

Horticulture Innovation Australia

Final Report

Financial Performance of Australian Vegetable Farms 2013-14 to 2015-16

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Sciences

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Summary

The primary objective of this project was to collect and disseminate representative data on the economic structure and financial performance of the Australian vegetable growing industry for the financial years 2013–14 to 2015–16. This data will assist industry stakeholders in developing plans for the long term direction of the industry. This project is an extension of the six surveys already conducted by ABARES for Horticulture Innovation Australia (Hort Innovation) and its predecessor Horticulture Australia Limited (HAL) from 2007–08 to 2012–13. The completion of this project has resulted in nine years of production and financial performance data. This survey is the only source of data on both physical and financial information available for vegetable farms at the state and national levels providing valuable time series data which can be used to conduct in-depth analysis on issues affecting the vegetable industry.

Three economic surveys of Australian Vegetable Growing Surveys were conducted as part of the project in the financial years 2013–14 to 2015–16. These surveys were designed to collect comprehensive production and financial performance data, production intentions and issues of particular interest to industry stakeholders. Production and financial information were collected for the preceding financial year and provisional data for the financial year in question.

Results from these surveys are contained in the report series 'Australian vegetable growing farms: an economic survey' together with additional data sets that can be accessed at www.agriculture.gov.au/abares/publications. These reports are produced each financial year.

The target audience of this project were vegetable industry stakeholders—vegetable growers, industry research and development organisations, researchers and policy makers.

Keywords

Vegetable growing farms

Farm surveys

Financial performance

Introduction

The Australian vegetable-growing sector is an important source of food. It supplies most of the fresh vegetables consumed in Australia and provides inputs for the processed vegetable products consumed in Australia and exported globally. It is a diverse industry consisting of over 100 commodities contributing around \$3.4 billion to the gross value of agricultural production in 2014–15. The industry is of the view that good quality data on the economic performance of growers is key to decision making both at the grower and industry level.

The vegetable industry has been funding the Vegetable Farms Survey by ABARES since 2007–08 to provide industry and government with information about farm-level production and the financial situation of vegetable growers. The primary objective of these surveys was to collect and disseminate representative data on the economic structure and financial performance of the Australian vegetable growing industry that will assist industry stakeholders in developing plans for the long term direction of the industry. The survey delivers comprehensive information on the physical, financial and socioeconomic characteristics of vegetable-growing farms in each state. The information collected in the survey provides a unique time series database that can be used to make evidence-based decisions and monitor changes in the vegetable industry.

Methodology

Each of the three surveys were conducted in two phases. The first phase was the design of the economic survey of the Australian vegetable growing farms and the collection of data. The second phase was the analysis of the data collected and the public release of the results. The project outputs included survey based estimates of the production and financial performance characteristics of vegetable growers in different states, complemented by data on issues of particular interest to industry stakeholders.

The sample population for the survey was selected from a population list drawn from the Australian Business Register (ABR) and maintained by the Australian Bureau of Statistics (ABS). The survey sample was selected from units classified as vegetable growing (under cover) and vegetable growing (outdoors). These classifications cover all vegetable growers, including levy paying and non-levy paying vegetables. The sample included levy paying vegetable growers to meet Hort Innovation requirements and non-levy paying vegetable growers in order to meet Department of Agriculture and Water Resource's (DAWR) needs for briefing the Australian Government Minister for Agriculture and Water Resources on the entire vegetable growing industry.

Growers were selected for participation in the survey using a random stratified sampling approach. The strata are defined according to farm size. This approach ensures a representative sample from each size class within each state. For each of the three surveys, the targeted sample size was around 300 vegetable growing farms. The surveys were designed to produce estimates at state level, with approximately 50 farms surveyed in each state.

The final allocation of sample numbers across each state was determined after investigating the variability in the farm size characteristics and range of vegetable crops grown by producers in each state. Sample selection for the ABARES vegetable survey was characterised by maximising sample continuity (that is, inclusion priority to the farms that responded to the survey in the previous year).

The survey of vegetable-growing enterprises included pre-interview questions to determine eligibility and stratification level, establish business structure and activities, confirm address and location and check availability of financial and production data.

Farm-level financial and physical information collected included vegetable production types, business receipts and costs, labour use, debts and assets and market value of business capital. The survey also included supplementary questions on irrigation water and chemical usage, pests and diseases, farm sale outlets, sources of information, future intentions, industry challenges and growers' relationships with main buyers. Data were collected by face to face interviews.

Farm-level estimates published in the report were calculated by appropriately weighting the data collected from each sample farm and using that data to calculate population estimates. Sample weights were calculated so that population estimates from the sample for numbers of farms and areas of vegetables planted correspond as closely as possible (by state and by groups of farms by area of vegetables planted) to the most recently available ABS estimates from data collected in the Agricultural Census and associated agricultural sample surveys. This weighting process ensures estimates are applicable for all commercial vegetable-growing farms rather than just those in the sample.

ABARES provided Hort Innovation with five reports as a part of this project; a report was provided to Hort Innovation examining the survey data over the period from 2006–07 to 2012–13 for levy paying vegetable growers only, three annual reports in 2014, 2015 and 2016 providing an overview of survey results as part of the ABARES *Industry Report* series and an overview of findings from the three surveys covering the period from 2013–14 to 2015–16.

Outputs

Valle, H 2014, *Trends in the Australian vegetable growing industry: 2005–06 to 2012–13*, ABARES Client report prepared for Horticulture Australia Limited, Canberra, June.

Valle, H 2014, Australian vegetable growing farms: an economic survey, 2012–13 and 2013–14, ABARES research report prepared for Horticulture Australia Limited, Canberra, November. CC BY 3.0.

Mifsud, C & Valle, H 2015, Australian vegetable growing farm businesses: an economic survey, 2013–14 and 2014–15, ABARES research report 15.10, prepared for Horticulture Innovation Australia Limited, Canberra, December, CC BY 3.0.

Ashton, D & Weragoda, A 2017, *Australian vegetable-growing farms: an economic survey, 2014–15 and 2015–16*, ABARES research report, Canberra, February, CC BY 3.0.

Outcomes

Results from these surveys are being used to bridge the information gap on the financial performance of vegetable farms as they are the only source of data on both physical and financial information for vegetable farms at state and national levels. The information collected by the surveys provide the industry with exclusive time series database that can be used for evidence-based decision making, conduct in-depth analysis of issues affecting the industry and to monitor changes in the vegetable industry. The results of this survey have been used extensively in order to maintain a viable and internationally competitive vegetable industry, improve grower profitability and adoption of best practice techniques. Some examples of the use of results of this project include:

- The Agricultural Competitiveness White Paper (2015)
- Development of Australian vegetable industry Strategic Investment Plan 2012–2017
- AUSVEG website and vegetables Australia magazine
- Victorian Department of Agriculture website
- Briefings to the Minister of Agriculture and Water Resources
- Tasmanian Fruit and Vegetable Industry taskforce

Results from the surveys are contained in the report series 'Australian vegetable growing farms: an economic survey' and can be accessed at www.agriculture.gov.au/abares/publications.

Co-operators reports are provided to each survey participant at the end of each survey to enable them to evaluate their farm performance against industry and state averages and allow growers to enhance their financial performance, resource allocation and investment decisions.

Evaluation and Discussion

The previous six surveys were developed following extensive discussions between ABARES, HAL/Hort Innovation and AUSVEG. This project was based on this solid foundation and feedback from the mid-term review which was conducted in April 2013 by HAL, AUSVEG and an independent consultant. The review committee consisted of Ben O'Neil (Independent Consultant), Jeff McSpedden (Chair, Vegetable IAC), Andrew White (Ausveg) and Ravi Hegde (HAL). The committee observed that the project has been very useful and covered current and interesting issues. This survey incorporated the feedback given by the review committee which resulted in producing a chapter specifically focusing on the commodities covered by the National Vegetable Levy.

The information collected by the surveys provided the industry with exclusive time series database that can be used for evidence-based decision making, conduct in-depth analysis of issues affecting the industry and to monitor changes in the vegetable industry.

Fieldwork for each survey of vegetable growers in 2014, 2015 and 2016 were successfully completed achieving the target sample of around 300 vegetable farms across Australia. Conducting face to face interviews was important to collect accurate information. The survey was well received with a number of vegetable growing farms participating over multiple survey years. Vegetable growers who participated in the survey were provided with a summary of their performance along with the average for their state which enabled them to evaluate their farm performance. Vegetable growers find this report very useful.

Milestone reports were provided to Hort Innovation at the end of each survey informing the progress of the individual survey.

Recommendations

The objective of this project was to collect and disseminate representative data on the economic structure and financial performance of the Australian vegetable growing industry to assist industry stakeholders in developing plans for the long term direction of the industry. The information collected by the surveys provided the industry with exclusive time series database that can be used for evidence-based decision making and conduct in-depth analysis of issues affecting the industry. The industry stakeholders find that the project is very useful covering quite current and interesting industry related issues. Noting that this is a very useful project, ABARES recommends continuation of this project as a follow up project to allow for continued time series database that can be used to assist industry stakeholders for future planning.

Scientific Refereed Publications

None to report

Intellectual Property/Commercialisation

No commercial IP generated

Project IP: Vegetable Industry Report- Financial Performance of Australian Vegetable Farms published as part of ABARES Industry Report series- IP in the project reports vest equally between the Commonwealth of Australia, represented by ABARES and Hort Innovation. ABARES industry report series are published under Creative Commons Attribution 3.0.

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ABARES relies on the voluntary cooperation of farmers participating in the annual Australian vegetable-growing farms survey to provide data used in the preparation of this report. Without this assistance, the survey would not be possible. Information presented in this report was mainly collected from farmers via on-farm interviews conducted by ABARES farm surveys staff. This project was made possible by Horticulture Innovation Australia Limited (through the National Vegetable Levy) and funding from the Australian Government.