Economic Policy and Research Manager for the Vegetable Industry

Lisa Maguire
AUSVEG Ltd

Project Number: VG07059

VG07059

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for the vegetables industry.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of the vegetable industry.

ISBN 0 7341 1788 4

Published and distributed by:
Horticulture Australia Ltd
Level 7
179 Elizabeth Street
Sydney NSW 2000
Telephone: (02) 8295 2300
Fax: (02) 8295 2399
E-Mail: horticulture@horticulture.com.au

Know-how for Horticulture™

VG07059 (June 30, 2008)

Economic Research and Statistics Development Program

AUSVEG Ltd

June 2008

VG07059
Economic Research and Statistics Development Program

The purpose of this final report is to communicate the successful delivery of project VG07059 Economic Research and Statistics Development Program

Project Leader: Ian James, AUSVEG Ltd

AUSVEG Ltd.
Suite 7, 756 Blackburn Road, Clayton North VIC
PO Box 563, Mulgrave VIC 3170
Phone: 03 9544 8098
Fax: 03 9558 6199
Email: info@ausveg.com.au
Web: www.ausveg.com.au

Funded by:

This project was facilitated by AUSVEG Ltd in partnership with HAL and was funded by the National Vegetable Levy. The Australian Government provides matched funding for all HAL's R&D activities.

Report date: 19 June 2008

Contents

Media Summary

This project was born out of the need to provide ongoing economic research and develop the statistical database for the Australian vegetable industry. The project was established as a short term measure (six months) to give the industry time to consider a longer term approach towards the provision of economic services to be dovetailed with the vegetable industry's strategic plan.

The project specification included the development of the range of economic data available on the industry through collaboration with the Australian Bureau of Statistics (ABS) and the Australian Bureau of Agriculture and Resource Economics (ABARE). Other work required included the delivery of speeches to selected groups, the writing of articles for industry magazines, reports on vegetable industry matters, economic services for the Australian Vegetable Industry Development Group and the Vegetable Industry Advisory Council, representation of the industry in public forums and in interaction with Government, liaison with Horticulture Australia Limited, representation on the Horticulture Market Access Committee and the provision of general information for vegetable growers on economic matters.

The key outcome of this project was delivery on these matters despite the resignation of the project team member responsible for this project midway through April. The industry has a much wider and more accurate database. There is now a range of data available for somebody with economic expertise to analyse. Processes have been set up to ensure the continuing provision of quality data for the vegetable industry. The ABS has at the time of writing (mid June) just delivered some extensive data which will enable more in depth analysis to be undertaken on the industry including some regional analysis.

Despite the advances made with this project the industry requires further and expanded data collection. Consistent time series data is essential. More extensive data on costs of production is needed to establish benchmarks to which individual producers can strive to achieve best business practice. Further economic work is required on supply chain demands and interchange of economic information with processors and retailers. The paucity of data on consumption needs to be addressed. Studies of demographic and lifestyle trends are essential to assist the industry in the achievement of the strategic direction outlined in VegVision 2020.

The industry requires ongoing economic expertise to provide the research necessary for the vegetable industry to demonstrate its importance, to provide the economic rigour in support of vegetable industry objectives and assist vegetable growers in understanding wider economic issues.

Technical Summary

This project continues earlier work aimed at improving the economic data and information available on the Australian vegetable industry. In the past, lack of information and economic analysis had hindered the industry's development. The industry had little idea of where it was at and it had insufficient economic knowledge to frame directions which would lead to a long term viable and profitable industry. Inadequate economic information meant that policy makers found it difficult to assist the vegetable industry in tackling the mounting issues it was confronting. With this in mind, the industry had set about attempting to rectify this problem with the employment of a research economist and the provision of funds to gather data on the industry. This project was put in place to enable this work to continue while giving the industry time to consider the most appropriate way forward in the provision and analysis of economic data and a range of other economic services.

The approach adopted was to initially gather existing data together, provide economic analysis of that data and make it readily available to industry participants. Discussions were held with the Australian Bureau of Statistics (ABS), the Australian Bureau of Agriculture and Resource Economics (ABARE) and other government agencies with the intent of improving the range and timeliness of data on the industry. A great degree of development work was completed which will provide the industry with vastly improved information going forward.

The major outcome of this work has been the delivery of data previously lacking on the industry. A range of data on the domestic operations of the Australian vegetable industry is now available enabling economic commentary on trends in the industry to be provided. Data covered includes, production, number of establishments, size of farms, State distribution, grower distribution by earnings, plantings, yields and the value of vegetable production. Extensive trade data has been collected and analyzed and has played a key role in highlighting the loss of trade competitiveness of the Australian industry. A number of specialized commodity reports have been produced and published. The industry has benefited by the use of the economist's expertise in discussing various issues with Government including Free Trade Agreements, bio-security access issues and in interaction with others on a number of issues including climate change and carbon emissions.

Further development of this work is essential for the industry's future well being. Ongoing development work with the ABS is required to lift the timeliness of production related data and with ABARE to provide the necessary financials on the industry. Further in depth analysis of trends in trade is required as the industry has suffered a significant loss of export markets and is under direct import threat. Benchmarking studies and analysis is required to encourage best practice in the industry and to identify the areas where cost competitiveness and/or quality have been lost.

Introduction

Historical background

In the past, the Australian Vegetable Industry has been poorly serviced with economic information and analysis. Data has been woefully inadequate. Some of the reasons for this are rooted in history.

The Australian vegetable industry grew out of the need to supply domestic urban markets. The industry was extremely fragmented and, with the exception of growers producing for the domestic food processing industry, farms were grouped around the major urban centres. Supplying domestic rather than export markets was the focus of the industry. As a consequence, unlike for other agriculture industries, the vegetable industry failed to establish a sense of national purpose and identity. The competitor was the vegetable grower next door. Little attention was paid to globalisation and the onset of new competitive forces in a freer trade environment. The industry was supply focused with an "I'll take any price approach" rather than producing to meet market needs. Exports were largely opportunistic

In 2004, a sense of looming crisis and inadequate returns to growers prompted the industry to provide the resources to undertake economic research and develop the industry data base. Processors and retailers were making increasing demands on growers which were raising costs of production. Growers were responding by lifting productivity and yields but to many growers this game appeared to be like "the dog trying to catch its tail". Lack of adequate data meant that it was difficult to quantify what was happening. There were increasing signs of despair in the industry. Anecdotal evidence suggested that the industry was aging, there were few new entrants and the inter generational transfer of vegetable farms was in decline with a high percentage of growers leaving the industry.

Things were equally as bad on the trade front. While export markets were relatively small for an Australian agriculture industry, they were nevertheless an important income source. Significant markets were being lost in Asia, particularly in Malaysia, Singapore and Japan to Chinese competition. In addition, growers supplying the processing side of the industry were facing significant competition from processed vegetables out of Europe and from New Zealand. Moreover, there was an over-riding feeling of inevitability that the Chinese and other low labour cost countries would soon enter the Australian market further eroding Australian growers markets and profitability.

Between 2005 and 2007 projects were put in place to collect more comprehensive data on the industry and the industry employed an economist. The data and the results of the economist's work were to be delivered progressively over 2007 and 2008. As well the industry felt there was a need for ongoing input from an economist to support the industry on a range of issues both industry specific and in the broader context of economic debate.

Why was this project undertaken?

Funding for the above projects expired in 2007. This project was conceived to continue the data development and provision of economic services through early 2008.

In the past the vegetable industry concentrated its resources on production issues. Research and development projects had concentrated on pests, diseases, yields and productivity improvements on farm. There had been some projects that focused on marketing issues and demand factors but none that took a holistic industry view. The employment of an economist to analyze industry wide economic developments was regarded as essential if the industry was to have any hope of identifying, quantifying and analyzing the issues it was confronting. You have to know where an industry is at and identify the problems and opportunities before concerted action can be devised and undertaken to address these problems. This was a significant shift in the thinking of the industry.

What were the aims of the project?

The project aimed to deliver the following:

- Articles written on economic issues for industry magazines
- Research reports written on domestic production and vegetable commodities
- Domestic production data collected and analysed
- Commence development work on per capita consumption estimates
- Research trade data and produce a trade data report
- Provision of a weekly note on economic issues
- Participate as a member of the Horticulture Market Access Committee
- Liaise with the ABS on the agriculture survey
- Design supplementary questions for the vegetable farm survey to be undertaken by ABARE
- Provide and comment on data for the media on behalf of the industry
- Maintain close contact with HAL on vegetable industry issues
- Undertake speeches on behalf of the industry when requested
- Be actively involved in industry forums
- Provide economic support for the vegetable industry export development group

What are the implications for the industry?

The implications for the industry are that it needs to consider a broad range of issues that will impact on the industry's viability. From a vegetable growers perspective he/she needs to be focused on the industry dynamics. Attention to what is happening beyond the farm gate is essential if growers are to prosper in the future. While the production of high quality produce remains a given, merely taking the attitude that this is all that is required will sound the death of the industry under the weight of competitive forces. The vegetable industry not only needs to address its own issues but needs to be aware and adopt

appropriate responses to the issues of the day such as climate change, rising input costs and carbon emissions trading.

What is the likely impact of the results?

This project delivered a range of essential services that the industry must have. Expanded and more accurate data has been provided to enable the industry to achieve its goals and develop appropriate policy responses to the trends revealed by that data. The project will if further developed lead to a more dynamic industry, focused on its markets (both domestic and export), with enhanced ability to cope with the globalisation of the Australian vegetable industry. Growers now have an enhanced knowledge of factors impacting on their business beyond the farm gate. Further development of economic analysis and input will enable growers to adopt better business practices. New business skills will be applied by both growers and their employees to enhance productivity. The provision of economic data and economic services is a key ingredient in enabling the industry to achieve the goals laid down in the industry strategic plan,VegVision 2020.

Materials and Methods

The method and materials required for this project was as outlined in the project brief which laid out the tasks to be completed over the six month period of this project. Some of these tasks related to the provision of economic services while others were dependent on the delivery of data from the ABS. In economics there is no substitute for hard data. Even if difficult to collect, and what ever the inbuilt inadequacies of that data, without data, there can be no industry analysis. Hence, there is little alternative to the hard work of setting up collection of economic material for analysis. This by necessity takes time and is a stage by stage process with incremental improvements. The data base, while not sufficient in itself, is an essential pre condition for properly researching and analyzing trends which are by far the most important ingredient in any industry analysis.

Much of the groundwork for the delivery of data had been prepared in previous funded projects. The expectation was that detailed information on the vegetable industry would arrive in the period of this project. A greatly expanded vegetable section had been devised for the 2006 Agriculture Census and 2007 Agriculture Survey covering a wider range of vegetables. As an example Asian vegetables which had grown in popularity in recent years were now included. Also different production techniques were identified in vegetables where they had become important. For example, there has been a significant shift in the production of tomatoes with growth in greenhouse tomatoes at the expense of field tomatoes. Failure to separate out these can lead to distorting data as a fall in hectares planted to tomatoes may simply reflect a change in production techniques rather than a trend decline in tomato production. In the meantime it was important that discussions occurred with the data providers to ensure the ongoing collection of data

The delivery of the detailed data that the industry required did not occur until near the end of this project and after the resignation of the economist employed on this project. This data is now available but will require some work to provide an adequate time series

on domestic production trends in the industry. This is due to a significant change in the basis of collection of data on the industry. The ABS data is now based on the new Business Register which relies on data collected under the Australian Business Number classification. This new method of collection has had important impacts on the industry. Both the number of vegetable growers and the value of vegetable production are significantly larger than previous data had revealed. While this project delivered on economic analysis of the more limited data releases, detailed tabulation requires extensive spreadsheet development work, as past comparisons without adjustments will lead to incorrect guidance as to trends.

There was no such problem with trade data on the vegetable industry and continual analysis of trade information occurred. Data was updated, and new tables were completed and posted to the AUSVEG Ltd. website. The trade data was researched and the results of that research published in a Trade Update Report. A copy of this report can be accessed from the AUSVEG Ltd. website (see appendix 1). In addition, extensive research was undertaken on trade issues associated with China in support of a project being funded by the Australian Vegetable Industry Development Group. Data provided and analysed formed the basis of critical parts of this study not only in relation to Australia/China trade but also in respect of the impact of China in key Australian export markets.

The other key piece of data collection put in place was the criteria for the conducting of the ABARE vegetable farm financial survey. The economist employed for this project ensured that the questions to be asked on vegetable farmers' finances were pertinent to the industry. Responses to questions are important for building a time series so that developments in vegetable farm financials can be compared over time. The economist also developed and reviewed 30 supplementary questions aimed at providing key data for the industry. This information is important in covering key gaps in industry data and information at no additional cost to the industry. These questions are attached as appendix 2.

The method adopted for the delivery of economic services was dictated by time deadlines and other timing factors outside the control of the economist. Under this program seven major pieces of work were researched and written for the industry on economic matters pertaining to the vegetable industry. These were published in vegetable industry magazines and were widely applauded for their interest and ease of understanding. The articles varied across a range of issues including topical issues such as bio-security and climate change. An example is included at appendix 3.

A further method of delivering economic research to the industry was through the publication of a weekly note. This was aimed at broadening growers understanding of economic issues and offering understanding of broader economic issues to assist them in their businesses. It also provided a channel of communication in regards to work being undertaken for the industry by the economist on data development and a range of issues. Two examples of these weekly events are attached at appendix 4.

The economist was active on the Horticulture Market Access Committee and in providing input on issues of relevance to that body. Over the short life of this project the key issues related to Free Trade Agreements and bio-security issues. The economist pursued these on behalf of the industry. A number of teleconferences were arranged with the Australian Quarantine Inspection Service and Bio Security Australia over continuing outbreaks of potato spindle tuber viroid in tomato crops in Western Australia Work was undertaken to co-ordinate a response to Taiwan's notice to ban certain root vegetables and increase testing on others.

The economist was in close contact with Plant Health Australia (PHA) over owner re-imbursement costs and other issues associated with the Emergency Plant Pest Response Deed. A number of meetings were held in Canberra on this and other plant health issues including the economic cost of exotic weeds. Liaison was established with the newly appointed economist for PHA. The economist also attended other important meetings on behalf of the industry in Canberra. These included a statistical workshop conducted by the ABS

Despite the late release of data a snapshot report on domestic production was produced. One of the further written tasks required of this project was the production of two specialised vegetable commodity reports. In the end four of these were delivered, potatoes, carrots, onions and lettuces. A copy of the carrot report is attached at appendix 5 and copies of the other reports can be accessed from the AUSVEG Ltd. website (see appendix 5).

The project began work on per capita consumption of vegetables and trends. There has been no official data on this since 1999. The preliminary results of this work were delivered in the commodity reports.

The economist participated in ABARE's annual Outlook Conference in March 2008 and along with AUSVEG Ltd's chairman and CEO entered into discussions with the new minister for Agriculture, Forestry and Fisheries, Tony Burke, on behalf of the vegetable industry. The economist was an active member of the Australian Farm Institute on behalf of the industry. He provided key input into discussions on the progress of the industry's strategic plan being reviewed by Concept Consulting. He also contributed to the vegetable industry's input into Future Focus, being undertaken by the Centre for International Economics on behalf of HAL.

The economist participated in the vegetable industry's annual meeting on research and development projects as an ex-officio member of the production group to advise on economic implications.

The economist gave three presentations one to a group of growers in East Gippsland, Victoria. This was the first time that these growers had had such contact. A copy of this speech is included at appendix 6. There were numerous requests for data which were answered within 24 hours of the request. Also a number of media interviews were given on economic data and issues relating to the industry.

Results

The project has delivered a much more robust level of data than the industry had previously. Most of this detailed data arrived at the conclusion of this project and awaits research and development. The data that was available and able to be analysed in the short time frame of this project is of great significance to the industry. It shows that the productivity and efficiency of vegetable growers is at the forefront of Australian agriculture. It reveals that in the past the vegetable industry has been considerably undervalued. As an example the value of production which was previously given as $2.13 billion is now $2.75 billion and the number of growers is 30% larger than previous data had suggested. In addition, the industry now has detailed information on the growth in the greenhouse production of vegetables. The data reveals increasing returns to the larger producers suggesting that economies of scale are important. It also suggests that returns are better for fresh production and that the rates of return for growers producing for the processing sector are inadequate.

The Trade Report provides industry with detailed information on vegetable products trade as well as major source and destination countries. The decline in export markets and the sharp increase in imports exposed by the data suggest a loss of competitiveness and the need for a new approach to marketing. At the same time the data reveals some positive stories. Growers are responding to the new challenges and there has been some product innovation. New export markets are being developed in the Middle East to replace the losses in South-East Asian markets and there has been a concentration on recovering lost markets in Japan with enhanced quality and new innovations such as mixed vegetable juices.

The project has delivered extensively on the tasks as outlined in the materials and methods section of this report. The industry now has available to it a great deal of data and information that was previously unavailable. Further analysis and research into this data will strengthen the industry by helping it to substantiate issues that it believes have been ignored in the past. The project has enhanced the industry's professionalism in the eyes of the media and government bodies that the industry interacts with. The expertise provided has been invaluable in providing the industry with an economic voice in policy and other forums.

In short, economic expertise has been provided to:

- help achieve the vegetable industry's strategic plan
- assist growers in developing their businesses into best practice
- enhance grower understanding of market developments beyond the farm gate
- develop an understanding of trade issues and the impact they have on the vegetable industry
- advance the vegetable industry in public and economic forums
- expand domestic consumption of vegetables and develop export markets
- provide the analysis of data to assist policy makers in developing appropriate policies for the industry.

Discussion

The achievement of the original outcomes and objective were affected by the short tern nature of this project (six months), the dependence on data delivery over which the industry had no control and the impracticality of employing somebody to continue the project following the resignation of the economist employed on this project. Nonetheless, the work output of the economist far exceeded expectations. In the end nearly all objectives were met and a number exceeded. A discussion of the eventual outcomes achieved against the original objectives follows.

1. **The writing of articles on economic issues of concern to the vegetable industry.**

This outcome achieved its original objective with seven articles published in industry magazines. The outcome was better than expected with strong positive feedback particularly in relation to bio-security issues in the industry and the raising of awareness in the vegetable industry of the importance of being pro-active and understanding the issue of carbon emissions and the likely economic impact on the vegetable industry.

2. **The production of research reports on the domestic industry, two specialized vegetable commodity reports and a regional study on release of regional data by the ABS.**

A research report was completed providing a snapshot on the domestic industry but has not yet being published to the website as it awaits one more critical piece of data on the industry which will be released at the end of June 2008. Also the regional study was not completed because the data arrived in the AUSVEG Ltd. office two months after the resignation of the economist and one week before the finalisation of this report. This was disappointing but the information can be used if the industry decides to continue a project which involves ongoing continuation of data analysis and economic services. As if to compensate four rather than two vegetable commodity reports were completed exceeding the original objective.

3. **Economic support for the vegetable industry export development group.**

This was a very time consuming exercise and far exceeded the expected support required. The reason for this was the difficulty in aligning trade data from overseas countries, especially China, with that provided by the Australian statistical bureaus. In the end the data sets were extremely useful in the completion of the major study undertaken by this group. Recognition of the work input has been given and a call for more resources to be allocated to enable the vegetable industry to undertake projects of this ilk in future. The expected outcome clearly exceeded expectations.

4. **Economic support for the vegetable IAC and other industry bodies.**

The economist played a key role in economic advice to the production group of the IAC in its annual meeting in March and subsequent discussions. He was also a key industry participant in the Australian Farm Institute and the Australian Association of Agriculture and Resource Economics Society.

5. **Trend analysis of domestic data production**.

Considerable background work was completed on this objective. However the changes in the basis of collection of data from the ABS meant that the previous format applied to data on the industry could not be continued. New formats for tables had to be devised. This requires considerable work and the resignation of the economist meant that the work was not completed before his departure. This is largely a presentation problem rather than a substantive data problem and if the industry decides to allocate resources to this type of project in the future can be delivered within a reasonably short period of time.

6. **Commence development of production of vegetable consumption data.**

Spreadsheets were established after discussion with other economists and statisticians and estimates made in relation to a number of key vegetables. This produced data on per capita consumption the first such data since these estimates were dropped from official statistics last century. The work involved exceeded that expected and lays a solid basis for ongoing work in this area.

7. **Completion of a Trade Update report to be published to the AUSVEG Ltd. Website**

Analysis of trade data was undertaken and a Trade Update Report produced to complement the Annual Trade Report. This was published to the AUSVEG Ltd. website in April. This information is of key importance to the industry in defining its level of competitiveness in a globalised economy.

8. **The writing of a weekly note on economic issues and distributed to growers and other industry participants.**

AUSVEG Ltd. has received huge complements on this outcome. Industry participants find the information provided informative as well as entertaining. This weekly note has contributed profoundly to industry participants understanding of economic issues. As one grower has responded, the Weekly Note demystifies economics.

9. **The preparation of questions on financial performance and other supplementary data questions for ABARE surveyors to use in interviewing growers**.

The economist ensured that this work was completed before he left so that the financial performance survey could be completed in May. The results of this year's survey

compared to 2007 will provide the basis for some useful comparison on changes in thinking and approaches to key industry issues by vegetable growers.

10. **Participate as a member of the Horticulture Market Access Committee and be responsible for all market access issues, tariff and non tariff, relating to vegetables**.

Feedback suggests that the economist was well regarded by other members of this Committee and contributed in a meaningful way. Significant input revolved around Free Trade Agreement issues and bio security access issues. The latter was of particular importance for the vegetable industry with problems associated with tomato seed imports and moves by Taiwan to tighten phyto-sanitary import requirements with strong adverse impacts on Australian exports to that market.

11. **Research and argue the vegetable industry's case with Plant Health Australia on economic issue**s.

The economist continued to work with Plant Health Australia to resolve the dispute between the vegetable industry and Plant Health Australia over the signing of the Emergency Plant Pest Response Deed. The economist actively participated in workshops on pest and disease control on behalf of the vegetable industry and this objective was clearly met.

12. Provide data and information on the industry to interested parties.

Data provision was continually undertaken for all interested parties and the economist conducted a number of interviews with journalists which were aired on rural radio and national television.

13. Deliver speeches to public forums on behalf of the industry.

The economist made three presentations over the period employed, one to Rotary Australia, one to an international delegation of growers and the other to vegetable growers in eastern Victoria.

14. Work closely with the HAL economist and vegetable industry development officer.

The economist worked closely with Andrew Collins the then HAL economist and with Lucy Keatinge the vegetable industry services manager.

Clearly the project has achieved its objectives and the outcomes have enhanced the industry's ability to understand and meet the challenges that it faces. Continuing collection of data and ongoing analysis is required in the future to achieve the full benefits of this project. There are limitations on the contribution that this project can make to the industry. As the old saying goes, "you can lead a horse to the trough but you can't make it drink the water." Economic research and development is like the trough. It

provides the essential ingredient for survival and revitalization. Without it the industry has no knowledge as to where it is at and where it is heading. But in the end, it is the take up of the messages and course of action by participants in the industry that will deliver the benefits.

Technology Transfer

Economic data and information was transferred on a daily basis to a wide range of industry participants. The target groups and the major means of communication were:

Vegetable growers - through the State organizations, AUSVEG Ltd. Board members, the industry development officers in each of the States, meetings with growers and the AUSVEG Ltd. website.

Supply chain participants – AUSVEG Ltd. website, discussions in pre arranged meetings.

Media – interviews were conducted with ABC rural radio commenting on a wide range of industry issues and economic data, information and discussions were held with the popular press and frequent dialogue maintained with the rural and regional press. Often these stories were generated from the AUSVEG Ltd. weekly newsletter or information that was regularly updated on the AUSVEG Ltd.website.

Horticulture Australia Limited – there was ongoing transfer of economic research and development liaison with HAL, largely through the HAL economist.

Government –The ABS and ABARE were key government agencies where there was a clear two way transfer of technology. Technology was transferred from this project to Bio-Security Australia through the economist's role on the Horticulture Market Access Committee. The transfer of the research and development undertaken by the economist into pest incursions was an important input into the work of Plant Health Australia.

Publications – a regular two page spread on economic issues was published in the industry bi-monthly magazine, Vegetables Australia. Articles were also produced for more targeted publications such as Potatoes Australia. Economic news items were written for the AUSVEG Ltd. Weekly.

Consultants – the results of the economic analysis undertaken was readily available to industry consultants and economic input from this project was used to assist the production of a major paper on the impact of China on the vegetable industry for the Australian Vegetable Industry Export Development Network.

Public and interested parties – through the AUSVEG Ltd. website and responding to email requests for information.

Recommendations

Recognition of the importance of economic research and development in positioning the industry in the next decade has been given in numerous studies and forms a key role in the strategic direction been undertaken by the industry under VegVision 2020. Economic research and development was the key element identified in the three strategic areas outlined in the paper Setting Directions for the Future of the Vegetable Industry released in November 2005. Some examples of recommended strategies identified in that report requiring action out to 2009 were:

- Identify and monitor cost structures and market strategies of overseas competitors
- Pursue import trade measures consistent with World Trade Organization agreements
- Develop and resource strategies for identifying specific export markets and products
- Develop and implement a benchmarking strategy for the industry
- Develop and implement new business models to supply customer requirements
- Address market knowledge gaps to enable domestic and export market growth Improve efficiency in how information is collected, maintained and distributed.

There is a need for ongoing research and development into economic issues confronting the industry. This includes not only issues which are industry specific but broader issues with major economic impact, such as climate change, rising energy costs and carbon emission trading schemes. The established data bases need to be maintained and updated. Data to be useful needs to be collected as a time series rather than in cross sectional studies. For instance, the value of the improved flow of data flowing from the ABS and ABARE will be diminished unless similar data is collected on an ongoing basis.

The industry should give further consideration to continuing this project in some form as well as providing the necessary finances to expand the economic data base. For instance, there is a need for a time series on the financials of vegetable growing along the lines of the ABARE Farm Surveys so that cost and revenue issues can be addressed in the industry. Benchmarking studies need to be undertaken to identify best practice so that the industry can lift its standards. Studies need to be conducted here and in competitor countries to ascertain where the industry is competitive or non-competitive. Further trade analysis needs to be undertaken to identify market niches overseas and where the looming competitive threats are coming so that action can be taken.

Further research and interlinkages along the supply line remain an essential and urgent need. The industry needs to focus its energies on the demand side of the economic equation and improving business practices. Ignoring these and focusing on raising yields is to the long term detriment of the industry. It undermines prices and fails to enhance industry profitability. Demographic trends, lifestyle changes and broader health issues all need research and development and to be linked into the broader economic analysis.

Acknowledgements

This project would have been impossible to complete without the support of all participants in the industry. It was gratifying that they were willing to assist the delivery of this project and to listen to the messages that it was delivering. In many cases the message was not comforting.

Collecting data and economic information can be a pain to many people as it involves time and effort and there are often doubts as to what the information will be used for. Nonetheless, the support of growers for this project has been nothing short of sensational.

Support from others in the vegetable supply chain outside the grower sector has been positive. While more work needs to done on this score the willingness to openly discuss economic issues, provide information when requested and look at ways to progress the industry forward is commendable.

At the risk of failing to give due recognition to some deserving people, a special vote of thanks for support for this project goes to Lucy Keatinge, the vegetable industry services manager at HAL, who has been a source of inspiration and provided invaluable assistance throughout the life of the project. AUSVEG Ltd. would also like to acknowledge the support of Stephen Winter the co-ordinator of the Horticulture Market Access Committee.

APPENDICES

APPENDIX 1

http://www.ausveg.com.au/statistics.cfm?CID=6667

APPENDIX 2

2008 Vegetable Industry Supplementary

Environment

1. Source of irrigation water in a normal year? *% of total water used*
    a) Irrigation scheme
    b) Ground water bores
    c) Diversions from rivers/streams
    d) Town water (mains supply)
    e) Farm storage dams
    f) Treated or reclaimed urban/industrial water
    g) Other (specify)

2. If you plan to increase the amount of irrigation water available to your farm where would you mainly source the water? Y/N *(more than one response allowed)*
    a) Does not plan to increase the amount of irrigation water
    b) Increase size of on-farm storages
    c) Increase water re-use on farm
    d) Purchase additional water entitlements/licences (ground water or surface)
    e) Access more treated urban/industrial water

3. Have you conducted a risk assessment of the (food) safety of your water source?

4. Have you conducted a risk assessment of the sustainability/future availability of your water source?

5. Have you reduced your overall chemical use in the past 3 years?

6. Do you test produce for chemical residues to verify that chemicals are applied correctly or that maximum allowable residue levels are not exceeded?

7. Do you have one of the following food safety programs in place and if so which one?
    a. Freshcare
    b. HACCP
    c. SQF1000
    d. SQF2000
    e. WQA
    f. Other

8. Have you considered participating/implementing an environmental management program to your property? Y/N

Pests & Diseases

9. Do you follow a set pest and disease monitoring program (Y/N)

If Q 9 = N go to Q11

10. Which of the following best describes how you monitor pests and diseases on your farm? Y/N
    a) Routine surveillance
    b) Intermittent surveillance
    c) Occasional surveillance
    d) Casual surveillance

11. In the event of an exotic pest or disease outbreak in the vegetable industry, would you support a grower levy that would be matched by government funding to meet the costs of eradication? Y/N

12. Would you also support using proceeds from an industry levy and joint government funding to compensate growers for lost income if crops are destroyed as part of the eradication effort? Y/N

Farm Production & Sale Points

13. On the basis of total vegetable revenue, what proportion of your vegetables was produced under protected cropping (eg glass, poly, plastic or shadecloth structure) in 2005-06 (%)

14. On the basis of total vegetable revenue, what proportion of your vegetables produce was sold through the following outlets in 2005-06 (%)
    a) Local capital city wholesale market
    b) Local market (inc. farmers markets, etc.)
    c) Interstate
    d) Export
    e) Direct to processor
    f) Direct to retail
    g) Direct to food services sector

15. How do you rate your relationship with your
    a) wholesaler
    b) retailer
    c) exporter
    d) processor
    e) capital city market
    f) local market

Code: 1 = Excellent, 2 = Good, 3 = Satisfactory, 4 = Poor, 5 = Don't have a relationship

16. What is the level of value adding you conduct on this farm?
(Code: 1 = Very High; 2 = High; 3 = Medium; 4 = Low; 5 = None)

Education and training

17. What is your highest level of education
    a) primary school
    b) part secondary
    c) complete secondary
    d) tertiary

18. During the previous 2 years have you participated in any of the following courses and training activities to improve your farm management and technical skills? (Y/N) *(more than one response allowed)*
    a) Demonstration sites or field days
    b) Conferences
    c) Workshops or short courses
    d) Tertiary level course
    e) Obtained specialist training/advice from a consultant
    f) Other (specify)

19. Which type of training would help you develop your business? *(more than one response allowed)*
    e) Crop types and varieties
    f) Soils and fertilisers
    g) Irrigation and water supply
    h) Pest control
    i) Financial management
    j) Business planning
    k) Staff management and OHS
    l) Marketing
    m) Other (specify)
    n) I don't need training

20. Do you use a computer/internet for any of the following? (Y/N) *(more than one response allowed)*
    a) Financial affairs (eg. account keeping, net banking, paying accounts etc)
    b) Market information (eg. prices)
    c) Weather information
    d) Purchasing farm inputs
    e) Education resources (related to farm business)
    f) Media releases
    g) Industry links
    h) Other (specify)

Future Intentions

21. What priority do you place on the following areas for future research and development expenditure?
(Code: 1 = Very High; 2 = High; 3 = Medium; 4 = Low; 5 = None)

a) Pest and disease management
b) More productive/higher yielding varieties
c) Farm productivity (exc. higher yielding varieties)
d) Marketing and market development
e) Consumer research
f) Chilling/storage technology
g) Environmental sustainability

22. Do you expect to do more value adding on farm in the future? Y/N

23. Would any of the following management practices improve the productivity of your farm business? Y/N *(more than one response allowed)*

a. Introduce or expand mechanisation
b. Introduce or expand the use of technology
c. Increase scale to take advantage of economies of size
d. Better control of finances
e. More effective use of labour
f. Introduce more productive/higher yielding vegetable varieties
g. Introduce GM vegetables
h. Nothing, already as productive as possible
i. Other (specify)

24. What is the major growth opportunity for your vegetable growing business? Y/N *(more than one response allowed)*

a) Exports
b) Selling direct to retail
c) Direct to food services sector
d) Niche products
e) High quality produce
f) Value adding on farm
g) Under protective cropping (eg glass, poly, plastic or shadecloth structure)
h) Hydroponics
i) Other (specify)

25. Which of the following best describes what you expect to be doing in 5 years time? Y/N

a. Vegetable production
b. Other agricultural production
c. Leave agriculture.

26. Do you intend to expand the area of vegetable crops in the next 3 to 5 years? Y/N
(If Q26 = N go to Q28)

27. How do you intend to expand the area of vegetable crops in the next 3 to 5 years? Y/N *(more than one response allowed)*
    a. Use the existing vegetable growing area more intensively
    b. Set-up additional vegetable growing area using existing farm area
    c. Purchase more land
    d. Lease more land
    e. Sharefarming arrangement.

<u>Constraints</u>

28. What are the constraints that may prevent you from changing your vegetable crop mix? *(more than one response allowed)*
    a) Soil type or topography
    b) Climate suitability
    c) Water availability
    d) Unsure how to choose alternative crops
    e) Inexperience with growing a crop
    f) Unsure how to market the product
    g) Other (specify)

29. Are any of the following major impediments to you developing export markets? Y/N *(more than one response allowed)*
    a. No local agents
    b. Prices not high enough
    c. Shipping costs to high
    d. Transport not available (inc. shipping)
    e. Additional infrastructure (chilling/storage/packing) needed on farm
    f. Too hard / too time consuming.

30. Are any of the following major threats to the future viability of your vegetable growing business? Y/N *(more than one response allowed)*
    a. Increased on farm input costs (eg water, fuel, fertiliser etc)
    b. Increased distribution and marketing costs (eg transport, labelling etc)
    c. Falling prices due to import competition
    d. Falling prices (due to other reasons)
    e. Availability of irrigation water
    f. Change production practices to ensure environmental sustainability
    g. Urban expansion
    h. Closure of local processing plant
    i. Access to, or cost of, labour
    j. Other (specify)

APPENDIX 3

Biosecurity is looming as a major issue for the Australian vegetable industry.

Pests and diseases have always been around and have continually posed a threat to the income of Australian vegetable growers. In the past, relative to other countries, Australia was blessed by its relative isolation and was spared the ravishes of some well known exotic diseases. Strict quarantine and active surveillance at the border contributed to preventing the incursion of major exotic diseases. This task was easier in the era of steamships and limited travel.

Over the last twenty-five years lines of communication have narrowed. Volumes of trade have increased enormously as has the diversity of transport modes and packaging. At the same time there has been an explosion in human and animal movement across Australia's borders. In short, the risk factors associated with the transmission of pests and diseases have expanded exponentially.

As bio security risks were growing, resources for monitoring them were not, at best, or being cut back, at worse. Funding reductions and rationalisation of personnel in Departments of Agriculture at both the Federal and State level saw a bank of knowledge removed from Australian agriculture. Those that remained struggled with limited resources that prevented the development of easily accessible and well documented data to assist in assessing bio security risks.

There were some positives. A comprehensive review of Australia's quarantine arrangements was ordered by the Keating Government. The so called Nairn Report which made 109 recommendations was delivered to the Howard government in late 1996 which responded in August 1997. Three themes were important for the Australian vegetable industry.

1. Addressing the bias in Australian quarantine towards animal rather than plant health
2. Development of a partnership approach between industry, government and the general public
3. A holistic approach towards bio security with efforts at pre-border, border and post border.

Some progress has been made on each of these although the speed of implementation has left much to be desired. The Office of the Chief Plant protection Officer was established in the Federal Department of Agriculture, Fisheries and Forestry , Plant Health Australia (PHA) was set up in 2000 and the Plant Biosecurity Cooperative Research Centre in November 2005. AUSVEG Ltd. is a member of PHA and engages in regular dialogue.

After much industry input PHA and AUSVEG Ltd. launched the national vegetable industry bio-security plan in May 2007 which outlines a course of action in the event of a major pest incursion.

Despite this progress the bias against plant industries remains. Just look at the publicity that the outbreak of equine influenza received not to mention the level of taxpayers' money thrown at the industry. When did you read a headline about diamondback moth or whitefly and the impact that these and other pests have on vegetable growers incomes? Nor are the existing arrangements for border control adequate. Inspections rates on incoming containers are low. It is not just in the importation of food products where the biosecurity risk for Australian vegetable growers lies. Exotic pests can attach to containers of non food items. Imported seed remains a huge risk as evidenced by the continuing outbreak of potato spindle tuber viroid in tomato plants in the Carnarvon area of Western Australia.

There are also concerns about the use of bio security issues as an effective trade barrier. Health and safety requirements are tending to replace import tariffs and quantitative restrictions on imports as the major barrier to agriculture trade. Australia's image has suffered in foreign markets because of a belief that Australia has been using phytosanitary issues as an effective trade barrier. More formal complaints have been brought against Australia than any other member country of the World Trade Organization (WTO). Under WTO rules, countries have a right to prohibit the import of certain foods to prevent the import of exotic pests and diseases providing the judgement is based on scientific grounds. Both the 'Nairn Report' and a subsequent report, the 'Corish Report', headed by Peter Corish, a former president of the National Farmers' Federation, which reported in 2006, called for the establishment of an independent statutory authority to oversee Australia's bio security and establish integrity in international circles as to the scientific basis of Australia's desire to protect the country from bio security risks.

The danger for Australian vegetable growers is that other countries may react in a tick for tack in response to other products being excluded from Australia on rather spurious scientific grounds. At present a number of countries are reviewing their bio security arrangements. There have been some difficulties in respect to bio security arrangements on trade between Taiwan and Australia. The Australian vegetable industry has been caught in this vortex with the Taiwanese proposing to prohibit imports of Australian carrots on the grounds of evidence of burrowing nematode and the risk that the continued importation of Australian carrots imposes. Taiwan is an established market for Australian carrots and no evidence of burrowing nematode has been found in carrot growing areas of Australia.

Whatever the outcome of the present deliberations the case sends a powerful measure of the need for a close look at Australia's bio security arrangements. For the vegetable industry it highlights the need for continual on farm monitoring. Under WTO rules it is not sufficient to argue that the growing area has never had a particular pest. What is required is evidence of active testing for pests and diseases. It also highlights the need for improved data bases and records to provide the necessary evidence to prove that certain

pests and diseases are not a risk. We will all groan at the increased paperwork but it is a marketing reality. After climate change food safety is the next big issue and Australia must ensure that it has in place systems that ensure the integrity of the food chain.

As such the announcement of a complete review of Australia's bio security arrangements by Tony Burke, the Minister for Agriculture, Fisheries and Forestry, in February was welcomed by the vegetable industry. The Review is to be headed by Roger Beale and at present is gathering information and submissions from a range of interested parties. The Review has wide terms of reference and will look at a range of issues including the functions of the Australian Quarantine and Inspection Service (AQIS) and Biosecurity Australia, the scope and adequacy of current animal and plant quarantine systems, as well as the effectiveness of import and export inspection and certification procedures. The 'Beale Review' is due to report to Mr. Burke by September 30, 2008.

New Information on the Vegetable Industry.

The Australian Bureau of Agriculture and Resource Economics (ABARE) will once again have their survey officers out on vegetable farms in April and May of this year assessing the financial performance of Australian vegetable farms. Last year the survey officers were overwhelmed with the willingness of growers to give up their valuable time to participate in this important industry survey. While these surveys have been conducted for a number of years in other agriculture industries this was a first for the vegetable industry. There was strong feedback that growers valued being asked and were willing to provide the data to advance the vegetable industry and take it into mainstream agriculture. The surveys are conducted in face to face interviews and around 400 vegetable growers are interviewed. The interview takes about two hours and there is often some follow up telephone calls to clarify information. The questions largely concentrate on the financial performance of last financial year (as most growers have usually signed their financial accounts off by April) with some questions devoted to existing financial conditions. Additional supplementary questions are also asked on a range of issues. All the data collected remains confidential and is aggregated out to give industry averages. Growers are strongly urged to support this year's Survey.

This Survey is part of an ongoing annual survey, sponsored. by AUSVEG Ltd. and financed through Horticulture Australia Limited (HAL). The financial survey is one of the three statistical legs aimed at providing more comprehensive data on the vegetable industry. The other two statistical legs relate to production and trade flows (exports and imports). The statistics collected will be used for a wide range of purposes with the ultimate aim of lifting returns to growers through identifying issues and problems confronting the industry.

Some of the financials from last year's survey were included in Volume 3.3 of Vegetable Australia in December last year. But some important industry data also emerged from the supplementary questions.

Water or lack thereof was the big issue throughout 2007. Nearly all vegetable farms undertake some form of irrigation. The major source of water was groundwater followed by on farm dam storage and then irrigation schemes. However there was wide variability around the country. Groundwater was most important in the Northern Territory, Queensland and South Australia with over 50% of water used sourced from bore. In contrast NSW and Tasmania were more dependent on farm storage dams. Western Australia and Victorian growers had more diversified sources of supply. NSW and Victorian vegetable growers were more dependent than their state counterparts on irrigation schemes. Some growers were able to tap into town water supplies, more so in Victoria and South Australia. This information proved useful in putting the vegetable industry's view forward in relation to the water debate which raged around the country.

Bio – security was also a big issue for vegetable growers as the AUSVEG Ltd. board tackled the question of how to protect the industry from exotic pest incursions without sending growers broke. Encouragingly, 77% of vegetable growers indicated that they followed a set pest and disease monitoring program although the level of compliance was particularly low in the Northern Territory. Pest and disease management was seen as the highest priority for research and development. The concern over bio-security issues was further highlighted by the fact that 74% of growers supported the imposition of a levy on growers matched by government funding to meet the costs of an eradication program in the event of an exotic pest and disease outbreak. This was important information because it forms the basis of the Emergency Plant Pest Response Deed that the AUSVEG Ltd. Board is being asked to sign on behalf of the industry.

Distribution outlets hold an important key in determining the profitability of vegetable growers and the future direction of the industry. The questions on these issues confirmed anecdotal information previously available on the industry. Tasmanian growers are more likely to sell their vegetables to processors and Western Australian growers are more likely to export their vegetables than in other States. However there were some surprising results in respect of the proportion of vegetables sold to the different distribution outlets. In particular the low level sold directly to retail was a surprise (see table) although in Victoria and Western Australia the rate was almost double.

Distribution Outlet	**Proportion of produce sold by volume %**
Direct to Food Services	2
Interstate	19
Local State Capital Wholesale Market	33
Local Market	11
Direct to Processor	26
Direct to Retail	8
Export	2

The figures confirm that for fresh vegetables the capital city wholesale markets remain the principal point of sale. When the figure for vegetables sent interstate, which would most likely be sent to other capital city wholesale markets, is added to vegetables sent to

the local capital wholesale market then wholesale capital markets are still handling over 50% of vegetable trade. AUSVEG Ltd. will be looking further into this matter and will be keen to follow whether this year's survey sees any major change.

The sale of vegetables direct to restaurants is extremely small. AUSVEG Ltd. sees this as a potential growth area where growers can extract better margins if the logistics of supply can be improved. The Survey is interesting in that only NSW and Victorian growers said that they supplied direct to restaurants presumably in Sydney and Melbourne. This direct supply to the restaurant trade was much stronger in Melbourne than Sydney with three times the volume of vegetables sold direct to Melbourne restaurants than in Sydney.

Finally, despite some of the difficulties being experienced in the industry, the Survey revealed a general sense of optimism. Over the next five years a majority of growers intend to remain vegetable growers, expand their operations, use land more intensively, introduce new higher yielding varieties and introduce more labour saving machinery. However this general optimism did not extend to Tasmania where the majority of vegetable growers indicated that they would either leave agriculture altogether or switch away from vegetable production to other agriculture industries. AUSVEG Ltd. is acutely aware of the problems being experienced in the processing side of the vegetable industry and is working on behalf of the vegetable industry to overcome the difficulties being experienced.

APPENDIX 4

Economic Environment : 18-01-2008
Economic Weekly

In the US "R" is the big discussion point

You have all heard the saying 'shop to you drop'. Well after years of underpinning the US economy, American consumers are dropping like flies. December retail sales went backwards and anecdotal reports from the large retailers suggest that Christmas gift vouchers are the only thing holding up sales in January. This has led to talk of the US entering recession ("R"). It's too early to for call that. But the signs are ominous. Huge losses are being revealed in the financial sector. Close to one million American households are already in default on their housing loans. Property prices are collapsing, houses are difficult to sell and there is more bad news to come on the housing front.

What is a recession?

Officially a recession occurs when there is two consecutive quarters of negative economic growth i.e. the economy going backwards. A depression is simply a severe recession and of longer duration than a recession.

US Authorities will react

The US Federal Reserve will react by cutting interest rates and the US Congress is likely to approve an expenditure package to boost the economy.

Hard task to manage the Australian economy

The economic situation in Australia is in complete contrast. The economy is calling for cuts in government spending and a further interest rate rise. The Reserve Bank and the Australian Government have to weigh the buoyant Australian domestic situation against the negative influence that will flow through the world economy from a slowdown in the US economy.

Psychological expectations are much more important these days in determining economic outcomes. If Australians start to worry about these world events and the impact on their declining wealth in equities and superannuation funds then we are in a different ball game.

Economic Environment : 03-03-2008
Economic Weekly

Your economist has been on a roving mission and applying his ‘economic expertise’ in a number of areas of concern for the industry in meetings in Canberra and Sydney this week.

Potato Spindle Tuber Viroid (PSTV)

A huge amount of effort has been put in by Jim Turley, Executive Officer, vegetablesWA and Potato Growers Association of WA (Inc), David Anderson AUSVEG vice-chair and Shashi Sharma from the WA Department of Primary Industries to solve the continuing incursion of PSTV into WA.

This is being backed on the eastern seaboard by discussions between AUSVEG, Biosecurity Australia and the Australian Quarantine Inspection Service. The issue is serious and because of the cost to individual growers and their families it is difficult to deal with. If there is a silver lining, it is that the industry is pulling together to solve the problem. A resolution is expected shortly.

Plant Health Strategy

David Anderson and I attended a strategy meeting on plant health. AUSVEG sees this as a critical issue for the industry. We are keen to shift the emphasis in resource allocation away from coping with controlling an exotic pest and disease incursion to early detection.

The costs of eradication are large. As an example it cost $265 million to eradicate the fire ant problem in Brisbane and $160 million to eradicate citrus canker in the Emerald region of Queensland. And we all saw the impact of the import of equine influenza. AUSVEG is arguing for stronger border surveillance and wants the plant health strategy to incorporate wider issues such as weeds and containments.

VegVision 2020

A meeting was conducted between the consultants working for the Australian Vegetable Industry Development Group, Horticulture Australia Limited (HAL) and yours truly on progress with one of the key foundation projects – data and industry information.

Progress has been made on providing the industry with more accurate data for industry policy input. More needs to be done on collecting data on factors driving consumption and the impact on grower returns.

Market Access Issues

A strategy day was held on this topic. The vegetable and potato industry is going to have to put more money into biosecurity issues if it wishes to maintain and improve market

access. The attempt to scuttle the Taiwanese attempt to exclude carrot exports out of WA will rest on the existence of data and information on the non-existence of burrowing nematode in the carrot growing areas of WA.

We think that we can deliver this. Nonetheless the issue underlies the importance of detailed historical data on pests and diseases. The World Trade Organisation rules it is not sufficient to say that you have never had a pest. You need to have data and records to prove it and an active biosecurity plan in place. The industry does not want to see the sort of devastation that occurred to the summer fruit industry because of insufficient data and information.

APPENDIX 5

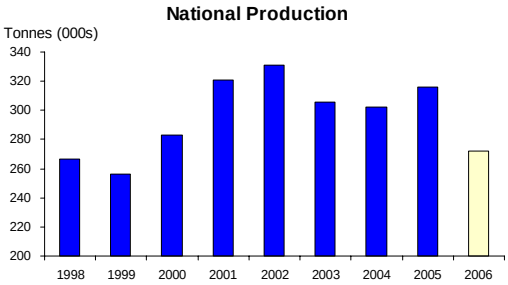
These commodity reports can be accessed at
http://www.ausveg.com.au/statistics.cfm?CIC=12

Vegetable Spotlight – Carrots

Snapshot

- Carrots are Australia's 7th most valuable vegetable crop, accounting for 6.1% of total vegetable production with a gross value of $162.3m in 2005/06.
- The latest data shows production and the area planted to be relatively low when compared to past levels.
- However, yields are in line with previous returns.
- Australia runs a positive and steady balance of trade in carrots.
- Strong competition from China has to some extent eroded Australia's share of exports amongst Asian economies.
- Offsetting this however, is the development of new markets in the Middle East, such as the United Arab Emirates.

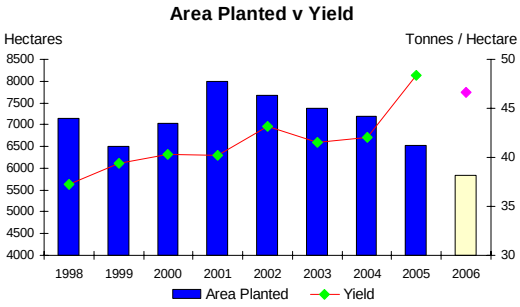
AUSVEG



The Australian Bureau of Statistics employed a new methodology in collecting data for the 2005/06 Agricultural Census. As a result, the data generated from the census – such as production volumes, area planted and yields – are not directly comparable to historical statistics. Readers should use this material with caution.

Current Australian Carrot Production

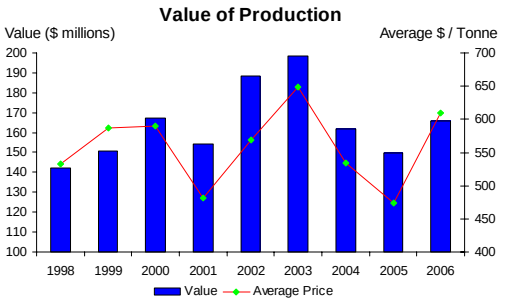
- Australian carrot production totalled 272,288 tonnes in 2006.
- The area planted was 5,844 hectares.
- The average yield per hectare over the year was 46.6 tonnes.
- These numbers seem to suggest that carrot production in Australia is not as prevalent as previously thought.



Long Term Production Trends

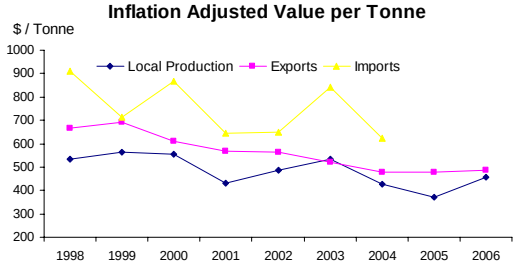
- Carrot production slowed and the area planted trended down in recent years, while yields had been rising for the past decade.
- The latest figures are largely consistent with these overall movements.

Value of Carrot Production



Domestic Value of Production

- The gross value of carrots grown in Australia in 2006 was $165.8 million.
- This is an increase of 11% on the previous 12 months, despite lower production figures.
- The national gross unit value (average price per tonne) rebounded 29% after falling in the previous two periods.
- Prices paid to growers have not kept up with retail price rises in the capital cities.

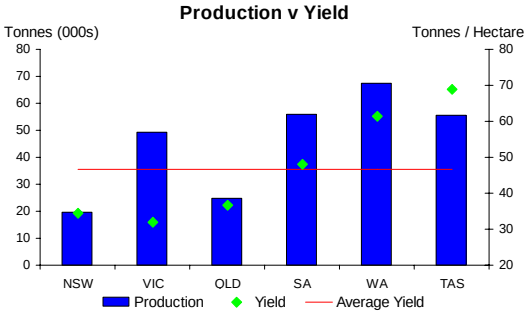


Adjusted for CPI (food), base year 1998. Source: Reserve Bank of Australia

Carrot Pricing in Australia

- After accounting for inflation, the average price of potatoes in Australia has fallen for exports as well as local production.
- In recent years, Australia has only imported carrots in very small quantities. Prices have been excluded from the chart as they may not provide an accurate indication of actual levels.

State Carrot Production



- National production is now evenly spread between four states: W.A. (25% of the national total), S.A. (21%), Tasmania (20%) and Victoria (18%).
- Yields in Western Australian and Tasmania remain well above the national average.
- It is likely that the level of production in Victoria and New South Wales has been over-reported in recent years.
- Production should continue to shift away from low-yielding states (especially Victoria) towards those with above average returns.

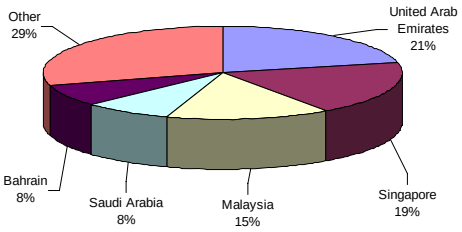
Carrot Consumption

Vegetable	Average for 3 years ending 1999(kg)	Average for 3 years ending 2006(kg)
Carrots	11.1	11.5
Potatoes	68.0	61.9
Onions	9.0	8.7
Tomatoes	22.0	24.2

- Data on consumption is fragmented and anecdotal.
- AUSVEG Ltd estimates suggest that annual consumption has been fairly constant in recent years at around 11.5 kg per capita.
- Comparisons with estimates of per capita consumption of some other major vegetables are presented in the table to the left.

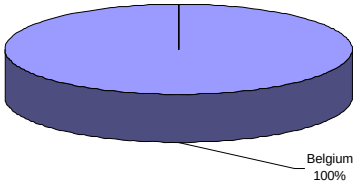
Characteristics of Australian Carrot Trade

Australian Exports



Total Value of Exports = $41.4 million

Australian Imports

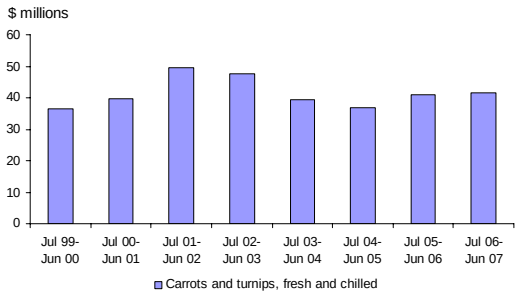


Total Value of Imports = $0.005 million

- Australia runs a strong and steady balance of trade in carrots.
- Exports are exclusively fresh, with markets developed in the Pacific region (Singapore and Malaysia) and in the Middle East.
- A small quantity of carrots have traditionally been imported from New Zealand, however this has fallen to zero over the past three years.
- Due to the labour intensive nature of production, low cost countries, in particular China are beginning to dominate regional trade in Asia.

Current Trade Data

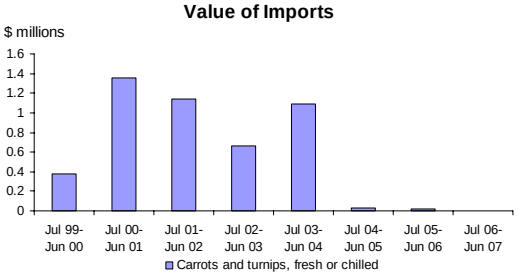
Value of Exports



Exports

• While still below the peak levels reached in the 2002 financial year, export values have remained relatively stable over the past four years.
• The value of exports was almost flat over the year, up 1.5% to $41.4 million.
• The recovery in exports is largely due to the creation of new markets in the Middle East, with the United Arab Emirates now the largest importer of Australian carrots and Saudi Arabia ranked fourth.
• This has offset the fall in exports to Asian economies such as Malaysia, Hong Kong and Japan (combined, down 45% since 2004).

Value of Imports



Imports

• Imports of fresh carrots are minimal and totaled less than four tonnes last financial year.
• All imports were sourced from Belgium, with none arriving from New Zealand for the first time.

Market Segments

- The carrot market consists of the fresh market segment and the processed segment (which is predominantly composed of freezing).
- There are a wide range of carrot varieties such as dutch carrots (these are small and sweet), imperator, nantes and kuroda.
- Carrots are available throughout Australia all year round, however they are at their best value from March through to August,

Market Access

- Domestic markets are free and there are no restrictions on carrot production.
- Imports of fresh carrots are free to enter Australia whilst a 5% tariff applies on frozen carrots (4% for developing nations).
- Access to foreign markets is reasonable with freight costs being the major barrier to expanded exports.
- Exports to Singapore, Malaysia and Hong Kong do not incur a tariff.
- The only significant tariffs in place in the region are in Taiwan, the Philippines and Japan with tariffs of 20%, 20-40% and 3% respectively.

For more economic analysis of vegetable production, visit the AUSVEG webpage at:
www.ausveg.com.au

Suite 9/756 Blackburn Road,
Clayton North, Victoria 3168

Phone: 03 9544 8098
Fax: 03 9558 6199

APPENDIX 6

Economic Challenges Facing Australian Vegetable Growers

Address at East Gippsland Field Day

Ian James
Economic Policy & Research Manager
AUSVEG Ltd.

April 11, 2008

AUSVEG

Snapshot of the Australian Vegetable Industry

- The vegetable industry is Australia's fourth largest agriculture industry with production valued at $2.75 billion.
- The industry is 40% bigger than the wool and lamb industries, more than double the size of the wine and poultry industries, and almost triple the size of the sugar and cotton industries.
- There are approximately 7500 growers.
- Queensland is the largest vegetable producing State with 35% of the national figure followed by Victoria with 24%.
- Tasmanian producers are more focused on producing vegetables for processing and Western Australia for export than the other States.

AUSVEG

Vegetable growers at the forefront of innovation and environment

- Vegetable producers use sophisticated production methods usually involving computerised release of water and other inputs.
- Vegetable growers lead the rest of Australian agriculture in their willingness to innovate both in production techniques and in response to consumer demand n.b. new vegetables and packaging.
- Vegetable growers have a keen interest in protecting the environment by reducing chemical use, the undertaking of integrated pest management programs and signing up to an EnviroVeg program.
- A vegetable grower won the inaugural Woolworths annual bursary to encourage innovation and sustainability in the fresh food industry and will use it to examine the impact on the environment of fresh vegetable production.

AUSVEG

Vegetable growers are more efficient and generally more profitable than other farmers

Average per farm 2005/2006	Receipts $	Costs $	Income $	Business profit $	Rate of Return %
N.S.W.	499,030	359,810	139,210	53,760	2.5
Victoria	878,270	641,420	236,850	137,740	5.0
Queensland	843,280	681,260	162,020	71,140	3.2
S.A.	512,630	396,910	115,720	44,670	4.2
W.A.	495,180	280,880	214,300	130,970	4.6
Tasmania	289,970	284,620	5,350	-72,930	-1.7
N.T.	503,330	342,220	161,110	105,570	7.5
Australia	**638,170**	**485,210**	**152,960**	**66410**	**3.2**

AUSVEG

Source: Australian Bureau of Agriculture and Resource Economics

Issue 1 – Water

- We support the principle of consistency and unified management across all Australia's water resources including but not restricted to the Murray-Darling Basin system.
- We are not red necks and understand the need for environmental flows to control rising salinity and strongly support a program to 'buy-back' over-allocated water.
- Vegetable growers are opposed to bureaucrats making decisions on water allocations based on industry pleading and believe that the market is the best decider of who gets available water.
- We support accelerated taxation depreciation for water based initiatives by farmers.
- Support the Victorian northern irrigators proposal for upgrading irrigation infrastructure.

AUSVEG

Issue 2 – Bio -Security

- It is absolutely critical that Australia preserves its image of green, clean and responsible pest control.
- Vegetable growers want amalgamation of Bio-security Australia and the Australian Quarantine Investigation Service to avoid buck passing.
- Vegetable growers are concerned that the costs of bio security control are being foisted back on growers e.g. sugar cane smut.
- Vegetable growers are concerned that the present safeguards are not adequate e.g. potato spindle tuber viroid and potato late blight.

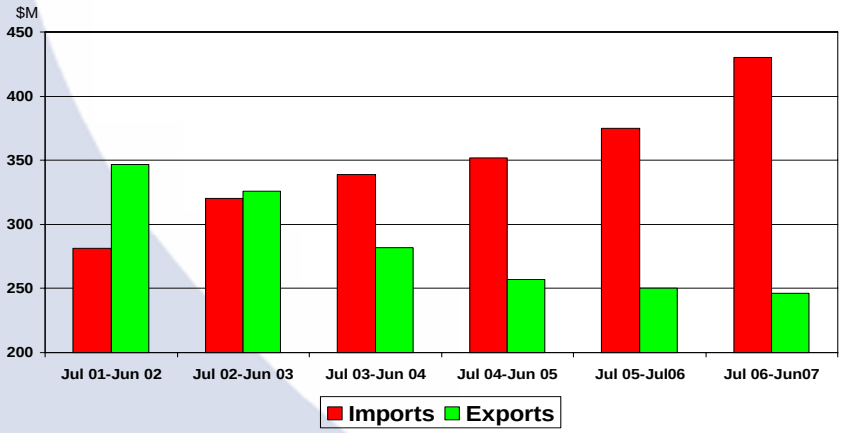
AUSVEG

Issue 3

Globalisation of the Food Processing Industry

AUSVEG

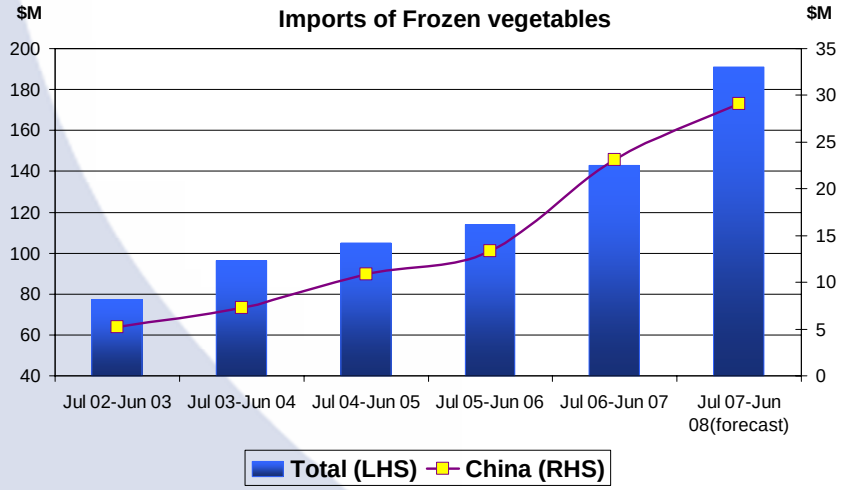
Vegetable imports are surging and Australia is now a net importer of vegetables



Source: Australian Bureau of Statistics

AUSVEG

Most of the damage is in the frozen vegetable category



Source: Australian Bureau of Statistics

AUSVEG

Issue 4 – Consumers right to know

- The fundamental economic underpinning of an efficient market is the assumption of informed consumers.
- To this end the vegetable industry has fought long and hard to have country of origin labeling on vegetable products so that consumers know the source of the vegetable they are buying.
- This now applies to 'whole loosely displayed products.'
- However the non inclusion of country of origin labeling on "house brands" is unacceptable as is the "and /or" clause regarding Australian and imported product on packaged vegetables.
- We have no issue in consumers choosing product from overseas in preference to Australian product but we strongly believe that the consumer needs to make an informed decision.

AUSVEG

Issue 5 – Climate Change, Food Miles, and Carbon Footprints

- Droughts have been an ongoing feature of Australia's history but make no mistake – rising carbon emissions are impacting on the world's climate and on Australian agriculture.
- In any case consumers are demanding that something be done to reduce greenhouse emissions and business around the world is responding.
- Food miles is something which gained traction in the U.K. but we need to be wary of using it to promote domestic consumption of Australian vegetables.
- Vegetable growers are at the forefront of this environmental issue and are working closely with supermarkets to reduce carbon emissions.

AUSVEG

Finally - Health and Communications

- The vegetable industry wishes to work closely with health authorities in tackling the issue of obesity and especially childhood obesity.
- At present only 10% of the population intake the recommended 5 vegetables per day, with the national average closer to 2 vegetables per day.
- There is an urgent need for access to very high speed internet in rural Australia.
- The third world status of the present system is a major inhibitor to uptake of innovation at a macro level and adversely impacts the delivery of market information at a micro level.

AUSVEG

Conclusion

- The Australian vegetable industry is a leader in innovation and concern for the environment.
- Vegetable growers are highly efficient and produce top quality world class vegetables.
- There are many challenges facing the industry most of which originate beyond the farm gate.
- Vegetable growers have shown that they are adaptive to these forces and will continue to rise to the challenges facing the industry.

AUSVEG