Rapid Market Assessment of the Livestock / Meat Value Chain in Ethiopia

SUB-REPORT 1: Cattle / Beef

Commissioned by:

Foundation Sustainable Meat Ethiopia, Netherlands

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Glossary

AI	Artificial Insemination
ETB	Ethiopian Birr
GoE	Government of Ethiopia
LMP	Livestock Master Plan
RMA	Rapid Market Assessment

Work in progress

1. Introduction and methodology

This Rapid Market Assessment (RMA) was commissioned by Stichting Sustainable Meat in the Netherlands and executed by F&S Ethiopia in the months of April and May 2017. Its objective is to provide background information preceding the scoping mission planned by these two organizations in May / June 2017. This document focuses on the cattle / beef value chain, which is part of the larger livestock / meat value chain or sector in Ethiopia. A second report has also been prepared, and focuses on the poultry value chain and the broiler value chain in particular. Other chains within the livestock / meat sector are not taken into detailed account in either of these documents; they include the value chains of sheep, goats, pigs and camels.

Rapid Market Appraisal (the formal term) or Rapid Market Assessment methods are efficient ways of obtaining quick policy relevant information, to provide guidance for development interventions, or, in this case, relevant background information for an investment decision. They can be used to orientate more in-depth, quantitative follow-up studies. RMA studies are designed to generate information that is largely general and qualitative. However, where possible, they include analysis of quantitative information from secondary sources and other rapid appraisal methods. It needs to be kept in mind that they are not comparable to a market survey, which is a distinct method requiring other (more) resources (Holtzman, 1995, Morris, 1995, in Gebremedhin 2009).

2. The livestock / meat value chain in Ethiopia

2.1. Background

The livestock / meat value chain in Ethiopia can be subdivided in various ways. An often-used distinction is between live animals and meat (the latter value chain being technically an extension of the former, and the fodder value chain feeds into the live animal value chain); another is segmentation by market (domestic vs. export). Annex I presents a schematic overview of the livestock / meat value chain in Ethiopia, from USAID (2011) End Market Assessment Report.

Ethiopia is the tenth largest livestock producer in the world. Table 1 presents an overview of the livestock population per Region.

Table 1 Livestock population by LMD region (2010-2011 data)

Regions	cattle	% of total	sheep	% of total	Goats	% of total	camels	% of total
Ethiopia	52,129,017		24,221,384		22,613,105		979,318	
Amhara	13,354,797	26%	8,227,826	34%	5,189,432	23%	55,626	6 %
Oromiya	22,481,530	43%	8,618,970	36%	7,226,944	32%	310,420	32%
SNNP	10,437,409	20%	3,865,819	16%	3,506,210	16%	0	0%
Tigray	3,539,395	7%	1,121,537	5%	2,874,520	13%	35,946	4%

The Government of Ethiopia (GoE), under its Growth and Transformation Plan II (2015-2020) has identified the livestock sector as a priority for the national economic development. Investments in processing, policy making and large programs supported by donors such as AGP-LMD (Agricultural Growth – Local Market Development) funded by USAID and related to its Feed the Future (FTF) program are all contributing to the development of the sector.

Ethiopia being relatively under-developed, much of the sector is informal and the chain actors, especially at lower levels, are often uneducated and have limited access to resources. Also, pastoralists are among the people with the most vulnerable livelihoods, especially in drought-prone areas of Ethiopia such as Somali and Afar Regions. Much work on the livestock sector, by the GoE and international donors, is focused on drought relief and development of the pastoralist sector in these regions.

2.2 Chain functions

The major chain functions in the Ethiopian livestock and meat value chains are producers, collectors, fatteners, live animal exporters, export abattoirs, domestic butcheries, hotels, restaurants, supermarkets and other service providers

Producers

In Ethiopia, the main livestock producers are the highland livestock producers (non pastoralist), and low land livestock producers (pastoralist). Although the majority of Ethiopia's livestock is found in the Highlands, 95 % of livestock is supplied for export is supplied by the pastoral and agro-pastoral areas of Afar, Somali and Borena. Producers rear cattle, shoats, camels and poultry. They are often located in rural areas where access to market and infrastructure is insufficient. Market and pricing information is difficult and often impossible to come by. Hence, these producers receive low pricing or profit margins from their live animals.

Collectors

This level in the chain includes small traders, large traders, brokers and livestock marketing cooperatives. Traders purchase animals on sight basis, without the use of any scales. **Brokers** are the major actors in many livestock markets in Ethiopia, acting as intermediary price negotiators between buyers and seller and keeping a commission from the scale of the animal. Small traders, large traders and cooperatives supply the purchased animal to feedlots, export abattoirs, local butcheries and **live animal exporters** in secondary markets.

These important market agents collect animals, usually from remote locations and gather animals to the producer areas where watering points are found. They are mostly independent operators who use their local knowledge and social relationships, family, clan and friends to collect animals. In return, they become an important source for big and small-scale traders and livestock trading cooperatives, which lack the local knowledge and relationships. They are usually constrained by their financial capacity that limits their operations and keeps them within a narrow geographic range. The collectors are not always good sources of market information, however, and they may take advantage of a producer's limited knowledge of markets. This can lead to distortional pricing, almost always benefiting the collector (AGP-LMD date XX).

Feedlots/fatteners

These operations include small-scale private feedlots and those that operate large facilities aimed at animal exporting. Some operate according to generally accepted SPS (Sanitary and Phytosanitary) requirements and rules and regulations of animal quarantine, while others, particularly the smaller ones, do not. Feedlots generally purchase livestock either from their own agents or from traders, cooperatives.

Feedlots generally purchase cattle; both young and older animals, fattening young animals primarily for sale to export abattoirs and older animals (more than five years old) for the

domestic market. Most of the cattle that come through feedlots are the Borena breed from the lowlands yet other breeds are also serviced in the feedlots[1].

Feedlots are primarily located in and around urban areas. Feedlot operators face a number of challenges, including policy-related issues that greatly affect the industry. There is not enough land available for feed production around cities and towns, and infrastructure such as roads, electric power and water are inadequate. A major challenge facing the industry is one of rising costs as feed costs have almost tripled from 2004 to 2011.

In the 2010 "End Market Analysis of Ethiopian Livestock and Meat" the author calculated a net profit for a typical feedlot for the purchase, fattening and sale of a 300 kg bull with a weight gain of 100 kg to be ETB 3,100. Whereas in 2013, the net profit for purchasing, fattening and selling that same 300 kg bull at current feed prices will only be ETB 1,550. The primary reasons for the increased prices are the inflated costs of the inputs due to a number of factors including overall inflation in Ethiopia, increase in global commodity prices and increased demand within Ethiopia.

Traders: There are both animal traders buying on average 100 animals per week and small traders (usually buying on average 15 animals per week) in the market. Large traders, which are few in number, are those who are permanently operating in the live animal and meat value chain business and are known for purchasing large numbers of animals from a variety of sources in order to supply their key buyers (abattoirs and live animal exporters). Usually just one or two big traders will operate in a certain area, dividing the markets among themselves, thereby reducing competition and increasing prices. The larger traders will use their own capital and act as a source of funding to their collectors. Most big traders are indigenous to the area in which they operate.

Smaller traders are large in number relative to big traders. At times, they are the only outlet to markets that many smaller collectors have. Unlike the larger traders, small traders have little working capital which results in their collecting limited numbers of animals on a weekly or even biweekly basis. They often use rented vehicles to transport the animals to abattoirs. Some small traders have relations with the larger traders and will often feed animals into the larger traders' networks; especially for the export market. The small traders lack access to the detailed market information that large traders possess.

Cooperatives

Livestock cooperatives are located throughout the livestock production areas in Ethiopia; however, few exist in highland areas. Most operate in the shoats market because of the low financial requirement of shoats compared with cattle and camel. Livestock trading cooperatives

[1] Previous attempts to introduce the Borena breed in the highlands have not been very successful, even though abattoirs located in the highlands are demanding Borenas.

primarily act as a marketing arm for their members. A number of problems plague livestock cooperatives including dysfunctional organizational setup and management systems, dependence on few buyers, a shortage of working capital, lack of market information inadequate training and conflicts of interest by cooperative directors, many of whom are also livestock traders themselves.

Brokers/Middlemen

An important feature of the livestock marketing system in Ethiopia is the involvement of brokers/middlemen in many segments of the marketing chain. They match buyers and sellers and facilitate transaction, and in some cases they indeed provide a valuable service. Brokers are more active in the lowland areas than in the highland areas because the volume of animals sold in lowland markets is much higher than in the highlands. Figure 1 below shows the typical mark ups obtained by brokers; note that there are 3 different levels of them.

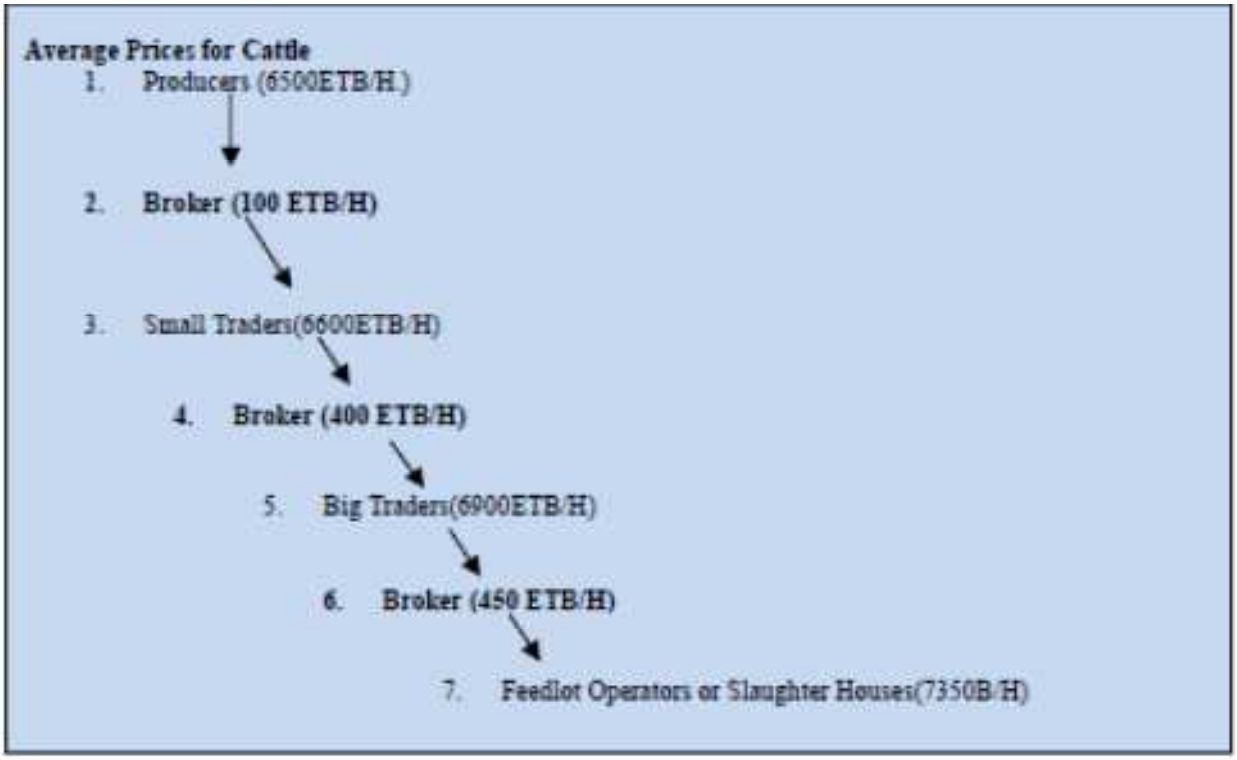

Figure 1 Live Animal Value Chain Mark-up with Broker Involvement. Source: AGP-LMD 2011

Live animal exporters

There are hundreds of legal live animal traders and exporters operating throughout Ethiopia. They are among the most highly paid actors along the value chain, with profit margins ranging between ETB 2000-3000 per head. Animals are supplied mostly by traders or small-scale

fatteners while sometimes animals are purchased directly from producers. The primary export markets for live animals are Egypt, Somalia, Djibouti, Somaliland, Yemen, Saudi Arabia and Sudan, whereas meat is exported to a number of Middle East and African countries, mostly through formal channels, and supplied mostly by small scale fatteners. In most cases importers come to Ethiopia and buy the animals. In recent years the Gulf food fair exhibition was used to get connection with potential importers. Most live animal exports from Ethiopia go through informal channels to Djibouti, Somaliland, Kenya and Sudan and most of these animals are shoats. Many of these animals (almost all lowland sourced) end up in Yemen, often falsely labelled as sourced from Djibouti and or Somaliland. Exported animals from the highland (mostly Amhara and Tigray) almost all end up Sudan for consumption in Sudan or for re-export to Egypt and other countries in the Gulf. Exporters collect animals from secondary markets (from big and small traders, livestock trading cooperatives, collectors and producers).

Importers from Yemen and Djibouti purchase animals for export. They use the export license of Ethiopian exporters who will be paid commission on the number of animals to be exported. They also rent barns at Adama and pass their animals through the quarantine centres there. They collect animals directly from the source markets through brokers and sometimes they purchase animals from feedlots.

Transporting animals from collection sites to feed lots and later transporting to the port of export, i.e. Djibouti is seen as a major problem by exporters. There is no designated vehicle for animal transportation and hence animals are loaded on trucks. Trucks are overloaded increasing the stress as well as causing bruises to the animals, leading to rejection rate of 2 – 5% of such animals upon inspection at the port of export. Animals that enter Djibouti are required to go through a formal quarantine and vaccination process at the Abu Yasir International quarantine facility. Animal exporters complain that this quarantine facility acts like a monopoly; the exporters are required to keep their animals here for 30 days, regardless of any procedures they have previously gone through in Ethiopia. More information on export is found in section 4.2.

Abattoirs / Butchers

Among the existing nine export abattoirs, only 5 are currently functional (see table XX below). All of the existing abattoirs have facilities for sheep and goats, but facilities for cattle are limited and none of the export abattoirs are currently exporting beef (although several are planning to). These abattoirs get their animals supplied by traders or through their agents. When the demand is high and the supplies are limited from their usual sources, some of them buy animals from big traders at their factory gate. Upon arrival animals undergo physical examination and

are rested for two to three days in a holding area. Before slaughtering, they are held for 12 to 24 hours with access to water but not feed. During their stay the animals undergo ante mortem or pre-slaughter examination. Animals that pass the examination are slaughtered using the Halal procedure. Afterward the carcass is chilled at -2 to 2 degrees Celsius for 24 hours. In most cases slaughtering is done when abattoirs receive orders from their customers. The only processing that local abattoirs do is put the carcass in stockinet for shipping.

Depending on demand and availability of freight, carcasses are loaded onto trucks fitted with coolers and transported to the airport. All of the export abattoirs have their own trucks. Upon arrival at the airport, the chilled carcasses are transferred to cold stores and held there until loaded onto the airplane shortly before the flight time.

The export abattoirs all have networks in destination markets through which they sell their product. Mojo Modern Abattoir has a retail outlet in Riyadh and Dubai from which they sell meat directly to consumers as well as do wholesale business in Saudi Arabia and the UAE, respectively. Abattoirs in Ethiopia sell both meat and meat by-products. Contrary to the approach taken by abattoirs elsewhere, the abattoirs in Ethiopia try to sell as much of the by-product as they can because it is by selling the by-product of the animals – hides, skins, blood, intestines, organs, etc. – that they make enough money to break even.

In Ethiopia, some of the by-products are being exported; however, there is an active domestic market for by-products as well. These include rumen gastro intestinal tract (GIT), liver, kidney and lung. Of these products the lung is usually sold as a pet food (dog) and other products are used in some dishes preferred by consumers in the market. Some export abattoirs have recently started exporting by-products like kidneys, brain and intestines.

Two by-product processing plants which are located in Dukem (Turkish company) and Debre Zeit (Chinese Company) process intestines and other GIT products and export to various countries including Vietnam, China, Turkey and the Gulf states. It is notable that the cost of these by-products has increased to 10 ETB per kg, up from just 2 ETB/kg only two years ago.

2.2 The fodder value chain

The types of fodder supplied in the country differ from place to place depending on the type of crops grown as conditioned by the agro-climatic conditions. There are also places where fodder sale is low because of weak market-oriented livestock production.

The high cost and low availability of good quality animal feed from forage and fodder is one of the major constraints to increasing productivity of livestock in dairy farms and feedlots, improved family and specialized poultry, and smallholder mixed crop-livestock and extensive livestock production systems (pastoral or agro-pastoral).

Underfeeding and malnutrition limit the ability of an animal to reach its genetic potential, measured through such indicators as birth weight and growth rate, milk production, mortality rate, and reproductive performance. Along with genetic and health interventions, supplemental feeding interventions are required to realize the full genetic potential and productivity increases possible from synchronization and Artificial Insemination (AI) in crossbred cows, as well as in improved poultry breeds.

The national feed resources potential includes natural pasture (fodder, forage), cultivated forage, concentrates, blood meal, bone meal, crop residues, stubble grazing, brewery and winery by-products, oilseed by-products, molasses, sugarcane tops, other feed resources, such as foliage and pods, maize or sorghum thinning, cactus pear, etc. Table 2 gives more details.

Table 2 Available feed types and constraints in three mixed crop-livestock production areas

Districts	Major Feed	Major Constraints
Sinana district (Bale), Oromia region, southeastern Ethiopia	Crop residues (cereal straws of wheat, barley, and emmer wheat, and legume residues of fava bean and field pea)	Lack of knowledge in crop residue management and feeding
	Natural Pasture	Lack of forage seed and poor extension services
	Cultivated fodder crops (maize and fodder oats)	Grazing land scarcity and low nutritional value of available feeds specially during dry season
	Stubble grazing or aftermath	High price of concentrates and inadequate clean water
	Weeds during rainy season	Cash shortage
	Linseed cake and wheat brans	Inadequate clean water
Dandi district, Oromia region, central Ethiopia	Natural pasture	Land scarcity and lack of awareness about how to grow improved forage crops
	Crop residues (straw of teff, wheat; maize stover) Conserved hay Stubble grazing or aftermath	Wet season feed shortage caused by water logging of grazing pasture and intensive cropping
	Non-conventional feeds (brewers grains)	

Source: Feed the Future Innovation Lab for Livestock Systems Ethiopia. ASF Production and Marketing Brief. USAID UF/IFAS University of Florida

2.2.1 Fodder supply

Teff straw is marketed in most regions. In the areas where teff straw is not supplied, it is primarily because teff is not grown. In the Bishoftu, Mojo and Adama areas, the amount of teff straw supplied decreased since farmers shifted from teff production to wheat production. Teff straw is sold in different units, including sacks, heaps and bales. There are two common types of teff straw sales arrangements in the rural areas around Adama and Bishoftu: bales or heaps. If sale is made at farm gate based on bales, the buyer will bale the straw heap and the producer is paid for the number of bales. Teff straw sale is also effected in donkey loads, usually when sold directly to users. Retailers usually buy heaps of straw at farm gates in the rural areas or donkey loads from farmers in the open market for retail in the same markets.

Barley/wheat straws are supplied mostly mixed. Generally, barley/wheat mix straw is preferred to pure wheat or pure barley straw. Pure barley or wheat straws, or barley/wheat mixed straws are sold in sacks, heaps or bales.

Sorghum stover of both the sweet and non-sweet varieties is supplied. For example, four sorghum varieties, locally known as Wedi Aker, Meko, Yeju and Zole, are grown in Metema area. However, only the stovers of the first three varieties are used as feed. The Wedi Aker variety is the most preferred as feed. Selling stover used to be considered taboo in some areas. For example, in Mieso area selling sorghum stover was considered as taboo until recently. Rather, farmers would prefer to give the stover as gift to those in need to feed their animals, which still is a common practice. If stover is sold to neighbours or relatives, sales price is usually lower than market price. In Alamata area, it was reported that stover sale started only about 10 years ago, mainly due to the increasing feed shortage due to drought and distribution of grazing lands to the landless youth.

Maize stover is sold mostly green; sale of dry maize stover is limited. In some areas, such as in the surroundings of Adama, maize production for green corn is common during the rainy season. Irrigated private and government farms also supply green maize stover. In some areas, green maize stover is sold *in situ* to traders who retail it in towns.

Commercial hay production is practiced in Sululta and Sendafa in the surroundings of Addis Ababa, and Tseda village in the surroundings of Gondar town. Farmers in these areas allocate their land for hay production because it becomes waterlogged during the wet season or it is more profitable to produce hay. The sell of hay generates good income to the farmers in these areas. Hay is also produced in public, community and religious compounds. Farmers in Sululta area are important suppliers of hay to Addis Ababa and the export market. About 17 producer associations produce hay in Sululta area and an estimated 1 million bales of hay are produced yearly. An average farmer in Sululta area supplies up to 100 to 200 bales of hay per year, equivalent to about 1 hectare. However, due to the expansion of the flower subsector and

urban development, hay production areas are declining. Hay is sold *in situ*, in human load, donkey load, heaps or bales.

Green grass supply comes from community and government institution compounds, grazing lands, road sides, irrigation lands, orchard farms, area enclosures, lake sides, swampy areas, cultivated plot sides and commercial grass production areas. Green grass is classified based on type and where it is harvested.

2.2.2 Fodder demand

The demand for fodder is increasing in Ethiopia because of the increase in market-oriented livestock production activity. In areas where dairy is important, there is a year round demand for fodder. However, demand for fodder for fattening is seasonal.

In general, the demand for straw, stover and hay exceeds the available supply at given prices. The demand for hay in Ethiopia is higher than for other straw and stover types. In some areas such as Bishoftu, the demand for straw has shown a significant increase due to the expansion of dairy farming. In Metema area, sales volume of sorghum stover has increased considerably due to the expansion of livestock export.

In Sululta area, hay export to Djibouti and the Middle East as feed for the exported animals is an important reason for the increase in price. Similarly, in Alaba, as reported by the farmers, the supply of hay to the open market is declining from year to year due to expansion of cropland into grazing areas. In Gondar area, demand for hay is increasing, possibly because of the increasing live animal export trade to Sudan. In Debre Tabor area, the demand for hay is very high due to the increase in market oriented dairy farms.

2.2.3 Chain actors and market systems

The major actors in the fodder marketing system are seed multipliers, forage seed traders, commercial and subsistence fodder producers, wholesalers, retailers, cooperatives, feedlot operators, small-scale fatteners, pastoralists, agro pastoralists, urban and peri-urban dairy producers, Different governmental (research centers and public seed enterprises) and non-governmental organizations are also performing support functions in the fodder market system. Two types of market systems can be distinguished: commercial fodder production and marketing and the subsistence production mainly limited to local seed multiplication and fodder production for filing the gap during drought to feed dairy cows and calves. Annex II and III depict the two distinct market systems with the volume and price at different stages.

The commercial system is driven by business actors involved solely in producing fodder for commercial or to supply to markets. The subsistence system is NGO/GoE driven and the purpose of fodder production is either for seed multiplication of fodder and/or to produce fodder for subsistence use. In the subsistence market system agro pastoralists get seed free

from NGOs, research centres and pastoralist area livestock development offices to multiply seed. The fodder is used to feed their dairy cows during pasture shortage.

This section is based on Prime (n.d.) and summarizes the key chain actors in the fodder market system Eastern, Southern, Afar cluster, as well as the Central market (Adama, Modjo and around Addis).

Subsistence Producers: These are agro-pastoralists who grow fodder for subsistence use of their dairy cows, camel and calf during drought period in all clusters. This production system is mostly NGO and government driven and participated limited number of agro-pastoralists. Producers multiply seed to sell or exchange to other agro pastoralists and feed their livestock the fodder. Producers sell seed in this system from 150-200 ETB/kg and the total volume of seed produced is estimated to be less than 100 quintal from all three clusters each year.

Commercial Producers: The majority of commercial producers are located around Addis (Sululta, Mulo and Koka) that producers fodder from natural pastureland they owned individually. Each of these produces own above three hectare of land with natural pasture grown on rain fed. Every season these producers only do harvesting and bailing of hey and sell to wholesalers from their areas. The volume produced under this market system is estimated to be 64,000MT and produces sale 1 bale from 12-20 ETB/bail (1 bail weighs on average 16 kg). The price varies based on seasonality and minimum in harvest and maximum in rainy season. In addition there are also by products/straw of teff and wheat supplied to market for commercial livestock feed purpose. These producers are located around Addis and after harvesting of teff and wheat they sale by produced for wholesalers and retailers that sale fodder.

There are agro pastoralists in eastern and southern cluster that produces different variety of fodder (alfalfa, susbania, lucinia, sudan grass and panicum) for the market.

Wholesalers: There are estimated to be more than 30 wholesalers in Sululta, Adama and Modge. These wholesalers predominantly engage in buying bulk fodder and selling it to feed lot operators, regional retailers, NGOs and the GoE. Wholesalers (around 10 in number) located in Sululta areas are also either give a bailing service or make bails after buying the bulk from producers. Each of them has up to five tractors and bailing machines on average. Furthermore wholesalers in Adama and Modjo buy by-products of teff and wheat from producers and supply together with the hay to buyers. The price at this level for hay and by-product ranges from 40-50 ETB/bail and on average each trader supply 3000MT to the market annually.

Brokers: There are few brokers operating around Sululta and Adama to broker sales between wholesalers and retailers in the regions. At this level the price will reach up to 50ETB/bail.

Retailers: There are several retailers in Adama and few in Awash and Methara area that retail fodder by buying from wholesalers in Adama and Sululta. They sell fodder for urban-based livestock keepers, feedlot operators, live animal exporters and very few pastoralists in Afar

areas. The price margin at this stage becomes 60-75ETB/bail based on season. These retailers by up to two ISUZU track every month (800bail/month) each.

Feedlot operators: Feedlot operators around Adama and Modjo purchase fodder from wholesalers and retailers to feed their animal and fatting for export market. Few Feedlot operators like Dina Exporter, buy fodder in bulk together with feed (factors by-products and supplements) to feed their animals and to sale for other small-scale fatting farms around Adama areas.

Buyers/end users: Most of the buyers of fodder are commercial fattener and dairy farms, live animal exporters and urban and per urban livestock keepers. The price of fodder at this level ranges from 75-85ETB depending on the availability of fodder in the market. During drought season NGOs and government agencies are also buyers to distribute the fodder for free to pastoralists. Apart from the NGO/GoE giving out to pastoralists and agro pastoralist, livestock keepers in pastoralist are rarely buy fodder. Instead they rely on natural pasture through mobility throughout the seasons.

Transportation service: Transportation service is a major service required in commercial fodder market system. Big wholesalers provide delivery service using their own and rented trucks. Whenever there is an order from other wholesalers, retailers and feedlot operators they deliver to destination.

Financial service: Most of the traders in commercial fodder market system did not mention financial constraints. The transaction of fodder at all stages is lively and cash flow is fast. Cooperatives that are working closely with regional Seed Enterprise in the Eastern cluster mentioned there is a limitation to finance that have hindered them from expanding their business.

Storage: In commercial fodder market system all of the traders have storage facility. Some of the storage facilities of few wholesalers and most retailers are made from wood and plastic/tin sheet and exposed to rain in winter.

Regulation: In fodder marketing, the critical issue regarding regulation are transporting fodder between regions and oversees. Free fodder mobility from regions is not allowed unless there is a letter from the MoA and fodder export is banned in 2005 by parliament. Only live animal exporters are allowed to take out fodder along with animals to feed until they reach their destinations.

2.3 SWOT analysis of the livestock / meat sector

Tables 3 and 4 present a SWOT analysis of the livestock / meat sector with a focus on meat production and export, and a focus on fodder respectively.

Table 3 SWOT analysis of the meat sector in Ethiopia – focus on meat production and export

Strengths	Weaknesses
• Large livestock population • Potential to increase productivity and off take • Potential for ranching and feedlots • Low prices of live animals (at source) • Low labour cost • Livestock and meat export firms • Plans for DFZ / Export zones / export certification • Export slaughterhouses • Multilateral and bilateral support • Projects on small-scale fattening • Donor projects that focus on the sector • Projects for pastoralist associations • Export promotion policy • Foreign investment policy	• Subsistence production / irregular selling • Land ownership problems • Poor market infrastructure • Poor road transport • Lack of internal market information system • High transaction cost in marketing channel • Illegal border trade • Animal diseases (TAD – OIE list A) • Quality of veterinary services • Lack of chain approach • Obsolete slaughter equipment • Low quality and consumer consciousness • Poor export facilities • Shortage of cooling / freezing facilities at the airport • Reliability of air transport • Strict financial export procedures • Lack of information (products, quality, procedures) on export markets
Opportunities	**Threats**
• High demand in the region (Middle-East and North Africa) • Relatively low sanitary requirements • Potential cooperation with NGO sector • Donor support • Joint ventures with foreign companies that contribute to technology transfer	• Import bans / sanitary regulations in consuming countries • Competition (Australia, NZ, Sudan) • Land locked country so export more complicated and expensive • Natural disasters (drought, famine, conflicts)

Table 4 SWOT analysis of the meat sector in Ethiopia – focus on fodder production

Strengths	Weaknesses
• Availability of land and adaptable and indigenous livestock • Use of crop residues in feeding livestock • Increased availability of credit facilities	• Community challenge the idea of making Seed into fodder, lack trust, lacks confidence and fears market failures • Shortage and availability of fodder seed • Areas for fodder production are far from cities • Lack of technical personnel • Marketing and handling problems • High seed price
Opportunities	**Threats**

• Land availability for fodder production expansion • Suitability for irrigation activity (producing twice a year) • Relatively attractive price for fodder is the opportunity for producers • High market demand due to high Livestock population • Fodder is one of Government priority in pastoralist areas in livestock development • Incentives like tax exemptions, land made available to investors (note: foreign investors face more difficulties here)	• Shortages of fertilizers, seed • Consistent market problem; mismatch between supply and demand

3. Cattle / beef production and slaughtering in Ethiopia

3.1. Production systems

In Ethiopia there are three different types of cattle fattening systems: traditional, by-product based fatting and the so-called Hararghe fattening system. Different features of these production systems are discussed in table 5 below.

Table 5 Cattle fattening systems in Ethiopia

Traditional Production System	By-Product based Production System	Hararghe Production System
Oxen are usually sold after the end of ploughing season when they are in poor body condition. Grass fattening is a technique which is economical in material and human resources, but which generally implies a certain loss of energy by the animals when they move from one place to another to change the pasture. Cattle are kept mainly for draft power, milk and manure production and are usually only sold when they are too old for these purposes, or drought or cash shortages force people to sell. Cattle in the lowlands are rarely fattened and are often sold in poor body condition and at low prices. In the lowland, where pastoralists do not use cattle for draft and sometimes fattened on natural pasture in good seasons, however much body weight is lost during long distance trekking to Addis Ababa and the animals may reach market in little better condition than culled high land stock. Meat yields obtained from this type of oxen are low, the beef is of poor quality.	Young oxen are collected from the pastoral areas and kept in feedlots. This is a type of fattening practice in urban and peri-urban area in which agro-industrial by-products such as molasses, cereal milling by-product and oilseed cake are the main sources of feed for fattening. In this system grazing land is completely unavailable and crop-residues are the only significant roughage source for beef cattle. A commercial feedlot is a confined yard area with watering and feeding facilities and often mechanically fed. The number of heads that can fatten per cycle is variable across the farms depending on their capacity. Commercial feedlots finish a relatively large number of animals at shorter time than small scale fattening. Commercial farms handle 100 - 500 heads on average and the larger ones 1000 - 1500 heads per cycle. The meat yield obtained from this system is higher compared to others and the quality is good.	Young oxen from adjacent lowlands pastoral areas, are used for several years, and then fattened and sold before they become old and emaciated. This system is largely based on cut-and-carry (zero grazing) feeding of individually tethered animals in which free grazing is rare. The major reason tethered feeding is practiced in the area is small land holding. The predominant animal feed in dry season is stover and crop residues followed by natural grazing. Cut and carry system was practiced for feeding of the grass, residue, stover and/or weeds. The meat yield from this system is very high and the quality is also very good.

Fattening activity in the Amhara Region differs substantially from the above-mentioned enterprises. Here, smallholder farmers commonly fatten mature and therefore much older

animals (5 to 7 years old) for short durations (usually three months). Ordinarily, farmers fatten their draught oxen so that they can fetch better price when brought to market. Some farmers purchase oxen specifically to fatten and sell them so as to get higher price per weight margins on each fattened animal. In such cases, animals are purchased based on their large skeletal frames and body conformation. In any case, whether purchased or own animals are used for fattening purposes, they have already reached their full skeletal size.

All commercial feedlots depend on purchased feed sources for fattening because of the shortage of land for feed production. Native grass hay is purchased from Sululta, and straws from Welenchiti. Agro-industrial by products are also bought from the factories in and around East Shewa. Almost all commercial farms are found around this areas and this gives them easy access to agro-industrial by-products, which form a major portion of the concentrate mix fed to feeder livestock. Agro-industrial by-products widely used as source of livestock feed include those resulting from flourmills, oil processing factories, and sugar factories.

3.2 Slaughtering facilities in Ethiopia

Table 6 provides details on the major domestic abbatoirs in Ethiopia.

Table 6 Major Domestic Abattoirs in Ethiopia

No	Name of Domestic Slaughter House	Average Slaughtering Capacity		Total	Remark
		Cattle	Shoat		
1	Addis Ababa Abattoirs Enterprise	260,212	177,781	437,993	Central Addis Ababa City Abattoir
2	Burayu Abattoir	13,000	101,000	114,000	
3	Karallo Abattoir	30,000	10,000	40,000	
4	Legedadi Abattoir	36,000	18,000	54,000	
5	Sebeta Municipality Abattoir	12,600	---	12,600	Informal slaughter for shoat (no health checks)
6	Sululeta Municipality Abattoir	34,000	---	34,000	Idem
7	Adama Municipality Abattoir	31,000	300	31,300	Idem
8	Bishoftu Municipality Abattoir	3,360	---	3360	Shares location with Zelalem Moges
9	Zelalem Moges Private Abattoir	600	6000	6600	
10	Hawassa Municipality Abattoir	20,000	---	20,000	Informal for shoat
11	Modjio Municipality Abattoir	10,800	---	10,800	Idem
12	Methara Municipality Abattoir	8,974	---	8,974	Idem
13	Dilla Municipality Abattoir	16,800	---	16,800	Idem
14	Welayita Sodo Municipality Abattoir	6,720	---	6,720	Idem
15	Bahir Dar Municipality Abattoir	4,368	---	4,368	Idem
16	Debre Markos Municipality Abattoir	3,784	---	3,784	Idem
17	Gondar Municipality Abattoir	7,392	---	7,392	Idem
18	Debre Birhan Municipality Abattoir	7,728	4704	12,432	Idem
19	Woldiya Municipality Abattoir	5,678	----	5,678	Idem
20	Mekelle Municipality Abattoir	9,300	---	9,300	Idem

21	Jimma Municipality Abattoir	14,400	---	14,400	Idem
22	Shashemene Municipality Abattoir	9,720	---	9,720	Idem
23	Nekemet Municipality Abattoir	7,470	---	7,470	Idem
24	Dire dawa Municipality Abattoir				Newly constructed
25	Harer Municipality Abattoir	35,280	---	35,280	Informal for shoat

As can be seen in the table, most of these abattoirs are municipal and this formally controlled by the local authorities. This does however not prevent them from practicing informal slaughter, especially shoats, which are not subject to formal health checks and also in most cases not reported. Table 7 provides an overview of export slaughter houses.

Table 7 Export Slaughter Houses in Ethiopia and their Slaughtering Capacity

No	Name	Installed capacity/year (MT)	Attained capacity 2016
1	Luna Export Slaughter	5,230 mutton and goat	4896.86
2	Modjo Modern Export Abattoir	5,230 mutton and goat	5,422.53
3	Helimex Export Slaughter	6,000 mutton and goat / 7,200 beef	1196.49
4	Organic Export Slaughter	4,500 mutton and goat	2614.71
5	Elfora Metehara Export Slaughter	2,112 mutton and goat	Not operational
6	Elfora Debrezeit Export Slaughter	4,608 mutton and goat	582.59
7	Abyssinia Modern Export Slaughter	5,148 mutton and goat / 6,578 beef	362.82
8	Halal Food Industries	4,500 mutton and goat	1,120.45
9	Oxcur Ethiopia Xezing	6,000 mutton and goat / 6,000 beef	1,255.58
10	Abergele International Animal Resource Development Plc.	2,850 mutton and goat / 9,072 beef	150
11	Ashref Export Slaughter and Meat processing	5,378 mutton and goat / 13,219 beef	Not operational
12	Alana	12,857 mutton and goat / 7,200 beef	Under construction
13	Jigjiga Livestock	4,608 mutton and goat / 5,760 beef	-
14	Alnujum Export Abattoir	4,500 mutton and goat	42

It needs to be noted that in general export companies, whether they have their own abattoir or not, cannot serve the national market. Their investment license stipulates that they have to export everything they produce. This can only in limited cases be circumnavigated; the GoE's interest in promoting these investments is not to better serve the local market with quality meat but to obtain the maximum amount of hard currency.

Another thing that needs to be noted is that new initiatives are constantly arising. Two recent initiatives in which Dutch investors are involved are Verde Beef and Holland Meat. The former is a large operation, involving an integrated feedlot operation that is capable of exporting 130.000 carcasses per year. See www.verdebeef.com for more information. The latter is an initiative from Holland Dairy, an established company now expanding into processed meat, co-funded by Incluvest. Its holding company is established in the Netherlands. F&S is looking for more information on this company.

4. Cattle / beef consumption in Ethiopia: a brief market analysis

4.1 Consumption

According to FAOSTAT (2013), total meat produced in 2012 reached 659,305 metric tons (MT), indicating a compounded annual growth rate of 2.3 % between 2000 and 2012. The domestic demand for meat in Ethiopia is growing as a result of increased purchasing power. Domestic meat consumption is estimated at approximately 9 kg per capita per year, of which approximately 4.3 kg is beef. For cattle the domestic market consumes primarily highland cattle, while the export market consumes lowland cattle. The exception is young Boran bulls, which are prized by all markets, domestic and international. Some of the reasons for this low consumption include:

- Low per capita incomes with 29% of the population still leaving below USD 2.00 a day
- High domestic meat prices (recently between USD 8.00 - 12.00/kg) depending on quality and outlet
- 43% of the population (Orthodox Christians) does not consume meat products for over 200 days per year in fasting
- Non-commercial oriented animal husbandry practices limit the supply of animals for meat processing
- Other cultural variables especially that of consideration of ownership of many cattle as a status symbol among the pastoralist community

The 2011 import value for all types of meat was USD 201,000. This is the amount that 'high end' consumers spent on imported, processed meat. Large institutions including International hotels, embassies, governmental and nongovernmental organizations are importing beef rather than using consuming Ethiopian beef due to quality standard issues. The quality of Ethiopian meat produced is not meeting the international standard required by the customers of the organizations, or cannot be proven to do so.

On the production side, Ethiopia has the tenth largest livestock population in the world, and although it is growing the production of meat is still very low and in 2011 contributed only about 0.2% of the world total meat production, and most is sheep and goat meat. This ranks Ethiopia the 55th largest meat producing country in the world. The reasons behind the low rate of meat processing in Ethiopia are multiple including:

- Low off-take rates owing to low domestic consumption of meat
- Large numbers of live animals that by-pass abattoirs and are exported on foot, and thus are not recorded

- Low supply of animals owing to lack of commercial orientation of animal producers as a result of which they sell only in need of cash or when draught animals get too old
- Limited capacity of meat processors in meeting international market requirements and limitations in fulfilling international industry standards.

The limited domestic market contributes to the low capacity utilization of abattoirs. It has to be noted that the consumption in Addis Ababa is higher compared to the regions, although in major cities meat consumption is also relatively high. The total consumption shows a positive trend owing to increasing income and population, as is shown in Table 8 below.

Table 8 Meat consumption trends in Ethiopia by type in metric tons

Meat Type	2000	2002	2004	2006	2008	2010	2012
Beef	294.000	352.500	336.000	374.000	380.000	420.000	338.150
Sheep meat	36.000	47.720	60.409	79.000	81.500	86.000	86.000
Goat meat	25.560	32.725	44.180	55.000	64.600	66.300	68.000
Pig meat	1.440	1.495	1.615	1.665	1.665	1.780	1.875
Chicken meat	37.600	54.064	47.096	45.200	48.589	59.200	60.480
Camel meat	11.050	13.430	13.940	12.750	28.900	31.450	19.800
Total	461.297	571.276	578.240	646.615	688.254	749.430	659.305

Source: FAOSTAT 2013

It needs to be noted that the cultural practices of Orthodox Christians (2 fasting days per week as well as 2 long fasting period per year) has a significant impact on the meat market and consumption. It is estimated that more than 75% of the butchers stay closed in the fasting season and the meat consumption reduces up to 70%. Another particularity of Ethiopia is that very few people buy meat in supermarkets (although this group is reported to be growing). This is probably mostly the returned diaspora, foreigners and rich Ethiopians. The vast majority buy their meat straight from the butcher, and like to indicate what part they want. A final issue that is worth considering is that much meat is consumed raw, both in the dish called *kitfo* which would be comparable to steak tartare, but also raw meat straight of the bone is much consumed and preferred.

4.2 Meat retail networks in Ethiopia

The number of butchers that use slaughtering services from the Addis Ababa Abattoir in Kera (the central Abattoir in the City) and that supply meat to the people in the city of Addis Ababa is estimated to be around 3100. Typically, the butchers buy the oxen and transport them to the slaughterhouse. The animals are inspected by the veterinarians in the abattoir and slaughtered if they are found to be healthy and the meat obtained from these animals is fit for consumption. The abattoir distributes the meat to the butchers in the city by its own cold trucks. The butchers subsequently retail this meat to the customers in the city. The abattoir also

provides a slaughtering service for the hotels in the city and other interested individuals to get the service.

There is another route that butchers around Kara-Kore, Burayu and Kara areas of the city use. This more informal business involves the (informal) slaughtering of low-grade animals by the surrounding small slaughterhouses and supplying the meat directly to the consumer at a lower price. These butchers are estimated to be 45 only, implying that the vast majority is using Addis Ababa Abattoir's services. It should be kept in mind that large amounts of meat are distributed in Addis Ababa from other private abattoirs and back yard slaughtered animals, on which there is no reliable data available. Table 9 presents details on the meat supply of Addis Abeba Abattoir.

Table 9 Meat supplied in Addis Ababa City by the Addis Ababa Abattoir in 2016

No	Types of Animals	Number of Animals slaughtered	Meat supplied in tones	Estimated value in USD, 1kg @ 8 USD (end consumer level)
1	Oxen	217.495	21.750	174.000.000
2	Bulls	411	27	219.200
3	Infant Bulls	3.122	156	1.248.000
4	Sheep	122.563	1.230	9.840.000
6	Goat	35.049	500	4.000.000
7	Swine	604	12	96.000
	Total	379.244	23.675	189.403.200

Source: Interview Addis Ababa Abattoirs

Table 10 presents the estimates on number of butchers, super market outlets and hotels using the services of the respective municipal abattoirs in main cities.

Table 10 Estimated number of butchers, super market outlets and hotels in large cities using municipal Abattoirs

No	Customers	Addis Ababa	Bahirdar	Adama	Hawassa	Diredawa	Mekele	Jimma
1	Butchers	3000	150	150	150	150	150	140
2	Super Market Outlets	20	5	3	5	5	3	2
3	Hotels, Bars, Restaurants	145	50	50	50	50	50	40

Source: Estimates of RMA Consultant and meat specialist Mr. Samson Adefris

4.3 Meat export

Section 2 mentioned the main export markets for live animals from Ethiopia. Much of Ethiopia's livestock is exported as live animals. This is related to the preference of Middle Eastern / Arab

consumers who like fresh meat, but it is also related to weak performance of Ethiopia's meat processing industry. Ethiopian export performance showed a decline from year 2011/12 to 2013/14 from USD 78.8 million to USD 74.6 million whereas the export unit price for the same period increased from USD 4.5 to 5.00 per kg. Table 11 lists the number of live animals exported through formal channels.

Table 11. Ethiopian Live Animal Exports through Formal Channels (thousand head)

Live Animals	2006-2007	2008-2009	2010-2011
Cattle	156	84	217
Camels	19	25	61
Sheep	33	97	165
Goats	11	5	28
Others	12	2	2
Total	233	214	472

Besides the formal channels, there is a lively informal trade in which animals are driven across the border and traded, bypassing formal procedures and regulations with regard to quarantine, and importantly, administration. The numbers in table 12 are therefore estimates.

Table 12 - Estimates of Informal Livestock Export

Source of Data	Reference period	Cattle	Shoats	Camels
Concerned Ministries 1983	1981-1982	225,450	758,200	n/a
Min. of Foreign Trade 1987	1985-1986	260,000	1,200,000	n/a
FAO 1993	1987-1988	150,000	300,000	n/a
World Bank 1987	1987	225,000	750,000	100,000
MEDaC 1988	1998	260,000	1,200,000	n/a
Belachew & Jemberu 2002	2001	325,000	1,150,000	16,000
Author's research 2013	2010-2011	575,000	1,150,000	126,500

Source: AGP-LMD 2011

The USAID (2011) end market analysis for livestock and meat lists a number of factors that constrain Ethiopia's competitiveness. These are mentioned below together with efforts undertaken to mitigate them:

1. Unreliability of supply and low quality of meat (due to supply / purchasing systems and abattoir / export operations). Increased vertical integration is recommended to address these issues. This is increasingly seen in large (foreign owned) operations such as Verde Beef.
2. Low quality is partially due to lack of infrastructure; the recommended improvements in e.g. cold infrastructure (Bole Airport) and the enforcement of proper animal and meat handling practices have since been addressed. It remains a topic for further research to what extent these improvements have been affective and satisfactory.
3. Infrastructure also included investments in refrigerated trucks and wagons for cold / frozen transport overland to Djibouti Port.
4. Ethiopian competitiveness is also subject to issues such as marketing and promotion, flexibility with payment terms and export incentives. These have also been partially addressed by the enabling environment (see section 7) however continuous improvement is needed.
5. Accessing higher end markets (boxed cuts, boneless beef and mutton) is still a weak segment as this requires technological upgrading and investments which have been limited so far.

5. Brief overview of supporting actors, projects and programs

Ministry of Livestock and Fisheries (MoLF)

Previously, the livestock sector including the poultry was under the ministry of Agriculture as a separate directorate. Due to recent increased attention given to the sector, its own separate ministry has been organized by the GoE at the beginning of the second Growth and Transformation Plan (GTP) which will run from 2015-2020. The Ministry is guiding all the activities in the livestock sector undertaken in the country. The ministry promotes private sector engagement, provides services like extension service for livestock producers and pastoralists, veterinary services, provides financial support for the extension system and supports the regions with training and other capacity-strengthening activities. It is also responsible for emergency response activities in the livestock sector in the pastoralist areas when drought occurs.

Livestock and Fishery Marketing Department (LFMD)

This is a relatively new organization; up to 2005 it was called the Livestock Marketing Authority (LMA) within the Ministry of Trade. The LMA was set up in 1998 with the objective of promoting domestic and export markets by initiating policies, laws and regulations, issuing quality control directives on exportable and importable materials, encouraging and establishing staging points and quarantine stations for domestic and export trade, promoting the organization of livestock markets, abattoirs, skins and hides shed, encourage the condition of research on the marketing of animal and animal by-products. The relations between LMA (under the Ministry of Trade) and the Veterinary Department of the Federal Ministry of Agriculture and Rural Development (MoARD) were not very easy due to overlapping roles (in the areas of quality control and licensing), specific problem areas are there on: issue of health certificates, design of slaughterhouses, payment modalities for meat inspectors. This new situation after the establishment of LFMD has probably led to an improved cooperation between marketing and the veterinary services. But no actual information is readily available on the functions and performance of the LFMD and its relation with the veterinary services.

Live Animals and Meat Exporters' Association of Ethiopia (LAMEA):

The objectives of the association include the provision of trade information (rules and regulations of importing countries, directory of importers, market trends and prices) to its members, facilitation of the trade environment (lobbying, pressure group), provision of a forum for its members and organizing and participating in trade promotion exhibitions in the country and abroad. So far, the association has acted as a bridge between members and relevant government institutions, either through representation or distributing relevant information, it is

a forum to discuss critical issues as import bans, customs procedures. Activities of the association have been reduced after the import bans and it is not clear how active the association is at the moment and which role it plays.

Ethiopian Meat and Dairy Industry Development Institute (EMDIDI)

This Institute was established in 2008 with a particular focus to support the Meat and Dairy Processing sector by the government of Ethiopia. Previously, the Institute was under the ministry of Agriculture supporting activities like livestock production and marketing. Currently, It has been transferred to the Ministry of Industry to support the meat processing and export sector with a special focus including the poultry meat processing. It provides services like consultancy, training and facilitation services for export abattoirs.

The TVET system (Technical and Vocational Training and Education)

All the regions have two or more Agricultural Technical and Vocational Education and (ATVET) colleges, all of which include animal production in their program. The ATVET colleges also offer short course for farmers, extension officers and government extension workers. Farmers are selected by the Developments Assistants (DA): extension workers of the government at Woreda level.

Agricultural Transformation Agency (ATA)

The Ethiopian Agriculture Transformation Agency (ATA) is an initiative of the Government of Ethiopia, established in 2011. The primary aim of the Agency is to promote agricultural sector transformation by supporting existing structures of government, private-sector and other non-governmental partners to address systemic bottlenecks in the system to deliver on a priority national agenda to achieve growth and food security.

AGP-LMD

The Agricultural Growth Program-Livestock Market Development (AGP-LMD) is a five-year project funded by the U.S. Government's Feed the Future (FTF) Initiative as part of the United States Agency for International Development's (USAID) contribution to the Government of Ethiopia's Agricultural Growth Program (AGP). The AGP's goal "to end poverty and enhance growth" aligns with FTF's goal to "sustainably reduce poverty and hunger." AGP- LMD follows a holistic value chain development approach and is developing the capacity of value chain businesses. Its operations take place in highly-productive highland woredas of Ethiopia that have the largest livestock populations with large number of smallholder producers.

ILRI

ILRI is a CGIAR Research Center focusing on livestock. In Ethiopia it has contributed several programs to livestock sector development. These include contributing to the Ethiopian

Livestock Master Plan (LMP), which in turns is set to contribute to achieving GTP II's goals. Since 2014, the Livestock Resources Development Sector (or Livestock State Ministry) of the Ethiopian MoA and ILRI have been collaborating to develop a livestock master plan (LMP) to provide guidance to the government of Ethiopia on future priorities for livestock research and development activities. The LMP project development process was funded by the Bill & Melinda Gates Foundation (BMGF). Beyond the plan itself, the project aims to build the capacity of the government to carry out data-driven, fact-based analytics and planning. The LMP was developed by a joint team from ILRI and the MoA. Development was overseen by a high-level technical advisory committee (TAC) comprising directors of key MoA Livestock State Ministry departments and institutes, as well as representatives from the Food and Agriculture Organization of the United Nations (FAO), the Intergovernmental Authority on Development (IGAD), the Ethiopian Agricultural Transformation Agency (ATA) and the presidents of the relevant professional associations of livestock experts (the Ethiopian Society of Animal Production and the Ethiopian Veterinary Association). (ILRI, 2015).

Other supporting actors

There are several smaller programs of (international) NGOs that focus on the livestock sector either directly or indirectly. SNV is very involved in the dairy sector with 2 large projects. Ethiopia Netherlands Trade for Agricultural Growth (ENTAG) promotes a chicken platform (more on this in the second sub report on poultry).

6. Brief overview of the Enabling Environment

One of the major economic objectives of the Government of Ethiopia is pursuing a policy of maximizing revenue of live animal and meat exports. The government has set a policy that encourages meat processors and exporters to maximize the benefit that the country gets from its large livestock number. Various kinds of supports are provided by the government for these investors interested to invest in the sector. Some of the supports provided are:

- Loan service from the development bank of Ethiopia which exceeds up to 70% of the total investment needed.
- Land provision for feasible and export oriented projects in areas which are identified to be a potential area for meat processing sector.
- Large numbers of Industrial parks are built and many of them are still under construction throughout the country of which the main component is Agro processing including meat processing.
- There is a value addition encouraging policy in the country up on Agricultural products which are aimed to maximize the benefit from the sector.
- Large number of meat is imported every year by various governmental and non-governmental organizations losing ample number of foreign currency. So that, companies interested to be involved in import substitution activities are highly encouraged.

To meet the predetermined goals, the government of Ethiopia has established various Institutions of which their primary mission is to support the livestock sector. Some of these governmental organizations are discussed in section 5 above with their main activities. It should be noted that this focus on export also means that obtaining a licence for supplying the domestic market is more difficult.

The enabling environment for the livestock sector has much improved in recent years, although much also remains to be done. The following factors are included in the Ethiopia Agro- Industry Strategy - Meat Industry subsector Strategic Plan (2015-2025):

1. Policy and institutional support

- Presence of a strong government support for agro processing sector.
- Strong commitment government of delivering investment land.

2. Improved investment conditions

- Establishment of industrial zone corridors
- Good investment attractive policy through various incentive linkages (duty free of imports of capital goods, tax holiday up to 5 years, exemption from export duties, keep 10 % of foreign currency earning in private account etc.)

- Rising of investment demand by foreigners on the sector.

3. Infrastructure support

- Expansion and availability of infrastructure like road, network, dependable power, water supply, telecom etc.

4. Industry diversification

- Expansion of modern feedlot operation
- Expansion strengthening of feed by products (offal) processing

5. Financial support

- Facilitating the financial support through financial institutions

Regulations for export

A requirement of the National Bank is that all legal exports are conducted through a Letter of Credit. This is difficult especially in the export market for live animals where limited cash advances and further cash on delivery are common systems of payment. Recently this regulation has changed, a Letter of Credit is no longer required for export of live animals, the exporters can now make a deposit with the bank related to the value of the animals to be exported, and this deposit is released after the animals have been paid.

Regulations related to foreign investments

In 2003 the government promulgated new regulations to stimulate foreign investment. The changes include a reduction of the minimum amount to be invested by foreign firms; this was reduced from US $ 500,000 to US $ 200,000 (150.000 if invested in an Ethiopian (co-owned) company). In 2003 the government has developed a package of incentives under Regulation No 84/2003 for investors engaged in new enterprises and expansions.

Some of the major incentives are:

- Duty and tax-free imports of investment capital goods and construction materials including spare parts (up to 15 % of the imported capital goods)
- Custom duty and tax-free importation of raw material for production of goods destined for export
- Income tax exemption for 2 – 8 years (depending on area of investment, export volume and location of investment)
- Loss carry forward for losses made during tax holiday
- Remittance of funds, investment guarantee and protection and availing of land at reasonable lease prices.

Recently, there have been upheavals in the Ethiopian Investment Climate due to the unstable political situation, and disputes over land taken by foreign investors. Although the GoE has tried its best to reimburse some of the affected companies, investor trust has been damaged.

7. Conclusions

The Ethiopian livestock sector can be considered an interesting investment opportunity given the relatively low but growing domestic consumption, the availability of resources such as large amounts of live animals, professional feedlots and increasingly professional slaughter businesses (although still far below international standards), as well as the strong Government support for sector development, especially focusing on processing industry development.

In practice however there are also significant constraints, which are systemic issues with complex solutions that require harmonized efforts of private, public and NGO actors. They can be categorized as follows:

1. Fragmented supply chains with much involvement of brokers, making chain functioning sub-optimal
2. Lack of business orientation of many smallholders, pastoralists and cooperatives, which in turn is due to their constraints in terms of resources such as access to land, finance, market information, extension services including veterinary services etc.
3. The fodder market is characterized by inadequate linking of supply and demand, leading to feed shortages / expensive feed
4. High market share of informal slaughter business, including in municipal abattoirs, impedes quality control, traceability and administration of the sector for better policy making
5. Despite efforts of the federal and regional Governments, doing business in Ethiopia is still a difficult task, with structural issues related to import, infrastructure, licensing, taxation etc.

Serving the domestic meat market seems less easy for a foreign owned company than serving the export market, due to the GoE's strong focus on export business promotion and earning hard currency. There are companies that manage to serve the domestic market with high quality processed meat, but these are relatively small operations. With the exception of some supermarket chains, hotels and restaurants, most high end consumers currently source their beef through import.

The results of this RMA can be further developed and validated during the field visit, and possibly during follow up research. This will allow more in-depth inquiry into particularly relevant issues that have been described in this document. These include but are not limited to:

1. More detailed market analysis, using surveys
2. Investigation and selection of suitable Ethiopian enterprise that can be partnered with

3. Investigation into rules and regulations applying to local registration and licensing of meat processing business
4. Investigation of project form and scope on social aspects of sector development, possibly in the fodder sector, and with the possibility to integrate this work into the investment trajectory at a later stage.

8. Bibliography / further reading

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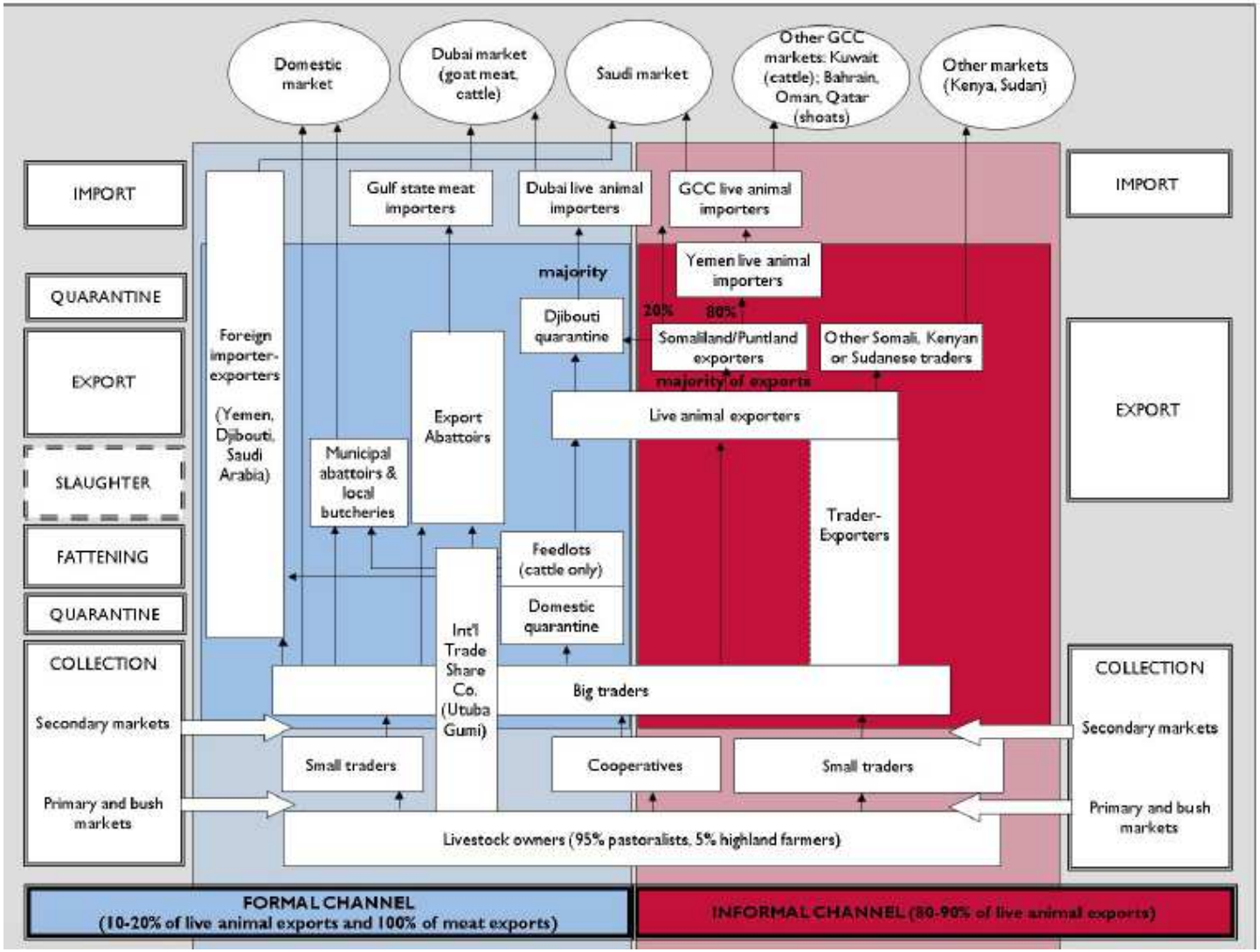
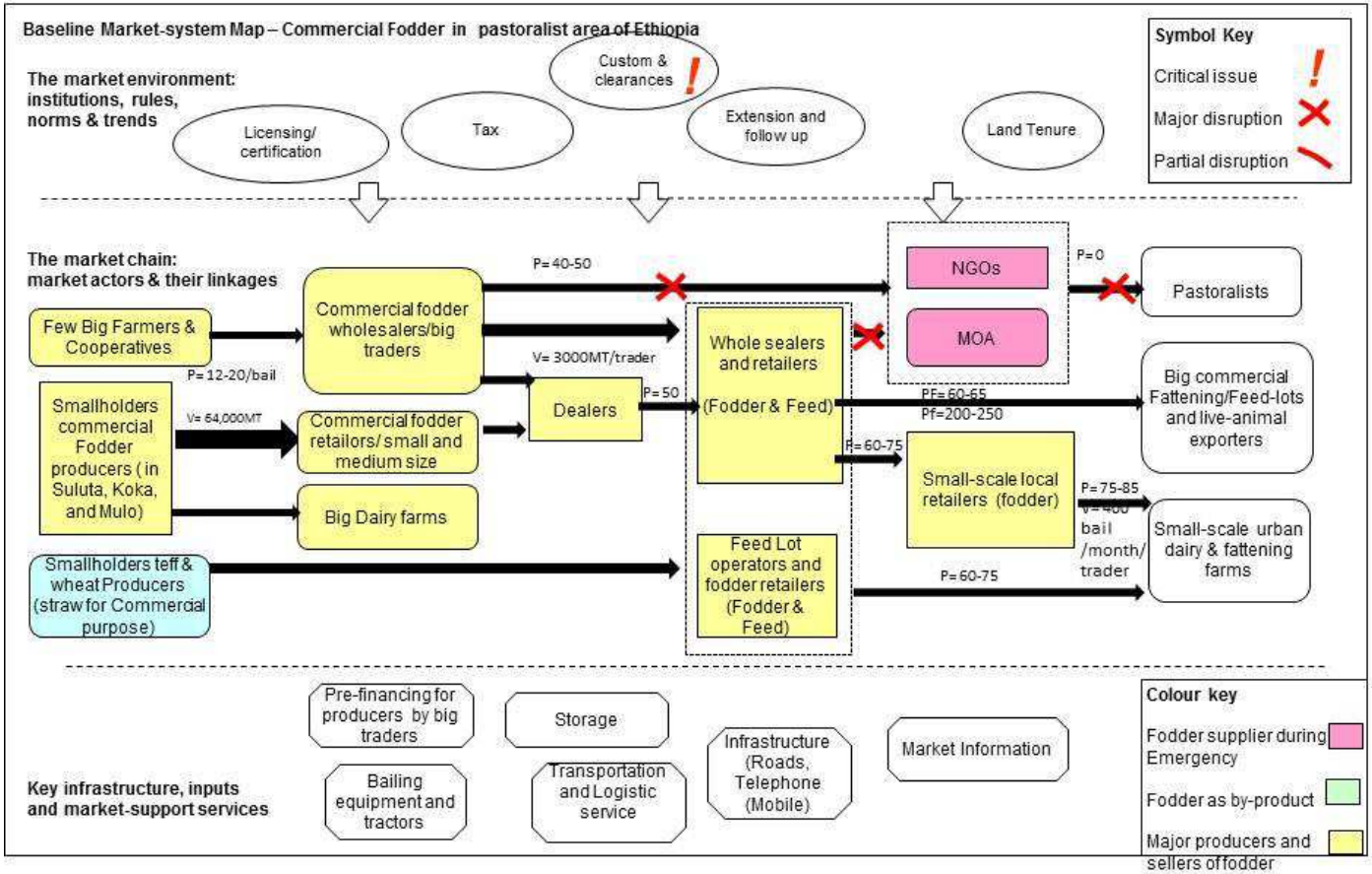
Work in progress

Annex III. Live animal and meat market system map



Annex II. Commercial fodder system map



Annex III. Subsistence fodder system map