the different in the internal factor among the abattoirs are not the same. This may be due to the most influential factor for one abattoir may not be the same for the other.

Table 4: Internal factors affect meat export Abattoirs' performance in Ethiopia

Internal Factors	Mean Rank	Rank
Limited compliance to international standards and market requirement	5.68	1 st
Lack of capacity for cattle slaughtering facilities	4.43	2 nd
Managers attitude and global knowledge of international market	4.21	3 rd
Constraint in getting qualified and trained workforce	4.18	4 th
Lack of developed technology	3.74	5 th
Shortage of working capital	3.65	6 th
Managers ability to handle challenges and to explore new opportunities	2.11	7 th

W= 0.335, Asymp. Sig. = 0.000, Significant $\alpha < 0.05$, N=106

Source: Author's survey result (2024)

As depicted on the table above, the most pressing internal factor that affects meat export abattoirs performance is limited compliance to international standards and market requirement. This implies limitation in meeting acceptable international standard and market requirement results unsatisfactory product quality further causes un-competitiveness in the international markets that create decline the market demand and price of the meat from Ethiopia. This finding is the same with Mulisa et al. (2022), they reported that Dark cutting (DC), lack of continuous supply, small carcass size, inappropriate packing, banding and labeling attributed to fail to meet acceptable international standards. Among these DC at retail display is one of the leading causes of consumer rejection in the end market. A large percentage of carcasses from Ethiopia animals (cattle and shoats) are rejected in international markets due to DC. Therefore, limitation in fulfilling the export market requirement affects the performance of the export abattoirs by binding the competitiveness in the international market and further unable the abattoirs to entering new markets. Eventually it is negatively affects the export performance of the abattoirs.

The second most constraint internal factor that the export abattoirs faced was Lack of capacity for cattle slaughtering facilities. This refers to the constraints related to technology that limits competitiveness of the sector by reducing product quality, by creating poor product development and limits diversification of products. This is aligned with the international literature that product quality and product development are the critical internal factor affect export performance of a given firms (Oura et al., 2016). Besides, reported by EMDIDI, (2021), that nearly all the existing abattoirs in Ethiopia have facilities for goats and sheep but facilities for cattle are mostly limited for local consumption and few abattoirs start export of beef recently.

The third constrained factor identified was managers' attitude and global knowledge of international market. This is in relation to the knowledge of the managers supposed to have international business knowledge and business strategy that have decisive role in the successful export performance and internationalization of the abattoir. The creativity of managers plays a key role in applying best strategy. Thus managers' attitude and global knowledge of international market may affect export performance of the abattoirs in limitation of market research, and limitations in applying the best strategies considering international global meat market and the competitors.

The fourth internal factor that affects the meat export abattoirs performance is constraint in getting qualified and trained workforce. Limitation of getting qualified workforce influence the performance of the export through incurring extra cost on the abattoirs. The knowledge gap for meat production process results additional cost for the abattoirs till the employee get trained and specialized for a specific job. This affect the performance of the export abattoir in increasing cost of production. This is because the knowledge gap will be improved on training and is on the abattoir's cost. Eventually, an increased cost of production will affect the abattoir's competitiveness and then performance of the export. The result is the same with the report of the World Bank Group (2015) as cited Mekonnen et al 2022, reported that, labor productivity in Ethiopia lag behind national average. The lagged labor productivity may be hindrance factor for performance of the meat export sector.

4.3 External Factors affect meat export abettors' performance in Ethiopia

As per the table depicted below (Table 5), among the eleven identified external factors that affect abattoirs export performance, Presence of illegal cross border trade of live animals, Non-market oriented livestock production system, Access to limited international markets and Act of intermediary and involvement in live animal marketing were ranked high being top four factors that affect meat export performance with the mean rank of 8.28, 8.17, 7.99, and 7.12 respectively. Lack of diseases free zone for livestock, Lack of animal disease control in the country and Lack of livestock market infrastructure ranked 5th to 7th with mean rank of 6.66, 6.33, and 5.99 respectively. Lack of government policy focus, Limited government support on market and promotion, Lack of coordination among export abattoirs, and Limited output in research and development intervention in the sector relatively low mean rank of 5.03, 4.66, 3.31, and 2.47 respectively.

A Kendall's W of standardized test statistics show that there was agreement among respondents and the significant mean difference among mean ranks was identified in the external factors. Based on the test statistics Kendall's coefficient of concordance W for external factors is 0.45 ($W > 0$), which is found strong agreement between respondents for the external factors with a significant level of 0.000.

Table5: External factors affect meat export abattoirs' performance in Ethiopia

External Factors	Mean Rank	Rank
Presence of illegal cross border trade of live animals	8.28	1 st
Non-market oriented livestock production system	8.17	2 nd
Access to limited international markets	7.99	3 rd
Act of intermediary and involvement in live animal marketing	7.12	4 th
Lack of diseases free zone for livestock	6.66	5 th
Lack of animal disease control in the country	6.33	6 th
Lack of livestock market infrastructure	5.99	7 th
Lack of government policy focus	5.03	8 th
Limited government support on market and promotion	4.66	9 th
Lack of coordination among export abattoirs	3.31	10 th
Limited output in research and development intervention in the sector	2.47	11 th

W= 0.452, Asymp. Sig. = 0.000, Significant $\alpha < 0.05$, N=106

Source: Author's survey result (2024)

Presence of illegal cross border trade of live animals identified as the major constraint factor that affect the meat export performance abattoirs. The majority of animals exported through this channel are Somali black head, followed by goats, cattle and young camel which are targeted for meat export market. As per the report of Eyob (2016), estimated annual outflow of livestock through border are 325,800 cattle, 1.15 million shoats and 16,000 camels. Factors contribute for increased illegal livestock trade is due to financial and non-financial comparative advantages that include taxation, black market foreign exchange rate, and absence of bureaucratic delay contributes large. It is reported that long procedures required to export formally including export licenses, quarantine, banking clearance for remitting foreign exchange, minimum weight restrictions, and minimum price requirements also been factor contributed for large volume of informal trade.

Thus, the presence of illegal cross border trade highly affects meat export performance of the sector by creating shortage of supplies in terms of quality and quantity. Also highly contributes livestock purchasing price to increase. Recent study reported that the meat and livestock sectors are in steady decline due to shortage of live animal supply, illegal trade, and lack of implementation of the live animal marketing proclamation that prohibits animal smuggling (USAID and AGP 2021).

The second external factor that hampers meat export abattoirs performance was Non-market oriented livestock production system. This refers to the livestock in the country are not purposefully produced for intended market especially for export. The livestock's are owned by pastoralists. The pastoralists consider their livestock as means of saving. The livestock sold by the pastoralists are whenever they require income and while shortage of feed or water happened. Producers supply to the market is not based on market demand. Consequently the market participation of the producers been limited.

Due to non-market oriented production system of livestock's, no planned production for market realized. The meat export market have requirement based on type, age, quality, and quantity of animals that could fulfill the demands from the import countries. However the pastoralist doesn't have entrepreneurial awareness to produce the livestock in planning interns of time, quantity and quality and through even they could maximize their income.

Therefore, the non-market oriented livestock production system may affect critically the performance of the meat export abattoirs by limiting availability of commercially viable quality and quantity of live animals and by reducing meat animals quality that are suitable for export and that could enable the abattoirs to be competitive in the international market. Adis 2019, note that livestock sub-sector is characterized by less commercially oriented production systems. It is also reported by Eyob and Zewdu, 2016 that absence of market-oriented production systems is described as the main constraints of livestock production in the country.

The third constrained factor identified was Access to limited international markets with mean rank of 7.99. Market access refers to the firm's ability to enter foreign market in selling its products to other countries. The demand of meat in the world is increased over years. The market expansion in the world is too. However, Ethiopian meat is allowed to access the GCC markets. This may be related to range of different factors including trade barriers and compliance with regulations. Entering new market access is critical for the Ethiopian meat export looking for to expand its reach and tap into new consumer base. It is reported by FAO 2023, that China and United States of America are key export market destinations. To access such huge markets government authorities play significant role because market access is often negotiation between countries for mutual benefits besides the export abattoirs compliance pertaining to quality and market standards. Access to international market contributed significant role in determining country's success and one of the measurements of countries export performance.

Thus, limited Access to international markets highly affects the Ethiopian meat export industry by limiting the market share in the international market and unable to expand production and growth of the sector. Majority of Ethiopian meat export is concentrated to the Middle East countries of UAE and KSA (ECC export data) little export share to Hong Kong, Vietnam and some African countries. It is reported that the restrictions not able to access the huge markets like China is due to prevention of Foot and Mouth Disease (FMD). It was reported by Terefe 2008 that Ethiopia's global export market share for meat is quite small that requires efforts on productivity improvement and market access findings. Tekeba et al., 2018 reported that unable to penetrate huge export markets and maintain substantial market share is one of the binding constraints the meat export sector is facing with.

The fourth rank identified as an external factor was Act of intermediary and involvement in live animal marketing. It refers to involvement and acts as livestock price intermediary in the meat value chain. The negotiation is among the animal producers, collectors, traders and export abattoirs. The involvement of various intermediaries creates longer and complex supply chain with increased transaction costs without significant value addition.

Thus, the Act of intermediary and involvement in live animal marketing may affect the meat export performance by increasing meat animal price. An increase of meat animals' price further increases the abattoirs cost of production and then results in uncompetitive participation in the international market. Eventually, it affects its export performance destructively. It was reported that livestock from the major producing areas reaches to the final end user passing through complex channels along the supply chains (Ayele, 2004). The number of intermediaries handling animals determines the profit margins at every stage along the value chain (Jemal, 2019).

Lack of disease-free zone for livestock and Lack of animal disease control in the country ranked as the 5th and 6th external factor affects the meat export performance of the abattoirs. The country's export of meat lies in the large livestock population. The major challenges the livestock sector faces with animal disease such as foot and mouth diseases (FMD) that is highly contagious disease that affects livestock in the country. The diseases highly affect all cattle age and breeds and small ruminants.

Thus, the lack of animals' disease control and absence of disease-free zone affects the meat export performance significantly and it has impact on livestock production and trade that causes reduction on animal production, creates market access barrier, and consumer confidence in the end market. As a result, the export abattoirs loses substantial market share and customer preference in international market. It is reported in recent study of Girma et al. (2023) that occurrence and outbreaks of FMD in Ethiopia has significant impact on livestock production and trade.

Lack of livestock market infrastructure, Limited government support on market and promotion, Lack of coordination among export abattoirs and Limited output in research and development intervention in the sector are relatively ranked from 7th to 11th with mean rank of 5.99, 5.03, 4.66, 3.31 and 2.47

4.4 Challenges in the meat export market in Ethiopia

The model detects that among the eleven items considered as challenges in the meat export sector in Ethiopia (Table 6). High purchase price of live animals in the domestic market, Shortage of slaughter animals supply, Huge exchange rate difference and Seasonality and low quality animals supply ranked high being the top four challenges in the meat export sector with mean rank of 8.85, 8.58, 8.44, and 7.54 respectively. Weak regulatory control with mean rank of 5.41, Lack of well-coordinated livestock supply chain with mean rank of 5.24, and High production cost with 5.02 ranked from 5th to 7th. High cost and limited access of logistics for frozen meat export relatively has low mean rank and identified as the least challenge in the sector. Low productivity of the local livestock breeds, Limited variety of products, and Limited market destination ranked as 8th to 10th with mean rank of 4.83, 4.67, and 4.50 respectively.

Table 6: Challenges in the meat export market in Ethiopia

Challenges	Mean Rank	Rank
High purchase price of live animals in the domestic market	8.85	1 st
Shortage of slaughter animals supply	8.58	2 nd
Huge exchange rate difference	8.44	3 rd
Seasonality and low quality animals supply	7.54	4 th
Weak regulatory control	5.41	5 th
Lack of well-coordinated livestock supply chain	5.24	6 th
High production cost	5.02	7 th
Low productivity of the local livestock breeds	4.83	8 th
Limited variety of products	4.67	9 th
Limited market destination	4.50	10 th
High cost and limited access of logistics for frozen meat export	2.91	11 th

W= 0.479, Asymp. Sig. = 0.000, Significant $\alpha < 0.05$, N=106

Source: Author's survey result (2024)

High purchase price of live animals in the domestic market identified and considered as the major challenges of the meat export sector in Ethiopia. The demand for meat in Ethiopia has become increasing (ERCA, 2018/19). When compared to export market price the red meat is very high. The high price of live animals in the domestic market which is far away exceeded

from international market price. The reason behind may be the increased contraband trade that causes shortage and then increase price, besides, increased animal feed price may contribute for the price escalation of meat animals in the domestic market. Reports show that the floor price of meat set by NBE is lower than the actual international market price. This may result significant lose on the export abattoirs since the international price is lower than the domestic price. Therefore, the higher price of live animal in the domestic market significantly hindering the export operations by incurring substantial lose in increasing production cost and may go up to stopped operation. The major challenge of meat export in Ethiopia today is incompatibility of local market price which makes production cost of meat higher. The same is supported by AGP, 2013 reported that Ethiopian meat is often costly in comparison to meat from alternative sources. This challenges the competitiveness of the Ethiopian meat in the international market.

Shortage of slaughter animals' supply is the second major challenges faced by the export abattoirs in Ethiopia. Shortage of slaughter animals' supply refers to inadequate commercially viable meat animals supply in terms of quantity and quality that are suitable for production of quality meat. Lack of animals supply may be a critical challenge for the export abattoirs by limits the operation of the abattoirs to operate underutilized capacity. The underutilized production capacity further results production cost to increase and also unable to fulfill customers demand. It has also a strategic disadvantage that creates opportunities for competitors to capture the market and can weaken sustainability of the meat export business of the country. The reason behind the animals shortage may associated with the illegal livestock trade, high domestic consumption, non-market oriented livestock production, poor market infrastructure, and inefficient market information.

It was reported in recent study of USAID and AGP 2021, that the existed meat processing facilities are operated under their full capacity. This is mainly due to lack of suitable quality and quantity of live animals and high price of live animals in the domestic market despite Ethiopia has the largest livestock population in Africa. Further Jemal 2019 reported the reliable and adequate supply of quality live animals and meat has been one of the major challenges faced the meat export sector in Ethiopia.

The third major challenges faced by the export abattoirs are huge exchange rate difference with high mean rank of 8.44. The huge exchange rate refers to the huge difference of the exchange rate (ETB/USD) between the official exchange market and parallel black market. The existence of huge exchange rate difference may contribute to increased livestock contraband. The attractive price offered by the importers through the illegal livestock trader in the border may contribute for occurrence of this informality practice. The huge exchange rate difference become the major hindrance on meat export operation by limits quality and quantity of meat animals supply that are suitable for meat processing for export. Also contributes for high purchasing price of the animals in the domestic market that significantly affects its export operation. The huge exchange rate difference is critical challenges that may require government policy intervention to get the issue addressed.

It was reported by Amha 2011 that illegal livestock trade and export are more reliable market across at the border. These include better price and black market foreign exchange rate, and lack of bureaucratic delay. Sintayehu on his study also reported that long procedures required to banking clearance for remitting foreign exchange is among the factors contributed for an increased informal livestock trade in the border.

The fourth ranked challenge identified is Seasonality and low quality animals supply. This refers to lack of consistent supply of quality animals. Inconsistent supply of animals may contribute for increase of animal price during peak export seasons of Ramadan, and EidAdla and limits the abattoirs ability not to sell towards the seasonal demand. Further loss of substantial market share occurred in the international market. Gebregziabher and Sileshy 2019 on their study reported that seasonality and low supply of poor quality animals was ranked the first most constraining factor for meat and meat products export in Ethiopia. USAID 2010 reported on its study that seasonality of supply make Ethiopian meat exporters facing with market related challenges that unable to supply demanded quantity as well as opportunity selling.

The fifth identified challenge in the meat export sector is Weak regulatory control. It observed that lack of regulatory control of illicit live animals export on the border which is the critical factor for the loss of substantial market share and hinders development of the meat export sector. Lack of regulation may significantly affect the meat export operation by increasing the live

animal's price, by limiting the number of animals reached to abattoir for meat processing and also creates shortage of supply. Further uncontrolled contraband of live animals results substantial revenue the government supposed to earn in terms of foreign currency earnings and revenue collected from taxes. The meat and live animal export sectors are in steady decline due to shortage of animals supply, illegal trade and weak regulatory control and lack of implementation of the live animal marketing proclamation that prohibits animal smuggling (USAID and AGP2021).

Lack of well-coordinated livestock supply chain, High production cost, Low productivity of the local livestock breeds, Limited variety of products, Limited market destination ranks 6th to 10th. High cost and limited access of logistics for frozen meat export ranked the 11th with relatively low mean rank of 2.91. This is related to frozen meat export challenges. Production of frozen meat required high technology and cold store facility. The reason to get relatively low rank may be associated with majority of the abattoirs has not frozen facility and not involved in frozen meat export and may not give attention for it.

4.5 Opportunities in the meat export market in Ethiopia

The top three opportunities identified by the respondents are Proximity to middle eastern countries, Ethiopian meat is derived from only grass feed livestock (no artificial hormones added), and Growth in demand for meat products in the world with highest meat rank of 6.20, 5.75, and 5.66. Presence of export abattoirs with big investment opportunities, Ethiopian meat has good test profile that has got preference by customers, Meat production offers opportunity to serve a vast export market as well as domestic market, are the 4th to 6th ranked opportunities with mean of 4.87, 4.46, and 4.08 respectively. Existence of large number of livestock population and attractive incentives provided by Ethiopia's investment policy has relatively low mean ranks of 2.35 and 1.64.

Table 7: Opportunities in the meat export market in Ethiopia

Opportunities in the meat export sector	Mean Rank	Rank
Proximity to middle eastern countries	6.20	1 st
Ethiopian meat is derived from only grass feed livestock (no artificial hormones added)	5.75	2 nd
Growth in demand for meat products in the world	5.66	3 rd
Presence of export abattoirs with big investment opportunities	4.87	4 th
Ethiopian meat has good test profile that has got preference by customers	4.46	5 th
Meat production offers opportunity to serve a vast export market as well as domestic market	4.08	6 th
Existence of large number of livestock population	3.35	7 th
Attractive incentives provided by Ethiopia's investment policy	1.64	8 th

W= 0.457, Asymp. Sig. = 0.000, Significant $\alpha < 0.05$, N=106

Source: Author's survey result (2024)

As depicted on table above, Proximity to Middle Eastern countries is the first opportunity ranked by respondents. Relative nearest distance to the Middle East considered is a comparative advantage that could influence the Middle East market in delivering relatively in less time and relatively with less transportation cost. Proximity to Middle Eastern countries indicated by various researchers as the best opportunity for the meat export sector of Ethiopia. Among (Ameha, 2011, Gidey, 2021, Jemal, 2019; Eyob and Zewdu 2016).

The second important opportunity identified was Ethiopian meat is derived from only grass feed livestock (no artificial hormones added) with high mean rank of 5.75. In Ethiopia animals from the low land are targeted for export of meat products. The source of feed is grass. This highlights the production of meat from these animals considered as organic. The organic test nature of Ethiopia's meat could be competitive in the international market that could further attract more markets in addition to GCC countries. By identifying which countries prefer Ethiopian meat test and possibly to expand the export market in more destinations. Asfawet al.2011 reported that in

the lowland agro-pastoral system, grazing is the most common source of feed, with limited use of crop residue. AGP, 2013 reported on its study that Ethiopian meat has a good taste profile in a number of countries including Middle East.

The third important opportunities identified with high mean rank of 5.66 was Growth in demand for meat products in the world. The demand of meat is increased with an increased number of world populations. At the same time demand for meat is be increased. The all-time increased meat demand in the world is good opportunity for Ethiopia who has vast livestock resource to expand its meat production by accessing huge markets of the world in fulfilling the market and trade requirements. In Brazil higher bovine production registered increased. This is due to higher supply of cattle along with high import demand (FAO, 2023).

The fourth important opportunities identified were Presence of export abattoirs with big investment opportunities. The more investment occurred in the sector, the more opportunity would be created in terms of FDI, large number of employment opportunity for citizens with facilities generation of new knowledge and adaptation of foreign technologies to the local environment. The big investment opportunities by FDI are good opportunity even for local abattoirs in enhancing transfer of technology for production of quality products and increasing export.

As per the participant during the interview, the Ethiopian meat export sector has several challenges. Amongst the high domestic price of live animals is the most challenging the export abattoirs are facing currently. It has a high impact on the operation of the abattoirs. The higher price of live animals increases the cost of production and price of the product eventually. Due to this the Abattoirs in Ethiopia can't be competitive in the international market. Then the demand has shifted to Kenya, and Tanzania since they offer better prices than Ethiopia. The higher live animals price in the domestic market might be associated with shortage of supply again the shortage of supply resulted from the illicit live animals trade in the border area. The illegal livestock trade became an advantage for the traders involved in this practice as the huge exchange rate difference between the official and parallel market has contributed to the increased illegal trade of livestock in the border area of Ethiopia.

The country's revenue from the sector is very low with the huge livestock resource and the opportunities. Ethiopian meat in the GCC market is more preferable due to its organic test nature. The participant suggested that to improve the sector to a better position, quality of our products has to be improved from pre slaughter and post slaughter process as well, Utilize the Abattoirs capacity by addressing the problems associated with their underutilized capacity operation, and access huge markets like China , and others like markets. These can be achieved by cooperation and coordination of all stakeholders involved in the sector, mainly the Government. Other stakeholders like all export abattoirs, animal traders, and non-governmental organizations.

4.6 Meat Export Performance in Ethiopia

Ethiopia is home to Africa's livestock population with an estimated 70 million cattle, 42.9 million sheep, 52 million goats and 8 million camels (CSA, 2020/21).

Before the last ten years the meat export in Ethiopia was an attractive industry and the number of export abattoirs was increased over years with better production capacity. In the year 2014 there was 8 export abattoirs (EMPEA, 2014/15). These export abattoirs produce 16,457 tons of meat and meat products that Ethiopia earned 82,922 USD million. Most of the exports were to Gulf countries. Currently there are 12 meat export abattoirs that have their own meat production facility. These export abattoirs are engaged in production and export of meat and meat products for export markets. The total installed production capacity of the abattoirs is 20,000 MT yearly.

According to the Ethiopian Customs Commission export data (Figure 1), export volume for meat and meat products exported during 2014 to 2023 was 157, 508 tons. The meat export volume decreased to 9,426 MT in 2023 from 16,485 MT in 2014 (Fig 1). There was an average of a 3% decrease during this period. The average production during the period was 15,751 tons per year. The meat production in Ethiopia is in less volume while compared with its potential and the total installed capacity of the export abattoirs. This reflects the meat processing abattoirs are operating under their capacity. The same is supported by EMPEA 2021 stated that existed meat processing facilities are operating at less than 10 percent of their full capacity.

Figure 1: Meat Export Performance in Ethiopia from 2014 to 2023



Source: Ethiopian Customs commission export data

In value terms, for the last ten years, exports of meat and meat products in Ethiopia generate a total of 847,716 USD million (fig. 1). The export averaged 84 USD million from 2014 to 2023, an all-time reached high of 98,456 USD million in 2017 and a low record of 63,401 USD million in 2023. Ethiopia meat and meat products export show increased trends from the year 2015 to 2017 and declined in year of 2018 to 2020 again show an increase in 2021 and decrease down in 2022 to 2023. The increase shown in the 2021 was not more than the 2017 export. This implies the meat and meat products export performance in Ethiopia is declining. The same is supported by the study conducted in 2021 by USAID and AGP concluded that the meat and live animal export sector are in steady decline. Most of the abattoirs are on the verge to collapse due to lack of domestic supply and high illicit live animal trade along boarder area. Thus the reason for the decline of the performance on these years may associated with the shortage of live animal supply, illicit live animal trade, diseases out breaks, and drought occurred during the period. The meat export from Ethiopia was banned by Gulf countries in 2015 and COVID 19 also attributed for the declined meat export performance.

4.6.1 Meat and Meat products Export by Category

Meat and meat products from Ethiopia have been export about 157,508 tons of meat and meat products for the last ten years. From this volume, about 134,220 tons (85.21%) gained from Fresh, chilled or frozen **goat meat**, 7,571.48 tons (4.81 %) from chilled and frozen **sheep/lamb meat**, 6,857.48 tons (4.35%) from beef, 8,852.59 tons (5.62%) from **edible offal** and 6.10 tons from **camel meat** (Table 8)

As depicted down on table 1, majority of meat production for export was goat meat. Limitation on the other products detected. The contribution of sheep, beef, and edible offal for meat and meat products export was limited than goat meat. As a result it is advisable to look for alternative market destinations for beef and camel meat and also improve use of edible offal.

Table 8: Export volume of meat and meat products by types in MT

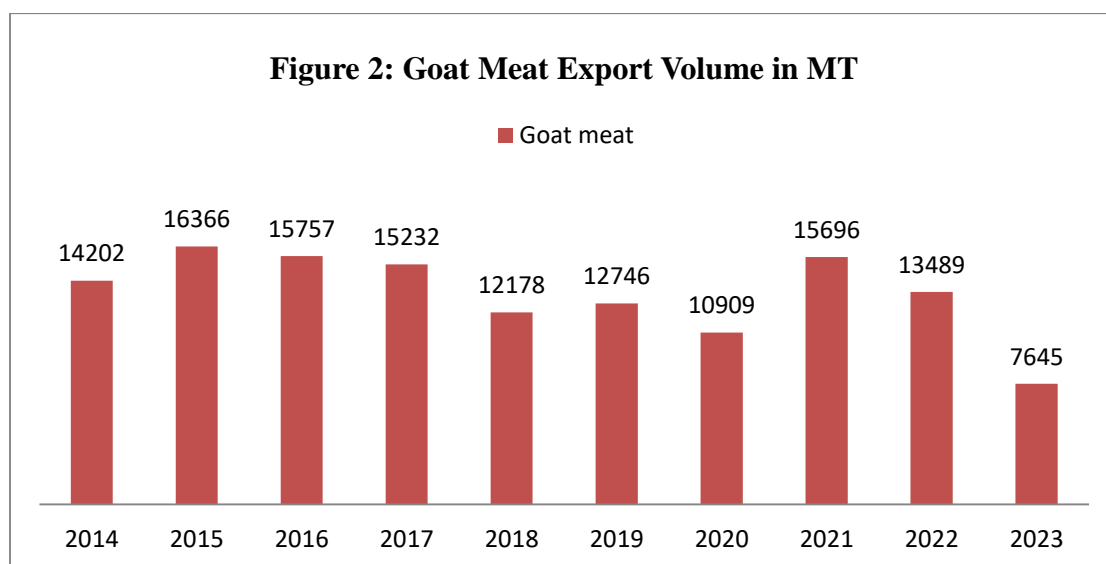
Year of export	Meat Product category					Total
	Goat Meat	Sheep Meat	Beef	Camel Meat	Edible Offasl	
2014	14,202	1,066	5	0	1,185	16,458
2015	16,366	1,038	51	0	899	18,353
2016	15,757	826	923	2	706	18,215
2017	15,232	777	1,700	0	1,063	18,772
2018	12,178	513	2,550	0	206	15,448
2019	12,746	487	947	0	984	15,165
2020	10,909	419	171	0	704	12,204
2021	15,696	760	329	0	1,028	17,813
2022	13,489	1,051	161	0	954	15,655
2023	7,645	634	20	4	1,123	9,426
Total	134,220	7,571	6,857	6	8,853	157,508
Share %	85.21%	4.81%	4.35%	0.00	5.62%	1

Source: Ethiopian Customs Commission export data

Goat Meat Export:

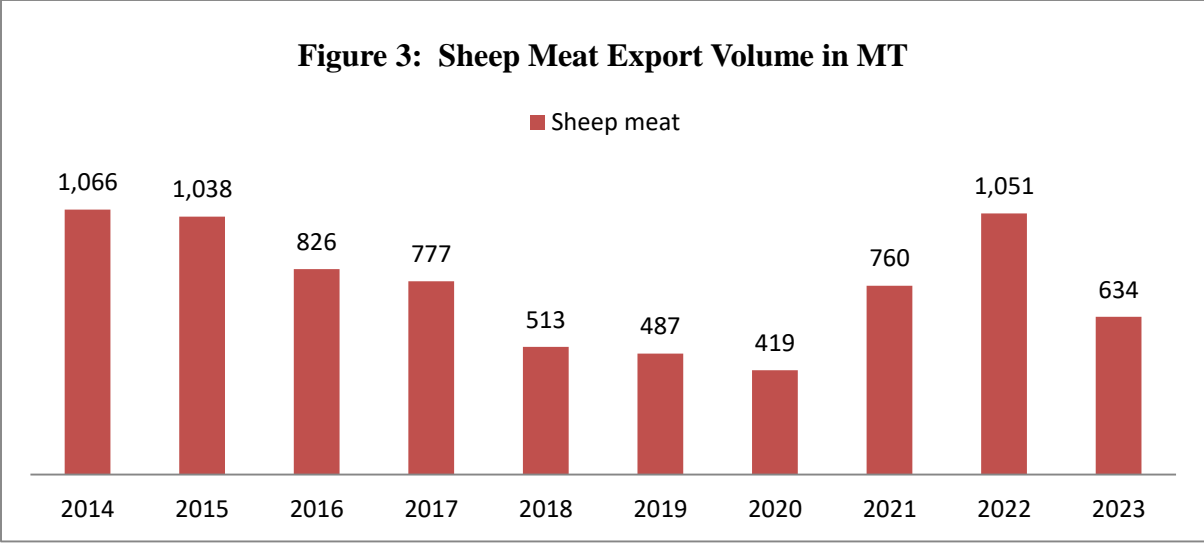
The total volume of goat meat exported during 2014 to 2023 was 134,220 tons which was the maximum volume exported during the period. On average 13.4 tons of goat meat exported yearly from 2014 to 2023. The highest volume of goat meat exported in 2015, it was about 16,366 tons and lowest export of 7,645 tons in 2023 (fig2). These above reflect goat meat export declined to

7,645 tons in 2023 from 14,201 tons in 2014. On average 3.5% decline detected during the period.



Sheep Meat Export

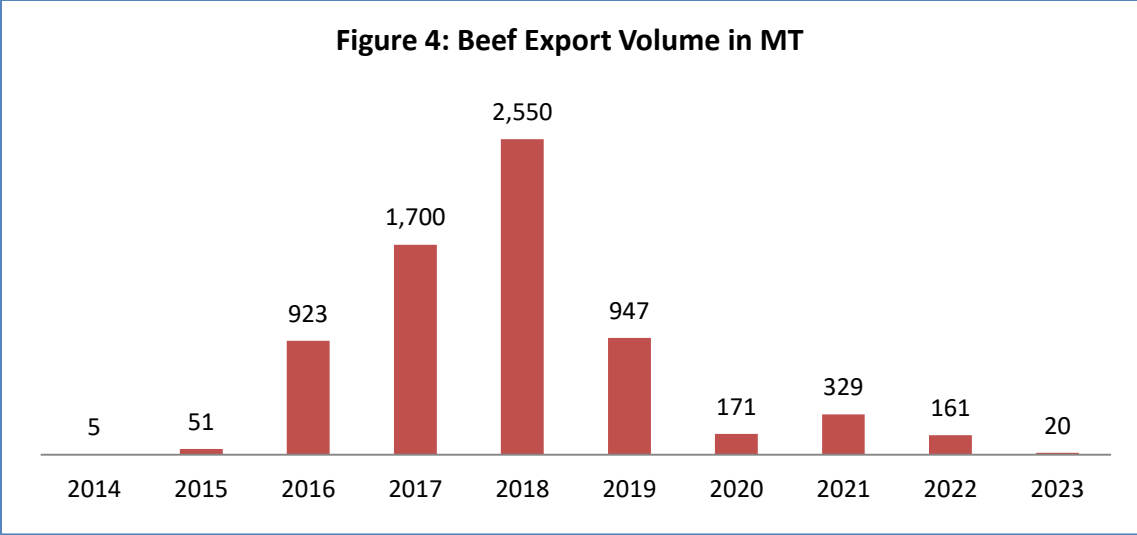
Exports of sheep meat in Ethiopia declined to 635 tons in 2023 from 1,066 tons in 2014. Sheep meat exports averaged 757 ton per year from 2014 to 2023 during the period. An all-time reached high was in 2022 it was 1,051 tons and low exported in 2020 (Fig 4). The sheep meat export was in declined trend up to 2020 and export increased in 2021 to 2022 again declined down in 2023. The small volume of the sheep meat export may be due to limited market destination. As mentioned in the literatures, majority of the exports are to UAE and KSA markets. These markets are Ethiopian meat traditional markets (Aklilu, 2008). These markets demanded goat meat rather than sheep meat. As per the export data of ECC, the sheep meat demand is available from Qatar, Oman, and Bahrain. As shown in table 1 above, the volume of sheep exported during the period was small. The reason could be lack of market access and limited market destination.



Source: Ethiopian Customs Commission

Beef Export

Export of beef from Ethiopia is in general small volume as compared to its highest potential. Beef export contributes 4.35% from the total export during 2014 to 2023. The total volume exported is 6857tons. As per the ECC export data, the beef export increased on average by 3.5% a year during 2014 to 2023. On average 685 tons of beef exported a year which was small volume. The highest exported was 2550 tons in 2018 and the lowest of 5 tons in 2014. The beef export in Ethiopia was in increased trends up to 2018 and declined down. The small volume exported of beef may associate with quality issue and limitation on beef production and processing facilities by the export abattoirs and lack of supply and high price of live cattle. EMDIDI, 2021 disclosed that nearly all the existing abattoirs in Ethiopia have facilities for goats and sheep but facilities for cattle are mostly limited for local consumption and few abattoirs start export of beef recently.



Source: Ethiopian Customs Commission export data

Low production of beef may be associated with different factors. A recent study conducted by Belete et al (2022), indicated that even if there is high demand for beef animals in the domestic as well as export markets, due to constraints associated with the beef cattle production system, diseases, shortage of feed and water, lack of veterinary services, drought, lack of market access and infrastructure, illegal animal trade, and poor genetic potential of indigenous cattle are among the limiting factors that hamper efficient beef production in the country.

The study conducted on Commodity-based Trade and Market Access for Developing Country Livestock Products: The Case of Beef Exports from Ethiopia found that the binding constraint for beef export from Ethiopia was high domestic input cost rather than other constraints. While Ethiopia is Africa’s largest livestock producer with 70 million cattle (CSA 2020/21)

Edebil Offal

Offal are the internal organs of a butchered animal. In Ethiopia offal is exported in chilled and frozen forms. The meat by-products for export include intestine, liver, brain, lung, kidney and abomasum’s which are mostly exported to Vietnam, Hong Kong, Oman, and Qatar. From the total meat export, edible offal contributes 5.62% (8,852 tons). On average 88 tons of offal are exported during the period. A 3.3% increase was recorded in export volume during 2014 to

2023. Offal processing and production is an opportunity in expanding products under meat production and can be gained significant foreign earnings if more destinations accessed.

Camel Meat:

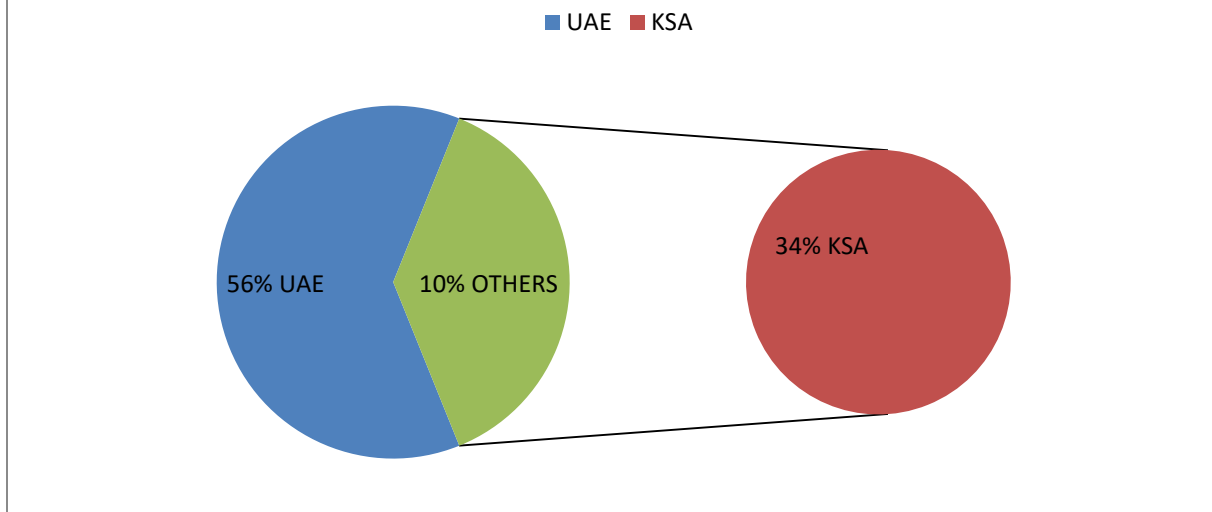
The Ethiopian camel meat export has moved double in 2023. Two export abattoirs got approval for export of camel meat to KSA. The list of government approved establishments for the export of camel meat and its products to the Kingdom of Saudi Arabia was updated on 26th September 2023.

Reported that, Ethiopianslaughter house started export of camel meat to Saudi Arabia in 2023. The slaughterhouse claims that it is sending around 60,000 kg of camel meat to Saudi Arabia. The report added Ethiopia has the potential to become a major player in the global camel meat market. However, there are still some challenges for Ethiopia to overcome, such as a lack of certifications and international standards. Ethiopians also do informal cross-border livestock exports that contribute to price escalation in domestic markets.

4.6.2 The Meat and meat products export by destination

The Ethiopian meat export major destination of goat and sheep meat during the period were United Arab Emirates (56%), Kingdom of Saudi Arabia (34%), the remaining 10 percent of meat exported to Hong Kong, Vietnam, Qatar, and other countries (figure 6). The survey conducted in this research show that all the export abattoirs made exportsto UAE and KSA markets. Only 33% of the abattoirs export their products to Qatar, Bahrain, and Oman in addition to the KSA and UAE (own survey result).

Figure 5 :Meat and meat products Export share



Source: Customs commission export data

Majority of Ethiopia's meat exported are chilled goat and sheep meat products and those export were limited to United Arab Emirate and Kingdom of Saudi Arabia and the remaining exported to Hong Kong, Vietnam, Qatar, Oman and other countries (USAID and AGP, 2021).

Chapter Five

Summary of Findings, Conclusion and Recommendations

5.1 Summary of major findings

Based on the study analysis, the following are identified as major finding of the study

- According to the Ethiopian Customs Commission export data, the meat export volume decreased to 9,426 MT in 2023 from 16,485 MT in 2014. The export volume for meat and meat products exported during 2014 to 2023 was 157, 508 tons .The average production during the period was 15,751 tons per year. There was an average of a 3% decreased during the period. In value terms, exports of meat and meat products in Ethiopia generate a total of 847,716 USD million. The export averaged 84 USD million from 2014 to 2023, an all-time reached high of 98,456 USD million in 2017 and a low record of 63,401 USD million in 2023. Ethiopia meat and meat products export show increased trends from the year 2015 to 2017 and declined in year of 2018 to 2020. Again show an increase in 2021 and decrease down in 2022 to 2023. The increase shown in the 2021 was not more than the 2017 export. Reflects the meat and meat products export performance in Ethiopia is declining.

- About 134,220 tons (85.21%) gained from Fresh, chilled or frozen **goat meat**, 7,571.48 tons (4.81 %) from chilled and frozen **sheep/lamb meat**,6,857.48 tons (4.35%) from beef, 8,852.59 tons (5.62%) from **edible offal** and 6.10 tons from **camel meat**. The majority of meat production for export was goat meat. Limitation on the other products detected. The contribution of sheep, beef, and edible offal for meat and meat products export was limited than goat meat. Among the meat categories above camel meat got double increases in 2023.

- The Ethiopian meat export major destination during the period were United Arab Emirates (56%), Kingdom of Saudi Arabia (34%), the remaining 10 percent of meat exported to Hong Kong, Vietnam, Qatar, and other countries.The survey conducted in

this research shows that the entire export abattoir's target market was UAE and KSA. Only 25% of the abattoirs export their products to Qatar, in addition to the KSA AndUAE.

- The major internal factors that affect meat export abattoirs performance in Ethiopia were:
 - i. Limited compliance to international standards and market requirement with mean rank of 5.68
 - ii. Lack of capacity for cattle slaughtering facilities with mean rank 4.43
 - iii. Managers' attitude and global knowledge of international market with mean rank of 4.21
 - iv. Constraint in getting qualified and trained workforce affect the Export performance with 4.18 mean rank

Kendall's Coefficient of Concordance (W) was used to measure differences in the ranking of variables and the degree of concordance among the respondents. The result of the study indicated that the major factor affects the meat export performance of the export abettors by binding market access not to enter new export destinations other than the countries traditional markets, and also limits the abettors' competitiveness in the international market in terms of quality and price.

- Major external factors identified were :
 - i. Presence of illegal cross border trade of live animals with mean rank 8.28
 - ii. Non-market oriented livestock production system with mean rank 8.17
 - iii. Access to limited international markets with mean rank 7.99
 - iv. Act of intermediary and involvement in live animal marketing with 7.12

A Kendall's W of standardized test statistics show that there was agreement among respondents and the significant mean difference among mean ranks was identified in the external factors. W for external factors is 0.45 ($W > 0$), which is found strong agreement between respondents for the external factors with a significant level of 0.000.

The result of the research indicated that those above factors affect performance of the meat export abattoirs by creating shortage of quality and quantity of slaughter animals, highly contributed to live animals' price to increase in the domestic market, also caused limitation in accessing huge market and eventually lost substantial market share in the international market.

- Major challenges identified in this research were:
 - i. High purchase price of live animals in the domestic market with mean rank 8.85
 - ii. Shortage of slaughter animals' supply with mean rank 8.58
 - iii. Huge exchange rate difference with mean rank 8.44
 - iv. Seasonality and low quality animals supply with 7.54

The result indicated that higher price of live animal in the domestic market significantly hinders the export abattoirs production cost of meat to increase and also unable to fulfill customers demand. The huge exchange rate difference between the official and black market was a very critical challenge that contributed more in escalating the contraband live animals trade further creates shortage of commercially viable animal supply, slaughter animal price to increase. Eventually hinders the abattoirs operation and made abattoirs to operate under their capacity.

Lack of animals supply may be a critical challenge for the export abattoirs by limits the operation of the abattoirs to operate underutilized capacity. The underutilized production capacity further results a strategic disadvantage that creates opportunities for competitors to capture the market and can weaken sustainability of the meat export business of the country.

- Major opportunities identified were:
 - i. Proximity to Middle Eastern countries with mean rank of 6.20
 - ii. Ethiopian meat is derived from only grass feed livestock (no artificial hormones added) with 5.75 mean rank
 - iii. Growth in demand for meat products in the world with highest meat rank

of 5.66

The result indicates that relative nearest distance to the Middle East considered as comparative advantage that could influence the Middle East market in delivering relatively in less time and relatively with less transportation cost (air freight). In Ethiopia animals from the low land are targeted for export of meat products. The source of feed is grass. This highlights the production of meat from these animals considered as organic. The organic test nature of Ethiopia's meat could be competitive in the international market that could further attract more markets in addition to GCC countries.

5.2 Conclusion of the study

Based on the finding of the study, the following conclusion was given:

The meat export performance in Ethiopia decreased to 9,426 MT in 2023 from 16,485 MT in 2014. An average of a 3% decreased during the period. The majority of meat production for export was goat meat. Limitation on the other products detected. Among the meat categories above camel meat got double increases in 2023. Ethiopian meat export major destination during the period was United Arab Emirates (56%), Kingdom of Saudi Arabia (34%), the remaining 10 percent of meat exported to Hong Kong, Vietnam, Qatar, and other countries. The survey conducted in this research show that the entire export abattoir's target market was UAE and KSA. Only 25% of the abattoirs export their products to Qatar, and Oman in addition to the KSA and UAE.

Limited compliance to international standards and market requirement, Lack of capacity for cattle slaughtering facilities, Managers' attitude and global knowledge of international market and constraint in getting qualified and trained workforce are the major internal factors that affect the export performance of the meat export abattoirs in Ethiopia. Presence of illegal cross border trade of live animals, Non-market oriented livestock production system, Access to limited international markets and Act of intermediary and involvement in live animal marketing were identified as the most pressed external factor that influence the Ethiopian meat export abattoirs performance. As per the finding of the study, the external factor more influences the performance of the meat export abattoirs in Ethiopia.

As per the result found High purchase price of live animals in the domestic market, Shortage of slaughter animals' supply, huge exchange rate difference and Seasonality and low quality animals supply was identified as the major challenges the meat export sector faces with. Proximity to Middle Eastern countries, Ethiopian meat is derived from only grass feed livestock (no artificial hormones added) and Growth in demand for meat products in the world was the top three opportunities identified by the respondents.

5.3 Recommendation of the study

- 1) The researcher suggests government to enforce live animal proclamations that prohibit animals smuggling. The illicit export trade at the border has consequences in creating shortage of animal simply in terms of quality and quantity, the price of meat animals to increase and also causes economic loss for the country. The control of the illicit livestock trade will significantly improve the supply shortage and the price of live animals to increase for meat processing. This can be achieved by Regulation Control at the border and entering agreement with the neighboring countries to follow the legal channel only for importing livestock from Ethiopia.
- 2) The researcher suggests the government to address the major factors identified in the study.
- 3) The researcher assumed that the overall problem of the meat export sector rose from livestock production and marketing system. The livestock production further required to study how much the available livestock are suitable for export. This is because the vast number of livestock in the country not reflects the supply in the market. Thus, it required further study by the government to identify how much of it has potential in terms of productivity and other parameters required by the export markets.
- 4) To mitigate high animals purchase price, researcher suggest fixing price of animals for meat exports. In the presence of shortage of supplies, there would be competition among the export abattoirs. Consequently the animal traders encourage to increasing price of animals. Thus government to fix price of animals may reduce unnecessary competition and the tendency to increase price by the animal traders.

- 5) Government to encourage commercial farming by providing attractive investment incentives to private investors.
- 6) The researcher suggests the government to establish disease free zone and develop diseases control mechanism that could provide longer protection from the diseases.FDM that became a cause for substantial economic loss for the country as well as barrier for penetrating huge export markets.

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APPENDIXES

Annex I

Annex II