Supply and demand of livestock data in sub-Saharan Africa

Evidence from a stakeholder survey

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Livestock data issues in sub-Saharan Africa

The livestock sector contributes between 20% and 50% to agricultural valued added in African countries, with a continental average of 26%. Livestock is expected to become the largest contributor to agriculture as economic development progresses because of growing demand for high-value food items, including meat and dairy products (in industrialized economies, the livestock sector accounts for about half of agricultural GDP). To give some figures, over the period 1990 to 2007 meat and milk consumption in Africa increased by 2.9% and 3.0% per year (+5,861 MT and +14,962 MT) respectively, and similar rates of growth are anticipated in the next decades for all meat and dairy products (FAOSTAT, 2011; OECD-FAO, 2009).

The current trends in the demand for animal food represent an unprecedented opportunity for achieving the Millennium Development Goals, as livestock are one of the most common assets amongst poor rural households in Africa. The most recent publicly available continental data, produced by ILRI in 2002 through overlaying population and poverty data on livestock production systems, indicate that over 53% of the population of sub-Saharan Africa keeps some livestock: i.e. one out of every two persons in the continent are partly dependent on livestock for their livelihood (ILRI, 2002).

Public and private sector investments are needed to assist small livestock producers in tapping into the growing market for animal-sourced foods but, as noted by the Africa Union's Inter African Bureau from Animal Resources (AU-IBAR), there is 'inadequate data to demonstrate quantitatively the role of animal resources in African economies, and to use such data to create broad awareness among policy-makers and investors' (AU-IBAR, 2010). At the second pan-African/AU Conference of the Ministries responsible for livestock sector development, held in Uganda in May 2010, the Ministries 'urge Member States to enhance capacity for timely collection, analysis and sharing of quality data to guide policy, strategy and investment programmes' (AU, 2010).

Improving the quantity and quality of livestock data requires first of all an appreciation of the current status of livestock data in Africa and, in particular, of gaps between the demand and supply of such data. Only users of livestock data know what information they need, and in what formats, to enable effective formulation of public and private sector investments in the livestock sector and associated industries such as the food industry and the livestock service sector.

A survey on livestock data issues and concerns

The 12th Annual Inter-Agency Livestock Donor (IADG) Meeting was held at AU-IBAR's headquarters in May 2011. Donors, NGOs, international organizations, universities, research institutions and some private companies and consultants participated in the meeting, for which the overall goal was to increase awareness of contemporary issues facing poor livestock farmers/pastoralists in Africa, highlight some major recent and foreseen research initiatives, agree on priority research issues, promote collaboration between donors and among research implementers and generally generate more support for livestock research and development in Africa.

One session of the meeting focused on 'Data management and information sharing', and presentations were given on issues related to data availability and information use (by IFAD and Media Trust), and on on-going efforts to improve the systems of livestock data collection, analysis and dissemination (by AU-IBAR and the Livestock Data Innovation Project (see Box 1)).

The Livestock Data Innovation Project took the opportunity to administer a survey on livestock data issues and concerns to the 60 or so participants in the 12th IADG meeting. The objective of the survey was to identify the concerns of users of livestock-related data / indicators, including what types of data they use and where the strengths and gaps in the available livestock data exist. Overall, whilst the availability and quality of livestock data / indicators in Africa is rated as 'very important' by 79% of respondents, more than 90% of them 'don't agree' that available livestock data are sufficient for their livestock-related activities.

Use of livestock data

Participants in the survey were asked to rank their four top uses of livestock data / indicators: project formulation and implementation is the most frequent use of livestock-related data (71% of respondents), followed by monitoring and evaluation (59%), and research & analysis and programme formulation and implementation (56% each).

Livestock stakeholders use primarily regional and national level data, as well as community and household level data. District level data are the least used, though they are critical to design projects, programmes and policies in the livestock sector. As one common example, unless information is available on the distribution of cattle across a country's districts, it is difficult to plan and implement a vaccination campaign.

Over 50% of the respondents use livestock data / indicators either on a daily or a weekly basis, while another 21% use them at least once a month. Overall, 84% of respondents use livestock data on a regular basis, and only 6% of them use it just occasionally.
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Box 1. The Livestock in Africa: Improving Data for Better Policies Project

The Livestock in Africa: Improving Data for Better Policies Project, or Livestock Data Innovation in Africa Project, is a three-year (2010-2012) initiative sponsored by the Bill & Melinda Gates Foundation and jointly implemented by the FAO, the International Livestock Research Institute (ILRI) and the World Bank, in partnership with AU-IBAR. In collaboration with national stakeholders in Niger, Uganda and Tanzania, the Project designs and experiments with methods of livestock data analysis and collection, its ultimate objective being to support the identification and collection of key livestock-related data and statistics, which guide investments in the livestock sector in sub-Saharan Africa that improve the wellbeing of the poor.

While the Livestock Data Innovation Project is piloting data-related activities in three sub-Saharan African countries, it will produce two major outputs of use for all sub-Saharan African countries:

- A ‘Sourcebook on Livestock Data in Africa’, which is a guide towards collecting and analysing livestock-related and poverty data with the objective of better understanding and responding to the key developmental questions facing livestock sectors.
- An advocacy document ‘Making the Case for Investing in Livestock in Africa’ which provides empirical evidence on the role of livestock in the lives and livelihoods of the poor and recommends strategies to enhance the contribution of livestock to poverty reduction and economic growth. For more information, visit www.africallivestockdata.org

Sources of livestock data

Ad hoc reports, papers and articles as well as international databases, such as FAOSTAT or the World Animal Health Information System of World Organization for Animal Health (OIE), are the major sources of livestock data / indicators, being used by 89% and 85% of respondents.

Data provided by countries’ Ministry of Agriculture and/or Livestock and by their National Statistical Office, are also widely used, by 67% and 53% of the respondents respectively. However, only 18% and 6% of the respondents indicate the Ministry of Agriculture and/or Livestock and the Statistical Office as their primary source of data. This highlights issues in livestock data communication and dissemination at national level, as international databases — which are the first source of data for the majority of respondents — are populated with data collected by national authorities.

Gaps between demand and supply of livestock data

Survey responses indicate a consistent gap between the use of / demand for livestock data and their supply or availability.

Production and productivity data are most in demand (rated as most useful to their work by over 68% and 59% of respondents respectively), followed by livestock inventories and input data (both >40%). Between 20% and 35% of stakeholders use animal disease, marketing, consumption, price, natural resource related and trade data the most, while only 12% state that breed data are ‘most useful’ to their work (fig. 1).

However, the ‘most useful’ data / indicators for stakeholders are amongst those not always available and, when available, rarely they are of good quality. This highlights a major gap between the demand and supply of livestock-related data that was widely discussed at the meeting and is commonly heard beyond its confines. Indeed, graph 2 shows the proportion of stakeholders that consider relevant livestock data / indicator as: (1) not available or of poor quality (lightest segment of the bars); (2) available but of low quality; (3) available and good (darkest segments).

Marketing, input, natural resource-related and consumption data / indicators are considered by most data users (>70%) as unavailable or, when available, to be of low quality. Conversely, trade and disease data are those most frequently available and with less quality problems.

Overall, livestock data / indicators are considered as ‘not available / poor’ by over 54% of respondents, and ‘available but of low quality’ by another 33%. Only 13% of respondents consider that, on average, good data / indicators are available.

Lessons learnt and the way forward

The results of the livestock data survey conducted by the Livestock Data Innovation Project are not necessarily representative of all stakeholders’ data concerns, as they are based on a small and non-random sample. However, they support the idea that, whilst livestock data / indicators are essential for the largest majority of stakeholders, rarely are the available data / indicators sufficient for the purposes of investment, development and research.

The Livestock Data Innovation Project, in partnership with AU-IBAR, has been facilitating cooperation and collaboration between major livestock data users and suppliers — in
IV. Statistical Development - Selected Areas - Développement de la statistique - Sujets choisis

Fig. 1. Types of livestock data / indicators ranked as 'most useful' by livestock data users

Fig. 2. Availability and quality of livestock data / indicators as ranked by livestock data users
Niger, Tanzania and Uganda — to contribute to enhancing the quantity / quality of livestock data / indicators available for public and private sector decision-making, consistently with the goals and objectives of the Global Strategy to Improve Agricultural and Rural Statistics, endorsed by the UN Statistical Commission in February 2010.

References


Developing young statisticians in Rwanda
Muhammed Semakula, SBCR Ltd

The regional technical advisor of the UNFPA East and South African countries Dr. Mady Biaye this month spared a moment on May 07, 2011 and visited young statisticians in Rwanda. On his visit to a research company; Statistical Based Consultancy and Research (SBCR Ltd) started and run by a group of young statisticians in the country, Mr. Biaye who had visited on a friendly schedule discussed with the young statisticians and gave a professional counsel which members of this company believe will help them in shaping their career and future performance of this company. SBCR Ltd was basically initiated by statistician graduates from the National University of Rwanda with an aim to keep track of their field of study (statistics) and develop an evidence-based culture of decision making in the country. After only a few months of operation, the company has managed to conduct remarkable researches and participate in several regional and international conferences. This is quite a great achievement given the infancy of the field in the country.