

## **Final Report**

# **Macadamia GVP Report Summary**

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**Delivery partner:**

Australian Bureau of Statistics

**Project code:**

MC16013

**Project:**

Macadamia GVP Report Summary MC16013

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**Funding statement:**

This project has been funded by Hort Innovation, using the Macadamia research and development levy, co-investment from Australian Bureau of Statistics and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

**Publishing details:**

ISBN 978 0 7341 4374 7

Published and distributed by: Hort Innovation

Level 8  
1 Chifley Square  
Sydney NSW 2000

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[www.horticulture.com.au](http://www.horticulture.com.au)

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## Summary

This report details activity and outcomes from the Macadamia Gross Value of Production (GVP) Pilot undertaken by the Australian Bureau of Statistics (ABS) on behalf of Horticulture Innovation Australia Limited (Hort Innovation) and in collaboration with the Australian Macadamia Society (AMS).

Specifically, this pilot tested whether it is possible to improve the quality of estimates of the Gross Value of Macadamia Production (GVP). The ABS conducted work in parallel looking at the feasibility of drawing in data from AMS and other estimates relating to the Macadamia industry, by utilising industry data with the intent of:

- reducing survey burden
- maximising the utility of data already collected by industry, and
- improving the re-use of Australian Government and private administrative datasets.

This pilot used a specific commodity where suspected survey coverage issues were contributing to a potential underestimate in production (macadamias), to explore whether business data could provide a viable alternative source of data. The pilot demonstrated the feasibility of this method within a case study. It confirmed that there is potential to improve the coverage of the population of macadamia producers and estimates of their gross production by utilising industry data, including levy payer information that links production back to individual businesses. This would offer benefits such as potentially offering better quality data as well as reducing the industry reporting burden.

The pilot has provided a 'proof of concept' for the broader horticultural industry, demonstrating the potential to use business data to replace survey data.

A number of identified statistical, ethical and data governance issues must be navigated before any such data substitution can be undertaken on an ongoing and systematic basis. The report concludes by making a number of recommendations enabling these barriers to be addressed in any subsequent phase of the project.

Any future work will be subject to endorsement by Horticulture Innovation and ABS management, successful engagement with the Department of Agriculture and Water Resources in relation to levy payer information, and a willingness to further participate on the part of industry.

## Keywords

Macadamias, Agricultural Surveys, Alternative Data Sources, Gross Value of Production

## Introduction

In 2015/16 the Australian Bureau of Statistics (ABS) estimated that agricultural businesses produced approximately 39 million kilos of Macadamia nuts, worth approximately \$202 million to the Australian economy. For the 2016 calendar year, the Australian Macadamia Handlers Association (AMHA) estimated these figures to be a much higher 52 million kilos (nut in shell) and \$287 million respectively. This gap in both production and value has been observed by interested industry bodies, including Hort Innovation and the Australian Macadamia Society (AMS), over a number of years.

In late 2016 the collaborative relationship between the ABS and Hort Innovation provided an opportunity to partner with AMS to review the data sources and methods employed in the calculation of the gross value of macadamia production for Australia. Established as a research agreement, the Macadamia Gross Value of Production (GVP) Pilot was to investigate the apparent discrepancies between ABS and industry estimates of Macadamia production and propose a new way forward for producing estimates into the future.

This pilot aligned with the ABS' agricultural administrative data initiative which seeks to develop methods for increased use of administrative data sources within the agricultural statistical system. The initiative examines legislative, privacy and commercial barriers to the use of data collected by governments and industry with the objective of reducing survey burden on farmers and implementing a "collect once, use many times" approach. The initiative seeks to research and develop best-practice methods for integration of administrative data into the agricultural statistical system to ensure data quality standards are met, privacy and commercial concerns are addressed, and to maximise utility of the data. This initiative complements the ABS' lead role in improving the re-use of key Australian Government administrative datasets to minimise regulatory burden on citizens and businesses. This project also integrates with the ABS' work program that is aligned with the findings of the National Agriculture Statistics Review.

The Macadamia Gross Value of Production (GVP) Pilot is an important contributor of this over-arching initiative and reflects a forward-looking collaboration between Hort Innovation and the ABS.

## Methodology

The fundamental objective of this project was for the Australian Bureau of Statistics (ABS) to review the calculation of the gross value of macadamia production in Australia, including data sources, methods and any related benchmarking information.

From the perspective of Hort Innovation, and as stated in the contract governing this project, this objective translated into two main goals:

1. To identify an improved novel mechanism for macadamia GVP estimation that leverages off existing supply chain dynamics to maximise data collection efficiencies and data accuracy.
2. For this new GVP estimation mechanism to be adopted / considered by the ABS when developing their GVP estimates at some point in the future, at the discretion of the Australian Statistician or delegate.

There were three main goals for the ABS running parallel with those outlined by Hort Innovation:

1. Test the willingness of industry to form a partnership to share data and reduce survey burden in the long term.
2. Test the ABS infrastructure's ability to absorb unit record data from alternative sources and appropriately manage this data under the *Census and Statistics Act 1905*.
3. To test the viability of these new approaches across the agricultural industry more broadly, as part of a more holistic ABS Agricultural Administrative Data Initiative project.

The methodology for this project followed these broad steps:

### COLLABORATION

- Build relationships with industry.
- Establish problem definition, project scope and goals with Hort Innovation.

### RESEARCH

- Field trip to the Lismore region to research the macadamia industry
- Understanding details of data collected in the supply chain
- Analysing options for incorporating supply chain data, and estimating survey compliance benefits for growers.
- Determining data acquisition options.
- Examining the legal requirements for industry and government, to ensure that a successful partnership could emerge from the research work.

### ACQUIRE

- Establish mechanisms to collect this supply chain data under the Census and Statistics Act.

- Successfully obtain a sample of industry data to assess its suitability as an alternative national statistics data source.

#### DATA ANALYSIS

- Analyse and confront industry data against ABS data
- Determine differences and understand reasons for any discrepancies

#### REPORTING

- Sharing ABS derivation of GVP with Hort Innovation. This includes its components, questions and methods in publishing GVP estimates for macadamias.
- Report findings and recommendations to Hort Innovation and discuss next steps.

## Outputs

The overarching output from the project is this Final Report that summarises the results of the pilot study into the Gross Value of Production estimates for macadamias. The results of the project are presented in the *Evaluation and Discussion* section of the report.



## Outcomes

The macadamia pilot was a valuable project for Hort Innovation, the macadamia industry and the ABS alike.

High level outcomes from the pilot were:

1. highlighting the areas in which industry based data can be introduced into the statistical process.
2. demonstrating the pathways in which strong partnerships can be formed to enhance statistical processes and opens up new possibilities for the future.
3. proving that industry data can be collected under the Census and Statistics Act 1905, maintaining the privacy of data while fulfilling statistical needs.
4. providing evidence that, for other industries, the process for incorporating industry generated data is feasible
5. identifying the need to link production data back to the property for statistical purposes
6. highlighting areas where current industry based responses to ABS statistical collection could be improved.

**The key finding was that levy based reports may hold the key to systematising the collection of most agricultural statistics - without imposing additional burden on industry.** Rich data relating to production and quality are already collected from growers outside of the statistical system. Under the right conditions – for example through use of a business location identifier – ABS could utilise natural business reporting mechanisms and bring these data into the statistical system. This has the benefits of reducing burden on industry, achieving more timely data collection, and potentially improving the quality and relevance of national agricultural statistics.

These findings can help to guide the redevelopment of the levy collection system currently being undertaken by the DAWR, for instance by:

1. recommending that levy receipts for manual and Levies Online submission are standardised with a minimum set of metadata fields
2. proposing that levies collection instruments seek to capture standard units of production, and specifiers such as ABN, business address, and property location – e.g. using a Property Identification Code (PIC).

## Evaluation and discussion

### Objective

The objective of this project was for ABS to review the calculation of the gross value of macadamia production in Australia, in cooperation with the macadamia industry.

A focus of the review was to seek out potential industry data sources that may reduce official reporting compliance but deliver more reliable national agricultural statistics estimates of gross value.

This 'pilot' provided three tests for the ABS' overall agricultural administrative data initiative:

1. it allowed the ABS to test the willingness of industry to form a partnership to share data and reduce survey burden for growers in the long term
2. it provided industry with practical insight into the duty of care ABS has in respecting its sensitive data and its requirements for better, more efficient and reliable industry data
3. it helped to assess ABS infrastructure's ability to absorb unit record data from alternative sources and appropriately manage this data under the *Census and Statistics Act 1905*.

### ABS's derivation of Gross Value for Macadamias

The ABS produces statistics on gross value of production (GVP) of crops (including macadamia nuts), livestock disposals and livestock products at the national and state/territory level via its Value of Agricultural Commodities Produced (VACP) Collections. Statistics are released annually and are produced at National, State and sub-state levels.

The gross value estimates are derived by the multiplication of price and quantity of production estimates of agricultural commodities i.e.

$$\text{GVP} = \text{price} * \text{quantity produced.}$$

Quantity data for macadamias are sourced from the ABS' agricultural commodity collection – the Agricultural Census once every five years and the Rural Environment and Agricultural Commodities Survey in the intercensal years.

Price data refers to the average unit value of a given commodity realised in the market place (market value). Price information for macadamias is collected by the ABS via its VACP collection where selected processors provide information about quantities of nuts purchased and prices paid. This information is used to produce an average price for the relevant period (on a standard 10% moisture nut in shell (NIS) basis).

Information about ABS quantity and price estimates is included in Appendix A and Appendix B of this report.

### Australian Macadamia Handlers Association derivation of GVP for macadamias

There has been a large investment in data associated with macadamia processors and growers by the Australian Macadamia Association, the Australian Macadamia Handlers Association and the Department of Agriculture and Fisheries in QLD. This has supported the compilation of a comprehensive set of annual industry statistics on the Australian macadamia industry.

This data is collected through an agreement between the Australian Macadamia Handlers Association (AMHA) and processors. These numbers are given to a third party, to model missing growers.

### **Other potential sources of GVP data for macadamias**

The ABS also produces estimates of GVP for that proportion of the macadamia crop which is exported. AMS estimates that approximately 70% of the annual macadamia crop is exported, so while these estimates are not a complete picture of production within a given year, they do give a reliable indication of both volumes and values for a significant proportion of the annual crop.

While the number of currently available data sources providing estimates of GVP for macadamias is relatively small, advice from both growers and processors interviewed suggests that the macadamia industry is evolving and growing in Australia. While the use of technology is increasing (e.g. drones and satellite imagery) with new planting techniques (e.g. less trees, greater light, straight line planting using GPS) the take up rate is still low in absolute terms. These changes should provide a range of potential new data sources in the near future and the ABS is actively engaged in identifying and evaluating these sources as they become available.

### **Investigations into macadamia production process and supply chain**

In partnership with AMS, ABS researched the supply chain for macadamias. Interviews were conducted with growers, processors, and industry bodies. The supply chain was found to be a relatively well-defined process with a small number of easy to access data points which could potentially provide access to regular and reliable production and price information (key inputs into derivation of gross value).

Optimal data collection points for sources of data that are, or could be, utilised in the production of official statistics on macadamia gross value of production (GVP) were identified as:

- volume information is likely to be available at the time of harvest;
- volume and price information at the point of consignment to the processor, and also through the levy payment record; and
- transaction data including export quantities are likely to be available when the processed product is on sold to the end user.

ABS learned that volumes are not collected systematically at the moment as part of levy payment data by the Department of Agriculture and Water Resources. There are plans for more systematic levy data collection to be rolled out over the next 3-5 years.

Through these investigations, ABS identified potential industry data sources that could inform the project's objective.

### **Data acquisition**

In response to ABS requests, sample files were received from industry players, allowing data analysis to proceed.

Unit record data provided in the sample files was officially obtained by the ABS under the *Census and Statistics Act 1905*, and has been afforded the same security and confidentiality protections as unit level data obtained through ABS survey processes.

### **Data security and governance issues**

The receipt of these sample files brought a strict need to protect the trust and cooperation of data included within the files. Further, as this data was already protected under privacy legislation, it was necessary to give thorough consideration to the legal and administrative arrangements required to extend these protections in the ABS environment.

One key message from this stage of the project was the importance of clear data governance enabled by legislation and the important issues around the ownership of industry data.

ABS has a strong record of trust when it comes to handling sensitive business and individual data. Whenever ABS obtains data about identifiable units – including through its direct survey collection program – it is necessary to bring it into the ABS environment under the *Census and Statistics Act 1905*. This legislation ensures that any such data remains confidential and cannot be disclosed (e.g. through a Freedom of Information request or similar).

For this pilot, some of the specific data governance arrangements in accordance with the legislation included:

- not contacting individual businesses directly
- advising data providers of protocols for contact with units supplying data, including specifying that any analysis would be for research purposes only
- collection of data through ABS' Secure Deposit Box (a secure online environment where data and electronic survey forms can be lodged directly into ABS's sensitive data stores).

If sensitive business data relating to the horticulture industry were to pass data to the ABS on a regular basis, similar provisions would be required to ensure this data were protected under the appropriate legislation. ABS would emphasise the safeguards that exist in relation to both data security and confidentiality (i.e. that data provided to the ABS is covered under the *Census and Statistics Act 1905* and is therefore treated in the same fashion as direct collected survey data).

#### **Data analysis: matching businesses**

Industry based sample files included a wide range of variables – including ABN and business names – for over 250 units. In the 2015-16 Agricultural Census approximately 490 businesses (equivalent to 480 ABNs) reported macadamia production, trees bearing or trees not yet of bearing age.

Of the sample provided:

- 85% could be matched to the list of businesses used for the Agricultural Census,
- 28% reported macadamia production on the Agricultural Census forms,
- growers represented about 54% of production recorded on the Agricultural Census, which confirm that growers use multiple processors.

Of the group that were matched but did not report on the Agricultural Census:

- 11% were under the old \$5,000 limit for Estimated Value of Agricultural Operations (EVAO),
- 45% were under the new \$40,000 limit for EVAO
- 24% were actually selected in the form and didn't complete the questions about macadamia production, even though they appear to be actively producing
- 21% did not have the requirements for an ABN.

Of the unmatched group, the majority could be identified by their ABN, but their records on the Australian Business Register indicated that they did not have agriculture listed as a primary activity. Based on this reporting, notifying key Government agencies such as the Australian Business Register of any business structural/activity changes as early as possible would assist ABS in identifying the correct macadamia businesses to approach. Industry knowledge indicates there was a large turnover (sale) of macadamia growers in the past few years and this could be an indication of the lag for determining the ABS Agriculture frame.

## **Data analysis: coherence**

The portability of macadamia nuts has seen an increase in competition between macadamia processors. The industry data received highlights that not all growers stay with, or deliver all their crops to, the same processor. There is therefore a high possibility that an individual grower may be represented in more than one processor data file.

Similarly, a number of ABNs reported in sample data files were old or no longer active, and therefore it is possible that an individual grower may be listed multiple times under different ABNs at different processors resulting in an inflation of the total grower count. The use of a property location identifier in the future could lead to better matching success.

Recollection can be an issue for growers filling out forms some-time after harvest. The portability of macadamias could also influence recollection if consignment notes are given back to the farmer in different formats, or with different calculation values (eg 3.5% moisture in shell vs 10% moisture in shell).

## **Evaluation of differences between alternative data sources**

The difference between the Macadamia Industry GVP and the ABS published GVP is around 20% in 2015/16. Differences in scope and reporting periods appear to be key contributors to the discrepancy.

The price used to calculate GVP from AMHA and ABS calculations were very similar. The average price paid for macadamias from both the Industry and the ABS are within 1% across several years (i.e. 2013/14 to 2015/16). This difference is likely to be from AMHA using a calendar year approach compared to the ABS financial year approach.

A comparison of the volume of macadamias produced over time demonstrates the same disparity between AMHA and ABS as observed in the GVP data. The consistency of the gap between AMHA and ABS once reporting differences have been accounted for strongly suggest that the scope differences between the two collections are the key contributors to this discrepancy.

ABS suggests that further investigation is required on the statistical unit reported by AMHA versus the statistical unit utilised through ABS data collection. Given earlier identified issues around outdated ABN use and the method with which AMHA may sum data reported by individual processors, there could be the potential for double counting on the number of growers based on the fact that growers send their harvest to multiple processors. The need to keep ABN information up to date with key Government agencies such as ABS and ATO would assist greatly in ensuring that the statistical frame for the macadamia industry is current and well represented.

The last difference that could influence results is the terminology used for reporting. Growers and processors have an array of different measures for the same product, for example:

- levies require 3.5% moisture Nut in Shell reporting.
- industry standard practice is to report on 10% moisture for Nut in Shell.
- ABS specifies that the 'fresh weight' should be reported – with some confusion in the industry about what that actually means.

To conclude, the following table summarises the comparative analysis of macadamia GVP data undertaken in this project.

Table 1: **Methodological comparison: Data collection, processing and data publication (GVP macadamias)**

	ABS	Industry (AMHA)	Supply Chain
<b>Scope of statistics</b>	<ul style="list-style-type: none"> <li>Macadamia industry production</li> </ul>	<ul style="list-style-type: none"> <li>Census – intends to capture all macadamia production</li> </ul>	<ul style="list-style-type: none"> <li>All macadamia processing undertaken by processors</li> </ul>
<b>Collection coverage</b>	<ul style="list-style-type: none"> <li>Growers identified from the ABS business survey frame with f/y BAS turnover above \$40K</li> </ul>	<ul style="list-style-type: none"> <li>Almost all active growers in industry</li> <li>2 processors not captured (approx. 1% of industry production)</li> </ul>	<ul style="list-style-type: none"> <li>Variable – limited to consignment notes produced by each processor for growers</li> </ul>
<b>Data collection and processing</b>	<ul style="list-style-type: none"> <li>Volume: Annual sample survey (REACS)</li> <li>Volume: Five-yearly Census (Ag Census)</li> <li>Price: Value of Agricultural Production (VACP) Survey</li> </ul>	<ul style="list-style-type: none"> <li>All processor data from their client growers (kgs and \$) as collected from levies system</li> <li>Data compiled for a third party who model missing growers and calculate GVP</li> </ul>	<ul style="list-style-type: none"> <li>Detailed grower data (kgs and \$) collected from consignment notes</li> </ul>
<b>EoFY reporting</b>	<ul style="list-style-type: none"> <li>30 June</li> </ul>	<ul style="list-style-type: none"> <li>31 December</li> </ul>	<ul style="list-style-type: none"> <li>na</li> </ul>
<b>Identified issues</b>	<ul style="list-style-type: none"> <li>Only growers above \$40k collected</li> <li>Frame: ANZSIC Class 0139 ‘NEC Other Fruit and Nut growers’</li> <li>Standard agricultural definition of “fresh weight” can be ambiguous to growers</li> <li>Growers may recall rather than reuse data provided to processors</li> <li>GVP data inputs from growers subject to rounding</li> <li>Collection spans the harvest season</li> </ul>	<ul style="list-style-type: none"> <li>2 processors not captured (approx. 1%)</li> <li>Insufficient long term data to use effectively</li> </ul>	<ul style="list-style-type: none"> <li>Relationships between processors and growers are ad hoc</li> <li>Data collected/reported depends on third party system requirements</li> <li>Confronting data by using ABNs is problematic without a persistent identifier for the business – eg Property Identification Code (PIC) or ABN</li> </ul>
<b>Identified advantages</b>	<ul style="list-style-type: none"> <li>Reuse within the statistical system</li> <li>Reduction in provider burden</li> <li>Perceived cost saving</li> <li>Data quality</li> </ul>	<ul style="list-style-type: none"> <li>Excellent coverage</li> <li>Consignment notes from processor are aggregated here – potential to capture industry-wide GVP data in this process</li> </ul>	<ul style="list-style-type: none"> <li>Detailed data includes waste product</li> <li>Potential for business survey frame maintenance</li> <li>Potential for improved sample selection</li> </ul>

## Recommendations

The project used a specific commodity where suspected survey coverage issues were contributing to a potential underestimate in production (macadamias), to explore whether business data from a key point in the supply chain could provide a viable alternative source of data. The pilot demonstrated the feasibility of this method using industry information within a case study. It confirmed that there is potential to improve the coverage of the population of macadamia producers and their commodity production by utilising administrative data, including levy payer information that links production back to individual businesses.

**Recommendation 1:**

That a second phase of this pilot trial the use of levy reports across the whole industry, with improved locational data.

**Recommendation 2:**

That consideration be given by other horticultural commodities to participate in the second or subsequent phases to demonstrate the wider applicability of levies databases to the statistical system.

**Recommendation 3:**

That use of tree numbers from benchmarking reports is included in a subsequent phase of the pilot.

**Recommendation 4:**

That data generated by local government rates calculation processes be included in a subsequent phase of the pilot.

**Recommendation 5:**

That data governance and ethical issues be specifically addressed in a subsequent phase of the pilot.

### Interim opportunities for improving ABS surveys

While the pursuit of industry sources is the ultimate aim, the pilot identified a number of opportunities to improve the existing ABS survey instruments. These included:

- Reducing the amount of grower rounding across ABS surveys:  
It is noted through the pilot analysis that there appears to be a number of growers that are rounding their macadamia estimates on the ABS forms (the majority of these cases seem to be rounding down). Somewhere between +/-500,000 kilos across the matched units, when extrapolated, could be an issue. This will be reviewed from an ABS forms perspective and ABS encourages growers to fill out estimates as close to the actual value as possible.
- Changing wording to be more specific:  
Macadamia growers and processors commented on what is meant by 'fresh weight'. The Industry standard is @10% moisture content while the wording is more ambiguous on ABS REACS and Census forms.

Given the ability to undertake further project work in this area, ABS is confident it would identify additional opportunities for improving ABS surveys and data quality.

## Intellectual property/commercialisation

Not applicable



## References

Not applicable

## Acknowledgements

This project would not have been possible without the assistance of the Australian Macadamias Handling Association and the Australian Macadamias Society.

## Appendices

### Appendix A ABS quantity and price estimates

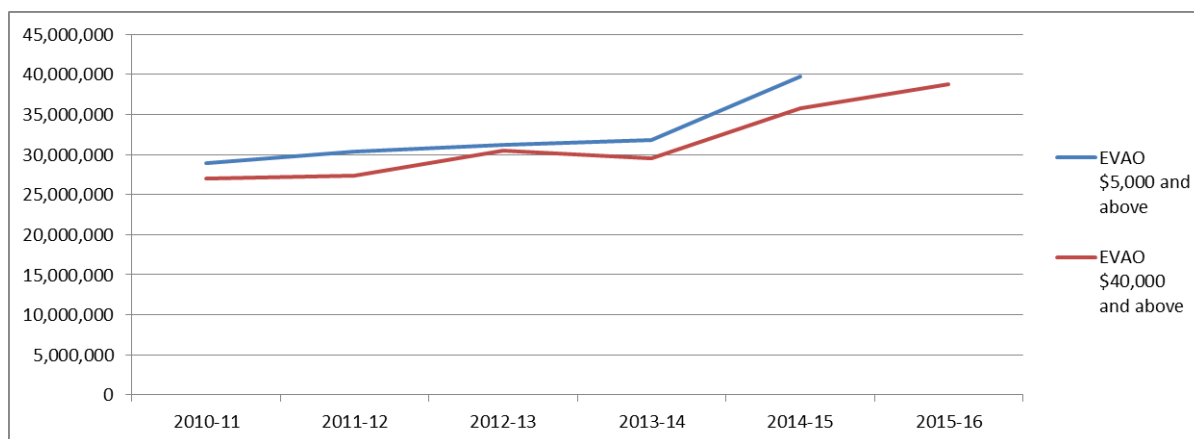
#### Agricultural commodities – quantity estimates

The quantity estimates produced from the ABS's agricultural commodities collections relates to the productive activities of Australian farming businesses.

The statistical unit for the ABS's agricultural commodities collections are **businesses** as recorded on the Australian Bureau of Statistics' Business Register (ABSBR) undertaking **agricultural activity** above a minimum threshold applied to the **estimated value of their agricultural operations**.

- The ABS applies an Estimated Value of Agricultural Operations (EVAO) threshold to ensure an appropriate balance between reporting burden and the relative size of agricultural activity undertaken by a business.
  - A change in the EVAO threshold applied to agricultural collections was made in 2015-16 increasing the minimum size of agricultural operations from \$5,000 to \$40,000, which saw an average of 7% fall in production reported through these surveys – as described in Figure 2.

Figure 2 – Macadamia production (kgs) - change in EVAO from \$5,000 to \$40,000



A copy of the Agricultural Census survey form is available on the ABS website: [sample form](#)

#### Value of Agricultural Commodities Produced – price estimates

The price estimates produced by the Value of Agricultural Commodities Produced (VACP) collection are weighted averages of prices realised at the point(s) of valuation where ownership of the commodity is relinquished by the agricultural sector.

The method of collection varies considerably between states and territories and between commodities. For macadamias, an average unit price was calculated for each based on their response to questions on quantity purchased and purchase cost.

A copy of the VACP survey form is attached in Appendix B.

## **Appendix B VACP Form**

ABS survey form: Value of Agricultural Commodities Survey, year ended 30 June 2016 (VAC2001): sample only.

# Value of Agricultural Commodities Survey

## Fruit and Vegetables for processing,

### Year ended 30 June 2016

In correspondence, please quote this number ▼

Please correct  
any errors

#### Purpose of Collection

Value of agricultural commodity statistics are used by government and industry to monitor the agricultural sector of the Australian economy and to facilitate formulation of industry policies.

#### Collection Authority

The information asked for is collected under the authority of the *Census and Statistics Act 1905*. Your cooperation is sought in completing and returning this form by the due date. The Act provides me with the power, if needed, to direct you to provide the information sought.

#### Confidentiality

Your completed form and personal information remain confidential to the Australian Bureau of Statistics.

#### Due Date

Please complete this form and return it in the reply paid envelope to the Australian Bureau of Statistics by **26 July 2016**.

#### Help Available

If you have problems in completing this form, or feel that you may have difficulties meeting the due date, please contact the Rural Environment and Agriculture Statistics Branch of the Australian Bureau of Statistics by:

#### Telephone

1800 685 497  
Freecall (excluding mobile phones)

Australian Statistician

#### Mail

Australian Bureau  
of Statistics  
Reply Paid 76746  
Sydney NSW 2000

Person we should contact if any queries arise regarding this form

Name		Date	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Signature		Telephone	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Email									

### Please read this first

- Only the Australian-based activities (including exports but excluding imports) of the business/organisation shown on the label should be included on this form. Include details of the participation of the business/organisation in any unincorporated joint ventures.
- If exact figures are not available, please provide careful estimates.
- Report all expense items **exclusive of Goods and Services Tax (GST)** where this is recoverable as an input tax credit.
- You will need to report an estimate of time taken when you have completed this form.

#### 1 Did you purchase fresh fruit and/or nuts for processing in the year ended 30 June 2016?

No ☐ Go to Question 3

Yes ☐

#### 2 Quantity and cost of fresh fruit and/or nuts purchased for processing in the year ended 30 June 2016

##### Excluding

- Goods and Services Tax (GST) where this is recoverable as an input tax credit
- Agent's commission and charges

	Quantity purchased (tonnes)	Purchase cost (\$)	Please tick all commodities that you purchased directly from the farmer
<b>Citrus fruit</b>			
Oranges – navel .....			<input type="checkbox"/>
– valencia .....			<input type="checkbox"/>
– other .....			<input type="checkbox"/>
Lemons .....			<input type="checkbox"/>
Limes .....			<input type="checkbox"/>
Mandarins .....			<input type="checkbox"/>
Grapefruit .....			<input type="checkbox"/>
<b>Pome fruit</b>			
Apples .....			<input type="checkbox"/>
Nashi .....			<input type="checkbox"/>
Pears .....			<input type="checkbox"/>
<b>Stone fruit</b>			
Apricots .....			<input type="checkbox"/>
Cherries .....			<input type="checkbox"/>
Nectarines .....			<input type="checkbox"/>
Olives .....			<input type="checkbox"/>
Peaches .....			<input type="checkbox"/>
Plums .....			<input type="checkbox"/>
Prunes .....			<input type="checkbox"/>

**2 Quantity and cost of fresh fruit and/or nuts purchased for processing in the year ended 30 June 2016 – (continued)**

**Other fresh fruit**

Avocados .....

Bananas .....

Blackcurrants .....

Blueberries .....

Grapes .....

Kiwifruit .....

Mangoes .....

Papaws/Papaya .....

Pineapples .....

Raspberries .....

Strawberries .....

Quantity purchased (tonnes)	Purchase cost (\$)	Please tick all commodities that you purchased directly from the farmer
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

**Other fresh fruit not elsewhere reported (please specify)**

		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

**Nuts**

Almonds (kernel weight) .....

Macadamias .....

Pecans .....

Walnuts .....

All other nuts .....

Quantity purchased (tonnes)	Purchase cost (\$)	Please tick all commodities that you purchased directly from the farmer
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

**3 Did you purchase fresh vegetables for processing in the year ended 30 June 2016?**

No ☐ Go to Question 5

Yes ☐

**4 Quantity and cost of fresh vegetables purchased for processing  
in the year ended 30 June 2016**

**Excluding**

- Goods and Services Tax (GST) where this is recoverable as an input tax credit
- Agent's commission and charges

	Quantity purchased (tonnes)	Purchase cost (\$)	Please tick all commodities that you purchased directly from the farmer
Asian vegetables .....			<input type="checkbox"/>
Asparagus .....			<input type="checkbox"/>
Beans, french and runner .....			<input type="checkbox"/>
Beetroot .....			<input type="checkbox"/>
Broccoli .....			<input type="checkbox"/>
Broccolini .....			<input type="checkbox"/>
Brussels sprouts .....			<input type="checkbox"/>
Cabbages .....			<input type="checkbox"/>
Capsicums (excluding chillies) .....			<input type="checkbox"/>
Carrots .....			<input type="checkbox"/>
Cauliflowers .....			<input type="checkbox"/>
Celery .....			<input type="checkbox"/>
Chillies (excluding capsicums) .....			<input type="checkbox"/>
Cucumbers .....			<input type="checkbox"/>
Eggplants .....			<input type="checkbox"/>
Leeks .....			<input type="checkbox"/>
Lettuces .....			<input type="checkbox"/>
Melons – rock and cantaloupe .....			<input type="checkbox"/>
– watermelons .....			<input type="checkbox"/>
– other melons .....			<input type="checkbox"/>
Mushrooms .....			<input type="checkbox"/>
Onions (brown, red or white) .....			<input type="checkbox"/>
Parsley .....			<input type="checkbox"/>
Parsnip .....			<input type="checkbox"/>
Peas, green .....			<input type="checkbox"/>
Potatoes .....			<input type="checkbox"/>



**4 Quantity and cost of fresh vegetables purchased for processing in the year ended 30 June 2016 – (continued)**

	Quantity purchased (tonnes)	Purchase cost (\$)	Please tick all commodities that you purchased directly from the farmer
Pumpkins (including butternut) . . . . .			<input type="checkbox"/>
Radish . . . . .			<input type="checkbox"/>
Shallots . . . . .			<input type="checkbox"/>
Silverbeet . . . . .			<input type="checkbox"/>
Spinach – baby . . . . .			<input type="checkbox"/>
– other . . . . .			<input type="checkbox"/>
Swedes . . . . .			<input type="checkbox"/>
Sweet corn . . . . .			<input type="checkbox"/>
Sweet potato . . . . .			<input type="checkbox"/>
Tomatoes . . . . .			<input type="checkbox"/>
Zucchini and button squash . . . . .			<input type="checkbox"/>
All other fresh vegetables (please specify)			
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

**5 Please provide comments**

- on any information you have supplied on this form (e.g. related to unusual movements or other factors)  
(Please use BLOCK letters)

<p>.....</p>
--------------

- on any difficulties you had in providing the requested information, or suggested improvements to this form  
(Please use BLOCK letters)

<p>.....</p>
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**6 Please provide an estimate of the time taken to complete this form**

**Including**

- The time actually spent reading the instructions, working on the questions and obtaining the information
- The time spent by all employees in collecting and providing this information

hrs  mins

**Thank you for completing this form**

Do Not Return to the ABS  
Sample Only

Do Not Return to the ABS  
Sample Only

Do Not Return to the ABS  
Sample Only