Australian Bureau of Statistics

Latest release

Sugarcane, experimental regional estimates using new data sources and methods

Experimental statistics on sugarcane for 2019, highlighting the use of alternative data sources and methods for producing agriculture statistics

Reference period 2019-20

Released 17/06/2020

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Key statistics

- 30.04 million tonnes of sugarcane were harvested in 2019-20.
- Australia’s five largest sugarcane producing regions were in Queensland.
- These five regions were responsible for over half of Australia's harvest.

Sugarcane, experimental statistics

The Australian Bureau of Statistics (ABS) are working with agriculture experts to explore the use of new data sources and methods to produce official agriculture statistics.

Using this co-design approach may help to reduce reporting burden on farmers, improve the timeliness of statistics and produce more detailed regional data.

The experimental sugarcane production estimates contained in this publication have been produced using this exploratory co-design approach, harnessing existing industry and government data sources. Traditionally sugarcane statistics are produced by the ABS through the annual Rural Environment and Agricultural Commodities Survey (REACS).

The process used to produce these experimental estimates indicates that for sugarcane, use of non-survey data sources can improve the regional detail and timeliness of sugarcane production statistics.

Key statistics from the experimental estimates

In 2019-20, 30.04 million tonnes of sugarcane were harvested and delivered to sugar mills in Australia.

Australia's five largest sugarcane producing Statistical Area Level 2 (SA2) regions were all in Queensland and together produced 16.43 million tonnes of sugarcane, over half of Australia's 2019 sugarcane harvest. These SA2s were:

- Burdekin, the largest sugarcane producing SA2 with 7,013,900 tonnes;
- Ingham Region (3,602,200 tonnes);
- Tully (2,183,400 tonnes);
- Walkerston-Eton (2,157,800 tonnes); and
- Pioneer Valley (1,473,500 tonnes).

These Queensland SA2s were also the top sugarcane producing regions in 2015-16, when this data was last published for SA2s from the 2015-16 Agricultural Census.

New data sources and methods for more timely and detailed data

How these experimental estimates have been created

The 2019-20 experimental estimates on tonnes of sugarcane harvested have been produced primarily using administrative data sourced from the Sugar Cane Levy Payers Register. This data is collected on behalf of Sugar Research Australia (SRA) by the Department of Agriculture, Water and the Environment (DAWE). The Sugar Cane Levy Payers Register contains details of the quantity of sugarcane delivered to a processing establishment and business address information for all producers during the harvest period. This data was aggregated to produce regional Statistical Area Level 2 (SA2) statistics.

The Sugar Cane Levy Payer Register data was benchmarked against publicly available Australian Sugar Milling Council (ASMC) sugarcane production data for the five sugarcane producing regions; Northern, Herbert-Burdekin, Mackay-Proserpine, Southern (all in Queensland) and New South Wales. Initial comparison between these two data sources showed that total production was within 0.01%.

Maps derived from satellite data identifying areas where sugarcane was grown in 2019, produced by the Queensland Department of Environment and Science and DAWE, were used to geospatially validate and adjust outliers in the production data (See the Methodology for more detail on this).

Industry collaboration

The ABS has worked with industry experts from SRA, the ASMC, Canegrowers, the Australian Cane Farmers Association and the Queensland Government to better understand these datasets and will look to further develop this co-design approach to ensure consistency between the different input datasets and to produce trusted statistical data.

Benefits for the agricultural industry

Greater regional detail

Agricultural production varies considerably across Australia. Examining data at a local level, such as SA2, enables data users to see regional differences in annual production or compare it with other statistics on local communities or the surrounding environment. One example where this is important is supporting emergency response to assist communities and agricultural businesses in the case of unexpected events like droughts, floods or cyclones.

Previously, robust SA2 agriculture statistics have required survey information to be collected from all producers. Due to the burden associated with reporting data in this way, and the cost of such a large data collection, data at this level of geographic detail is normally only produced by ABS every five years when data is collected from a large number of farmers as part of the Agricultural Census.

More timely data

The Sugar Cane Levy Payer Register data is reported throughout each harvest period meaning that final data is available by February each year, only several months after the harvest is complete. Reported information can be aggregated to produce statistics that inform a comprehensive picture of production for that year, shortly after that information is complete. This enables the release of these statistics much earlier than would be possible with traditional annual agriculture surveys.

The experimental estimates presented in this publication have been published approximately six months after the harvest and approximately nine months earlier than could be produced from the corresponding annual REACS.

Fewer questions for farmers to complete on surveys

Utilising these alternative data sources for sugarcane means that once this estimation process is further refined, the questions relating to sugarcane production in future ABS agriculture surveys can be reduced. This is a small but significant step towards reducing the reporting burden for sugarcane farmers. It is hoped this concept can be extended to other agriculture commodities.

Interactive map showing production of sugarcane by Statistical Area Level 2

Click here

This map uses data contained in Sugarcane, experimental regional estimates using new data sources and methods, 2019-20.

How to use

- Navigating topics: maps can be selected via the drop-down menu (mobile devices) or the tabs (larger screens).
- Search: opens the search function. It is set to look for locations such as addresses, suburbs and postcodes contained within an SA2.
- Data: an SA2 region can be selected to view the underlying data. Data for all SA2s can be found in the Data download section of this publication.
- If the maps do not load successfully, please try refreshing this page.

More information

- Statistical Area 2 boundaries are presented according to the Australian Statistical Geography Standard (ASGS), 2016. For more information see the Statistical Geography page of the ABS website or the following: Australian Statistical Geography Standard, Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001).
- Detailed data information is available in the Methodology.

Data downloads

Sugarcane, experimental regional estimates using new data sources and methods, 2019-20

Download XLS
[151 KB]

History of changes

Show all

19/06/2020 - An interactive map that allows users to further explore differences in regional sugarcane production across Queensland and northern New South Wales was added.

Previous catalogue number

This release previously used catalogue number 7128.0.

Methodology

[Sugarcane, experimental regional estimates using new data sources and methods methodology, 2019-20]

Articles

17 June 2020

Data shows Burdekin is Australia's sugarcane capital

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