

---

## Australia – 2010-11 Agricultural Census - Explanatory Notes

### 1. Historical outline

Agricultural commodity data has been collected in Australia since the 1860s. The Australian Bureau of Statistics (ABS) has conducted an Agricultural Census for many years. Up until 1996-97, the Agricultural Census was conducted annually, at the end of March. From that time onwards (starting with the 2000-01 reference year), the Agricultural Census became 5 yearly, with data collected at the end of June. Subsequent Agricultural Censuses have been conducted for 2005-06 and 2010-11, with the next planned for 2015-16.

### 2. Legal basis and organization

The Agricultural Census is undertaken under the provision of the *Census and Statistics Act 1905*. The ABS is the agency responsible for the Agricultural Census and for the Census of Population and Housing.

The Agricultural Census is funded predominantly via appropriation (i.e. funding from the Australian Government), however some content is funded by users, such as government agencies or industry bodies.

### 3. Reference period/date

There were two reference periods for the 2010-11 Agricultural Census according to the type of data:

- 1) for crop production, land management practices and water use: 1 July 2010 to 30 June 2011;
- 2) for the number of livestock on the holding: as at 30 June 2011.

### 4. Enumeration period

The field phase for the 2010-11 Agricultural Census was from July 2011 to November 2011.

### 5. Definition of the statistical unit

The statistical unit for the 2010-11 Agricultural Census was a business undertaking agricultural activity drawn from the ABS Business Register (ABSBR), which is based on the Australian Business Register (ABR) which is administered and maintained by the Australian Business Registrar. Further information on the frame and scope used for the Census is provided below.

### 6. Geographical coverage

The 2010-11 Agricultural Census covered the whole of Australia, with information collected from agricultural businesses in all states and territories. Aggregate statistics were produced at national and state and territory levels.

Statistics were also produced for a wider range of smaller geographic regions (some of which are only produced for the Agricultural Census), including: Murray Darling Basin (MDB), Natural Resource Management (NRM) region, Statistical Division (SD), Statistical Local Area (SLA), Statistical Area 4 (SA4) and Statistical Area 2 (SA2).

### 7. Exclusions and cut-off thresholds

The 2010–11 Agricultural Census covered all businesses undertaking agricultural activity recorded on the ABS Business Register (ABSBR) above a minimum size cut-off of \$5,000 AUD. This measure of size was based primarily on the ABS' Estimated Value of Agricultural Operations (EVAO), which is a combined measure of both agricultural activity and area of holding (in some instances, it also incorporates information derived from the Business Activity Statement turnover sourced from the Australian Taxation Office).

### 8. Methodology

The 2010-11 Agricultural Census was designed as a complete enumeration of agricultural businesses listed on the ABS Business Register (ABSBR) that met the collection's scope requirements.

---

Selected (i.e. in-scope) businesses were placed in strata at the time of selection based on their predominant industry (activity), size and geographic location. This stratification was undertaken so that weights could be applied to reported data to compensate for any non-response. This weighted data was the basis of estimates generated from the 2010-11 Agricultural Census.

Agricultural businesses were contacted by ABS by the postal service (mail) which included a paper form that they could complete and return to ABS, as well as details that enabled an alternate mode of response to be provided (for the first time for an Agricultural Census) - via an electronic form. The majority of businesses responded by mail (88%).

The overall response rate achieved for the 2010-11 Agricultural Census was 88%. Intensive follow up of significant (important) units was undertaken to minimise the impact of non-response bias and to maximise the accuracy of small area estimates.

The main measure of accuracy of estimates from the 2010-11 Agricultural Census was indicated by calculation of relative standard errors (RSEs), which were assigned to each estimate produced.

### **Framework**

The 2010-11 Agricultural Census frame was drawn from the ABS Business Register (ABSBR). The ABSBR has been used since 2005-06 for ABS' agricultural collections, and is based on the Australian Business Register (ABR) which is maintained by the Australian Business Registrar. The ABSBR has a very high level of coverage of agricultural businesses in Australia as most businesses and organisations in Australia need to obtain an Australian Business Number (ABN) from the Australian Business Registrar for their business operations, and the ABR is updated regularly to reflect changes in business populations.

### **Questionnaire(s)**

The 2010-11 Agricultural Census collected information on:

- Identification and location of the agricultural holding
- Area of holding according to land use type, and Total area of holding
- Area and production of crops on the holding including:
  - pasture seed, hay and silage
  - major broadacre crops – including: major cereal crops (wheat, oats, barley, etc.), sugar cane, cotton, other crops (including various varieties of oilseeds, legumes and essential oil crops) and nurseries, cut flowers and cultivated turf
  - vegetables for seed and vegetables for sale for human consumption (approximately 16 varieties captured)
  - grapevines and orchard fruit and nuts intended for sale (approximately 40 varieties of fruit and nuts plus 'other' categories)
- Livestock – number present on holding at 30 June by type (dairy and meat cattle, sheep and lambs, pigs, poultry, beekeeping, other)
- Land management practices including: crop/stubble management practices, cultivation practices, ground cover management, and pasture management practices
- Irrigation and water use – including sources of water used for agricultural production, and the area watered and volume applied by crop type
- Additional data items were also included for the purposes of frame maintenance (such as questions on land vacations, leased land and sharefarming, and Australian Business Numbers).

These data items were chosen as they represent the key information required to inform the needs of key policy users as well as for the compilation of Australia's National Accounts; enable international comparisons for key commodities; and provide information to maintain the agricultural survey frame for inter-censal years. The items reflect the predominantly commercial (business-based) focus of farming in Australia (non-subsistence or household-based).

## **9. Data Entry, Edits, Imputation and Tabulation**

---

## **10. Data Dissemination and Use**

### **11. Census data quality**

### **12. Data source**

Final estimates from the 2010-11 Agricultural Census were published on the ABS website in the following publications. These publications also include methodological notes as well as a copy of the 2010-11 Agricultural Census form.

Agricultural Commodities, Australia, 2010-11 (ABS cat. no. 7121.0). Value of Agricultural Commodities Produced, 2010-11 (ABS cat. no. 7503.0). Water Use on Australian Farms, 2010-11 (ABS cat. no. 4618.0).

### **13. Contact**

GPO Box 66, Hobart TAS 7001.

Phone: +61 3 6222 5939

Email: [agriculture.statistics@abs.gov.au](mailto:agriculture.statistics@abs.gov.au)