Livestock and Livelihoods in Tanzania: Can the Sector Deliver on Growth and Poverty Reduction?

The Tanzania National Panel Survey (NPS) is a unique, and as yet largely underutilized, source of knowledge and information on rural Tanzania’s economy and living standards. It is a nationally representative survey regularly conducted by the National Bureau of Statistics (NBS). Consequently it is much richer in data on the rural economy than previous living standard surveys carried out in Tanzania in the past, thus allowing painting a much more refined picture compared to what has been possible to date. Its first round, on which this note is based, was carried out in 2008-09. Since then, the survey has been implemented every two years (2010-11 and 2012-13, ongoing).

Livestock ownership is widespread

Results show that sixty percent of rural households in Tanzania engage in livestock keeping, earning an average of over 20 percent of their income from livestock, while also benefiting from other livestock uses (e.g., traction, manure), which are not captured in that figure.

In aggregate, large ruminants dominate, accounting for over 80 percent of total livestock holdings when measured in Tropical Livestock Units (TLUs). Cattle ownership is, however, less common and more clearly linked to wealth than ownership of smaller livestock. Conversely, poor goat herders have flocks of similar size, or larger, to those of rich ones. Meanwhile, poultry ownership is very common place.

From a household livelihood perspective, the importance of poultry emerges clearly alongside that of cattle: the average livestock keeping household holds 44 percent of the total poultry birds in the country. In particular, the poorest 40 percent of rural households rely essentially on small numbers of poultry, with goats becoming more important among the somewhat better-off households, and cattle dominating among the richest 20 percent of rural households.

A core of livestock specialized households own most of farm animals

One issue emerging from the analysis is the high degree of concentration in livestock holdings, with the top 20 percent of livestock keepers holding over 80 percent of livestock assets (as measured by animal numbers in TLU).

Interestingly, as an alternative measure of wealth, levels of per capita expenditures do not change significantly across quintiles of livestock ownership, whereas herd size and structure does, with a particularly steep gradient in the top quintile, suggesting that there is a small core of relatively larger livestock owners who are substantially different from the rest. This is confirmed by the fact that households in the top quintile earn about a third of their income from...
livestock, as opposed to 10-14 percent of income in the other quintiles.

Livestock and gender

Results show that women are relatively disadvantaged in terms of livestock ownership, particularly for cattle: this effect is strongest among poorer households. Where women do own livestock, they appear to be as market oriented as are men, if not more so, due to their role in the marketing of milk and milk products. However, the sale of live animals is much more frequently handled by men.

It should be noted that the gender disaggregation of livestock data in the NPS is rather simplistic and hence these findings should be interpreted with some caution. More recent rounds of NPS data have been designed with greater attention to these aspects, and will therefore provide an opportunity for further analysis as their results become available.

Consumption of animal source foods

The NPS data allow going beyond livestock production to look into patterns of consumption of products of animal origin. The picture that emerges is one of substantial disparities in livestock product consumption between rural and urban areas and between different income groups. Overall, one can argue that that as average incomes in Tanzania continue to increase, the demand for livestock products on the domestic market will expand, offering good opportunities for livestock producers to increase incomes.

Seizing the sector’s growth opportunities for poverty reduction

Removing the constraints to increasing productivity and market participation for dynamic livestock producers, including some of the poor, should allow them to tap into growing market opportunities and realize the full income generating potential from their livestock resources.

The anti-poverty payoffs are amplified via the interaction between livestock keeping and crop production through the provision of manure and draught power. Indeed, these inputs do appear to be used more frequently by mixed crop-livestock producers, than by pure crop producers at comparable income levels. While this additional benefit of livestock keeping is not included in the figures of income shares reported above, it should enter the equation when calculating the full range of benefits of livestock production for rural households.

Female-headed households, while somewhat disadvantaged in terms of access to livestock assets, appear to be in a relatively good position to benefit from such opportunities.

While the prospects for the livestock sector are promising, there are a number of factors that may constrain households’ ability to take advantage of the opportunities offered by a possible growth in the demand for animal food. In particular, the low level of input use and veterinary services, and the high prevalence of reported animal diseases could place restrictions on the extent to which livestock is productive. Further analysis is required to identify the extent to which these constraints may become binding, and to single out possible actions to remedy the situation.

The NPS data offer a rich basis, particularly if integrated with additional data sources, upon which to further this descriptive analysis. Future analysis of the NPS data and, even more so, the analysis of longitudinal data as future rounds become available, provide an unprecedented opportunity for the national and international community to further our understanding of the nexus between livestock and livelihoods in rural Tanzania.

This brief is based on K. Covarrubias, L. Nsiima, and A. Zezza, 2012, Livestock farming and livelihoods in rural Tanzania. A descriptive analysis of the 2009 National Panel Survey. This report provides an initial, descriptive exploration of the NPS dataset, with a specific focus on the livestock sector, and is available for download at www.africalivestockdata.org