Pastoralist Livelihood Initiative
Livestock Marketing Project

Ethiopian Borena and Southern Somali Areas
Livestock Value Chain Analysis Report

August 30, 2006

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Acknowledgements

The author would like to thank the following individuals for their hard work and invaluable contributions to this report:

**Borena Area Team**

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- Mengistu Niguesse (ACDI/VOCA)
- Chindi Bayissa (ACDI/VOCA)
- Ejeta Jabessa (ACDI/VOCA)
- Andrew Bisson (ACDI/VOCA)
- Tiya Miyo (Action for Development)
- Genzebe Barako (SoS Sahel)
- Baharu Yifru (Yabello Woreda Pastoral & Rural Development Office)

**Southern Somali Area Team**

- Ali Mekonnen (ACDI/VOCA)
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- Jemal Ali (ACDI/VOCA)
- Ali Ahmed (ACDI/VOCA)
- Did Wako (Save the Children-US)
- Kassech Abera (SoS Sahel)
- Muluget Bekele (Negelle Woreda Pastoral & Agricultural Office)
# Table of Contents

I LIST OF TABLES AND FIGURES ........................................................................................................... 4

II ACRONYMS AND DEFINITIONS ......................................................................................................... 4

III EXECUTIVE SUMMARY ...................................................................................................................... 5

IV BACKGROUND AND RESEARCH APPROACH .................................................................................. 8

   A ASSIGNMENT BACKGROUND ........................................................................................................ 8
   B PASTORALIST LIVELIHOOD INITIATIVE PROJECT BACKGROUND ....................................................... 8
   C RESEARCH APPROACH ..................................................................................................................... 9

V OVERVIEW OF ETHIOPIAN LIVESTOCK VALUE CHAIN ..................................................................... 10

   A MAJOR MARKET CHANNELS FOR LIVESTOCK ............................................................................. 10

VI ACTORS .................................................................................................................................................. 23

   A PASTORALISTS AND AGRO-PASTORALISTS .................................................................................. 23
   B BROKERS AND TRADERS ................................................................................................................. 24
   C COOPERATIVES ................................................................................................................................. 24
   D EXPORT ABATTOIRS AND ABATTOIR PURCHASING AGENTS ......................................................... 25
   E FATTENING UNIT OPERATORS ......................................................................................................... 26
   F MUNICIPAL ABATTOIRS & BUTCHERS .......................................................................................... 26

VII FACTORS .............................................................................................................................................. 27

   A END MARKETS .................................................................................................................................. 27
   B ENABLING ENVIRONMENT .............................................................................................................. 29
   C INTER-FIRM LINKAGES ..................................................................................................................... 31
   D SUPPORTING MARKETS .................................................................................................................. 33
   E UPGRADING ....................................................................................................................................... 38

VIII RELATIONSHIPS ............................................................................................................................... 39

   A POWER DYNAMICS BETWEEN FIRMS .......................................................................................... 39
   B ACCESS TO LEARNING AND INNOVATION .................................................................................... 40
   C BENEFITS .......................................................................................................................................... 40

IX RECOMMENDATIONS ........................................................................................................................... 42
I List of Tables and Figures

Tables

TABLE 1 – BORENA ANIMALS PURCHASED BY PRIVATE TRADERS .............................................................. 16
TABLE 2 – BORENA ANIMALS PURCHASED BY ABATTOIR AGENTS .......................................................... 18
TABLE 3 – LIVESTOCK TREKKING FEES ........................................................................................................... 35
TABLE 4 – PER ANIMAL TRANSACTION COST FOR SMALL SHOAT SALE ....................................................... 41
TABLE 5 – PER ANIMAL TRANSACTION COST FOR LARGE SHOAT SALE ....................................................... 41
TABLE 6 – TRANSACTION COSTS FOR THE SALE OF A BULL ............................................................................. 42

Figures

FIGURE 1 – BORENA AREA OF OROMIA REGION LIVESTOCK VALUE CHAIN MAP .................................................. 12
FIGURE 2 – ADDIS ABABA ABATTOIR ENTERPRISE OPERATION FIGURES ..................................................... 14
FIGURE 3 – SOUTHERN SOMALI AREA LIVESTOCK VALUE CHAIN MAP ........................................................... 20

II Acronyms and Definitions

ETB Ethiopian Birr
CAHWs Community Animal Health Workers
CBPP Contagious Bovine Pleuropneumonia
CCPP Contagious Caprine Pleuropneumonia
GoE Government of Ethiopia
HACCP Hazard and Critical Control Point
HELIMEX Hashim Ethiopian Livestock and Meat Exporter PLC
MMEA Modjo Modern Export Abattoir
MOARD Ministry of Agriculture and Rural Development
NGO Non-Governmental Organization
PLI-LM Pastoralist Livelihood Initiative – Livestock Marketing
SPS Sanitary and Phyto-Sanitary
STTA Short Term Technical Assistance
USAID United States Agency for International Development
VCA Value Chain Analysis

Shoats Sheep and goats
Small ruminant Sheep and/or goat
Livestock Relating to Cattle, sheep, goat and/or camel

1 June 2006 exchange rate: 1USD = 8.69ETB.
III Executive Summary

This value chain analysis report is the second produced by the Pastoralist Livelihood Initiative Livestock Marketing Project implemented by ACDI/VOCA. The focus was to determine the constraints and opportunities to growth and expansion of the livestock sector in the Borena and Southern Somali Regions of Ethiopia using the value chain analysis methodology.

Overview

This report describes and analyzes the value chain, and then sets out a series of recommendations based on the following outline:

1. Value chain analysis
   a. Overview of the Ethiopian livestock value chain with discussion on the major market channels in the Borena area of the Oromia Region and the Southern Somali Region, including descriptions of geographic flows, transactions, and end markets.
   b. Overview of the key actors, or participants involved in transactions resulting in direct ownership of livestock during the process of moving the product from conception to end consumer.
   c. Discussion of the key factors of end markets, enabling environment, inter-firm linkages, supporting markets and upgrading effecting value chain dynamics and success.
   d. Discussion of the relationships between the actors in the value chain, including power dynamics, the transfer of learning and benefits, and how these effect the value chain.

2. Recommendations for interventions based on the analysis.

Key Findings

The value chain analysis teams identified and analyzed the following market channels in each region:

1. Borena area of the Oromia Region Market Channels
   a. Domestic cattle, shoat and camel consumption
   b. Domestic cattle, shoat and camel restocking sales
   c. Domestic slaughter of cattle and shoats for institutional sale
   d. Official live cattle, shoat and camel sales through the Central Ethiopian Markets for export
   e. Unofficial live camel cross border trade to Kenya
   f. Cattle and shoat meat product export

2. Southern Somali Region Market Channels
   a. Domestic livestock trade to other Ethiopian Regions
   b. Domestic livestock consumption and restocking sales
   c. Unofficial livestock cross border trade to Kenya and Somalia
   d. Official livestock sales through the Central Ethiopian Markets for export
   e. Cattle and shoat meat product export
The key characteristics and trends of the livestock industry in these areas that appeared during the analysis process are as follows:

1. As with the Afar and Northern Somali Region value chain report, extreme fractionalization\(^2\) of the value chain was evident. The value chain is characterized by multiple transactions between traders of different sizes occurred with no value addition in the process, and weak relationships between value chain actors.

2. Lack of a clear and coordinated effort by the various levels of the Government of Ethiopia in investing in the livestock sector is a major constraint. The lack of coordination and investment extends to a) a lack of appropriate veterinary and extension service coverage in pastoral areas, b) a lack of appropriate funding levels for livestock industry related activities, and c) a lack of livestock market information management and distribution to interested industry stakeholders.

3. Weak supporting service markets, including a) significant need for commercial veterinary services, b) lack of appropriate livestock transportation trucks, c) complete lack formal financial services available pastoralists, traders, and livestock cooperatives, d) complete lack of insurance products available to pastoralists, traders, livestock cooperatives and Isuzu truck owners/operators.

4. The lack of easily accessible market information, such as end market quality and quantity requirements and delivery timing needs, available to all actors, but particularly those at the lower levels, is a result of mistrust and weak relationships along the chain and decreases the efficiency of the transactions.

5. The Southern Somali Region is characterized by high levels of unofficial cross border livestock trade to Kenya and Somalia. While the Borena area is currently only experiencing notable amounts of unofficial cross border trade of camels into Kenya, cattle and shoats are currently flowing from Kenya into Ethiopian border markets for sale.

The report recommendations are:

1. Advocate for increased coordination and information management between various levels of the Government of Ethiopia.

2. Establish pilot fattening stations in the regions.

3. Encourage establishment of holding grounds near major market places so livestock are rested for an appropriate amount of time before being loaded onto transport vehicles.

4. Investigate low-cost partition improvements or creation for Isuzu trucks appropriate for livestock.

5. Support livestock cooperatives through strengthening business management and modern herd management short term technical assistance.

\(^2\) Fractionalization is used in this context to denote the lack of sustained and/or contractual buyer-seller relationships, and a large number of transactions involved in the market chain. The transactions are characterized by a lack of transparency and trust between buyers and sellers.
6. Support the increased usage, rehabilitation and management of existing ranches through rangeland management and applicable short term technical assistance.

7. Organize market linkage trips between cooperative leaders and live animal exporters, fattening unit operators and export abattoirs.

8. Facilitate a stakeholder workshop with representatives from all categories of actors within the value chain and major supporting service providers with an emphasis on the private sector taking control of the competitiveness strategy for the Ethiopian livestock industry.

9. Work with the financial sector to encourage the creation of appropriate loan products and lending schemes for the livestock industry participants.

10. Work with the insurance sector to encourage the establishment of livestock insurance plans that could be made available to pastoralists, cooperatives and Isuzu truck owners.

11. Encourage pastoralists to purchase scales appropriate for weighing sheep and goats.

12. Establishing a basis for accurately estimating cattle weight based on chest measurements.

13. Establish a radio-based market information dissemination program broadcast in regional dialects.
IV  Background and Research Approach

A  Assignment Background

The primary objectives of this assessment were to:

- Determine the major constraints and opportunities to growth and expansion of the livestock sector in the Borena and Southern Somali Regions of Ethiopia;
- Propose strategies to the Pastoralist Livelihood Initiative (PLI) implementing consortia members to alleviate or at least mitigate those constraints;
- Identify the volume of animals moving through the major market channels of the Borena and S. Somali area of the Somali Regions.

This assessment examined the actors, factors and relationships of the Ethiopian Borena area of the Oromia Region and the Southern Somali area of the Somali Region livestock industry within a given level of effort. This report serves as a compliment to the Ethiopian Afar and Northern Somali Regions livestock value chain analysis and report completed by ACDI/VOCA in March 2006. The assessment took place over a three week period from May 22 to June 9, 2006. Interviews were conducted in Borena (Teltele, Yabello, Haro Bake, Surupha and Moyale) and S. Somali (Negelle, Hudet, Bitata, Filtu and Dollo Ado) Areas from May 27 to June 2, 2006. Additional interviews were conducted in Addis Ababa from June 6 to 9, 2006. Please see Annex A for the Scope of Work for this assignment, and Annex B for a complete listing of individuals and organizations interviewed during the assessment.

The core team consisted of Carmen Filip (Borena Team Leader/ACDI/VOCA) and Ali Mekonnen (S. Somali Team Leader/ACDI/VOCA). Additional support and technical input was provided by the following: Andrew Bisson, Sileshi Damte, Mengistu Niguesse, Chindi Bayissa, Ejeta Jabessa, Tiya Miyo, Genzebe Barako, Baharu Yifru, Ismail Mohammed, Jamal Ali, Ali Ahmed, Did Wako, Kassech Aher and Muluget Bekele.

A summary of the PLI Project and the research approach are described below. A description of Ethiopia’s major livestock market channels is presented in Section V.A and the primary actors of the Ethiopian livestock industry are presented in Section VI. The factors affecting the Ethiopian livestock value chain are covered in Section VII, and relationships between actors are discussed in Section VIII. Finally, recommendations can be found in Section IX.

B  Pastoralist Livelihood Initiative Project Background

The Pastoralist Livelihoods Initiative Project (PLI) is a two-year USAID-funded project that aims to increase livelihoods security among Ethiopia’s eight to nine million pastoralists in Afar, Somali and Oromia regions. PLI is comprised of five components implemented by eight consortia of NGOs: ACDI/VOCA, Mercy Corps International, CARE, Save the Children UK (SC-UK), Save the Children US (SC-US) and Tufts University with support from the Ethiopian Ministry of Agriculture and Rural Development (MOARD).

ACDI/VOCA is leading the analysis of the live animal and meat value chains originating from the project’s target pastoralist regions. A previous study of the Afar and N. Somali
Regions was conducted from February 27 to March 11, 2006. The use of these value chain analyses represents a new approach to working in pastoralist areas, although it recognizes that pastoralism is not inherently market oriented, operates according to principles of risk and vulnerability minimization rather than typical market rules of profit maximization. In this context, the PLI-LM Project links the value chain approach with a livelihoods approach, under the premise that strengthening the competitiveness of the Ethiopian livestock industry and creating access to more profitable markets is key to successfully and sustainably improving pastoralist livelihoods and increasing their resistance to drought and other shocks.

### C Research Approach

The value chain analysis (VCA) is a tool that assesses the dynamics and potential for competitiveness of an industry by examining three aspects of the transactions involved in moving a product from inception to end use or final consumption:

**Actors** – the players involved in value chain transactions and the nature and scale of their respective functions

**Factors** – the external influences affecting the nature and terms of transactions along the value chain

**Relationships** – the flows of power, knowledge and benefits throughout the chain

These aspects of the value chain serve as a framework for identifying key constraints, opportunities, and suggested points of intervention for industry development. The VCA produces a roadmap to the value chain that illustrates the flow of products and value addition into key market channels, or end markets for final consumption. This value chain map provides a tool for visualizing value chain dynamics and for locating the transactions involved in the highest value or highest potential markets. Primary information was gained through a series of interviews conducted with key value chain actors and service providers at a variety of livestock markets and towns in the regions. A more detailed description of the VCA methodology is provided in Annex C.

A review of secondary information sources was also conducted in addition to the primary data collection phase of the research. This enabled the author to obtain an understanding of the Ethiopian livestock industry as a whole and more carefully focus the primary data collection.

One of the major difficulties encountered during the course of this study was the availability of accurate and reliable data. The reluctance of major value chain actors to provide information regarding the volume of animals flowing through their firms greatly inhibited the accurate projections of the flow of livestock.

Finally, it should be noted that this value chain analysis examined the market channels for domestic meat consumption, export meat products and live animal export of cattle, sheep, goats and camels only. It was outside the scope of this VCA to examine the domestic or export market channels for hides, skins, leather products or dairy products.
V Overview of Ethiopian Livestock Value Chain

A Major Market Channels for Livestock

With the livestock population in 2000 estimated at 35.5 million cattle and an additional 30.5 million sheep and goats, Ethiopia possesses the largest livestock population on the African continent.\(^3\) The largest portion of the livestock population is exported meat products or live animals to the Gulf States and other regional African nations with the remaining consumed domestically. In 2002, official Ethiopian meat product exports amounted to 1,079,031 MT and official live animal exports were 145,671 MT.\(^4\) During the same year, UN Statistics gives the Ethiopian population as 67,220,000, and assuming an average annual domestic consumption of 7.04 kg of meat would put domestic meat consumption at 673,002 MT.\(^5\)

For 2006, the current estimated Ethiopian population is 70 million, and keeping the annual domestic meat consumption rate steady at 7.04 kg per capita provides a rough estimate of 492,800 MT of meat consumed, or approximately 88 percent of the market share. Unofficial live animal exports follow with eight percent of the market share, or an estimated 45,204 MT per year, based on the following estimates of 30,625 MT flowing out through Somalia\(^6\), 8,000 MT flowing out through Kenya and 6,579 MT flowing out through Djibouti annually. Official live animal exports are the next largest market channel, with three percent of the share, or 19,583 MT exported as reported by Ethiopian Customs. Chilled meat product export is the smallest market channel with 3,754 MT exported, or one percent of the overall value chain, as reported by Ethiopian Customs.

Currently, efforts are being made by various export abattoirs to expand into other international market channels. However, long term success will depend on the ability of the exporting companies to cope with the fluctuations in both end market demand and producer's ability to supply suitable quality animals that also meet animal health protocols.

1 Borena Area of the Oromia Region Livestock Market Channels

In the Borena Area of the Oromia Region, livestock predominantly flows in a South to North direction, regardless of their market channel. Please see Annex D for maps of the market flows with primary and secondary markets shown. There are six main market channels for livestock in the Borena Area of the Oromia Region of Ethiopia. These are illustrated on the Borena Area Livestock Value Chain Map on page nine.

Domestic Market Channels:

- Domestic livestock consumption
- Domestic livestock restocking

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\(^3\) FAO Ethiopia Livestock Sector Brief, 2004.

\(^4\) UN COMTRADE, 2002.

\(^5\) The FAO estimates annual domestic consumption to be approx. 7.04 kg for 2000.

\(^6\) Based on FSAU-Somalia data, estimated rolling 1.7 million head of shoa ts unofficially exported through Bosassa & Berbera, Somalia with estimate of 70 percent being Ethiopian in origin.
- Cattle, sheep, goat and camel meat consumption, with slaughtering and packaging done by ELFORA and other private abattoir facilities, with sales to international hotels, Ethiopian Airlines, universities, supermarkets and shops.

**Live Animal Export Market Channels:**
- Official live animal export through the central Ethiopian markets
- Unofficial live animal export to Kenya

**Meat Product Export Market Channels:**
- Cattle, sheep and goat meat product export, with slaughtering and packaging done by abattoirs in the Nazareth, Modjo, and Debre Ziet areas, with sales to the Gulf States, Egypt, Congo-Brazzaville and other regional African nations.
Figure 1 – Borena Area of Oromia Region Livestock Value Chain Map
a) Domestic Market Channels

Sub-channel 1: Domestic Livestock Consumption

Of the domestic market channels, the domestic consumption of cattle, sheep, goats and camels is the most significant. Based on market data collected by the Southern Rangeland Development Unit (SORDU) in Yabello, approximately 17 percent of animals (24,779 head) brought to rural secondary markets were sold to pastoralists and agro-pastoralists for restocking and to butchers for sale to rural consumers in the Borena Area during the fourth quarter of 2005. The remaining 83 percent (147,587 head) was purchased by export abattoirs or private traders; however, a smaller proportion of this amount of animals sold join others from across the country and enter the domestic Ethiopian market at the major central market sites of Nazareth, Modjo, Mata Hara, Debre-Ziet and Addis Ababa. It is reported that the vast majority of goats, approximately 95 percent, offered in those market places are sold to restaurants, butcheries and household consumers. Smaller amounts of sheep and cattle, 20 percent and 25 percent respectively, are sold to the same domestic consumers.

Older animals are often sold into this market, as they are not generally bought by the export market purchasers. As Ethiopian law prohibits the export of female animals, this is often the main market outlet for unproductive female animals. Animals sold for domestic consumption are purchased by individual citizens, butchers, hoteliers and restaurant owners. The vast majority purchased by individual citizens is not slaughtered in municipal slaughterhouses but at their homes, leading to extreme difficulties in calculating accurate figures regarding domestic consumption amounts.

Butchers and restaurant owners in Moyale and Yabello expressed difficulty in finding high quality, fat animals for their operations, and stated they would often travel to markets farther away to obtain the quality products they required. In addition to sourcing animals that meet their requirements, rural butchers interviewed reported that domestic meat sales are currently lower than in the previous year. The lower figures are due in part to the recent drought emergency that severely limited the quantity and quality of animals available for purchase. The Moyale Municipal Abattoir is currently operating far below capacity, slaughtering approximately five head of cattle per day. Prior to the drought emergency, it was slaughtering fifteen to eighteen head of cattle per day, and was still far below the maximum operating capacity.

The decrease in consumption is believed to be caused not only by the drought emergency, but also by the rising cost of meat and other consumer goods and the static nature of rural salaries. Rural butchers and restaurateurs reported decreases in the volume of sales over the past year, most often citing the increase in the price per kilogram as the reason. The increase in meat per kilogram costs can be linked to the increase in prices paid per live kilogram weight of sheep, and the increased prices paid for cattle. As there is no differentiation between these market channels in some locations, the prices have been driven up by abattoir purchasing agents and large live animal export traders. One Yabello-based export abattoir purchasing agent informed us that over the past eight years, the price per live kilogram

7 For example, a restaurant/butcher in Moyale stated that quality animals were not available at the Moyale market (secondary size) and that he would arrange for the purchase of animals from Dubluck market located approximately 150 kilometers away.
weight has increased from 4 ETB to 5.5 ETB for cattle and from 2.5 ETB to 6.5 ETB for sheep and goats.

The amount of meat consumed in Addis Ababa represents the largest portion of domestic consumption within Ethiopia, as it has the highest urban population. In the urban area of Addis, animals are slaughtered one of three ways: at the Addis Ababa Abattoir Enterprise (official municipal slaughterhouse), at small private abattoirs operating unofficially or by the individual citizen. Sheep and goats are far more likely to be slaughtered by individual citizens than cattle, due to their smaller nature.

The Addis Ababa Abattoir Enterprise has an operational capacity of 1,200 cattle and 1,000 sheep per day, or 48,400 animals monthly based on a 22 working day month. As seen below in Figure 2, during the last peak in February 2006, the abattoir was operating at 40 percent and 19 percent capacity for cattle and small ruminants, respectively. During the low point in March 2006 (a period corresponding to Ethiopian Orthodox lent), the abattoir was operating at 16.5 percent and 13 percent for cattle and small ruminants, respectively. A slight decrease in the number of animals slaughtered by the Addis Ababa Abattoir Enterprise can be seen over the two year time span of Figure 2. The Deputy Manager described this slight decrease as a result of the increase in unofficial abattoirs that do not charge the additional required taxes, which represent 50 percent of the total cost of slaughtering at the municipal abattoir. The Addis Ababa Abattoir Enterprise charges for slaughtering cattle are 70 ETB slaughtering fee, 45 ETB profit tax, 20 ETB turnover tax, 2.25 ETB municipal tax and 3 ETB agricultural service charges (140.25 ETB total). Charges for sheep and goats at the Addis Ababa Abattoir Enterprise are 10 ETB slaughtering fee, 3 ETB profit tax, 4 ETB turnover tax, 0.25 ETB municipal tax and 2 ETB agricultural service charge (19.25 ETB total).

**Figure 2 – Addis Ababa Abattoir Enterprise Operation Figures**

![Figure 2 – Addis Ababa Abattoir Enterprise Operation Figures](image)

*Data Source: Addis Ababa Abattoir Enterprise.*
**Sub-channel 2: Domestic Livestock Restocking Sales**

In all market areas, pastoralists and agro-pastoralists purchase and sell livestock for restocking purposes. To maintain the herd size, pastoralists will often sell an animal that greatly exceeds their immediate cash needs, such as a large un-castrated bull, and with the remaining money purchase a smaller bull or heifer. The same principle applies to camel pastoralists. The large adult males are typically sold to live camel exporters who export them unofficially through Kenya, while the young are sold for restocking purposes.

As male un-castrated animals are preferred by the abattoir purchasing agents due and live animal exporters due to end market requirements, pastoralists tend to supply far larger numbers of these animals to the markets. In addition to market driven needs, and a prohibition against exporting female animals, pastoralists often retain breeding females to maintain or increase herd sizes.

**Sub-channel 3: Domestic Slaughter of Livestock for Institutional Consumption**

Currently, one export abattoir – ELFORA, is processing cattle, sheep and goats for institutional consumption within Addis Ababa. ELFORA provides processed meat products to international hotels, airlines, universities and supermarkets. While ELFORA would not provide specific numbers regarding the proportion of sales, the impression given was that these domestic institutional sales were minimal in comparison with the export sales.

**b) Live Animal Export Market Channels**

**Sub-channel 1: Official Live Animal Export Through Central Ethiopian Markets**

The next major market channel for the region is live animal trade through the Nazareth, Modjo, Meta Hara, Debre-Ziet and Addis Ababa markets. Livestock not purchased by abattoir purchasing agents are bought by private traders of varying sizes, which represented 41.18 percent of the market sales as reported by SORDU for the August 2004 – May 2006 period. Private traders primarily purchase cattle, and to a far lesser extent goats and sheep from bush, primary and secondary markets. In addition, some traders purchase animals directly from pastoralists outside the formal market areas, and as such these transactions are not captured by SORDU’s data collection team or by the municipal market sales tax collectors. Based on data provided by SORDU, private traders accounted for 96.60 percent (153,025 animals) of the cattle sales in the Teltele, Elwaya, Yabello, Haro Bake, and Dubluck markets, but only 10.36 percent (11,012 animals) of sheep and 17.18 percent (39,398 animals) goat sales for the same markets during August 2004 – May 2006 period. Mega and Hidi are primary markets that feed into the Moyale and Dubluck secondary markets. Also supplying the Dubluck secondary market are Teltele, Elwaya, Surupha, and Arero primary markets. Haro Bake is an additional secondary market in this chain that receives animals from the same markets that feed into Dubluck. After the cattle move through the markets mentioned above, they are transported by Isuzu trucks to the Ethiopian central fattening units and markets in Nazareth, Modjo, Meta Hara, Debre Ziet and Addis Ababa. The majority cattle are then resold after fattening, or directly at the markets, to large live animal export traders who export the animals to Djibouti, the Gulf States and other regional African nations. Approximately 25 percent of cattle, 95 percent of goats and 20 percent of sheep entering the Nazareth, Modjo, Meta Hara, Debre Ziet and Addis Ababa markets do not enter the live animal export market sub-channel, but instead flow into the domestic
consumption sub-channel, which is described below in Section V.A.1.a). Sheep and goats do not move through the fattening operations but go directly to markets or export abattoir slaughtering facilities for processing. More information regarding the transactions and flow of livestock from the central Ethiopian markets can be found in the ACDI/VOCA Afar and N. Somali Region Livestock Value Chain Analysis report of April 2006.

Table 1 – Borena Animals Purchased by Private Traders

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Cattle</th>
<th>Sheep</th>
<th>Goats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. – Sep. 2004</td>
<td>11,655</td>
<td>1,379</td>
<td>3,773</td>
</tr>
<tr>
<td>Oct. – Dec. 2004</td>
<td>18,298</td>
<td>2,470</td>
<td>5,834</td>
</tr>
<tr>
<td>Jan. – Mar. 2005</td>
<td>14,505</td>
<td>1,730</td>
<td>5,648</td>
</tr>
<tr>
<td>Apr. – Jun. 2005</td>
<td>18,944</td>
<td>1,097</td>
<td>5,967</td>
</tr>
<tr>
<td>Jul. – Sep. 2005</td>
<td>26,855</td>
<td>464</td>
<td>4,537</td>
</tr>
<tr>
<td>Jan. – Mar. 2006</td>
<td>23,518</td>
<td>1,433</td>
<td>5,085</td>
</tr>
<tr>
<td>Apr. – May 2006</td>
<td>16,840</td>
<td>2,375</td>
<td>5,743</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>153,025</td>
<td>11,112</td>
<td>39,401</td>
</tr>
</tbody>
</table>

A smaller amount of live camel trade is transacted through the central Ethiopian markets. Live juvenile camels are sold to traders in the Surupha and Haro Bake markets who then trek the animals north and into the Afar Region for export. This market channel is described in detail in the ACDI/VOCA Afar and N. Somali Region Value Chain Analysis Report of April 2006.

**Sub-channel 2: Unofficial Livestock Export to Kenya**

The strength of this market channel for cattle and shoats has dramatically decreased in the recent months. Based on interviews conducted with various value chain actors in the Ethiopia Moyale livestock market, the amount of official and unofficial cattle, sheep and goat livestock flowing into Kenya near the Moyale area from the Borena Area is minimal. The Ethiopia Moyale livestock market buyers purchase animals in both Ethiopian Birr (ETB) and Kenyan Shillings (KES) and offer higher prices in both currencies than the corresponding formal and informal markets in Kenya Moyale, thereby encouraging Kenyan pastoralists, agro-pastoralists and traders to cross into Ethiopia to sell livestock.

The relative ease in crossing the border, officially or unofficially, is increased by the acknowledgement by both the Kenyan and Ethiopian officials stationed in Moyale that there is little that can be done to secure the porous border. Neither country’s customs officials collect taxes or monitor the flow of livestock. The Kenyans do not collect taxes because

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9 Interviews with Nazret market officials, April/May 2006.
10 Southern Rangeland Development Unit (SORDU) data.
they have been instructed not to by their central government and the Ethiopians because of chronic manpower and budget shortages leading to an inability to perform this function.

The Kenyan Moyale livestock market was observed to be relatively unused by the Kenyan population. Based on observations of the market yard and surrounding areas, no evidence of large numbers of livestock being moved through the area was found. Small amounts of sheep and goat trade was observed being conducted outside the formal Kenya Moyale market areas, mostly on the street in various locations.

Unlike the cattle and shooat trade, live camel trade into Kenya still exists. In the Borena Area, large adult male camels are trekked from surrounding market regions into Ethiopia Moyale by pastoralists and some medium-scale traders for sale. Camels sold by traders primarily flow from the Surupha, Haro Bake and Dubluck markets into Moyale. Pastoralists in the region will often bring their animals directly to Moyale if cash requirement are not urgent, as they are able to obtain higher margins over selling to traders in primary markets. Once in the Moyale market, the animals are purchased by large-scale camel traders and trekked into Kenya, where they will be further trekked or trucked to Nairobi for slaughter or further export. Animals may also be moved through Kenya into Somalia with a final destination of Mogadishu for slaughter or further export.

c) **Meat Product Export Market Channel**

The market channel with the largest amount of animals from the Borena Area, and the most significant based on volume, is the one in which livestock flows through traders and export abattoir purchasing agents to four main export abattoirs of Hashim Ethiopian Livestock & Meat Exporter (HELMEX), Modjo Modern Export Abattoir (MMEA), EFORA Agro-Industries (ELFORA) and Luna Modern Slaughterhouse (LUNA) located in the central cities of Modjo and Debre-Ziet. Based on reported information, the export abattoirs are operating far below capacity – between 36 to 66 percent. It is not clear if the underperformance is due to a lack of supply, lack of demand, or a combination of both as all export abattoirs were unwilling to provide exact data figures. Meat products in the form of chilled or frozen cattle, sheep and goat carcasses and cuts are then exported to Saudi Arabia (64.85 percent), the United Arab Emirates (28.24 percent) and other regional countries such as Yemen, Egypt, Congo-Brazzaville, Djibouti and Côte d'Ivoire (6.91 percent). Currently, efforts are being made by various export abattoirs to expand into other international market channels to increase their operations. However, long term success will depend on the ability of the exporting companies to cope with the fluctuations in both end market demand and producer supply.

Cattle, sheep and goats are purchased by EFORA and LUNA abattoir purchasing agents located in strategic areas throughout the region. Large traders also act as animal collectors for MMEA and HELMEX export abattoirs as they do not have their own purchasing agents in the regional areas. These purchasing agents and traders visit larger secondary markets and buy directly from medium to large scale traders, cooperatives and individual pastoralists. The purchasing agents will also work with medium to large scale traders collecting animals from smaller primary and bush markets further from the agents’ base of operations. The animals sourced from smaller primary markets are held until either the purchasing agent is able to send an Isuzu truck to transport the animals to the slaughterhouse facility, or they are trekked at the traders’ expense to a secondary market collection site. The abattoir purchasing agents arrange for transportation of collected
animals, usually by company-owned Isuzu or livestock trucks, to company-owned fattening grounds or slaughtering facilities near the cities of Nazareth, Modjo and Debre-Ziet. A small proportion of cattle flow from private traders at secondary markets to private fattening operations located near the central cities before being sold to export abattoirs for slaughter. (Please see Annex D for more detailed market flows)

The requirements for cattle in this market channel are un-castrated male animals between four and six years of age and at least 280 kilograms in weight. Sheep and goat average weight requirements are 22 – 35 kilograms for sheep and 15 – 22 kilograms for goats. Abattoir purchasing agents obtain animals strictly on a weight basis, and some have installed company-owned cattle scales at major market areas for this purpose. Cattle traders, however, purchase animals on a sight estimate basis, which increases the chance for underweight animals being rejected by the abattoir facilities or purchasing agents. The traders also purchase sheep and goat on a weight basis using the above mentioned weight requirements to ensure final purchase by export abattoirs.

Table 2 – Borena Animals Purchased by Abattoir Agents

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Cattle</th>
<th>Sheep</th>
<th>Goats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. – Sep. 2004</td>
<td>20</td>
<td>9,137</td>
<td>16,202</td>
</tr>
<tr>
<td>Oct. – Dec. 2004</td>
<td>0</td>
<td>8,730</td>
<td>21,343</td>
</tr>
<tr>
<td>Jan. – Mar. 2005</td>
<td>20</td>
<td>17,278</td>
<td>36,561</td>
</tr>
<tr>
<td>Apr. – Jun. 2005</td>
<td>923</td>
<td>6,537</td>
<td>35,175</td>
</tr>
<tr>
<td>Jan. – Mar. 2006</td>
<td>175</td>
<td>10,596</td>
<td>23,652</td>
</tr>
<tr>
<td>Apr. – May 2006</td>
<td>0</td>
<td>3,314</td>
<td>10,033</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5,384</td>
<td>95,279</td>
<td>189,918</td>
</tr>
</tbody>
</table>

Table 3, to the right, illustrates the volume of livestock purchased in the markets of Teltele, Elwaya, Yabello, Haro Bake and Dubluck of the Borena Area of the Oromia Region by purchasing agents from ELFORA, LUNA and Modjo Modern Export Abattoirs from August 2004 through May 2006. This volume of animals represents between 10 – 14 percent of the total animals processed for each individual export abattoir based on their average processing amounts reported.

2 Southern Somali Area Livestock Market Channels

The Southern Somali Area livestock value chain map appears as Figure 3 on the following page, for maps of the livestock trade flows through the markets described below please see Annex D. There are six main livestock marketing channels in the Southern Somali Region of Ethiopia:

- **Domestic Market channels**
  - Livestock trade to neighboring Ethiopian regions

12 SORDU data.
- Domestic livestock consumption and restocking

**Live Animal Export**
- Unofficial livestock export to Somalia
- Unofficial livestock export to Kenya
- Official live animal export through the central Ethiopian markets

**Meat Product Export**
- Cattle, sheep and goat meat product export, with slaughtering and packaging done by abattoirs in the Nazareth, Modjo, and Debre Ziet areas, with sales to the Gulf States, Egypt, Congo-Brazzaville and other regional African nations.
Figure 3 – Southern Somali Area Livestock Value Chain Map
a) Domestic Livestock Trade

Sub-channel 1: Livestock Trade to other Ethiopian Regions

As mentioned in the previous market sub-channel, livestock does move from the Negelle market west into the Borena Area where they are subsequently sold to traders at the Dubluck or Moyale markets. These animals are most often sold on to abattoir purchasing agents or to traders taking them through the central markets for eventual export or entrance into the central areas domestic consumption markets as described in Section VA1a) above. However it must be assumed that a small proportion of animals enter the domestic consumption and restocking sub-channel.

Sub-channel 2: Domestic Consumption and Restocking

As with the Borena Area, pastoralists purchase animals in the markets to maintain and restock herds. Butchers and restaurateurs also purchase animals for sale to the local populations. This channel operates very similarly to the one described for the Borena Area in Section VA1a) above.

b) Live Animal Export

Sub-channel 1: Cross-Border Livestock Trade to Somalia

The S. Somali area is characterized by significantly higher levels of unofficial cross-border trade, with the most significant routes being the ones into Somalia. In the S. Somalia Area, animals are sourced from pastoralists at bush and primary markets and channeled through a variety of secondary markets before being trekked or trucked over the border into Somalia. One of the main routes animals move through is from the secondary markets of Filtu and Cherriti into Dollo Ado. From Dollo Ado, the livestock are then transported to Mogadishu through Badebo. The other main route is from Imi and Degeh Bur to Gode and on to Kelafo. From Kelafo the animals are moved into Somalia where they are destined for Bossaso or Mogadishu. Animals from the secondary markets of Imi and Gode also move north through Babile and Jigjiga before being trekked eastwards into Somalia through Hargeysa and on to Berbera for further export. (Please see Annex D for more information on market flow routes.) Traders interviewed expressed the opinion that up to 70 percent of camels and 30 percent of cattle, sheep and goats sold in the Dollo Ado market alone were destined for unofficial export into Somalia markets. It is also assumed that these percentages of unofficial sales to markets directly in Somalia increase the further north along the Ethiopia-Somalia border one travels.

Based on FASU-Somali export data from 1994 - 2004, the unofficial live animal exports from Ethiopia to Somalia at that time was 30,625 MT. This figure is based on a rolling average of 1.75 million head of shotts exported from the Somali ports of Berbera and Bossasso on an annual basis, with an estimated 70 percent being of Ethiopian origin.13

The majority of all animal sales occur on a sight basis, including sheep and goat sales. All transactions occur through brokers, with both buying and selling parties using their own. The clan structures are such in the Somali Region that each clan has their own set of

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13 FASU-Somali data.
livestock brokers and members of the clans will only conduct transactions through them. This use of brokers by both parties involved in the transactions adds to the lack of trust between pastoralists and traders and the lack of information flows between actors in the value chain.

**Sub-channel 2: Cross Border Livestock Trade to Kenya**

In addition to unofficial trade into Somalia, unofficial cross-border trade into Kenya also occurs. The major unofficial trade routes cross into Kenya through the border towns of Dollo Ado and Suftu in Ethiopia and into Mandera in Kenya. Informants interviewed during this study stated that Ethiopian cattle, sheep and goats were trekked or trucked into Mandera, Kenya from surrounding Ethiopian areas. In Mandera, the livestock is sold to larger trader-wholesalers who truck the animals to Nairobi, Kenya or Mogadishu, Somalia. Of the livestock offered in the Dollo Ado market, traders expressed the view that up to 30 percent of camels, 40 percent of cattle and 50 percent of shoats offered were bound for unofficial export into Kenya, however it is unclear what proportion of these animals are bound to be exported over the border into neighboring Somalia.

**Sub-channel 3: Live Animal Export through the Central Ethiopian Markets**

Not all trade occurring in the S. Somali area is unofficial. There are a smaller proportion of animals moving through the export abattoirs’ purchasing agents and traders to the central Ethiopian markets. Pastoralists and smaller scale traders bring livestock from bush and primary markets to the Cherriti and Filtu markets; from there animals are trekked west to Negelle. In Negelle, animals may again be sold to traders who trek them further west into the Borena Area where they are sold into the Dubluck or Moyale markets and then channeled north as described in Section V.A.1.a), above.

There are also abattoir purchasing agents located in Negelle that obtain livestock and send them to company holding and slaughtering facilities in the areas surrounding Addis Ababa. The abattoir purchasing agents source sheep and goats from cooperatives, pastoralists and traders in the Guji, Bale and Somali of Liben Zones for their companies. In addition, some export abattoirs use holding grounds in the areas surrounding Filtu and Negelle where stock will stay for up to 72 hours while sufficient numbers are being collected for transport by company owned or rented Isuzu trucks to company facilities in the central areas. However, due to fierce price competition and the ability of pastoralists and traders to access higher prices through unofficial cross-border trade the volume of animals flowing through this route is lower in comparison to other available market outlets.

The majority of large, adult camels are also exported through the central Ethiopian markets. The preference is for camels 6 to 12 years old and of a good size. These will be bought in the Negelle and Genale areas and trucked north to Nazarethh and Meta Hara for export via Djibouti.

c) Meat Product Export

As with the Borena Area, export abattoirs source cattle, sheep and goats from the S. Somali area of the Somali Region for their export processing operations. The transaction process is very similar to the activities described in Section V.A.1.c), above. Abattoir purchasing agents
obtain animals from pastoralists, pastoralist cooperatives, medium- and large-scale traders at designated collection points and markets throughout the area. Those animals collected by traders may be held three to five days at unofficial holding sites until the abattoir agent sends an Isuzu truck or livestock transportation vehicle to purchase and retrieve the animals. Animals bought by the abattoir agents either are transported directly to the main slaughtering facilities in the central Ethiopian area, or are held on company-owned holding grounds until a full truck-load of animals is obtained. Purchasing agents will hold livestock for 72 hours for disease observation prior to transport even if a full truckload is obtained.

Again, as with the Borena Area, medium- and large-scale traders serve as livestock collectors for the export abattoirs who do not employ regional purchasing agents. These traders arrange for the animals to be transported, predominantly by Isuzu truck, to the abattoir holding or slaughtering facilities in the central areas.

Unlike the Borena Area, this market channel is not believed to carry the majority of animals out of the Southern Somali Area. The live animal export channels described below, especially the unofficial trade to Somalia, represent the largest flows of livestock in this region.

VI Actors

Value chain actors are classified as those individuals who take ownership of a product, through the exchange of money or equivalent goods or services, during the transaction process of moving the product from conception to end consumer. Those individuals or firms providing a service without taking ownership of the product are classified as service providers and are described in more detail in Section VII.D, below.

The primary actors in the Borena and S. Somali areas’ livestock value chains are pastoralists and agro-pastoralists, brokers, small- and large-scale traders, cooperatives, local butcheries, municipal abattoirs, fattening stations, and export abattoirs and their purchasing agents. Information on each of these actors can be found below.

A Pastoralists and Agro-pastoralists

Pastoralists and agro-pastoralists are the main producers of livestock in the Ethiopian livestock value chain, raising some combination of cattle, sheep, goats and camels. Pastoralists in the southern parts of the Borena and Southern Somali areas tend to raise larger herds of shoats, camels and cattle in that order as the shoats and camels are more drought resistant. They raise their livestock using free grazing methods for most animals, keeping only the young, milking animals and sick in enclosures near the home. Additional feed inputs were cited as crop residues and foraged fodder during droughts for those pastoralists and agro-pastoralists found along the Genale and Wabi Rivers, as well as salt and mineral soils. The off-take decisions are motivated by the need for cash to complete payments for a variety of goods and services, rather than a desire to maximize profit margins. The price quoted from potential buyers is the strongest factor in determining to

14 Pastoralists cited the following examples as needs for cash: food, clothing, medical treatment for family, veterinary services for animals, annual taxes, payment of wages for day laborers, weddings, deaths, and other celebrations.
whom to sell. Pastoralists and agro-pastoralists interviewed in the Borena Area preferred to sell to larger traders and abattoir purchasing agents, and not through brokers if at all possible, citing slightly higher prices offered by these actors. The S. Somali Area pastoralists and agro-pastoralists sell through the clan based broker system, and generally do not have any direct contact with traders of any size. Pastoralists that are members of livestock cooperatives exhibited a greater knowledge of end market requirements and more of an understanding of market-based sales opportunities as opposed to need-based.

In the Southern Somali Area, agro-pastoralists also play the role of input suppliers to traders trekking animals from one market to another. During droughts and periods with limited free grazing available, agro-pastoralists will sell feed and fodder inputs to the trekkers to enable them to maintain the animals during transport.

\section*{B Brokers and Traders}

The majority of transactions are completed by brokers and traders in both regions, usually with little value addition in the process. Brokers are involved in all market areas visited and facilitate the sale of animals, taking a commission ranging from 2 – 5 ETB per shoat and 5 – 10 ETB per head of cattle or camel. Often it is difficult to differentiate between brokers and traders as most perform both functions – serving as brokers if working capital is limited and as traders if they can afford to purchase animals. In the S. Somali area, all transactions occur through brokers, with each ethnic clan having their own preferred livestock brokers.

As with the Afar and N. Somali Regions detailed in the earlier value chain report, smaller traders obtain animals from primary bush markets and supply to the local domestic market and to larger traders. The larger traders collect animals from smaller traders and from pastoralists at larger secondary markets and supply the animals to traders at other secondary markets, abattoir purchasing agents or to fattening units and live animal exporters. As seen in Table 1 above, the private traders tend to specialize in purchasing and collecting cattle. Some small traders also specialize in collecting sheep and goats and trekking them to abattoir purchasing sites for bulk sales to the abattoir purchasing agents. Most traders expressed a preference of buying directly from pastoralists and agro-pastoralists as their profit margins are higher than if they purchase from other traders or brokers. Cash based payments are the preferred method cited most often during interviews. However, credit sales do occur on occasion, with the payments being made anywhere from a day or two to weeks later, if at all. The potential for not receiving payment was often given as the reason why credit based sales were not preferred, which points to a lack of trust between traders and those further up the value chain.

When holding livestock or transporting them to the next point of sale, most traders do not provide feed or water inputs beyond those available through free grazing during the wet seasons. During droughts and dry seasons, efforts are made to sell the livestock as quickly as possible to reduce the maintenance costs; however, inputs will be supplied to ensure the herds are in saleable condition. Most traders also stated they purchased and provided some veterinary drugs, usually broad spectrum antibiotics, to the livestock.

\section*{C Cooperatives}

The strength of cooperatives varies between and within the two regions. The Geda Livestock Cooperative Union (Geda Union) is an umbrella organization for eight of the
livestock cooperatives in the Borena Area. The role of the Geda Union is that of a facilitator to enable member cooperatives to obtain additional market linkages for the sale of primary member cooperatives. In addition, the Geda Union owns two Isuzu trucks that it uses to transport livestock to the abattoir facilities. The Union provides these trucks on a rental basis to the primary cooperative members, private traders and export abattoir purchasing agents.

Primary livestock cooperatives within the Borena and S. Somali areas are mostly involved in buying and subsequently reselling their members’ livestock. The frequency and scale of this activity is largely dependent upon the livestock cooperative's available capital resources; the more capital the more purchases made. The stronger cooperatives in both regions tend to restrict their members to selling livestock only through the cooperative to help build capital resources and increase dividend payments. Cooperatives organize the sale of members’ cattle, sheep and goats to export abattoir purchasing agents and to larger-scale traders at large secondary markets using the ability to conduct bulk sales to their advantage when determining sale prices. In addition to purchasing from members, some cooperatives in both regions have the available capital to act as traders and purchase animals from bush markets to resell in the bulk sales. A great deal of the cooperatives are also involved in providing savings or credit services to cooperatives, and some provide emergency loan services to cooperative members during financial crises. In the S. Somali area of the Somali Region, two cooperatives were identified that also provided fodder services to members. All cooperative leaders interviewed expressed a desire to access new markets and additional buyers for cooperative livestock.

In addition to arranging for bulk sales of animals, there are three cooperatives that “own” previously state-owned livestock ranches. The ranches are, by all reports, in dire need of infrastructure repairs to barns, sheds, water sources, loading ramps and offices and are by most reports not operating as ranches so much as communal graze-land. The cooperatives responsible for these ranches are most likely all in need of technical assistance regarding business planning and management, combating bush encroachment, and proper rangeland management to bring the ranches to full operational capacity.

D Export Abattoirs and Abattoir Purchasing Agents

There are four major export abattoirs operating in Ethiopia. They are ELFORA, LUNA, MMEA and HELMEX. All export abattoirs obtain animals from the livestock producing regions of Ethiopia, namely Oromia, Afar and Somali. The end markets for the exported chilled and/or frozen beef, goat and sheep carcasses and offal are to Middle Eastern nations. More information on the end markets can be found in Section VA1c). All four export abattoirs have made progress towards implementing HACCP standards, but none are officially certified as of yet. MMEA is following SPS standards in its operations as well.

Two of the export abattoirs operate at a number of different levels within the value chain, not simply at the highest level of exporter. The operations of ELFORA and LUNA include the purchasing agents on staff located throughout the livestock production regions of Ethiopia, fleets of livestock transportation vehicles, holding grounds and fattening facilities and slaughterhouses.

As previously mentioned, the export abattoirs are all operating below capacity and uniformly expressed the problems of aligning the fluctuating supply with unpredictable fluctuations in
demand from importing nations as a major constraint to growth. Other problems cited were an inability to consistently source high quality animals, the lack of numerous well organized livestock cooperatives. In addition, the export abattoirs recognized that pastoralists are inherently not market oriented and this leads directly to the differences between the supply and demand markets for livestock in Ethiopia. In addition, the high degree of price fluctuation, which has led to price not matching the quality of the animals received in some cases, was also cited as a constraint. For example, the price per kilogram of live weight for sheep and goats has doubled over the past two years but the quality of animals supplied has relatively the same. Additional constraints to their operations are the poor road and market infrastructures, which inhibit the ability to move stock quickly and efficiently across the country.

E  Fattening Unit Operators

Several small scale fattening units operate in the Southern Somali Area. These are typically run by local butchers who purchase animals and then fatten them on purchased crop residues and other agricultural by-products. The animals are then resold, or slaughtered by the butcher for sale to local community through the domestic consumption market channels. In the Borena Area, most animals bought for fattening are transported to the commercial operations located in the central areas. However, it was discovered late in the value chain assessment that two fattening cooperatives exist in the Borena Area. In addition to the cooperatives, it was also discovered that a private individual in the Yabello area operates a small scale fattening operation.

F  Municipal Abattoirs & Butchers

Municipal abattoirs operate in the larger towns of most regions, both urban and rural, providing slaughtering and meat inspection services to customers. The Addis Ababa Abattoir Enterprise (AAAE) is the only official slaughterhouse for the Addis Ababa urban area, and provides slaughtering and inspection services to private citizens, butchers, restaurants and supermarkets. The livestock is mostly trekked to the slaughterhouse facilities from surrounding markets by the owners; however, the AAAE has recently begun to provide limited free truck transport to some clients from the Addis Ababa market. There is a 24 hour turn around for the slaughtering, and the cost of transporting the meat to the clients is included in the service fees charged by the AAAE. The total cost of processing animals at this facility is 140.25 ETB for cattle and 19.25 ETB for sheep, inclusive of all taxes and fees. The deputy director of the AAAE stated that recently some private, smaller-scale slaughterhouses have developed that provides slaughter services without collecting the municipal taxes, which was cited as one of the reasons why demand for services has declined slightly over the past year.

In most towns, there are municipal abattoirs slaughtering and performing meat inspections of cattle, sheep and goats for the nearby populations. In Moyale, the slaughterhouse charges 15 ETB and 3 ETB for processing cattle and sheep, respectively. These charges are not levied on the household population, mostly likely to encourage the local population to utilize the sanitary facilities and consume inspected meat; however, it is not known if other municipalities have similar policies. Based on the relative ease of slaughtering small ruminants at the home, the official figures of animals slaughtered in municipal abattoirs is far
below the actual amount of animals consumed domestically. For example, Moyale has a population of approximately 25,000, yet the municipal slaughterhouse currently only processes two to five cattle and up to 10 sheep and goats per day.

Municipal butchers purchase a small amount of cattle, sheep and goats directly from pastoralists or from small traders. Most operate not only as butchers which sell meat by the kilo, but also as small restaurants serving meat dishes for consumers. Depending on the size of the town and season, most butcher/restauranters slaughter between two to five cattle and three to seven sheep per week. The current butchered sheep meat prices in rural areas is an average of 31.33 ETB per kilo, an increase of 21 percent over last year's average price of 26 ETB per kilo. For butchered beef, the average rural price is currently 25.25 ETB per kilo, up 18 percent from last year's average price of 21.37 ETB per kilo.\textsuperscript{15}

\section{Factors}

Value chain factors are external influences on the operations of the actors and transactions of the industry. These factors can have positive and negative effects on the competitiveness and efficiency of the industry value chain.

\subsection{End Markets}

\subsubsection{Export Markets}

As mentioned above, the export market for both live animals and meat products occupies the smaller of the two market channels for Ethiopian livestock. The major recipients of officially exported Ethiopian live animals and meat products are Saudi Arabia, the United Arab Emirates (UAE), Yemen, Djibouti, Egypt, Congo-Brazzaville and Côte d'Ivoire. Somalia and Kenya are the major recipients of unofficially exported live animals. Consumer preference from these countries is cited as favoring Ethiopian livestock breeds (Borena cattle, Somali black-head sheep, etc.), and rangeland fed over feedlot fattened animals. These consumer preferences represent an excellent opportunity for expanding the Ethiopian livestock industry exports to these areas. However, to exploit this comparative advantage, export abattoirs must first overcome their difficulties coping with the demand fluctuations from the importing countries. They must also begin to improve the packaging and advertising strategies of the Ethiopian meat export channel as a whole to capitalize on the end market consumers’ preferences. The packaging and advertising of products to consumers in these countries is becoming more sophisticated with detailed labeling and source information, and to compete effectively Ethiopian exporters must begin to improve their packaging along these lines.

In addition to demand fluctuations, importing countries are imposing increasingly stringent sanitary and phyto-sanitary requirements. Increased attention to and compliance with HACCP and SPS standards will also benefit Ethiopian meat exporters in maintaining their export market shares. However, animal health issues remain a constant obstacle to overcome when exporting live animals and meat products. Rift Valley Fever and Foot and Mouth disease outbreaks and incidences have led to the frequent importation bans on

\textsuperscript{15} ACDI/VOCA PLI-LM Market Data, Yabello Office.
Ethiopian livestock in many of the major end market countries. Currently, Saudi Arabia is the only country with an RVF ban against importing livestock from Ethiopia. A combined effort by all value chain actors and the Government of Ethiopia in decreasing disease prevalence will assist Ethiopia in continuing to export meat products.

Kenya is the major recipient of live camel export from the Borena area, and Somalia the major live camel recipient from the Southern Somali Area. As the market prices are higher in the Borena area than in the neighboring Kenyan market towns for cattle, sheep and goats, it is assumed that the majority of cross border trade, official or otherwise, is minimal for those animals. In the S. Somali area, a larger proportion of animals are involved in cross border trade. Cattle, sheep and camels are all exported through various routes into Kenya and Somalia from the S. Somali area. Due to the similarity of the official and unofficial live animal export market channels until nearing the border, it is extremely difficult for government officials and researchers alike to accurately determine the volume of animals in each channel, but it is assumed that the unofficial channels are stronger in the Southern Somali Area.

The vast majority of pastoralists in both regions did not exhibit a great deal of knowledge regarding the end markets for the livestock they raise. Most in the Borena Area knew that animals purchased by traders and abattoir purchasing agents went “to Nazareth,” but the final destinations were not known. As a result of not knowing the final end markets for their livestock, most pastoralists are unaware of the specific end market consumer preferences or requirements. They are aware of the export abattoir weight requirements for sheep and goats and understood that only un-castrated male animals were accepted, however they did not know why the requirements were in place. For cattle, most pastoralists did not understand why some livestock was chosen over others brought to the market. Traders showed slightly more knowledge regarding the end market requirements, with the larger traders understanding more of the requirements than smaller traders. There was still little knowledge regarding the final end markets once the animals reached the markets around Nazareth.

2 Domestic Markets

The domestic market for meat products is the largest segment of the value chain, and not yet saturated. The prices of meat per kilo have risen steadily for the past year, and supply in the central Addis Ababa butcheries has declined. The relative cost of raising livestock has not increased dramatically, yet the prices paid for export quality animals at primary, secondary, and terminal markets has increased in recent years. The increase in the prices paid for animals by both abattoirs and live animal exporters has caused a subsequent increase in the domestic market purchase price for cattle, sheep and goats for local consumers, butchers and retailers. These price increases are then passed on to the consumers in both Addis Ababa and regional cities. The slightly higher prices in Addis Ababa also include the transportation margins for animals being trucked into the central areas from the rural regions. While the middle and upper class populations of Addis Ababa are able to accommodate this price increase, the study found regional butchers’ demand decreasing as the rural populations incomes have remained static overtime and cannot accommodate the large increases in meat prices per kilo. In Addis Ababa, meat has risen from 25 to 40 ETB per kilo, while in the rural cities prices have increased 5 ETB per kilo (from 20 to 25 ETB per kilo in Yabello, and from 15 to 20 ETB per kilo in Negelle) over the past year.
B Enabling Environment

1 Global Enabling Environment

The largest constraint to Ethiopian livestock and meat product exports are quarantine and health certification requirements required by the importing countries. The periodic Rift Valley Fever, Foot and Mouth Disease, and other disease bans imposed by several Arab nations have reduced the amount of live animals and meat products Ethiopia is able to directly export. Currently, only Saudi Arabia still has the RVF ban in place. As all Ethiopian live animal export is via cross-border trade, either officially or unofficially, into the neighboring countries of Djibouti, Somali, Kenya and Sudan a system of subterfuge has arisen. Once animals are within Somali, Kenya and Sudan, they are often exported not as Ethiopian in origin, but under the aegis of the secondary country and effectively bypassing the RVF ban. The exception to this being Djibouti, as all animals exported from this country are considered non-native. Increases in animal health treatment and service provision to prevent widespread disease outbreaks and to bolster foreign confidence in the quality of Ethiopian livestock will help overcome the obstacle of frequent disease bans from importing countries.

2 Ethiopian Enabling Environment

The overall Ethiopian enabling environment factors of the letter of credit scheme and multiple taxation have been addressed in the previous ACDI/VOCA Afar and N. Somali Region Value Chain Assessment Report. The letter of credit scheme effectively prohibits all but the largest livestock traders from participating in official export trade due to the minimum capital requirement of 265,000 ETB to gain a letter of credit. The report also found that the requirements were the key reason why unofficial trade routes dominated the livestock export along the Djibouti and Somaliland borders. In regards to multiple taxation, the issue appears in several ways. Pastoralists are taxed by multiple levels of the government (woreda and municipality administration) and at the market during livestock transactions. Export traders experienced multiple points of taxation along the export routes through Somaliland, with one example given of a truck being stopped and taxed four times along the route for an approximate total of 280 ETB paid.\(^\text{16}\) Of these two issues from the first value chain analysis report, the multiple taxation is more pressing to the Borena and S. Somali areas. The letter of credit was not mentioned as a constraint, most likely due to the low volume of official live animal cross border trade with Kenya and Somali. However, the predominant policies and practices within the Ethiopian system that inhibit the growth of the livestock industry, both domestically and internationally, is the lack of government coordination, which is described below.

Lack of Government Coordination

The Government of Ethiopia (GoE) operates in a highly decentralized manner, allowing the various zones, regions, woredas and municipalities autonomy over activities. It was noted during the course of this study that a severe lack in information management, transparency and coordination contributes to multiple GoE agencies in the same area having activity overlaps and gaps simply because they report to different levels of the GoE. Similarly, the GoE agencies in the Borena and Southern Somali Areas all suffer from chronic manpower

\(^{16}\) ACDI/VOCA Afar and N. Somali Region VCA Report.
and budget shortages keeping them from fully achieving planned activities. Instead of effectively collaborating together to compensate for staff and budget shortfalls, the various agencies continue to operate independent, but parallel, strategies far below capacity.

As mentioned above, the lack of information management is also a major inhibitor to the growth of the Ethiopian livestock sector. For example, the Southern Rangeland Development Unit (SORDU) based in Yabello in the Borena Area collects market data regarding animals offered, sold, buyer types and high, low and average sale prices at five markets near their offices. In addition to this current market information, there are records going back more than 20 years to when SORDU was operated as a World Bank project. However, due to budget shortages there are no computers or photocopy machines and at the time of the interview the fax machine was inoperable. This lack of equipment infrastructure contributes to the inability of SORDU to effectively disseminate the wealth of historical and current market information collected to interested stakeholders in both the public and private sectors, or to conduct comprehensive analysis of the market activity trends. In addition to the simple equipment needs for effective information management, a clear and coherent strategy for disseminating information is also required. Under the current system, all information is sent to and retained at the central GoE levels. While this facilitates control of the information, it does not allow free access to market information to all actors in the value chain, specifically the lesser informed pastoralists.

Again, due to budget shortfalls the highly dedicated staffs at the local GoE levels are performing as best they can under the circumstances. However, as the GoE is the main veterinary service provider and of long-term information gathering, more investment in the local GoE branches is needed to allow these institutions to fully reach their capacity in providing assistance to the pastoralist communities and livestock sector if they are to remain the primary providers.

The apparent lack of local governments’ reinvestment back into the livestock sector is also apparent as an inhibitor to the industry’s growth. Market taxes levied on animals entering or sold within primary and secondary markets are quite obviously not reinvested back into the maintenance or expansion of livestock market facilities. Most market tax collectors interviewed either had no knowledge of how their local governments invested the funds collected, or stated that the funds were most often split between local education programs and maintaining the city. A small amount of market taxes invested in improving and maintaining the infrastructure by formalizing the market areas in some cases, adding water and feed troughs and improving market access roads may have the possibility of attracting even more activity to the marketplace, and in turn generate more revenue through increased sales. While the lack of reinvestment is obvious, it is also apparent that this is due to the lack of proper funding and support from the federal government levels. The federal government has passed planning responsibilities without the appropriate budgets to fund activities under the current decentralized system. Without the necessary funding, apparently investments in other areas, such as education and city maintenance, take priority over reinvesting in the livestock markets.
C  Inter-firm Linkages

1  Vertical Linkages

Within the Borena and S. Somali area value chains, there is a lack of strong vertical linkages between actors at all levels. A constant theme is the unwillingness to share information in an attempt to maintain the competitive advantage knowledge of the information provides. This lack of information sharing is much more evident at the lower levels of the value chain, with very little information consistently and transparently being provided the further down.

Buyers and sellers tend to seek each other out based solely on the best price offered, and this has not led to strong relationships built through repeat sales. In addition, the prevalent use of brokers when conducting transactions further clouds the relationships between pastoralists and traders, and provides an additional level through which information may not always pass. This results in limited information flows, both up and down the chain. Individual pastoralists rarely receive frequent information from traders of any size regarding the quantity, quality and other characteristics of the livestock required by the purchasing parties. If the pastoralists are members of a cooperative, and the cooperative has an ongoing relationship with larger traders or abattoir purchasing agents, this information is often provided through the cooperative. The knowledge individual pastoralists do have regarding the market preferences have been gained predominantly through the observing the transactions over time, especially in the Borena region. While this method has allowed them to gain some market information, it is not the most efficient as it does not provide information beyond the most general physical characteristics.

In addition to limited information flows, there are very few embedded services provided with the limited linkages that do exist. No examples of input supplies, veterinary supplies or similar services were reported as being provided to pastoralists by other value chain actors. On occasion, informal credit services were reported to occur. Some abattoir purchasing agents and larger traders occasionally provide advance payments to smaller scale traders to collect a given amount of livestock. Traders may also provide livestock to abattoir purchasing agents with payments to be sent via bank transfer at a later date. The major complaint from traders providing livestock on credit to other actors was that payments were often delayed or in some cases never sent at all, and thereby preventing them from participating in the industry for several weeks at a time.

Traders reported different levels of cooperation with actors above and below them in the value chain. Larger traders often reported that they provided information regarding the quantities and qualities they required in the animals they purchased to smaller traders and pastoralists, as this increased their ability to meet production requirements shared with them by abattoirs or their agents. However, the smaller traders did not appear to obtain, or subsequently pass on, much information beyond the minimum and maximum weight requirements export abattoir purchasing agents would accept. Most often, smaller traders appeared to have limited information regarding product quality, and therefore would not pass this information on to other value chain actors for fear of losing the advantage that knowledge provides.

The export abattoirs do have some vertical linkages into the producer and trader/collection levels through their purchasing agents. Most often, these purchasing agents prefer to work with cooperatives and larger traders as these actors are able to provide economies of scale through selling larger quantities of animals in one transaction. Purchasing agents are
generally transparent regarding the quantity, quality, age, weight and breeds of animals required by their parent export abattoir and provide this information to their suppliers of all sizes.

Cooperatives represent the best and strongest example of vertical linkages with buyers. The export abattoir purchasing agents work with several cooperatives in each region, and transmit information regarding weight requirements, quality, quantity, breed and sex of the animals required to the cooperatives, which in turn provide the information to their members. One abattoir purchasing agent stated that he prefers to purchase animals from pastoralist cooperatives over traders in his area as he feels this helps the community members in the region.

In addition to primary cooperatives in the Borena Area, there is also one cooperative union – the Geda Union.

2 Horizontal Linkages

Horizontal linkages between actors in the Borena and S. Somali area value chains are slightly stronger than the vertical ones. There is a great deal of informal cooperation existing at the producer level of the chain. Pastoralists and agro-pastoralists have a number of traditional cooperating methods including collective grazing, watering (traditional ela wells), bush clearing, trekking and general assistance to each other. Pastoralists also pass information regarding markets, prices and quality and quantity information to each other on a regular, but informal basis through word of mouth.

Pastoralist cooperatives seek to expand and enhance these traditional cooperation methods by adding bulk and contract sales to abattoir purchasing agents and large traders to the activities. There are varying degrees of effectiveness among pastoralist cooperatives; success mostly dependant upon the business and cooperative management skills and livestock marketing training received from various NGOs and government extension agencies.

In addition to pastoralist cooperatives, there are trader cooperatives found in the S. Somali area. The main goal of these cooperatives is not to act as true pastoralist livestock cooperatives, but associations of traders exploiting the tax exemption status that cooperatives enjoy. In the Borena area, there is informal cooperation between traders, usually at the small- and medium-scale size. However, no trader cooperatives were identified. In the Borena area, traders informally cooperate in the primary and some secondary markets by fixing the prices of all livestock classes prior to the market opening. To reduce fierce competition between them, they decide the minimum and maximum prices to be paid for cattle and shoats bought on sight basis and essentially form local cartels to force pastoralists to sell for the lowest possible price. For shoats bought on a weight basis, they will attempt to set one price to be paid for live kilogram weight.

No cooperation between abattoir purchasing agents from rival companies was reported. As all export abattoirs are operating below capacity, there is fierce competition to obtain quality animals in all regions. At the national level, there are the Live Animal Exporter Association and the Meat Exporter Association which coordinate advocacy for both classes of export activities.
**D Supporting Markets**

1 **Livestock Industry Specific Service Providers**

    a) Input Suppliers

Pastoralist and agro-pastoralists cited free grazing on common pastoral land as the predominant source of feed inputs for their cattle, sheep, goats and camels. Pastoralists and traders alike purchase feed supplies during the dry seasons from agro-pastoralists in the S. Somali area. These feed supplies tend to be crop residues and fodder. In addition to the feed inputs, pastoralists and agro-pastoralists in both areas purchased salts for their livestock. Mineral salts purchased at approximately 300 ETB per 10 kilos were the preferred input over the mud-like black salt.

In the Borena area, pastoralists and traders stated that they only provide free range grazing to the animals while they are in their care. During the dry seasons, pastoralists stated they simply moved their herds to areas with available graze land and water supplies as opposed to paying for additional feed products. Traders uniformly stated they make every effort to reduce the amount of time the animals are in their possession before reselling them to minimize the feed and water requirements.

    b) Veterinary Services

Veterinary services are available from five sources in both regions: Government of Ethiopia agency providers, Community Animal Health Workers (CAHWs), private veterinary service providers, NGOs and illegal supplies from Kenya or Somalia. Pastoralists in both regions repeatedly mentioned shortages in available veterinary service provision. It was also noted in both regions that some pastoralists were reluctant to purchasing veterinary inputs from government agencies, as they believe that all such services should be provided free of charge as they were under the Derg regime. The majority of pastoralists and traders did state they purchased or obtained veterinary services to maintain the health of their animals. The prevalence of community animal health workers, private veterinary suppliers and black market drug supplies also points to a willingness for pastoralist and traders to pay for veterinary services. The limited supply appeared to be the dominant problem, as opposed to demand, because even with the variety of providers the inability to access the services when needed was a common constraint mentioned.

Various government agencies provide veterinary services in the forms of vaccinations (on annual and as-needed basis), diagnosis, treatment and castrations. The most common diseases and conditions for treatment mentioned were the following: internal parasites, external parasites, contagious caprine pleuropneumonia (CCPP), foot and mouth disease, lump skin disease, black leg disease, pastrolosis, trips, contagious bovine pleuropneumonia (CBPP), anthrax and general wounds. In both regions, the Woreda Pastoral and Rural Development Office provide the above mentioned services. In the Borena Area, the Southern Rangeland Development Unit (SORDU) also provides these same services and has a small veterinary lab on their premises with seven small satellite offices. However, there is a shortage of senior technical staff with only one licensed veterinary doctor is available for all eight offices and a shortage of laboratory assistants.

Annual vaccinations are free of charge; all other services are on a fee basis with the fees being set by the regional government. The price range for drugs and vaccinations is from
0.15 ETB to 434.50 ETB, with the most expensive drug being the one to treat camel trips (but the dosage is appropriate for six to seven animals). The vaccines and drugs are supplied to both the Woreda offices and SORDU by the Oromia Pastoral Area Development Commission and the Oromia Rural and Agricultural Development Bureau. Occasionally, NGOs supply veterinary inputs to both agencies. In the Borena Area, there were severe shortages of necessary drugs noted by both the woreda and SORDU offices, to the point where SORDU staff noted that they were only able to carry out 20 percent of planned activities based on the limited supplies.

Community Animal Health Workers (CAHWs) are another source of veterinary inputs to the pastoralist regions. These CAHWs are members of the pastoralist communities chosen to provide basic animal veterinary services. They are trained by the government and by NGOs in basic diagnosis and treatment of common cattle, sheep and goat diseases. They provide their services to the pastoralist communities on a fee basis. Often, these CAHWs are organized into cooperatives, and the cooperative organizes the purchase of medical supplies and other necessary inputs for the members through associations with local veterinary doctors.

A limited number of private veterinary service providers are located in each region. They obtain their supplies and drugs from companies in Addis Ababa and provide services on a fee basis only. The private service providers are generally found in the larger rural towns where there is a sufficient population and knowledge of their services to support the business.

As there is a chronic shortage of drugs through the government veterinary service providers, contraband drugs and vaccines from Kenya and Somalia are frequently available in or near the livestock market places. The drugs and vaccines available through the illegal traders are often administered without proper consultation. Efforts are made by the Woreda level officials to curb the sale of these contraband drugs; however, they face difficulties of manpower and budget shortages during the efforts of eliminating this problem.

c) Training and Extension Services

Various GoE agencies are tasked with providing training and extension services to pastoralists regarding animal health, herd management and rangeland management topics. All agencies acknowledge this portion of their responsibilities and stated that extension and training plans were made. It was unclear, however, the level of activities actually undertaken against planned in light of staff and budget constraints. Agencies stated that while plans were made and annually submitted to the central government for approval and funding, rarely were activities undertaken due to inadequate funding. The local GoE branches rely heavily on the NGO community to assist in these training and extension activities. In both regions, there are a number of local and international NGOs providing a variety of trainings to cooperatives and members of the pastoralist communities. Most pastoralists interviewed mentioned the NGO community as the current providers of training and extension services, but stated that the government “used to” provide these as well.

d) Trekking & Livestock Specific Transport Services

The trekking services available to the livestock industry are informal in nature. Most pastoralists will trek their own animals to markets on an as needed basis. Traders of all sizes will hire individuals to trek cattle, sheep, goats and camels from bush and primary markets to
secondary markets. The trekkers hired may be smaller traders, brokers or family members of the livestock owner. Examples of trekking fees from are illustrated on the next page in Table 3.

Table 3 – Livestock Trekking Fees

<table>
<thead>
<tr>
<th>Origin Market</th>
<th>Destination Market</th>
<th>Distance (Km)</th>
<th>Days (Avg.)</th>
<th>Fee per Head (ETB)</th>
<th>Unit Price per km/head (ETB)</th>
<th>Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dokole</td>
<td>Dubluk</td>
<td>37</td>
<td>1</td>
<td>3.00</td>
<td>0.08</td>
<td>Cattle</td>
</tr>
<tr>
<td>Negelle</td>
<td>Dubluk</td>
<td>250</td>
<td>8</td>
<td>31.25</td>
<td>0.13</td>
<td>Cattle</td>
</tr>
<tr>
<td>Negelle</td>
<td>Moyale</td>
<td>250</td>
<td>8</td>
<td>31.25</td>
<td>0.13</td>
<td>Cattle</td>
</tr>
<tr>
<td>Dawa</td>
<td>Haro Bake</td>
<td>100</td>
<td>4</td>
<td>17.00</td>
<td>0.17</td>
<td>Cattle</td>
</tr>
<tr>
<td>Dubluk</td>
<td>Haro Bake</td>
<td>85</td>
<td>2.5</td>
<td>5.00</td>
<td>0.06</td>
<td>Cattle</td>
</tr>
<tr>
<td>Teltele</td>
<td>Haro Bake</td>
<td>120</td>
<td>3</td>
<td>10.00</td>
<td>0.08</td>
<td>Cattle</td>
</tr>
<tr>
<td>Elwaya</td>
<td>Haro Bake</td>
<td>50</td>
<td>2</td>
<td>10.00</td>
<td>0.20</td>
<td>Cattle</td>
</tr>
<tr>
<td>Arero</td>
<td>Haro Bake</td>
<td>100</td>
<td>4</td>
<td>10.00</td>
<td>0.10</td>
<td>Cattle</td>
</tr>
<tr>
<td>Haro Bake</td>
<td>Moyale</td>
<td>220</td>
<td>7.5</td>
<td>26.67</td>
<td>0.12</td>
<td>Camel</td>
</tr>
<tr>
<td>Dubluk</td>
<td>Moyale</td>
<td>135</td>
<td>3</td>
<td>13.33</td>
<td>0.10</td>
<td>Camel</td>
</tr>
</tbody>
</table>

In addition to trekking animals, a limited amount of livestock-specific transportation vehicles is available in the Borena Area. SORDU currently owns four livestock transport vehicles, with an additional four trailers capable of being hitched. However, only two of the trucks are operational. SORDU occasionally allows cooperatives to borrow the operational vehicles, free of charge, to transport animals to the central markets, fattening stations and abattoir facilities. The cooperatives are responsible for providing all fuel costs, the driver and the driver’s salary.

e) Holding Grounds

Large scale commercial holding grounds were not identified in the Borena or S. Somali areas during the course of the study. Open pastoral land was typically reported as being the areas where animals were held before being transported to central markets, fattening grounds in the central region or abattoir facilities. Traders of all sorts also stated that when collecting animals that they would keep them on open pastoral or graze land near the purchase market. In market areas, there are often small thorn enclosures used as short term holding grounds by traders and pastoralists, often for a fee, which suggests a demand for short term pre- and post-market holding grounds.

Some export abattoirs lease large tracts of land from the GoE for use as their own holding grounds as part of an integrated service with their other operations. They do not operate these areas on a fee-for-use basis to local traders, pastoralists or other value chain actors. However, during drought emergencies one purchasing agent stated that surrounding communities are implicitly allowed to bring their herds onto these holding grounds should the grazing need arise. Outside of drought emergencies, the land is generally considered integrated into the export abattoir’s processing system and is not open to community use or individual rent.

17 ACDI/VOCA PLI-LM Market Data, Yabello Office.
f) Fattening Operations

Small-scale fattening operations exist in the S. Somali area. These are generally restaurateurs or butchers who purchase cattle and fatten them on table scraps. No formal weighing at purchase and prior to sale is conducted, so no knowledge of weight gains are recorded. When the livestock is visually determined to have reached an appropriate size they are either resold or slaughtered for use within the restaurant or butchery.

Two fattening cooperatives are located in the Borena Area, and one small-scale fattening operation is being conducted by an individual in the Yabello area. More exploration is required to understand the scale and conduct of the activities of these organizations.

g) Ranches

In the Borena Area, there are three ranches – Saritay (70,000 ha), Walenso (20,000 ha) and Dombolo Wocho (10,000 ha). These three ranches were previously under the GoE (SORDU) management during the Derg Regime; however, they have been turned over to cooperatives located in the same areas. All three ranches are reportedly in need of extensive rehabilitation and maintenance of infrastructure (offices, barns, loading ramps, wells, ponds, watering and feeding troughs) to bring them to full operational capacity.

Of the three ranches, the cooperative with ostensible control over Dombolo Wocho was interviewed. It is apparent that the cooperative does not have the necessary business management or technical capacity to properly manage or exploit the ranch’s resources. In addition, the cooperative is wary of making too many improvements and increasing the number of animals contained within the ranch for fear of upsetting the local community which views the land as a source of emergency grazing land during drought emergencies. The cooperative stated they were the ultimate decision makers regarding the operations of the ranch, but also expressed the need to receive approval from the local community regarding the use of the land or face intrusions and unofficial grazing on the land. This contradiction raises the issue of ultimate control, especially in the Borena Area where the need for community approval is quite strong in the decision making processes.

h) Quarantine Services

Relatively new quarantine facilities are available in Moyale, but appeared closed for unknown reasons. Individuals with knowledge of the facilities and operations were not located during the course of the study. A visual inspection of the facilities suggest several offices, observation barns, feeding & watering troughs, roof cisterns, and an intake chute with partitions on the premises. It could not be observed how the animals would be separated upon entry and quarantined from those already processed and under observation. Further investigation is required to determine the full nature of the operation capacity, why the facilities are inoperable and who the intended clients of the facilities are.

2 Cross-cutting Service Providers

a) Transportation Services

There are a variety of transport options which provide services to industries in addition to the livestock one, and they are listed below.

Isuzu Trucks
The largest proportion of livestock animals are transported via privately owned Isuzu trucks. These Isuzu trucks transport grains and other commodity goods south into Borena from the central areas and then return northward with livestock. On average, between 10 – 12 large cattle, 15 – 17 immature cattle or 60 – 70 shoats are transported in one vehicle. If the trucks are equipped with a second platform level, the number of shoats transported doubles. Cattle are taken to the markets in Nazareth, Modjo and Debre-Ziet, while shoats are taken primarily to abattoirs located in Modjo, Debre-Ziet and Meta Hara.

The Isuzu truck drivers are matched with traders through brokers who arrange the transportation fees and collect a commission of 50 ETB. Average transport costs range between 1,000 – 1,800 ETB depending upon the distance the animals are to be transported, with prices rising up to 2,200 ETB per trip during a drought. For example, an Isuzu truck delivering cattle on the approximately 500 km route from Dubluck market to Nazareth was quoted as 1,600 ETB, or 3.20 ETB per km.

The main constraint with this form of transport is that the Isuzu trucks are not specifically designed to transport livestock, therefore the risk of animal mortality or damage is quite high. The high speeds at which these trucks travel and the lack of partitions within the bed of the truck both contributes to this problem. In addition, livestock of all types are typically loaded immediately after purchase by the traders with little rest period. As the livestock are often trekked one to five days to the market places they are not in a rested condition prior to be loaded onto the trucks which is another factor in increasing the chances of damage during transport.

**Airline Cargo Transportation**

Meat products are exported via air cargo space to the Gulf States and regional African nations. The export abattoirs reported problems regarding the availability of required cargo space for their operations. Often there are shortages, or confirmed space allotments are cancelled without prior notification. Ethiopian and Saudi Airlines are the ones that export abattoirs can reportedly use at the present to export chilled and frozen meat products to various international locations.

### 3 Financial Service Providers

In general, there is a lack of appropriate financial service providers to the livestock industry actors at the lower levels of the value chain. Pastoralists, livestock cooperatives and all levels of traders expressed the lack of capital as one of their main constraints. Most pastoralists and traders interviewed cited family and friends as the major provider of informal credit when necessary. The majority of cooperative leaders interviewed mentioned emergency credit services were available to individual members of the cooperatives, but these were generally smaller loans not intended to finance business operations.

In addition, there are limited amounts of transactions that occur on a credit basis. Most traders do not prefer to sell animals to larger traders or abattoir purchasing agents on a credit basis as payments can be delayed, or in some cases never arrive. In some instances, the purchasing trader will not reveal that he does not have the cash available to cover the cost of the agreed upon transaction. Instead of revealing this when negotiations start, the purchasing trader will negotiate the price, mark the animals as sold and then reveal that he is incapable of providing the payment. The selling party is often forced to accept this situation with little recourse as once the animals are marked as sold, no other traders will negotiate for
their purchase under the assumption that they are not for sale. When payments are delayed, this effectively removes the trader from the markets until capital funds can be rebuilt.

The major inhibiting factor for pastoralists, traders and cooperatives obtaining loans from commercial banks is the inability to use livestock as collateral. One bank officer stated that the bank was willing to make loans to individuals in the livestock industry if they could meet the collateral terms. When asked if livestock could be used as collateral, it was stated livestock could be used as collateral if insured. However, no insurance policies for livestock are currently in place in Ethiopia. In Moyale, the manager of the Ethiopian Commercial Bank appeared open to the possibility of working with pastoralist cooperatives in providing loans based on business plans. More exploration with the bank and assistance to the cooperatives is most likely required before progress can be made.

**E Upgrading**

**1 Livestock Industry**

There are a few examples of upgrading that can occur at various levels of the Ethiopian livestock industry. One such activity is increased cooperation at the upper levels of the value chain to create a collective export strategy for the industry.

Another example of upgrading would be encouraging the shift from visual weight estimate sales to weight based sales. Market infrastructure development presents an excellent opportunity to encourage this shift within the livestock industry. Repairing existing cattle scales and providing standard weights to verify the accuracy of the scales would increase transparency during the transaction process, and may serve to encourage pastoralists and traders to transact cattle sales on a weight basis. Additionally, providing stable cross-bars and standard weights to verify the accuracy of traders’ scales for the shoat trade could also increase transparency during the course of sales.

In the absence of cattle scales, another method to encourage more accurate weight estimations is the use of a tape measurement around the barrel of the animal’s chest with corresponding marks to weights. This practice is currently in use in other countries, however due to the different chest circumference to weight ratios for various breeds of cattle, the formula should be re-calculated before being introduced into the markets. Once an accurate formula is established, making the tape measures available to all actors within the value chain will help concentrations of power at any one particular level.

Upgrading animal quality through improved animal health status could be achieved through improving veterinary health service provision and improving the inspection and certification systems. Improved animal health services will improve overall animal productivity and could begin to address SPS requirements of countries importing live animals and meat products, especially if appropriate measures are applied to export animals.

**2 Firm Level**

At the firm level, there are opportunities for upgrading as well. For cooperatives, increased attention to improving business planning, business and cooperative management skills will enhance their groups’ ability to operate efficiently. Cooperatives and traders could expand upon current activities to begin small scale fattening operations to increase the amount of value added activities in the rural areas. Activities could begin with only a few cattle to
minimize investment risks, but expand over time. Feed inputs could be obtained as crop residues from local agro-pastoralists or purchased from input suppliers in the central areas.

Holding grounds also represent another opportunity for cooperatives and traders to expand upon current activities. It was noted by Isuzu truck drivers, larger traders, and abattoir purchasing agents that livestock are sometimes loaded immediately onto Isuzu trucks for transport after being sold in the market places. When livestock have been trekked long distances to the market places and then loaded immediately onto Isuzu trucks, this increases the odds of animals falling during transport due to weakened conditions. If holding grounds near major market places are established with the necessary infrastructure of watering points and feed troughs, the animals could be maintained either prior to the market days or after being sold. Holding grounds could also eliminate the possibility of loss or theft of animals when left to free graze with minimal supervision between sale and transportation.

Export abattoirs could continue to integrate transportation, holding and fattening processes into their operations. However this does not increase the amount of value addition at the lower levels of the value chain and will most likely not create a great deal of benefits to pastoralists and agro-pastoralists. Another option for upgrading at the export abattoir level that may help offset some of the supply and demand fluctuations is the expansion of vacuum packing meat cuts. This process upgrading function would allow meat to be stored for longer periods, and open the possibility of exporting meat products via sea as opposed to air cargo.

Pastoralists did not exhibit much interest in upgrading activities to move to another level of the value chain. They mostly stated a desire for additional buyers to increase price competition, but not the desire to move into trader or broker functions themselves. In terms of process upgrading, the ability to increase pastoralists’ knowledge of market oriented herd and range management techniques are an opportunity to increase the quality of the livestock they produce.

VIII Relationships

A Power Dynamics between Firms

Power is increasingly concentrated in actors further up the value chain. As there are a large number of pastoralists supplying animals at any given market and a rather limited number of traders and abattoir purchasing agents, the traders and purchasing agents are the ones setting prices and dictating the terms of sale. The purchasing agents and large traders supplying them and export abattoirs have the maximum sale prices and livestock requirements for meat export set by the abattoirs, as these are ultimately set by the foreign orders for products and or live animals. The pastoralists do have a small amount of power in that they have some ability to control when and to whom they sell their livestock. With limited market information on a national and international level, this is not a great deal of leverage.

In the market places, brokers also wield a great deal of power, as the majority of transactions are conducted with their assistance. The brokers make every effort to conceal maximum and minimum sale prices from pastoralists, traders and abattoir purchasing agents. Controlling the price information from both parties allows the brokers to conduct sales at the maximum
benefit to themselves and not buying or selling parties. This occurs when the brokers arrange a sale and accept the maximum sale price for the buyer and the minimum sale price from the seller, keeping the difference for themselves. This occurs most often in the Borena area when language barriers keep pastoralists and traders from communicating directly with each other. As mentioned earlier in the report, groups of brokers and traders also collaborate to fix maximum purchase and minimum sale prices during markets.

**B Access to Learning and Innovation**

There is not a great deal of access to learning and innovation at the lower levels of the value chain. Pastoralists have been raising livestock for generations and in many cases continue to use the same traditional methods of herd management. Export abattoir managers and their purchasing agents stressed that pastoralists and cooperatives should be educated in “modern,” or market oriented, herd management techniques, but consistently stated that providing that information was the responsibility of the government, NGOs or some other party, not themselves. While the government and NGO community does provide some training and extension services to pastoralists and agro-pastoralists the reach is limited and dependent upon the budget availabilities of the providers.

In the Borena region, pastoralists and cooperatives’ main access to end market requirements for their livestock is through the export abattoir purchasing agents. Purchasing agents provide cooperatives and larger traders with information requiring the quantity, quality, weights and delivery times of the livestock required. They stated that when cooperatives were informed of the livestock requirements and delivery times, they were usually met. When it comes to market price information, purchasing agents do not provide any information beyond the price per kilogram of live weight for cattle, sheep and goats that they will pay as they do not want to inform their suppliers of alternate market outlets which may provide better prices.

In addition, there is a lack of market price and livestock quantity requirement information for both major Ethiopian markets and international markets. This lack of price and quantity information prohibits all parties from knowing where to obtain the best market prices for livestock. Some pastoralists interviewed reported that to determine fair market prices for the cattle they wished to sell, they would often visit the market in advance and observe the sales of cattle of similar age, size and quality of the ones they wished to sell. When they return with the cattle and are prepared to sell, they will use their knowledge of the prior week’s sale prices during the bargaining process. Pastoralists will also ask others in their community who have recently come from market places for information on pricing and the types of animals sold. The only downside to these methods is that the end market requirements may shift suddenly and the animals brought to the market may no longer be in high demand.

**C Benefits**

Benefits can create incentives or disincentives for performance by the participants within a value chain. They can translate into increased income, reduced market risk and an increased value of assets. The easiest way to see where the benefits to participating within a value chain are located is to observe where the profits occur during the various transactions. Several examples of transaction series are outlined below to illustrate where the profit margins lie within the Ethiopian livestock value chain. Without knowing the cost to
pastoralists of raising livestock, the profit for them has been calculated at the total sales cost less any brokerage fees or market taxes levied. For all other participants, the profits are calculated at the total sale price less brokerage fees, market taxes and transportation costs.

1 Example One

In this example, a pastoralist sells five shoats, each with an average weight of 25 kg, to a small scale trader in Teltele market. The small scale trader treks the purchased shoats, with 15 others bought during the day, to Haro Bake market and sells them all to a large scale trader. The large scale trader purchases a total of 65 shoats during the market period, enough to fill an Isuzu truck. The large scale trader arranges for the truck load of shoats to be sold to MMEA. The transportation cost to the small trader is that of hiring a trekker to move the animals from Teltele to Haro Bake. The transportation costs for the large trader include the truck rental, loading and unloading fees and taxation at three points along the delivery route. The table below illustrates the transaction cost to each actor within the value chain on a per animal basis.

Table 4 – Per Animal Transaction Cost for Small Shoat Sale

<table>
<thead>
<tr>
<th>Seller</th>
<th>Point of Sale</th>
<th>Purchase Price/kg</th>
<th>Broker Fee</th>
<th>Market Tax</th>
<th>Transport Cost</th>
<th>Subtotal Sale Price / kg</th>
<th>Total Sale Price</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoralist</td>
<td>Teltele</td>
<td>2.50 ETB</td>
<td>2.50</td>
<td>5.00 ETB</td>
<td>5.50 ETB</td>
<td>137.50 ETB</td>
<td>132.50 ETB</td>
<td>4.79 ETB</td>
</tr>
<tr>
<td>Sm. Trader</td>
<td>Haro Bake</td>
<td>5.50 ETB</td>
<td>2.50 ETB</td>
<td>0.25 ETB</td>
<td>142.75 ETB</td>
<td>150.00 ETB</td>
<td>7.25 ETB</td>
<td></td>
</tr>
<tr>
<td>Lg. Trader</td>
<td>MMEA Facilities</td>
<td>6.00 ETB</td>
<td></td>
<td></td>
<td>26.46 ETB</td>
<td>181.25 ETB</td>
<td>4.79 ETB</td>
<td></td>
</tr>
</tbody>
</table>

2 Example Two

This transaction example is almost identical to the first example. The only change is the large trader accumulates 130 shoats for transport to the MMEA facilities. He hires an Isuzu truck fitted with a second layer, so only one transport delivery is to be made. As shown in Table 5, the large trader’s profit margins increase by 11.73 ETB per animal in this instance. Simply by increasing the economy of scale in the transaction, the large broker is able to increase his profits in this transaction by almost 350 percent, yet this benefit is not transferred down the value chain to the smaller trader or pastoralist. Without receiving a price premium, and therefore increased profits, for providing large numbers of sheep and goats during a single sale directly to large traders or abattoir purchasing agents, the pastoralists have no increased benefit to conducting bulk transactions.

Table 5 – Per Animal Transaction Cost for Large Shoat Sale

<table>
<thead>
<tr>
<th>Seller</th>
<th>Point of Sale</th>
<th>Purchase Price/kg</th>
<th>Broker Fee</th>
<th>Market Tax</th>
<th>Transport Cost</th>
<th>Subtotal Sale Price / kg</th>
<th>Total Sale Price</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoralist</td>
<td>Teltele</td>
<td>2.50 ETB</td>
<td>2.50</td>
<td>5.00 ETB</td>
<td>5.50 ETB</td>
<td>137.50 ETB</td>
<td>132.50 ETB</td>
<td>4.79 ETB</td>
</tr>
</tbody>
</table>
3 Example Three

In this example, a pastoralist sells a bull to a small trader in Dubluck market, who then treks the animal to Haro Bake. In Haro Bake, the small trader sells the bull to a larger trader who hires an Isuzu to truck the animal, with the others he bought, to Nazareth for further sale.

Table 6 – Transaction Costs for the Sale of a Bull

<table>
<thead>
<tr>
<th>Owner</th>
<th>Point of Sale</th>
<th>Purchase Price</th>
<th>Broker Fee</th>
<th>Market Tax</th>
<th>Transport Cost</th>
<th>Subtotal</th>
<th>Sale Price</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoralist</td>
<td>Dubluck</td>
<td>15.00 ETB</td>
<td>5.00 ETB</td>
<td>20.00 ETB</td>
<td>2,100.00 ETB</td>
<td>2,100.00</td>
<td>2,080.00</td>
<td></td>
</tr>
<tr>
<td>Sm. Trader</td>
<td>Haro Bake</td>
<td>2,100.00 ETB</td>
<td>5.00 ETB</td>
<td>5.00 ETB</td>
<td>2,125.00 ETB</td>
<td>2,300.00</td>
<td>175.00</td>
<td></td>
</tr>
<tr>
<td>Lg. Trader</td>
<td>Nazareth</td>
<td>2,300.00 ETB</td>
<td>5.00 ETB</td>
<td>195.63 ETB</td>
<td>2,515.63 ETB</td>
<td>2,900.00</td>
<td>384.38</td>
<td></td>
</tr>
</tbody>
</table>

IX Recommendations

14. Advocate for increased coordination and information management between various levels of the Government of Ethiopia.

A key area to be addressed is the transparency and flow of information regarding the Ethiopian livestock sector to all participants. Removing barriers to access information and eliminating the concentration of information at particular levels will increase the ability of the value chain actors to make more appropriate market-based decisions regarding their activities. Improved access to information such as export figures (volume, pricing, destination, etc.), national secondary and terminal market prices, policy and legislation issues and the effective transparent communication of this information to interested value chain stakeholders will be a tremendous effort in eliminating market distortions.

15. Establish pilot fattening stations in the regions.

Pilot fattening stations established in the Borena and Southern Somali areas would help increase the amount of value added activities available to value chain actors in these regions. In the S. Somali area, some cooperatives are already engaged in providing fodder to both
members and non-members. Working with these cooperatives to feasibly expand the fodder gathering and/or the use of agricultural byproducts into a more regularized activity with a focus on fattening small numbers of cattle for resale may be one approach.

In the Borena area, there are no rivers and therefore little opportunity for the same expansion upon irrigation fodder activities that are currently underway in the Southern Somali area. In this area, cooperatives and other formal or informal pastoralist groups wishing to upgrade services into fattening operations could be supported through technical assistance.

One opportunity for a pilot site location is the Dombolo Wocho ranch located near Dubluck. If community buy-in is achieved, there is sufficient land available to support a fattening station.

16. Encourage establishment of holding grounds near major market places so livestock are rested for an appropriate amount of time before being loaded onto transport vehicles.

Livestock fatigued from being trekked long distances to markets and then loaded onto Isuzu trucks for transport to the areas surrounding Addis Ababa are more likely to fall and damage themselves or other animals within the truck. Holding grounds used prior to or post sale could reduce this likelihood for injury. In cases where markets are not held every day, there is the potential to upgrade and begin holding ground operations. Municipal governments may be encouraged to allow the existing market facilities to be used as secure holding grounds based on the potential for increased funds.

17. Investigate low-cost partition improvements or creation for Isuzu trucks appropriate for livestock.

This activity will be investigated during the course of the ACDI/VOCA transportation consultant’s study.

18. Support livestock cooperatives through strengthening business management and modern herd management short term technical assistance.

The continued support of existing cooperatives in both the Borena and Southern Somali areas will help strengthen their abilities to compete within the livestock value chain. Particular emphasis should be on providing business planning and management and cooperative management to newer cooperatives. Modern herd and graze land management techniques will also strengthen cooperatives’ ability to improve the quality of livestock they are able to offer buyers.

19. Support the increased usage, rehabilitation and management of existing ranches through rangeland management and applicable short term technical assistance.

This support can be to the cooperatives that have ostensible responsibility for the management of the ranches. Or in cases where the responsible cooperatives are not in a position to undertake these activities, the support could be seen as a community development issue with the management training targeted at community elected management groups. In either circumstance, educating the local pastoral communities who
(in at least one instance) have come to view the land as an emergency reserve for use during droughts will be essential to its success.

20. Organize market linkage trips between cooperative leaders and live animal exporters, fattening unit operators and export abattoirs.

Improving access to different markets and increasing the number and variety of buyers available, and thereby increasing the options and bargaining power of producer groups, is the goal of these market linkages. In the Borena area, the linkage trips can be organized through the Geda Cooperative Union, which will assist in strengthening its reputation and service provision to primary cooperative members. Or, the linkage trips can be organized for the leaders of the strongest cooperatives throughout the Borena and Southern Somali areas with no dependency upon their membership in a cooperative union.

Working with pastoralist representative institutions (such as cooperatives and unions, but also including pastoral traditional leaders and elders, Pastoralist forum, etc.) will help achieve greater awareness and empowerment of pastoralists in terms of understanding market prices and where profits are extracted from the system and by whom. A publicity campaign should be mounted to extend this information as broadly as possible (using PLI partners and other NGOs such as Oxfam, mass media and development of concise, multi-lingual briefs containing the key information and targeting pastoral leaders).

21. Facilitate a stakeholder workshop with representatives from all categories of actors within the value chain and major supporting service providers with an emphasis on the private sector taking control of the competitiveness strategy for the Ethiopian livestock industry.

Bringing together forward-thinking representatives from the entire Ethiopian livestock industry – pastoralists, cooperative leaders, traders, fattening unit and holding ground operators, live animal exporters and export abattoirs and their purchasing agents – will allow all participants in the industry to fully understand how their livelihoods are all interconnected and that the key to increased competitiveness is industry cooperation. When facilitating the stakeholder workshop, the emphasis should be on the industry players formulating a vision for the Ethiopian livestock industry’s competitiveness and establishing their own goals in reaching it. Encouraging the private sector to take ownership of investment and improvements within and to the industry will help ensure sustainability once PLI program funds are no longer available. The industry actors must begin to realize that they must make the investments, or effectively lobby the Government of Ethiopia, to the livestock industry as there will be no “livestock Starbucks” making the investments for them.

22. Work with the financial sector to encourage the creation of appropriate loan products and lending schemes for the livestock industry participants.

More research is necessary to determine the specific types of appropriate loans and lending schemes for pastoralist and traders further down the industry value chain. However, encouragement of the formal banking sector to work with pastoralist cooperatives in
developing business loans, similar to the emergency loans disbursed by ACDI/VOCA during the recent drought, could serve as a starting point.

23. Work with the insurance sector to encourage the establishment of livestock insurance plans that could be made available to pastoralists, cooperatives and Isuzu truck owners. Agriculture insurance products are common in numerous other countries, both developed and developing. Assisting the insurance industry in seeing the viability of insuring pastoralist and pastoralist cooperative livestock would be a step forward in helping establish livestock as collateral in the formal banking sector. In addition, exploring the opportunity of creating insurance plans for Isuzu truck owners to reduce the financial shocks when animals are damaged during transport would also benefit the industry.

24. Encourage pastoralists to purchase scales appropriate for weighing sheep and goats. The ability of individual pastoralists to know the live weights of their sheep and goat flocks is easily managed through the encouragement of purchasing scales. Bulk scale purchases could be coordinated by cooperatives, which could resell them both to members and non-members at local market places. The ability to know the live weight of animals in the herds will allow pastoralists to transport only those sheep and goats that will be accepted by traders or abattoir purchasing agents and thereby reduce wasted time and effort.

25. Establishing a basis for accurately estimating cattle weight based on chest measurements. Formulas for calculating an accurate ratio of cattle chest circumference to weight exist for other breeds. Investigating the establishment of a similar “low-tech” measurement for Ethiopian cattle breeds would be an effective way to begin to introduce weight measurement sales into areas without operational livestock scales. Once the ratios are established, the production and sales of low cost tape measures in the rural regions could easily be organized.

26. Establish a radio-based market information dissemination program broadcast in regional dialects. Currently there is a lack of reliable and accurate market information regarding both quantities of animals required and available and the respective market prices for locations in Ethiopia and internationally. The establishment of either a public or private sector run weekly radio program is an effective way to reach the vast majority of the rural populations. Radio programs would have a much further reach than any print or televised media campaign. Broadcasts conducted in the major regional dialects would further increase the number of beneficiaries.