



Influences of Climate, Coping Strategies and Middle Eastern Markets on the Livestock Trade in Southern Ethiopia: Preliminary Observations

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Research Brief

Feed the Future Innovation Lab for Collaborative Research on Adapting Livestock Systems to Climate Change

Abstract

This research brief presents preliminary observations from six months of field research and interviews with key actors involved in livestock marketing in southern Ethiopia and northeastern Kenya, as well as ongoing trader surveys started in August and December 2012. Key aspects of this research include, first, the importance of understanding the ways in which climate variability interacts with livestock trade. In fact, much of our research thus far highlights the impacts of the most recent drought in 2011 on livestock marketing. Second is the complexity of livestock trade and the extent to which it has changed since 2005 as a result of growing export trade to Middle Eastern markets. And, third, we note the importance of understanding the market system from the perspectives of individual traders. Research in these three areas plus further assessments of pastoralism and marketing chains in southern Ethiopia and northeastern Kenya will aid in forming policy recommendations to strengthen livestock markets in the region. 

Pastoralists unable to take advantage of growing export trade

Pastoralism, which provides a livelihood for millions of people occupying the drylands of Eastern Africa, is but one component in a complex international livestock market chain. A chain that also includes traders, market brokers, feedlot operators, transporters, government officials and more, all of whom benefit, to varying degrees, from access to Ethiopia's growing livestock export trade to Middle Eastern markets – growth made possible by Arab states' relaxation on their chilled meat and live animal import restrictions. However, many small-scale livestock producers (pastoralists), in the face of difficult challenges, remain unable to take advantage of this growing market. Market off-take rates among many Borana pastoralists of southern Ethiopia remain stagnant, even with export increases, resulting in a lack of sustained quantity of marketable animals. Thus, improving both export and alternative (national and regional) livestock markets promises to benefit the greatest number of households in this region.



These young bulls were collected at HaroBakke market on 21 October 2012. (Photo by Waktole Tiki)

To better understand the complexity and challenges of the livestock market chain, Dr. Waktole Tiki, post-doctoral associate on the project, conducted field research and interviews with key actors involved in livestock marketing in southern Ethiopia and northeastern Kenya for six months. The opinions and experiences of these market actors are critical to creating sound livestock and export policies and strengthening livestock markets. Ultimately, these interviews and preliminary observations will help researchers for the *Feed the Future Innovation Lab for Collaborative Research on Adapting Livestock Systems to Climate Change* recommend policy-based solutions to improve livestock markets so that low-income pastoralists and traders can take advantage of the growing export trade.

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Livestock production faces several challenges

Climate variability affects the health of the entire market chain

Pastoral systems in the arid and semi-arid rangelands of Borana Zone in southern Ethiopia produce the greatest proportion of cattle exports in the country. However, increasingly unpredictable rainfall caused by the region's changing climate impacts both pasture and water availability, which directly influence livestock production and indirectly the rest of the market chain. Climate variability, particularly drought, significantly affects the system's sustainability. For example, during the 2011 drought in Borana, about 300,000 cattle, worth \$90 million, died. Such substantial loss impacts the ability of pastoralists to meet the demand of growing markets.

“According to the general manager of the [Ethiopian Livestock Trader's Association], the concern is now shifting from lack of markets to sustainable supply, since the production side is not improving to meet the demand—quality as well as quantity,” Tiki wrote in a preliminary observation report. “There has not been much effort in increasing production and productivity and the impact of drought is undeniably reducing the supply. The impact of drought in depleting the resource is substantial. Therefore, the impact of climate variability is seen not only in the short-term impacts, but also in how it affects the supply chain for long periods, until the next recovery period.”

Drought presents risks and benefits for pastoralists and livestock traders. For pastoralists, drought periods threaten food security, as herders' livelihoods depend upon the health and value of their animals. Drought forces pastoralists to decide whether to move their animals in a search of pasture and water, a search that may just weaken the animals and expose them to disease, or to sell the animals before they become too emaciated and lose all value. The wrong decision made too late or too early could be costly for the pastoralist. In addition, large portions of young cattle and female animals die during the drought periods due to emaciation from fodder shortages as traders will not buy them because importing countries exclude females, and the Ethiopian government bans the export of young and female animals. Consequently, drought harms the future reproductive and productive potential of the animals and sustainability of the supply since it kills and creates a scarcity of reproductive females. Lastly, during drought periods, sellers outnumber buyers, putting pastoralists at a strong disadvantage.

On the other hand, some traders have found great profits during drought periods, depending on the volume purchase determined by the level of acceptable risk, feedlot capacity, and the number of stock they have prior to drought's onset. Some traders have taken to buying the pastoralists' emaciated animals at cheap prices; they then feed the animals until they regain weight and sell them at higher prices. While some traders encounter feed problems and loss during drought, some, especially big traders, acknowledge the potential for high profits and the increase of their own herds. For example, in an interview with Tiki, a trader described how near the end of the 2011 drought, he bought 12 emaciated bulls for about 200 to 300 birr each (\$12 to \$18). After feeding the bulls for about two months, the trader sold them for about 5,000 birr each (\$265). With wealthy pastoralists and traders buying emaciated animals during the drought from poor herders, Tiki says

the “change will inevitably redistribute wealth from the poor to the wealthy, increasing the number of dropouts and destitute families from the pastoral sector.”

Other factors challenge the market's sustainability

In addition to climate variability, the Ethiopian livestock chain faces several other challenges that decrease market sustainability, efficiency and profitability.



Moyale market, October 27, 2012. (Photo by Waktole Tiki)

- **Market Fluctuation:** The markets fluctuate often, as price and demand depend on a combination of environmental, political and social factors, thus putting the livelihoods of low-income pastoralists and traders at an increased risk.
- **Poor Market infrastructure:** Pastoralists lack access to infrastructure like roads, markets, telecommunication, market information, schools and veterinary services.
- **Disease:** Livestock are more likely to contract diseases when emaciated and weak. In addition, access to veterinary services or education is limited. Lastly, the spread of disease increases when livestock can freely move across borderlines.
- **Push for sedentary lifestyle:** Government policy pushes pastoralists to adopt a sedentary lifestyle over a mobile one even though pastoral mobility provides herders a means to adapt to climate change.
- **Lack of information on market standards:** Pastoralists do not know the desired livestock characteristics and health requirements of importing countries, nor understand the importance of tracing the animals' source of origin and completing certification processes.

“When livestock marketing is affected due to unpredictable weather conditions, disease outbreaks, or conflict, the livelihoods of many people and families connected to the [different parts of the livestock chain] will be affected,” Tiki wrote. “Many of the people in the demand chain earn money only when there are transactions. Absence of financial transactions means loss of livelihood for many of them.”

Wealthy livestock traders benefit the most from markets

Currently, the growing export markets mainly benefit rich male traders, who have enough money to absorb losses and manage the risks involved. Thus, climate variability impacts females, small traders and poor pastoralists the most.

“Skyscrapers in Adama [Ethiopia] are built by Borana cattle,” a small trader told Tiki in an interview. “Borana pastoralists keep cattle for years and benefit less than the person keeping them for three months. We small traders are not benefiting. Our operation is for subsistence.”

Pastoralists incur the most risk of all the actors in the livestock chain and also benefit the least in comparison to traders, brokers, and feedlot operators, who can afford to feed the animals before selling them at higher prices. Thus, even though the livestock market is growing, low-income pastoralists do not benefit.

“Despite the currency devaluation over years, the relative export value of live animals has increased. However, thousands of the Borana population continued to depend on food aid,” Tiki wrote. “Why? The benefits of livestock export trade are not trickling down; the wealth is skewed with only a few households controlling a higher proportion of the livestock and the big traders are benefiting from their increased and improved market access.”

Helping pastoralists take advantage of growing markets



Meat market at HaroBakke. (Photo montage by Waktole Tiki)

Ethiopia stands in an advantageous position to other competitors due to its proximity to Middle Eastern nations, and the adaptation of importing countries to the taste of Ethiopian livestock and diverse agro-ecologies for production of different types of livestock. But, in order for pastoralists to fully benefit from this opportunity and combat climate variability impacts, changes must be made to the system.

For example, pastoralists require improved access to markets, as traveling to far-off markets weakens and thus decreases the value of animals during transport. A solution may come in the form of cross-border trade, currently considered illegal by the government. But, if this policy could be changed, a shorter trek to markets across the border could alleviate livestock loss.

Improvements in physical as well as social infrastructure would also allow pastoralists increased access to markets and information. “Increased access to such social services increase the capacity of the pastoralists to respond to climate variability before it becomes too late for selling their animals,” Tiki wrote. “Such infrastructural development can increase the pastoralists’ link to the markets in the center and even to the international market.”

Even now, pastoralists and others involved in the livestock trade are implementing certain innovations in order to cope with climatic variability and take advantage of the growing market. These include transport of water and hay to feed the animals, renting surrounding farm land on which to keep animals for a few days or weeks and paying other pastoralists to care for purchased animals grazing free of charge on communal lands for a couple days.

The mobile phone is a particularly important innovation as it provides pastoralists access to exchange price information, weather conditions and potential disaster causing hazards. Thus, pastoralists can make informed decisions and reduce risks. One trader said the mobile phone “opened our eyes.”

“Mobile phones are causing real transformation in the lives of pastoralists,” Tiki wrote. “A pastoralist can keep contact with their family at the base settlement, the mobile foraa herd, and still go to any market to sell their animals. Mobile phones have shortened the distance which they would have travelled to get information that is now available at their fingertips.”

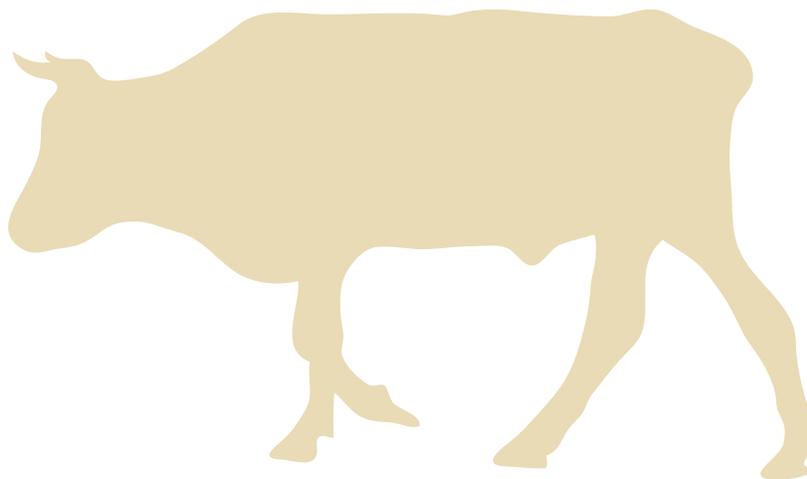
What lies ahead

We began collecting field data and market information during the past year, but plan to publish several papers and policy briefs for donor and government policy makers over the next two years. The team also will make information available through local seminars, workshops and through collaboration with non-governmental organizations (NGOs) working on livestock development in the region. Understanding the ways in which new market-related technologies, such as mobile phones and improved fodder delivery systems, affect livestock markets and the ability of low-income pastoralists to access them, is an important challenge. Designing policy scenarios that distribute the benefits from recent market growth to mobile pastoralists is a critical goal of the study and potentially could benefit up to 130,000 pastoralists and traders from the two districts, Dillo and Yabello, where the project is based.

Because pastoralists in the region strongly depend on livestock sales to finance purchases of cereals and other foods, improving producer access to and incomes from livestock markets directly benefits local food security. Improvements in livestock trade also enhance the livelihoods and incomes of pastoralist producers, as well as those of others who are dependent on livestock markets. The latter group includes animal transporters, butchers, market brokers, market food vendors, and livestock trekkers who benefit from livestock trade. In short, the most immediate way to improve food security, incomes and livelihoods in the region is to support and sustain livestock production and marketing. 🐄

Further Reading

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Climate variability, pastoralism, and commodity chains in Ethiopia and Kenya

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The Climate variability, pastoralism, and commodity chains in Ethiopia and Kenya project was developed to determine: how mobile herders access market chains in remote areas, how weather-related risks affect market access and markets themselves, which producer scales/groups (including women) benefit from different markets and which do not.

This project addresses interactions between climate variability, pastoralism, and livestock marketing from production to final sale. Secondly, it will look at the ways that outbreaks of animal diseases and conflict—indirectly associated with climate variability—negatively impact different producers and commodity chains. The research design is based on the premise that uncertainty over extreme climatic events and their potential effects on herders, markets, animal disease, and conflict will continue in eastern Africa. In fact, there remains considerable uncertainty over the direction of climate change in the region's drylands, with some models predicting increased incidences of floods rather than drought. The project entails literature and secondary data reviews, participatory field research, community stakeholder meetings, and a research planning workshop in the region. It will employ a benefit/cost analysis that not only addresses herder and trader level benefits/costs but also compare benefits/multipliers (e.g., employment), especially for local economies, associated with different commodity chains. Research sites for the study include: (1) the southern Boran plateau, Ethiopia and the market links up to export markets and Nairobi, Kenya across the border; and (2) the Tana River basin near Garissa, northeastern Kenya and the area's market links to Nairobi and Mombasa (including exports from Mombasa). The study is directly relevant to USAID's pastoralism/value chain programs in both countries. By involving faculty and students at Pwani (Coast) campus of Kenyatta University and from the Institute for Rural Development, Addis Ababa University, the project will build regional capacity in pastoral systems and commodity chain analyses.



Feed the Future Innovation Lab for Collaborative Research on Adapting Livestock Systems to Climate Change is dedicated to catalyzing and coordinating research that improves the livelihoods of livestock producers affected by climate change by reducing vulnerability and increasing adaptive capacity.

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