



LIVESTOCK LIVELIHOODS AND AGRI-FOOD SYSTEMS THE DEMAND FOR AND IMPACT OF IMPROVED LIVESTOCK MARKET FACILITIES IN ETHIOPIA

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KEY MESSAGES

- Traditional marketing arrangements of livestock, characterized by lack of market facilities and prohibitive transaction costs, can hardly match the complexities that arise in the production and consumption systems of the agriculture sector.
- Inadequate market infrastructure constitutes a major impediment to trading and marketing activities resulting in higher transaction costs for farmers and limiting the benefits from market participation.
- Farmer's benefits from livestock production in Ethiopia are very low. Scientific evidence shows that the contributions of livestock farming can grow through improvements in the marketing system, which include developing the infrastructure of livestock markets.
- There is growing recognition among policymakers in agricultural and rural development of the value and need for investments in market infrastructure and facilities.
- Farmers have strong preferences for key livestock market facilities, ranking in order of importance access to veterinary clinics, a fenced market shed and watering troughs.
- Experimental market sheds have significantly increased market participation and income from small ruminants in central Ethiopia.

INTRODUCTION

Livestock markets in rural Ethiopia consist mainly of an open plot of marginal land within or close to towns or administrative capitals. They are poorly equipped and inconvenient both for the livestock keepers and their animals.

Farmers usually have to travel on foot for hours, herding their animals on market days. In the rainy season, even if farmers and their animals manage to cross the rivers along the way, when they arrive at the markets there are often no covered shelter facilities to protect them or their animals from the rain. In the dry season, animals stay under the hot sun, struggling with thirst and rapidly losing body condition. Because of these challenges, rural livestock markets are held for only an hour or so.

In general, the markets in the central highlands of Ethiopia are characterized by limited accessibility and poor physical infrastructure (Jabbar and Ayele 2004; Solomon et al. 2003). Lack of market infrastructure significantly undermines the margins farmers generate from their agricultural products in the markets and increases the prices they pay for agricultural products when involved as buyers (Barrett et al. 2017). The transaction costs of agricultural markets in general, and livestock markets in particular, are also high due to lack of transport facilities that force farmers to trek their animals over long distances.

These problems are compounded with the overall lack of feed, watering services, veterinary services, storage facilities, and information at market sites.

Animals that are forced to withstand lots of stress and discomfort under poor market conditions that lead to weight loss, physical injuries and sickness). The shortened market days as a result of poor facilities and sales of animals below market prices also hamper the income earning potential of farmers.

Any interventions aimed at addressing constraints of marketing activities, such as market infrastructure, are increasingly seen as a meaningful way to contribute to the transformation of the livestock sector so that it contributes towards poverty reduction and increased food security of rural inhabitants.

Recognizing the huge and yet unexploited potential of the livestock sector, the Ethiopian government has recently renewed efforts to make the marketing system more efficient through the construction of market infrastructure (Ministry of Agriculture, 2015). Investments like these could have a significant impact on returns for rural households (Manggat et al. 2018; Mogues 2013). It could attract more buyers and sellers to the markets, reduce transaction costs and increase returns from agricultural production. Improving market infrastructure could increase the efficiency of live animal marketing.

This fact sheet summarizes the empirical evidence generated over a period of six years in eliciting demand for livestock market facilities and the impact of one of the most preferred facilities - market sheds.



Small ruminant markets in rural areas are often marginal plots of land with no facilities for either the animals or farmers.

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Card 1

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Choice experiment with hypothetical markets to elicit preferences for facilities.

THE EXPERIMENT

The key focus of this research has been to highlight the demand for livestock market facilities and make the case for the impact they can have on market participation and performance. The demand for livestock market facilities was estimated using stated choice methods, as the facilities are yet to be available in the markets.

In order to assess the impact, experimental market sheds were constructed in nine randomly selected livestock markets in central Ethiopia and a comparison was made on market participation and income generated from livestock over time between markets with sheds and without sheds [control markets].



Market sheds have improved market participation and income from small ruminant sales

OUTCOMES AND EVIDENCE

Farmers have shown great interest in livestock market facilities. The empirical evidence, generated from within the intervention sites of the livestock collaborative research programs in Ethiopia, revealed that veterinary clinics, fenced market sheds and watering troughs are the most preferred facilities (Kassie et al. 2020). A site level study in central Ethiopia also showed that temporary holding barns, toilets, veterinary clinics, watering troughs, feed shops, and market sheds are the facilities livestock keepers are most interested in (Zelege et al. 2020).

The second set of evidence generated is on the impact of market sheds on market participation, in terms of offtake and income from small ruminants. The scientific evidence shows that market sheds have improved farmers' income from small ruminants by 40%.

Similarly, the sheds have significantly increased farmers' market participation (Zelege et al. 2021). This positive impact was very well received by the farmers. Neither the farmers nor the animals were subjected to the rain or sun, which increased sales because the farmer no longer felt the pressure to sell the animals quickly, often below market prices. With the farmers

no longer deterred by weather conditions, they now come to the market more regularly. These are the main reasons for the improved market performance and participation according to the farm households.

DRIVERS AND SUCCESS FACTORS

The market facilities resulted in positive impact simply because they address a critical gap in livestock marketing. Demand-driven and carefully designed interventions to develop livestock markets will certainly be very useful. However, a number of preconditions need to be addressed in order to incentivize the different actors to invest in the construction of market facilities. These include:

- the empowerment of the private sector and clear guidelines on the development of livestock markets need to be given due attention by the Government of Ethiopia.
- the development of the market facilities needs to be accompanied by investments in road networks by the government and the local community.
- land ownership issues need to be redefined to empower local level administrators to make decisions that encourage investment in the development of the livestock markets.

LESSONS LEARNED AND CONSIDERATIONS FOR SCALING

Market facilities protect farmers and animals from harsh weather, thirst, and similar inconveniences. The facilities will also enable farmers to stay in the market longer and the animals will be less stressed resulting in higher bargaining power. Farmers have shown clear and high demand for key livestock market facilities.

Small ruminant market sheds are one of the market facilities farmers attached high value to. Marketers are aware that market sheds protect them and the small ruminants from the scorching sun in the dry season and rainfall in the rainy season. Currently, unbearable sun heat and rainfall force smallholder farmers not to stay longer in the markets and sell their animals for lower prices than they usually expect. Dehydration due to sun heat and wet-cold hypothermia due to cold rain make the animals appear emaciated and unhealthy, and concomitantly, undermining the prices they fetch.

The positive impact of market sheds on market participation and performance empirically observed in central Ethiopia is an important tool that can be used in scaling up livestock market facilities. Notwithstanding the fact that the relative weights attached to the different facilities do differ across locations,

investments in developing livestock markets need to prioritize markets holding barns, market sheds, toilet, veterinary service, watering troughs, feed stores, and market sheds.



Photo ILRI/Zerhun Sewunet

A woman checks the body condition of sheep at a market in Doyogena, Ethiopia. In rural areas, livestock markets tend to stay open only for an hour or two due to little to no facilities available to shelter people and their animals.

Partners

The SmaRT-Ethiopia project is led by ICARDA in close collaboration with ILRI, Ethiopian NARS and other international partners.



Related publications

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