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# **Climate Variability and Livestock Marketing in Borana: Opportunities and challenges, preliminary observations**

**Year 2 Report**

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**PROJECT ON “CLIMATE-INDUCED VULNERABILITY AND  
PASTORALIST LIVESTOCK MARKETING CHAINS IN SOUTHERN  
ETHIOPIA AND NORTHEASTERN KENYA (CHAINS)”**

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## **Preface**

This report is part of a series of field research reports from the “Climate-Induced Vulnerability and Pastoralist Livestock Marketing Chains in southern Ethiopia and northeastern Kenya (CHAINS)” project, which is part of the Feed the Future Innovation Lab for Collaborative Research on Adapting Livestock Systems to Climate Change based at Colorado State University and supported by USAID Grant No. EEM-A-00-10-0001. It represents the second annual report by Dr. Waktole Tiki, a post-doctoral research associate on the project who is based in Ethiopia. The CHAINS project works with several partners in Ethiopia, including the Institute of Development Studies, Addis Ababa University and the International Livestock Research Institute (ILRI), and in Kenya, including the Technical University of Mombasa and ILRI. Its objectives are to: (1) understand the ways in which climate variability and change affect livestock marketing chains in southern Ethiopia and northeastern Kenya; (2) assess which social groups (for example, low-income pastoralists and small- and large-scale traders) benefit the most from different market chains and climate risk scenarios; (3) examine the effects of increased market commercialization and climate variability on pastoral livelihoods and land use; and (4) recommend policy-based solutions to improve livestock markets and the benefits that low-income pastoralists and traders derive from them.

As part of the CHAINS project, Dr. Waktole has been involved with a study of livestock traders and market institutions involved with animal trade in Ethiopia. This annual report highlights both the successes and challenges that he has faced in the field and provides some of the unedited excerpts from his detailed ethnographic interviews with traders. Rather than wait several months or even years until these materials are published in a formal format or journal, we are making the materials available in a field research report series with only light editing. Enjoy!

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## **Preamble**

This report presents the work done from 1 November 2012 to 31 October 2013. Seventy-six traders were interviewed during the first round from Yabello, Dubuluq, Harobake, Moyale and Adama. Moreover, qualitative interviews were conducted with pastoralists, key traders, brokers, and government officials working in livestock and marketing sectors. The main problem in conducting this work was finding time to talk with the traders who were busy with their marketing activities. In some cases, we had to interrupt the interview and went back to the trader to complete the questionnaire. The field work was conducted in October and December of 2012 and in February, March, May-June and August of 2013.

### ***Ethiopia's livestock potential and challenges***

Ethiopia has diverse microclimates and ecological settings that suit the production systems of diverse livestock species. Moreover, Ethiopia is located close to the Middle East, a region where the demand for beef and mutton is growing fast. However, the benefits to the smallholder producers and the country's earnings from the livestock sector are constrained by a number of factors. First, the majority of livestock for export originate from pastoral areas, where the purpose of production is family subsistence.

Pastoralists lack the know-how and access to improved inputs such as animal feed to help improve the production sector. They have little, if any, knowledge of the international requirements for beef/mutton quality as well. There is no traceability mechanism that would allow the product to be traced to its origin of production. In general, pastoral livestock producers lack the orientation towards internationally marketable products.

Second, climate variability has threatened the pastoral production system by impacting the availability and quality of feed and water resources on which the livestock depend. Pastoral areas of Ethiopia are the most vulnerable to climate variability. Climate variability reduces range productivity, changes plant composition to less palatable species (bush encroachment) and reduces feed availability. A reduction in feed availability and the deterioration of quality range lands leads to diminished livestock production. Since the Ethiopian livestock marketing chain links pastoral areas, specifically Borana, to the international level, the likelihood of climate variability disrupting the chain is always high.

Third, environmental degradation in pastoral areas has already changed large areas of land into unusable plots (due to things like soil degradation, bush encroachment, etc.). Fourth, shrinkage of available grassland due to the expansion of cultivation and other private use has reduced the potential of communal grazing land (Tiki, et al. 2011). Changes in land use and land tenure present additional challenges to the already diminished amounts of feed available in pastoral areas. In some cases, crop cultivation competes with livestock production in the more productive valleys. In other cases, cultivated land divides available

land for communal grazing and puts it under private ownership. This reduces the amount of communal grazing land, causes conflict and threatens community responses to climate variability by weakening the social fabric and social safety net. Furthermore, crop production restricts mobility, or blocks mobility routes, and instigates conflict. However, there are still benefits to livestock production, if the climate is good (i.e., crop residue).

Another important point that is missing is how climate variability leads to a shortage of animal feed, especially when animals overgraze the land before perishing due to drought. The overgrazed, less productive land will become overgrown with less palatable acacia species, a common problem of current Borana rangelands.

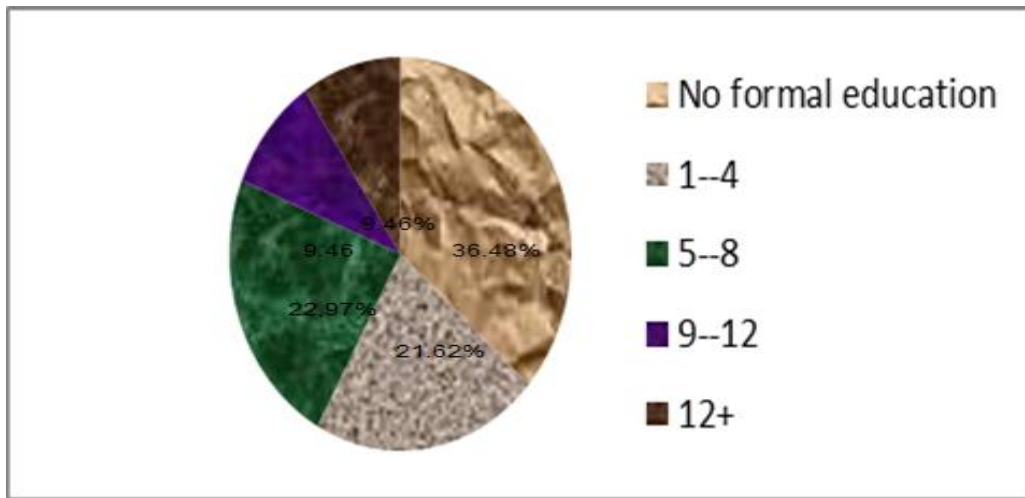
Therefore, the continuity of livestock marketing that benefits all actors should focus on reducing the impact of climate variability by reducing the vulnerabilities of pastoral producers. Increasing pastoralists' knowledge of the changing climate, focusing on improved availability and quality of animal feed, and having better access to inputs and output markets will benefit pastoralists and will increase their income and ensure food security. In the following sections, I present preliminary results from the traders' interviews conducted in the last year.

## **Background of respondents**

### *Education*

Of the 76 traders interviewed, 27 (36.48%) have never had any formal education (Figure 1), and only 5 (18.52%) of those 27 can read and write. Traders stated that a lack of education affected their business operations. Primarily, they reported not knowing how to record their income and expenses on a daily basis. From the survey, only 29 (38.72%) respondents said they keep written accounts of their transactions. Moreover, illiterate traders cannot read the contents of a written contract if they need to enter into agreements. Additionally, traders reported lacking skills around business planning and implementation. The most challenging issue reported by traders was an inability to make situational analyses and take appropriate actions, particularly relative to climate variability. One of the informants said that an educated person understands things better, is better able to forecast demand and supply conditions, makes decisions swiftly and adjusts to situations quickly. In contrast, they reported that the uneducated person often tries to avoid risks, may not be able to progress in the livestock trade, lacks analytical capacity and sees things from the local perspective only.

**Figure 1.** Educational level of respondents



N= 76 traders

Source: Data from CHAINS Trader Study

Small traders who are either uneducated or have few years of formal education lack knowledge about their legal rights and how to seek legal recompense, if violated. This is particularly true when traders/pastoralists are involved in credit operations. They have no clear understanding of their right to reclaim the money by taking the defaulter to court.

Most of the informants appreciate the value of education in the livestock trade. One respondent said, “Trade involves managing resources, and education teaches us how to manage it properly and wisely. Educated people can record income and expenditures and know the profits and losses. Education helps them to plan and act. It is not only completing high school, but attaining some level [of education] is important.”

Although traders see education as important, the current education policy, which encourages self-employment, has generated mixed responses from other traders. Despite the general appreciation of university education, many small traders consider it a waste of time and resources. A group of women respondents in Moyale said that they do not encourage their children to go beyond grade 10. They talk of examples where parents depleted their assets in educating children who graduated from university and remain unemployed. A woman trader and her grade 9 son have already decided that the young boy will stop schooling after completing grade 10 and will join her in the goat trade. She does not want to invest in the further education of her child. She said that the “investment in educating children has impoverished many households. After completing university education, many young boys and girls return home with a certificate that buys nothing”. The boy agrees with his mother’s argument. A similar view was held by another young man who is a goat trader. He dropped out of school 3 years ago and joined the business. He

said, “If the government tells me to create my own job after graduation, I should do it now”. Therefore, there is a need to create awareness regarding the value of education as a long-term investment rather than a waste of time and resources in the short-term.

From the pastoralists’ point of view, informants agree that educating children is important. However, dropout rates are the main problem. There are many different things informants in Qancharo listed as the reason for dropouts (BG, August 2013), including the need for children to migrate with the herd, the inability to maintain their subsistence and the lack of school feeding programs in harsh areas like Dillo. “Those who went to urban centers for education disappeared because they did not have their basic needs fulfilled”, said BG. “Hostels in urban areas are overcrowded, no food, no proper shelter”, adds another informant. There were young boys who participated in the discussion and agreed with the above statement. I asked why they did not sell livestock and send the children to school and the informant replied, “A goat can feed a boy or a girl in [an] urban area for a month”. “Therefore, you need to sell at least 12 goats for educating a single child for 1 year, including shelter, clothing and medication. Imagine, how many Borana can afford this”, said the informant. The number of children in school and the financial capacity of households who can send their children to school are disproportionate. School uniforms and stationery are other additional costs deterring school attendance.

In the past the term used for the educated Borana was ‘*yasidame, yanyaphe*’ literally meaning ‘he is Amharized, became outsider’. Therefore, “education was for the poor who could not bribe the governors so that their children escape recruitment for schooling. This trend has changed and it is now the children of the rich who have access to education” (BB, August 2013, Dubuluq).

The Borana now have an appreciation for their children’s education. However, the need for child labor and the inability to cover education costs are the main obstacles households face in deciding to send children to school or not. “We should educate our children. We should not search for someone to read for us”, stated an informant from Qancharo. He added, “*Ela-gura bana*”, meaning ‘education opens eyes and ears’. Regarding child labor, a shift based school system has solved the problem to some extent. This, however, does not work when the herd moves away in search of pasture and water during the extreme dry season or drought periods.

### *Ethnicity, language*

Language is the main means of communication in the livestock trade in Borana. As business requires extended and thorough verbal negotiations, understanding each other’s language is very important for business. In the Borana livestock market, the Oromo language is used commonly. The majority of respondents (98.67%) speak Afaan Oromo as their primary language of communication in business, while



Amharic, Burji, Somali and Konso are also spoken by a few traders. Amharic is the 2<sup>nd</sup> most utilized language, with 44 (57.9%) respondents speaking the language as their second language. Regarding the ethnic composition, the majority (77.63%) of the respondents are Oromo (see Table 1).

**Table 1.** Ethnic background of the respondents

Ethnic group	Frequency	Percent
Oromo	59	77.63
Burji	9	11.84
Amhara	4	5.26
Gari	2	2.63
Konso	2	2.63
Total	76	100

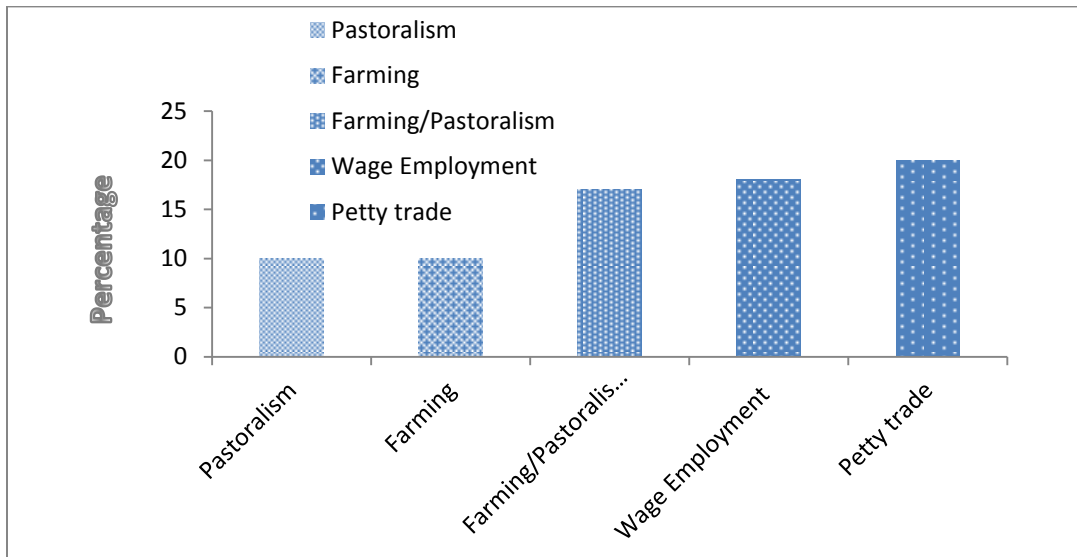
N= 76 traders

Source: Data from CHAINS Trader Study

#### *Traders previous occupation*

Understanding the previous and current occupations/business activities of respondents helps to understand to what extent the traders are linked to pastoralism. Accordingly, 46% of the respondents said that they were agro-pastoralists, pastoralists or farmers (Figure 2). Wage employment, construction work, petty trade, government employment, and security guard work are examples of some of the livelihood activities practiced by traders before joining the livestock trade. Regarding their current occupation, 56 (74.47%) respondents still practice pastoralism, while only 25.33% said they do not practice pastoralism. From the survey, it is clear that many traders are linked to pastoralism, which creates an opportunity for market expansion and pastoralists' involvement in livestock marketing.

**Figure 2.** Traders' previous occupation



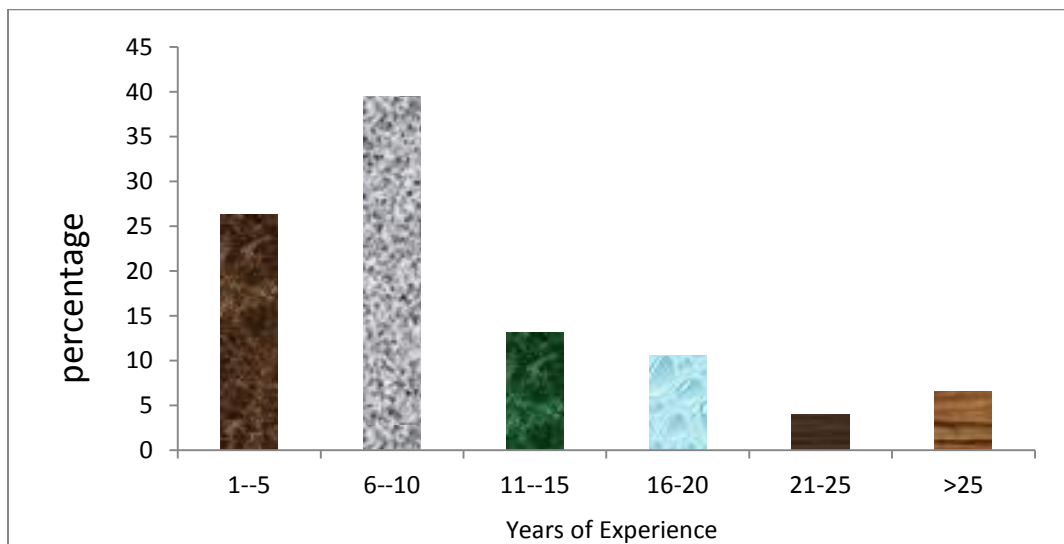
N= 76 traders

Source: Data from CHAINS Trader Study

### Experience in livestock marketing

Experiences reported by traders reveal two important things. First, livestock trade in Borana is an old profession, with some traders having been in the business for more than three decades. Second, most of the traders (64.47%) entered the business within the last 10 years (Figure 3). This means that despite the long history of livestock trade in Borana, the involvement of more people as livestock traders is relatively recent. As shown in Table 2, the mean years of experience is 10.

**Figure 3.** Livestock traders' experience in years



N= 76 traders

Source: Data from CHAINS Trader Study

**Table 2.** Mean experience in livestock trade (years)

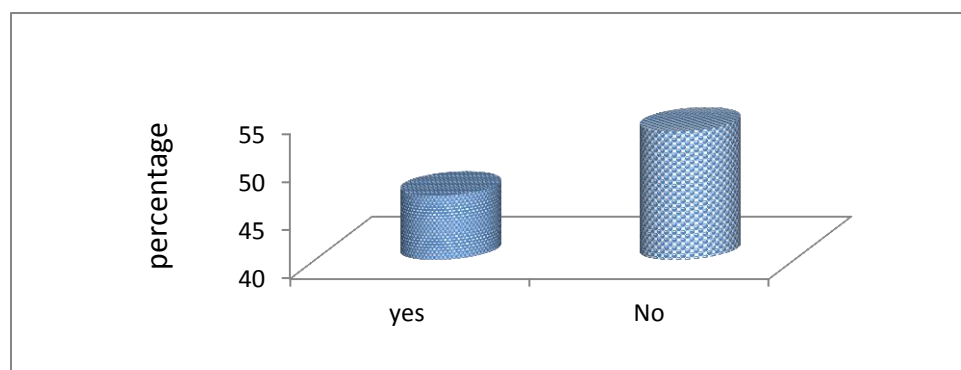
	N	Minimum	Maximum	Mean	Std. Deviation
Experience in Livestock Trading Business (in years)	76	1	40	10.81	7.79

N= 76 traders

Source: Data from CHAINS Trader Study

As was repeatedly stated by traders in our interviews, the opening of the Middle East market was the main cause for market expansion and led to an increased involvement of many people in the livestock marketing business. Most of the traders reported that the first time they sold animals to feedlot operators was after 2003. 46.67% of the respondents said they sell animals to feedlot operators/exporters (Figure 4), implying a relative strength of vertical market integration.

**Figure 4.** Whether the trader has ever sold livestock to exporters/feedlot operators



N= 76 traders

Source: Data from CHAINS Trader Study

### **Vertical and horizontal integration of market actors**

Demand side information given in advance to traders is important to reduce their market risks. From the survey, 20 (28.17%) respondents reported being told in advance by bigger traders to collect the livestock, whereas 12 (16.9%) said that they were only occasionally told in advance to collect and assemble the animals. When asked if they normally sell to the same person, 17 (23.29%) respondents replied yes, while 13 (17.81%) reported occasionally (Table 3). Besides the vertical integration of market actors, there are horizontal linkages in the business operations.

Establishing partnerships for economies of scale and risk and benefit sharing is growing in Borana livestock marketing chains. Accordingly, 21 (28%) respondents said that they have partners in their business operations with whom they cooperate on buying, selling, trekking, taking care of the animals, and other activities related to marketing (Table 4). Most partners speak the same language and are from the same areas. Vertical and horizontal market integration may be one key action that facilitates off-take arrangements that benefit both smallholder pastoralists and small-scale traders. Under current conditions, the markets operate through the initiatives of actors who have established ad hoc working relations, most of which are vertical.

**Table 3.** Traders’ vertical market linkage

	Are you normally told in advance to collect animals?		Do you normally sell animals to the same person?	
	N	Frequency	N	Frequency
Yes	20	28.17	17	23.29
No	39	54.93	43	58.9
Occasionally	12	16.90	13	17.81
Total	71		73	

N=76 traders

Source: Data from CHAINS Trader Study

**Table 4.** Whether trader has business partner

	N	Frequency
Yes	21	28
No	54	72
Total	75	100

N=76 traders

Source: Data from CHAINS Trader Study

## Description of livestock source markets in Borana

The number of livestock markets and the volume of transactions have increased in the last couple of years. However, there are few markets that are frequently visited by many traders. Traders have individual reasons for preferring one market to another, including proximity, accessibility, breed selections, security, supply, etc. Accordingly, Harobake is frequently visited by 20 (26.67%) respondents as their first choice of market where they buy most frequently, while 19 (25.33%) said that they buy most frequently from Moyale. Only 5 (6.67%) traders reported Dubuluq as the market that they most frequently

buy from ,while 22 (29.33%) reported it as the second most frequently visited marketplaces. Regarding the total number of traders that visit and buy from each market, Harobake is used by the majority of the traders (62.67%), followed by Dubuluq (48%) (see Table 5). Harobake is near Yabello, with plenty of options for traders to find accommodations for an overnight stay. Other marketplaces visited by traders, but less frequently, include Alona, Hiddi, Arbale, Mega, and Boku; other regions like Bale; Kenyan markets like Sololo; and Buladi in the Somali region. In the following section, I briefly describe the main markets in Borana.

**Table 5.** Markets most frequently used to source livestock

Market	First choice	Second choice	Third choice	Fourth choice	Total
Yabello	1	5	2	-	8
Moyale	19	2	6	4	31
Dubuluq	5	22	10	-	36
Harobake	20	11	7	3	41
El-wayya	8	10	10	-	28
Surupha	4	-	1	8	13
Finca'a	1	1	-	2	4
Teltele	2	-	4	2	8
Total	60	51	40	19	

N= 76 traders

Source: Data from CHAINS Trader Study

### *Harobake market*

Harobake is located 17 km north of Yabello town, close to Bake pond after which it is named. It was established in the 1990s. The livestock market center has fences, a weighing scale, a veterinary drug store, loading spaces, a place for tax collectors, and separate sections for cattle, camels, and small stock. In addition to livestock marketing, many other transactions of goods and services take place on market days. It is one of the fastest growing markets in Borana and the weekly transactions are remarkable. Currently, pastoralists get most of the goods and services they need in this market. The number of generators recharging mobile batteries and powering hair cutting tools in this market also increased dramatically, numbering 15 generators on 16 December 2012<sup>1</sup>. From an interview with service providers, the number of mobiles that could be recharged using one generator was between 50, on the low end, and 150, on the high end. This means that 15 generators can recharge more than 1000 mobiles on a market

<sup>1</sup> During our visit in November 2013, the generators have stopped recharging mobile batteries since the village is now connected to the national grid. This has already reduced the cost of mobile battery recharge from 5 to 3 birr. It is likely that this new development will assist the growth of the village to a town.

day, almost all phones of which are owned by pastoralists. All of the mobile batteries that are recharged in this market come from the rural settlements surrounding Harobake market. Other services include grinding mills, hotels (three of them providing bedroom services), tea rooms, barbershops, butcheries, drug stores, and other services. There are more than 300 small houses used as drinking places, shops, tea rooms, etc. Dominant commodities include clothes, shoes, food grains, rice, sugar, soaps, mobile apparatuses and accessories, spaghetti, macaroni, salt, tobacco, etc.

**Figure 5.** Market structured according to the services rendered



*Photos by Waktole Tiki*

It may be too early to tell what impact the growth of this village will have on pastoralism. However, it is evident that urban centers depend on a diversified economy, which is an opportunity as well as a challenge to pastoralism in different ways. On one hand, it increases pastoralists' access to goods and services in the village market. It also creates demand for livestock. On the other hand, it introduces many

social ills characteristic of urban environments (alcoholism<sup>2</sup>, addictions, prostitution, etc.) that erode the value attached to livestock and pastoralism. The town is in the process of being structured into blocks, with each block providing similar services or selling similar goods at a given place (See Figure 5). For example, clothes, butter, grain, etc. will be sold at their own specific places in the market.

### *Dubuluq livestock market*

According to informants, except for a brief interruption during the Ethio-Somali war, Dubuluq served as a transitional marketplace for Mega livestock until the 1990s. It was a place where small-scale transactions took place before the cattle were trekked to Mega for a weekly market held on Saturdays. In the 1990s, the government started a tax on the sale of livestock. In order to regulate and enforce this, they built a fence from thorn bush, which later changed to wooden fences and more recently to a concrete fence built by USAID/VOCA. The primary motive behind building the fence was to keep traders and pastoralists from avoiding taxation. Through time, the Dubuluq market overtook the Mega market and became one of the major markets in Borana. At an earlier stage, Dubuluq's wells assisted in marketing the venue as a water source for animals. Many of the livestock markets in Borana developed in a similar manner. The facilities have also changed through time, with the Dubuluq livestock market now containing fences, shelter, a drug store, a room for tax collectors and sections for different species. Traders prefer this market as a place where they can find a relatively pure Borana breed. Its market shed covers Web, Dhas, Gayo, and Anno well clusters.

### *Dillo livestock marketing*

Livestock markets were recently established in Dillo town, having similar infrastructure to that of the Harobake and Dubuluq livestock markets. However, few traders visit the market on a weekly basis. The main problem is the inconvenient location of the road that is necessary for trucking the animals. Therefore, Dubuluq and El-wayä continue to be important market outlets for cattle and camels depending on the location of the kebeles in Dillo Woreda. Most Qanchoro residents, for instance, prefer to trek to El-wayä, because there is water for the livestock on the way to El-wayä. Both Dubuluq and El-wayä are a three day trek for the animals. One of the pastoralists I talked to said that there are traders who buy in the settlement or at water points. However, these traders offer lower prices and pastoralists prefer to trek to El-wayä. The pastoralist remembered when their colleague refused to sell a bull at 7000 birr and trekked it to El-wayä and sold it for 13,000. For small stock, pastoralists prefer to sell either in the settlement, Dillo town or Gorayä, or the nearest bush market. Pastoralists know that there are price differences for small stock too, but the cost of trekking goats to distant markets outweighs the benefits.

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<sup>2</sup> Alcoholic drinks were banned in July 2013 in Borana settlements by Gada council.

People who can't walk to distant markets sell at the price offered in the bush markets. There are others who do not want to travel to El-waya or Dubuluq due to commitments like taking care of the family herd or their family.

#### *Water points or marketplaces*

Goraye is 12 km southwest of Dillo and located near Crater Lake where thousands of shoats and hundreds of cattle are watered every day. This water point also serves as a marketplace for small stock. At least two levels of transactions take place at the entrance of Crater Lake watering point. Small traders sitting at the entrance of the lake equipped with weighing scales collect a few heads of shoats each, which they then sell to medium level traders who assemble hundreds of shoats and either truck them to Yabello or sell them to big traders coming from Yabello. Finally, the shoats are trucked to Modjo/Adama export abattoirs. Some are also trekked to Dubuluq and then trucked to Modjo (see section on cross border).

#### *Didahara*

The Didahara market is growing and the village is expanding fast as a peri-urban center. Grain (mainly maize) and other consumables like spaghetti, macaroni, rice, tobacco, coffee, salt, sugar, and tea leaves are sold in the village market every Wednesday. The market is open to small stock only. Pastoralists in Dikale kebele (Didahara) trek the cattle either to the Dubuluq or Harobake market depending on their location in the kebele. The kebele is divided into three parts: Negele, Eastern, and Damabala aba chana divisions. The Negele and Eastern divisions are relatively closer to Dubuluq while the Dambala aba chana division residents go to Harobake. However, both marketplaces require two days of trekking.

One of the recent developments in this Pastoral Association (PA) is that the bush market for goats and sheep shifted to a settlement (*olla*). There are local traders who move from house to house with their hand-held weighing scales and collect goats and sheep that fit the requirements for export abattoirs. They collect the animals and communicate with the big traders in Yabello. The traders go to the settlement with an Isuzu truck and transport the animals to Yabello. The chance of selling small stock animals that do not fulfill the requirement for export set by the abattoirs in the settlement is slim. The price for live weight per kg at the Negele division of Dikale PA (25-30 km southeast of Didahara center) was 24 birr, while the same weight was 27 birr at the Harobake market in December 2012. It was not a lack of price information that forced pastoralists to sell at 24 birr. They are aware of the opportunity cost of traveling to Harobake or Dubuluq to sell a goat or two.

I interviewed one local trader (eastern division of the kebele) who collects goats and sells them to Yabello traders. He started in the goat trade with 5 goats and now he can buy up to 65 goats at a time. He has already established small agents who buy goats that then supply him.



The informant explained how he started the business:

I used to travel with herd to water them at Dharito. During this time, my father used to give me 5 to 10 birr which I was supposed to use to drink tea or locally brewed beer called *farso*. From the saving, I managed to buy 5 male goats for 600 birr which I kept for 3 months and sold them at 1400 birr at Yabello kela. Next, I bought 8 goats and sold them for 2300 birr, on the side of asphalt road. Then the third batch was sold in the settlement. The maximum number of goats I sold at a time was 65 (valued to be about 30,000 birr).

### *Moyale livestock market*

There are four marketplaces in Moyale town: one for camels and cattle on the Somali side, one for cattle on the Oromia side and two for goats and sheep (one on each side of the region separated by an asphalt road). Goats and sheep in both markets are mainly for local consumption, and the actors are small traders who buy and sell a few heads of goat/sheep in the same market daily. The popular mode of operation is that the vehicle arrives with goats (see figure 6) and the local traders run to the vehicle and hold the goats while unloading. Whichever goat the local trader is holding signifies that she/he intends to buy that animal. Other traders who could not get one from the vehicle can buy from other small traders and resell it. According to informants, a goat can be sold 3-4 times in the same market before ending up in a hotel or butchery.

Traders complained about the unfavorable conditions of the goat trade during our visit in June 2013. The reasons were all very similar. From the supply side, pastoralists were less compelled to sell because milk was abundant and their cash need seemed at its lowest level. From the demand side, consumers substituted milk for meat and as a result, there was a reduction in meat consumption. This shows the seasonality of livestock marketing. Moreover, there were many small traders in the market, which increased competition among the traders.

## **Livestock Marketing and Access to Facilities**

### *Ownership of holding grounds*

Animal holding grounds are one of the most important facilities for livestock traders. From 76 traders interviewed, 32 (42.7%) respondents said that they had private animal holding grounds for the purchased animals, while 43 (56.6%) said they did not have animal holding grounds (Table 6). However, holding grounds range from family compounds to ranches, in the case of a few traders. Despite many traders reporting holding grounds, the majority (77.6%) of them are dependent on communal grazing land as a source of pasture for the purchased animals (see Figure 7). This means that a shortage of resources like

pasture and water on communal grazing land affects the business of small traders who cannot truck animal feed.

**Table 6.** Do you have private animal holding grounds or a feedlot?

	Frequency	Percent
Yes	32	42.1
No	44	57.9
Total	76	100.0

N= 76 traders

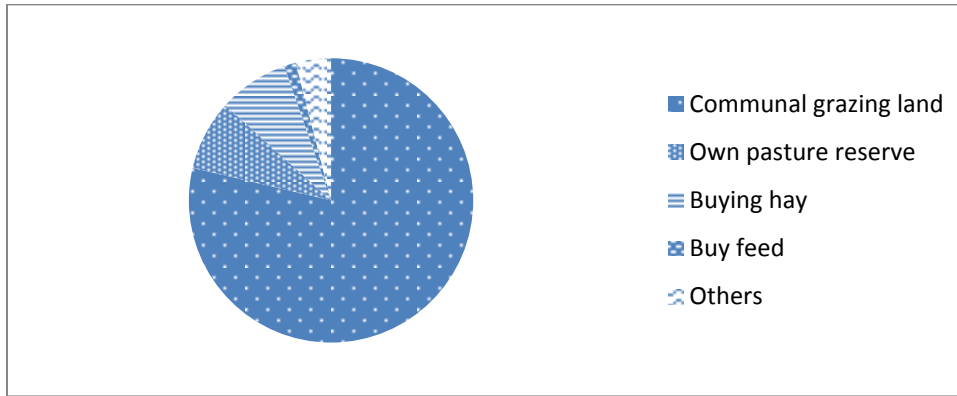
Source: Data from CHAINS Trader Study

### *Access to grazing land*

Traders use different arrangements to house the marketing animals until they truck them to Adama feedlots. Most traders truck bulls immediately after buying them as a way to reduce operational costs including herding and feeding. However, traders may be forced to keep the bulls for days or even weeks (see reasons below). Under such circumstances, there is a need to arrange for herding and feed/pasture land. Traders from pastoral areas can trek the bulls to the base settlement and share the communal grazing land in accordance with the local resource use rules that govern the pastoral herd. However, traders who are not from Borana or are from urban centers need to hire herders from the local area as a means of getting access to the grazing land. The payment is made for the labor and the communal grazing land is used free of charge. Establishing business partnerships with pastoral traders is also used as a strategy to access communal grazing land. Results from the survey also confirm the importance of communal grazing land as a main source of pasture for the majority of the traders. As Figure 7 shows, more than 77% of the respondents rely on communal grazing land as a source of animal feed. Utilizing their own pasture reserve and purchasing hay and feed are other means of sustaining the marketing animals.

Buying grazing rights and crop residue from other agro-pastoralists is another means of getting access to pasture resources. Traders buy grazing rights in the proximity of marketplaces (mostly within a 10 km radius). However, depending on the availability and the planned stay of the animals, the distance of grazing land can extend up to a 20 km radius.

**Figure 6.** Proportion of traders relying on different sources of pasture



N= 76 traders

Source: Data from CHAINS Trader Study

The stay of the purchased animal in the hand of a trader ranges from hours to months, depending on the mode of operation, the availability of transport, demand, the price from the destination, and the extent to which the required number of animals is met in order for trucks to transport the animals quickly. About 47% of the respondents keep the animals for a week or less while 43% reported keeping the animals for more than 15 days (Table 7). Only 18.3% of the respondents reported keeping the animals for 90 or more days (for fattening).

**Table 7.** For how long do you keep the animals?

Duration in days	Frequency	%
1-7	35	46.7
8-15	8	10.67
>15	32	42.63

N= 76 traders

Source: Data from CHAINS Trader Study

There are different reasons traders keep the animals for certain periods of time, whether it is planned or imposed on them. Many of the respondents listed reasons for holding on to animals for longer periods of time, including waiting for buyers (36.84%), assembling (33.89%), feeding with better forage (21.1%) (Table 8), waiting on transportation arrangements, waiting for an increase in demand and better prices, allowing the animals time to recover from transportation stresses (especially for goats), etc. Keeping goats for longer periods of time is a way for some small traders to make a bigger profit, relative to the commission they earn from big traders who base payment on the weight of the animal. Price drops occurring between the purchase and sale of an animal is another reason traders keep the animals for certain periods of time.

**Table 8.** Reasons for keeping animals for a longer period of time

Reason	Frequency	%
Feeding with better forage	16	21.1
Treating against disease	4	5.26
Waiting for buyers/next market day	28	36.84
Clearance and certification	1	1.3
Enable animals to recover from climate stress	5	6.58
Assembling and waiting for traders	25	33.89
Lack of buyers	10	13.16
Total	76	100

N= 76 traders

Source: Data from CHAINS Trader Study

### *Amount and sources of initial capital*

Financial capital is the most important resource in initiating and continuing the livestock trade. Livestock traders in Borana have reported different sources and amounts of initial capital. Sources include their own money, gifts from relatives, payments received working as agents for big traders, etc. As Table 9 shows, the majority of traders (68.4%) initiated the business using their own money. The role of formal financial institutions is limited in livestock marketing at the grassroots level. Borrowing from local moneylenders, working with other traders, and purchasing animals on credit and selling in the same market were some of the means described to securing initial capital. Petty trade, wage labor, and crop sales were other sources of finance used to start the business. Most of those who reported using their own money as initial capital generated the finance from the sale of livestock or crops.

As the source of initial capital varies, so does the amount. Seventy-five percent of the respondents initiated their business using less than 5000 birr. There appears to be an inverse relationship between the number of years spent in the livestock trade and the amount of initial capital. From the survey, only 2 traders reported initiating their business more than 10 years ago with 20,000 birr. The majority of those who started their business more than 10 years ago reported initiating it with a few thousand or hundred birr. However, raising even a small amount of money was reportedly difficult at that time. Recent entrants have used relatively large amounts of money as starting capital. The starting capital ranges from 30 to 500,000 birr (Table 10). The person that initiated their business using only 30 birr reported buying 360 bulls within the last six months. He is now one of the big traders.

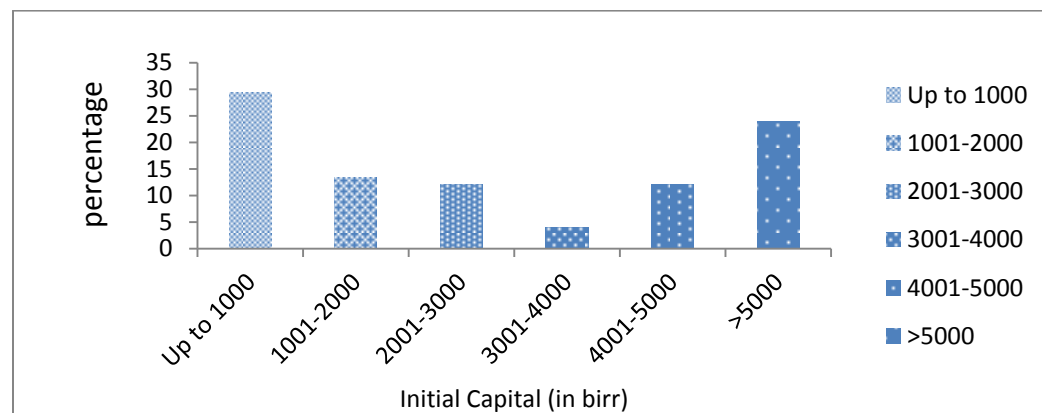
**Table 9.** Source of initial capital to initiate livestock trade

	Frequency	Percent	Cumulative Percent
Own money	52	68.4	68.4
Bank	1	1.3	69.7
Microfinance	1	1.3	71.1
From bigger traders	2	2.6	73.7
Friends/relatives	7	9.2	82.9
Others	13	17.1	100.0
Total	76	100.0	

N= 76 traders

Source: Data from CHAINS Trader Study

**Figure 7.** Traders' initial capital



N= 76 traders

Source: Data from CHAINS Trader Study

From the surveys, only 7 (9.86%) traders initiated their business with more than 500,000 birr. This means that only a small proportion of respondents indicated that they were able to buy 100 bulls or more at a time, using the current price of bulls. The mean value of initial capital is 21,168.82 birr with a standard deviation of 68,995.95 (Table 10), implying that there is huge variation in the amount of initial capital used by different traders. Alternatively, the correlation analysis shows significant positive relations between the number of bulls bought and the amount of initial capital ( $P < 0.05$ ).

**Table 10.** Mean amount of initial capital

	N	Minimum	Maximum	Mean	Std. Deviation
Starting capital in ET birr	73	30	500000	21168.82	68995.95

N= 76 traders

Source: Data from CHAINS Trader Study

### *Livestock marketing activities*

Cattle, sheep, goats, and camels are the dominant species in Borana livestock marketing. Traders were asked to report their purchasing and selling prices as well as other related costs. The average purchasing price of dominant category animals for live export (bulls 3-6 years) is 5943 birr (Table 11), which mostly includes other associated costs, while the average selling price is 6454 birr (Table 12). This means that traders make an average profit of 511 birr (8.6%) per bull. The average purchasing price for 3-6 year old bulls ranged from 3500 to 9300 birr during the last 6 months of the traders' operations. Similarly, the mean purchasing price for bulls older than 6 years was 7972 birr while the average selling price was 8439 birr, meaning that the trader was profiting 467 birr per bull. This is equivalent to a 6% profit. However, traders are very likely to underreport their profit margin. Despite potential underreporting, those buying a higher number of animals (e.g. 3070 in 6 months) make enormous amounts of money. Since that money is being continuously circulated, unless fattening takes place or the money goes to selling credit, traders who buy and sell every week in the market are likely to get a higher proportion of the benefit compared to those who just pocket their profits.

There is also a slight difference in prices reported by traders and Woreda market development offices that collect weekly price information. For example, the information from the market development office showed that the average price for bulls ranged from 7500 to 10,000 birr in December 2012 and 7500 to 11,000 birr in January 2013. The office also reported the price in November 2012 to be between 6760 and 9000 birr for bulls.

**Table 11. Total number of animals bought and average prices paid**

Item	N	Minimum	Maximum	Mean	Std. Deviation
Bulls more than 6 years	22	10	48	158.69	125.36
Average price paid for bulls more than six years	16	6000	10000	7992	1348.84
Number of bulls, 3-6 years	30	10.00	3200.00	367.43	704.28
Average price paid for bull 3- 6 years	30	3500.00	9300.00	5943	1452
Number of bulls <3 years	6	9.00	700.00	198.5000	265.24
Average price paid for bull <3 years	6	3000.00	4500.00	3800	595.82
Number of oxen	6	10.00	205.00	118.33	94.59
Average price paid for oxen	6	5000.00	10000.00	7133.33	1991.65
Total number of fertile cows bought	1	300.00	300.00	300.00	.
Average price paid for fertile cows	1	7000.00	7000.00	7000.00	.
Total number of old/infertile cows	7	15.00	300.00	113.28	128.58
Average price paid for old/infertile cows	6	4000.00	7500.00	5333.33	1169.05
Total number of heifers bought	8	40.00	1000.00	350.25	410.9
Average price paid for heifer	8	2500.00	6000.00	3512.50	1124.33
Total number of male camels bought	14	18.00	3100.00	452.00	921.49
Average price paid for male camels	14	8000.00	21000.00	13215.71	3894.34
Total number of female camels bought	3	60.00	400.00	230.00	240.42
Average price paid for female camels	3	9500.00	15000.00	11500.00	3041.38
Total number of goats bought	40	100.00	20000.00	1019.65	3164.49
Average price paid for goat	38	350	1600.00	83	279.92
Total number of sheep bought	16	12.00	6800.00	1290.88	2348.84
Average price paid for sheep	16	500	1400.00	754.6	262.41

N= 76 traders

Source: Data from CHAINS Trader Study

**Table 12. Total number of animals sold and average prices received**

	N	Minimum	Maximum	Mean	Std. Deviation
Total number of bulls more than 6 years	16	8.00	498.00	145.94	121.1
Average price received, bulls more than 6 years	16	6500	10500.00	8439	1338.13
Total number of bulls 3-6 years	30	10.00	3070.00	357.33	687.68
Average price received for bull 3- 6 years	28	4200.00	11780	6453.93	1907
Total number of bulls <3 years	5	5.00	700.00	181.00	293.96
Average price received for bull <3 years	5	4100.00	4700.00	4376.00	275
Total number of oxen sold	6	5.00	200.00	85.00	93.17
Average price received for oxen	6	5300.00	10500.00	7650.00	2065.67
Total number of fertile cows sold	1	300.00	300.00	300.00	.
Average price received for fertile cows	1	7300.00	7300.00	7300.00	.
Total number of old/infertile cows sold	7	15.00	300.00	112.43	129.28
Average price received for old/infertile cows	7	4600.00	8000.00	5671.43	1082.76
Total number of heifers	7	40.00	1000.00	386.00	430.18
Average price received for heifer	8	2600.00	6200.00	3700.00	1122.82
Total number of male camels sold	12	18.00	3100.00	511.67	978.53
Average price received for male camels	12	8400.00	21500.00	14468.3	3851.9
Total number of female camels sold	4	10.00	397.00	129.25	179.77
Average price received for female camels	4	9700.00	15500.00	11675.00	2636.12
Total number of goats sold	41	90.00	19800.00	1145.88	3213.33
Average price paid for goat	40	450.00	1630.00	879.58	274.71
Total number of sheep bought	14	12.00	5930.00	949.21	1912.11

N= 76 traders

Source: Data from CHAINS Trader Study

### Livestock Export data

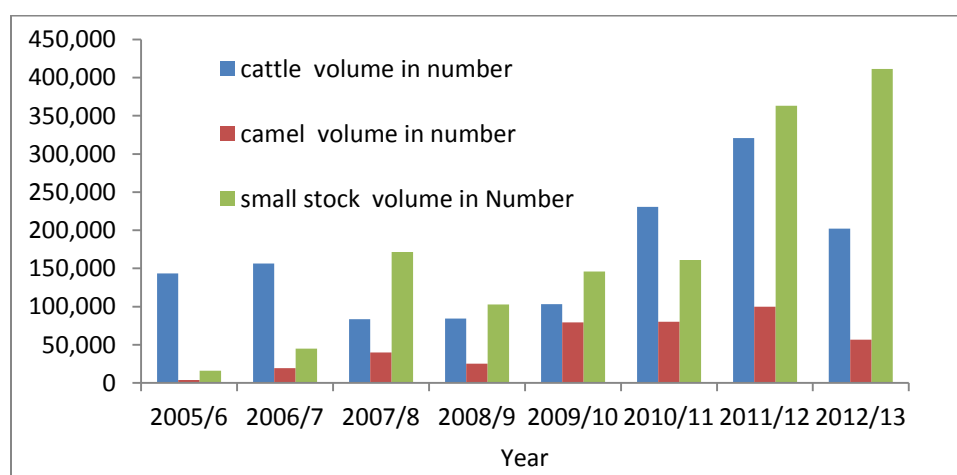
The average export prices for cattle have remained stable over the last five years while prices for camels and small stock were relatively higher during the same period (Table 13). Other than minor fluctuations, there has been a general trend for average export prices to increase incrementally over time. The increase in shoat and camel prices may be attributed to the expanding market for these species, including a rising demand in the Middle East. From Table 13, it is clear that the highest export prices for cattle were registered in 2009/10 (465.87 USD), while the highest average prices for camel and shoats were registered in 2012/13 (697 and 94.4 USD, respectively). In 2012/13, the highest export prices were registered as well as the highest observed inter-annual variation for camels and shoats. Despite incremental price increases, live animal exports of cattle and camel declined during the 2012/13 fiscal year while small stock exports showed a slight increase (see Figure 9). Additionally, exports of fresh meat show a slight decline in 2012/13 (Table 14). From interviews with experts at the Meat and Dairy Technology Institute, they attributed the decline in formal export volumes mainly to the increase in cross-border illegal trade. This is refuted by traders who attribute the decline to an increase in competition for Middle Eastern markets (based on November field notes).

**Table 13.** Average export prices for different species in the last 8 years (in USD)

Species	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13
Cattle	179.92	176.98	239.37	430.04	465.87	444.34	418.47	433.18
Camel	242.92	253.48	337.3	454.7	460.77	469.21	502.19	697.2
Small stock	28.34	30.61	39.74	43.23	39.66	47.95	62.41	94.4

Source: Meat and Dairy Technology Institute

**Figure 8.** Volume of export in the last 8 years



Source: Meat and Dairy Technology institute



**Table 14.** Meat exported from 2010/11 to 2012/13

Exported meat	2010/11		2011/12		2012/13	
	Volume in thousands of tons	Income in millions of dollars	Volume in thousands of tons	Income in millions of dollars	Volume in thousands of tons	Income in millions of dollars
Chilled beef	1308.07	3.53	2165.6	7.17	127.85	0.265
Fresh mutton/goat meat	14010.37	57.6	13999.9	69	13826.8	70.16
Meat by-product	1558.93	2.16	1500.2	2.63	1486	3.7
Total	16877.37	63.24	17666	79.1	15,440.65	74.13

Source: Meat and Dairy Technology Institute

### *Operational costs*

Livestock traders incur different operational and management costs within this business. There are different ways traders account for transactional costs. In most cases, the cost of transport is included in the purchasing price. This is usually done for ease since most traders do not keep business records. However, there are some traders who make the differentiation. As traders usually report the lump sum, which includes the transport cost, it makes it difficult to find out what these associated costs are. Despite the difficulty, we tried to identify the operational costs for individual traders (see Table 15). The survey results show enormous variation within and between cost items. For example, feed costs incurred by traders vary from 45 to 504,000 birr, while water costs during the last 6 months of operation varied from 5 to 48,000 birr. Transport is the highest cost incurred by traders.

**Table 15.** Average costs during the last 6 months of operation

	N	Minimum	Maximum	Mean	Std. Deviation
Feed	26	45	504000	30599	104596
Water	22	5	48000	2891.23	10151.83
Labor	42	100	126000	8885.1	22328
Veterinary medicines/inputs	45	15	30000	1283.87	4508
Transport	35	300	936000	42023.57	161268

N= 76 traders

Source: Data from CHAINS Trader Study

## **Informal credit operations**

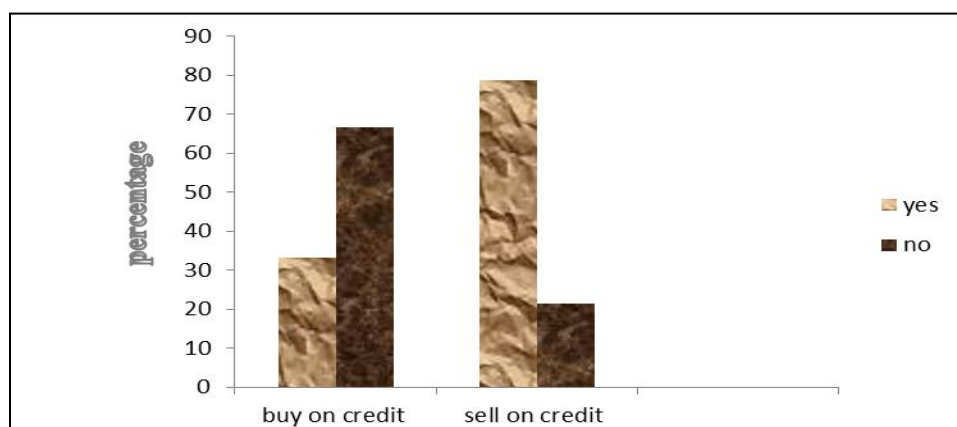
The livestock marketing value chain from Borana to the Middle East is partly characterized by informal credit operations. There is a mixed reaction to credit operations from traders. On one hand, it is a major barrier to the operations of many small traders. It pushes many actors in the lower level of the value chain out of business due to credit defaults. On the other hand, it facilitates transactions in the absence of formal sources of finance to the livestock marketing community. Many traders earn a living from these credit operations, buying and selling without having the required amount of money, and utilizing credit in order to finance their operations.

The importance of and challenges posed by credit operations are evident from the survey results. In Figure 10, 25 (33.33%) traders reported that they buy animals on credit while 59 (78.67%) reported selling animals on credit. Sources of credit for the livestock marketing community are diverse. Some of the traders take advances from the big traders, while many others take the animals on credit from suppliers. Some of the traders reported using more than one source of credit. Twenty-four out of the 25 traders who indicated buying animals on credit reported their source of credit to be traders or pastoralists from whom they buy the animals (Table 16). This indicates that the costs of credit operations are pushed down to the small-scale operators, who buy and assemble a few heads of livestock in the local market. This is also evident from the mechanisms of credit repayment.

Recovering the loan as well as paying it back depends on a number of factors: pre-agreed time periods, the personality of the debtor, credit repayments from a third trader at the higher level of the chain, etc. Traders reported diverse periods in which they paid back loans or recovered from the big traders. Seventeen (68%) of those buying on credit reported repaying the credit immediately after selling the animals, while 7 (28%) reported paying the credit back a few days after selling the animals (see Table 18). On the other hand, 39% of the traders who reported selling on credit said that they get the money back whenever the buyer gets money, while 22% said they get the money back immediately after the borrower sells the animals (Table 17).

However, since the big traders also partly or fully sell on credit, the repayment at the lower level is delayed by multiple factors: the time it takes the bigger traders to repay the credit, the personality of the trader, inefficient banking transfers, and the delay with money transfers from importing countries. In general, those at the lower level of the value chain bear the cost of credit transactions. This means, the small traders stay out of business until they get the money back. The worst situation is when the credit repayment is extended for an indefinite amount of time.

**Figure 9.** Percentage of traders buying and selling on credit



N= 76 traders

Source: Data from CHAINS Trader Study

**Table 16.** Source of credit (n=25)

Source of credit	Frequency	%
Take advance from big trader	4	16
Take animal on credit	24	96
Borrow from friends/friends	2	8
Borrow from bank	1	4
Total	25	

N= 76 traders

Source: Data from CHAINS Trader Study

**Table 17.** Recovery of credit money as reported by traders

Time of repayment	When do you get loan money back from debtor (N=59)		When do you pay loan money back to your creditors(N=25)	
	Frequency	Percent	Frequency	Percent
Immediately after reselling the animal	13	22.03	17	68
Few days after reselling the animals	9	15.25		
Few weeks after reselling the animal	7	11.86	7	28
Whenever the buyer gets money	23	38.98	1	4
Others	7	11.86		
Total	<b>59</b>	100	<b>25</b>	100

N= 76 traders

Source: Data from CHAINS Trader Study

The buyers are diverse in that they come from different locations and for a variety of different purposes. However, the majority are either exporters or supplying exporters and feedlot operators based in Adama (Table 18). Buyers in the “others” category include: hotel operators, export abattoirs, local butchers,

small traders in the local markets, Arab traders, and residents who occasionally slaughter animals for family consumption or festivities.

**Table 18.** To whom do you sell animal on credit?

Who are the buyers	Frequency	Percent
Traders trucking to highlands/Adama	12	20.34
Traders trekking across the border	4	7.78
Feedlot operators	14	23.73
Ethiopian exporters	5	8.47
Pastoralists	2	3.39
Others	22	37.29
Total	59	

N= 76 traders

Source: Data from CHAINS Trader Study

The most frustrating part of the credit transaction is the frequency with which credit defaults happen in livestock marketing chains and the amount of money that is lost as a result. Of the 59 (78.86%) traders who reported selling on credit, 30 (50.84%) have encountered at least a onetime default (Table 19). Of those 30, only 10 (33%) were able to recover the credit fully or partly. The most popular methods of credit recovery are repeated reminders and negotiations using elders, with a few traders even reporting taking the case to court. Bank officials are also involved to a limited extent in bringing the debtor and creditor together, particularly when the defaulter issues bad checks. The amount of money lost ranges from slightly above a thousand to millions of birr (see Table 20).

**Table 19.** How many times traders encountered defaulters

Time of default	Frequency	Percent
1	17	56.67
2	5	16.67
3	3	10
4	1	3.33
5	1	3.33
Total	30	

N= 76 traders

Source: Data from CHAINS Trader Study

**Table 20.** Amount of money lost to credit, time of default and number of defaulters

	N	Minimum	Maximum	Mean	Std. Deviation
Amount lost (in birr)	31	1300.00	3000000.00	315709.0323	670379.76182
Times defaulted	28	1.00	5.00	1.6429	1.06160
Number of defaulters	30	1.00	5.00	1.8000	1.21485

N= 76 traders

Source: Data from CHAINS Trader Study

### *How does the credit work?*

The credit arrangement in the livestock marketing value chain is more complex than one may expect. However, the most common arrangement is that the Adama feedlot operators cover some part of the transaction and negotiate the transfer of the remaining balance in a couple of days. The diplomatic phrase used by big traders is, “I send the money in two or three days’ time”. Practically speaking, this takes more than 3 months, until the feedlot operator resells the bulls. During this time, the small traders get no additional money. Moreover, informants suspect that some feedlot operators delay the repayment even after reselling the bulls, systematically forcing small traders out of business. Some feedlot operators disappeared with large amounts of money collected from small traders and pastoralists. Therefore, some informants in Borana say that credit-based transactions make their business operations uncertain because they do not know when they are going to get the money back (GB, August 2013). It limits their capacity to stay in business<sup>3</sup>. The big traders benefit from the fattening period while the small traders stay out of business. If the small trader buys on partial credit from pastoralists, the cost is partly transferred to the producers. Furthermore, it is not only a loss of money but discontinuity in the business leads to a loss of customers both from the supply and demand side.

According to an informant from Yabello, many Adama feedlot operators prefer to buy from pastoralists when they have enough cash (LB, August 2013). In this case, they pay a commission to *dalala* to collect the number of animals they need. “We can guess that the feedlot operator lacks enough money when he tries to buy from small traders,” said LB. In this case, the trader comes with money and pays in part with cash and takes credit from many small traders. I asked the informant what would happen if they refused to sell to such traders. He replied, “They all operate in similar manner and we have no option.” When asking another informant how they know whether a person is credit worthy, he said, “*Waan atti addaan baasuu*

<sup>3</sup> For those who negotiate credit transactions from the beginning, there may be some top-up on the selling prices

*dandesu shonkora qofa,*” meaning, “it is only sugarcane that you can tell the test” (DA, August, 2013). This shows the difficult situation small traders occupy within the livestock trade.

A trader in Moyale showed me 2 ‘bad checks’ in June 2013, which were 16 months overdue and for 778,900 birr. Not only do defaulters lack the money to pay back creditors, but there is also a lack of knowledge about law enforcement procedures on the part of the traders in Borana. All of this has contributed to the loss of millions of dollars at the expense of traders based in Borana. Moreover, some of the traders suspect that most of the defaulters may be affiliated with top government officials, granting them undeclared immunity. Some big traders appear to be exploiting small traders by capitalizing on their relatively high social and economic status. Such opportunistic behavior can only be controlled through a proper regulatory system and by creating awareness among small traders and pastoralists regarding their legal rights. They also should have formal ways of making agreements with their trading partners.

At Moyale, it is common to have butchers and hotel owners take goats on credit from small traders, which they pay back after selling the meat. Some traders report losing money to butchers who change their address and are not able to be traced. QB, an informant, recalls that she lost the value of 4 goats in the last 6 months. QB lost a higher proportion of her operational capital in the credit transaction. Despite the loss, she still sells on credit. Credit operations have a long history in Borana.

### *Seasonality of livestock marketing*

The livestock marketing value chain, ranging from Borana to a destination in the Middle East, North Africa, or the Ethiopian highland, is vulnerable to the seasonality of demand and price fluctuations. Prices of animals have risen and fallen in the last 12 months. Price fluctuations were mainly attributed to the instability created by the Arab Spring and the Egyptian crisis, as well as changing demands depending on the Ethiopian and Middle Eastern religious calendars. Informants confirmed that the peak season for demand is slightly before Ramadan and Haji (Ed al Adha), the two main Muslim holidays. Majid (2010) noted similar seasonality in the whole Horn of Africa. According to one of the big livestock exporters, they could only fulfill 50% of the demand for the live export of small stock during the 2012 Eid al-Adha (MA, March 2013, Adama). “This demand drops drastically immediately after the holidays,” said MA. The lack of alternative markets is a major constraint to the livestock marketing system. In fact, the livestock marketing value chain is so dependent on Middle Eastern markets, what would happen to pastoralists if Middle Eastern markets closed down temporarily or permanently? This happened when Saudi Arabia imposed bans on imports of livestock and meat some years back due to disease prevalence in the region (Aklilu, 2008). The number of people relying on the livestock trade has increased, and the role of live animal and chilled meat exports in the Ethiopian economy is growing. Therefore, the impacts

of trade are felt both nationally as well as locally. I asked traders what would happen if Arabs stopped buying Borana livestock and one of the traders replied, “*Namnuu walisaamaa*”, meaning people will be robbers. Another trader said, “*Banne, iyyommanne*”, meaning we are impoverished, finished. Therefore, expanding market options will benefit Ethiopian small holders, traders, and both local and federal governments.

The Ethiopian and Middle Eastern religious calendars influence the demand for livestock and, hence, impact prices. Moreover, the rainy season in Adama affects feedlot operations, which in turn affects demand. On the other hand, climate variability, festivities, and cash requirements of pastoralists influence the supply side. Drought causes feed scarcity in Borana, forcing pastoralists to supply more to the market. This, in turn, causes livestock prices to drop, benefitting traders who can afford to buy livestock at significantly below market prices. Drought also affects the availability of exports, as well as the quality and quantity of those exports, from pastoral areas in Eastern African and the Horn of Africa. Drought periods are a time when pastoralists opt to sell more animals to buy food for the household. Therefore, it increases the number of emaciated animals in the market, forcing a sharp fall in prices. Pastoralists supply more emaciated animals during drought periods because they have an immediate need for cash and they also risk not surviving the drought period if they do not sell their animals.

### **Favorable seasons**

Most traders reported preferring to buy animals in the dry season, which also fits into the Muslim fasting calendar. Another important reason why traders have preferred buying times is because purchased animals must be ready when demand rises from the point of destination. Therefore, there is a gap between the purchase of animals and preparing them for export by the feedlot operators. Since the Borana traders do not keep the animals, they prefer to purchase and sell them as quickly as possible. Only the feedlot operators forecast when demand will rise and purchase their animals accordingly. Generally, in addition to an expected rise in demand at destination, purchasing prices are another reason traders prefer to buy in the dry season. The favorable seasons for purchasing cattle are given in Table 21.

**Table 21.** What are the most favorable months to purchase cattle?

Season	Months	Frequency	Percent
Dry season	December to March	20	26.32
Dry season	June to August	7	9.21
Wet season	March to May	8	10.53
Wet season	Sept to November	5	6.58
No reported preference or not a cattle trader		36	47.37
Total		76	100

N= 76 traders

Source: Data from CHAINS Trader Study

The preferred season for purchasing goats depends on what type of goat the trader buys. Those traders buying goats for export abattoirs prefer the dry season, while those buying to supply to the local abattoirs prefer the wet season, when feed availability is high and the goats are fat. Suppliers selling to local butchers use visual assessments and are not concerned with weight loss, although goats tend to lose weight due to what they call ‘shrinkage’ from cold weather. Traders say that goats can gain weight easily during the dry season, while the purchasing price is relatively low. Moreover, the death of goats is substantially reduced during the dry season. From the survey about 23.6% of traders reported preferring the dry season when purchasing goats (Table 22).

For traders preferring the wet season, the quality of the animal and the availability of feed, which reduces the cost of feeding, were the main reasons for buying during this season. Additionally, during the wet season gaining access to communal grazing land is easy and the cost of keeping animals for certain periods of time drops drastically.

**Table 22.** Preferred purchase season for goats

Season	Months	Frequency	Percent
Dry season	December to March	17	22.37
Dry season	June to August	1	1.3
Wet season	March to May	12	15.79
Wet season	Sept to November	3	3.95
Holidays		2	2.63
Not reported preference or are not goat trader		40	52.63
Total		76	100

N= 76 traders

Source: Data from CHAINS Trader Study



Among the most favorable seasons to sell animals, June to August is reported to be best for cattle (Table 23), as it is after the main rainy season and when the animal body condition is good. Some traders also said that demand at destination is high at this time and animals from the free grazing areas can be exported within a few weeks after treatment and a certificate of clearance. This is also the season when there are many traders in the market, purchasing animals to prepare for Ramadan. Other traders said that June-August is the season pastoralists withhold animals from the market due to the availability of milk and crops for household consumption. Therefore, the supply is meager and price goes up. This is a good time to sell animals. It is also a season when traders can buy quality animals and sell immediately without incurring feeding costs.

Regarding the sale of camels, most traders say that August is preferred because it fits into the Muslim holiday of Ramadan. This is also the season when camels are in good shape due to the availability of nutritive browse.

**Table 23.** Favorable season to sell cattle

Season	Months	Frequency	Percent
Dry season	December to March	4	5.26
Dry season	June to August	15	19.74
Wet season	March to May	7	9.21
Wet season	Sept to November	5	6.58
Depends on demand side		8	10.53
Not reported		37	48.68
Total		76	100

N= 76 traders

Source: Data from CHAINS Trader Study

From the pastoralists' point of view, they are selective when selling their animals. However, the selectivity depends on the cash requirements of the household. If they decide to sell, the preferred time to do so is after the rainy season, when the body conditions are good, the animals are fat and they fetch a better price. However, this may not coincide with a favorable demand at destination. Furthermore, most pastoralists sell animals when they are compelled to, either due to family need or external factors like climate variability. Only a few rich pastoralists can take advantage of being selective when deciding to sell their animals. One of my informants said that he prefers the period when supply is down because he gets a better price during this period. Therefore, a combination of factors, including milk scarcity, the need to purchase consumable commodities, children's education, etc., are the main causes of increases in livestock sales.

### **Cross-border livestock trade**

Crossing borders has been part of the herd management/risk management strategy for pastoralists for centuries. However, the international border demarcation has been a constraint to the free movement pastoralists have experienced in the past. In the last few decades, free movement has been attributed to compromising national security and a loss of foreign currency earnings. Consequently, the result has been tighter control of the border points and the cross-border livestock trade. Governments have attempted to control the borders using border security guards, which in some cases has involved harassment and even a confiscation of animals. Despite the negative attitudes toward cross-border trade, the business remains a source of livelihood for a significant number of people living on the borderlands (Little *et al.*, 2010; Pavanello, 2009).

The cross-border trade has been changing dynamically, not only due to newly enforced regulations, but also due to the regional and international dynamics that have impacted demand, price and the direction of movement. The recent dynamism of cross-border trade between Kenya and Ethiopia has been attributed to the opening and expansion of Middle Eastern markets for Ethiopian livestock exports.

In the past, the cross-border livestock trade between Kenya and Ethiopia was understood as Ethiopian pastoralists selling across the border. This has changed in the last couple of years; Ethiopian traders are also now buying from the other side of the border and trucking the animals to Adama for export. Regardless of the direction, cross-border trade remains vital for remote parts of both Ethiopia and Kenya. As communities are interdependent during normal as well as drought periods, cross-border trade continues to play a vital role in coping with drought.

Little describes the importance of cross-border livestock trade as: "...in many instances it represents the only type of exchange in the area" (2005:1). This is true of Goraye and its surroundings, as it is located on the Ethio-Kenyan border, with limited infrastructural development. Goraye is located southwest of Dillo and is known for its small stock production. Young male goats and sheep from this area and across the border are trucked to Modjo for export abattoirs. In general, traders and pastoralists make their own price assessment and use comparative advantage to drive livestock to either side of the market (Desta, *et al.*, 2011).

Although there is no constant monitoring of cross-border movements of animals on the Moyale side by Ethiopian security forces, traders still experience uncertainty due to a lack of regulations governing cross-border trade. Consequently, traders and pastoralists do not know what the future of their business will look like. Furthermore, the absence of formalized trade relations across borders forces traders to operate

without formal financial institutions and credit facilities (Pavanello, 2009). The absence of formal cross-border trade means that actors rely on informal social ties such as ethnicity and religious affiliations. Negative consequences of the informal cross-border trade include the inflation of animal feed and water prices along trekking routes as well as the monopolization of the animal trade by a few. (Little, 2007). Despite all of the constraints, cross-border trade continues to be a viable alternative for pastoralists and traders living along the borders, due to their geographical location and ethnic ties with cross-border communities. Pastoralists and traders often engage in it to fulfill immediate needs and to benefit from better prices that result from cross-border trade.

Regarding the cross-border trade with Kenya, most literature emphasizes the Moyale section. However, with the growing demand in the Middle East for chilled meat and live animals, there has been a dramatic increase in cross-border trade in the Dukana area. Most of the goats and sheep from Goraye areas originate from Kenya and the transaction mainly takes place at water points using the Kenyan shilling. Traders must undergo risky currency transactions at the Moyale black market and then carry a large amount of currency with them hundreds of kilometers to Goraye and beyond. According to informants from Goraye, Malka sadeqa is one of the most famous bush markets, located 12 km from Goraye. At Malka sadeqa there is a motorized water supply where herders come to water their animals and also sell goats/sheep, if they need the cash. The shoats are then trekked to Goraye for assemblage. The traders also travel deep into Kenyan territory to source the animals. Two of the traders who work as partners said they recently returned from Kenya with more than five hundred sheep. The informants said that the Kenyan goats mostly go south toward Kenya, while the blackhead Somali sheep are trekked or trucked to Ethiopia.

The level of risk that traders assume is indicative of the importance of the business to them. The traders travel with huge amounts of money to Moyale to exchange currency. One of our informants travelled to Moyale and exchanged currency while I was in the field in late May 2013. This trader was detained for a week by Ethiopian security forces when returning from purchasing the Kenyan shilling (few months ago) because he was suspected of money laundering. He said that he got out of jail through a local arrangement.

The Kenyan shilling is the preferred currency in the area for two main reasons. First, most of the sellers are Kenyan. Second, most consumables originate in Kenya. Therefore, pastoralists are not willing to use the Ethiopian birr. One trader indicated that the use of the Ethiopian birr was, “*Udaanu hin bittu*”, meaning ‘it does not buy even garbage’. There are neither formal nor informal financial institutions

In talking with pastoralists and traders, we have tried to understand the changes regarding cross-border trade within the last 10 years. About 50% of the respondents described the change in the direction of animal movement from Kenya to Ethiopia as the major change they observed in the cross-border livestock trade in the last 10 years (see Table 24). Due to the change in the direction of movement, 53.9% of the respondents reported buying animals that originated from Moyale/Kenya (Table 25).

The direction of movement is now determined by demand and price, rather than government regulation controlling the border land. Border control, which is enforced by each country's respective government, is now seen as secondary to the traders, as opposed to the case a few years ago. The value of the Ethiopian birr against the Kenyan shilling plays into where traders determine to sell their animals, although it is not significant. When the value of the Ethiopian birr drops against the Kenyan shilling, there is a decrease in the amount of animals bought from the Kenyan side and trekked to Ethiopia. Using the Ethiopian birr is not common on the Kenyan side, while the transaction of camels in Ethiopian Somali markets in Moyale take place using the Kenyan shilling.

**Table 24.** During the past two years what were the major changes in livestock cross-border trade with Kenya?

	Frequency	%
Livestock trade has increased	3	4.41
Livestock trade has decreased	1	1.47
The direction of the trade changed from Kenya to Ethiopia	34	50
Other	30	44.12
Total	68	100

N= 76 traders

Source: Data from CHAINS Trader Study

**Table 25.** Do you currently buy animals that originate from Moyale?

	Frequency	Percent
Yes	41	53.9
No	35	46.1
Total	76	100.0

N= 76 traders

Source: Data from CHAINS Trader Study

### **Middle Eastern markets and small traders**

Small traders agree that the opening of Middle Eastern markets has been an advantage to all Ethiopian livestock marketing value chain actors. It has opened a means of livelihood to many, including traders, brokers (*dalala*), transporters, herders, pastoralists, etc. and supports the livelihood of many families even

outside of pastoralism. An informant, DM, said, “*Loon amora sisay turan. Amma fayida gudda qabu*”, meaning ‘cattle were the feasts of vultures’. If Arabs stop importing Borana bulls, it is the vultures that benefit again, said DM.

I asked another informant what the impact might be if Middle Eastern markets closed. He replied, “*Namni walisama*”, meaning ‘many will be robbers’. Another informant said, “*Gabayaan kun bade jechuun nubadne jechudha, eyyoommanne, waan nyaannu dhabne jechudha*” (ZZ, August 2013, Yabello), meaning ‘if this market chain is disrupted or stopped for some reason, we are finished, impoverished and will not have anything to subsist on’.

Despite the importance of Middle Eastern markets to their lives, most small traders do not have adequate information regarding the operations of the export market. They have said that they know the Adama feedlot operators/exporters, but when the Adama feedlot is not operating, the price and demand in Borana drops quickly. During our visit in August 2013, we saw a fall in prices, which was attributed to the heavy rains in Adama. The seasonality of the demand from Arabs is another common reason given by some traders of the impact export markets have on their business operations.

## **Climate variability and livestock marketing**

### **Climate variability: from the local perspective**

Pastoralists explain climate variability in different ways, including characterizing it by erratic rainfall, spatial and temporal variability, and delays in the onset of rain or an early ending of rain. In all cases, it affects the availability of pasture and water resources, which in turn impacts the quality, productivity, and health of animals. When rain is plentiful, pastoralists survive on milk supplemented by grains produced or purchased from the sale of small stock. When rain is scarce, there is no milk and pastoralists have to depend on grain, forcing them to sell livestock. Occasionally, pastoralists may decide to sell the animal too late, which often results in a deteriorated body condition due to the lack of pasture, and forces pastoralists into bargaining positions that are less than ideal. The worst situations occur during severe droughts.

### **2011 drought**

We asked traders how the 2011 drought affected their business and how they coped with it. The main coping strategy used by traders was buying and transporting hay from the highland region of Ethiopia to Borana. Despite the additional feeding and water costs involved during the drought, 30 (39.47%) respondents reported profiting from their operations, while 36 (47.37%) respondents took a loss during the same period (Table 26). Low purchasing prices and the ability to transport water and feed to enable

the animals to recover from drought stresses were the main causes of profit during the drought. Those who took a loss during the drought attributed the loss to increased prices of animal feed and the inability to buy the feed. A lack of stored feed resulted in the death of emaciated animals bought during the drought. Additionally, other contributing factors or causes of loss during the drought included buying animals with a slim probability of recovery, a lack of labor to take care of the weak animals, and the death of animals during transportation. In general, resource availability, differences in decision making (even a few days delay can cause disaster), and the availability of feed and water dictated whether traders profited or lost during the 2011 drought.

From the survey results, the majority of traders who reported experiencing a loss had no formal education. More specifically, 14 out of the 36 traders who lost profits in the 2011 drought had never had any formal education, while 13 of the 36 had attended primary school. Alternatively, 18 of the 30 traders reporting a profit during the 2011 drought had attended 5 years or more of formal education.

**Table 26.** Profit/loss from 2011 drought period operations

	Frequency	Percent
Profited	30	39.47
Lost	36	47.37
Not applicable	10	13.16
Total	76	100

N= 76 traders

Source: Data from CHAINS Trader Study

Traders also said that the government response to increase off-take during 2011 was slow and full of bureaucracy. The intention was to facilitate credit that would enable traders to buy as many cattle as they could. However, repeated meetings did not result in any tangible actions, causing many animals to be lost due to the conditions brought on by the drought. Finally, the rain did arrive, but had the government been efficient, millions of dollars would have been saved and the livelihoods of thousands would not have been negatively affected.

### **Why the impact of drought is so severe in Borana**

Borana pastoralists have experienced many droughts throughout history and crash and recovery has long been a part of the system. The resilience of this pastoral system is attributed to both internally crafted institutions that organize the community as well as the resilient environmental conditions in which they live. However, since the 1970s, things have deteriorated. Range productivity has declined, drought frequency has increased, and the capacity of indigenous institutions to cope with shocks has eroded

(Helland, 1998). External intervention in the form of food aid and later as development work has further exacerbated the Borana reliance on external aid. Mobile pastoralism has been in decline and pastoralists' reliance on non-animal food products has increased. The shrinkage of grazing land due to the expansion of settlement, bush encroachment, cultivation and privatization has further curtailed mobility. The expansion of social services like schools has also contributed to sedentary ways of life.

For the last two decades, the national government has been persistently pushing for sedentary agriculture and promoting individual land use rights over communal grazing. The government has advocated for the intensification of livestock production, which means reducing the number of animals pastoralists keep and curtailing their mobility without any real detail on how it will take place. If pastoralists have to respond, it will depend heavily on the availability of alternative livelihoods and resources at their disposal.

Moreover, it requires Borana pastoralists transition to new skills. Overall, Borana's old but ecologically adaptive mode of mobility has declined, and in its decline, it has exacerbated pastoralists' exposure to droughts.

### **Consequences of climate variability on livestock marketing**

About 57% of respondents reported a deteriorating quality of their animals and a consequent fall in prices of livestock as major consequences of drought, while 17.57% of respondents reported increased water and feed costs due to drought (Table 27). About 26% of respondents listed other reasons, including exposure to disease, animal death, weight loss, forcing producers and small traders to sell on credit, shortage of supply after drought and discontinuity of business relations with importing countries. Drought results in an abnormal increase in the supply and a consequent fall in demand and prices, followed by a shortage of marketable animals after the drought. This abnormality has various impacts on the value chain, creating supply gaps and forcing importers to look for alternative suppliers. Reforming those business relationships with importing countries is difficult once the business relation has been terminated due to supply shortages.

Increased supply of livestock to the market and a consequent fall in price is another main problem pastoralists face during acute drought, consequently impacting the future reproductive potential of the animals. This is a period when demand from the destination also drops due to a fear of deteriorating animal and meat quality. Increased management costs are other consequences, with each animal requiring attention, feeding, watering, cleaning against ticks, and supporting the animal to be able to stand and walk.

**Table 27.** Consequences of drought on livestock marketing in the last two years

	Frequency	Percent	Cumulative Percent
Deteriorating quality and less price	42	56.76	56.76
Increased feeding and watering costs	13	17.57	65.8
Others	19	31.6	97.4
Total	74	100.0	100

N= 76 traders

Source: Data from CHAINS Trader Study

Respondents were asked whether they incurred additional costs during the most recent drought to sustain the animals they had purchased. About 47% of respondents spent additional money on purchasing hay during the 2011 drought, while 40% reported spending additional money on veterinary drugs (Table 27). Respondents also reported increased labor, water, and transportation costs.

**Table 28.** Number of traders who spent additional money during 2011 drought

Item	N	Percent (%)
On hay purchase	35	46.67
On purchase of feed/concentrate	22	29.33
On purchase of vet	30	40
Labor	16	21.33
On water	24	32
On transport	7	9.33
On labor	16	21.33

N= 76 traders

Source: Data from CHAINS Trader Study

### Traders' responses to drought

Traders respond to climate variability differently, depending on their access to information, resource ownership, knowledge and prior experience in managing climate vagaries. To understand how traders respond to expected drought, they were asked to report how they would change their business operations if informed that the weather forecast revealed approaching drought. The question generated different responses, ranging from discontinuing the business altogether to increasing the volume of purchases during the drought. From the survey, at least 30% of the respondents were not concerned about the drought, reporting that they would either buy the same amount as before (18.67%) or would increase the volume of their purchase (12%) (See Table 29). About 39% of respondents said they would buy less animals than during a normal period.



**Table 29.** Strategy envisaged for drought period

Strategy	Frequency	Percent
I buy the same number as normal period	14	18.67
Buy more animals than before	9	12
Buy less animals than normal period	29	38.67
Stop buying	11	14.67
Others	12	16
Total	75	100

N= 76 traders

Source: Data from CHAINS Trader Study

Traders report buying fat and healthy animals selectively, using demand side decision-making, and shifting to the goat or camel trade as strategies to mitigate the impacts of drought. However, the prevailing infrastructure and the financial capacity of the trader are very important factors that dictate the volume and type of purchases prior to the drought. To continue operations during drought, traders report storing hay or transporting feed and water as supportive elements.

### **Response by pastoralists**

When asked about how they coped with climate variability, pastoralists responded that it differed depending on wealth, geographical location, access to information, perceptions, exposure to the external environment and understanding of the options outside of pastoralism. Some pastoralists reported storing grain for people and hay for animals to stave off effects of drought, while others reported increasingly using tree leaves to feed animals (see Figure 11). During the 2011 drought, many pastoralists bought concentrate feed and hay for their animals. One of the pastoralists I interviewed bought hay for 5000 birr (a bale was 40 birr) at Didahara. During the drought he lost only 10 cattle out of 80. He used water from a cemented well (cistern) for weak animals and a traditional well for the others. Another informant at Dubuluq paid 56,000 birr for hay and concentrates during the 2011 drought, while still yet another wealthier pastoralist at Didahara paid 58,630 birr over three months in 2011. he paid 38,000 birr during the 2008 drought to buy hay and concentrates (a bale of hay was 18-35 birr). Despite his efforts, he lost 66 cattle during the 2011 drought. Informants report that labor demand also increases during drought as animals require more frequent washing against ticks, feeding and watering, all tasks that take a significant amount of time

Decades of herd crash and recovery drive pastoralists' adoption of coping strategies like transporting hay and water to save the animals, storing crop residue, and cutting tree leaves to feed the animals.

**Figure 10.** Picture A shows sprouting tree branches after the 2008 drought at Dharito where pastoralists fed their animals tree leaves during the drought. This area is located around spring water that was developed by a local NGO called Action for Development. Pastoralists migrated to the water point and fed the animals with tree leaves. Picture B shows pruned cacti for animal consumption at Dubuluq during the 2008 drought.



*Photos by Waktole Tiki*

### *Case*

Not all pastoralists are successful in managing and coping with drought. One of my informants in Moyale had 50 cattle that were a part of his family herd and 30 marketing animals during the onset of the 2011 drought. At the initial stage of the drought, he fed the animals with the little cash he had on hand. As the drought progressed to a more serious stage, he was out of cash and the condition of the animals worsened. It was too late for him to be able to sell any of the animals due to their poor body conditions. Finally, only 5 cattle survived. He considered this a double loss: the feeding costs and the death of the animals. Despite his loss, the informant has no

intention of abandoning the livestock trade when drought approaches. He said, “This is the only skill I have and I trust God and continue my business”.

## **Livestock mobility and marketing opportunities**

In the arid and semi-arid Borana rangeland, characterized by erratic and unpredictable rainfall with high temporal and spatial variability, mobile pastoralism has proved to be the best livelihood strategy. Under current conditions, there are no other means of livelihood that fit the Borana environment as pastoralism does. There are two distinct categories of mobility in Borana. First is the *Godanasa foora*, where usual mobility in search of pasture and water is selective and able men move with the dry herd to remote grazing regions for months. This mobility usually takes place after sending scouts to identify resource availability and negotiate with the host community. This is the main strategy pastoralists employ to utilize meager resources opportunistically. The second category of mobility is *godaansa warra guda*, or the mobility of the whole family and herd. This is a forced mobility and includes the total movement of the household and family herd due to acute drought or conflict. It may take place abruptly and in any direction deemed to be most advantageous relative to the pertinent problem they are migrating away from.

Because of the temporal and geographical variability of rainfall that affects the availability of water and pasture, the mobility of the pastoral herd remains vital. Little *et al.*, (2010) emphasize the need for mobility in environments where climate variability dictates the primary mode of production. However, movement can take herds far away from market centers. As drought prolongs, the cash needs of pastoralists increase, while the chances of selling emaciated cattle decrease. From the demand side, buyers hesitate to buy severely emaciated cattle. This pushes the climatic risks down to the producers, causing huge losses to the economy and asset depletion within the household.

## **Value chains**

Value chains may be defined as “the full range of activities required to bring a product to final consumers passing through the different phases of production, processing and delivery” (IFAD 2010:1). IFAD further explains value chain analysis as “...essential to an understanding of markets, their relationships, the participation of different actors, and the critical constraints that limit the growth of livestock production and consequently the competitiveness of smallholder farmers” (2010:1).

Livestock marketing value chain analysis must include inputs. From the Borana perspective, feed and water must be stressed as the primary determinants affecting supply, and thus the whole value chain. Borana pastoralists are occasionally forced to rely on hay transported from more than 600 km away,

which does not improve production, but does sustain the herd during difficult periods of drought and ensures the continuity of livestock production. The challenges here are numerous, including a lack of transport, increased cost of hay and transport, lack of access to hay, inability to purchase the required amount of hay, limited supply, and late arrival of the purchased hay. The hay is mainly from the Sululta area, which is also a distribution center to many parts of the country, including the Adama feedlots. Relying on hay from Sululta is unsustainable for many reasons, including the distance, cost, lack of transport, seasonality of production, as well as seasonality of demand from Borana.

Livestock marketing from Borana follows two main routes: via Kenya and via Adama. The third route is not clear, as it leaves via Somalia and shows no clear mapped passageways for livestock. The formal export channel is via Djibouti, while Metema has been growing in recent years. Illegal cross-border trade mainly goes via Somali, Kenya and to some extent Sudan and south Sudan.

#### *Export via Adama*

Livestock are collected from different bush markets and primary and secondary markets in the Borana zone. After assemblage, the animals are trucked directly from the markets in Borana to feedlots located in Adama and its surroundings. Upon arrival, different vaccines are given to the animals. Feeding continues for about three months. Depending on demand in the Middle East and North Africa, the animals can be shipped well before three months or can stay in the feedlot for more than six months. The longer the livestock stay in the feedlot, the greater the management costs. Its impact on producers is a lack in demand and a subsequent fall in prices. On the other hand, the feedlot operator may have relied on credit from small traders in Borana. The delay in the sale of livestock in the feedlot means that no money is going down to Borana, as has happened many times in the last couple of years. This is why the Borana pastoralists and small traders would like to see more destinations and markets for their produce.

#### *How the value chain operates*

There are different ways that traders ranging from Borana to the Middle East organize their transactions. First, Arab importers may send specifications regarding the type of animal they want. The Ethiopian feedlot operator/exporter transfers the specifications to the agent in Borana who buys the sample bulls and trucks them to Adama. If they agree that the samples fulfill the requirements, they may sign an agreement specifying the number of animals and the price. The feedlot operators then collect bulls from their agents in Borana, vaccinate them, and feed them for three months, after which they are exported. Most of the time, the feedlot operator also travels to Borana and is involved in the buying of the animals with his agent. The second mode of operation is that feedlot operators buy the bulls, fatten them and then search

for the market. In both cases, the importing country sends a committee or team of veterinarians to conduct their own tests, follow-ups and selection. The check-up processes take about 21 days, during which, important health requirements are checked.

The money can be transferred from Arab countries to Ethiopia in two ways: 1. Opening a letter of credit (LC) is the most common way to transfer money. In this case, when the national bank of Ethiopia is notified that an LC has been opened by the importer, the bank writes a clearance for export and the animals are sent. After the exporter produces a loading bill that shows the animals are loaded on the ship, he collects the money from his local bank. 2. The importer transfers the estimated value of the animals in US dollars to the private bank account of the exporter in Ethiopia. The national bank checks the transfer and if the money is transferred, the Bank writes a clearance for export to transport the animals to Djibouti. In both cases, the Ministry of Agriculture is expected to write a clearance explaining that the animals have fulfilled the requirements for export, including health requirements. Finally, custom and revenue authority writes a letter explaining that the exporter has fulfilled the requirements and can transport the animals to Djibouti. There is no fee paid to get the letters, but bureaucratic bottlenecks at each office (which have been described as a problem) can sometimes delay the shipment.

Regarding the purchase, some feedlot operators send money to their agents in Borana. Then, the agents buy the animals and send them to Adama. There is usually a quoted 100-150 birr commission per animal for camels and bulls, although some said that the commission for camels could go up as high as 200 birr. Additional costs like transport are paid by feedlot operators, while the loading cost, payment for the small *dalala*, tax, etc. are included in the purchase price. Commission for small stock varies from 20-50 birr. The partial credit operation is more complex than the cash transaction (see earlier).

## **Mobile phones**

The use of mobile phones in the livestock marketing value chain has increased dramatically in the last couple of years. From 76 traders' interviewed, 75 (98.68%) own mobile phones while only 1 (1.32%) respondent reported not owning a mobile phone (Table 30). On the other hand, traders were asked what percentage of the traders they knew owned a mobile phone and 93% of the respondents said that 100% of the traders they knew owned a mobile phone (Table 31). Traders use their mobile phone to communicate with their business partners, pastoral suppliers, and their family. About 43.4% of the traders said that they directly communicate with pastoralists using a mobile phone.

Livestock traders have expressed the benefits brought to their businesses through the introduction of mobile phone. Some are:

- Reduced time cost, meaning no long distance travel to get essential information.

- Reduced transaction cost, meaning it connected traders to business partners easily and helped them to buy the quality and quantity of animals required in the market. The purchase of unwanted animals was substantially reduced, reducing traders’ loss due to a lack of information. A trader explained, “Mobile phone made communication and information exchange easy. I can deal with buyers and sellers easily. It also helped me make follow-up of my herd and family, search information regarding pasture and water, which would have taken days of travel”.

**Table 30.** Do you use a mobile phone to communicate directly with herders about price and markets or about delivering materials for you to buy?

	Frequency	Percent
Yes	33	44
No	43	56
Total	75	100

N= 76 traders

Source: Data from CHAINS Trader Study

**Table 31.** What percentages of traders you know own mobile phones?

Percent reported	Frequency	Percent
10	1	1.3
70	2	2.6
90	1	1.3
95	1	1.3
100	71	93.4
Total	76	100.0

N= 76 traders

Source: Data from CHAINS Trader Study

## Gendered division of labor

Most of the livestock markets in Borana are promoting urban development and a diversified economy, especially in the growth of service sectors. Markets like Harobake and Dubuluq are growing fast with tens of millions of birr in transactions taking place on the weekly market days. However, businesses in these livestock markets are organized along gender lines. The livestock trade, particularly camel and cattle, is dominated by males, while females dominate the small-scale businesses like selling tea, coffee, alcoholic drinks, salt, sugar, and food (Figure 12). Male traders also dominate in the businesses of selling clothes, barberry, recharging mobile batteries, and selling mobiles and accessories.

Financial constraints are the main challenges females face, limiting them from being involved in the large-scale livestock trade. Small-scale traders at Harobake said they did not have enough money to get involved in the livestock trade. “I can initiate the sale of alcoholic drink by borrowing a box of beer. However, involving in livestock trade requires 10 times of this amount. I have no access to credit for such business,” said an informant. Small stock traders in Moyale raised similar points when explaining what barred them from the cattle/camel trade. Cultural issues are also important to consider as the large-scale livestock trade has been a male dominated field for so long and entry may not be easy for women.

On the other hand, the Borana male traders attribute the absence of Borana women from the livestock trade not only to finance, but also to their limited exposure to the external environment. The Borana say that the Somali are more mobile and are exposed to different situations in the Horn, making them more aware than the Borana. There are also few women traders who use opportunistic price drops to buy cattle/camel. They buy a few heads of cattle/camel when there is no demand at the international level and resell when demand increases.

Most of the women traders are involved in the small-scale goat trade. There are a few women cattle/camel traders who buy and sell a few heads in the local market of Moyale. The fundamental constraint for Garri women to be involved in the cattle/camel trade is financial, while for the Borana, very few attempts have been made by women to be involved in this type of trade.

**Figure 11.** Gender-based marketing activities



*Photos by Waktole Tiki*

## Who is benefiting more

Informants agreed that benefits drawn from the livestock value chain were not fairly distributed among the different levels of market actors. Accordingly, Borana traders said that big traders in Adama benefit more than those on the lower level of the value chain. One of the traders said, “*Fabirikaan loonii Borana, fooqiin kan ijaaramu adamatti*”, meaning ‘Borana is a factory of livestock (referring to the production), but it is Adama traders who are erecting tall buildings in Adama (by big traders)’. Other traders in Borana use a simple comparison to talk about the disparate benefits received from those involved in the livestock trade. According to these informants, Adama traders that started in the livestock trade with 40-50 bulls now buy 400-500 bulls or more. Traders in Borana also understand their weak bargaining positions compared to the Adama feedlot operators or exporters. This is particularly the case when there is drought or scarcity of feed in Borana. “Mostly the big traders tell us to send the money in few days’ time, but it takes months before sending the money. They fatten the bulls using our money, but we do not get benefit from that” (LB, August 2013, Yabello). The benefits received by traders in Borana depend on the individual’s financial capacity and their links to the international market, which can allow them to connect with market outlets and earn a good profit. However, the small traders in Borana have limited access to both. Therefore, the traders in Borana perceive that feedlot operators/exporters are benefiting disproportionately. Some informants attribute their inability to penetrate the international market to low levels of education (see earlier). On the other hand, feedlot operators complain that rising operational costs, such as feed, water and transport, reduce their benefits.

Fluctuating demand in the Middle East also makes traders’ situations uncertain. Some traders suggest organizing under cooperatives as a solution to their weak bargaining position and their exposure to the risk of credit operations. However, there is no single cooperative or group of people organized to operate as a team that has been successful. Cooperative managements prove to be weak, with the committee members concerned primarily for their own private gain and busy with their private livestock trade businesses.

*Contradiction:* The abattoirs in Modjo complain that they are not getting enough animals to slaughter. Furthermore, they complain about operating at a loss due to high prices. However, the Borana pastoralists complain about a lack of demand and low prices from the abattoir. This view is shared by small traders in Borana. There is a need for further information within the whole value chain in order to verify the claims made by the two categories of value chain actors.



## Challenges

- The absence of alternative market outlets other than the Middle East limits the options of pastoralists and small traders in Borana. This affects demand and, hence, price. Many of the feedlot operators complain about feeding animals for more than 4 months due to a lack of demand. According to some informants, the government has not paid attention or delivered on what they call ‘business diplomacy’. However, this claim contradicts the claim made by the Ethiopian Livestock Exporters Association, which considers an opening of business diplomacy sections in the Middle East a success.
- A lack of suitable feedlots (space, landscape suitability, and facilities like water supply) is one of the main challenges facing feedlot operators, who are the main gate to the export market for Borana livestock.
- A lack of quarantine services is another major problem. Despite the government’s attempt to build the new quarantine station at Mille, the traders have concerns over crossing the non-disease free zone after the quarantine as well as the inconvenient location of the new station. This might increase operation costs for the traders, since it most likely will not replace the Djibouti quarantine, meaning trade animals will also be checked in Djibouti, and will cause traders to have to load and unload animals twice. Experts in the Animal and Plant Health Regulatory Directorate do not share the same concerns and believe that the new quarantine system solves the problem. However, they are not sure what challenges they may face from the importing countries regarding the location and standard of the quarantine services relative to the Djibouti port.
- Stiff competition between feedlot operators and exporters, who use free grazing (with less investment), is another challenge.
- The minimum weight for export of live animals set by the Ethiopian government is another bottleneck to export activities. Young bulls banned from legal export routes by the government are exported illegally via Somalia, causing an expansion of contraband exports via Somalia. The impact is twofold: the government loses foreign currency earnings and Ethiopian traders lose their customers who decide to buy contraband goods.
- A lack of credit facilities force actors to rely on informal credit arrangements in the value chain. This impacts the operations of many actors, specifically those with limited knowledge of law enforcement procedures at the lower level of the value chain.
- Price fluctuation is another challenge to traders and pastoralists alike.
- A lack of effective and sufficient transport systems is another key challenge to traders and exporters. “There is no company that can provide enough vehicles to transport hundreds or even

thousands of bulls at a time,” said MA, an exporter based in Adama. Sometimes a single exporter may need 40-50 trucks. A lack of trucks delays transport and, hence, the departure of ships from Djibouti port. This becomes a point of disagreement between exporters and importers. A prolonged stay in Djibouti affects the animal’s body condition due to the change in the micro-climate and the risk of exposure to disease. It also increases feeding and management costs at Djibouti port.

- Dealing with multiple institutions is a challenge. Having a feedlot is a pre-requisite to getting a license. Government bodies issuing licenses are different from the institutions providing plots for feedlots. This is one of the main problems for new entrants into the business, or for the expansion of the business.
- Traders complain about the irrelevance of the cash registry to their business. Since their transactions are not made on a daily basis, they cannot enter transactions into the cash registry every day. Many of the traders also complain about their inability to operate the cash registry. Others complain that the machine is designed for a maximum of 1 million birr at a time. However, many of them undertake multimillion birr transactions at a time. Fear of touching the wrong button and being jailed for fraud is another issue raised by some small traders. Furthermore, some traders complain that “we buy from small traders without receipt, we sell with VAT receipt. We are in problem.”

### **Some general suggestions**

- Linking Borana livestock markets to more destinations may increase market competition and benefit small traders and pastoralists alike.
- There is a need to create short market chains that link producers and consumers by removing actors with no value added.
- Holding grounds are one of the key problems for upcoming Borana traders. There is a need to find a balance between the privatization of rangeland and promoting livestock marketing by providing holding grounds to the needy. Delineated holding grounds will reduce potential conflict between traders and local people while creating more jobs for the local people.
- For a sustainable supply of the best Borana bulls in the market, there must be an effort to improve the production. There is a ranch that works to this effect. However, the capacity of the ranch is quite limited. Unusual mobility to Konso in search of pasture is one factor causing genetic dilution of Borana cattle. Working to solve feed problems in Borana may keep the breed in relative isolation for sustainable trade links to Arab countries. Furthermore, the Borana must be

educated on how to produce the best Borana bulls by isolating short Guji/Konso bulls or mixed ones.

- There must be a link to the hotels in the highland areas for infertile goats, cows, as well as castrates. Under current conditions, most of them are trucked to Moyale where traders complain that they are not getting fair prices for these animal categories. Under current conditions, poor pastoralists who want to sell female goats either do not get buyers or are forced to sell at lower prices.
- Some rural areas cannot trek their animals to market during the rainy season due to the threat of flash floods. Therefore, roads need to be constructed to link isolated places to livestock markets.
- There may be a need to create awareness training on the legal rights of small traders in business operations. Furthermore, creating legally binding procedures that protect small traders and pastoralists against the loss of money due to informal credit operations can increase the benefits to small traders and pastoralists.
- Having formal agreements in credit transactions and taking cases of default to court are not widely practiced or known about by small traders and pastoralists. Therefore, there is a need to create awareness around the importance of legally binding agreements, if the credit operations have to continue. The preparation and implementation of a simple format that is legally binding and acceptable may reduce the problem.
- There may be a need for advocacy services in order to train small traders and possibly pastoralists regarding their legal rights. Most small traders and all pastoralists have limited information on court procedures and the international livestock marketing system. This limits the benefits they draw from livestock marketing chains.
- Access to formal financial sources for the big traders may be another way of saving the small traders from the predatory business transactions of the big traders.
- Traders need to know the detailed addresses of their trading partners to avoid unnecessary loss.
- The empowerment of small traders is needed. One way of doing this is through organizing traders into an association that facilitates the legality of the operations, links them to the market, and provides legal advice. The Ethiopian Live Animal Exporters Association in Addis Ababa is not well known by traders in Borana and is inaccessible to many of them. Moreover, the Association itself is not active in this regard.

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