Developing an Agricultural Statistics Strategy for South Africa

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Abstract

South Africa, and indeed many other countries, has in the past years been in the process of developing her agricultural statistics strategy. The agricultural statistics strategy was developed to guide to all matters related to the collection, processing, analysis and dissemination of agricultural statistics. A country's agricultural statistics are aimed at addressing planning, policy, evaluation and developmental issues related to the agricultural sector and the country at large. The first motive for a country to develop an agricultural strategy is, naturally, to address these national issues. South Africa is no exception in this regard. However, there were other factors, which catalysed the development of the strategy. Firstly, to align the country's agricultural statistics processes to the Global Strategy for the improvement of agricultural and rural statistics as specified by the Food and Agriculture Organisation (FAO) and its partners. This process involved the development of a National Agricultural Statistical Subsystem and the integration of agriculture and rural statistics into the country's National Statistical System. Secondly, in order to reduce duplication and therefore wastage of resources within the public and private sector, it was important to conduct an audit of all agricultural statistics producers in the country. Thirdly, traditionally, agricultural statistics in the country largely excluded small scale and subsistence (smallholder) agriculture. The strategy had to address the exclusion. And lastly, a strategy had to be developed to address capacity development and data quality (also quantity) challenges connected to agricultural statistics in the country.

This paper is a review of the strategy development process in South Africa and provides insight into the more fine-tuned process behind the design of the agricultural statistics strategy in a diverse and large country like South Africa. It provides the major steps undertaken from the initial study, formation of the National Agricultural Statistics Subsystem (NASS) through to the incorporation of the NASS into the South African National Statistical System (SANSS). The paper is also a reflection of subsequent developments after first paper on the topic was submitted to the 5th International Conference on Agricultural Statistics held in October 2010 in Kampala, Uganda.

Key words: Agriculture, Statistics, Strategy development**.**

Introduction

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South Africa is the southernmost country on the African continent with a population of 51,8 million[2]. A large portion of the country lies in the water scarce ecosystem of southern Africa to which the Kalahari Desert forms part. It is estimated that the country's R132 billion[3] (USD 14,5 billion) commercial primary agricultural sector contributes less than 4% to the nation's Gross Domestic Product.

Structurally, the agricultural sector is constituted of the commercial, small scale and subsistence farming units. In reality, the commercial subsector dominates all resources in the sector with privileged access to land, finance, mechanization, labour and national and export markets. The country's agricultural statistics[4] are largely biased towards the commercial subsector, with the small scale and subsistence farming remaining statistically mysterious.

Until recently, there was no dedicated agricultural statistics collection, processing, analysis and dissemination strategy and as mentioned earlier the other two subsectors of agriculture were largely excluded from mainstream agricultural statistics. The agricultural statistics strategy had to be developed to address the shortcomings and replace the proceeding program. Most importantly, the strategy is designed to provide vital agricultural sectorial information to tackle the developing challenges of the country.

The agricultural statistics strategy was necessary for the following specific reasons:

Firstly, to align the country's agricultural statistics processes to the Global Strategy for the improvement of agricultural and rural statistics as specified by the Food and Agriculture Organisation (FAO) and its partners. This involved the development of a National Agricultural Statistical Subsystem and the integration of agriculture and rural statistics into the country's National Statistical System. Secondly, in order to reduce duplication and therefore wastage of resources within the public and private sector it was important to conduct an audit of all agricultural statistics producers in the country. Thirdly, traditionally, agricultural statistics in the country largely excluded small scale and subsistence (smallholder) agriculture. The strategy had to address the exclusion. And lastly, a strategy had to be developed to address capacity development and data quality (also quantity) issues connected to agricultural statistics in the country.

The strategy is to be reviewed every five (5) to accommodate new national and global developments regarding the agricultural and rural sectors.

The strategy development process

It was evident from the onset that the strategy development process was destined to be a long consultative process and that a study had to be conducted to establish the state of affairs of agricultural statistics in the country.

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[2] Population Census 2011
[3] Survey of Commercial Agriculture 2011
[4] South Africa's first agricultural census was conducted at the beginning of the 20th century

The research

The study conducted by Statistics South Africa (Stats SA) among generators and users of agricultural statistics in the country commenced in 2009. The research showed that considerable ground had been covered towards the improvement of agricultural statistics in the country over the years. For example, there was considerable progress towards meeting the three (3) dimensions of agricultural statistics demand[5]. Also, there was public confidence in the statistics generated in the sector. And lastly, there was a variety of data generators in the sector.

The study, however, revealed that smallholder and subsistence agriculture were largely absent from mainstream agricultural statistics and that there were data quality (depth and breadth) gaps, including but not restricted to lack of small area statistics. Other short comings revealed by the study included: Lack of a master sampling frame, shortage of capacity in government departments and the sector at large to generate agricultural statistics and uncoordinated effort in the generation of agricultural statistics, sometimes leading to the production of conflicting data in the sector.

The resultant research report was presented and discussed during the initial consultations with stakeholders.

Linking agricultural and rural statistics with the population census

By linking agricultural and rural statistics to the population census, the width and breadth and versatility of agricultural and rural statistics are enhanced by the ability to link the responses to the agriculture related questions to any variable(s) of interest in the population census. The process of linking agricultural and rural statistics to the population census in this strategy started with the inclusion of three (3) farming questions related to agriculture in the Population Census Questionnaire (2011).

Respondents (households) were asked the following questions: What kind of agricultural activity is the household involved in? How many animals (by category) does the household own? And where does the household operate its agricultural activities?

For the first time, in history, each agricultural household's access to electricity, running water and other municipal amenities, to mention but a few, can now be linked. The information, which is currently being processed, is illuminating a picture of the sector that most were not aware of.

Development of a full agricultural census frame (Master sampling frame)

The purpose of including the above questions was to identify all household engaged in agriculture and ultimately develop a household based sampling frame for the country. The household based frame is to be merged with the already

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[5] Namely; the economic, social and environmental dimensions of agricultural statistics demand.

existing tax based frame (for commercial agriculture) to develop a comprehensive agricultural frame for South Africa. The resultant frame will form the basis for all agricultural censuses and surveys in the country. Information from subsequent population censuses will be used to update and maintain this frame.

Development of a National Agricultural Statistics Subsystem (NASS)

After consultations with the key role players in the generation and use of agricultural statistics, it was proposed that a National Agricultural Statistics Steering Committee (NASSC) be formed. The NASSC is tasked with the driving of the agricultural strategy statistics in the country. The NASSC is entrusted with the coordination of generators and user needs, research and advisory functions of the country's agricultural statistics. The NASSC's membership is constituted of three (3) government departments, and university representatives:

It is envisaged that three (3) working groups will be setup and chaired by three (3) persons from the NASSC. The three working groups (one for farming, forestry and fisheries), consisting of experts in each field, will conduct research and provide advice on the provision of statistics for each subsector.

The establishment of the NASS is a key to the operation of this strategy. The NASSC, generators and users of agricultural statistics constitute the NASS.

Sustainability and governance of NASS

Each member of the NASSC (and therefore NASS) was assigned a specific role(s), detail of which is beyond the scope of this paper. For example, Stats SA, as the mandated institution to produce and certify official statistics, is to play a coordination role in ensuring the sustainability and proper governance in agricultural statistics generation in the country.

Integration of NASS into the SANSS

The NASS will form one of the subsystem building blocks of the South African National Statistics System (SANSS).

Under SANSS all participants in any statistical subsystems will be expected to conform to the following:

- *Certification and quality assurance of statistics*

All statistics generated in any subsystem under the SANSS will be subjected and evaluated to the stipulations in the SASQAF before they are granted the official statistics status - agricultural statistics and the NASS are no exception.

- *Standards*

Standards are set to promote consistency in the methods and results of surveys and censuses. This involves the development of nationally and internationally agreed classifications, concepts and definitions.

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- *Coordination*

All generation of agricultural statistics, and indeed other statistics, in the country will be governed by the Statistics Act[6]. Legal agreements in form of Memoranda of understanding or Service level agreements will be utilized to enforce compliance.

Shortcomings addressed by the strategy

Exclusion of small scale and subsistence farmers

This is perhaps the most critical area to be addressed by the strategy. Information on small scale and subsistence agriculture is crucial for the development of rural areas. The inclusion of the three questions, related to agriculture, in the population census mentioned earlier was the first step in identifying these farming households. A follow up large sample survey/census for small scale and subsistence agriculture is intended to establish baseline information on these subsectors.

Statistical capacity shortage

Capacity building is required in the specific areas of conducting surveys and data analyses (both on the production and user side). In addition, a proper audit of the skills available, both within and outside government, will have to be conducted to ascertain the extent of this challenge.

Data quality

The SASQAF, in addition to the capacity development programmes, mentioned earlier, are some of the measures to address data quality challenges identified in the study. Stats SA is tasked with overseeing this aspect of the strategy.

Lack of small area statistics

The demand for small area statistics, at municipality level in South Africa's case, has been steadily increasing over the past years. The National Development Plan (NDP) of South Africa identifies agriculture as one of the sectors to drive rural economic development and the improvement of livelihoods in the country. District municipalities need information on the type and level of agricultural activities in their locality in order to implement the NDP. Available statistics cannot meet this demand.

Provision of small area statistics is now a reality after the linkage between agricultural and rural statistics with the population census discussed in the preceding section of this paper. Also, as stated earlier, it is now possible to link detailed information about agricultural households such as physical location and variables like the size, population group, gender and age for a particular locality.

Uncoordinated data generation effort

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[6] Statistics Act, 1999

Coordination in data generation leads to improved efficiency in the utilization of resources. The NASS was developed to address the challenge of uncoordinated data generation. If, as planned, all agricultural data producers subscribe to NASS, this challenge will be minimized.

Implementation of the Agricultural statistics strategy

The current agreement between major stakeholders is that the current regime of data generation will remain in place until the strategy is implemented. The provisional implementation schedule falls within the 2013/14 to 2017/18 period.

Challenges encountered during the strategy development process

A number of challenges were encountered during the strategy development process, but the one most worth mentioning was obtaining commitment and consensus from a very diverse sector, that South African agriculture is. The country's sociopolitical history meant that a variety of considerations had to be made to involve the subsectors engaged in by the majority of previously disadvantaged population groups, while keeping those that are relevant to the advantaged population groups.

Conclusion

The new strategy will evolve with national and global changes as agricultural and rural statistics evolve over the next decades. For this reason, the strategy was designed to be reviewed every five years.

The strategy, when implemented, will address a number of shortcomings that have plagued agricultural statistics in South Africa for decades.

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