

SOUTH AFRICA – CENSUS OF COMMERCIAL AGRICULTURE 2017 – METADATA REVIEW

1. Historical outline

South Africa conducted the first Agricultural Survey covering both Large Scale and Small Scale and Emerging Farms sectors in 2000. Agricultural surveys were undertaken in the past by the Central Statistical Service in 1994, 1995 and 1996 but covering the commercial farms sector only. South Africa conducted Censuses of Commercial Agriculture (CoCAs) in 2002 and 2007. The CoCA 2017 to which the metadata review and data presented here refer is the last CoCA conducted by the country.¹ Previous census were carried out in 1930, 1950, 1960 and 1970/1971.

2. Legal basis and organization

Legal framework

The Statistics Act (Act No. 6 of 1999) gives Statistics South Africa (Stats SA) the authority to collect statistics and the responsibility to ensure that the information remains confidential.

Institutional framework and international collaboration

Stats SA through the Statistician-General is responsible for official statistics in the country. Stats SA signed a Memorandum of understanding with the Department of Agriculture, Forestry and Fisheries (DAFF), according to which Stats SA conducted the CoCA 2017, and DAFF developed a farmers' register.

Census staff

The CoCA 2017 involved 60 census office staff, 480 enumerators, 79 supervisors and 75 publicity officers.

3. Reference date and period

Reference day: the day of the interview for inventory items such as legal status and management system of the holding;

- 28 February 2018, for data of enterprises' debts;
- 30 June 2018, for items on land use and the number of employees; and
- 30 September 2018, for inventory items such as the number of livestock.

Reference period: the financial year (ending on any date between 1 March 2017 and 28 February 2018²), for flow items, such as area planted, irrigated area, production, livestock disposed, income and expenditure related to farming activity and employment.

4. Enumeration period

The data collection was conducted from 15 October 2018 to 1 April 2019.

5. Scope of the census and definition of the statistical unit

The **census scope** covered enterprises registered for value added tax (VAT) and which were mainly engaged in the following activities:³ (i) growing of crops, market gardening and horticulture; (ii) farming of animals; (iii) combination of (i) and (ii) (mixed farming); (iv) agricultural and animal husbandry services, except veterinary activities; and (v) game propagation and related services.

The **statistical unit** was a farming unit registered for VAT, where a farming unit consists of one or more farms, holdings, or pieces of land, whether adjacent or not, operated as a single unit and situated within the same local municipality. In this report, the word farm means farming unit.

¹ The CoCa planned for 2012 was not funded and, as such, was not conducted.

² The questionnaires were completed for the financial year ended on any date between 1 March 2017 and 28 February 2018, according to the usual reporting schedule of the enterprise,

³ As classified according to the January 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth edition

Community-level data

There were no community-level data collected along with the census.

6. Census coverage

Geographic coverage

The entire country was covered in the CoCA 2017.

Cut-off threshold and other exclusions

The units growing crops or raising livestock for own consumption and/or not registered for VAT were excluded from the CoCa 2017.

7. Methodology

Methodological modality for conducting the census

The CoCA 2017 used the classical approach. No administrative data were used to source census data.

Relation to other censuses

No relationship with other censuses.

Frames

The frame was drawn from Stats SA's business register. The business register is mainly based on the VAT database of the South African Revenue Service (SARS). The farm was first contacted by phone and its economic activities were verified. Once it was verified that they were farmers, arrangements were made to send the questionnaire or identify their preferred method of completing it.

Complete or/and sample enumeration methods

The CoCA 2017 was conducted based on complete enumeration of farming units.

Sample design

No sampling was used.

Data collection methods

Initially, enterprises were contacted by phone to update their information on the frame such as specific agriculture activity and location. Enterprises were given an option of either self-enumeration or a visit by a Stats SA official. In the latter case, fieldworkers visited farms to conduct interviews using Computer-assisted Personal Interviewing (CAPI) on tablets. Self-enumeration was conducted through e-mail, post, drop-off and send back by mail or pick-up by enumerators.

Questionnaire(s) and items covered

A single questionnaire was used for census data collection. The census questionnaire covered 17 of the 23 essential items recommended for the WCA 2020.⁴

8. Use of technology

The census data collection was conducted using CAPI. Data analysis was done using the SAS. Census results were disseminated and are accessible online.

9. Data processing

CAPI on the tablet, was used to conduct the interview and capture the data. For paper questionnaires, the application for the CAPI method was used for data entry through desktop computers. Input data editing was conducted on the CAPI environment. The CAPI data was stored in SQL and then transferred to SAS where coding and output editing was conducted.

⁴ The following essential items were not covered by the CoCA: (i) 0104 Sex of agricultural holder; (ii) 0105 Age of agricultural holder; (iii) 0302 Area of land actually irrigated: fully controlled and partially controlled irrigation; (iv) 0801 Household size by sex and age groups; (v) 0901 Whether working on the holding is the main activity; and (vi) 0902 Working time on the holding.

10. Quality assurance

In the census, the supervisors also performed the role of quality assurers. The quality check was embedded in the CAPI system and reports were generated for supervisors and their managers to monitor quality. The Questionnaire Completeness Rules (QCR) were SAS programs used to verify the quality of supervisor checks, reject questionnaires with inconsistencies or missing values for key variables, and ensure completeness of key variables.

Every effort was made to minimise non-sampling errors by updating the frame, careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. The country did not conduct a Post-enumeration Survey (PES).

11. Data and metadata archiving

The census data were captured using CAPI and stored on the SQL server. The data were transferred to SAS environment for further processing. SAS servers were used to store the data. An anonymized microdata base of the CoCA 2017 is in the process of being created.

12. Data reconciliation

There was no reconciliation process of CoCA 2017 data.

13. Dissemination of census results and microdata

The results of the CoCA 2017 were disseminated online through a press release and census reports and tables through the website of Stats SA. The report with final results was published in March 2020. The census microdata is not accessible for external users.

14. Data sources

Statistics South Africa (Stats SA). 2020. Publication. In *Stats SA* [online]. Pretoria, South Africa. [Cited 07 July 2020]. http://www.statssa.gov.za/?page_id=1854&PPN=Report-11-02-01&SCH=7902

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