



# Improving food security, nutrition and incomes: the contribution of small stock

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*A livestock keeper takes a goat to the market in Zimbabwe. Photo: A van Rooyen, ICRISAT.*

## The contribution of livestock to livelihoods

Despite years of work, the development indicators relating to sub-Saharan Africa (SSA) often disappoint. For example, the highest incidence of undernourishment in the world occurs in SSA where one out of every three people suffers from chronic hunger (WDR, 2007). Per capita food consumption in SSA is on the decline (Shapouri et al., 1999). Sub-Saharan Africa is the only region in the world where the number of rural poor is on the rise (WDR, 2007).

The majority (86%) of SSA's combined population of 200 million relies on the agriculture sector. Therefore, it is no surprise that we look to this sector to provide solutions to the issues of chronic poverty, food insecurity, and malnutrition. Improvements here have the possibility of impacting millions. This brief looks at the contribution that livestock, small stock in particular, can make towards achieving food and nutritional security and improving social wellbeing in southern Africa.

## Livestock at the household level

Access to cash is of critical importance to rural homes. Most households in semi-arid Zimbabwe are unable to grow enough staple food to meet their own requirements. They supplement what they grow with food that they buy and the source of this cash is often from the sales of livestock. Of all their farming activities, most small-scale producers say that animals are their most important source of cash. In particular, goats represent small discrete bundles of cash and farmers are more willing to part with them than their cattle. Families also need cash for school fees and medical expenses (Figure 1). This shows the direct contribution that goats can make to achieving food security, providing education, and improving human health.

Farmers also use their animals for their meat and milk and the manure for their crops – uses that have indirect impacts on food security, nutrition and poverty reduction.

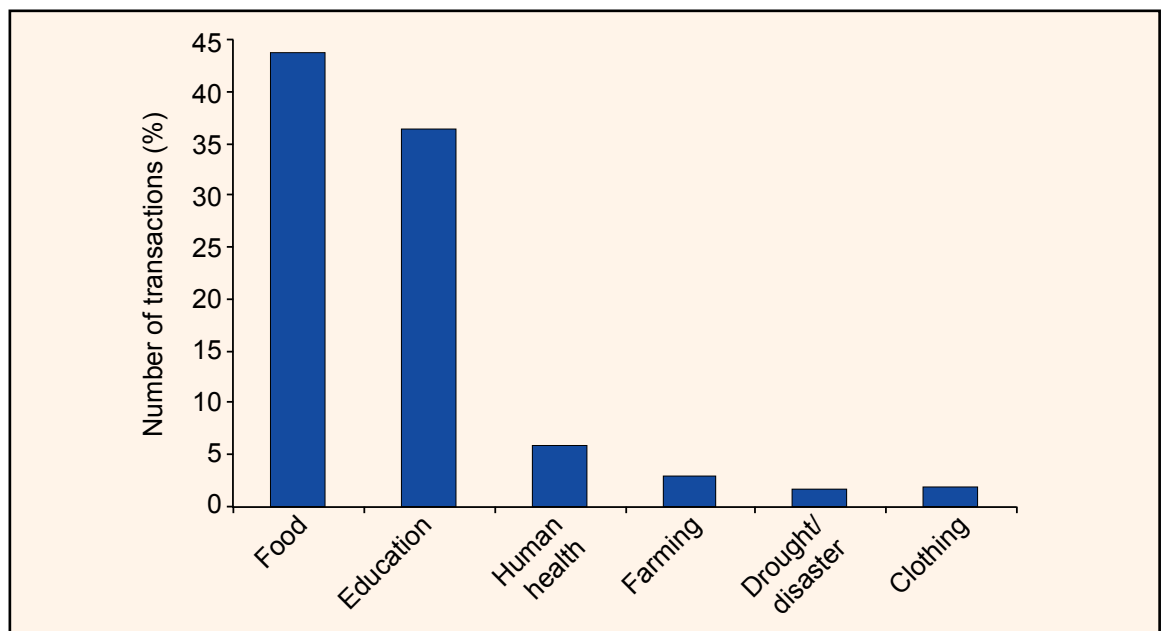


Figure 1. The cash earned from livestock is used to purchase a variety of commodities that cannot be produced on farm as well as services such as education which is considered of high priority for development. Source: Homann et al. 2007.

## Investing in goat production – household level

Given the potential direct and indirect benefits of owning livestock and given that more than 85% of farming households have small stock, why has goat production not made any significant impact in reducing poverty levels or improving food security? Or phrased differently, what can the research and development community as well as government do to make this system more efficient and enhance the contribution of small stock to food and nutritional security and social welfare?

The first step lies in reducing the number of unnecessary mortalities. Goat mortality rates in Zimbabwe are relatively high – 30%. This is high enough to erode any potential economic benefits from goat production. A family with six goats cannot afford to lose one or two to mortalities when they are also in need of using the cash from the sale of goats to pay for food and education. The potential for goats to contribute to household food security and generating cash is huge. However, in any given year, the reality is that a household's goat production barely replaces the outflows (death and sales) and the family remains strapped for cash. Reducing mortality rates is the first step for farmers to realize greater direct and indirect benefits from their animals at the household level in the short term.

## Investing in goat production – national level

Reducing mortalities will also create impact at the national level. Zimbabwe has a population of approximately three million goats. With mortality rates as high as 30%, 900,000 goats may be lost annually. Reducing mortality to 20% would make an additional 300,000 goats available to local markets and could potentially earn small-scale livestock keepers a further USD 6,000,000 at current prices.

There are two million rural households in Zimbabwe. If even half of these households sells one more goat per annum than before, it would place an additional million goats on the market. This represents an income of at least USD 35,000,000!

What is needed are efforts to commercialize the goat sector rather than the farmer. And this means better market linkages. There is already a demand for more goats. The demand for meat and milk in developing countries is expected to rise by 2.8% and 3.3% per year respectively to 2020 (Ryan and Spencer, 2001). Already retailers in the larger urban areas of Zimbabwe regularly report meat shortages. There are also regional opportunities for Zimbabwe as neighboring South Africa and Mozambique are significant importers of meat and other livestock products.

## Recommendations

So what can be done to allow a farmer in rural Zimbabwe to capture these opportunities and maximize benefits from their livestock production?

What is needed now are better market linkages, strategic investment in the small stock sector and new partnerships, all of which will create the necessary environment for farmers to begin to invest in their small stock and improve production levels.

The development of more efficient functional markets that reward quality will mean that farmers invest more in their animals in order to benefit from the price premiums paid for high-quality products. In return, households will have more cash to put towards their food security and social welfare needs.

Recent projects in Gwanda have shown this to be the case. Farmers used to sell their goats for a maximum of USD 20. Our work tested different marketing strategies and eventually settled on auctions that are held once a month. In order to make these auctions run more efficiently, sale pens were constructed. Today the auctions generate USD 50,000/ year and the average price for a medium-quality goat is now USD 35–50. As a result, farmers take better care of their goats (e.g., providing dry season feeding) in an attempt to reduce unnecessary mortalities. A dead goat represents a serious loss of income.

Governments need to be cognizant that goats actually represent food security, enhanced nutrition and income and access to education. By supporting the small stock sector through better policies, governments have an entry point to achieving lasting impact and change. Strategies that create an environment where inputs can be made available to farmers (i.e., reducing the duty on the imports of inputs or offering tax incentives for the private sector to engage with smallholders) should be explored.

Strategic investment in infrastructure and investing in the development of more inclusive and sustainable partnerships are also important changes to make to the system so farmers can realize greater benefits from their animals.



*Providing goats with improved housing built with locally available material can help prevent illness and reduce mortality rates.* Photo: S Sridharan, ICRISAT.





Improved goat sale facilities such as this in Gwanda, Zimbabwe, along with new market institutions have helped to boost goat prices from USD 20 to USD 35-50 per animal. Photo: S Sridharan, ICRISAT.

## References

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ICRISAT is headquartered in Patancheru near Hyderabad, Andhra Pradesh, India, with two regional hubs and five country offices in sub-Saharan Africa. It is a member of the CGIAR Consortium. CGIAR is a global research partnership for a food secure future.

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