is an advantage in a semi-commercialized economy, such as Uganda’s livestock sector, in which livestock owners consume a significant portion of what their herds produce. Home production for home consumption (or for informal local exchange and consumption) is frequently unrecorded in official marketing statistics. By using estimates on total product output, production-based GDP estimates do not rely on incomplete marketing data and should, in principle, include subsistence production.

Official national accounts estimates are produced by the Uganda Bureau of Statistics (UBOS). UBOS’s estimation techniques do not at present correspond to ISADG’s production approach. Since changes to their methodology in 2007, UBOS does not estimate the volume of output for different livestock products, does not collect farm gate prices on the sale of livestock products, and does not collect information on the intermediate costs specific to different livestock enterprises (such as cattle, sheep and goat raising). UBOS methodology was, however, closer to that of ISADG prior to 2007, and is likely in the next couple of years to evolve to again resemble the production approach employed in this study.

Unlike Ethiopia and Kenya, and to a lesser extent Sudan, there is in Uganda no substantial, independent body of scientific or or research that can be used to cross-check official data on livestock production. It is therefore fortunate that government data is both up-to-date and reasonably comprehensive. Of the ISADG countries thus far reviewed in this series (Ethiopia, Kenya, Sudan and Uganda), only Uganda has recently undertaken a national livestock census that includes pastoral livestock. Of the countries reviewed here, only Uganda will in future be attempting to base its annual livestock GDP estimates on data from regular national head surveys that include pastoral areas of the country. The twice yearly Uganda National Pasture Survey (UNPS) undertaken by UBOS.

The contribution of livestock to GDP

Using 2008 as a basis for comparison, this study re-estimated the contribution of livestock to agricultural GDP. Both the original official and re-estimated figures are based in large measure on official data, but the two calculation produce substantially different results. The re-estimated livestock value added in 2009: 1,089.4 billion Uganda Shillings (US$) (or about $526 million US dollars at 2009 exchange rates) – is nearly double the official estimate of $73 billion US dollars (roughly $292 million US dollars), an increase of 88.6% over official estimates for that year.

Table 1 summarizes the unpublished calculations that lie behind the official 2005 estimate of the livestock contribution to agricultural GDP.

According to previous official estimates, livestock contributed 1% to total national GDP in 2009; our revised estimates would now place this contribution at about 3.2% of the national total.

The value of livestock services

Table 2 summarizes our estimates of livestock services. Table 3 summarizes our estimates of the direct economic benefits obtained from livestock products (as a proportion of agricultural GDP) and from livestock services (normally net part of GDP estimate). In 2005 just under half – about 47% of the direct benefits derived by livestock owners from their animals were attributable to the financially related livelihood services provided by livestock. According to conventional national accounting procedures, these financial services may support the livelihoods of farming or pastoral households and thereby enhance agricultural output, but the increases in economic productivity that arise from these services are not recognised as part of the contribution by livestock to the economy, including financial benefits, total direct use benefits derived from livestock were 2007.39 billion US$ at about $809,000,000 US dollars in 2009. This figure may have been higher if we had been able to estimate the economic value of livestock poaching and transport services, but there was insufficient evidence to quantify the importance of these aspects of livestock production.

In 2006-08 the average monthly expenditure for a household in Uganda was US$ 297.70 (177.500 US$ in rural and 381.350 in urban areas; food, drink and tobacco were the largest category of household expenditure, accounting on average for 45% of all expenditures (53% in rural and 52% in urban areas). Livestock food products (meat, milk, dairy products and eggs) constituted about 43% of household expenditure on food and beverages. 72% of these expenditures were in cash.

The production of meat and milk for domestic consumption is low in Uganda, averaging less than 11 kg of meat and about 23 litres of milk per capita per year for all Ugandans (Table 5).

Table 5: Meat and milk for domestic consumption, 2009

| Commodity        | 2006 | 2007 | 2008 | 2009
|------------------|------|------|------|------
| Cattle (head)    | 7.3% | 7.3% | 7.3% | 7.3%
| Sheep (head)     | 3.1% | 3.1% | 3.1% | 3.1%
| Goat (head)      | 5.7% | 5.7% | 5.7% | 5.7%
| Total (head)     | 16.1%| 16.1%| 16.1%| 16.1%

According to previous official estimates, livestock contributed 1% to total national GDP in 2009; our revised estimates would now place this contribution at about 3.2% of the national total. Livestock services and domestic consumption of livestock products. The financial component of livestock output is high in Uganda because formal sector financial services are usually expensive or not available in rural areas. When the coverage provided by formal financial institutions increases and these services become more available, livestock production diminishes in importance relative to the value of more tangible goods and services – milk, meat, manure, animal traction etc. – as has happened in Kenya (ISADG LPI Working Paper O-3). In sum, increasing non-formal forms of livestock production, which are recognized in GDP accounting, is, to some extent, on the provision of affordable credit and insurance for livestock owners, which permits animal owners to focus their production objectives on conventional types of livestock output. Until this happens, the apparent low output of Ugandan livestock will reflect, in part, the diverse and unaccounted array of services that these animals currently provide for their owners.

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