

Women, Livestock Ownership and Food Security

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Food security is defined as when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Dimensions to food security include: availability, access, utilisation, stability and gender, which includes the role that men and women play in food production, processing and distribution.

Animal source foods (ASF), such as milk, meat and eggs, are rich in energy and also provide a good source of proteins, vitamins and minerals. The consumption of ASF, particularly by the rural poor, can therefore substantially contribute to dietary diversity and household nutritional status, which has implications on household productivity, income levels and ultimately national development.

However, the role that gender inequalities (in resource allocation, income management and access to productive resources) play in causing food insecurity is less well studied. Little is known about the role that livestock play in buffering households against food deficit or the implications of livestock ownership by women in influencing food security.



In Ethiopia, Adi Key milks her cow

Facts

Livestock play a key role in contributing to food security through:

- enabling direct access to milk, meat, eggs etc.
- providing cash income from sale of livestock and livestock products for purchasing food, especially during times of food shortage.
- contributing to increased grain yields as a result of improved productivity from use of manure and traction.

The extent to which livestock contributes to food security is dependent on intra-household dynamics including:

- women's ownership of assets, including livestock, and the extent to which they make decisions on the use of assets, their products and the income derived from these assets.
- women's decision-making on how much of the products to sell and how much to keep for domestic consumption.

A growing body of evidence has shown that not only do women typically have fewer assets than men, but the assets owned by women are used differently. Increasing women's control over assets (mainly land, physical, and financial), has positive effects on food security, child nutrition, and education, as well as women's own well-being.

Diverse diets

Livestock ownership plays a vital role in enabling households to benefit from a more diverse diet,

and contributes to the consumption of milk, meat, eggs etc. This study concurs with others that reveal positive relationships between livestock ownership and food security.

However, the results show that livestock species and ownership patterns play an equally significant role in determining household food consumption:

- Households that owned goats and exotic chickens had diets that were twice as diverse as those who did not own these species.
- Income gains from exotic chicken sales enabled households to purchase a greater diversity of food and enjoy a more varied diet than households keeping traditional chickens for food and sale.
- Households owning exotic chickens also consumed significantly more eggs than those that did not own exotic chickens.
- There were no significant differences in egg consumption in households that owned and did not own local chickens, most likely due to their lower productivity and low numbers kept by farmers.

Home consumption or sale?

For many smallholders in rural communities, the sale of livestock provides the only outlet to the cash economy. Even in times of food abundance, livestock sales enable households to diversify their diets. In semi-arid Mali, for example, livestock contribute 78% of cash income from smallholder mixed crop and livestock farming. In pastoral areas of East Africa, sale of livestock and milk is the main source of income used to buy grain for household consumption.

While ASF contributed considerably to household diets, particularly in livestock owning households,

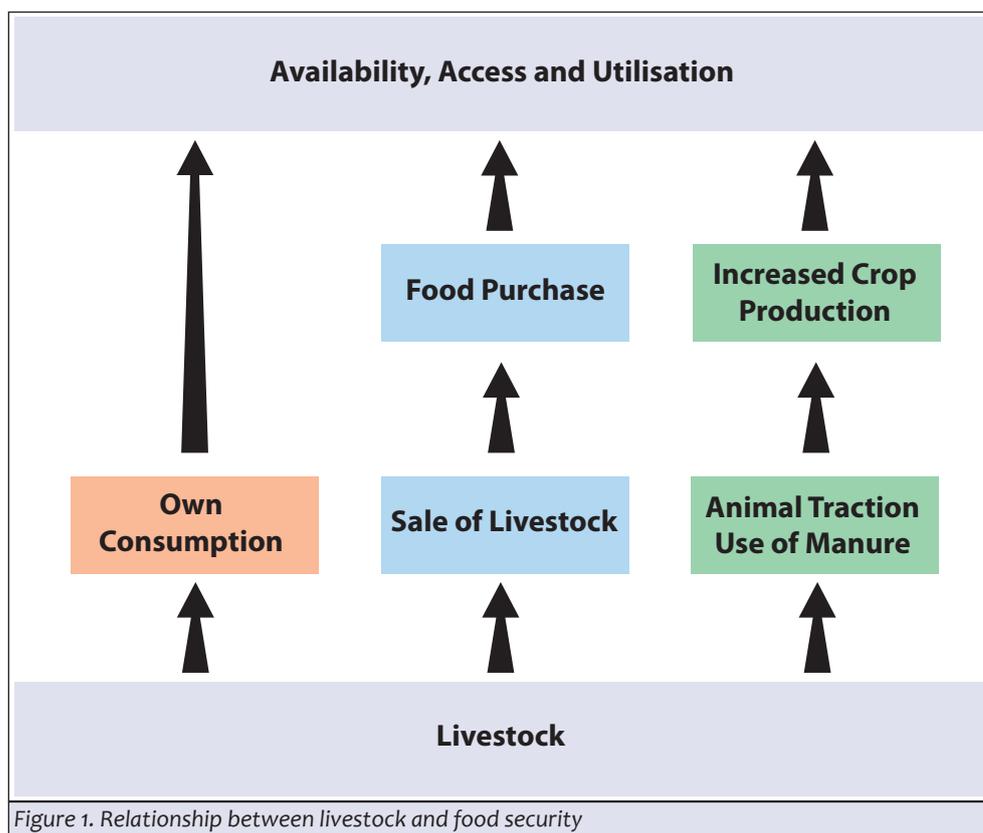


Figure 1. Relationship between livestock and food security

there was an exception with regards to meat consumption. The frequency of meat consumption was the highest in households with no cattle, goats and exotic chicken, compared with households who did own these livestock. One study found that meat



Jalia Nambehela Khaukha, from Uganda, with her goat



Julia Roque Purihuan, with her alpacas in Peru

consumption from own slaughter was infrequent except in cases of sick and/or unproductive animals or for ceremonial reasons.

There is also evidence to suggest that if the cost of producing livestock products domestically is lower than its production in the commercial sector, households are more likely to opt for the sale of these products, rather than use them for domestic consumption. Research from Nigeria shows that at the individual household level, poor producer families are less inclined to consume poultry products and more likely to sell them, especially when the household is in need of cash.

Surprisingly, results showed that there was no

| Livestock | Women own livestock species | Women do not own livestock species | t-value |
|----------------|-----------------------------|------------------------------------|-----------|
| Cattle | 9.2 | 8.3 | -3.602* |
| Goats | 8.9 | 8.4 | -1.639*** |
| Exotic chicken | 9.7 | 8.4 | -1.677*** |
| Local chicken | 9.7 | 8.4 | -1.621 |

*1%, **5%, ***10% significance level

Table 1. Months of adequate household provisioning in households where women owned or did not own different livestock species



Sherifaf Sheriff is a commercial chicken farmer in Nigeria

significant difference in the number of months when households had insufficient food between households that did and did not own livestock. It would seem that while households with livestock would sell livestock to supplement their diets, livestock sales were not used for bulk food purchases that would reduce the number of months households did not have enough food.

Ownership of livestock by women and food security

Ownership of livestock by women increases the probability that women will make decisions on allocation of livestock, livestock products or income derived from these on household consumption, increasing the likelihood that households consume these products.

The results show that if women own livestock, the number of months that households have adequate food increases (Table 1). However, the extent to which livestock contribute to food security is dependent on intra-household dynamics. In this context, women’s often limited control over productive assets and income management remains a potential risk to their ability to boost household food security. A growing body of evidence suggests that increasing women’s control over assets, including

livestock, has positive effects on food security, child nutrition, and education, as well as women’s well-being.

Results indicate that the frequency of meat consumption in households where women owned livestock was considerably

| | Livestock | Number of times eaten per week in households where women own species | Number of times eaten per week in households where women do not own species | t-value |
|--|----------------|--|---|---------|
| Consumption of meat | Cattle | 2.7 | 1.9 | 2.268** |
| | Goats | 3 | 2.2 | 1.928 |
| | Exotic chicken | 4 | 3.2 | 2.552* |
| | Local chicken | 2.4 | 2.1 | 0.802 |
| Consumption of eggs | Exotic chicken | 2.4 | 2.5 | 0.835 |
| | Local chicken | 1.9 | 1.8 | 0.46 |
| Consumption of milk | Cattle | 3.9 | 6.5 | 2.281** |
| | Goats | 4 | 4 | 1.1 |
| ***1%, **5%, *10% significance level | | | | |
| Table 2. Consumption of animal source foods in households where women own and do not own different livestock species | | | | |

higher than in households where women did not own livestock. There were significant differences in meat consumption between households where exotic chickens and cattle were owned by women rather than men. However, the frequency of milk consumption was significantly lower in households where men owned them. This may be a general reflection of women's lower decision-making on large livestock (Table 2).

men's spending on the household reduces as women earn and manage more income.

For example, a study in Nigeria found increases in women's income share slightly reduced per capita calorie intake. These findings suggest that interventions intended to improve household nutrition outcomes can face limited success if women and men are not addressed jointly as beneficiaries.

Income and food security

Commercialisation of the livestock sector can create a pathway out of poverty for smallholder women livestock keepers. However, women's financial status can also serve to subjugate them further, especially if

Recommendations:

1. Various factors influence the consumption of ASF by households. A further analysis of these and the role that women's ownership of assets (including livestock) and decision-making plays is crucial to understanding potential interventions.
2. In seeking ways to improve household food security in Africa, it is important to intervene in ways that benefit women, such as improving their ownership of assets and enhancing their decision-making abilities, while being careful not to increase women's burden of production and household food provisioning.
3. Engagement of men in programmes aimed at empowering women and increasing their access and decision-making is important if these programmes are to have impacts on household welfare.



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A mother, in Nigeria, feeding her child

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