



Livestock Data Innovation in Africa **BRIEF**

Joint brief of the World Bank, FAO, ILRI, AU-IBAR with support from the Gates Foundation

Issue 3 • December 2010

Routine livestock data in sub-Saharan Africa: collection and use

Agricultural and Livestock Ministries in sub-Saharan Africa, Regional Economic Communities and pan-African Institutions, such as the Inter-African Bureau for Animal Resources (AU-IBAR), all need data and statistics on the status and trends in the livestock sector, as well as of the economy in general. These serve the purpose of formulating, realizing, monitoring and evaluating their livestock sector interventions. Private investors, NGOs, as well as international organizations and donors, also need information on livestock to plan and implement their actions at various levels.

Livestock-related data are collected by a multiplicity of actors, with different methods and for different purposes:

- In 2009, the Ministry of Agriculture and Livestock of Niger administered a Livestock Market Survey. The survey, by asking questions to buyers and sellers in 80 of the 635 livestock markets in the country, collected quantity and price data on market transactions, with the objective to generate information for formulating food security policies (www.ins.ne).
- In 2008, the Tanzania National Bureau of Statistics carried out the first round of the National Panel Survey. It consists of three questionnaires - household, agriculture (livestock) and community - administered to a representative sample of 3,280 households, with the aim to 'provide high-quality household-level data to the Tanzanian government and other stakeholders for monitoring poverty dynamics' (www.nbs.go.tz).
- In 2008, the Uganda Bureau of Statistics and the Ministry of Agriculture, Animal Industry and Fisheries jointly carried out the

Livestock Census across the country. It involved interviewing approximately 950,000 households with the prime objective to 'establish livestock and poultry numbers at national and district level' (www.ubos.org).

Routine livestock data

Most of the livestock data publicly available in sub-Saharan African countries are collected by National Offices of Statistics. These data are used to depict the status and monitor trends of livestock, as well as to appreciate the linkages between livestock, agriculture, economic growth and poverty. They represent the backbone of national (and regional) development plans, which guide macro-economic, sector and social policies and programmes.

Ministries responsible for livestock in sub-Saharan Africa also collect and produce a large amount of data and statistics, so called routine or administrative data. Government officers at the lowest administrative unit are instructed to collect livestock-related data on a regular basis - such as monthly or quarterly. They report to the central local administrative unit, which processes the data and reports to the higher level in the administration, and so forth. At the end, the Agriculture and/or Livestock Ministry gets access to key livestock data and statistics on a regular basis, typically every month.



There are deficiencies and strengths in routine livestock data. They are allegedly incomplete and inaccurate because of limited financial and human resources as well as lack of incentives and training for data collectors; systems of data collection differ in different administrative units, which makes aggregation difficult; data are inherently biased as they focus only on a sub-sample of the population (e.g. the livestock keepers); concepts and definitions used are often unsuitable for statistical purposes and rarely conform to international standards.

However, costs of collecting routine data are relatively low, being part of other administrative processes; records in registers form the sampling frame for other livestock surveys and can be used to cross-check results obtained by other enquiries; statistics can be prepared relatively quickly; the collected data cover the entire reference population and convey information on a regular (usually monthly) basis.

The use of routine livestock data

Routine livestock data provide critical information for the government to effectively design, implement and monitor policies and programmes.

- In 2010 the Ministry of Agriculture and Livestock of Niger assessed the availability of feed resources in pastoral areas for the period 2009-2010. The assessment was based on an *ad hoc* survey as well as on the routine data produced both by the Ministry of Agriculture and Livestock and by the Ministry of Agricultural Development.
- In 2009 the Ministry of Livestock and Fisheries Development of Tanzania released a report on 'Livestock and Dairy Industry Development', which makes the case for increased investments in the sector. But for livestock numbers, all data presented in the Report, such as on the status of milk processing plants and on the daily capacity of major abattoirs in the country, were based on administrative records data.
- The 2006 National Integrated Monitoring and Evaluation Framework of Uganda identifies a number of indicators to monitor the implementation of the National Development Plan. District Authorities and the Ministry of Agriculture, Animal Industry and Fisheries are expected to quarterly monitor changes in crop and livestock production, making use of their administrative records.

Routine livestock data are also used to populate regional, pan-African and international livestock-related information systems and/or databases. These include the Livestock Information Management System (LIMS) of the Southern Africa Development Community (SADC), the Animal Resources Information System (ARIS) of the Inter-African Bureau for Animal Resources of the African Union (AU-IBAR), CountrySTAT and FAOSTAT of the Food and Agriculture Organization (FAO), and the World Animal Health Information System (WAHIS) of the World Organization for Animal Health (OIE).

Improved livestock data

Routine livestock data collection systems are largely weak in sub-Saharan African countries. At the same time, the costs to design and administer nationally representative surveys, combined with shrinking budgets, demand improved methods to generate high-quality routine data and create synergies between the systems of routine data collection and censuses and surveys.

The Livestock Data Innovation Project, in collaboration with AU-IBAR, supports dialogue and collaboration between National Statistical Offices and the Ministries responsible for livestock sector development, to improve the quality, availability and consistency of both routine livestock data and household survey data. For instance, it has established a livestock data stakeholder group in Uganda; it has been contributing to administering and analyzing household survey data in Niger, Tanzania and Uganda; it has analyzed the systems of routine livestock data collection in Uganda and Tanzania. The ultimate aim is to identify ways to enhance the quantity and availability of data to sustain investments in the livestock sector, which contribute both to economic growth and poverty reduction.

For further information please visit:

www.africalivestock.data.org

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