



Do Pastoral Husbands and Wives in Northern Kenya View Milk Markets Differently?

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Efforts to develop market opportunities are a key element of the current USAID agricultural strategy. In this study, we illustrate how milk marketing in two pastoral towns in northern Kenya is influenced by patterns in intra-household decision making. In this pastoral study area, men make migration decisions and women market milk. Since milk markets are in town and households change location frequently, the husband's decision about where to settle the household has obvious implications for the distance his wife will have to walk to the milk market in town. We find that all else equal, husbands do not locate the household to facilitate milk sales—if anything they are locating the household to make it harder for wives to market milk. This study illustrates how efforts to link producers to markets may need to be designed with an understanding of the intra-household decision making process.

Background

The Gabra are nomadic pastoralists that reside in the Kenya-Ethiopia borderlands. They raise mixed herds of camels, cattle, goats, and sheep in an arid environment. They obtain most of their calories as milk from their animals, but they are increasingly meeting some of their caloric requirements by consuming grains purchased from the proceeds of livestock and milk sales.

Gabra culture distinguishes clear rights, roles, and responsibilities for men and women. The symbolic distinction is between that which is outside of the household dwelling, which is the men's domain, and that which is inside the dwelling, which is women's domain. Each evening, men milk the animals after they return from grazing. The husband is handed containers full of milk as he sits outside the door of the hut. He inspects the milk, takes a sip, and then passes it through the door to the wife. Once it enters the hut, management of the milk becomes the responsibility of the wife. Traditionally, this meant that women are responsible for the decisions about how much milk will be consumed fresh, how much will be conserved as ghee (dehydrated butter) or fermented milk, and how much will be shared with other households. Over the past 40 years or so, as small towns have grown in the Gabra area, women now have the opportunity to walk to the nearest town and sell the milk in exchange for cash.

The development of milk markets in this area is an example of the changes that are occurring throughout Africa. Milk is a traditional product, produced and consumed within a clear set of cultural rules. The creation of markets challenges these social norms and provides new

opportunities. These norms surrounding milk are being renegotiated, both implicitly and explicitly, as households weigh the costs and benefits of these new opportunities.

Development policies usually assume that households will respond cooperatively to new market opportunities. However, if this is not the case, then realized outcomes may be much less promising than the anticipated ones. Efforts to use improved access to markets as a development strategy may need to be designed with explicit mechanisms to reduce the potential for intra-household contestation.

Major Findings

The data analyzed are from a survey of 88 households in the areas around Dukana and Chalbi in northern Kenya. Data are available for each of the four seasons (rainfall is bimodal in this area, with two rainy seasons separated by dry seasons) for the years 1993-1997.

If total income is defined to include the cash value of all goods produced and consumed within the household together with cash income, milk sales account for a relatively minor portion of total household income. In Chalbi milk sales account for 3% of total income and in Dukana the corresponding figure is 1%. But milk sales are a much larger portion of cash income: milk sales account for 11% of cash income in Chalbi and 14% in Dukana. The majority of households, 67% in Chalbi and 86% in Dukana, sold milk in one or more of seasons analyzed.

Milk prices of 20 Kenyan shillings per liter were constant



Figure 1. Herders in northern Kenya have seen a rapid growth of milk marketing opportunities. As market institutions develop, new rules associated with the market must be reconciled with existing cultural institutions. Amongst Gabra nomadic pastoralists in northern Kenya, traditionally the management of milk is the wife's domain. Buyo, pictured here with her child, sometimes sells milk but her ability to market milk depends on her household's proximity to town. Traditional cultural rules allocates the responsibility to decide where to locate the household to her husband. Photo by John McPeak.

over the four years studied (around \$0.30). Maize prices averaged 20 shillings per kilogram. Thus, the exchange rate is one liter milk to one kilogram of maize. However, when expressed in caloric terms (1 liter of milk valued at 750 calories, 1 kilogram of maize valued at 3650 calories), we find what has been called the “caloric terms of trade” (Degan et al., 2001). In this area, the sale of one liter of milk generates almost five times as many calories from the maize that can be purchased with the proceeds than would have been generated by direct consumption of the milk.

On average, it took five hours to walk to the nearest town from the household in Chalbi and eight hours in Dukana. Milk production per day from the household herd averaged 4.5 liters per day in Chalbi and 3.5 liters per day in Dukana. The trips taken by wives to towns typically involve waking up pre-dawn, carrying some share of the milk collected the prior evening from the household herd in a small plastic or traditional woven container, and walking to town where they sell the milk themselves. They then use the income generated by these milk sales to make purchases before returning on foot to the household before night falls.

In our theoretical analysis, we developed the implication that if households behave according to a “cooperative model,” husbands and wives would jointly decide where to locate the household in order to reap the benefits from milk sales, while taking other factors into consideration. If households act according to what we call the “traditional model,” based on what people described as a possible outcome in our fieldwork, husbands make the location decision without considering its impact on milk sales. The men make the decisions based only on the needs of the herd. Finally, following what we describe as the “contested model,” husbands view wives marketing milk with trepidation, and use migration decisions to limit their wives’ milk marketing activity. We identified the sign of a specific coefficient in our empirical model that could discern between these three models.

The statistical analysis allowed us to investigate patterns in decision making. In particular, it allowed us to identify how

the relationship between the decisions of where to locate the household and how much milk to sell. To conduct this analysis, we also used information on the household such as the age of the husband, the age of the wife, household size, herd size, and presence of pack animals. Information was also collected on time period characteristics, such as rainfall levels, what season it was, whether food aid was being delivered, and whether there were any livestock raids in that period.

Our findings were consistent with this third model, suggesting that household decisions about migration and milk marketing were best viewed as contested. Why might husbands and wives contest decisions about milk marketing? A variety of explanations were proposed when we returned to the field with our findings. A leading explanation was that husbands are not comfortable with their wives gaining control over income. While some husbands claimed that milk sales were a good opportunity to generate cash to buy food for the household so that they did not have to sell livestock, we frequently encountered husbands who were concerned about what their wives did with money from milk sales. Another explanation that was given was that men did not like the fact that sales reduced milk available for consumption by the household, as milk is the main component of the diet as noted above. A third interpretation advanced was that husbands were uncomfortable with their wives being alone in town, largely centering on the concern that they might develop relationships with men in town. Our data did not allow us to distinguish among these different explanations which we leave as a topic for further research.

Practical Implications

Improving market opportunities is an important part of development policy. As noted above, markets – through forces such as the caloric terms of trade described above – can play a crucial role in food security. It is natural that efforts to improve the well being of people in pastoral areas should identify markets as a key intervention.

In addition, the status of pastoral women merits special concern. Women's traditional roles are very circumscribed. Milk marketing is one of few activities which is both consistent with women's traditional roles and provides opportunities for income generation.

However, this study indicates that one can not directly proceed to the conclusion that improved milk marketing opportunities will automatically improve women's, or pastoral households', well-being. One practical implication of this study is that it illustrates how intra household contestation can provide an example of why a promising development intervention has less impact than expected, and cites examples where these intrahousehold dynamics even

led to project failure (Waters-Bayer, 1985). From a design standpoint, it illustrates how it is critical to understand the gender dynamics inside households to design programs that reduce the potential for intrahousehold contestation. With further research, the underlying reasons for resistance to milk marketing by some husbands could be clarified. Armed with this information, a development project aimed at improving milk marketing could also facilitate dialog about these concerns with men and women within the community. Such a dialog could simply "clear the air" and bring out into the open for discussion issues that may not have been recognized, or could serve as a foundation for developing institutional responses that design mechanisms to address these concerns.

Further Reading

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The GL-CRSP Pastoral Risk Management Project (PARIMA) was established in 1997 and conducts research, training, and outreach in an effort to improve welfare of pastoral and agro-pastoral peoples with a focus on northern Kenya and southern Ethiopia. The project is led by Dr. D. Layne Coppock, Utah State University. Email contact: Lcoppock@cc.usu.edu.



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East Africa, Central Asia and Latin America.

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