

## **Technical Conversion Factors for Agricultural Statistics: Sank into Oblivion? The Case of Tanzania Livestock Statistics**

Longin Nsiima\*

Ministry of Livestock and Fisheries Development, Dar Es Salaam, Tanzania, [nsiimalongin@yahoo.co.uk](mailto:nsiimalongin@yahoo.co.uk)

Ugo Pica-Ciamarra

Food and Agriculture of the United Nations (FAO), Rome, Italy - [ugo.picaciamarra@fao.org](mailto:ugo.picaciamarra@fao.org)

Derek Baker

International Livestock Research Institute (ILRI), Nairobi, Kenya – [d.baker@cgiar.org](mailto:d.baker@cgiar.org)

Gabriel Simbila

National Bureau of Statistics (NBS), Dar Es Salaam, Tanzania – [sku.lomba@hotmail.com](mailto:sku.lomba@hotmail.com)

There are three major sources of data for agricultural statistics in the developing world: censuses, sample surveys and administrative data. In censuses and sample surveys, agricultural data are regularly collected through interviews; in the case of administrative data, agricultural data are collected through records of day to day operations. However, for many variables good quality agricultural statistics can only be generated when reliable and updated technical conversion factors or technical coefficients are available, which convert a calculated statistics to a different unit of measure. Examples are extraction rates, which convert agricultural primary products in processed products (e.g. flour from wheat), and dressed carcass weight, which convert the weight of a slaughtered animal into edible meat. Technical conversion factors can rarely be calculated with statistical precision using agricultural census / survey data and administrative records – particularly in developing countries where self-consumption is common and the informal economy large – and some direct measurement is needed. However, investments to improve agricultural data and statistics have been primarily focusing on improving the quality of data from surveys and administrative records – such as with the utilization of Computer Assisted Personal Interviewing (CAPI) or Global Positioning System (GPS) equipment – with little attention given to technical conversion factors. This paper makes the case for investing resources for regularly updating agricultural technical conversion factors, taking Tanzania livestock as a case in point. It analyses the major livestock technical conversion factors used by the Tanzanian Government and shows that estimates of livestock value added in the National Accounts over the period 2001-2011 are based on constant technical coefficients, i.e. that increases in livestock productivity – also a result of public sector investments – are not reflected in official country statistics. It then presents some methodologies implemented by the Ministry of Livestock and Development to update key livestock technical conversion factors, which will lead to improved GDP estimation. It recommends that resources be allocated to regularly update livestock technical conversion factors.

**Key Words:** technical conversion factors, GDP, livestock, Tanzania