The Australian Vegetable Industry: Taking Stock & Setting Directions

The Vegetable Industry Partnership is a joint venture project between the Australian Vegetable Industry and the Australian Government.

Prepared by

November 2005
ABOUT KIRI-GANAI RESEARCH

Kiri-ganai Research Pty Ltd is a Canberra based consultancy company that designs, implements, manages and coordinates complex programs involving multiple organisations, disciplines and stakeholder interests. We also undertake research and consultancy studies concerned with natural resource management and competitive, profitable and sustainable agriculture. Our strength is in turning knowledge gained from markets, business operations, science and research, as well as from the policy positions developed by governments, industry organisations, producers and marketers, into ideas, options, strategies and business plans for resilient and self-reliant industries.

Kiri-ganai Research Pty Ltd
GPO Box 103
CANBERRA ACT 2601
AUSTRALIA
ph: +62 2 62956300  fax: +61 2 62327727
www.kiri-ganai.com.au

Project team

The consultants undertaking this project comprise an alliance of three companies led by Kiri-ganai Research. The other companies are the Concept Consulting Group and Boorara Management. The principals of the companies: Dr Richard Price, Brian Ramsay and Ken Moore have been the team that has collected and reviewed industry information, undertaken the consultations and prepared the Taking Stock and Setting Directions Report.

The team members bring together skills and experience in industry situational analysis and strategy setting; business planning; industry structural change aligned to world markets, industry adoption programs and change management; and research, project management and report writing. The team includes sociological expertise as well as economic and business analysis skills, thus recognising the need to address social and community issues in developing and implementing industry strategies.

Disclaimer

Care has been taken to ensure that the information contained in this report is reliable and that the conclusions and recommendations reflect considerable professional judgment. Kiri-ganai Research Pty Ltd however does not guarantee that the report is without flaw or is wholly appropriate for all purposes and, therefore, disclaims all liability for any loss or other consequence which may arise from reliance on any information contained herein.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>7</td>
</tr>
<tr>
<td>Glossary</td>
<td>8</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>9</td>
</tr>
<tr>
<td>Pivotal conclusions</td>
<td>9</td>
</tr>
<tr>
<td>Recommendations</td>
<td>11</td>
</tr>
<tr>
<td>Taking stock of the Australian Vegetable Industry</td>
<td>14</td>
</tr>
<tr>
<td>The business of the Australian Vegetable Industry</td>
<td>15</td>
</tr>
<tr>
<td>Industry profile</td>
<td>15</td>
</tr>
<tr>
<td>Markets</td>
<td>16</td>
</tr>
<tr>
<td>Supply chain</td>
<td>17</td>
</tr>
<tr>
<td>Industry organisations</td>
<td>18</td>
</tr>
<tr>
<td>Role of Government</td>
<td>19</td>
</tr>
<tr>
<td>Summary of key trends</td>
<td>21</td>
</tr>
<tr>
<td>Chapter One: Project Background</td>
<td>23</td>
</tr>
<tr>
<td>1.1 What is the Australian Vegetable Industry</td>
<td>23</td>
</tr>
<tr>
<td>1.2 The Australian Vegetable Industry Partnership</td>
<td>23</td>
</tr>
<tr>
<td>1.3 Purpose of this report</td>
<td>24</td>
</tr>
<tr>
<td>1.4 Approach in preparing this report</td>
<td>25</td>
</tr>
<tr>
<td>1.5 The Industry Partnerships Programme framework</td>
<td>27</td>
</tr>
<tr>
<td>1.6 The project team</td>
<td>29</td>
</tr>
<tr>
<td>FRAMEWORK COMPONENT ONE: RESOURCES</td>
<td>30</td>
</tr>
<tr>
<td>Chapter Two: Industry Profile</td>
<td>31</td>
</tr>
<tr>
<td>2.1 Industry characteristics</td>
<td>31</td>
</tr>
<tr>
<td>2.2 Global context</td>
<td>32</td>
</tr>
<tr>
<td>2.3 Australian production</td>
<td>33</td>
</tr>
<tr>
<td>2.4 Distribution of production across Australia</td>
<td>35</td>
</tr>
<tr>
<td>2.5 The family farm and structural adjustment</td>
<td>37</td>
</tr>
<tr>
<td>2.6 The industry’s place in Australian society</td>
<td>39</td>
</tr>
<tr>
<td>2.7 Social capital</td>
<td>40</td>
</tr>
<tr>
<td>2.8 Trends in key crops</td>
<td>41</td>
</tr>
<tr>
<td>2.9 Resource use</td>
<td>46</td>
</tr>
<tr>
<td>2.10 Vegetable production and the environment</td>
<td>49</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>2.11</td>
<td>Australian Vegetable Industry information</td>
</tr>
<tr>
<td>2.12</td>
<td>Implications for setting directions</td>
</tr>
<tr>
<td></td>
<td><strong>FRAMEWORK COMPONENT TWO: EXTERNAL ENVIRONMENT</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chapter Three: Vegetable Markets</strong></td>
</tr>
<tr>
<td>3.1</td>
<td>Overview</td>
</tr>
<tr>
<td>3.2</td>
<td>International consumer trends</td>
</tr>
<tr>
<td>3.3</td>
<td>Export markets</td>
</tr>
<tr>
<td>3.4</td>
<td>Australian market</td>
</tr>
<tr>
<td>3.5</td>
<td>Implications for setting directions</td>
</tr>
<tr>
<td></td>
<td><strong>Chapter Four: Supply Chain</strong></td>
</tr>
<tr>
<td>4.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>4.2</td>
<td>Global trends in supply chains</td>
</tr>
<tr>
<td>4.3</td>
<td>Attributes of the Australian Vegetable Industry supply chain</td>
</tr>
<tr>
<td>4.4</td>
<td>Establishment of new supply chain relationships</td>
</tr>
<tr>
<td>4.5</td>
<td>Supply chain stakeholder views</td>
</tr>
<tr>
<td>4.6</td>
<td>Implications for setting directions</td>
</tr>
<tr>
<td></td>
<td><strong>FRAMEWORK COMPONENT THREE: ENABLING ENVIRONMENT</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chapter Five: Institutional Environment: Industry</strong></td>
</tr>
<tr>
<td>5.1</td>
<td>Role of industry organisations</td>
</tr>
<tr>
<td>5.2</td>
<td>Industry planning</td>
</tr>
<tr>
<td>5.3</td>
<td>Industry advocacy and support</td>
</tr>
<tr>
<td>5.4</td>
<td>Marketing</td>
</tr>
<tr>
<td>5.5</td>
<td>Research and development</td>
</tr>
<tr>
<td>5.6</td>
<td>Industry development and coordination</td>
</tr>
<tr>
<td>5.7</td>
<td>Benchmarking, continuous learning and business skills</td>
</tr>
<tr>
<td>5.8</td>
<td>Implications for setting directions</td>
</tr>
<tr>
<td></td>
<td><strong>Chapter Six: Institutional Environment: Government Policy and Regulation</strong></td>
</tr>
<tr>
<td>6.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>6.2</td>
<td>Food safety standards</td>
</tr>
<tr>
<td>6.3</td>
<td>International trade and free trade agreements</td>
</tr>
<tr>
<td>6.4</td>
<td>Country of origin labeling</td>
</tr>
<tr>
<td>6.5</td>
<td>Competition and fair trade in the supply chain</td>
</tr>
<tr>
<td>6.6</td>
<td>Levies and statutory organisations</td>
</tr>
<tr>
<td>6.7</td>
<td>Taxation</td>
</tr>
<tr>
<td>6.8</td>
<td>Industrial relations</td>
</tr>
</tbody>
</table>
The Australian Vegetable Industry: Taking Stock and Setting Directions

6.9 Transport infrastructure 98
6.10 Natural resource management 98
6.11 Local government 100
6.12 Food safety 100
6.13 Implications for setting directions 100

Chapter Seven: Conclusions and recommendations: Setting Directions for the Future 102
7.1 Taking Stock pivotal conclusions 102
7.2 Recommendations: Setting directions for the future 104

Bibliography 118
Other references 121
Appendix A: Consultation 124
Appendix B: Taking Stock Workshop Outputs 129
Appendix C: Setting Directions Workshop Outputs 144

List of Tables
Table 1.1 Adaptation of the IPP Framework for this project 29
Table 2.1 Gross value of Australian vegetable production 2003-04 34
Table 2.2 Main growing States for key vegetable crops 2004 36
Table 2.3 Exports of carrots from WA for selected years 44
Table 7.1 Strategic areas for action 109

List of Figures
Figure 1.1 Project methodology and timeline 25
Figure 1.2 IPP assessment framework 28
Figure 2.1 Balance of trade: vegetables 1996-2005 33
Figure 2.2 Volume of Australian vegetable production 1996-2004 34
Figure 2.3 Gross value of vegetable production 1996-2004 35
Figure 2.4 No. of establishments with vegetable growing: 1996-2004 35
Figure 2.5 Establishments with vegetable growing activities by State 36
Figure 2.6 Average annual employment contribution of horticulture 39
Figure 2.7 Average annual contribution of the horticultural economy 40
Figure 2.8 Vegetable Industry market information audit 51
Figure 3.1 Value of vegetable exports 1996-2005 57
Figure 3.2 Per capita consumption of major vegetables: 1997-2004 60
Figure 3.3 Per capita consumption of major vegetables (aggregated) 60
Figure 3.4 Value of vegetable imports: 1996-2005 63
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 4.1</td>
<td>Market share of main retailers</td>
<td>69</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Traditional supply chains cause wastage and extra costs</td>
<td>71</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>HMAC application process and approval pathway</td>
<td>82</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>R&amp;D priority setting and administrative arrangements</td>
<td>84</td>
</tr>
<tr>
<td>Figure 5.3</td>
<td>Vegetable levy R&amp;D projects by type</td>
<td>85</td>
</tr>
<tr>
<td>Figure 7.1</td>
<td>Australian Vegetable Industry Partnership Roadmap</td>
<td>117</td>
</tr>
</tbody>
</table>
Acknowledgements

The authors of the report wish to acknowledge the assistance of the following individuals and organisations whose knowledge and inputs contributed to the report:

- AUSVEG Directors and staff, with special thanks to Mike Badcock, Euan Laird, Jonathan Eccles, Ian James and Lisa Maguire for their knowledge of the industry and making the project run smoothly through the contacts and resources of AUSVEG.

- Horticulture Australia Limited (HAL) Directors and staff with special thanks to Simon Drum for his enthusiasm and commitment to developing the information and R&D capability of the industry and making reports of HAL commissioned projects available to the team.

- Department of Agriculture, Fisheries and Forestry staff with special thanks to Vicki Manson, Nicky Seaby, Edwina Johnson, Robert McLeish and Andrew Winter, for their commitment to the Partnership concept and their knowledge of government processes. Also to Colin Mues and Stephen Apted of the Australian Bureau of Agricultural and Resource Economics.

- The Vegetable Industry Development Officers David Ellement, Craig Feutrill, Patrick Ulloa, Jack Milbank, Alison Anderson and Stephen Welsh who helped to organise the field interviews and participated in some of the meetings.

We particularly wish to thank the many owners and managers of vegetable businesses and organisations involved in the industry’s supply chain who gave their valuable time, insights and knowledge to the project team. We were impressed by the professionalism of all the people we met and with their passion and commitment to achieving a highly successful and sustainable Australian Vegetable Industry.

Project team
Dr Richard Price, Managing Director, Kiri-ganai Research
Brian Ramsay, Managing Director, Concept Consulting Group
Ken Moore, Principal, Boorara Management
Judy Andrews, Executive Coordinator, Kiri-ganai Research
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABARE</td>
<td>Australian Bureau of Agricultural and Resource Economics</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACCC</td>
<td>Australian Competition and Consumer Commission</td>
</tr>
<tr>
<td>AQIS</td>
<td>Australian Quarantine and Inspection Service</td>
</tr>
<tr>
<td>ATO</td>
<td>Australian Taxation Office</td>
</tr>
<tr>
<td>AUS</td>
<td>Australian Universal Standard</td>
</tr>
<tr>
<td>AUSVEG</td>
<td>Australian Vegetable and Potato Growers Federation</td>
</tr>
<tr>
<td>CIE</td>
<td>The Centre for International Economics</td>
</tr>
<tr>
<td>COOL</td>
<td>Country of Origin Labelling</td>
</tr>
<tr>
<td>DAFF</td>
<td>Department of Agriculture, Fisheries and Forestry</td>
</tr>
<tr>
<td>DFAT</td>
<td>Department of Foreign Affairs and Trade</td>
</tr>
<tr>
<td>DPIE</td>
<td>Department of Primary Industry and Energy</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management Systems</td>
</tr>
<tr>
<td>FSANZ</td>
<td>Food Safety Australia and New Zealand</td>
</tr>
<tr>
<td>FSC</td>
<td>Food Standards Code</td>
</tr>
<tr>
<td>FTAs</td>
<td>Free Trade Agreements</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GVP</td>
<td>Gross value of production</td>
</tr>
<tr>
<td>HAL</td>
<td>Horticulture Australia Limited</td>
</tr>
<tr>
<td>HMAC</td>
<td>Horticultural Market Access Committee</td>
</tr>
<tr>
<td>IDON</td>
<td>Industry Development Officer Network</td>
</tr>
<tr>
<td>IDOs</td>
<td>Industry Development Officers</td>
</tr>
<tr>
<td>Kg / kgs</td>
<td>Kilogram/s</td>
</tr>
<tr>
<td>MDBC</td>
<td>Murray-Darling Basin Commission</td>
</tr>
<tr>
<td>ML</td>
<td>Megalitre</td>
</tr>
<tr>
<td>MRLs</td>
<td>Maximum Residue Limits</td>
</tr>
<tr>
<td>NHT</td>
<td>Natural Heritage Trust</td>
</tr>
<tr>
<td>OH&amp;S</td>
<td>Occupational health and safety</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RIRDC</td>
<td>Rural Industries Research and Development Corporation</td>
</tr>
<tr>
<td>RIS</td>
<td>Regulation Impact Statement</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small to medium enterprises</td>
</tr>
<tr>
<td>WHS</td>
<td>Workplace Health and Safety</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
</tbody>
</table>
Executive Summary

The pivotal conclusions

Competitiveness

1. The Australian Vegetable Industry has low barriers to entry, resulting in a competitive business environment. However, the global nature of vegetable production and trade is placing new and significant competitive pressures on the industry.

2. The Australian Vegetable Industry is facing a period of significant adjustment. The immediate concern is the vegetable processing industry where competitive advantage in a globalised market is largely based on price. Australia is not a low cost producer of most processing vegetables and this situation cannot be changed in the short term.

3. While the situation for the fresh vegetable sector is better, it too faces potential challenges of cost competitiveness as imported fresh product continues to increase. Movement from processing vegetable production into fresh vegetable production could place added pressure on the fresh sector.

4. Labour costs are a key differential in product prices and it is likely that Australia will have difficulty in competing with low labour cost suppliers in open markets unless buyers can be convinced of the value of attributes other than price.

5. The favourable trend is that consumer markets for fresh vegetables domestically and overseas are growing. Consumer trends world-wide are moving in the direction of healthy foods with high nutritional values that can be satisfied by quality vegetables. Australia can capitalise upon its reputation as a supplier of clean, quality food in pursuing opportunities from the trend towards healthy eating.

6. Despite the opportunities, Australia is losing market share to overseas competitors. Imports have risen for the last four years and exports have fallen for the last three years. Over the last three years there has been a $148 million turn around in the balance of trade.

7. Future success overseas will largely be in niche markets where Australia has a quality and/or seasonal advantage that buyers will value and pay premium prices.

Profitability

8. The change in the competitive environment and the loss of markets has eroded the profitability of many enterprises and this is reflected in the declining number of growers. Processing vegetable growers are particularly affected and will continue to lose contracts and face price reductions unless they can consolidate to supply larger contract volumes and continue to work on yields, costs of production and efficient use of capital.

9. Retailers are importing increasing volumes of processed vegetables. Consequently, processors are also importing products from cheaper overseas suppliers to sustain their profitability and maintain their own market share.

Sustainability

10. The present situation with competitiveness and profitability is unsustainable. Unless major changes take place there will be a substantial reduction in the number of
growers of processing vegetables with potential spill-over effects on the domestic fresh vegetable market.

11. The diversity of the Australian Vegetable Industry is both a strength and a weakness. As a strength, its diversity provides the capacity for supplying substantial quantities of many products for domestic and overseas markets and to manage continuity of supply to markets. As a weakness, its diversity and dispersion can hinder development of economies of scale, cooperation in the supply chain and establishing the unity of vision and action to be successful against the competition of imports and in export markets.

12. The Vegetable Industry invests in sustainable production systems through research development. However, the diverse nature of the industry (including the ethnic and geographical diversity) challenges effective communication of best practice environmental management systems.

**Resilience**

13. Australia’s capacity to supply vegetables is greater than the size of the domestic market. With rising imports and loss of export markets, the industry has a marketing challenge that will intensify and drive structural change. The industry needs strategies, structures and resources in place to sustain and grow markets.

14. Global competitive forces are rapidly driving consolidation in supply chains worldwide. Retailers supplying consumers and providores supplying the food service industry are consolidating rapidly. In turn, they are seeking to deal with fewer suppliers who are able to deliver product year-round to stringent quality assurance standards and meet price expectations.

15. In response to retail and providore consolidation, suppliers too are following this trend and consolidating and/or forming supply alliances. New business models where growers are linked into these supply chains are the way of the future. Industry services bodies similarly need new models to engage with supply chain firms.

**Self reliance**

16. Turning around the current trade trends and capturing the opportunities offered by global markets will require a level of coordination and cooperation across the supply chain that previously has not been characteristic of the Australian industry. The lack of collaboration has weakened strategic planning and the building of a cohesive and purposeful industry that is committed to creating its own future.

17. The industry bodies are currently fragmented, lack clarity in their roles and do not have the capacity to respond rapidly to the modern business needs of the industry. A cohesive and responsive leadership structure is essential so that the industry institutions can keep pace with the changes being faced in the market place. Further, the people leading and managing the significant changes ahead will need access to advice and support and opportunities to develop their skills and capabilities.

18. Most of the industry’s research and development (R&D) funding is being invested in on-farm issues. However, supply chain and marketing issues are largely driving industry profitability. The existing strategies, structures and processes for investing in R&D are not meeting the needs of the industry for the future.

19. The industry requires ongoing access to quality and timely information on markets and competitors. The information available in the past has not been adequate for informed policy and commercial decisions. Collection, dissemination and application of quality information represents a powerful platform for developing overall business and leadership capabilities at all levels across the Vegetable Industry.
20. The industry requires more effective means of communicating between and within industry sectors, particularly in respect to sharing information that can underpin processes of benchmarking and continuous improvement.

Recommendations

Facilitative Tactics

Three facilitative tactics have been identified to provide an overarching framework for implementation of the findings of this report.

1. Australian Vegetable Industry Development Group

Various foundation projects and strategies have been identified for action to reposition the industry for meeting the challenges ahead. Further, the participative process adopted in the Industry Partnership project has created momentum for change that must be sustained and enhanced if the project is to have real and positive impact. It raises the question of how implementation will be coordinated.

It is imperative that the industry act decisively to implement the findings of this report. There is considerable pressure for change in the commercial environment and in the institutional arrangements, and a strong case for forming a group that provides a sharp focus for implementation. It is recommended that a Vegetable Industry Development Group is established to be responsible for:

i) making recommendations to the Minister for Agriculture, Fisheries and Forestry on projects to be funded from the $3m pledged by the Australian Government to support Vegetable Industry development;

ii) maximising cross-industry ownership of activities flowing from the Industry Partnership Programme;

iii) implementing the recommended strategies of the Setting Directions Report;

iv) negotiating co-investment in foundation and other Setting Direction projects;

v) facilitating communication throughout the industry about the implementation of the Setting Direction Report; and

vi) monitoring the progress of Setting Direction Report activities.

The proposed membership size of the Development Group is up to seven people. They will have strategic level experience and influence as the role is not operational. The existing bodies have operational delivery responsibilities. Membership would include:

- an independent chair with agribusiness experience;
- the Chairs (or a nominated Director) from Horticulture Australia Ltd and AUSVEG; and
- five people with knowledge and experience in the areas of retailing, processing, exporting, government and industry restructuring.

The Vegetable Industry Development Group should be formed immediately and ideally announced by December 2005. It could be wound up in June 2008 or earlier if it has achieved its purpose.
2. Foundation projects

A variety of strategies to respond to the challenges facing the Vegetable Industry have been developed with the input of many people participating in the industry at all levels and through the supply chain. These strategies are often interlinked and seven industry foundation projects have been identified that will address the most critical areas requiring action and also contribute to achieving progress with other strategies and activities identified in the report. These foundation projects cover:

i) Development of an Australian Vegetable Industry strategic plan:
   This report identifies the need for improved communication and collaboration across the supply chain. However, these are not ends in themselves and require purpose and commitment to shared benefits. The development of a shared strategic plan can outline these shared benefits and act as a focus point for jointly strengthening the Australian Vegetable Industry.

ii) Leadership and industry structures:
   This report suggests that sustainable growth of the Australian Vegetable Industry is held back by, among other things, its lack of cohesion and communication across the supply chain, and by inefficient structures reflecting internal fragmentation and factionalism. These factors reduce the capacity of the industry to jointly identify, create, co-invest and capture opportunities in a way that successful industries take for granted.

iii) Industry information and decision support framework:
   This report identifies the lack of quality and timely data and information about many aspects of the industry. Such data is required to make informed decisions by industry bodies, government and individual businesses.

iv) Industry benchmarking:
   This report and subsequent workshop discussions highlighted the lack of a continuous learning culture throughout all levels of the industry. Industries that have experienced significant market ‘shocks’, such as deregulation, have shown that industry-wide benchmarking can work effectively to increase the performance of individual businesses and business alliances.

v) Business skill development:
   This report identifies the development of a modern business culture as an important way to empower individual producers to develop new and build on existing opportunities, and to provide them with more skills and confidence to continuously improve their practices and negotiating power in meeting market specifications.

vi) Global comparative analyses:
   This report identifies the lack of suitable data and feedback mechanisms to inform comparisons of Australian and overseas market and production situations. As a result, many claims about Australian production competitiveness are based on anecdotal evidence. Good market intelligence and knowledge of competitors’ practices are fundamental to improving Australian production systems and competitiveness.
vii) Market development:

This report identifies the need for the Australian Vegetable Industry to expand its domestic and international markets through identifying points of difference and capturing competitive advantage where it exists or can be created. The industry needs strategies, structures and resources in place to sustain and grow markets.

3. Communications Strategy

The various strategies and projects identified in this report collectively offer the potential for the industry to create a viable and continually prosperous future. A coordinated response will be important in this and the role of communications is critical. An integrated communications strategy should be formulated and implemented as one of the first actions of the Development Group. The objectives of the strategy are to:

- promote awareness and enlist commitment and support from stakeholders and key audiences about the outcomes and directions of the Vegetable Industry Partnership project; and
- promote the progress achieved and opportunities for participation in initiatives.

Strategic areas for action

The following recommendations (R1-R20) address the issues outlined in the pivotal conclusions, and are grouped under five priority categories identified by industry at its Taking Stock workshop:

Strategic Area 1: Competitiveness

Expansion of the domestic market
R1 Develop and leverage points of difference for Australian products (Foundation Project).
R2 Invest in marketing and promotion, and monitor sales.
R3 Pursue import trade measures consistent with WTO agreements.

Export market development
R4 Develop and resource strategies for identifying specific export markets and products.
R5 Build commitment of supply chains to search for and meet export demand.

Strategic Area 2: Profitability

Internationally competitive vegetable production
R6 Identify and monitor cost structures and market strategies of leading overseas competitors (Foundation Project.)
R7 Develop and implement a benchmarking strategy for the industry (Foundation Project).
R8 Develop and implement new business models to supply customer requirements.
R9 Reduce labour costs as a proportion of total production costs.
R10 Increase sustainable productivity of land and water use.
Strategic Area 3: Self Reliance and Resilience

Enhancement of industry leadership and institutional arrangements

R11 Increase whole of industry engagement and representativeness in industry bodies (Foundation Project – combined with R12).
R12 Develop industry leadership capability (Foundation Project – combined with R11).
R13 Strengthen the industry’s capacity to develop and implement visionary and feasible industry plans (Foundation Project).
R14 Rationalise and invigorate industry service mechanisms to enhance the timeliness, quality and impact of industry responses to emerging issues.

Quality industry information, communication, innovation and capacity development

R15 Address market knowledge gaps to enable domestic and export market growth (Foundation Project– combined with R16).
R16 Improve efficiency in how information is collected, maintained and distributed (Foundation Project – combined with R15).
R17 Provide opportunities for open and constructive communication between industry participants.
R18 Improve the business skills and management of growers (Foundation Project)
R19 Develop a national technology extension strategy in support of domestic and export market strategies.
R20 Invest in R&D that is systems-based, balances supply chain issues and is focussed on programs rather than projects.

Table 7.1 in the concluding chapter provides a Roadmap outlining the relationship between the Taking-Stock pivotal conclusions, industry-agreed response strategies, the seven foundation projects and the outcomes expected of these projects.

Overview: Taking stock of the Australian Vegetable Industry

The Australian Vegetable Industry is facing a period of major change which will require it to respond to international competition in order to grow and prosper. The domestic market is increasingly being subject to the pressures of globalisation through competition from imports and Australia’s export markets are facing increasing competition from low cost exporters.

In global markets, international competitiveness is the key factor in industry survival and future prosperity. Recognising the need for change, the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) has partnered with the Australian Vegetable and Potato Growers Federation (AUSVEG) under the Industry Partnerships Programme to improve the Vegetable industry's long-term profitability, competitiveness and sustainability.

The Programme initiated a ‘Taking Stock and Setting Directions’ project to support the Vegetable Industry in identifying opportunities and threats that it is likely to face over the next five to ten years; in evaluating its strengths and weaknesses; and to develop strategies for its future profitability and sustainability.
Kiri-ganai Research Pty Ltd was commissioned as an independent consultant to work with the Vegetable Industry and the Australian Government in undertaking the project. This report combines the Taking Stock and Setting Directions phases of the project for action by the industry and Australian Government. In this respect, the Government allocated $3 million for follow up action on Vegetable Industry issues once the final outcomes of the Industry Partnership project were known.

This Taking Stock and Setting Directions report is the output of processes that actively engaged a wide array of industry stakeholders, and extensive review of industry reports, research and data holdings. Of particular importance to the success of the project, were meetings and discussions with some 160 individuals and organisations from all parts of the vegetable industry supply chain in August 2005. In addition, some 80 industry and government participants met in Melbourne on 7 September to workshop the initial Taking Stock findings. This was followed by a Setting Directions workshop in Sydney on 31 October 2005 involving key industry stakeholders. While these aspects of the project were progressing, ABARE and HAL were also working on other research and commissioned studies about key elements of the industry.

The business of the Australian Vegetable Industry

The Australian Vegetable Industry is a food industry that supplies products for consumers to satisfy food needs and values. The needs and values of consumers range from basic nutrition, to higher order nutritional values associated with well-being, to lifestyle values of food as an experience.

The products of the industry are those which are perceived as vegetables or vegetable products in the market. It includes: whole fresh vegetables, packaged fresh cuts, frozen and canned vegetables and vegetable products, and vegetable ingredients used in other processed foods.

Meeting consumer demand for these products involves a complete supply chain comprising production, distribution, transformation and retailing of vegetables for Australian and international consumers. This project has covered all elements of the supply chain.

Industry profile

Vegetable production, processing and retailing is an important industry in Australian society and the economy. It is relatively more important in regional economies where it is located in providing employment opportunities across the supply chain, and revenue for allied businesses that supply goods and services to the industry.

The industry is characterized by a diversity of products, locations, production and distribution systems, business types and markets. The key features of the industry can be summarized as follows:

- It is a large and diverse industry with multiple and widespread regional locations around Australia in temperate and warm or tropical climates. It comprises differing production systems that produce a variety of crops supplying many types of markets both domestically and overseas.
- It produces fresh produce (the major product in volume and value); fresh packed value-added products (fresh cuts, washed salads, etc) which represent a growing
market segment for consumers seeking convenience); processed vegetables in significant volume and traded on a commodity basis including frozen (fries, peas, beans, mixed vegetables), canned and dried vegetables; ingredients for other food products; and dietary supplements.

- The industry comprises a diverse and highly commercial supply chain of growers, packers, processors, marketers, wholesalers, agents, providores, retailers, and food service companies. These sectors encompass a diverse array of enterprise structures including: multi-national agrifood corporations (including food processors, food service, quick service restaurants); major retail chains; small to medium incorporated enterprises (SMEs) in each sector; and sole trader/partnerships, especially in the growing sector. Few cooperatives exist, although grower networks and alliances are increasingly forming part of the supply chain arrangements.

- The Vegetable Industry is serviced by many commercial suppliers of inputs, equipment, transport services, capital and advisory services that are important not only to the industry, but also to the communities in which they are located; and

- It comprises an array of industry organisational arrangements that service the growing sector of the industry.

Rapid industry rationalisation is occurring which is having considerable ramifications for regions that are dependent on the vegetable industry. This will require consideration of structural adjustment issues based on wider community outcomes.

The diversity of the Australian Vegetable Industry is both a strength and a weakness. As a strength, its diversity provides the capacity for supplying substantial quantities of many products for domestic and overseas markets and to manage continuity of supply to markets. As a weakness, its diversity and dispersion can hinder development of economies of scale, cooperation in the supply chain and establishing the unity of vision and action to be successful against the competition of imports and in export markets.

A significant characteristic of the Vegetable Industry’s diversity is based on cultural, ethnic and generational factors. Almost 40 per cent of the industry speak languages other than English and the industry comprises many cultures and cultural practices. Like other areas of agriculture, the average age of growers is increasing. These factors present challenges that require more sophisticated, practical and diverse methods of communication, consultation, education and extension.

**Markets**

The Australian Vegetable Industry is greatly influenced by global markets. The global market economy has been built by communication and transport technologies breaking down boundaries and trade barriers being reduced. As seen over the past decade, these developments have opened up opportunities for Australia to export its food products and some industries such as our meat and grain industries have become highly successful in world markets. However, the other side of globalisation is that our own markets have become more accessible to overseas suppliers and local enterprises have come under greater competitive pressure.

The domestic market is most vulnerable to imports of vegetables used in processing. These products are traded as commodities and Australia is a high cost producer relative to other countries (eg, developed economies such as New Zealand and emerging economies such as China). As imports of processed vegetables continue to increase, this
will have a greater flow-on impact on local suppliers and the already over-supplied domestic market.

Australia is losing export market share with the key areas of concern being the loss of markets for carrots, onions and cauliflowers. For these products, there has been a decline of exports over the past three years. Low cost producers such as China have taken market share particularly in south-east Asia. For other crops, opportunities continue to be optimistic with continuing adoption of advanced technology and mechanization. There are examples across all areas of the vegetable industry where businesses are competing successfully to supply consumers in Australia and overseas markets.

The longer term outlook is that the global vegetable industry has large, growing consumer markets to supply. The world population is growing, there is a trend to urbanisation and consumers in developing countries have more disposable income. At the same time, consumers are increasingly well informed about food safety and quality and are more health conscious. An emerging focus on obesity in the developed world has sharpened consumer attention on food that is good for their health. In summary, demand for quality vegetables in Australia and overseas can be expected to grow.

The challenge for Australian businesses is to invest in areas where they can create and sustain competitive advantage against suppliers from other countries. Niche markets and opportunities to differentiate Australian vegetables locally and overseas are important strategies for competitive advantage. In order to develop and implement these strategies, attributes of consumer satisfaction and trends need to be understood at a deeper level than at present and monitored by the industry and commercial players.

Strategies are needed to increase exports and stimulate domestic demand. The capacity of the Australian industry to supply vegetables far exceeds domestic demand, while international competition is intensifying. In this environment, there is a need to develop a deeper understanding of overseas competitor strategies and their advantages in the market relative to Australia.

Export success will require action to reduce costs and develop niche markets. A more sophisticated and coordinated approach will be required to consolidate and expand exports in the future. Australia has largely operated in spot markets and been an opportunistic trader in international markets to date.

**Supply chain**

There is no single supply chain in today’s vegetable industry and it comprises a wide variety of pathways to markets. The traditional supply chain in agriculture has been represented as involving a high degree of wastage, high transaction costs, a long chain to share profit margins and farmers being considered as the bottom of the chain and ‘taking what’s left’. While this type of supply chain continues to exist and used by many growers, it is not an internationally competitive and sustainable chain in the modern global economy.

The future profitability of vegetable growing in Australia depends on a full industry strategy and approach that addresses all elements of the supply chain. Industry success in meeting the requirements of the market (domestic and export) depends on the performance of the whole chain from producer to consumer. The profitability of each sector of the supply chain is critical to its overall health.
Consumers lie at the heart of the supply chain as the products they buy, the amounts they consume and the price they pay determines the profitability of the whole chain. Effective supply chains “…satisfy the expectations of consumers through continual improvement of processes and relationships that support the efficient development of products and services from producer to consumer.” (DPIE, 1997)

Communication is critical to supply chain performance and revolves around developing a shared view of market requirements, understanding of the preferences and values of consumers. Information flow and visibility builds trust and needs to ensure transparency of prices and costs, order lead times, supply chain benchmark information and status of market conditions; along with data pooling and sharing, and trading terms linked to transaction visibility.

Synergies in information technology with common or compatible systems and software allowing e-transactions, electronic stock control and reporting are essential in modern supply chains. Supply chain performance also includes efficiency of physical logistics and effective use of capital infrastructure and equipment.

Since a supply chain operates through relationships and transactions more than any other industry aspect, it is continually subject to claims and counterclaims about relative performance. Moving forward to better performance requires understanding the dynamics and the facts, and addressing these objectively with strategies for change that are possible.

Global competitive forces are driving consolidation in supply chains worldwide. Retailers supplying consumers and providores supplying the food service industry are consolidating themselves and at the same time seeking to deal with fewer suppliers who are able to deliver product year-round to stringent quality assurance standards and meet price expectations.

The pivotal question is, therefore, what business models are internationally competitive in modern supply chains and how do individual grower businesses restructure to be competitive and profitable? In this environment, successful suppliers are those who are:

1. large scale vertically integrated companies (grower-packer-marketer) supplying directly to the customer;
2. large scale, very efficient, innovative growers supplying direct to a wholesale market or retailer;
3. part of a consolidation network operating through a grower-owned marketing company or champion company; or
4. grower-packer-marketers with strategic alliances with other Australian (or international) growers to supply product to required specifications year round.

It is clear that growers supplying processing vegetables are in serious difficulty and will continue to lose contracts and face price reductions unless they can consolidate to supply larger contract volumes and continue to work on yields, costs of production and efficient use of capital. The present situation is unsustainable and unless major changes take place, there will be a substantial reduction in the number of growers of processing vegetables.

**Industry organisations**

For a small industry in comparison to many other agricultural industries, there is a large number of institutions associated with it – authorities, agri-political bodies, committees
and associations. Finding a coherent industry ‘voice’ that can act on whole-of-industry issues is problematic.

Industry-wide planning is also problematic, particularly as industry plans tend to be focused on individual commodities. The planning process is cumbersome and costly, and does not result in plans that adequately address significant post-production issues. Scope exists to revise planning structures to meet increasingly complex issues arising from globalisation.

In terms of addressing many of the issues raised in this report, there is no one industry body that can take charge of a coordinated approach to industry strategy development and implementation. Hence, effective networks and alliances are important in the planning process.

The fragmented product and issue-specific nature of many of these institutions, and the local, ideological and professional commitment to them, can and commonly does lead to adversarial-based relationships.

Building industry capacity is an issue that has resulted in divergent views. While there is a need to develop capacity to strategically address industry issues, particularly in the face of globalisation, there are differences of view as to what this capacity might look like, where it might reside and how it might be funded.

Industry R&D is largely directed to short-term production issues, partially because of traditional industry advisory arrangements. Attempts are being made to balance industry R&D across the supply chain. The use of voluntary contributions from downstream partners can act to increase the overall R&D pool and to redress the balance.

A paucity of reliable market information is preventing many sectors of the industry from making optimal decisions and from negotiating on the basis of good knowledge.

Benchmarking, monitoring, evaluation and other activities associated with continuous improvement are lacking across the institutions supporting the vegetable industry, and this contributes to a grower sector that is not fully informed about its performance or competitiveness.

**Role of Government**

There are many policies and regulations at all levels of government which impact on the Australian Vegetable Industry. The project’s literature review and field interviews clearly indicated that the following are priority issues in the minds of industry members:

- the safety for consumers of vegetable imports;
- consumer choice in purchasing vegetables based on country of origin;
- transparency, fairness and equity in supply chain transactions and relationships;
- achieving a ‘level playing field’ in bilateral trade agreements and for imported products;
- achieving maximum productivity in the use of labour and innovation in reducing the labour component of total production costs; and
- establishing statutory industry arrangements and levies that foster leadership and innovation in the Australian Vegetable Industry.
For many of these issues, processes are underway to review current policy and regulatory settings. Experience of Vegetable Industry organisations over recent years indicates the need for industry representatives to establish strong working relationships with key areas of Government to ensure industry perspectives and requirements are taken into account in policy settings.

In the case of perceived unfair trade, it is unlikely for any Australian Government to move back to applying tariffs or providing subsidies. However, it is appropriate for the Government to provide support for import trade measures consistent with WTO agreements. In this respect, the industry needs to research and analyse competitor export strategies, production costs and subsidies. This would allow it to identify and act on situations where dumping of product may be occurring or where there is a case for other measures to safeguard the industry from surging imports.

In terms of the effective operation of markets, a key principle is that consumers have choice in their purchases and that this is supported by information on the products that they are seeking. Food Standards need to implement this principle for vegetable products available to Australian consumers.

There are a number of resource use issues facing the Vegetable Industry including the small size of holdings, land use pressures and the high cost of land where urban development is taking place, the availability and cost of labour; and the availability and rising cost of water which require industry attention and strategies to survive and prosper. These issues need to be resolved through a partnership approach between the industry and governments at all levels.

Government has a key role to play in a partnership approach with the leadership of the Australian Vegetable Industry and to support the facilitation of the required changes. This includes appropriate structural adjustment support; leadership development; export market development; import trade measures consistent with WTO agreements; labour availability and skills; industry training and capacity development in areas such as business model change; addressing the need for and cost of regulations; and incentives for investment in technological change in the industry.
Summary of key trends

Gross value of production for vegetables has been steadily rising over the past ten years:

GVP of vegetables: 1996-2004

Volumes for the top six vegetables have experienced different growth patterns:

Volume of vegetable production

Vegetable farms have been in decline over the past ten years:

Vegetable farm numbers: 1996-2004
Despite export growth for much of the 1990s, this has been outpaced by import growth, and recent export declines have seen a negative balance of trade in more recent years:

**Balance of trade: vegetables 1996-2005**

Import growth has been experienced across fresh, frozen and processed vegetables:

**Vegetable imports 1996-2005**

The most significant decline in exports has been in the fresh and chilled sector:

**Vegetable exports 1996-2005**
Chapter 1: Project Background

1.1 What is the Australian Vegetable Industry?

For the purposes of this project, the Australian Vegetable Industry comprises the production, distribution, transformation, retailing and consumption of a wide array of products that are perceived and purchased by consumers as vegetables.

The approach taken in this report is to view the industry as the full range of businesses, and the organisations that represent them, involved in meeting consumer demand for Australian vegetables and vegetable products in domestic markets and overseas. Organisations that represent the interests of the industry are an important part of the enabling environment for effective industry representation, action and change.

The products of the industry are those which are perceived as vegetables or vegetable products in the market. It includes whole fresh vegetables, packaged fresh cuts, frozen, canned vegetable and vegetable products, and vegetable ingredients used in other processed foods.

The Australian vegetable industry is a food industry that supplies products for consumers to satisfy food needs and values. The needs and values of consumers range from basic nutrition, to higher order nutritional values associated with well-being, to lifestyle values of food as an experience.

Comments from field interviews:

‘When I hear myself being called a grower, I say that I am a food producer. I think this term has more meaning to consumers’ (vegetable grower).

1.2 The Australian Vegetable Industry Partnership

The Australian Vegetable Industry is facing a period of major change which will require it to respond to world competition in order to grow and prosper. The domestic market is increasingly being subject to the pressures of globalisation through competition from imports where these are permitted under quarantine and bio-security arrangements. Similarly, Australia’s export markets are facing increasing competition from low cost exporters in developing countries and market focused and efficient exporters in other developed economies.

In global markets, international competitiveness is the key factor in industry survival and future prosperity. Recognising the need for change, the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) has partnered with the AUSVEG (Australian Vegetable and Potato Growers Federation) under the Industry Partnerships Programme to improve the Vegetable Industry's long-term profitability, competitiveness and sustainability.

This Industry Partnerships Programme project, ‘Taking Stock and Setting Directions’, was designed to support the Vegetable Industry in evaluating its current situation and performance, to identify opportunities and threats that it is likely to face over the next five to ten years; and to develop strategies for its future profitability and sustainability.

The specific objectives of the project were to:
• analyse the industry’s current performance and situation including strengths, weaknesses, opportunities and threats; and performance against key success criteria;
• identify key challenges and opportunities over the next 5-10 years;
• determine the industry’s capacity to achieve future profitability, sustainability, competitiveness, resilience and self-reliance;
• prioritise key areas in which the industry and government can improve the industry’s performance;
• determine how the industry can structure, resource and position itself to respond to these priorities; and
• assist the development of response strategies for the key areas.

Activities of the Australian Government’s Industry Partnerships Programme (IPP) are based on partnerships and collaboration with industries in developing the skills and capacity to plan for their future and to manage their destiny. Consistent with the approach of the IPP, this project has emphasises industry self assessment supported by the independent advice and analysis of the consulting team. The aim was for the industry to be able to clarify, strengthen and build on its vision for the future, quantify the targets it will achieve and further develop or revise strategies and actions that will lead to a more profitable and sustainable future.

While the focus of IPP activities is on industry capacity development, the project also identifies implications for government policy and the industry’s wider service sector.

1.3 Purpose of this report

This report reflects the outcomes of the processes that have taken place for the industry to take stock of and reflect upon its present sustainability and prospects for the future. It essentially provides a situation analysis, drawing out the implications of the pressures present in the domestic and global markets, the state of relationships in the supply chain and the operating environment as influenced by the institutional arrangements presently in place. More specifically, it is a strategic description and analysis that focuses on vital issues relating to:

• the industry’s overall structure, operations and products;
• the industry’s domestic and export markets, and trends in vegetable consumption;
• the supply chain of the industry from production, packing and storage, transport, processing, wholesaling to retailing;
• key aspects of service provision to the industry that impacts on its performance;
• government policy, regulation and services;
• industry organisational arrangements; and
• the role of the industry in regional economies and communities.

Taking a whole of industry and government view was essential to improve understanding of the entire industry’s position and possible directions. The report includes consideration of the role of the Vegetable Industry in Australian society and
particularly rural and regional communities where it has a prominent economic and social position.

The conclusions reached in the report provide the basis for decisions by industry and government in respect to the strategic responses required to ensure the long-term sustainability of the Vegetable Industry.

1.4 Approach in preparing this report

There have been three key phases to the Project:

- Phase One involved undertaking a situational analysis of the Vegetable Industry and its operating environment. This has resulted in an initial Taking Stock report that was considered by an industry workshop on 7 September 2005.

- Phase Two involved analysing the implications of the stock-take to develop recommendations for the future directions of the industry. This resulted in an initial Direction Setting report that was considered by a second industry workshop on 31 October 2005.

- Phase Three of the project brought the first two phases of the project together, and provides recommendations to both industry and government about what actions will be required in order to facilitate the achievement of desired future directions.

The project has been carried out under the guidance of a Project Management Committee comprising representative of the Australian Government, HAL and AUSVEG. It involved close consultation with industry and government, and two workshops were held to enable stakeholders to consider the implications of project findings and provide feedback on ways forward.
This report is the output of processes that actively engaged a wide array of industry stakeholders (listed in Appendix A). It has involved:

- an extensive literature review of industry reports and research;
- meetings and discussions with directors and staff of AUSVEG, affiliate State associations and HAL; the Hon Richard Colbeck (Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry); staff of the Department of Agriculture, Fisheries and Forestry; and some State government agencies;
- meetings and discussions with some 160 individuals and organisations from all parts of the vegetable industry supply chain;
- feedback from the Project Management Committee on the project’s reports;
- the outputs of the Taking Stock Workshop of some 80 industry and government participants on 7 September 2005 in which findings and feedback from the field interviews were presented and workshopped; and
- the outputs of the Setting Directions Workshop involving key stakeholders on 31 October 2005 which considered and workshopped an initial Setting Directions report.

In conjunction with this project, a number of other industry studies were taking place through the Australian Bureau of Agricultural and Resource Economics (ABARE) and Horticulture Australia Limited (HAL).

The objective of the ABARE project has been to examine the international competitiveness of the Australian vegetable production sector. It was designed to contribute to a better understanding of the competitive pressures being faced by the vegetable industry and to complement this Industry Partnerships Programme project.

The specific terms of reference for the ABARE project covered:

- a review and analysis of trends in domestic production and trade in vegetable and vegetable products, with particular emphasis on the extent of consumer competition;
- an analysis of factors underpinning recent changes in the competitiveness of imports in the Australian domestic market;
- a review of the proportion of output entering the wholesale or food processing stage via different sales methods;
- an assessment of the impact that the location and concentration of processing facilities and transport and logistics frameworks have on industry viability;
- an assessment of the impacts of international competition on the domestic vegetable production sector – including impacts on producer prices, farmer incomes, and labour and the contribution to vegetable production to state and national economies: a summary of region specific implications of international competition in the vegetable production sector;
- the Australian sector’s capacity to adjust to the effects of international competition, including:
  - identification of potential production efficiencies in the Australian sector, and
  - identification of potential export growth opportunities.
The Australian Vegetable Industry: Taking Stock and Setting Directions

- industry and stakeholder issues that are identified in the Industry Partnerships Program.

As a complementary study, the ABARE project will add value to this report in a number of ways. It differentiates between fresh and processed markets in analysing production and trade trends, and intends to analyse retail volumes by fresh and processed and by country of origin. This will be important as it provides further insights into where the recent changes in competitive pressures are greatest. The ABARE report is also expected to analyse the observable investment behaviour of vegetable processing companies, trends in vegetable processing, and the organisation of the processing sector in Australia.

AUSVEG/HAL have commissioned a range of studies relating to the horticulture labour situation, marketing information systems, marketing strategies, the vegetable industry supply chain, the economic contribution of the vegetable industry and the economic fundamentals of the industry. These studies also complement this project.

This final report identifies key areas for industry action and to recommends strategies for industry and government adoption that address the key areas and will achieve results for the industry. In this respect, the Government allocated $3 million for follow up action on Vegetable Industry issues once the final outcomes of the Vegetable Industry Partnership project were known.

1.5 The Industry Partnerships Programme framework

The Industry Partnerships Programme has invested in the development of a framework for assessing the performance of a range of agricultural industries as a means to identify where they could improve. This framework has been used as a guide for analysing the industry’s attributes, assessing ‘success’ and identifying actions that can be taken to move industries to improve overall performance (Figure 2).

The desirable outcomes (or goals) for an industry as set out in the framework include the following (CIE 2005):

- Profitability: do participants in the industry make reasonable profits or is there a general low-income problem?
- Sustainability: is the industry sustainable in the long term in terms of economic long-term viability as well as environmental sustainability?
- Competitiveness: the extent to which the industry can compete in the global market place but also, the degree of competition within the industry itself. Vibrant competition generally is associated with better performing industries.
- Resilience and flexibility: refers to the ability of an industry to bounce back from adverse shocks and how flexible it is to deal with shocks, either physical (such as drought) or economic (such as severe market downturns).
- Self-reliance: better-performing industries usually have the capacity to respond quickly and effectively to issues that arise from time to time. The soundness of an industry’s institutional arrangements plays an important part in this capacity.

The framework recognises the drivers of an industry’s success as the external environment in which the industry operates, the enabling environment over which the industry has some control and an assessment of the resources that the industry applies to the production and marketing of vegetables.
External environment: The external environment in which the industry operates is inclusive of developments in international markets, domestic macroeconomic policies, weather and changes in other industries. These are factors over which the industry has no control, but are considerations against which industry strategies and investment plans must be tested if they are to achieve success.

Enabling environment: The enabling environment embraces the historical development of the industry and its culture, as well as the policy environment governing use of resources, production processes, transport, storage, handling and marketing. The enabling environment includes consideration of the industry’s approach to risk management, its culture, skills and training, strategy, information sharing, communication, organisational structures, use of government subsidies, value chain linkages, R&D, regulation and market access.

Resources: (consistency) physical (soil, topography, water, climate), financial, social, infrastructure, human and technological. Some of these resources are influenced by the industries using them and give rise to issues of economic and environmental sustainability.

The external environment, enabling environment and resource use, interact over time with the defining characteristics of a product and its production processes to produce a set of attributes that characterise a particular industry and drive its ultimate success.

Figure 1.2: IPP assessment framework

Table 1.1 shows the relationship between the IPP framework and this report. The report’s sections and chapters adopt the three drivers outlined in the framework (i.e. Section One deals with resources; Section Two deals with the external environment; and Section Three deals with the enabling environment). However, the sequence of the
drivers is altered so that the enabling environment is considered last. The project team believes that this slight modification emphasises the need to consider the enabling environment in terms of the changes required to achieve the desired outcomes for the industry in future.

<table>
<thead>
<tr>
<th>Table 1.1: Adaptation of the IPP Framework for this project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IPP Framework</strong></td>
</tr>
<tr>
<td>Resources</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>External environment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Enabling environment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Outcomes</td>
</tr>
<tr>
<td>✓ Profitability</td>
</tr>
<tr>
<td>✓ Sustainability</td>
</tr>
<tr>
<td>✓ Competitiveness</td>
</tr>
<tr>
<td>✓ Resilience</td>
</tr>
<tr>
<td>✓ Self-reliance</td>
</tr>
</tbody>
</table>

1.6 The project team

The consultants undertaking this project comprised an alliance of three companies led by Kiri-ganai Research. The other companies are the Concept Consulting Group and Boorara Management. The principals of the companies: Dr Richard Price, Brian Ramsay and Ken Moore have been the team that has collected and reviewed industry information, undertaken the field interviews and prepared the reports.

The team members brought together skills and experience in industry situational analysis and strategy setting; business planning; industry structural change aligned to world markets, industry adoption programs and change management; and research, project management and report writing. The team included sociological expertise as well as economic and business analysis skills, thus recognising the need to address social and community issues in developing and implementing industry strategies.
FRAMEWORK
COMPONENT
ONE:

RESOURCES
Chapter 2. Industry Profile

This chapter covers the first component of the IPP Framework outlined on pages 27-29 of this report. Understanding the nature of the industry and its resource use provides a useful basis to ascertain what is at stake when progressing into the implications of the external and enabling environments, dealt with in later sections. The chapter prefers the terminology ‘industry profile’, and covers the following aspects of the Vegetable Industry:

- Industry characteristics
- Global context
- Australian production
- Spatial distribution of the industry
- Industry demographics
- Industry’s place in Australian society
- Industry’s place in regional economies
- Trends in key crops
- Resource use and the environment
- Australian Vegetable Industry information

2.1 Industry characteristics

Vegetable production, processing and retailing is an important industry in Australian society and the economy. It is characterized by diversity of products, locations, production and distribution systems; business types and markets. Identification of the key characteristics of the industry is critical to determine the areas in which attention is required for future sustainability.

The key features of the industry are that it:

- is a large and diverse industry with multiple and widespread regional locations around Australia in temperate and warm or tropical climates;
- produces fresh produce (the major product in volume and value); fresh packed value-added products (fresh cuts, washed salads, etc which represent a growing market segment for consumers seeking convenience); processed vegetables in significant volume and traded on a commodity basis including frozen (fries, peas, beans, mixed vegetables), canned and dried vegetables; ingredients for other food products; and dietary supplements;
- comprises differing production systems that produce a variety of crops supplying many types of markets both domestically and overseas;
- comprises a diverse and highly commercial supply chain of growers, packers, processors, marketers, wholesalers; agents, providores; retailers; and food service companies. These sectors encompass a diverse array of enterprise structures including multi-national agrifood corporations (including food processors, food service, quick service restaurants); major retail chains; small to medium incorporated enterprises (SMEs) in each sector; and sole trader/partnerships,
especially in the growing sector. Few cooperatives exist, although commercial networks and alliances involving growers are increasingly forming part of the supply chain arrangements;

- is serviced by many commercial suppliers of inputs, equipment, transport services, capital and advisory services that are important not only to the Vegetable Industry, but also to the communities in which they are located;

- comprises an array of industry organisational arrangements that service the vegetable growing sector of the industry; and

- has some unique social and cultural features shared by only a few Australian rural industries:
  - it is characterised by a high level of ethnic and cultural diversity;
  - this diversity applies not only at the production level, but to all levels of the supply chain;
  - the industry spans rural, peri-urban and urban landscapes at the production level, representing a diversity in producers’ lifestyles, aspirations and motivations;
  - it also represents varying degrees of access to labour, education, markets etc;
  - many vegetable farms have a number of generations working on them, although the average age of the main farmer is increasing in line with most other agricultural industries;
  - the sheer diversity of industries involved under the umbrella term ‘vegetables’ has resulted in a plethora of institutional arrangements such as commodity and regionally specific associations; and
  - this in turn provides enormous challenges in respect to industry cohesion and communication.

Like other Australian agricultural industries, around 70 per cent of total production comes from around 30 per cent of farms. An example of this is the Lockyer Valley, where five consolidator / production networks dominate (Dunne & O’Keefe, 2004).

The diversity of the industry and markets as represented above is both a strength and a weakness. As a strength, its diversity provides the capacity for supplying substantial quantities of many products for domestic and overseas markets and to manage continuity of supply to markets. As a weakness, its diversity and dispersion can hinder development of economies of scale, cooperation in the supply chain and establishing the unity of vision and action to be successful against the competition of imports and in export markets.

### 2.2 Global context

Vegetable growers have the capacity to produce substantially more vegetables than can be consumed in the domestic market and, like most Australian primary industries, exports are vitally important for future growth and sustainability. Australia is presently a very small player on a global scale, with exports accounting for less than 3% of world vegetable trade (McKinna 2005).

International markets are undergoing rapid change with new low-production-cost players beginning to provide strong competition. This includes China, South America and South
Africa whose exports are driving down vegetable prices and changing patterns of trade. Australia has traditionally been a net exporter, however, imports have risen for the last four years and exports have fallen for the last three years. Over the last three years there has been a $148 million turn around in the balance of trade (AUSVEG 2005).

Global agrifood businesses are increasingly supplying world demand and the trend in most countries is towards fewer growers, lower prices, larger processors, and increasing dominance of major retailers (DFAT 2005).

Despite the challenges, there are long term opportunities for the Vegetable Industry associated with increasing world population, urbanisation, increasing disposable incomes and growing numbers of health conscious consumers.

In this operating environment, there is no option but to improve international competitiveness and to compete vigorously for market share or new niche markets. This need is reinforced by the decline in balance of trade for the Vegetable Industry in recent years (see Figure 2.1).

![Fig 2.1: Balance of trade: vegetables 1996-2005](image)

### 2.3 Australian production

Australian Bureau of Statistics (ABS) data shows that in 2003-04, the industry had a gross value of production (GVP) of $2.35 billion, covering 14 key crops grown among 4,300 establishments (vegetable farms). AUSVEG and HAL suggest the number of vegetable farms is between 6,500 and 8,000 based on calculations of levy receipts (HAL 2004).

The composition of the Australian Vegetable Industry and its value is outlined in Table 2.1. Figure 2.2 outlines the volumes produced for the top six vegetables. It should be noted that vegetable production can shift rapidly and based on anecdotal evidence the relativities between crops may have changed considerably in the past 3 years.
### Table 2.1: Gross value of Australian vegetable production 2003-04

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value of Prod $M (inc mkt)</th>
<th>Farm Gate Value $M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potatoes</td>
<td>480.9</td>
<td>412.7</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>280.4</td>
<td>218.3</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>219.3</td>
<td>194.1</td>
</tr>
<tr>
<td>Onions</td>
<td>153.1</td>
<td>134.9</td>
</tr>
<tr>
<td>Carrots</td>
<td>149.7</td>
<td>111.5</td>
</tr>
<tr>
<td>Lettuces</td>
<td>115.1</td>
<td>79.6</td>
</tr>
<tr>
<td>Asparagus</td>
<td>46.5</td>
<td>44.1</td>
</tr>
<tr>
<td>Beans</td>
<td>62.1</td>
<td>58.0</td>
</tr>
<tr>
<td>Beetroot</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Broccoli</td>
<td>81.4</td>
<td>68.8</td>
</tr>
<tr>
<td>Cabbages</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Capsicums, chillies and peppers</td>
<td>115.9</td>
<td>92.0</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>57.3</td>
<td>39.9</td>
</tr>
<tr>
<td>Celery</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Green peas</td>
<td>14.1</td>
<td>13.9</td>
</tr>
<tr>
<td>Marrow, squash and zucchini</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Melons</td>
<td>143.6</td>
<td>104.6</td>
</tr>
<tr>
<td>Parsnips</td>
<td>in other</td>
<td>in other</td>
</tr>
<tr>
<td>Pumpkins</td>
<td>57.2</td>
<td>35.8</td>
</tr>
<tr>
<td>Sweet corn</td>
<td>70.6</td>
<td>53.7</td>
</tr>
<tr>
<td>Other</td>
<td>308.3</td>
<td>266.4</td>
</tr>
<tr>
<td><strong>Total (Aggregate of ABS Class Data)</strong></td>
<td><strong>2,355.5</strong></td>
<td><strong>1,661.9</strong></td>
</tr>
</tbody>
</table>

Source: ABS. Agricultural Commodities, 7121.0, 2003-04

### Figure 2.2: Volume of Australian vegetable production 1996-2004

![Volume of vegetable production chart](chart.png)
ABS data shows the industry GVP has been steadily rising over the past decade at an average of around 4.7% per annum. While there is discrepancy in the number of vegetable farms identified by various data sources, there is agreement that the number has declined substantially.

AUSVEG believes the decline has been around 19% (AUSVEG 2005) in the past 4 years (almost double the rate of exits in total agricultural establishments), but it needs to be recognized that farmers can enter and exit vegetable production on a small scale relatively easily and this impacts the variation in the number of farms recorded in various statistics.

It is apparent that the increased volume and value of vegetable production has been produced by fewer growers operating on a larger scale.

**Figure 2.3: Gross value of vegetable production 1996-2004**

![GVP of vegetables: 1996-2004](image)

Source: ABS, Australian Farming in Brief, 2000, 01,02,03,04

**Figure 2.4: No. establishments with vegetable growing activities, 1996-2004**

![Vegetable farm numbers: 1996-2004](image)

Source: ABS, Australian Farming in Brief, 2000, 01,02,03,04

### 2.4 Distribution of production across Australia

Australia has a diversity of regional soil and climate conditions that enable production of a wide variety of vegetable crops across Australia. Together with New Zealand, parts of
Australia, such as Tasmania, provide an ideally long growing window comparable with successful vegetable growing areas overseas.

ABS data for financial year 2003-04 (ABS 2003-04) shows the distribution of Australia’s vegetable growers by State with Queensland (1,247) having the most growers followed Victoria (920), New South Wales (761), Tasmania (509), Western Australia (445) and South Australia (406) (see Figure 2.5).

Figure 2.5: Establishments with vegetable growing activities by State, 30 June 2004

![Establishments with vegetable growing activities by State, 30 June 2004](image)

Source: ABS. Agricultural Commodities, 7121.0, 2003-04

Production is distributed widely across Australia with some States being the prominent producers of certain crops as shown in Table 2.2.

<table>
<thead>
<tr>
<th>Product</th>
<th>Main growing States, 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potatoes (total)</td>
<td>Vic, SA, Tas</td>
</tr>
<tr>
<td>Tomatoes (total)</td>
<td>Vic, Qld</td>
</tr>
<tr>
<td>Carrots</td>
<td>WA, Vic, SA, Tas</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>NSW, Vic, Qld</td>
</tr>
<tr>
<td>Onions white and brown</td>
<td>SA, Tas</td>
</tr>
<tr>
<td>Lettuce</td>
<td>Qld, Vic</td>
</tr>
<tr>
<td>Asparagus</td>
<td>Vic</td>
</tr>
<tr>
<td>Capsicum, chillies and peppers</td>
<td>Qld</td>
</tr>
<tr>
<td>Cauliflowers</td>
<td>Qld, WA, Vic, NSW</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Vic, Qld</td>
</tr>
<tr>
<td>Pumpkins</td>
<td>Qld</td>
</tr>
<tr>
<td>French &amp; runner beans (total)</td>
<td>Qld, Tas</td>
</tr>
<tr>
<td>Sweet corn</td>
<td>NSW, Qld</td>
</tr>
<tr>
<td>Peas (processing)</td>
<td>Tas</td>
</tr>
<tr>
<td>Peas (pod)</td>
<td>Qld, NSW</td>
</tr>
</tbody>
</table>

Source: ABS, Agricultural Commodities, 7121.0, 2003-04
The Vegetable Industry contributes in economic and societal terms to all States, and relatively important in regional economies where it is located. The economic contribution of the industry includes:

- purchases of inputs (products and services) by vegetable growers and supply chain participants from businesses that supply goods and services to the industry;
- wages and profits spent by the Vegetable Industry in their region;

The contribution of this expenditure to a regional economy is multiplied through iterative spending. For example, each dollar paid to an input supplier, is spent on other goods and services through the wage of an employee or in purchases from other suppliers. The size of the multiplier effect depends on the number and closeness of linkages between a vegetable growing business and other businesses in the region. The Productivity Commission cites work by Econtech estimating the multiplier effect for agriculture to be around 12 per cent.

CDI Pinnacle Management and Street Ryan & Associates (2004) have attempted to calculate the contribution of the horticultural industry to the Queensland economy and concluded that:

- in 2001, the horticultural industry contributed $1.4 billion to the Queensland gross state product (about 5%);
- supported 27,880 full time equivalent jobs in addition to on-farm employment; and
- with a multiplier of between 150-200%, generated additional sales of between $2.1 and $2.8 billion; and
- every 10 hectares of land used for growing vegetables and fruit generates in the order of $153,000 to gross state product, $225,000 to $300,000 in sales, and 3 full time equivalent jobs.

**Why is this important?**

Analysing aggregate production data as a proportion of the national economy does not provide a picture of the contribution of the Vegetable Industry to rural and regional communities. The industry can be overlooked or given lower priority in the provision of economic and social infrastructure and services by government and the private sector.

**2.5 The family farm and structural adjustment**

In most cases, the family farm is the main ownership structure for the production of vegetables. This is roughly consistent with the total agriculture sector average of 94 per cent of farms being held under family structures and 6 per cent being owned by corporations (Tonts *et al* 2003).

Like other horticultural industries, the Vegetable Industry is labour intensive, and over 23,000 people are employed in one capacity or another on vegetable growing farms.

The Vegetable Industry reflects the general decline in Australian farm enterprise numbers, although exit rates are presently nearly double the wider agricultural industry average. A 19 per cent decrease in farm numbers over the past four years has seen a similar decrease in farm employment numbers. The national average for the decrease of total farm numbers in Australia over the past 50 years has been around 1.3 per cent per annum (Gray & Lawrence 2001).
Industry rationalisation has been significant, with smaller farms being bought out by neighbours to create larger and more viable farming enterprises; smaller farms being bought out by agribusinesses, with management decisions moved off farm; smaller farms buying out neighbours to become more viable; and smaller farms changing their focus to become suppliers to consolidators (CDI Pinnacle Management 2004).

The processed tomato sector provides an excellent example of the impact structural change has resulted in (see box below).

**Structural change in the processing tomato industry** (Pritchard et al 2005)

“The Australian processing tomato sector provides an exemplary case for the exploration of the dynamics of family farming, because it has been radically restructured under the gaze of market-oriented, neo-liberal agriculture. In 1984, approximately 350 growers supplied 183,000 tonnes of processing tomatoes (Burch and Pritchard, 1996, p.109) in a highly regulated domestic market place protected by tariffs and with statutes designed to protect farmers’ collective bargaining powers and rights. By 2004, just 32 growers produced 360,000 tonnes of product to a liberalized market place characterized by intense import competition and in which the commercial interaction between growers and processing companies has been deregulated (Pritchard and Burch 2003, pp. 102–26).”

The study of the processing tomato industry by Pritchard, Burch and Lawrence (2005) observes the resilience of the family farm under enormous structural change driven by neo-liberalist (free trade) policies and phenomena. For example, of the 32 farms remaining from 350, all but one is family owned. The lessons underpinning this are pertinent to other areas of vegetable production:

“In seeking to maintain family ownership, properties are increasingly relying upon extended and intergenerational family networks. To overcome the difficulties of securing borrowings from banks they are searching out and signing multi-year contracts with processors. In order to extract economic security in a context of heightened international competition, they are becoming more professional and entrepreneurial. And, in seeking to increase output (to meet large contract tonnages) they are leasing rather than buying, additional land.” (Pritchard et al 2005)

**Why is this important?**

Few societies are immune to globalisation, and structural adjustment is an inevitable phenomenon in any free market society trading in global markets. The dominance of the family farm as the unit of ownership for most vegetable enterprises, combined with agriculture’s place in the national character of Australia (Lockie 2000), sharpens the focus of structural change onto people that perceive themselves, and have been perceived by others, to have held a special place in Australian society. While structural change for them is as confronting as it has been to workers in other industry sectors (eg. manufacturing, textiles etc), the outcome can often result in unsubstantiated blame and generalizations directed towards a stereotyped ‘urban Australia’. However, despite the massive changes in agricultural production, the ‘family farm’ has shown itself to be extremely resilient where the families involved have shown foresight, enterprise, innovation and flexibility.
2.6 The industry’s place in Australian society

For many city dwellers, vegetable production provides one of the few links to agricultural production, and to an insight into rural Australia. This is because considerable vegetable production is undertaken within metropolitan catchments. It is also because an increasing proportion of Australians have fewer or no relatives residing in ‘the country’ and have less cause to travel ‘inland’.

The urban drift affecting rural Australia is not a new phenomenon, but is increasing at a more rapid rate. For example, in 1920, there were 20 Victorians for every farm in that state. By 1970, the ratio increased to one farm for every 50 Victorians, while today the ratio is one farm for every 175 Victorians. Modelling suggests that this will increase to one farm for every 400 Victorians by 2021. (Barr 2004)

One implication of urban drift is that the culture of farming will have less and less meaning to average Australians, and hence will have less influence upon the broader values and attitudes of Australians in future.

Farmer’s markets, roadside hawkers and similar conduits of selling fresh produce can bring many Australian consumers closer to those responsible for food production than elsewhere in Australian agricultural supply chains. For many Australians, this link can provide a sense of empathy for growers.

While the Vegetable Industry makes up only a minor proportion of Australia’s GDP, it figures prominently in downstream employment and ‘farm-dependent’ GDP. The Productivity Commission, based on a study by Econtech (2005), suggests that Australia’s farm-dependent GDP makes up around 12% of GDP, a ratio of $6 generated off-farm for every $1 generated on-farm. Farm dependent industries include: the agricultural sector; farm input sector (i.e. chemical suppliers); and farm output sector (i.e. retailers, restaurants, accommodation establishments etc). Figures 2.6 and 2.7 provide an example of how the wider horticultural industry contributes to flow on benefits through the economy and to some particular regional economies.

**Figure 2.6: Average Annual Employment Contribution of Horticulture (‘000 persons)**

```
<table>
<thead>
<tr>
<th>Sector</th>
<th>'000 persons</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture industry</td>
<td>7.8 (13%)</td>
<td>52.8 (87%)</td>
</tr>
<tr>
<td>Horticulture-inputs sector</td>
<td>8.7 (57%)</td>
<td>6.6 (43%)</td>
</tr>
<tr>
<td>Horticulture-outputs sector</td>
<td>20.0 (62%)</td>
<td>12.3 (38%)</td>
</tr>
<tr>
<td>Horticulture economy</td>
<td>36.4 (34%)</td>
<td>71.6 (66%)</td>
</tr>
</tbody>
</table>
```

Source: IOF Model (EconTech 2005)
The above Figures need to be read with some caution. For example, Figure 2.7 depicts 4 per cent of GDP and employment in southern Tasmania being derived from horticulture — a large proportion of this would be from fruit and wine—grapes, as vegetable production in southern Tasmania is relatively small. Figure 2.6 may also be misleading in that the farm output sector does not necessarily rely on Australian farm produce and reductions in Australian vegetable production in response to increased imports could not be expected to impact negatively on retailers and the hospitality sector.

### 2.7 Social capital

Despite the general decline of the industry’s importance to the overall economic and social fabric of Australia, the vegetable industries play an important and sometimes dominant role in some regional communities.

In this respect, the social and cultural capital built around the number of producers in a region can have a more significant influence than their direct economic contribution may suggest; although in some regions, vegetable production is a major regional source of income.

#### What is social capital?

Social capital can be more clearly defined by what it does than what it is. It is not a single entity, but rather many different entities brought about by different social structures or networks that enable individuals and institutions comprising them to perform certain actions and achieve certain ends. Perhaps more simply, social capital reflects the existence of a certain set of informal values or norms shared among members of a social collective that permits cooperation among them.

The Productivity Commission has recognised the importance of social capital and suggests it “can generate benefits to society by reducing transaction costs, promoting cooperative behaviour, diffusing knowledge and innovations, and through enhancements to personal well-being and associated spill-overs. Some aspects of social capital can have adverse effects, such as when strong internal group cohesion is associated with intolerance of others”

The role of social and cultural capital within a regional community cannot be underestimated, and is an inseparable element of how individuals and communities
perceive threats to their economic and social well-being. That is, while the concept of structural adjustment is daunting for individuals, the perceived threat is magnified when wider communities are also perceived to be endangered by processes of change.

Studies over the past decade (eg. DeFilippis 200; Knack & Keefer) have argued that consideration of social capital and economic capital should not be divorced. At the same time, they also argue that the concept has been abused extensively in relation to community and regional development by suggesting that high levels of social coherence and trust within social networks promotes economic growth. Their work tends to suggest that high levels of regional economic capital is more likely to lead to improved social capital rather than the other way around. Irrespective of this, the social capital built around vegetable production has provided some regions with unique social characteristics and identity, and has certainly contributed significantly to some regional economies.

Traditionally, vegetable growers have been described as having ‘a reputation for not working well together and tending to be non-trusting of the people with whom they market their produce to’ (CDI Pinnacle Management 2004). Despite this, the advent of landcare and catchment management programs has seen some increase in community engagement among vegetable growers. The large number of productivity groups and industry committees and associations also belies the traditional axiom.

For some contract growers, there is an enhanced level of distrust of non-regional people and those associated with downstream sectors of the supply chain who hold direct influence over their own farm management practices (Burch and Rickson 2001).

### 2.8 Trends in key crops

Australia produces a wide variety of vegetable crops due to variations in climate, soil types and resource availability across the country. However as shown in Table 2.1, six crops contribute most to the gross value of vegetable production. The profitability and trends in these crops largely determines the profitability of the whole industry.

**Potatoes**

Potatoes are Australia’s top vegetable crop in terms of volume and value. There are three distinct categories of production:

- fresh potatoes for the fresh market and food service sector;
- potatoes for the processing sector (crisps and frozen fries); and
- seed potato production.

Over the 10-year period to 2003, production and consumption has been relatively stable with little real growth. Production volumes have increased slightly (at a compound average rate of 1% per year), the gross value has decreased by 2.7% p.a. in the five-year period to 2003 (HAL 2004).

Tasmania, South Australia and Victoria are the largest producers, with production declining in Victoria, New South Wales and Western Australia, and increasing substantially South Australia. More recent locally generated data shows both the area planted to potatoes in Tasmania and volume produced have declined in 2004-05 and 2005-06 (projected).

Domestic consumption appears to be static at just under 70 kilograms per person (ie, production + imports – exports).
Exports represented only about 7% of annual sales receipts with markets in 2000-01 and 2001-02 in Republic of Korea, Malaysia, Singapore, Hong Kong, Indonesia and Taiwan. Australia was the largest supplier to South Korea, Indonesia and Hong Kong.

Australia has some large and successful potato businesses, particularly in the fresh sector, that have integrated operations across the supply chain and are utilizing advanced and labour saving technology in crop management, harvesting, washing, packing, storage and distribution.

However, the field interviews with processing potato growers and processing companies in Tasmania clearly showed that this sector of the industry requires major changes to re-establish competitiveness, particularly with New Zealand produce. Moreover, HAL’s consumer research (HAL 1993, 2001, 2004) has consistently shown that fresh potato products continue not to meet consumer needs and expectations.

Commercial information presented to the project team showed major disparities in the number of growers, contract sizes, yields, production costs and contract prices between individual growers and between growers in Australia and New Zealand.

Simplot Australia in a public submission to the Agriculture and Food Policy Reference Group stated that there is a major gap of 30% between the Australian and New Zealand farm gate price and that the average contract size for Tasmania is 757 tonnes compared with 9,000 tonnes for New Zealand. Processors are trending towards having fewer suppliers with larger contracts to cut costs and suggest that major changes are required to ensure Tasmanian producers are competitive in the face of cheaper, alternative suppliers such as New Zealand.

Field interviews with growers in Tasmania showed that they consider that they have been increasing yields over a long period and that they are significantly disadvantaged by cost differentials (such as labour and fertiliser) with New Zealand that are largely outside their control. In response, consolidation is occurring with restructuring and there is much better utilization of equipment due to the contracting system.

Why is this important?

It is clear that growers supplying processing potatoes will continue to lose contracts and face price reductions unless they can consolidate to supply larger contract volumes and continue to work on yields, costs of production and efficient use of capital. The present situation is unsustainable and unless major changes take place there will be a substantial reduction in the number of growers.

Tomatoes

Tomatoes are produced for:

- processing (canned, juiced, dried and converted to paste); and
- for fresh consumption (determinate/round, greenhouse, cherry and gourmet types).

Victoria is the largest tomato producer, much of which is for processing, and Queensland is the major producer of tomatoes for the fresh market, producing about 75% of the total tonnage grown. Growers in Queensland dispute this level and argue that it has declined below 60% (Eccles, pers comm. 2005).

Volumes fluctuate on a yearly basis, but ABS figures show total tomato production declining in NSW and SA, and increasing in Victoria and Queensland. Australian Processing Tomato Council figures show production of processing tomatoes declining considerably in NSW and to a lesser amount in Victoria between 2000 and 2003.

There has been major restructuring in the processing tomato sector as described by Pritchard, Burch and Lawrence (2005). They reported that in 1984, there were
approximately 350 growers supplying 183,000 tonnes in a highly regulated domestic market place. By 2004, the number of growers had been reduced to just 32 growers producing around 360,000 tonnes of product in a market they describe as a liberalized market place characterized by intense import competition and in which the commercial interaction between growers and processing companies has been deregulated.

The authors report that in recent years there has been substantial consolidation of the processing sector, with leading firms being either transnational branded food corporations (such as H.J. Heinz Co., Unilever and Campbell Soup), or specialist bulk processors who on-sell tomato products to other users (such as The Morning Star Packing Company, S.K. Foods Inc. and Ingomar Inc (California), the La Doria and Russo groups (Italy), and the Tunhe Group and the Xinjiang Production and Construction Group (China)) (Pritchard and Burch 2003).

Apparent per capita consumption (fresh production + imports – exports) averaged 26 kilograms per year between 2000 and 2002. Exports to markets in South East Asia and the South Pacific have declined in volume terms between 1999 and 2002.

There was an increase of 16% in volume exported to New Zealand between 2001-02 and 2002-03 which in value terms was an increase of 95%. At the same time, imports from New Zealand increased by 352% in volume and 415% in value. However, there was still a positive trade balance for Australia of 2:1 in value terms in 2002-03.

Production of tomatoes is in-field or greenhouse. In-field growing is on trellis or on the ground. Major advances in technology and management have taken place for both in-field and greenhouse tomatoes. Modern in-field tomato production involves drip or subsurface irrigation with fertigation and soil moisture monitoring. More effective use of both water and nutrients with effective crop rotations is increasing yields and quality.

**Case example**

**North Central Produce** in Rochester, Victoria farms 300 hectares for processing tomatoes uses sub-surface irrigation with fertigation, soil moisture monitoring and global positioning technology to increase yields. The grower’s water use is 5 ML/hectare to produce 100 tonnes of tomatoes compared with the traditional furrow irrigation which used 8 ML/hectare to produce 65 tonnes. This is a yield increase of 54% and returns around $2,500 gross per ML of water used.

Source: Australian Government’s 2004 Innovation in Irrigation Showcase

Greenhouse production of tomatoes also enables high yields, quality and consistent supply. The Netherlands is regarded as the most advanced country for greenhouse horticulture and are major suppliers of tomatoes to the UK, Germany and the US. Greenhouse production expanded rapidly in New Zealand during the 1990s in response to competition from imports of Australian tomatoes.

**Case example**

**Richard Thurbon Greenhouse Productions** in Rossmore, New South Wales operates a state of the art 6,000 square metre hydroponic greenhouse. It has a fully automatic computer control system that monitors temperature, humidity, carbon dioxide and light (lux) levels within the greenhouse. Sensors maintain conditions to predetermined parameters by opening and closing vents that run the length of the shed, moving shade screens and turning the heating and carbon dioxide systems on and off. Water, nutrient and pH levels are controlled by the irrigation system which also has light sensors to make automatic adjustments to the concentration of nutrient with the irrigation water dependent on temperature and light levels. The grower achieves 22-30 tonnes of premium quality tomatoes per ML of water used with a gross return of $66,000 per ML.

Source: Australian Government’s 2004 Innovation in Irrigation Showcase
Australian growers have the potential to expand high technology greenhouse production which can grow up to 55 kilograms of tomatoes per square metre. Expansion needs to be well planned due to the high capital costs and the need for training of growers.

**Carrots**

Market Equity (2005) has reported on the carrot industry in preparing a marketing strategy commissioned by HAL. Market Equity note that over much of the past decade carrot production has increased with a compound annual rate of 2.9% in the six years between 1997 and 2003. Production peaked at 331,000 tonnes in 2001-02. Western Australia produces the largest volume, but significant volumes are produced by other States. Tasmania is the major producer for the processing industry with some 20,000 tonnes being processed.

In 2003-04, Australia exported around 66,000 tonnes of carrots valued at $39 million. Western Australia accounts for the major of exports with 86% of total exports in 2002-03. Market Equity report that exports showed strong growth during the 1990s, but have been decreasing in volume and value terms since 2002-03.

| Table 2.3: Exports of carrots from WA for selected years, approximate volumes and values |
|-----------------|--------|-------------------|
| **Year**        | **Volume** | **Value FOB** (A $million) |
| 1990-91         | 20,000   | 10                |
| 2001-02         | 67,000   | 43                |
| 2002-03         | 67,000   | 41                |
| 2003-04         | 60,000   | 34                |

Source: Market Equity (2005)

The major markets for Australian carrots have been in South East Asia with Malaysia being the largest market since the early 1990s and important markets in Singapore, Hong Kong, Japan and Thailand. However, exports to Malaysia have been decreasing since 2002-03 associated with increasing volumes of Chinese carrots being imported in Asian markets. While some of the losses of Australian exports to Asia have been compensated for by increased exports to the Middle East, the export volumes have not been fully recovered. Anecdotal reports provided during the field interviews were that with the loss of exports, greater volumes were being supplied to the domestic market causing pressure on prices.

Australia has some large and successful businesses producing carrots with the largest carrot farms being located east of Mildura on the Murray River and in Gingin north of Perth. These farms have integrated operations across the supply chain and are utilizing advanced and labour saving technology in crop management, harvesting, washing, packing, storage and distribution.

The field interviews with growers and processors in Tasmania showed that suppliers of processing carrots were under price and cost of production pressures.

**Lettuce**

Total lettuce production has trended upward over the decade 1993-2003 at an average annual rate of 2.1%. AUSVEG report that the gross value of lettuce production increased by an average annual growth rate of 2.6% between 1997 and 2003, although in real terms this was less than half-a-percent per year and in 2003, GVP declined by 9.3% in real terms over 2002. Latest ABS figures show the volume of production in 2003-04 increased by 10.5% (127,228 tonnes) over 2002-03 (121,508), although it is 6% below the level of 2001-02.
The increase in production over the decade has been associated with increases in area planted and yield increases. In the domestic market, consumption appears to be relatively stable at just under 7 kilograms per person per annum. Imports represent a very small proportion of domestic consumption with minor amounts being imported from New Zealand over the past 5 years. Lettuce is exported to many countries, but only accounts for a small proportion of the aggregate value of total vegetable exports (6%). Most exports are to Singapore (42%) with other markets in the United Arab Emirates (16%), Indonesia (9%) and Hong Kong (7%).

Anecdotal evidence from the field interviews shows that lettuce production in Australia has successfully restructured over the past five years with fewer growers, larger scale capital intensive operations and an emphasis on quality. There are highly successful businesses producing for food service, retail and niche markets such as loose leaf and gourmet lettuces. These businesses have a strong emphasis on marketing, high quality production and packing, labour saving mechanization and product innovation.

**Mushrooms**

The Australian Mushroom Growers Association consider mushrooms are currently the second most valuable fresh vegetable crop in Australia and the mushroom industry has been one of the three fastest growing crop industries established in Australia since the 1950’s.

There are approximately 100 commercial growers with the largest 3 companies producing 50% of output, the 5 largest producing 60% and largest 13 companies producing 75%. The industry is generally located near capital cities with NSW, Victoria and Queensland being the largest growing states. Some 2,500 people are directly employed in the industry.

The industry considers that from the mid 1970’s to mid 1990’s, domestic production has increased at an average annual rate of 10% per annum. The industry’s 2001-2006 strategic plan sought to drive growth in the Australian mushroom market at an average 3% to 5% per annum over the period of the plan. ABS data shows production levels at 43,412, 39,288 and 46,265 tonnes over the past 3 years.

The industry supplies 75% of its produce to the retail sector, 20% to food service and 5% is processed. Approximately 90% of mushrooms sold in retail outlets are loose and about 10% are in pre packs. Australian annual per capita mushroom consumption increased from 0.65 kg in 1974 to about 2.84 kg in 2000-01 which is considered to be one of the highest levels in the western world.

Imports of mushrooms have fallen dramatically from about 50% of the market in the mid-1970’s to less than 11% in 2000-01. The industry is continuing to replace fresh imports with domestic product. Imports of processed products have remained steady and there are opportunities for Australian value-added products competing with imported products.

The industry notes there is growing demand for exotic, nutraceutical and wild mushrooms (eg shiitake, oyster, straw, shimeji), but this niche market is very small (around 500 tonnes per annum) and will only grow slowly without significant investment in promotion. It is estimated that over the next five years, growth of these varieties will be slow at about 1.2% with an estimated value of $5-6 million.

**Onions**

Onion production over the three years to 2003-04 has been 282,516 tonnes, 228,608 tonnes and 233,354 tonnes respectively. South Australia and Tasmania are the main producers, although all States produce significant volumes. Tasmanian production increased rapidly from the late 1980s to a peak of 90,000 tonnes in 1996, but has
declined to around 60,000 tonnes at present. Loss of market share occurred due to competition with New Zealand growers (personal communication, exporter 2005).

The total area planted to onions has been relatively constant over past 3 years at around 5,500 hectares grown by approximately 500 growers. Onions are grown in rotation with other crops, so there are no specialized onion growers. The average vegetable farm is usually owner-operated and about 100 hectares in size. Sowing, harvesting and cartage are carried out by contractors organized by the grower or packer-exporting company.

Australian consumption has averaged 11.4 kilograms per person per year in 2000-01 and 2001-02. In recent years opportunities have arisen for new varieties in the market.

Major export markets of brown onions are in Germany, the United Kingdom, Hong Kong, Japan, Indonesia, Taiwan and Malaysia. New Zealand, Chile, South Africa and China are emerging suppliers to world markets. Transport costs impact heavily on exports with some 35% of the gross return per tonne being for shipping.

Most packing and exporting operations are involved with quality assurance programs such as ISO9000, SQF2000, Tesco Nature’s Choice, Woolworth’s Quality Vendor Scheme and JUSCO (a Japanese supermarket quality assurance system). Imports from USA, New Zealand, Netherlands, China and Malaysia have declined from 3,300 tonnes in 2001-02 to 1,571 tonnes in 2002-03.

Overall, the onion industry is relatively flat with both prices and production costs being a major concern to growers.

**Asian vegetables**

A growing segment of the Australian Vegetable Industry is the Asian vegetable sector. In 2000-01, the value of the industry was estimated at around $135.8 million, up from around $50.4 million in 1993-04 (Hassall & Assoc. 2003). The market accommodates about 80 different Asian vegetable types, with presence in every State and Territory in Australia. There was estimated to be 1,675 growers in 2000-01, almost double the 1993-94 number of 679.

While it is still a small part of the wider Vegetable Industry, the value of the Asian Vegetable Industry as a proportion of the total industry has grown from 3.6 per cent to 7.5 per cent between 1993-94 and 2000-01. Australian consumption patterns would seem to suggest that this will grow further in future. Around 16 per cent of Asian vegetables by volume are exported, and this has remained stagnant for some time with competition from China more dominant in recent years (Hassall & Assoc. 2003).

Investment in Asian Vegetable Industry R&D is largely through the Rural Industries R&D Corporation, representing the ‘new industry’ status of many Asian vegetable products (see Chapter 5).

### 2.9 Resource use

The IPP Framework identifies the way in which an industry uses its resources as extremely important. The following attributes are listed as key assessment measures:

- land intensity, measured in dollars gross value of production per hectare;
- input intensity, measured as the dollar input per dollar output;
- capital intensity, measured as the ratio of dollars turnover to total asset value;
- water intensity, measured as the value of output per megalitre of water used; and
The Australian Vegetable Industry: Taking Stock and Setting Directions

- debt to asset ratio.

There is a lack of data to adequately measure these attributes, but in this report we have provided a limited assessment based on qualitative information collected through industry studies and the field interviews.

**Land intensity**

- A key issue in some areas is the size of landholding with over 70 per cent of vegetable farms being under 100 hectares. This can challenge growers to remain competitive while also maintaining the long-term productive value of their soils through optimum crop rotations.

- Intensive crops continue to be located in urban and peri-urban areas, while broadacre crops such as carrots, onions and potatoes are located generally in areas where larger acreages are available. Location of vegetable growing in peri-urban areas has brought conflicts of land use and pressures for urban development forcing land prices up and making it difficult for growers to consolidate landholdings.

- It is likely that land prices will continue to result in the re-location of vegetable growing in Australia. With any relocation, it is important that this be on a planned and well considered basis involving input of the industry and State and local government authorities. This is necessary to ensure that vegetable production takes place in environments with optimum climatic, soil, water, land-use and infrastructure conditions.

**Input intensity**

- In an increasingly competitive market, identifying and adopting technologies that reduce costs, enhance quality and improve productivity is crucial.

- Labour costs represent 50-70% of cost of production and technology adoption is one strategy to compete against suppliers based in countries with access to cheap labour.

- The main sources of labour across horticulture, including vegetables, are:
  - Australian locals in horticultural regions. This includes workers who reside on a permanent or semi-permanent basis in the region that they are employed;
  - working holiday makers or backpackers. These employees, often described as Working Holiday Makers, have a permanent place of residence other than Australia;
  - full time or seasonal itinerant workers;
  - Australian students. These include workers who are Australian students for at least a major portion of a year. They are generally secondary school or tertiary school students who gain employment during holiday periods; and
  - immigrants who enter under a variety of programs (CDI Pinnacle Management 2005).

- Demand for skilled and unskilled labour is high in all areas of the sector including demand for farm management, field workers, business and supply chain management and support services.

- Labour availability at critical times is met through seasonal packers and pickers who have variable skills.

- Skilled and permanent middle management positions such as farm managers are increasingly difficult to recruit and retain.
A high proportion of growers and employees are from non-English speaking backgrounds.

Increasing farm size and a rapidly changing market environment is requiring new skills for owners and managers.

**Capital intensity**

- Some crops are highly mechanized such as carrot production and have high turnover to asset value ratios.
- Contracting is a feature of many crops supplying processing, where growers operate in networks and vertically integrated growers. This has worked to increase the turnover/asset value ratio for these growers.
- Overall, the anecdotal information is that vegetable production remains labour intensive with generally low turnover/asset value ratios.

**Water intensity**

- Vegetables are grown in a wide range of climate zones in Australia. However, for most vegetables and most regions this means that supplementary watering through irrigation is required to produce high quality and high yielding crops. There is around 100,000 hectares of irrigated land in Australia used for vegetable production.
- Vegetable crops require optimum soil moisture conditions to be maintained throughout the entire growing season. They are characterised by shallow root systems, which have small soil water storage reservoirs and plants with changing water needs, depending on their stage of development and the weather.
- Effective management of irrigation is required to achieve optimum production and high water use efficiency. Over-watering of vegetables can result in waterlogging and the risk of disease, the leaching of nutrients, unwanted additions to groundwater, increased energy (pumping), increased labour and excess drainage water, which needs to be managed. They are also very sensitive to a lack of available water which may result in reduced quality, yield and size and salinity risks.
- Irrigation for vegetable production involves high capital investment per megalitre of water used and per hectare of land area. The industry achieves high water use efficiency (defined as the value of output/ML) compared to many other irrigated industries. However, individual case studies show that greater yields are possible with the use of modern irrigation technology and advanced management practices.
- The availability and price of water and value of production per megalitre of water used is critical to the future growth of the Australian Vegetable Industry. There is little economic information on the industry’s performance and its potential to achieve greater returns per megalitre. A major assessment of water availability and use in the Vegetable Industry is important in industry strategic planning.
- HAL is presently undertaking a range of studies to assess the vegetable industry water use and water use efficiency through its R&D investment program.
Debt to asset ratio

- Access to capital for expansion and adoption of new technologies at farm level is variable, although farm size trends and productivity growth suggests it may be adequate (Thompson, HAL 2005). There is little information on debt to asset ratios of growers.

2.10 Vegetable production and the environment

Management of resources for environmental outcomes highlights issues faced by many growers caught in the nexus of local/global relationships implicit in globalisation. For contract producers, globalisation has left many with a sense of incapacity to make decisions pertaining to land management (Burch and Rickson 2001).

In the vegetable industries, processor demands for continual supply and tight specification of production methods can conflict with good land management.

In some cases, processor demands for implementing vegetable production methods can conflict with methods specified by other processors for other vegetables grown on the same farm.

Under such arrangements, it is critical for the maintenance of farm resource sustainability and regional environmental health that processors and other downstream sectors maintain a keen interest in environmental values.

For this reason, there is a strong link between consumer demand for clean and green products and environmental management at all levels of the value chain.

In some parts of the country, water trading will see an increase in water used for higher value produce such as vegetables over other industries (such as those based on flood irrigated pastures).

A 1992 report by the Department of the Environment, Sports and Territories noted that: “...few of our current horticultural systems are sustainable in the long term. Of all the various forms of agriculture in Australia, horticulture has been the most reluctant to abandon the traditional European cultivation techniques which are so unsuited to Australia’s soils and climate. Australian horticultural management has been characterised by relatively small scale monoculture cropping of introduced species, regular tillage to control weeds and to produce a soft seedbed, regular application of fertilisers and biocides and little direct regard for the maintenance of supporting ecosystems.” (IC, 1993) The challenges presented by the very nature vegetable production will not disappear, although the industry has been more proactive in recent years in investing in environmental initiatives.

Two broad types of environmental problems are linked to Australia’s fruit and vegetable production practices: (1) pollution and contamination of soil, water, air and food resulting from the use of farm chemicals; and (2) degradation of natural resources, especially the deterioration in the available quantity and quality of soil and water. (Stringer, 1998)

Some elements of the Vegetable Industry have responded to these issues through exploring the development of environmental management systems, most recently in partnership with the Australian Government’s Pathways to Industry EMS program. The Horticulture for Tomorrow is one such initiative supported under the EMS program, and has established effective links with the Vegetable Industry’s Enviroveg initiative. This initiative addresses key environmental issues, including:
● Water management
● Soil management
● Nutrient management
● Pest and disease management
● Air quality
● Energy conservation
● Waste management
● Biodiversity

While the Vegetable Industry invests in sustainable production systems R&D, the diverse nature of the industry (including the ethnic and geographical diversity) challenges effective communication and extension of best practice environmental management systems.

2.11 Australian Vegetable Industry information

In this report, we have drawn on general statistics to provide an overall picture of the industry, but it is more important to distill key characteristics and trends, and then examine the implications.

Why is this important?
The old axiom, Knowledge is Power is highly relevant here. This is a key area for industry action as strong information systems are a competitive advantage in the market place. Australian Bureau of Statistics’ data provides baseline information on many aspects of the industry, as does the Australian Horticultural Statistics Handbook produced by HAL. However, these sources are not sufficiently timely for commercial and market decision making. In recognition of the inadequacy of industry statistics, AUSVEG has employed a full-time economist to increase the Vegetable Industry’s capacity to gather and analyse important economic data.

An early observation in this project was that there are gaps and deficiencies in data on the production, distribution and transformation, consumption and trade of most of Australia’s vegetable crops, along with weaknesses in its timeliness and questions on its accuracy.

HAL commissioned Market Equity to examine the Vegetable Industry’s data and information systems and provide recommendations to build an excellent business information system at industry level. The Market Equity (2005) report provides a strong analysis of gaps and weaknesses in industry data and outlines recommendations to systematically address industry information systems (see Figure 2.8). It identified the key priorities for industry investment as:

<table>
<thead>
<tr>
<th>Information set</th>
<th>Key priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grower</td>
<td>Establish a grower information exchange</td>
</tr>
<tr>
<td>Retail</td>
<td>Recommence investment in retail sales data</td>
</tr>
<tr>
<td>Export Markets</td>
<td>Prioritise and conduct detailed market analyses</td>
</tr>
<tr>
<td>Consumer</td>
<td>Undertake group consumer research</td>
</tr>
<tr>
<td>Consumer/Retail</td>
<td>Establish a household panel</td>
</tr>
<tr>
<td>Food Service</td>
<td>Undertake a foundation study of the food service sector</td>
</tr>
</tbody>
</table>
During interviews with a range of producers, the concept of benchmarking and sharing of farm information to underpin processes of continuous improvement was commonly rejected. Some industry leaders noted that benchmarking studies are undertaken from time to time, although these did not necessarily support ongoing processes of engagement, active learning and adaptive management. Processors, including McCain Foods and Simplot, utilise forms of benchmarking, but many growers viewed the criteria as setting bars for negotiation rather than as criteria for ongoing self-improvement.

2.12 Implications for Setting Directions

Competitiveness

- The diversity of the Australian Vegetable Industry is both a strength and a weakness. As a strength, its diversity provides the capacity for supplying substantial quantities of many products for domestic and overseas markets and to manage continuity of supply to markets. As a weakness, its diversity and dispersion can hinder development of economies of scale, cooperation in the supply chain and establishing the unity of vision and action to be successful against the competition of imports and in export markets.

- Production and consumption of the key vegetable crops have been relatively flat over the past few years with most enterprises under cost-price pressures. Key areas of concern are processing vegetables and the loss of export markets in the case of carrots, onions and cauliflowers. There continue to be opportunities with these crops through adoption of advanced technology and mechanization.

- It is clear that growers supplying processing vegetables will continue to lose contracts and face price reductions unless they can consolidate to supply larger
contract volumes and continue to work on yields, costs of production and efficient use of capital. The present situation is unsustainable and unless major changes take place there will be a substantial reduction in the number of growers of processing vegetables.

- While the situation for the fresh vegetable sector is better, it too faces potential challenges of cost competitiveness as imported fresh product continues to increase. Movement from processing vegetable production into fresh vegetable production could place added pressure on the fresh sector.

- There are examples across all areas of the Vegetable Industry where businesses are competing successfully to supply consumers in Australia and overseas markets.

**Sustainability**

- The Vegetable Industry is important in economic and societal terms to all States, but is relatively more important in regional economies where it is located in providing employment opportunities across the supply chain, and revenue for allied businesses that supply goods and services to the industry.

- Analysing aggregate production data as a proportion of the national economy does not provide a picture of the contribution of the Vegetable Industry to rural and regional communities. The industry can be overlooked or given lower priority in the provision of economic and social infrastructure and services by government and the private sector.

**Resilience**

- There are a number of resource use issues facing the Vegetable Industry including the small size of holdings, land use pressures and the high cost of land where urban development is taking place, the availability and cost of labour; and the availability and rising cost of water which require industry attention and strategies to survive and prosper.

- Rapid industry rationalisation is already occurring, although it has considerable ramifications for regions that are dependent on the vegetable-industry. This will require consideration of structural adjustment issues based on wider community outcomes.

**Self reliance**

- There are gaps or deficiencies in data on the production, distribution and transformation, consumption and trade of most of Australia’s vegetable crops, weaknesses in its timeliness and questions on its accuracy. This is a key area for industry action as strong information systems are a competitive advantage in the market place. Australian Bureau of Statistics' data provides baseline information on many aspects of the industry, but it is not sufficiently timely for commercial and market decision making.

- Improved collection of social statistics pertaining to the Vegetable Industry is important so as to base future direction setting on sound ‘triple-bottom-line’ considerations.

- The challenges presented by the diverse social and cultural nature of the Vegetable Industry require improved and more sophisticated methods of communication, consultation, education and extension.
FRAMEWORK COMPONENT TWO:

EXTERNAL ENVIRONMENT
Chapter 3. Vegetable Markets

The following two chapters deal with the second component of the IPP Framework: the external environment. The external environment in which the industry operates is inclusive of developments in international and domestic markets, domestic macroeconomic policies, weather and changes in other industries. These are factors over which the industry has no control, but are considerations against which industry strategies and investment plans must be tested if they are to achieve success.

This chapter covers issues specifically relating to markets, including
- Export markets and international consumer trends
- Domestic markets and consumer trends
- Characteristics of successful export businesses
- Nature of existing and specialized markets; and
- International and domestic opportunities and threats.

3.1 Overview

Agrifood globalisation is driving change on an unprecedented scale with all economic activity becoming globalised. The Australian Vegetable Industry is part of the global production base, in a global marketplace, oriented to a global customer base. Globalisation has been accelerated by:
- continued downward trend in agrifood commodity prices;
- massive economic change in Asia, Latin America and Eastern Europe;
- technological advances and deregulation communications, transport and information;
- improved access to capital and increased access for foreign investors in the agrifood sector;
- reductions in global agrifood trade barriers; and
- globalisation of culture making possible global brand consciousness and marketing (Department of Foreign Affairs and Trade, 2001).

These trends and changes have far-reaching implications for Australian firms that supply vegetables and vegetable products to meet consumer demand domestically and internationally. They represent challenges to sustain market share against new competitors from emerging economies and direct competition from large, sophisticated suppliers in developed countries. At the same time, these trends open up opportunities to access new markets and to explore new business models and alliances to build business profitability.
3.2 International consumer trends

The international food market is diverse and potentially volatile. The attitudes of consumers, governments and major corporations differ according to social and cultural factors, while patterns of demand and regulation are linked to issues such as food safety, preferences for local production and more traditional production methods (Allen Consulting Group 2004).

What is clear is that the global vegetable industry has large, growing consumer markets to supply. The world population is growing, there is a trend to urbanisation and consumers in developing countries have more disposable income. At the same time, consumers are increasingly well informed about food safety and quality and are more health conscious. An emerging focus on obesity in developed economies has sharpened consumer attention on food that is good for their health. In summary, demand for quality vegetables can be expected to grow.

Taking into account the growing health consciousness of consumers, McKinna (2005) identifies the key drivers of food purchase in order as:

- taste/enjoyment;
- availability;
- price/value;
- nutritional value;
- convenience; and
- safety.

Other drivers are emerging for consumers. Consumers are more conscious of environmental sustainability and over time this could translate into preference for foods that are produced in a responsible way. Corporate social responsibility is recognised by an increasing number of businesses, including the major food retailers in Australia and around the world (PricewaterhouseCoopers 2005). However, environmental awareness has not translated into markets with product premiums at this time (Allen Consulting Group 2004).

Adhering to production systems that are considered environmentally sound, however, is essential to access certain markets, and an increasing number of importers and retailers are setting criteria on both quality of product and quality of production process. The movement is not just cosmetic – leading overseas retailers such as Marks and Spencer and Tesco are devoting considerable effort to ethical supply chain management and developing programs to address environmental and social issues. Evolving environmental and social trends are likely to encourage Australian retailers down the same path (PricewaterhouseCoopers 2005).
Consumer interest in safe, tasty, ‘natural’ products is being reflected in the rising demand for organic food in some developed country markets. Organic produce is also establishing itself in processed food markets – baby food being a prime example (Allen Consulting Group 2004). However, growth in demand for organic food is coming off a low base and it still only represents a niche market (McKinna 2005).

### Why is this important?

Australian vegetable growers are part of a global industry producing products to meet growing consumer demand. Where consumer demand is growing, there are always opportunities for astute businesses to prosper. The challenge for Australian vegetable businesses is to invest in areas where they can create and sustain competitive advantage.

### 3.3 Export markets

Australian agriculture is well positioned in overseas markets as a reliable source of clean, safe food, with low incidence of pests and disease. Further, Australia’s proximity to developing economies in Asia provides market access opportunities. These characteristics contributed to the steady expansion of vegetable exports during the 1990’s, although over the past three years, exports have been in decline. Most exports are fresh chilled vegetables, amounting to $164m in 2003/04 (Australian Bureau of Statistics, Australian Horticulture Statistics Handbook 2004) and geared to supply counter-seasonal opportunities for quality produce.

**Fig 3.1: Value of vegetable exports 1996-2005**

![Graph showing the value of vegetable exports from 1996 to 2005.](Image)

Key export products and destinations are:

- Carrots – Malaysia, Singapore, UAE
- Onions – Netherlands, UK, France
- Potatoes – Republic of Korea, Malaysia, Mauritius
- Cauliflower – Malaysia, Singapore, Hong Kong
- Broccoli – Singapore, Malaysia, Japan
- Asparagus – Japan, Taiwan, Hong Kong

Export prices and sales of these ‘mainstream’ fresh vegetables have slowed for Australia in recent years, with the emergence of low-cost suppliers such as China, South Africa...
and Chile taking up market share in Asia. At this time, these export competitors have competitive advantage on price over Australian exporters. Also, they have increasing capacity to supply the counter seasonal opportunities that Australia has historically supplied.

Increased competition in Australian export markets is likely to continue and Australian exporters are faced with the challenge of driving down costs if they wish to compete on price and/or pursuing other strategies to differentiate products or capture niche markets.

3.3.1 Market opportunities and threats

The broader agrifood sector is rapidly globalising (DFAT 2001) and producing both opportunities and threats for the Vegetable Industry with:

- an accelerating trend towards larger corporations and industry consolidation;
- global rationalisation of production facilities;
- global rationalisation of business segments, product lines and brands;
- trend towards global sourcing;
- major agrifood businesses strengthening control of supply chains; and
- outsourcing by agrifood corporations – contract manufacturing, private labels.

These developments are translating into vigorous competition for Australian vegetable producers. Suppliers in developing countries are investing in modern technology to improve yields and quality and, with lower labour costs than Australia, are set to continue their expansion into Australia’s traditional export markets.

Australia has successfully used its capacity to supply seasonal windows of opportunity in northern hemisphere markets where no one else can supply, or where there is some other point of difference (eg. superior quality). Opportunities exist to continue with this strategy for vegetable exports, however, seasonal advantages are reducing and so too is the quality gap between Australia and competitor countries.

Products and markets where price is the main driver (eg processed vegetables) are the first affected. Loss of export markets for fresh or processing vegetables has a flow-on effect for domestic markets by causing supply to outstrip local demand and drive prices down.

The opportunity for Australian businesses is to reduce costs to match global benchmarks or have a point of difference sufficient to support premium pricing (McKinna 2005). An example is the supply of overseas niche markets in the food service (hotel) industry in Asia.

Comments from field interviews

“Exports are very, very important. We have a real capacity to grow food in Australia. We need exports or we will drown.” (grower/packer/exporter).

“If money was spent to improve exports, it would be money well spent.” (industry leader)
3.3.2 Success characteristics

Although markets are changing and competition is intensifying, progressive Australian firms are exporting successfully. McKinna (2005) identifies success in vegetable exporting as requiring a long term commitment to markets and investment for:

- cost reduction through continuous improvement;
- innovation – new and improved products and processing;
- critical mass and economies of scale through alliances and consolidation;
- market/customer focus;
- market segmentation;
- product differentiation;
- critical mass issues at every level of supply chain;
- market intelligence; and
- tight specialisation.

Participants at the Taking Stock workshop in Melbourne on 7 September 2005 confirmed these areas as critical for future export success and emphasised the importance of relationships through the supply chain to focus and coordinate export development. Further, workshop participants considered that there was no difference between the success factors for the export market or the domestic market, recognising that businesses need to make decisions on the basis that there is really one market and it is international.

Comments from field interviews

- “Our focus has always been on a very high quality product.” (Grower/packer/exporter).
- “You get growers specialising in a crop and then targeting regions to grow it...there’s no prizes for second anymore.” (grower)
- “It’s a changing market. Therefore growers must embrace it, join with someone who can embrace it, or go.” (grower/packer/exporter)
- “We are over-priced. That is the crux of the issue.” (exporter)
- “Progressive growers know their costs inside out.” (grower)
- “Unless the industry is internationally competitive, that is exporting, you are finished.” (grower/exporter)
- “Why can’t growers see that their competitors are overseas and they should work together here?” (exporter)
Australia’s opportunities in global markets with vegetables will involve niche marketing, product differentiation, premium quality product and technology transfer. (McKinna 2005).

**Why is this important?**
Action is required to reduce costs, however competing successfully overseas will require a strong focus on niche strategies and development of points of differentiation through innovation. This means an emphasis on fresh quality products rather than cheap products for processing.

### 3.4 Australian Market

The majority of the Australian industry is geared to supply domestic consumers with vegetables. The capacity of the industry to meet local demand exceeds domestic demand, with shortfalls usually due to seasonality or adverse weather conditions in some regions. Productivity has grown with the adoption of new technologies, increasing scale of farms and shorter, more efficient supply chains. However, increasing competition from lower-priced imports and rising costs of inputs are exerting strong pressure on grower and supply chain businesses at all levels to further increase productivity and reduce costs (CDI Pinnacle Management 2004).

#### 3.4.1 Consumer trends

Trends for Australian consumers are similar to those for consumers in other developed countries. That is, they are tending to eat out more often and consume more take-away foods (Reid 2001) and are increasingly health conscious. Australians are also tending to waste more of the food that they purchase, potentially amounting to $2.9 billion per annum (Australia Institute 2005). Further, the key drivers of food purchase in order are: taste/enjoyment, availability, price/value, nutritional value, convenience and safety (McKinna 2005).

Australian vegetable consumption was around 162kg per capita in the three years to 1999 and trending upward. From 1989 to 1999 the consumption of fruit and vegetables in Australia was fairly constant. Overall, the top five vegetables purchased the most between 1993 and 2002 included tomatoes (13%), sweet corn (10%), broccoli (9%), onion (7%) and potatoes (6%) (Market Equity 2005a). Preliminary data to 2004-05 suggests the possibility that consumption of some major lines of vegetables has been in decline in more recent years (see Figures 3.2 and 3.3), although this needs further exploration.

While fresh vegetables represent the majority of sales, a large amount of frozen vegetables are sold in Australia each year. Some 88,000 tonnes of frozen vegetables were sold in 2004 with a grocery sales value of $308m. The frozen vegetable category is showing good growth of 2.2% volume and 1.7% value growth in 2004 (Market Equity 2005).
All firms in the supply chain are grappling with a rapidly changing environment and increasingly vigorous competitors. In response, businesses including major retailers are investing in new, more rigorous research techniques and deeper customer insight analysis to improve predictive capability (PricewaterhouseCoopers, 2005). In the Vegetable Industry, some specific industries are also investing in gaining a deeper understanding of consumer perceptions and attitudes, with a view to developing national marketing plans (Market Equity, 2005, Market Equity 2005a).

Comments from field interviews
“Our biggest challenge is keeping up with the consumer.” (grower/packer/marketer)
“Focus on the quality and the market will find you. For us, it’s all on the up and up and demand is outstripping supply.” (grower)
“Our bank balance is going backwards and we’ve never worked harder.” (grower)
3.4.2 Existing markets

Most sales to consumers are through the two major retail chains (Coles Supermarkets and Woolworths), whose buying policies impact on firms of all sizes in the value chain. Domestic channels for vegetables reaching the Australian consumer are listed below (McKinna 2005) and explored further in Chapter 4.

The major supermarkets in Australia and overseas are consolidating and growing their share of food sales to consumers. In response, suppliers are following this trend and consolidating and/or forming supply alliances. Business models where growers are linked into these supply chains are emerging as very successful.

<table>
<thead>
<tr>
<th>Retail</th>
<th>(65%): Supermarket</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail grocery shop</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Local markets</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Farmers markets</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Food Service</th>
<th>(30%): Restaurants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quick service restaurants</td>
</tr>
<tr>
<td></td>
<td>Catering</td>
</tr>
<tr>
<td></td>
<td>Institutions</td>
</tr>
<tr>
<td></td>
<td>Transport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>(5%): Manufacturing</th>
</tr>
</thead>
</table>

Comments from field interviews

“In general my relationship with the supermarket is excellent. I have had 100 per cent support for years with no overt or covert pressure of any kind.” (grower)

“We grow to our market – not grow to sell. If everybody did that we would be making money and not have all this upset and ill-feeling in the industry (grower)

“Industry and retailers should be working together more.” (grower)

“Direct to retailers is the best bang for your buck. Therefore we need good links with supermarkets.” (Grower/packer)

3.4.3 Specialised markets

While globalisation has been driving general market trends (eg, consolidation across the supply chain, sourcing from lowest cost suppliers from anywhere in the world, standardisation of brands and stringent audit based quality supply requirements) specialised markets are providing diversity in marketing opportunities for Australian growers.

This diversity comprises farmers’ markets, organics, specialist gourmet lines for retailers and food service, specialist juice bars and nutraceuticals (vegetables and vegetable products used in dietary complements and supplements, ‘herbal’ medicines and ‘well-being’ products).

Farmers markets’ are said to be an increasing sector in some States, particularly Victoria, although they account for only a small proportion of total vegetable sales to consumers.
Case example

Regional Farmers’ Markets have established markets in Koonwarra, Drouhin, Collingwood, Lancefield, Tatong, Port Fairy, Cardinia Ranges, Yarra Valley, Warrnambool, Boroondara, Doncaster and Bairnsdale

“The purpose of a Farmers Market is to enable local producers to sell their goods directly to consumers. This means fresher food, a better understanding between producer and consumer, high quality produce at an affordable price, and a fairer income for producers.

Farmers Markets promote a more sustainable society by reducing 'food miles' assisting in the sale and marketing of food produced to high environmental standards and by reconnecting consumers with the farming community that surrounds and serves them.

The connection of 'grower to consumer' fosters community spirit and appreciation and respect for fresh clean food and the environment. It also strengthens the local economy, providing greater returns to the grower and excellent value to the customer.

The Selection of produce will vary with both location and season. The markets aim for an atmosphere, which is vibrant, up-beat and fun, helping to re-vitalise rural centres and make shopping a sociable and enjoyable experience.

Nowhere else will you find such a mixture of fresh and locally produced goods. The public can be confident of the origins of the food they eat and get closer to the sources of local foods. Farmers Markets are the embodiment of the availability of home grown foods.

Most markets have strict criteria for producers to adhere to in order to sell their produce at the market. The integrity of the product is a key ingredient to the success of each market. The prime aim of the market must be to develop a creative and stimulating environment where consumers and producers are brought together.”

Source: Peter Arnold, Regional Farmers’ Markets
http://www.rfm.net.au/index.html

3.4.4 Market opportunities and threats

Opportunities

There is a rapidly growing market for inputs into recipe foods (McKinna 2005) such as:

- canned and dried soups;
- convenience meals;
- sauces;
- stocks and flavour bases; and
- baby foods.

Similarly, there is a growing demand for first stage processing of vegetables (peeled, cut, pureed, dried, frozen). The ingredient market tends to be dominated by cheap imports, particularly for dried products ie. Indian/Chinese. However, it offers substantial opportunities for Australia in some categories/markets (McKinna 2005).

New varieties of vegetables offer opportunities, especially as tastes broaden and lifestyles become more cosmopolitan. Retailers and quick service restaurants are interested in new varieties that are ‘exclusive’ to their customers and have consumer appeal. Some national wholesale/marketing firms have developed significant businesses in this niche, with sophisticated regional networks of growers and packers. Thus, ‘closed loop’ marketing arrangements are becoming more prominent.
Food service and independent retailers are providing new opportunities for suppliers. Around 40% of the food dollar is consumed away from home, including in restaurants, bistro and cafes, pubs and clubs, and quick service restaurants, through catering and institutions, and whilst travelling. Rationalisation and consolidation in this sector has seen emergence of large global players.

**Comments from field interviews**

“People who are succeeding in horticulture are those who anticipate change and move before they have to.”  (Grower/packer/marketer)

“Part of the value we add is in helping supermarkets get products in front of consumers that they want to buy.” (grower/packer/marketer)

“Farmers need to be more willing to get out and build relationships. It’s only the relationship that determines what you get back.” (industry leader).

“The industry is good. We have a perishable product that people will buy. It’s just that technology has overrun us and allowed us to increase production and oversupply a small (domestic) market. We need bigger markets.” (Grower)

**Threats**

Import volumes are growing, particularly of prepared and frozen vegetables and represent a significant threat (see Figure 3.2). For example, some 60 per cent of potatoes grown in Australia are used in processing (Market Equity 2005a), and in the last three years the industry is starting to lose market share to lower price imports of frozen fries from New Zealand. In addition to the impact on Australian growers, lower volumes through Australian processors will discourage investment and/or hasten rationalisation of processing facilities.

![Fig 3.4: Value of vegetable imports 1996-2005](image)

The key threats can be summarised as:

- emerging economies seeking export markets;
- low labour costs in emerging countries;
- grower/industry subsidies in developed economies;
- large scale operations in key competitor markets;
- lower cost overseas competitors; and
• overseas barriers to market entry.
Imports represent a threat to Australian growers, although the volume and values are currently small.

3.4.5 Market promotion and development

Most elements of the Vegetable Industry do not have a national levy to fund market and promotion activities and these activities are largely left to the private sector. Indeed, the supermarkets invest substantially in advertising campaigns focusing on the fresh sector.

However:

• the industry does invest R&D levy funds in market research. Individual industries have invested via R&D projects to understand the characteristics of the supply chain, consumer preferences and expectations; but the connection between these studies and uptake is variable
• aggregated market information and statistical records are compiled and made available by both AUSVEG and HAL, but issues of data paucity and quality are significant
• there is no regular market intelligence and monitoring service that is widely used by the industry. Price reporting services are available in all wholesale markets, but do not provide specific information (some growers and industry members interviewed said that they distrust these services at present).

While government is investing in promoting the health advantages of consuming fresh vegetables through programs such as ‘2 and 5’ program, there is little industry investment in marketing and promotion to increase demand for Australian vegetables. Mushroom growers are one part of the wider Vegetable Industry that do invest marketing, and offer an example and possible benchmark for how the rest of the industry could gainfully support marketing and promotion.

Comments from field interviews
“We’ve got to move on past research. We’ve got to get into promotion.” (grower)

The Vegetable Industry is divided on what is promotion, the benefits of generic promotion on the domestic market (the effect of increasing competition between different vegetables) and the benefits flowing back to the levy payers.

3.5 Implications for Setting Directions

Competitiveness

• The majority of vegetables are essentially grown as commodities, where it is difficult to compete. While some structural adjustment will be inevitable in the fresh as well as the processing market, it needs to be recognised that there are growing consumer markets for vegetables in Australia and overseas. The challenge for Australian businesses is to invest in areas where they can create and sustain competitive advantage against suppliers from other countries.
• Niche markets and opportunities to differentiate Australian vegetables locally and overseas will be important strategies for competitive advantage. In order to develop and implement these strategies, consumer satisfaction attributes and trends need to be understood at a deeper level and monitored by the industry and commercial players.

• Strategies are needed to increase exports and stimulate domestic demand for Australian produce. The capacity of the Australian industry to supply vegetables exceeds domestic demand, while international competition is intensifying.

• Competition for exports and from imports will continue to intensify. There is a need to develop a deeper understanding of overseas competitor strategies and their advantages in the market relative to Australia.

• Export success will require action to reduce costs and develop niche markets. A more sophisticated and coordinated approach will be required to consolidate and expand exports in the future. Australian exporters have largely operated as spot market-opportunistic trader in international markets to date.

• The domestic market is most vulnerable to imports of vegetables used in processing. These products are traded as commodities and Australia is a high cost producer relative to other countries (e.g., developed economies such as New Zealand and emerging economies such as China). As imports of processed vegetables continue to increase, it will have a flow-on impact on local suppliers and the already over-supplied domestic market.
Chapter 4. Supply chain

This chapter continues to deal with the second component of the IPP Framework: the external environment. The chapter covers issues specifically relating to the supply chain, including:

- Global trends in supply chains;
- Attributes of the Australian Vegetable Industry supply chain;
- Establishment of new supply chain relationships; and
- Supply chain stakeholder views.

4.1 Introduction

“It is becoming increasing evident that achievement of the desired market position cannot be achieved solely through the company’s own efforts. Because each company is just one link in the production chain, with upstream and downstream links, it has to cooperate. The more effectively it does this, the stronger its competitive position in the market.”

Source: Jan van Roekel, Managing Director, Agri Chain Competence Foundation (the Netherlands, 1998)

There is a general perception of the Australian Vegetable Industry, particularly with the growing sector, as comprising a large number of individual enterprises operating as though they must compete with each other and with other participants in the supply chain. A frequent observation of many consulted is that the industry has does not have a culture of cooperation to be competitive in the supply chain and in export markets.

4.2 Global trends in supply chains

The global market economy has been built by communication and transport technologies breaking down boundaries and trade barriers being reduced. As seen over the past decade, these developments have opened up opportunities for Australia to export its food products and some industries such as our meat and grain industries have become highly successful in world markets. However, the other side of globalisation is that our own markets have become more accessible to overseas suppliers and local enterprises have come under greater competitive pressure. Internationally, competitive suppliers can and will increasingly trade in markets where consumers are willing to buy their products.

Comment from field interviews:
“We have no option, but to compete.” (a successful vegetable grower-packer-exporter)

Competition is increasing as food suppliers are able to make offers in any world market. This has meant world markets have become more crowded and even saturated as suppliers compete for market share.

Markets have become ‘buyers markets’ with consumers exerting greater power and being more discerning about the quality and value of products. In consumer dominated markets, supplier success factors include the following:
• close knowledge of consumers’ values and buying preferences and the ability to supply products which meet consumer expectations;
• major investment in differentiation against the best competing suppliers from anywhere in the world;
• achievement of continuity of supply over the whole year requiring sufficient volumes and the ability to be able to source from where the product is able to be produced at any time during the year;
• having the capacity to supply domestic and export markets as the distinction continues to blur between these markets;
• having the business approach and systems to be able to deal with more consolidated buyers including retail and food service chains;
• having the capacity and systems to supply global sourcing networks which may mean being able to source product both domestically and from overseas; and
• being able to build long term relationships with buyers and able to supply according to their specifications particularly in relation to quality and food safety.

There is much research and studies on global food market trends. The main trends can be summarised as below:

<table>
<thead>
<tr>
<th>Consumers</th>
<th>Westernisation; income growth; seeking convenience; concern about health and nutrition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailing</td>
<td>Global spread of major retailers; growth of hyperstores, discount warehouses, premium supermarkets, specialty stores.</td>
</tr>
<tr>
<td>Global food supply chains</td>
<td>Increasing purchasing power of major supermarkets; reduced number of suppliers; regional and global buying; increasing prominence of house brands and retailer labels; supply chain influence moving to retailers and away from processors.</td>
</tr>
<tr>
<td>Processed food</td>
<td>Increasing international trade; consolidation of processors (mergers and acquisitions); increasing variety of products.</td>
</tr>
<tr>
<td>Food service</td>
<td>Consumption increasing through quick service and family restaurants; development of uniform brands; increasingly centralised procurement; strong emphasis of food quality and safety; uniformity of products.</td>
</tr>
</tbody>
</table>

### 4.3 Attributes of the Australian Vegetable Industry supply chain

Attributes of the Australian Vegetable Industry supply chain that are apparent from marketing literature and the field interviews can be summarised as below:

**Consumers**

- Consumers comprise households; restaurant and quick-service restaurant diners; aircraft, train; ship passengers; employment canteen diners; hospital patients, inmates of institutions; etc.
- Consumers are the ‘heart’ of the chain and what they are willing to buy and the price they will pay determines the health of the complete supply chain.
- Total consumption is rising slowly with major changes in food preparation and eating styles. Strong messages are being promoted in the market about healthy...
eating and lifestyles and vegetables are a central element of the health message. This is a positive trend for the industry and it requires continually up-to-date information on consumption trends to allow more proactive marketing strategies.

- Some industry commentators have cited the “disconnect between attitudes and behaviour” amongst consumers as a market impediment (eg, McKinna, 2005). It is suggested that households buy on taste, convenience and value, but express preference for healthy, ‘clean and green’, and Australian products. Again this can be a positive for the industry if market research supports the proposition, because there is potential to turn attitudes into behaviour through product education and promotion.

**Retailers**

- This sector comprises the large retail chains, Woolworths and Coles; a recent market entrant, the German retailer Aldi; the South African Pick ‘N’ Pay, trading as Franklins; the Metcash supplied Independent Grocers of Australia (IGA); FAL supplied food retailers such as Action, Dewsons and SupaValu in Western Australia; and many small niche retailers.

- Coles Myer Ltd (2005) states that there are over 100,000 retailers in Australia and, of those, 30,000 are food retailers. Some 96% of retailers are said to be small businesses and that Australia continues to have the same number of small retail businesses per head of population as there was 30 years ago.

- The retail sector is believed to account for around 60% of the vegetable market. This sector is driven by consumer preferences, year round supply, quality and food safety, environmental management systems, stock and supply management, competitive costing, supplier rationalisation (CDI Pinnacle Management, 2005).

- The market power of large retail chains is perceived as a key issue for others in the chain, particularly growers: they consider the large retailers can drive price down and buy from cheapest source including imports. A source of contention to growers is that retailers tend to make most of their money as landlords and not out of margins for product. Their trading terms essentially mean that they are ‘banking’ monies received for product when consumers pay at point of sale, although they may not yet have made payment themselves for the product sold. There is scope for further analysis in this area.

- The view of the retail chains is that supermarket concentration in Australia is similar to that of other Western countries with population being the main determinant of the number of supermarket chain competitors. They point to the fact that consolidation is occurring throughout the food supply chain driven by economies of scale and technological advancement. Supermarket retailing is considered to be a low margin, high volume business that requires scale to be effective in delivering food products to consumers at the lowest possible retail prices (Coles Myer Ltd, 2005).

- Both of the major supermarket chains claim to source the overwhelming majority of fresh produce from Australian producers and have a purchasing policy of always buying Australian products where quality, reliability of supply and competitive prices allow. This is not necessarily the case for processed product.

- Greater volumes of vegetables are being sourced by the supermarket chains directly from grower–packers or packer–category managers and most direct suppliers report successful business relationships with the large retailers.
From the retailers’ viewpoint, the major drivers are sales volume and value with vegetables competing in the overall food basket and consumer services. Supermarkets are believed to have grown the total food sector.

Consolidation in the supermarket sector is increasing with acquisitions, some of which are being subject to investigation by the Australian Consumer and Competition Commission. The market shares of retailers for the food and liquor distribution channels in Australia are said to be as shown below. The retention of competitive large retail chains under Australian ownership is also important to having a purchasing policy that sources from Australian growers as a priority.

**Figure 4.1: Market share of main retailers (Source: Coles Myer Ltd, 2005)**

Private/generic labelling (such as home branding) of product by retailers is well entrenched. Retailers are now moving towards greater differentiation of products to appeal to different price markets by introducing low, medium and premium home brands. Potential exists to adopt an “Australian home grown” option within the product mix.

**Food Service**

This sector comprises institutional caterers (airlines, hospitals, industrial canteens), hotel chains and restaurants, quick service restaurants, small restaurants and hotels, juice bars. It is believed to account for 30% of total vegetable market.

Major changes in consumptive patterns in society over past two decades now mean that 30-40% of main meals are consumed through food service sector, and this is increasing.

This trend is driven by consumers’ desire for convenience and eating experiences, increased non-household use of time (more work and leisure) and decrease in cost difference of home preparation and eating out (Reid 2001).

The food service sector generally sources product through providores operating through wholesale markets rather than directly with growers.

Large global players dominate quick-service restaurants, and hotel and restaurant chains. This is a growing and high value sector, but is poorly understood and there is little promotion from the industry directed at the opportunities offered by this sector.
Vegetable Growers

- There is great diversity within the growing sector, from large scale growers to small scale hobbyists.
- Corporate farming is not yet a feature of this sector in Australia, although there are many farming operations which have commenced as family farms and have grown to ‘family corporate’ style of businesses.
- CDI Pinnacle Management (2005) have categorised producers as: individual growers – operate individually supplying product through a variety of channels. Generally, smaller operators, but some have substantial scale; network growers – supply to a consolidator under contract or part of a network/cooperative; and producer consolidators (grower- packer-marketer) – vertically integrated and supply to customers' specifications.
- The growing sector is undergoing rapid re-structuring in response to market conditions, economic conditions and trends in the supply chain.
- Overall, the growing sector is facing difficulties with being internationally competitive, sometimes in terms of yields, but certainly in terms of production costs. However, there are examples of individual businesses competing successfully.
- Network growing and producer consolidation models appear to offer the best prospects for future business profitability.

Consolidators

- This sector comprises pre-packers, processors, exporters and nutraceutical manufacturers.
- Consolidators account for around 5% of total vegetable market.
- Food products include fresh value added (washed salads, pan ready packs); processed (frozen, canned and dried) and ingredients. Ingredients provide inputs to canned and dried soups, sauces, stocks, and baby foods.
- The nutraceutical market is believed to be rapidly growing in association with complementary medicine market.
- Import statistics show rapid growth in the use of imports in the processed foods sector.
- There is a growing demand for first stage processing such as peeled, cut, pureed, dried and frozen products.
- Overall, this is a growing sector that offers opportunities, but is poorly understood and requires relationship building strategies.
- The Australian processing sector is facing similar global pressures to the growing pressures to increase productivity and reduce product prices.

Intermediaries

- Wholesalers/merchants buy produce from growers and markets and sell to the retail sector taking the difference between the purchase and sale price as the operating margin. Agents/brokers sell produce for growers on a commission or fee basis. Providores purchase from wholesalers and on-sell to the food service sector generally on a cost plus basis. Margins in this sector can have a significant impact on prices received by growers and concerns have been raised about the
transparency of transactions in this sector (see Chapter 6 for discussion on this sector and the mandatory code of conduct).

- The wholesale/central market sector is said to be declining as an intermediary, although there is a lack of documented information on their market position and trends reflecting the informality of this sector.

### 4.4 Establishment of new supply chain relationships

There is no single supply chain for the industry and instead a variety of pathways to markets. A traditional supply chain in agriculture has been represented as in the following diagram. In this chain, there is a high degree of wastage, high transaction costs, a long chain to share profit margins and farmers being considered as the bottom of the chain and ‘taking what’s left’. While there continue to be growers supplying through these types of chains, there is widespread recognition that it is not internationally competitive and is unsustainable.

A modern chain that is becoming more characteristic of the industry is for direct supply between growers or packer-marketers to the retail or food service sector. Anecdotal information is that the main supermarkets source up to 85% of their purchases through this chain which is either direct to a limited number of large growers, through single packer-marketers or category managers that handle the supply transactions and quality assurance requirements for the supermarket. The field interviews revealed many cases where both growers involved in this marketing arrangement and the supermarkets were satisfied with both the relationships that had been formed and outcomes.

Global competitive forces are driving consolidation in supply chains worldwide. Retailers supplying consumers and providores supplying the food service industry are consolidating themselves and at the same time seeking to deal with fewer suppliers who are able to deliver product year-round to stringent quality assurance standards and meet price expectations.
Why is this important?
The individual small-scale grower supplying into the wholesale market or on contract to a processor and who has little or no status in supply conditions is exposed to unacceptable price and supply volume risks. This business model that is characteristic of vegetable processing suppliers and the declining segment of the wholesale market which still supplies retailers and food service is unsustainable.

The pivotal question is, therefore, what business models are internationally competitive in modern supply chains and how do individual grower businesses restructure to be competitive and profitable?

In this environment, successful suppliers are those who are:

1. large scale vertically integrated companies (grower-packer-marketer) supplying directly to the customer;
2. large scale, very efficient, innovative growers supplying direct to a wholesale market or retailer;
3. part of a consolidation network operating through a grower-owned marketing company or champion company; or
4. grower-packer-marketers with strategic alliances with other Australian (or international) growers to supply product to required specifications year round.

The success factors of these three business models are:

1. Large scale, vertically integrated grower-packer-marketer supplying direct to customers.
   - Marketing strategies and systems to produce the volume and quality demanded by customers;
   - Branding to provide profile and market positioning that links the product and company in the eyes of the buyer;
   - Multiple locations to ensure year-round supply;
   - Systems to produce and pack high quality vegetables on a consistent basis;
   - Use of the latest machinery to provide the best produce protection through the supply chain from harvesting to distribution;
   - Modern rapid cooling and temperature controlled storage;
   - Daily temperature controlled distribution to ensure freshness;
   - Modern transport to provide fast and protected links between the supplier and customer; and
   - Operation of the company with professional business management systems including detailed production costing and supply chain benchmarking systems.

2. Large scale, very efficient, innovative growers supplying direct to a wholesale market or retailer;
   - Professional, large scale grower businesses that deliver product direct to wholesale markets and/or supermarkets.
   - Growers meet customer specifications as prescribed by the wholesaler/retailer;
   - Produce delivered to schedules set by the wholesaler/retailer;
• Best agronomic advice sought for, valued and paid for as an investment;
• Required labour supplied through a professional hire company;
• Use of the latest machinery/technology to grow, harvest and pack produce supplied on contract to fully utilise capital equipment;
• Packing, storage and distribution systems as above; and
• Detailed production cost recorded and compared to previous performance and performance of others in a process of continuous improvement.

3. Grower consolidation network operating through a grower-owned marketing company or champion company.

• Professional grower-owned marketing company or champion supply company that delivers product direct to customers from networked growers.
• Growers meet customer specifications as prescribed by the marketer;
• Produce delivered to schedules set by the marketer;
• Inputs and agronomy services supplied to growers through central purchase and to specification;
• Required labour supplied through a professional hire company;
• Use of the latest machinery/technology to grow, harvest and pack produce supplied on contract to fully utilise capital equipment;
• Packing, storage and distribution systems as above;
• Detailed production cost recording within the network and benchmarking with others outside the network; and
• Operation of the consolidation network with professional business management systems.

4. Grower-packer-marketer with strategic alliances with other growers around Australia to supply product to required specifications year round.

• Independent growers supplying direct to customers through strategic alliances with other grower-packers that provide continuity of supply direct to customers according to contract specifications.
• Grower-packer, marketing and business management systems as per 1. and 3. above.

There are successful businesses operating under the three models in Australia and these provide case examples for others establishing or contemplating new business structures and arrangements.

The majority of Australian growers operate on an individual basis and, although many are very competent growers, there is a lack of knowledge and skills to implement the type of business arrangements and systems to be internationally competitive. For those growers who have a vision to remain in the Vegetable Industry, a case exists for significant restructuring of their businesses which may require the support of industry and government.
4.5 Supply chain stakeholder views

During the field interviews and the Taking Stock Workshop, a number of principles were consistently raised as being essential to effective and competitive Australian Vegetable Industry supply chains. A summary of the key principles is provided below:

<table>
<thead>
<tr>
<th>Personal relationship principles</th>
<th>Business principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Openness and transparency;</td>
<td>• Profitability/profit sharing for all sectors of the chain;</td>
</tr>
<tr>
<td>• Honesty;</td>
<td>• Security in supply, quality and prices;</td>
</tr>
<tr>
<td>• Trust;</td>
<td>• Commitment in terms of contracts and duration with time allowed for rationalisation</td>
</tr>
<tr>
<td>• Even handedness;</td>
<td>• Clear product standards and specifications, and shared risks;</td>
</tr>
<tr>
<td>• Integrity;</td>
<td>• Adding value to each sector, relationships that value contributions and allow some leverage in the market;</td>
</tr>
<tr>
<td>• Routine communication (daily phone, regular face-to-face and group contacts);</td>
<td>• Vertical integration to the extent possible and joint ventures to shorten the chain and reduce complexity, joint strategic planning, and global views;</td>
</tr>
<tr>
<td>• Cooperation rather than adversarial relationships;</td>
<td>• Strong links to customers, professional relationships, and rapid feedback along the supply chain;</td>
</tr>
<tr>
<td>• Identification of common and shared interests;</td>
<td>• More network groups and alliances;</td>
</tr>
<tr>
<td>• Collective problem solving.</td>
<td>• Balanced and healthy business relationships with each sector understanding the business of others and sharing details;</td>
</tr>
<tr>
<td></td>
<td>• Flexibility and responding quickly to market conditions;</td>
</tr>
<tr>
<td></td>
<td>• Ethical business standards.</td>
</tr>
</tbody>
</table>

4.6 Implications for Setting Directions

Profitability

- The future profitability of vegetable growing in Australia depends on a full industry strategy and approach that addresses all elements of the supply chain.
- Industry success in meeting the requirements of the market (domestic and export) depends on the performance of the whole chain from producer to consumer. The profitability of each sector of the supply chain is critical to its overall health.
- Consumers lie at the heart of the supply chain as the products they buy, the amounts they consume and the price they pay determines the profitability of the whole chain. Effective supply chains “…satisfy the expectations of consumers through continual improvement of processes and relationships that support the
efficient development of products and services from producer to consumer.”
(DPIE, 1997)

**Self Reliance**

- Communication is critical to supply chain performance and revolves around developing a shared view of market requirements, understanding of the preferences and values of consumers.

- Information flow and visibility builds trust and needs to ensure transparency of prices and costs, order lead times, supply chain benchmark information and status of market conditions; along with data pooling and sharing, and trading terms linked to transaction visibility.

- Synergies in information technology with common or compatible systems and software allowing e-transactions, electronic stock control and reporting are essential in modern supply chains.

- Supply chain performance includes efficiency of physical logistic and use of capital infrastructure and equipment.

- Since the chain operates through relationships and transactions more than any other industry aspect, it is subject to claims and counterclaims about relative performance. Moving forward to better performance requires understanding the dynamics and the facts, and addressing these objectively with strategies for change that are possible.

- Supply chain performance is not just about streamlined processes. It’s about connected people. Suppliers, distributors, retailers and customers all communicating more fluidly. The challenge is to identify and seek agreement on the issues where collective action is of benefit and will result in increased margins to all involved.

- Pro-active relationship building between growers and processors, retailers and the food service sector offers best prospects for the industry’s future. This is a long-term challenge with no quick fixes, but efforts to ensure constant high level communication between sectors of the supply chain and strategies for relationship management.
FRAMEWORK COMPONENT THREE:

ENABLING ENVIRONMENT
Chapter 5. Institutional environment: industry

The following two chapters deal with the third of the Framework components: the enabling environment. This embraces the range of policies, programs, institutions, organisations and structures that influence the capacity of the industry to effectively respond and act upon opportunities and threats.

The report focuses on the enabling environment relating to two key areas of institutional features: industry and government. This chapter deals with the industry environment, with specific reference to the nature and performance of institutional arrangements and the future challenges they face. It covers:

- Industry organisations;
- Industry planning;
- Industry advocacy;
- Marketing;
- Research and development;
- Industry coordination and development; and
- Industry skills and human capacity.

In order for the Australian Vegetable Industry to improve its resilience and self-reliance, it is critical for these institutional arrangements to be well focused, cohesive and aligned to market requirements. As such, well performing industry institutions provide the enabling capacity to achieve a broad range of industry outcomes.

5.1 Role of Industry Organisations

Australian producers have found that a totally undisciplined form of competition does not necessarily serve industries as a whole well. For this reason, Australian agriculture has been characterised by the establishment of institutions that intervene into marketing, research and development, policy development, political advocacy, industry development and information provision functions.

Some of these institutions have their basis in legislation (see Chapter 6 in respect to levy-based organisations). Others have been established to represent the interests of various stakeholders associated with agriculture. Frequently, there are formalized relationships or means of consultation or representation between the two, such as where industry organisations (eg “Representative Organisations”) are recognised in legislation associated with particular marketing or R&D authorities.

An important role of industry organisations is to ensure the sustainable future of those involved in the industries. They may take different approaches to dealing with this: some institutions may place an emphasis on protecting the welfare of their members, while others may place an emphasis on identifying and capturing opportunities. These approaches are not mutually exclusive, and in many industry organisations, it is only a matter of emphasis. However, in some cases where there is a plethora of industry bodies, the end result can be confusion about roles, conflict between organisations and
sub-optimal collaboration and co-investment. This is certainly the case of the Australian Vegetable Industry.

Industry organisations are not unique to Australia, and lessons may be learnt from those of other countries. For example, in the case of those bodies responsible for marketing, the following comment, while made 20 years ago and about a different horticultural industry, remains pertinent:

“The existence of this statutory authority has not promoted the growth and expansion of apple and pear exports from Australia. The New Zealand and South African apple and pear industries also have statutory authorities. These two have successfully managed their industries’ growth and profitability. One could therefore argue that it is not a matter of whether the authority exists; it is a matter of the effective management of that authority. In this regard, it is my view that statutory authorities are no different to commercial organisations. Both depend on efficient and effective leadership and management.” (Haines 1985)

A defining characteristic of Australian industry groups, not least those involved in the Vegetable Industry, is their extensive number and diversity. This, in part, reflects the federal nature of the Australian political system, which has indirectly encouraged the formation of industry bodies at both state and national levels.

The Vegetable Industry is in a more challenging position than other industries in respect to rationalisation and harmonisation of industry bodies. It is made up of many crops which vary in where and how they are produced, and the people involved have diverse ethnic and cultural origins. As a result, many special interest organisations are formed by those whose concerns relate specifically to particular products or issues rather than to the Vegetable Industry as a whole.

During the course of the field interviews, many individuals commented that the complexity associated with the number of industry organisations is also mirrored internally within certain organisations, where some are said to be characterised by large numbers of special interest committees. For some non-production based supply chain participants, this complexity creates confusion about who represents what, and this in turn makes it difficult to establish effective relationships.

**Why is this important?**
The number and nature of Vegetable Industry bodies poses challenges to forming effective relationships required to underpin a progressive and dynamic industry.

The result is a lack of unity, clarity of purpose and cooperation that weakens the industry’s capacity to develop coherent industry-driven strategies, communicate effectively, build on strengths and address challenges.

Participants at the Taking Stock workshop observed that communication up and down the supply chain tends to take place most often when there is something to negotiate (ie. at the very time when the relationship is likely to be at its most adversarial). Ongoing and constructive communication is critical, but this requires purpose, coherence and trust.
5.2 Industry planning

It is difficult for any industry in a free-market economy to develop overall industry strategies that guide the different components of the industry down particular strategic directions. If anything, this is a role that government facilitates by broader macro-economic policy and micro-economic reform attempts, influencing the operating environment within which individual market decisions are made.

That said, government and industries do jointly invest in planning initiatives through such mechanisms as:

- establishing statutory industry organisations, or supporting industry-owned companies with similar functions, to prepare industry strategic plans for marketing and R&D, such as HAL;
- investing in strategic reviews of opportunities for new and emerging industry and providing seeding funds, such as R&D support through the Rural Industries R&D Corporation; and
- investing in human capacity and coordination arrangements, such as support for industry development officers.

The overall growth of the Australian Vegetable Industry will not come from any one sector, but rather across sectors of the supply chain. This will require:

- shared aspirations for the future of the Vegetable Industry;
- agreed priorities for future investment to develop the industry;
- specific targets, milestones and responsibilities identified; and
- alignment of the plans and activities of industry organisations.

An issue identified by many people associated with industry groups (and confirmed during the course of this project) is the lack of immediately useful data upon which to develop clear industry strategies and government policies. While this issue makes it difficult to develop future directions based on sound knowledge, it also makes statements made by either industry or government open to claims of subjectivity.

5.3 Industry advocacy and support

The Vegetable Industry has several advocacy and support groups, aligned to national and state level interests as well specific commodity interests. AUSVEG is the primary national advocacy and support group for vegetable growers, although it is not often recognised as such, even among its own members. It is made up of members that fulfill similar roles at the state level. In some cases, state organisations such as Growcom, the Victorian Vegetable Growers Association and Vegetables WA have specific interest in the vegetable and horticultural industries, while in other cases, such as the Tasmanian Farmers and Graziers Association, NSW Farmers Association and the South Australian Farmers Federation, they have a broader mandate covering the full range of agricultural industries.

National bodies exist for other vegetables and for other parts of the supply chain, including the Australian Mushroom Growers Association, the Potato Processors Association of Australia, and Onions Australia. The latter two organisations are presently working effectively for their members and have been providing advocacy and support roles for their members for many years.
Onions Australia is not well resourced and during interviews, some members suggested that this is severely affecting the organisation’s ability to adequately address issues confronting the onion industry. There are also more national bodies representing the specific interests of sub-groups of the Vegetable Industry. For example, the Australian Horticultural Exporters Association represents the interests of exporters.

A major form of political advocacy utilised by the Vegetable Industry is the preparation of submissions to government in relation to specific enquiries. Recent responses to public calls for views relevant to the China Free Trade Agreement and on the National Agriculture and Food Policy Reference Group are examples of where AUSVEG and other vegetable related industry bodies are attempting to influence national policy.

Other issues of significant concern to the industry groups include, among other things:

- food security;
- the cost of complying to government regulations;
- inequitable impacts of globalisation on local growers;
- concentration of power in parts of the supply chain; and
- unclear country of origin labelling of produce.

In recent years, AUSVEG has attempted to broaden its original advocacy charter to provide essential services to industry that would otherwise be lacking. This includes the provision of economic analysis and statistical trends, cross-industry communication, and coordination of certain R&D projects to maximise grower ownership and participation. This has required a growth in AUSVEG staff and resources, and has received mixed levels of endorsement from among its constituency. It has also blurred the lines of responsibility somewhat between HAL and AUSVEG, at least as perceived by many interviewed during the course of this project.

Some producers and State-based industry bodies argue that the relationship between HAL and AUSVEG reduces AUSVEG’s capacity to concentrate on its advocacy role, and that R&D levies are being used to support a perceived AUSVEG expansion strategy rather to support R&D. This claim is counteracted with the argument that the Vegetable Industry will benefit from more strategic investment of R&D funds, and that this strategy requires industry capacity to be developed to direct funds most appropriately.

The authors of this report endorse increasing the level of information and communication support provided to industry constituents, and suggest that the benefits of this support and relationship between HAL and AUSVEG requires better public communication.

### 5.4 Marketing

**Commodity marketing arrangements**

Marketing arrangements for vegetables have undergone an evolutionary process, although not to the same degree as experienced by other agricultural industries. The evolution of organisations from local cooperatives; to mandatory cooperatives; to statutory, single-desk marketing arrangements; to deregulated arrangements have not been as distinct for vegetables as elsewhere.

Marketing arrangements for the Vegetable Industry are largely left in the hands of the private sector, operating across relationships conducted at the various points of the supply chain. This is consistent with National Competition Policy, which has seen a
decline in the involvement of state-based organisations facilitating marketing arrangements through pooling and quotas. The notable exception is in Western Australia, where potato growers are required to apply to Western Potatoes for an area license to produce potatoes grown within particular districts. Western Potatoes issues quotas for certain tonnages to be delivered within certain area pools. Wash-packers collecting from this pool have the right to specify from which growers they prefer to receive their potatoes. This system is designed to ensure that over-production of potatoes for the domestic market does not occur. On two occasions, this process has been given clearance through Regulation Impact Statement reviews under the National Competition Policy framework.

Over the years many attempts have been made to create sustainable cooperatives, although these attempts have frequently failed because of non-compulsory membership (one reason why some of the early statutory marketing authorities arose over a century ago). Some regionally based cooperatives are in operation, although largely constitute smaller growers (sometimes ‘backyard’ operators) selling into very local markets.

**Horticulture Australia Limited**

The marketing and promotions role of HAL is largely practised in joint promotional activities with industry members, in the limited application of export marketing efficiency powers, and in servicing the Horticultural Market Access Committee (HMAC – see next section).

In respect to support for promotional activities, HAL receives a marketing levy imposed on producers of member industries (largely the non-vegetable industries), which amounted to $9.3 million in 2003-04. These funds are largely directed towards export development opportunities, although the mushroom levy is exclusively directed towards the domestic market.

HAL’s export marketing efficiency powers give it the capacity to licence overseas importers to act as the main conduit for Australian produce into overseas markets. While the power restricts the number of importers into a country, it does not restrict the number of Australian exporters to that country. The power is exercised in respect to individual products going into individual markets. A substantial market-failure case needs to be established by industry for this power to be enacted. Although this power is available across the full spectrum of horticultural industries under its auspices, it has only been enacted for the orange market into the Republic of Korea, Taiwan, Thailand and USA, and the tangerine, tangelo, lime and lemon market into the USA.

Related to the export market efficiency powers, HAL also has the capacity to license exporters, as it does with apple and pear exporters, and, in theory, to establish single desk exporting arrangements. The single desk approach has not been instigated for any vegetables, and would require a substantial case made on market failure.

A combination of the highly competitive nature of the vegetable industries and the concentration of most of the exports in the top percentage of the market has seen limited reason for HAL to enact its potential marketing powers (i.e. no market failure has been proven).

**Horticultural Market Access Committee**

The HMAC is the peak industry/government market access committee with responsibilities for 1) setting and pursuit of strategies with regard to the horticulture industry’s top line market access issues and with regard to achieving market access into major markets and 2) assessment, setting and monitoring of market access commodity priorities into particular markets. Market access refers to both new markets access and
maintenance of market access into existing markets. It covers both quarantine market access and non-quarantine market access such as tariffs, other elements of our trading partners’ border regime, and other supports which distort open markets and trade, and safety standards as they affect market access. The Committee represents the horticulture industry as a whole. It works closely with divisions of the federal government agencies which are responsible for achieving and negotiating market access such as, within DAFF, the International Division, Plant Biosecurity and AQIS, and various divisions of DFAT. It also works closely with grower and exporter organisations, individuals and the research community with regard to market access issues and interests. A schematic representation of the HMAC application processes and various approval pathways is provided in Figure 5.1.

**Figure 5.1. HMAC application process and approval pathway**
5.5 Research and Development

Horticulture Australia Limited

As with many other agricultural industries, statutory arrangements are in place to support vegetable R&D. These arrangements underpin the major function of HAL, at least as a proportion of its overall expenditure. For example, over the past five years, HAL’s R&D expenditure has averaged just over 70% of its total expenditure. In 2003-04, this expenditure amounted to $51.2 million across all horticultural R&D, of which vegetable (including potato and onion) R&D comprised around $15.2 million.

R&D Levies

A vegetable R&D levy is charged on most vegetables (the exceptions being asparagus, garlic, most herbs, melons, seed sprouts and tomatoes). A separate levy exists for hard onions, processing tomatoes, mushrooms and potatoes. There is currently a push to establish a new levy for fresh tomatoes, however, it is presently difficult to establish any new levies at present, and the problems experienced by the turf industry suggest that establishing new levies for a range of industries will remain problematic.

The levies are usually collected by the first purchasers of vegetables, passed on to the Australian Government’s national levy authority (the Levy Revenue Service administered under DAFF) and forwarded to HAL. In the case of mushrooms, the levy is collected on spawn.

The vegetable R&D levy is equivalent to 0.5 per cent of Gross Value of Production (GVP) and different rates apply to potatoes, onions, processing tomatoes and mushrooms.

A separate charge on exporters acts as an equivalent levy collecting mechanism for exported vegetables where a domestic levy has not also been paid. This is set at the equivalent rate to the domestic levy for the various products.

HAL R&D expenditure from levies is matched dollar for dollar by the Australian Government up to 0.5 per cent of the industries’ GVP. Within the HAL arrangements, it is only the vegetable R&D levy that is at the 0.5 per cent level and thereby fully utilising the Government’s matching contribution.

In addition to the levy-payer contributions, HAL has a unique arrangement that sees voluntary contributions made by organisations also matched dollar for dollar by the Government.

This arrangement was introduced to allow horticultural industries that did not pay a levy to still participate in receiving government funding for R&D, and to encourage downstream supply chain players to participate in horticultural R&D for their own and overall industry benefit and to maximise adoption of R&D results. As previously mentioned, this capacity is not taken advantage of to the extent that it might.

Industry Advisory Committees

Advice to HAL on vegetable R&D priorities and expenditure is made through four Industry Advisory Committees covering vegetables, processed potatoes, fresh potatoes, onions and mushrooms.

The Vegetable IAC has 17 members including an independent chair, one HAL staff member, two AUSVEG staff members and 13 growers. To assist the IAC, there are six sub-committees each with a representative from each State to consider R&D proposals. Four of the sub-committees focus on crops, while two focus on export and processing issues.
Under these arrangements, the HAL Board becomes accountable for the implementation of the plans. Indeed, most of HAL’s budget is expended on activities identified through IAC plans. It does not have a strategic plan as such, but rather a strategic list of issues. The focus of the HAL system of planning is on the individual levies rather than on whole-of-industry issues. The IAC mechanism and levy-payer dominated membership are aligned to individual commodities, and the majority of investment tends to be directed towards on-farm technical research.

From a planning perspective, the multi-committee structure of the Vegetable IAC is a constraint for the industry to be able to respond rapidly to emerging, cross-industry issues, particularly where relationships with non-production levels of the supply chain are critical. Planning tends to be internally focused rather than inclusive of broader industry considerations.

While industry ownership is a potential strength in the existing planning approach, it also potentially reinforces segregation of different levels of the supply chain. For all of the vegetable industry IACs, the issue is that they need a broad range of skills from across the supply chain or other industries and not only comprise levy payers.

Comments from the field:
“...We spend too much time worrying about who else is going to capture the benefits from our spending. I reckon we need to get over that and concentrate on how we can all benefit through working together.” (grower)

During the course of this project, many producers, exporters and processors commented on the complex mix of industry advisory committees and administrative arrangements that exist for prioritizing and directing vegetable R&D. Few saw the myriad of national, state-based and local committees as a strength, and indeed many suggested that it reduced the capacity of AUSVEG and HAL to be strategic in addressing long-term priorities. Figure 5.2 attempts to show the complexity of the arrangements in place for the vegetable levy program, although it does not specifically apply to potatoes, onions, processing tomatoes and mushrooms.

Figure 5.2. R&D priority setting and administrative arrangements
Some acknowledgement needs to be made to recent streamlining of the R&D planning process, although the legislative environment within which HAL operates, which aligns its structure and processes to the multitude of separate levies received, can be an impediment to rapid change.

Some acknowledgement needs to be made to recent streamlining of the R&D planning process, although the legislative environment within which HAL operates, which aligns its structure and processes to the multitude of separate levies received, can be an impediment to rapid change.

**R&D investment streams**

Over recent years, the bulk of vegetable R&D has been invested in production-based research aimed at maintaining and increasing yield and quality. This can be seen in the diagram 5.3, which reflects the nature of vegetable-related R&D projects completed and published in 2004 (note that the table refers to project numbers and not value).

Figure 5.3. Vegetable levy R&D projects completed / published by type

More recently AUSVEG and HAL have highlighted the desire for more vegetable levy research investment into supply chain and other downstream issues. The mushroom IAC now focuses most of its R&D on supply chain and marketing issues. However, for other products the IAC structure has not supported this as they cannot see direct benefits flowing to growers. The HAL Strategic Plan identifies some key priority areas for the Vegetable Industry that show that the industry is beginning to head in the direction of:

- breaking down trade barriers for horticulture (vegetable) products;
- effectively market horticulture (vegetable) products in export markets;
- consistently meet requirements of consumers and key customers;
- ensure consumers appreciate the health benefits of fruit and vegetables;
- enhance efficiency, responsiveness and product integrity of the supply chain;
- improve industry’s access to water and efficient utilisation of this resource; and
- improve industry’s access to skilled resources.
Rural Industries R&D Corporation

Not all vegetable R&D is funded through HAL. A range of Asian vegetables have been the subject of the RIRDC’s R&D investment, which in 2004-05 was around $450,000. The investments have been made through RIRDC on the premise that many of the Asian vegetables represent new industries, requiring seed funding from government in the clear absence of any capacity for the industry to invest through the mechanism of an R&D levy.

A five year plan for Asian food R&D covering 2005-10 has been developed through industry workshops. The plan covers four key objectives:

1) Understanding consumer needs in both the domestic and export markets (30% indicative budget allocation).
2) Communication and collaboration with industry (25%).
3) Improve crop productivity, sustainability and produce quality (30%).
4) Foster the development of new products, both fresh and semi-processed (15%).

Through an Asian Vegetables Advisory Panel, HAL assists RIRDC in developing specific R&D priorities and selecting projects for investment. In 2004-05, HAL contributed $110,000 towards RIRDC-managed Asian vegetable projects.

As the production volume and value of some of the Asian vegetables increases, there may be an argument for transferring responsibility for managing the related R&D from RIRDC to HAL, although at this stage this does not yet appear warranted.

R&D Capacity

Vegetable R&D faces some of the same capacity issues of other agricultural industries:

- overall investment by state and federal governments in vegetable R&D is reducing;
- as a result, industry levy investment is becoming a more significant proportion of total investment;
- more frequently, levy funds make up 100% of project budgets. Although this has always been the case with commercial providers, industry is being called on to fund more project costs of government-based R&D organisations);
- governments are reducing, or no longer, support extension capacity; and
- extension is being left up to the private sector and/or industry, although it is not clear as yet as to whether this will adequately address the needs of an industry that faces pressure to change rapidly (HAL 2005).

The small size of the Australian Vegetable Industry and its research and development capacity would suggest the need for it to increase international collaboration in joint research activities. At the same time, there is a need for world’s best practice information to be translated into Australian extension materials following local validation. HAL has increasingly sought to collaborate with other countries (i.e with New Zealand’s Vegfed, Canada, UK and others). The Mushroom Industry is an excellent example of a group that has worked on R&D internationally for many years.

International benchmarking as an ongoing, rather than ad-hoc approach to continuous improvement needs to underpin the integral relationship between markets, innovation, production and continuous improvement.

Few evaluation reports exist determining the benefits of research and development in the vegetable sector. Indeed, the management of the R&D does not include an ongoing
monitoring and evaluation strategy. However, a recent communication survey undertaken to underpin improvements to AUSVEG’s communication effort highlights some major issues in respect to the current vegetable R&D arrangements. Specific R&D concerns include:

- very low awareness of the levy funded Research and Development Program;
- high level of grower dissatisfaction with the levy funded R&D program;
- high level of grower dissatisfaction with information they receive on the funded R&D program;
- inconsistent use of logos and brands in the industry creating confusion what is and isn’t levy funded; and
- lack of coordinated and consistent message release on R&D outcomes (AUSVEG 2005c).

5.6 Industry development and coordination

HAL presently supports 55 Industry Development Officers (IDO) and ten Industry Development Managers (IDM) across Australia. For the Vegetable Industry, it supports six IDOs and one IDM for AUSVEG member industries. It also supports one IDO for the processing tomatoes industry and a technical transfer coordinator for the potato industry. While ‘Industry Development’ may imply a role of providing strategic industry planning and advice, their role is more one of coordination, extension and communication. The role of IDO’s varies from state to state largely due to the flexibility they are given by the ‘host’ agency, but overall the emphasis on their work schedule is biased towards farm level interaction:

“They aim to fast track the uptake of Research and Development (R&D) by growers, encourage innovation and collaboration and support growers by providing information to help improve the efficiency of their operations.” (AUSVEG 2005)

The IDO arrangements are subject to a separate review being undertaken for HAL at the present time.

AUSVEG and HAL also attempt to provide industry guidance through a range of communication mechanisms, including a variety of magazines. Much of the content of these publications is based on production information relevant to growers. An AUSVEG audit of industry communication mechanisms highlights problems endemic across the Vegetable Industry:

- high level of apathy among vegetable growers reducing the amount of information actively sought out;
- poor audience definition makes targeting communication difficult (including no identification of levy payers);
- communication activity not consistent across Australia for all growers. All growers pay the levy and should receive similar communication services;
- limited communication networks and reliance on one dominant network;
- limited identification of the breadth of information other organisations and interest groups communicate to growers;
The Australian Vegetable Industry: Taking Stock and Setting Directions

- no national event/workshop register available to growers;
- low cross-pollination of ideas and communication between states;
- low readability in the majority of existing Vegetable Industry publications;
- lack of coordinated, regular and consistent communication mediums to deliver key messages; and
- low industry profile.

AUSVEG is attempting to address this situation, and while many of the points raised above appear negative, they are important to understand as the starting point in developing any effective communication strategy. Alongside these challenges are a number of strengths:

- willingness to improve communications in the Vegetable Industry;
- good level of funding allocated by the industry to improve communications;
- high level of focus on communication in the industry - seen as a valuable and high priority area; and
- Industry Development Officer Network established and some information reaching a number of levy payers.

A number of individuals consulted in this project called for more focus on supply chain relationships and debating strategic matters facing the industry.

Coordination and communication across other parts of supply chain tends to be through membership of specific industry associations, of which there are a great many given the nature of the Vegetable Industry. The focused membership of these, and the communication mechanisms they support, contributes to the perception of fragmentation.

5.7 Benchmarking, continuous learning and business skills

Benchmarking processes as a means of developing industry capacity, efficiency and sustainability are not evident across the production sector. Indeed, among some producers consulted, this process was strongly resisted. While the processors contracting growers utilise forms of benchmarking, many producers see this as an obligation, and have not adopted it as an ethic of continuous improvement.

During the course of the interview phase of the project, some industry representatives pointed to one-off benchmarking studies that had been undertaken for specific vegetable production practices at various times. However, this in part reflected mixed understanding as to what benchmarking processes are. It is important that benchmarking be tied to continuous improvement, and hence must involve ongoing monitoring and data collection, feedback and comparative analysis, and reflection and discussion. This requires an initial commitment from industry bodies to establish the necessary infrastructure and support. This is best undertaken in conjunction with coordinated extension activities that provide a pathway forward to respond to the feedback provided by benchmarking that might suggest under-performance.

In respect to extension, much of the effort appears ad-hoc, project-focused and lacking a whole-farm, market driven context. This is in part due to the decline of State government based extension services, but also due to a void in industry leadership in this area.
Monitoring, evaluation, benchmarking, self reflection and continuous improvement are not particularly evident in the range of institutions that support growers, and so it is perhaps symptomatic of the system rather than the individuals that many growers are skeptical about benchmarking. Irrespective of this, it also points towards a lack of business skills and appreciation of the contribution continuous learning makes to improved profitability, competitiveness, confidence and, ultimately, quality of life.

When the ‘mirror’ was raised to industry representatives on this issue, very few argued against this position, and benchmarking and improvement in business skills was identified by growers and others in the supply chain alike as a fundamental issue to be addressed.

5.8 Implications for Setting Directions

Self Reliance

- For a small industry in comparison to many other agricultural industries, there is a large number of institutions associated with it – authorities, agri-political bodies, committees and associations. Finding a coherent industry ‘voice’ that can act on whole-of-industry issues is problematic.

- Industry-wide planning is also problematic, particularly as industry plans tend to be focused on individual commodities. The planning process is cumbersome and costly, and does not result in plans that adequately address significant non-production issues. Scope exists to revise planning structures to meet increasingly complex issues arising from globalisation.

- In terms of addressing many of the issues raised in this report, there is no one industry body that can take charge of a coordinated approach to industry strategy development and implementation. Hence networks and alliances are important in the planning process.

- The fragmented, product and issue-specific nature of many of these institutions, and the local, ideological and professional commitment to them, can and commonly does lead to adversarial-based relationships.

- Building industry capacity is an issue that has resulted in divergent views. While there is a need to develop capacity to strategically address industry issues, particularly in the face of globalisation, there are differences of view as to what this capacity might look like, where it might reside and how it might be funded.

- Industry R&D is largely directed to short-term production issues, partially because of traditional industry advisory arrangements. Attempts are being made to balance industry R&D across the supply chain. The use of voluntary contributions from downstream partners can act to increase the overall R&D pool and to redress the balance.

- A paucity of reliable market information is preventing many sectors of the industry from making optimal decisions and from negotiating on the basis of good knowledge.

- Benchmarking, monitoring, evaluation and other activities associated with continuous improvement are lacking across the institutions supporting the Vegetable Industry, and this contributes to a grower sector that is not fully informed about its performance or competitiveness.
Chapter 6. Institutional environment ➤ government policy and regulation

This chapter continues to deal with the third component of the IPP Framework: the enabling environment. The chapter covers issues specifically relating to government institutions, policies, programs and regulations, including:

- Food safety standards;
- International trade and free trade agreements;
- Country of origin labeling;
- Competition and fair trade in the supply chain;
- Levies and statutory arrangements;
- Taxation;
- Industrial relations;
- Transport infrastructure;
- Local government; and
- Food security.

6.1 Introduction

This chapter deals with the government institutional arrangements which provide several key attributes of the enabling environment in which the Australian Vegetable Industry operates.

The role of government in society is multi-layered. It acts as legislator, regulator, adjudicator and taxer so that society and its economy may function with confidence. The national government has a responsibility to ensure that inter-governmental relations, both domestically with States and internationally, serve the purposes and aspirations of society.

A major role of government is as a policy director, influencing broader societal relationships within and among the economy, industry, education, environment, health etc. A major intersection between government and the Vegetable Industry lies the area of industry and agricultural policy. Here the role of government is specifically to:

- provide industry development strategies at both the macro (national) and micro (firm) levels, recognising concepts of globalisation and the need for internationalisation of Australian industries;
- promote industrial development; and
- integrate policy objectives.

The Australian Government aims to improve the competitiveness and adaptation of industries to the international environment, favouring concepts of free trade across international markets. To this end, Australia has seen a policy evolution of tariff reductions, deregulation, micro-economic reform, development of industry plans and investment in innovation.
The current reform agenda includes an aim for 5% maximum tariffs, simplified regulations and lower business costs, improved government costs and efficiency, increased private involvement in infrastructure and increased industrial relations flexibility.

A significant challenge for government is dealing with structural adjustment issues in the face of complex and sometimes contradictory social, institutional and policy settings at both the domestic and international levels. This is most felt among industries attempting to increase their efficiency and economic competitiveness in the face of a non-level playing field internationally.

Key policy areas in relation to the Vegetable Industry are:

- ensuring Australian agricultural industries and the environment are protected from exotic pests and diseases (ie, biosecurity policy and regulation);
- ensuring the safety and health of Australians in consuming products imported from overseas;
- ensuring Australia’s trading relationships with other countries facilitate the growth and prosperity of Australian industries; and
- ensuring competition within and between different sectors in the economy.

6.2 Food safety standards

In recent months, industry and community concerns about the safety of imported food have been heightened. All food imported to Australia must comply with the Quarantine Act (1908) (animal and plant disease control) and the Imported Food Control Act 1992 (matters relating to food safety).

There is a two-tiered scheme aimed at ensuring imported food is safe:

- Imported Food Inspection Scheme; and
- State/Territory health and related responsibilities.

The Imported Food Inspection Scheme is a joint responsibility of the Australian Quarantine and Inspection Service (AQIS) and the Food Safety Australia and New Zealand (FSANZ). FSANZ is a statutory authority which develops and maintains food in accordance with policy guidelines laid down by the Australia New Zealand Food Regulation Ministerial Council. The Council is able to request that FSANZ review standards.

AQIS is responsible for ensuring imported food meets the Food Standards Code (FSC) through inspection and sampling. FSANZ is responsible for developing the food risk assessment policy involving:

- categorising food within the Imported Food Inspection Scheme according to its potential risk to human health; and
- providing advice to AQIS of the tests to apply.

The Food risk categories involve:

1. ‘Risk’ category (foods that FSANZ categorises as representing the highest potential risk to human health).
   - 100% of consignments referred to AQIS from the Australian Customs Service selected by country of origin, food type and supplier;
risk food must be held pending the results of analyses;
compliance history of the producer (manufacturer/packer) determines the inspection frequency; and
three tiered performance based inspection – 100%, 25% (5 consecutive passes), 5% (20 consecutive passes).

2. ‘Active surveillance’ category:
- designated foods determined by FSANZ;
- selected at the rate of 10% by country of origin; and
- goods are released if they pass the initial inspection.

3. ‘Random surveillance’ category. This comprises all other food which is not in the Risk or Active Surveillance Categories.
- food in this category is referred to AQIS by the Australian Customs Service at the rate of 5% of all shipments by tariff classification for inspection; and
- goods are released if they pass initial inspection.

Dried vegetables used as seasonings (eg. onion flakes) are ‘risk’ foods. Vegetable sprouts (other than canned) are ‘active surveillance’ foods. All other vegetables are ‘random surveillance.’

The Australian Vegetable Industry through AUSVEG (2005) has expressed concern at vegetable imports being included in this ‘low risk’ category, the random basis for testing for pesticide residues, and the absence of routine tests for microbial contamination.

Review processes are undertaken by FSANZ from time to time, with one underway during the preparation of this report. In addition, AQIS conducted a survey on imported horticultural products, the results of which will inform FSANZ’s review process.

6.3 International trade and free trade agreements

This element of government policy is about creating and improving the opportunities for Australian exporters on world markets and reducing the level of distortions on world markets through the policies of other countries through high levels of protection and subsidies.

Department of Foreign Affairs and Trade (DFAT) states that: ‘The Australian Government pursues a combined multilateral, regional and bilateral approach to trade policy. As part of this policy, Australia is open to concluding regional or bilateral agreements that deliver substantial gains to Australia and which cannot be achieved in a similar timeframe elsewhere (DFAT, 2005).

Free Trade Agreements (FTAs) are an important component of Australia’s bilateral trade policy. FTAs have recently been signed with the USA, Singapore and Thailand, and are currently under negotiation with China, Malaysia and the United Arab Emirates. Despite this, the DFAT (2005) contends that ‘..that any progress in regional trade liberalisation should be multilateralised in due course through World Trade Organisation (WTO) negotiations.’

WTO members are free to enter into FTAs where these Agreements comply with certain tests. The crucial test of an FTA is that it must eliminate all tariffs and other restrictions on substantially all the trade in goods between its member countries. Australia considers
that ‘substantially’ must mean ‘a very high percentage’, and that no major sector should be excluded from tariff elimination.

During the course of this project, the Free Trade Agreement negotiations with China have been referred to by many in the Vegetable Industry as highlighting the difficulties faced by the industry in accessing such a potentially lucrative market. These difficulties have included:

- China’s high tariff regime. The simple average Chinese applied tariff for vegetables in 2004 was 10.8 per cent;
- differentiation in quarantine standards and administration, and the need to align these to science-based systems common to both countries;
- inconsistent application of labelling standards at domestic and international levels, and their real and potential application as trade barriers;
- lax legal systems in respect to the protection of intellectual property;
- poor transparency or communication of regulations and licensing requirements at both national and provincial levels; and
- potential competition with other FTAs China is entering into with other countries, particularly where China may enter into these on a preferential basis.

Some participants in the Vegetable Industry are competing in the Chinese market. However, a large part of the grower and export sector are worried that an FTA would result in greater benefits to China because of its inherent cost advantages, particularly in respect to labour, despite counter-seasonal supply factors.

Vegetable (and horticultural) industry organisations are particularly concerned about the need to safeguard industry sectors that are highly vulnerable to increased competition arising from FTAs. The Uruguay Agreement of the WTO allows for transitional periods of protection where increasing imports cause, or threaten to cause, serious injury to the domestic industry. In such cases, a challenge is presented to government in dealing with potentially conflicting costs and benefits associated with international trade and regional economic development policies.

The Australian Vegetable Industry has outlined a policy position for ‘levelling the playing field’ with overseas competitors through the introduction of an ‘Australian Universal Standard (AUS)’ for all imported goods. The AUS would require importers to receive some form of accreditation that their goods were grown to minimum Australian standards in the areas of:

- Food Safety;
- Food Quality;
- Environment;
- Human Rights and Exploitation of Labour; and
- Occupational Health and Safety.

The argument advanced by many growers and industry organisations is that many Australian exporters have to comply with onerous regulations to export their products overseas. By requiring Australian standards that are consistent with our values to be met, the enforcement of an AUS would effectively be levelling the playing field.

AUSVEG believes this to be WTO compliant because Australia would be imposing regulations on imported product that is already imposed on domestic producers.
However, the findings of the WTO Appellate Body in the Shrimp/Turtle case suggest that the AUSVEG proposal may be seen to be a disguised trade barrier, and therefore, not compliant with the GATT (ABARE 2005).

Many in the Vegetable Industry believe that heavily subsidised imports should either be banned or attract some form of penalty to encourage their country of origin to free up their own markets. Given current policies of the major political parties and Government efforts to remove tariffs and subsidies applied by other countries, it is unlikely for any Australian Government to move back to applying tariffs or providing subsidies.

However, it is appropriate for the Government to provide support for import trade measures consistent with WTO agreements. In this respect, the industry needs to research and analyse competitor export strategies, production costs and subsidies. This would allow it to identify and act on situations where dumping of product may be occurring or where there is a case for other measures to safeguard the industry from surging imports.

6.4 Country of Origin Labelling (COOL)

Industry and community concerns about Australia’s food labelling requirements with respect to country of origin labelling have also come to the fore in recent months. This issue centres around facilitating consumers choice in the purchasing of food based on country of origin of the product.

Food Standards Australia New Zealand (FSANZ) is the statutory authority charged with developing, reviewing and amending food standards. Currently, transitional standard 1.1A3 for COOL applies to all food products for sale in Australia, whether produced domestically or are imported.

FSANZ has been reviewing the current transitional standard and notified a final draft standard to the Australia New Zealand Food Regulation Ministerial Council (ANZFRMC) for endorsement. At their meeting on 28 October, the Australia New Zealand Food Regulation Ministerial Council agreed to the stronger country of origin labeling standard.

The new standard:

- covers processed as well as fresh unpackaged fruit, vegetables, nuts, and seafood;
- has been extended to include unpackaged pork and pork products;
- requires unpackaged food to state a specific country of origin, including Australian product. Labelling food as ‘imported’ will not be enough;
- requires the display of unpackaged food to be clearly labelled with 9mm type;
- requires all packaged food to be labelled, showing either the country in which it was made or produced; or make a qualified statement (as at present) where it contains local and imported ingredients. These statements will be guided by the requirements of the Trade Practices Act 1974.

Once the new standard is gazetted, the timelines for compliance are two years for packaged products, 12 months for unpackaged pork and pork products and 6 months for unpackaged fresh and processed fruit, vegetables and seafood.

In addition, ANZFRMC supported an Australian Government proposal to direct FSANZ to undertake further work to assess the merit of extending country of origin labeling to each of the two (or less) principal fruit or vegetable ‘whole food’ components packaged together including where other incidental ingredients are included.
Two (or less) fruit or vegetable whole food components packed together include frozen, preserved, dehydrated and packaged product; and juice. The proposal should require the actual country of origin of each of the two principal whole food components to be identified. This also applies where other incidental components are included. Identical whole food components from different countries would be separately identified.

FSANZ will report back to Ministerial Council on this issue in March 2006.

In terms of the effective operation of markets, a key principle is that consumers have choice in their purchases and that this is supported by clear and accurate information on the products that they are purchasing. The new COOL standard will provide this information enabling consumers to buy Australian products if they so choose.

### 6.5 Competition and fair trade in the supply chain

The Australian Government has committed to the wholesale horticultural sector having a mandatory code prescribed under relevant provisions of the Trade Practices Act 1974. The Department of Agriculture, Fisheries and Forestry (DAFF) are managing the implementation of the mandatory code. The Centre for International Economics (CIE) and Allens Arthur Robinson were commissioned to:

- prepare a Regulation Impact Statement (RIS);
- prepare an exposure draft of the mandatory code to facilitate discussion; and
- undertake consultations with interested stakeholders.

The request from horticultural industries and the Government’s decision to impose a mandatory code reflects many years of sustained complaints and concerns about how business is conducted in the wholesale market for fresh fruit and vegetables (The CIE, 2005).

The specific issues identified by The CIE are:

- under-supply of important information, particularly in regard to prices obtained and prices paid by traders in the marketplace;
- failure throughout the wholesale sector to invest in development of and adherence to clear terms of trade arrangements;
- cost and price averaging (cross subsidisation) that simplifies transactions but also mutes price and cost signals, reducing incentives to maximise quality and creating incentives which tolerate the excess supply of low quality fruit;
- claims about the quality of produce — many boxes in the market are labelled ‘A1’ grade quality when there are clearly significant differences in quality even within a single producer’s product;
- disputes where traders and growers have different views about the quality of produce;
- problems with the delivery of unsolicited, unwanted and poor quality produce;
- inconsistencies about the treatment of high quality produce and volatility in the returns for quality; and
- development of alternative pathways to market rather than trade in a central market characterised by a lack of market information and many problems.
The Australian Vegetable Industry: Taking Stock and Setting Directions

The CIE have held forums around Australia to discuss the draft code and the feedback obtained will be used by the CIE when preparing the final RIS and draft code to be submitted to the Government.

There are significant industry concerns about the consultants’ recommended option which is called a “hybrid” system and further consultation is taking place on these concerns.

The Government will consider the final report from The CIE that has taken into consideration feedback from the consultations.

Once a code is approved by the Government, it becomes a regulation under the Trade Practices Act 1974, and would be administered by the ACCC. Parties that do not comply with the code would be in breach under section 51AD of the Trade Practices Act.

6.6 Levies and statutory organisations

The history of government support for Australian agriculture has involved, among other things, significant support for statutory marketing and research arrangements. This has involved governments at both state and federal levels providing the legislative means for the compulsory collection of industry levies and the creation of statutory authorities responsible for overseeing the expenditure of the levies on behalf of the industries concerned. The first such legislation was enacted by the Queensland government in the early 1900s to support research and marketing arrangements for the sugar industry.

The traditional arguments for government involvement in these statutory arrangements were based on market failure, in particular the inability of individual producers to capture the benefits of marketing and research investments, and free rider problems (many marketing authorities grew out of a need to overcome dysfunctional, non-mandatory co-operatives). More recently, ongoing support for the research arrangements in particular is tied to industry policies aimed at increasing the competitiveness of the agricultural sector.

The statutory research arrangements have undergone an evolution from farmer-based advisory committees making recommendations to agricultural ministers, to more formalised research councils, R&D corporations and, more recently, industry-owned company structures. Part of this evolution has seen separate research and marketing arrangements come closer together. During the mid-1980s, the federal government introduced more stable forms of providing government contributions to the industries through matching industry levies expended on R&D.

Horticulture Australia Limited (HAL) is an example of the most recent phenomena to encourage marketing and research arrangements to be embedded into industry owned companies. HAL is owned by a range of levy-paying industries. However, the government continues to invest in the R&D responsibilities of HAL by through the matching arrangements discussed previously.

Potential exists for the Government to streamline the levy arrangements across the horticultural industries and to adopt arrangements that provide flexibility such as the dairy model where a single levy can be utilised flexibly between R&D and marketing and promotion. In addition, more streamlined arrangements are required to enable the Vegetable Industry to be more responsive to changes in market demand and the trading environment.
### 6.7 Taxation

Both the Australian Government and State governments levy taxes which impact on the Vegetable Industry at all levels.

The main issue of contention from various sectors of the industry are taxes which impact on the cost of production, including payroll tax and stamp duty.

Payroll tax is a state tax on the wages paid by employers. Employers are liable for payroll tax when their total Australian wages exceed the exemption threshold. Exemption thresholds vary between states, but this tax mainly impacts the packing and processing sectors of the industry with significant numbers of employees.

Stamp duty impacts on vegetable businesses through transactions such as insurance. Generally, stamp duty is exempted or reduced for acquiring agricultural property.

The Australian Government provides a limited range of input cost offset schemes such as the energy grants credits scheme which provides a grant for an eligible fuel purchase (diesel) for use in an off-road agricultural activity.

There are few specific tax deductions or rebates available for vegetable growers, with the exception of landcare and water resource expenditure and R&D (if undertaken) which apply to primary industry generally. Producers may elect to participate in tax averaging and a Farm Management Deposits Scheme, which defers tax paid on income paid into the Deposits, is available under prescribed conditions.

The Australian Taxation Office provides an accelerated depreciation scheme for the establishment costs of horticultural plants, but for the majority of vegetable crops are annual and the scheme relates only to those crops with an effective life of three years or more.

### 6.8 Industrial relations

Labour represents by far the largest single element of vegetable production costs at the growing, packing, distribution and processing levels of the industry.

The Australian Government and State governments have significant powers in relation to industrial relations matters which impact on the costs of employing labour. This includes the processes for setting terms and conditions of employment, payment of the superannuation guarantee, workers’ compensation premiums, and occupational safety and health requirements.

Growcom, supported by HAL funding, commissioned a detailed Horticultural Labour Situation Assessment for Queensland undertaken by CDI Pinnacle Management (June 2005) which provides a comprehensive coverage of the employment and industrial relations situation. This study sought to develop a situation statement of the current practices in the Queensland horticultural industry pertaining to labour, with the Terms of Reference covering the following issues:

- current statistical data including numbers and types of employees;
- current industrial relations and OH&S issues of importance to growers and trends in the broader Australian industrial relations environment;
- management and administration issues;
- training and education issues affecting both employers and employees in the industry; and
• the scope for other productivity improvements eg. mechanisation, precision agriculture, to impact labour issues.

This study produced a series of recommendations about how the production sector in Queensland and allied sectors may be provided with a framework to develop the skills, systems, experience and structures necessary to provide the industry with a sector of choice for employees and a sector which maximises the potential of employers.

CDI Pinnacle Management noted considerable deficiencies in the way labour is managed both at the farm and industry levels. It has proposed more pro-active management of the multiple issues involved under a coordinated strategy driven by Growcom. It has also implied that such an approach if successfully implemented could be extended nationally.

The key strategic issues that have been identified by the Australian industry are the significance of:

• labour costs in all facets of the supply chain;
• shortages in the supply of labour with appropriate skills; and
• Australian society’s expectations on employment conditions and management practices.

There is little likelihood of the conditions that contribute to high labour costs being removed in Australia, and attention needs to be directed at management approaches which maximise productivity and innovation to reduce the labour input.

Progressive growers and vegetable businesses consulted during this project stressed the need for the focus to be on becoming ‘super efficient’ in the use of labour and in maximising productivity through highly skilled workers and automation. The Growcom study provides a framework and specific recommendations on how this may be achieved.

6.9 Transport infrastructure

The Australian Government and State governments have leading roles to play in the provision of transport and associated infrastructure covering roads, rail, shipping and airways.

For the distribution of vegetables, road and shipping are the primary modes of transport. The field interviews with the industry did not disclose significant concerns about transport apart from claims that fresh and frozen produce being sourced from overseas destinations such as China and New Zealand having freight cost advantages.

With regard to shipping, the Tasmanian Vegetable Industry Task Force (Version 2, 3 August 2005) has reported that there has been a reduction in direct call overseas vessels calling at Tasmanian ports due to fixed date global schedules necessitating mainland port calls only. Tasmanian exporters, therefore, have to source other shipping alternatives such as via Melbourne.

The Tasmanian Freight Equalisation Scheme assists shippers of eligible cargo to offset the freight differential to interstate markets, but does not apply to exports transhipped via Melbourne.

6.10 Natural Resource Management

An important role of government is its responsibility for the protection of the terrestrial, aquatic, marine and atmospheric environments. This role is becoming increasingly
advocated by communities both domestically and internationally, and recognition of government’s role is reflected in the rapidly increasing number of international agreements on environmental issues.

The Australian Government’s role in natural resource management and the environment is played out through a combination of mechanisms that influence individual and collective behaviour impacting on resource condition:

- legislative and regulatory powers, such as through environmental protection acts, setting standards;
- inter-governmental cooperation in direct management of resources and infrastructure, such as through organisations like the Murray-Darling Basin Commission;
- establishment of policy priorities for government investment or joint-investment in industry, scientific and education programs, such as through Australia’s national science objectives;
- establishment and management of programs that invest in on-ground resource management actions, such as Landcare and the Natural Heritage Trust; and
- establishment of community-based resource management organisations, often underwritten by legislation in the form of authorities, such as catchment management authorities.

Australia’s approach to natural resource management has taken an evolutionary direction towards social response mechanisms. That is, emphasis is increasingly being placed on those owning or directly managing natural resources to take more responsibility for the sustainable use of the resources under their control. The term “bottom-up” is often associated with this approach.

Many natural resource management issues are made complex by their diffuse nature. For example, issues such as salinity, sediment movement and eutrophication, among others, make it difficult to identify specific polluters, and so Australia’s environmental policies are complicated by blurred lines between public and private responsibilities (hence requiring combinations of policies based on beneficiary versus polluter pay principles).

Water is presently the highest natural resource management priority of federal and state governments. Increasingly governments are seeking market-based instruments to influence behaviour affecting the quality and quantity of water.

Market-based instruments that see an increasing emphasis on the allocation water rights and the trade in these rights will influence the vegetable industries in those places where such mechanisms exist. This will see increasing movement of water allocated to industries of higher value (in many cases towards vegetable industries) and an increasing emphasis on increasing water use efficiency to increase productivity from every drop available.

Not all vegetable growing regions are affected by water trading policies. However, in regions such as northern Tasmania, among many others, potential exists for government to influence water use through licensing water holding capacity on farms (dams) or limiting new developments and infrastructure. This already occurs in some states such as NSW and Victoria.

The Australian Government’s Pathways to Industry EMS program has established vegetable related initiatives through the Horticulture for Tomorrow project, and its linkages to the Enviroveg project (see Chapter Two: Industry Profile).
6.11 Local Government

Local governments interact with the Vegetable Industry through a variety of ways:

- they are involved in land classing and zoning, identifying suitability of land uses within their jurisdiction;
- following from this, they are responsible for land use approvals, and approvals of related on-farm infrastructure;
- in some cases they price and regulate the use of resources such as water, depending on where the water is sourced;
- the management of some regional infrastructure such as local roads;
- placement, licensing and control of local markets and other retail establishments; and
- certain regulatory responsibilities for food and food service standards, safety and health, and point source pollution.

In some regions of Australia, particularly where vegetable producers and related downstream industries form a significant part of the local community, local governments can have an intimate association with the industry, taking close interest in its health and viability. In some of these areas, vegetable producers are often represented on a council’s membership.

In regions where the Vegetable Industry is carried out in close proximity to urban or peri-urban communities, local councils can become involved in conflict resolution processes involving resource use, safety and sustainability.

6.12 Food Security

The issue of food security for the nation has been raised in response to perceived loss of capacity in the Australian industry. The industry argues that this is a critical risk management issue for the Australian Government. While there has been significant decline in the number of farmers, overall production has increased and Australia is by far a net exporter of food.

6.13 Implications for Setting Directions

Resilience

- There are many policies and regulations at all levels of government which impact on the Australian Vegetable Industry. The Taking Stock literature review and field interviews clearly indicate that the following are priority issues:
  - the safety for consumers of vegetable imports;
  - consumer choice in purchasing vegetables based on country of origin;
  - transparency, fairness and equity in supply chain transactions and relationships; and
  - achieving a ‘level playing field’ or ‘competitive neutrality’ in bilateral trade agreements and imported products;
- achieving maximum productivity in the use of labour and innovation in reducing the labour component of total production costs; and
- establishing statutory industry arrangements and levies that foster leadership and innovation in the Australian Vegetable Industry.

- For many of these issues, processes are underway to review current policy and regulatory settings. Experience of Vegetable Industry organisations over the past few months indicate the need for industry representatives to establish strong working relationships with key areas of government to ensure industry perspectives and requirements are taken into account in policy settings.

- Opportunity exists to establish a clear framework for industry development and adjustment, based on cooperation between national industry organisations that coordinates all activities and investments dealing with the key strategic issues that impact on industry viability. This could build on the platform of the Industry Partnership Programme and use or leverage other information and initiatives that have bearing on vegetables, horticulture and agriculture. In many ways, issues facing the Vegetable Industry resonate with issues for other horticulture and agriculture industries adjusting to the global market.
Chapter 7: Conclusions and recommendations: Setting directions for the future

7.1 Taking Stock pivotal conclusions

The following are the pivotal conclusions reached by the consultancy team. They were derived from a synthesis of the key implications arising from analysis of each of the chapters in this report. The Taking Stock and Setting Directions framework was used as the basis for the synthesis, with the conclusions matched to the success outcomes outlined in the framework.

The reader should note that these are not recommendations, but rather statements about the situation faced by the Vegetable Industry. The tables that follow outline the report’s recommendations against three strategic areas directed towards the outcomes of competitiveness, profitability, sustainability, resilience and self-reliance.

**Competitiveness**

1. The Australian Vegetable Industry has low barriers to entry, resulting in a competitive business environment. However, the global nature of vegetable production and trade is placing new and significant competitive pressures on the industry.

2. The Australian Vegetable Industry is facing a period of significant adjustment. The immediate concern is the vegetable processing industry where competitive advantage in a globalised market is largely based on price. Australia is not a low cost producer of most processing vegetables and this situation cannot be changed in the short term.

3. While the situation for the fresh vegetable sector is better, it too faces potential challenges of cost competitiveness as imported fresh product continues to increase. Movement from processing vegetable production into fresh vegetable production could place added pressure on the fresh sector.

4. Labour costs are a key differential in product prices and it is likely that Australia will have difficulty in competing with low labour cost suppliers in open markets unless buyers can be convinced of the value of attributes other than price.

5. The favourable trend is that consumer markets for fresh vegetables domestically and overseas are growing. Consumer trends world-wide are moving in the direction of healthy foods with high nutritional values that can be satisfied by quality vegetables. Australia can capitalise upon its reputation as a supplier of clean, quality food in pursuing opportunities from the trend towards healthy eating.

6. Despite the opportunities, Australia is losing market share to overseas competitors. Imports have risen for the last four years and exports have fallen for the last three years. Over the last three years, there has been a $148 million turn around in the balance of trade.

7. Future success overseas will largely be in niche markets where Australia has a quality and/or seasonal advantage that buyers will value and pay premium prices.
**Profitability**

8. The change in the competitive environment and the loss of markets has eroded the profitability of many enterprises and this is reflected in the declining number of growers. Processing vegetable growers are particularly affected and will continue to lose contracts and face price reductions unless they can consolidate to supply larger contract volumes and continue to work on yields, costs of production and efficient use of capital.

9. Retailers are importing increasing volumes of processed vegetables. Consequently, processors are also importing products from cheaper overseas suppliers to sustain their profitability and maintain their own market share.

**Sustainability**

10. The present situation with competitiveness and profitability is unsustainable. Unless major changes take place there will be a substantial reduction in the number of growers of processing vegetables with potential spill-over effects on the domestic fresh vegetable market.

11. The diversity of the Australian Vegetable Industry is both a strength and a weakness. As a strength, its diversity provides the capacity for supplying substantial quantities of many products for domestic and overseas markets and to manage continuity of supply to markets. As a weakness, its diversity and dispersion can hinder development of economies of scale, cooperation in the supply chain and establishing the unity of vision and action to be successful against the competition of imports and in export markets.

12. The Vegetable Industry invests in sustainable production systems through research development. However, the diverse nature of the industry (including the ethnic and geographical diversity) challenges effective communication of best practice environmental management systems.

**Resilience**

13. Australia’s capacity to supply vegetables is greater than the size of the domestic market. With rising imports and loss of export markets, the industry has a marketing challenge that will intensify and drive structural change. The industry needs strategies, structures and resources in place to sustain and grow markets.

14. Global competitive forces are rapidly driving consolidation in supply chains worldwide. Retailers supplying consumers and providores supplying the food service industry are consolidating rapidly. In turn, they are seeking to deal with fewer suppliers who are able to deliver product year-round to stringent quality assurance standards and meet price expectations.

15. In response to retail and providore consolidation, suppliers too are following this trend and consolidating and/or forming supply alliances. New business models where growers are linked into these supply chains are the way of the future. Industry services bodies similarly need new models to engage with supply chain firms.

**Self reliance**

16. Turning around the current trade trends and capturing the opportunities offered by global markets will require a level of coordination and cooperation across the supply chain that previously has not been characteristic of the Australian industry. The lack of collaboration has weakened strategic planning and the building of a cohesive and purposeful industry that is committed to influencing its own future.
17. The industry bodies are currently fragmented, lack clarity in their roles and do not have the capacity to respond rapidly to the modern business needs of the industry. A cohesive and responsive leadership structure is essential so that the industry institutions can keep pace with the changes being faced in the market place. Further, the people leading and managing the significant changes ahead will need access to advice and support and opportunities to develop their skills and capabilities.

18. Most of the industry’s Research and Development (R&D) funding is being invested in on-farm issues. However, supply chain and marketing issues are largely driving industry profitability. The existing strategies, structures and processes for investing in R&D are not meeting the needs of the industry for the future.

19. The industry requires ongoing access to quality, timely information on markets and competitors. The information available in the past has not been adequate for informed policy and commercial decisions. Collection, dissemination and application of quality information represents a powerful platform for developing overall business and leadership capabilities at all levels across the Vegetable Industry.

20. The industry requires more effective means of communicating between and within industry sectors, particularly in respect to sharing information that can underpin processes of benchmarking and continuous improvement.

### 7.2 Recommendations: Setting directions for the future

**Facilitative Tactics**

Three facilitative tactics have been identified to provide an overarching framework for implementation of the findings of this report.

**4. Australian Vegetable Industry Development Group**

Various foundation projects and strategies have been identified for action to reposition the industry for meeting the challenges ahead. Further, the participative process adopted in the partnership project has created momentum for change that must be sustained and enhanced if the project is to have real and positive impact. It raises the question of how implementation will be coordinated.

It is imperative that the industry act decisively to implement the findings of this report. There is considerable pressure for change in the commercial environment and in the institutional arrangements and a strong case for forming a group that provides a sharp focus for implementation. It is recommended that a Vegetable Industry Development Group is established to be responsible for:

i) making recommendations to the Minister for Agriculture, Fisheries and Forestry on projects to be funded from the $3M pledged by the Australian Government to support Vegetable Industry development;

ii) maximising cross-industry ownership of activities flowing from the Industry Partnership Programme;

iii) implementing the Setting Directions Report recommended strategies;
iv) negotiating co-investment in foundation and other Setting Direction projects;

v) facilitating communication throughout the industry about the Setting Direction Report implementation; and

vi) monitoring the progress of Setting Direction Report activities.

The proposed membership of the Development Group is for up to seven people. They will have strategic level experience and influence as the role is not operational. The existing bodies have operational delivery responsibilities. Membership would include:

- an independent chair with agribusiness experience;
- the Chairs (or a nominated director) from Horticulture Australia Ltd and AUSVEG; and
- five people with knowledge and experience in the areas of retail, processing, export, government and industry restructuring.

The Development Group should be formed immediately and ideally announced by December 2005. It will wind-up in June 2008 or earlier if possible.

5. Foundation projects

A variety of strategies to respond to the challenges facing the Vegetable Industry have been developed with the input of many people participating in the industry at all levels and through the supply chain. These strategies are often interlinked and seven industry foundation projects have been identified that will address the most critical areas requiring action and also contribute to achieving progress with other strategies and activities identified in the report. These foundation projects cover:

i) Development of an Australian Vegetable Industry strategic plan;

The report identifies the need for improved communication and collaboration across the supply chain. However, these are not ends in themselves, and require purpose and commitment to shared benefits. The development of a shared strategic plan can outline these shared benefits and act as a focus point for jointly strengthening the Australian Vegetable Industry.

ii) Leadership and industry structures

The report suggests that sustainable growth of the Australian Vegetable Industry is held back by, among other things, its lack of cohesion and communication across the supply chain, and by inefficient structures reflecting internal fragmentation and factionalism. These factors reduce the capacity of the industry to jointly identify, create, co-invest in and capture opportunities in a way that successful industries take for granted.

iii) Industry information and decision support framework

The report identifies the lack of quality and timely data and information about many aspects of the industry. Such data is required to make informed decisions by industry bodies, Government and individual businesses.
iv) **Industry benchmarking**

The report and subsequent workshop discussions highlighted the lack of a continuous learning culture throughout all levels of the industry. Industries that have undergone significant market shocks, such as deregulation, have shown that industry-wide benchmarking can work effectively to increase the performance of individual businesses and business alliances.

v) **Business skill development**

The report identifies the development of a business culture as an important way to empower individual producers to develop new and build on existing opportunities, and to provide them with more skills and confidence to continuously improve their practices and negotiating power in meeting market specifications.

vi) **Global comparative analyses**

The report identifies the lack of suitable data and feedback mechanisms to inform comparisons of Australian and overseas market and production situations. As a result, many claims about Australian production competitiveness are based on anecdotal evidence. Accurate and insightful market intelligence and knowledge of competitor’s practices are fundamental to improving Australian production systems and competitiveness.

vii) **Market development**

The report identifies the need for the Australian Vegetable Industry to expand its domestic and international markets through identifying points of difference and capturing competitive advantage where it exists and where it can be created. The industry needs strategies, structures and resources in place to sustain and grow markets.

6. **Communications Strategy**

The various projects and strategies identified in this report collectively offer the potential for the industry to create a viable and prosperous future. A coordinated response will be important and the role of communications is critical. An integrated communications strategy should be formulated and implemented as one of the first actions of the Development Group. The objectives of the strategy are to:

- Promote awareness and enlist commitment and support from stakeholders and key audiences about the industry partnership project outcomes and directions; and
- Promote the progress achieved and opportunities for participation in initiatives.

**Recommended strategic areas for action**

Table 7.1 recommends strategic areas for action to address the issues outlined in the pivotal conclusions. These strategic areas are based on the Taking Stock and Setting Directions framework’s success outcomes. Because particular recommended strategies can address more than one outcome, the tables combine some outcomes to maintain an emphasis on direction setting. The recommended strategic areas for action are as follows:
The Australian Vegetable Industry: Taking Stock and Setting Directions

Strategic Area 1: Competitiveness

Expansion of the domestic market:
R1 Develop and leverage points of difference for Australian products (Foundation Project).
R2 Invest in marketing and promotion and monitor sales.
R3 Pursue import trade measures consistent with WTO agreements.

Export market development:
R4 Develop and resource strategies for identifying specific export markets and products.
R5 Build commitment of supply chains to search for and meet export demand.

Strategic Area 2: Profitability

Internationally competitive vegetable production:
R6 Identify and monitor cost structures and market strategies of leading overseas competitors (Foundation Project).
R7 Develop and implement a benchmarking strategy for the industry (Foundation Project).
R8 Develop and implement new business models to supply customer requirements.
R9 Reduce labour costs as a proportion of total production costs.
R10 Increase sustainable productivity of land and water use.

Strategic Area 3: Self Reliance and Resilience

Enhancement of industry leadership and institutional arrangements:
R11 Increase whole of industry engagement and representativeness in industry bodies (Foundation Project– combined with R12).
R12 Develop industry leadership capability (Foundation Project – combined with R11).
R13 Strengthen the industry’s capacity to develop and implement visionary and feasible industry plans (Foundation Project).
R14 Rationalise and invigorate industry service mechanisms to enhance the timeliness, quality and impact of industry responses to emerging issues.

Quality industry information, communication, innovation and capacity development:
R15 Address market knowledge gaps to enable domestic and export market growth (Foundation Project– combined with R16).
R16 Improve efficiency in how information is collected, maintained and distributed (Foundation Project – combined with R15).
R17 Provide opportunities for open and constructive communication between industry participants.
R18 Improve the business skills and management of growers (Foundation Project).
R19 Develop a national technology extension strategy in support of domestic and export market strategies.
R20 Invest in R&D that is systems-based, balances supply chain issues and is program rather than project focussed.
Figure 7.1 diagrammatically presents the relationship between the Taking-Stock pivotal conclusions, the agreed SDR strategies, seven foundation projects and the outcomes expected of these projects.

A critical element to the success of implementing the strategies outlined in this report will be the role of the Vegetable Industry Development Group, which must comprise members with strategic level experience from across the supply chain and are committed to a whole-of-industry approach to building the future of the Australian Vegetable Industry.

It is important that the momentum from the Industry Partnership project, and the good relationships built across the supply chain during the course of the project, are built on rather than allowed to wane. While an important part of the Group’s role should be to assist the Australian Government direct its investment strategic industry projects (such as the Foundation Projects set out in this report), it is vital that the Group oversee efforts to address all recommended strategies.
### Table 7.1: Strategic Areas for Action

#### STRATEGIC AREA 1: Competitiveness

#### 1.1 Expansion of the domestic market

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Expand demand for Australian products.</td>
<td>R1 Develop and leverage points of difference for Australian products.</td>
<td>Research Australian consumer preferences and values to identify marketing opportunities based on points of difference:</td>
</tr>
<tr>
<td>➢ Information and processes for better matching of supply and demand (quality, quantity, continuity).</td>
<td>(Industry representatives identified this as a priority Foundation Project.)</td>
<td>o undertake global searching for new products and innovation with potential application to the Australian market.</td>
</tr>
<tr>
<td>➢ Competing against imports.</td>
<td></td>
<td>Facilitate information sharing along the supply chain to ensure opportunities are captured:</td>
</tr>
<tr>
<td>➢ Supplying to fewer larger customers.</td>
<td></td>
<td>o establish mechanisms for building relationships with major supply chain firms (to identify emerging trends, consider quality programs and issues, invest in R&amp;D for new products etc.);</td>
</tr>
<tr>
<td>➢ Capturing regional competitive advantage.</td>
<td></td>
<td>o develop a targeted strategy to understand and act on the opportunities presented by the food service sector.</td>
</tr>
<tr>
<td></td>
<td>R2 Invest in marketing and promotion and monitor sales.</td>
<td>Develop the industry domestic marketing capability:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o review present marketing capability;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o develop promotional strategies, including adding value, influencing and supplementing government investment on promoting healthy eating;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o invest in high impact public relations to profile vegetables in food, lifestyle and health media and campaigns.</td>
</tr>
<tr>
<td></td>
<td>R3 Pursue import trade measures consistent with WTO agreements</td>
<td>Research and analyse competitor marketing strategies, production costs and subsidies:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o identify and act on situations where dumping of product may be occurring or where there is a case for other measures to safeguard the industry from surging imports;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o food standards be revised to implement the principle of consumer choice based on comprehensive information;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o build relationships with Government to ensure the industry case is understood and properly considered in policy development.</td>
</tr>
</tbody>
</table>
**STRATEGIC AREA 1: Competitiveness continued . . .**

### 1.2 Export market development

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
</table>
| ➢ Retaining and growing profitable export markets.                        | R4 Develop and resource strategies for identifying specific export markets and products. | Establish an export market development group involving key commercial players to create a collaborative approach to expand export trade:  
  o the group would oversee the following activities (3.1.2 and 3.1.3);  
  o supported by government seed funding, commercial contributions and use of R&D levy funds where appropriate. |
| ➢ Creating an export culture.                                             | R5 Build commitment of supply chains to search for and meet export demand.     | Conduct export market research, competitor analysis and monitoring. |
| ➢ Competing against other exporting countries.                            |                                                                               | Maintain market intelligence systems. |

Conduct export market research, competitor analysis and monitoring.

Maintain market intelligence systems.

Undertake economic and commercial analysis on the industry's capacity to supply identified market opportunities.

Prepare export market development strategies:
  o identify priority markets;
  o set targets;
  o monitor export performance;
  o influence R&D priorities for export development;
  o communicate export market requirements back to the supply chain including growers;
  o consider the value of permanent international presence in selected markets.
## STRATEGIC AREA 2: Profitability

### 2.1 Internationally competitive vegetable production

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Reducing cost of production.</td>
<td>R6 Identify and monitor cost structures and market strategies of leading overseas competitors.</td>
<td>Undertake a global benchmarking study in selected markets:</td>
</tr>
<tr>
<td>➢ Increasing efficiency of resource and capital utilisation.</td>
<td>(Industry representatives identified this as a priority Foundation Project).</td>
<td>o collect commercially valuable information (as opposed to international trade statistics) for benchmarking that leads to continuous improvement;</td>
</tr>
<tr>
<td>➢ Supplying under contract arrangements to buyers’ requirements.</td>
<td></td>
<td>o establish mechanisms for ongoing data collection, monitoring and analysis of the implications of competitor cost structures and strategies that can be used for Australian production, R&amp;D and marketing investments.</td>
</tr>
<tr>
<td>➢ Accessing and adopting world’s best technologies.</td>
<td>R7 Develop and implement a benchmarking strategy for the industry including communication of benchmarking results.</td>
<td>Benchmark vegetable production practices, supporting ongoing information sharing and offering opportunities to enable producers to compare and analyse their performance to that of their peers:</td>
</tr>
<tr>
<td>➢ Accessing required labour with necessary skills.</td>
<td>(Industry representatives identified this as a priority Foundation Project).</td>
<td>o establish a national producer benchmarking scheme (using dairy industry processes as a model);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o investigate incorporating New Zealand growers in the benchmarking as illustrated by the dairy industry.</td>
</tr>
<tr>
<td></td>
<td>R8 Develop and implement new business models to supply customer requirements.</td>
<td>Research to identify successful business models and initiatives that can be applied to more rapidly capture opportunities and bring new products onto the market:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o initially focus on processing sector to facilitate alignment of production models to major domestic market buyers’ requirements;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilitate the development of commercial networks and alliances consistent with win-win business models:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o priority should be given to processing vegetable growers to create profitable scales of operation and marketing.</td>
</tr>
<tr>
<td>CHALLENGES</td>
<td>RECOMMENDATION</td>
<td>POTENTIAL OPTIONS</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>R9</td>
<td>Reduce labour costs as a proportion of total production costs.</td>
<td>Support policies for increasing the availability and skills of labour in the Vegetable Industry. Undertake whole of system assessments to identify processes and labour that can be eliminated or replaced by technology to reduce costs in line with international benchmarks. Ensure that current government and industry reviews of labour availability and skills take into account the need for flexible approaches to labour recruitment and utilisation by the Vegetable Industry.</td>
</tr>
<tr>
<td>R10</td>
<td>Increase sustainable productivity of land and water use.</td>
<td>Develop and implement strategies for more sustainable use of land and water resources on an industry wide basis.</td>
</tr>
</tbody>
</table>
### STRATEGIC AREA 3: Self-reliance and resilience

#### 3.1 Enhancement of industry leadership and institutional arrangements

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
</table>
| Industry cohesion and growth strategies. | R11 Increase whole of industry engagement and representativeness in industry bodies. (Industry representatives identified this as a priority Foundation Project in combination with R12). | Enhance the representativeness of the membership of the peak industry body:  
  - develop a plan for increasing the representativeness of the Australian Vegetable Industry in AUSVEG membership, including groups that are currently under-represented (such as large commercial operations, ethnic groups, etc);  
  - increase the proportion of total Australian vegetable production in the membership of the peak industry body;  
  - develop flexible avenues of membership, including direct national membership;  
  - renegotiate the constitution and structure of AUSVEG to ensure a coordinated nationally focussed body.  

Build the professional capacity of the AUSVEG Board and management, and its member organisations:  
  - prepare and adopt sound governance policies that ensure the roles and responsibilities of the AUSVEG board, directors, members and management are articulated, understood and practiced;  
  - develop a director succession plan that ensures the board has directors with the skills required to meet the changing demands on the organisation;  

Explore options for a whole of industry structure or network that can develop, negotiate and promote whole of industry positions. |

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
</table>
| Organisational credibility, professionalism and best practice governance. | R12 Develop industry leadership capability. (Industry representatives identified this recommendation as a priority Foundation Project in combination with R11.) | Invest in people and leadership:  
  - the Vegetable Industry strategic plan to include a leadership development investment plan;  
  - create an executive network for senior industry executives across the horticultural industries’ supply chain;  
  - support a young growers / exporters / innovators network;  
  - develop an industry mentoring programme for local leadership, including participation of women and ethnic groups. |
<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
</table>
| R13 Strengthen the industry’s capacity to develop and implement visionary and feasible industry plans. (Industry representatives identified this recommendation as a priority Foundation Project). | Enhance the industry’s planning capacity and skills to develop and implement whole of industry strategic plans.  
- redevelop the Vegetable Industry strategic plan so that it includes increased investment in global market intelligence, effective supply chain relationships and the adoption of world’s best technologies. The plan needs to set targets for return on investment and establish sound monitoring and evaluation arrangements.  
- improve the communication of industry plans, priorities, investments, benefits.  
- Strengthen the accountability for outcomes resulting from investment in strategic planning.  
- develop a strategy and guidelines for how industry strategic plans are developed, resourced and implemented. The guidelines should be based on business management principles, best practice corporate governance, meaningful performance measures, and effective monitoring and evaluation. |  |
| R14 Rationalise and invigorate industry service mechanisms to enhance the timeliness, quality and impact of industry responses to emerging issues. | Re-focus the Vegetable Industry research and development arrangements:  
- review the Vegetable Industry Advisory Committee (IAC) and restructure to enhance its efficiency and effectiveness;  
- membership of IACs to be based on industry growth strategies requiring specialised expertise;  
- IAC selection processes to nominate the ‘best and brightest’ through an open and competitive process;  
- selection processes to be chaired by an independent and experienced chair;  
- consider reducing the number of IACs.  
Establish an effective R&D investment prioritisation process so that it is clearly focused on emerging and future issues at both production and post-production levels. This may mean investing in fewer, but larger, projects directed towards key strategic outcomes.  
Utilise the R&D levies in multi-disciplinary research to advance industry policy, marketing and technology agendas. |  |
STRATEGIC AREA 3: Self reliance and resilience continued . . .

3.2 Quality industry information, communication, innovation and capacity development

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>RECOMMENDATION</th>
<th>POTENTIAL OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Access to reliable and timely industry and market data.</td>
<td>R15 Address market knowledge gaps to enable domestic and export market growth.</td>
<td>Act on known industry information gaps including the need to:</td>
</tr>
<tr>
<td>➢ Using quality data and turning it into information, strategies and decisions.</td>
<td>R16 Improve efficiency in how information is collected, maintained and distributed.</td>
<td>o establish a grower information exchange;</td>
</tr>
<tr>
<td>➢ Business willingness to pay for commercially relevant information.</td>
<td>(Industry representatives identified R15 and R16 as a priority Foundation Project).</td>
<td>o recommence investment in retail sales data;</td>
</tr>
<tr>
<td>➢ Developing trust and open communication between industry players.</td>
<td>R17 Provide opportunities for open and constructive communication between industry participants.</td>
<td>o prioritise and conduct detailed market analyses;</td>
</tr>
<tr>
<td>➢ Communicating across a diverse, multi-cultural industry.</td>
<td>(Industry representatives identified this as a priority Foundation Project).</td>
<td>o establish a household panel for consumer research;</td>
</tr>
<tr>
<td></td>
<td>R18 Improve the business skills and management of growers.</td>
<td>o undertake a foundation study of the food service sector.</td>
</tr>
<tr>
<td></td>
<td>(Industry representatives identified this as a priority Foundation Project).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R19 Develop a national technology extension strategy in support of domestic and export market strategies.</td>
<td>Support national conferences and workshops relevant to all levels of the supply chain, dealing with themes such as business development in a global context. Enhance the resources and skill base of AUSVEG and HAL staff to deal with communication across the supply chain:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o refocus industry communication mechanisms to facilitate understanding of issues across the supply chain.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop a program on business skills development specifically tailored to Vegetable Industry needs:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o identify how growers will become involved;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o include the option of one-on-one analysis and advice through a facilitation process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raise the business skills of staff and others dealing with growers (HAL, AUSVEG, extension officers, researchers etc) through training programs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prepare a national extension strategy focussed on international competitiveness, and optimising the use of limited extension resources nationally. Elements could include: demonstration and monitoring farms (aligned to benchmarking); group learning approaches; information exchange; training; mentoring; and trials. Engage a national extension coordinator to facilitate alignment of extension activities with key industry strategies.</td>
</tr>
<tr>
<td>CHALLENGES</td>
<td>RECOMMENDATION</td>
<td>POTENTIAL OPTIONS</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>R20 Invest in R&amp;D that is systems-based, balances supply chain issues and program rather than project focused.</td>
<td>Develop program-based R&amp;D strategies that support a range of R&amp;D whereby each project adds value to each other and addresses the whole-farm and/or whole-of-supply chain context.</td>
<td></td>
</tr>
</tbody>
</table>
Figure 7.1: Australian Vegetable Industry Partnership Roadmap

**AUSTRALIAN VEGETABLE INDUSTRY TAKING-STOCK PIVOTAL CONCLUSIONS**

1. **COMPETITIVENESS**
   - Expansion of domestic market
   - Export market development
   - Competitive vegetable production
   - Industry leadership & institutions
   - Industry information, communication & capacity

2. **PROFITABILITY**

3. **RESILIENCE**

4. **SELF-RELIANCE**

5. **SUSTAINABILITY**

**AUSTRALIAN VEGETABLE INDUSTRY SETTING DIRECTIONS STRATEGIES**

1. **FACILITATIVE TACTICS**
   - Establish a Vegetable Industry Development Group
   - Invest in priority ‘foundation’ projects:
     - Market development
     - Global comparison
     - Benchmarking
     - Strategic planning
     - Leadership & structures
     - Information framework
     - Business skill development

2. **INDUSTRY OUTCOMES**
   - Growing profitable markets
   - Competitive knowledge
   - Continuous improvement
   - Shared vision
   - Strong leadership & responsive structures
   - Robust basis for decisions
   - Entrepreneurship, pride
   - Wide industry awareness, support and participation in foundation projects and future initiatives
Bibliography


Barr, N. (2004), *Social Trajectories for Rural Landscaping*. Department of Natural Resources and Environment, Bendigo


Department of Agriculture, Fisheries and Forestry. 2005. *Australian Agriculture and Food Sector Stocktake*, Canberra


Department of Transport and Regional Services. September 2003. *A Regional Profile, Cradle Coast Region, Tasmania*, Canberra


Queensland Department of Primary Industries and Fisheries, *Can Australian Horticulture Survive Globalisation? What Does the Future Hold?* Brisbane


Tasmanian Vegetable Industry Task Force, Tasmanian Vegetable Industry Situation Paper, 3 August 2005)


Other references

The following references provided additional background briefing, although have not been specifically cited.


Australian Potato Industry Council. 2004 : *Potato Australia*: Volume 15,

AUSVEG. 2005. *Submission to the Agriculture and Food Policy Reference Group*: Ensuring a profitable and sustainable agriculture and food sector in Australia. AUSVEG, Melbourne


Australian Chamber of Commerce and Industry. 1997 *Role of Government Industry Programs* ACCI, Canberra


Bundaberg Fruit & Vegetable Growers Cooperative Ltd. 2005. *Industry Issues affecting the Sustainability and Profitability of Horticulture in the Bundaberg, Childers, Gin Gin, Hinkler and Gympie Regions*


Coles Myer Ltd. 2005: *Submission to the Agriculture and Food Policy Reference Group*: Ensuring a profitable and sustainable agriculture and food sector in Australia. Coles Myer, Melbourne


DuPont Mospilan. No date. *Fast-acting Residual Control of Green Peach Aphid in Potatoes.* Technical Sheet

Gallagher, P. 2004: *Agriculture in an Australia-China FTA*

Glover, J. 2004. *Asian Retail Trends and Development*


Horticulture Australia Ltd. 2005b: *Consultant’s Brief: Vegetable Marketing Information Audit : Stage 1 – Desktop Analysis.* HAL, Sydney


Myers, P. 2004 *Sir James Goldsmith against Modern Agriculture and Free Trade*

O’Brien, T. 2005 *Submission to the Agriculture and Food Policy Reference Group: Ensuring a profitable and sustainable agriculture and food sector in Australia.* Simplot Australia, Melbourne


Teresa, E. No date. *Southern Hemisphere Congress : Shape of the UP Fresh Produce Sector.* International Produce

Vanclay, F. 2004.: *Social Principles for Agricultural Extension to assist in the Promotion of Natural Resource Management,* Australian Journal of Experimental Agriculture

Vegfed 2004: *Chips August 2004*
Victorian Potato Growers Council. 2004 *Potatoes in Print.* Newsletter October 2004
# Appendix A
## Consultation

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senator the Hon Richard Colbeck (Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry), Tom Black (Department Advisor)</td>
<td>Australian Government</td>
<td>2</td>
</tr>
<tr>
<td>Ann McDonald, Julie Goodchap</td>
<td>Australian Quarantine Inspection Service</td>
<td>2</td>
</tr>
<tr>
<td>Colin Mues, Stev Apted</td>
<td>Australian Bureau of Agriculture &amp; Resource Economics</td>
<td>2</td>
</tr>
<tr>
<td>Richard Souness, Tony Harman, Ann McGovern, Russell Phillips, Peter Hancock, Robert McLeish, Dominic Pyne, Ian Thompson</td>
<td>Commonwealth Department of Agriculture Fisheries and Forestry</td>
<td>8</td>
</tr>
<tr>
<td>Tony Byrne</td>
<td>Rural Industries R&amp;D Corporation</td>
<td>1</td>
</tr>
<tr>
<td><strong>Victoria</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patrick Ulloa</td>
<td>Vegetable Industry Dev Officer</td>
<td>1</td>
</tr>
<tr>
<td>Tristan Kitchener, National Buyer, Soft Vegetables</td>
<td>Coles Supermarkets</td>
<td>1</td>
</tr>
<tr>
<td>Terry O’Brien, Managing Director</td>
<td>Simplot Australia</td>
<td>1</td>
</tr>
<tr>
<td>Peter and Paul Scheurs, Managing Director and Production Manager</td>
<td>Processor Growers</td>
<td>2</td>
</tr>
<tr>
<td>Neil Barker (MD), Richard Barker</td>
<td>BGP International Pty Ltd</td>
<td>2</td>
</tr>
<tr>
<td>Angelo Taranto, Owner Steven Yung</td>
<td>Exporter/Importers McCain Foods (Aust)</td>
<td>2</td>
</tr>
<tr>
<td>Managing Director Luis and Paul Gazzola</td>
<td>Taranto Farms L&amp;G Gazzola &amp; Sons Grower</td>
<td>1</td>
</tr>
<tr>
<td>Richard Bennett (telephone interview)</td>
<td>Horticulture Australia Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Robert Nave</td>
<td>Grower, Werribee</td>
<td>1</td>
</tr>
<tr>
<td>Stephen Winter (Managing Director)</td>
<td>Stephen Winter &amp; Associates Trade consultant</td>
<td>1</td>
</tr>
<tr>
<td><strong>NSW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simon Hoyle, Mark Hawthorne</td>
<td>McDonalds</td>
<td>1</td>
</tr>
</tbody>
</table>
The Australian Vegetable Industry: Taking Stock and Setting Directions

Merv Tasker
Deputy General Manager
Windsor Farm Foods
Processor

Steve Muldoon
Agricultural Manager
Simplot Australia
Bathurst

Jeff McSpedden
Grower, Bathurst
Ace Ohlssen
Rural Supplier

Charlie Horder
Lawrie Greenup
Consultant
Australian Chamber of Fruit & Veg Industries
Fresh Produce Watch

Martin Clark
Executive Officer

Steve Muldoon
Agricultural Manager
Simplot Australia
Bathurst

Jeff McSpedden
Grower, Bathurst
Ace Ohlssen
Rural Supplier

Martin Clark
Executive Officer
Australian Chamber of Fruit & Veg Industries
Fresh Produce Watch

Steve Muldoon
Agricultural Manager
Simplot Australia
Bathurst

Jeff McSpedden
Grower, Bathurst
Ace Ohlssen
Rural Supplier

Lawrie Greenup
Consultant

Mario Muscat
Grower

John Webster
Managing Director
Horticulture Australia Ltd

Michael Simonetta,
Managing Director
Perfection Fresh

Ken Dixon,
Managing Director
GSF

John Vella
Leppington Speedy
Seedlings & Suppliers
Growers

Eddie and Kerrie Galea
Luke Jewell (telephone interview)
NSW Farmers Association

Alison Anderson
Vegetable Industry IDO

Queensland
Rob Thompson
Director
Harvest One

Jan Davis, CEO
GROWCOM

Mark Panitz
Industry Sustainability Manager

Lloyd Russell
Partnership Development Officer

Kim Michael
Principal Trade Officer
Qld Dept Premier & Cabinet

Peter Whittle
Principal Scientific Officer
Qld Dept Primary Industries

Cameron Tree, Biosecurity Director

Alan Ducret, Regional Director
ACCC Qld office

Albert Julum, Rural & Regional Outreach manager

Kent & Kerry West
Growers

Sally Abbott & Glenn Brent
Withcott Seedlings Qld

Wendy Erhart, Business Owner

Jack Milbank
Vegetable Industry Dev Officer

Andrew
Mulgowie Farming Company

Michael Jess
Potato Grower

Guy Barbera, Managing Director

IPG (Grower packer)
### The Australian Vegetable Industry: Taking Stock and Setting Directions

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Office</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trevor Steinhardt</td>
<td>Steinhardt Farms</td>
<td></td>
</tr>
<tr>
<td>Andrew Philip</td>
<td>SP Exports Pty Ltd, Grower</td>
<td></td>
</tr>
<tr>
<td>John Hall, CEO</td>
<td>Crop Tech</td>
<td></td>
</tr>
<tr>
<td>Bill &amp; Rob</td>
<td>Agronomic consultants</td>
<td></td>
</tr>
<tr>
<td>David De Paoli</td>
<td>AustChilli</td>
<td></td>
</tr>
<tr>
<td>Managing Director</td>
<td>Grower, processor, exporter</td>
<td></td>
</tr>
<tr>
<td>Anthony</td>
<td>Potato Grower</td>
<td></td>
</tr>
<tr>
<td>Brett Tucker</td>
<td>Qld Dept Primary</td>
<td></td>
</tr>
<tr>
<td>Senior Trade Dev’t Officer</td>
<td>Industries</td>
<td></td>
</tr>
<tr>
<td>Patrick Lowe</td>
<td>Exporter</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Western Australia</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>David East</strong> Grower</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Gary Bendotti</strong> Grower-processor</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dom Della Vedova</strong> Potato grower, AUSVEG Board member</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Terry Hill (Executive Director)</strong> Department of Agriculture, HAL Board member</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dennis Cerench (Director)</strong> Herdsman Fresh Essentials Specialist retailer</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ally Mackay</strong> Ally Mackay &amp; Associates International Fruit Marketing Consultants</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Nick Tana (owner)</strong> North East Equity Pty Ltd - SUMICH Vertically integrated grower</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>David Anderson</strong> Grower, President Vegetables WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tony Galati</strong> Grower</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Clive Stevens</strong> Stevens Farms/Fasttrack Exports Pty Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Figaro Natoli</strong> National Produce Farms</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Jim Turley (Executive Officer)</strong> Vegetables WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dene Lampard</strong> Centre West Exports</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Geoff Rowden</strong> Coles</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Woolworths (WA)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Julian Baker (Director)</strong> Growers Rural</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>David Ellement (IDO)</strong> AUSVEG, Vegetables WA</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Jim Trandos</strong> Grower</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Brad Ipsen</strong> Grower</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Maureen Dobra</strong> Grower-packer-marketer</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tasmania</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Michael Badcock</strong> Enchanted Isle Farms, Chair AUSVEG Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Managing Director)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Mark Kable</strong> (Agricultural Director), Kevin Clayton-Greene (Operations Manager) Harvest Moon Grower-packer-marketer-exporter</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Michael Ertler, James Ertler</strong> Premium Fresh Packer-marketer</td>
<td></td>
</tr>
</tbody>
</table>

1. Grower
2. Grower-packer-marketer-exporter
3. Packer-marketer
<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Role Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigel Carey (Marketing Manager), Rudy Gilham (Operations Manager)</td>
<td>Webster Fresh Grower-packer-marketer-exporter</td>
<td>2</td>
</tr>
<tr>
<td>L.R. (Buz) Green (Chief Executive)</td>
<td>Serve-Ag Rural suppliers and consultancy</td>
<td>1</td>
</tr>
<tr>
<td>Les Murdoch (Tasmanian Operations Manager)</td>
<td>McCain Foods</td>
<td>1</td>
</tr>
<tr>
<td>Mike Broadby (Director)</td>
<td>Perfecta Produce Grower-packer-processor-marketer</td>
<td>1</td>
</tr>
<tr>
<td>John Young (owner)</td>
<td>Youngs Vegie Sheds Vertically intergrated growing-retailing</td>
<td>1</td>
</tr>
<tr>
<td>Roger Jaensch (Executive Chairman)</td>
<td>Cradle Coast Authority Joint local government authority for regional development</td>
<td>1</td>
</tr>
<tr>
<td>Richard Bovill (Managing Director)</td>
<td>Bovill Farms</td>
<td>1</td>
</tr>
<tr>
<td>Dr Tony McCall (Lecturer)</td>
<td>University of Tasmania</td>
<td>1</td>
</tr>
<tr>
<td>Dr Frank Hay (Group Research Leader Vegetables), Tim Wilson, David Russell</td>
<td>Tasmanian Institute of Agricultural Research</td>
<td>3</td>
</tr>
<tr>
<td>Mark Smith (Executive Officer)</td>
<td>Tasmanian Agricultural Productivity Group</td>
<td>1</td>
</tr>
<tr>
<td>Jeff Jost (Tasmanian Operations Manager)</td>
<td>Simplot Australia Grower-processor</td>
<td>1</td>
</tr>
<tr>
<td>Sheryl Rockliff, Jos Mckenna, Jan Ian Young</td>
<td>Tasmanian Women in Agriculture Grower, AUSVEG Board member</td>
<td>3</td>
</tr>
<tr>
<td>Dennis Leonard (Exec. Off.), Stuart McGee, Phil Spencer, Nathan Richardson, Alan Perry, Matt Ryan, Kevin Hall, Rob Bayles, Bruce Goss, Phil Reader (growers)</td>
<td>Tasmanian Farmers and Graziers’ Association</td>
<td>10</td>
</tr>
<tr>
<td>Glenn Moore, John Carswell, Robin Thompson, Nic van den Bosch, Peter Beatty, Joe Horack</td>
<td>Dorset Community Economic Development Group</td>
<td>6</td>
</tr>
<tr>
<td>Scott Marston (Senior Advisor to Premier), Gary Hill (Snr Private Secretary to Minister of PI&amp;W), Michael Hart (Manager, Vegetable &amp; Associated Industries), Wes Ford (General Manager Primary Industries Division), John McPhee (Team Leader, Sustainable &amp; Profitable)</td>
<td>Tasmanian Government and Department of Primary Industries, Water and Environment</td>
<td>6</td>
</tr>
</tbody>
</table>
Industries), Alan Johnson (Manager, Regional & Business Development)
Jeremy Rockliff MHA (Shadow Minister for PIWE)
Colin Houston, Anthony Houston (Owners)
Steven Welsh (IDO)

Tasmanian Parliament 1

Houstons’ Farm 2
AUSVEG, TFGA 1

South Australia

Derek & Janice Bade
Don Ruggiero
Brian Size (Director), Rod Matthews (Director)
John Cranwell
John & Andrew Newman
John Mundy
Mike Redmond (General Manager), Victoria Andrew (Manager Marketing & Communication), Andrew Hudson (Product Development Manager), Stacey Brouwers (Agronomy, NRM Officer), Maxine Grieve (Project Manager), Van Van Le (Manager Greenhouse), Peter de Lacy (Manager Training & Learning Programs), Kate Parkin (Sales Coordinator)
Greg Prendergast (Managing Director)
Danny Deleso
Rocco Musolino
Han Chhen
Romeo Giangregrio
Lorry DeRuvo
Dino Musolino
Andrew Braham
Morris and Barry Nicol
Tony Clark (Managing Director), Ian (Field Manager)
Frank Musolino
Mark Drew
Neil Howells
Craig Feutrill (IDO)

Grower 2
Grower 1
Grower-packager-marketer 2
Grower-packager-marketer 2
Grower-packager-exporter 1
Grower 2
Grower, AUSVEG Board member 1
Grower 8
Grower 1
Grower 1
Grower 1
Grower 1
Grower 1
Grower-packager-marketer 1
Vertically integrated potato business 2
Grower 1
Grower-packager-marketer 1
Grower 1
Grower 1
Rural Solutions, PIRSA 1
Hudson Howells 1
Consultancy 1
AUSVEG, Arris 1
Appendix B: Taking-Stock Workshop Outputs

Workshop Date: 7 September 2005

Location: Hilton Hotel, Melbourne Airport

Workshop Hosts: The Australian Government Department of Agriculture, Fisheries and Forestry, Australian Vegetable and Potato Federation (AUSVEG), and Horticulture Australia Limited (HAL).

Project Service Providers: Kiri-ganai Research

Workshop Facilitator: Michael Williams

Workshop Aims

1. To facilitate discussion across the industry value chain and between industry and government on issues critical to the long-term sustainability of the Australian Vegetable Industry.
2. To improve understanding and clarify the Australian Vegetable Industry’s current situation and performance.
3. Identify information gaps and areas for further research.

Participants

Participants included representatives of:

- Vegetable growers
- AUSVEG and its Board
- Horticulture Australia Ltd advisory committees for vegetables, onions, processing tomatoes and potatoes
- Australian government representatives
- State government representatives from Tasmania
- Horticulture Australia Limited Research and Development Committee
- Vegetable Industry Development officers from all states
- Processors
- Retailers
- Exporters
- Food service industries
- Exporters
- Wholesalers
- Fresh markets
- Young industry representatives
SESSION 1: MARKETS

Question 1 – What are the characteristics that make farm businesses and supply chain relationships successful?

All participants responded to this question. The responses have been categorised under the headings: market information, relationships and collaborations, innovation, management and business skills, marketing and perception of roles.

A high degree of consensus was reached on the following:

- good market information is essential to good business decision making
- ultimately, businesses must understand and respond to the consumer
- there is an important role for all players in the supply chain to share information about the market and market requirements
- good, ongoing communication between players across the supply chain is critical – this requires trust, respect and transparency
- all players in the supply chain have an equal responsibility to ensure relationships are strong and mutually rewarding
- successful businesses must respond to market information, be flexible and utilise best available technologies
- delivering on specifications of quality is essential
- marketing is an important element of doing business.

Raw Data:

**Market information**

Successful businesses have a clear understanding of customer requirements
Ability to forewarn of future market prices
Ability to forecast production/market demand
Market intelligence can be sourced via Industry Associations
Understand the market and supply market appropriately
Grow what sells best, not what grows best
Direct link to consumer information
Ability to conduct market research
Ability to adapt overseas info to local conditions
Very good understanding of competitors
Transparency – growing costs, profit (comes with building relationships)
Identify core competency of industry – competitive advantage
They understand the ultimate consumer
Base product development on knowledge, facts not myth
Clear market signals being passed along
Greater sharing of information and understanding of competitors
The supply chain knows the customer and passes info through
Understanding the market
Discuss end consumer needs
Successful ones understand costs, markets and keep abreast of new technology
Not just spotting opportunity but talking to end customer to see if it is a goer

**Relationships and collaborations**

Open discussions between parties on what customer wants
High level of interaction – transparency
High level of communication between businesses
Understanding of one another's needs – level of trust, respect
Working together from production to marketing – reducing supply chain costs
Have to get rid of individual mentality – NETWORKS
Mutual recognition of need for adequate remuneration along supply chain (+ transparency)
Personal/business relationships with business partners. Establishing communication lines
Trust in the supply chain
High level of communication among all links of supply chain
High degree of ethics, trust among partners
Transparency. All links in supply chain working together
Understanding that the supply chain is only as strong as the weakest link
Good selection of partners
Part of strategic alliances
Relationships – consumer needs (knowing them), communication
Commitment and trust (commit to who you are supplying to and trust they will stay with you)
Communication – internal – supply chain
Finance is important to relationships
Align within your industry – network horizontally and vertically
People with influence are the successful ones
Horizontal alignment
More political involvement in vegetable trade
Retail tender
Keep to the terms of an alliance – monitor
Responsibility and collaboration
Communication throughout supply chain
All players in supply chain responsible for communication
Transparent
Potential blocks in supply chain
2-way communication
Successful businesses need to consider whole supply chain
Short chain – beneficial
Communication critical/open (disconnect between consumer and producer major barrier)
Trust with chain partners
Remove non-required links
Willingness of chain members to respond
Not inhibited – will communicate to retailers. Can be intimidating but necessary
Can interact with retailers or have market agent
Trust and respect between 2 markets – if us and them relationship doesn’t work as well. Works better if respect each other
Transparency issues – must not distrust each other
Successful producers work closely with customer (either retailer or consumer)
Supply relationships – direct relationship but also can need wholesaler to simplify supply change and take costs out

Innovation
Being innovative
Able to adopt technology
Able to develop innovative solutions (e.g., labour shortages)
Use world best practice technology
Able to do on-farm research
Able to be part of supply chain research
Ability to be innovative – structure within business to allow this – to do research, etc.
Can reduce labour costs
Capitalising on their environment – right product for soil, climate
Technology – mechanisation – management systems
Innovation - products with a point of difference
Closed loop marketing – holding plant variety rights
Aim for niche product to overcome subsidised markets
Latest technology/innovative

Management and business skills
Good supply chain management
Delivery in full, on time, at quality (expected)
Willingness to change/adapt to meet market requirements
Understanding your business – building skills and abilities to achieve this outcome
Achieving margins that maintain profitability, growth, reinvestment
Ability to respond quickly
Ability to see beyond what buyers ask for
Entrepreneurial skills
Strict quality culture
Very efficient
Able to recognise important changes
Business focus
Evolving with what customer needs but also need to hold your ground with who you are supplying to – return on your investment in new products
Controlled and well managed enterprise – inventory, knowing where you are up to, running farm as a business and not as a lifestyle, planning
Ability to diversity – be flexible, change
Leadership – vision
Culture of change
Culture of quality
Spread risk – markets
Logistics are good – location is irrelevant
Utilise resources
Fewer suppliers the better
Recognise the push to reduce the suppliers
Change from supply lead to demand lead
Diversified
Training and education of small producers to get into business
Handling of produce and presentation in market
Traceability
Ability to anticipate change
Focus on not just cost but quality
Productivity and efficiency
Good business management skills – need to understand cost of production – having the right information not guesses
Ability to re-coup costs when things go wrong
Need for rapid response leading to appropriate investment and products
Supply chain issue – successful businesses conform to environmental standards and others don’t

Marketing
Spend more on marketing and promotion
Presence of industry in final market place
Quality standard
Collective standards for quality, not currently in hort/veg, ie citrus industry
Orderly marketing. Have market before planting

Perception of roles
Industry should develop and government should protect
Growers who specialise have an advantage
Committed chain participants not speculators
Buyer has to be willing to pay for quality – and a good price to compensate for bad
Some producers won’t cope with change – can’t force them.

**Question 2 - What useful ideas and lessons are there for the Vegetable Industry from successful exporters, including other successful export industries?**

21 participants responded to this question.

- Some degree of consensus was reached on the following:
  - good market information underpins successful exporting
  - the supply chain and networks play essential parts in understanding the market
  - there is a need to break down the distinctions between export and domestic markets so the industry members can see that they can readily move between them
  - there is a role for industry organisations to facilitate an export culture and gathering and dissemination of market information.

Raw data:
An evolving trust in networks of producers (difficult to facilitate)
Ideally maintenance of a domestic and export market for commodities
Meat Industry – resources itself through MLA to find and fill markets
Relationship based, trust in the supply chain – onground intelligence in export destinations and transparent communications
Efficient supply chain
No point in distinguishing between exports and domestic markets (globally competitive)
Good examples already of globally competitive companies - need to learn more from them
Understanding market through research and travel
Building relationships at a personal level
Build trust and confidence within market – continued consistent supply
Understanding – competition
Spread risk and match suppliers and markets
Pink Lady apples to UK, Riversun to US – branding important for premium price
Success due to same factors as for domestic markets – market understanding, costs, technology, innovation, good packaging
Reliability and planning
Trust along supply lines critical – cooperative and common purpose approach
Small growers – need to take initiative not bureaucracy although role for AUSVEG and HAL to provide information data on sources of supply
Understanding opportunities
Question 3 – How can the Vegetable Industry invest more in understanding overseas consumer and market trends?

6 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- it is important to gather information from within the market (ie gather it locally rather than from afar).</td>
</tr>
</tbody>
</table>

Raw data:
Why? If you can watch o/s trends we might be able to pick where they are going to next.
Understand customers’ expectations
Is it responsibility of individual producer or HAL or AUSVEG or someone else?
Get involved with commercial players – they have people travelling or based o/s
Need to visit more than markets, got to get to know the needs of consumer e.g. smaller produce, different size cans
Get to know their food industry
Having access to o/s info – got to be physically there (not Austrade)
Australian industry facilitates workshops at export destinations with their key industry people (whole supply chain). Involve some Australian export reps in the workshop.

Question 4 – How can the industry involve key commercial players in a strategic approach to export development?

14 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- need for good relationships between players across the supply chain</td>
</tr>
<tr>
<td>- provision of good market information is the basis for exploring opportunities and identifying potential partners.</td>
</tr>
</tbody>
</table>

Raw data:
Share success stories
Government structure to assist
$ spread income base – market options
Premium products with a point of difference – organic – GMO free
Understand key elements in markets
Need to consider long term supply (cost and quality important)
We need to ensure our quality standards match market requirements
Knowledge of cost structure of whole industry and collaborate to get out of spot market
Access industry stats to improve business management – benchmark
Market whole industry - safe produce
In touch with final market requirements and produce what is required – consumer pull for our product
Shorter supply chain
Collaborative including government (FTA’s)

Question 5 – How can the Vegetable Industry increase consumer demand for Australian vegetable products/ What are the critical business relationships that need to be developed?
21 participants responded to these questions.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the precursor to increasing consumer demand is understanding consumer demand and behaviour</td>
</tr>
<tr>
<td>- investment in promotion is critical</td>
</tr>
<tr>
<td>- promote the benefits of buying Australian rather than rely on patriotism</td>
</tr>
<tr>
<td>- need to develop and maintain constructive relationships across the supply chain (but especially between growers and retailers) to ensure good two way communication of messages between suppliers and consumers</td>
</tr>
</tbody>
</table>

Raw data:
Why?
- Need to grow market
- Need to understand market
- Both domestic and export focus
Address and deliver on consumer requirements
- Education of consumers, growers and supply chain
- Address all market sectors (e.g. food service, export, processing)
- Understanding the most effective supply chains for the modern Vegetable Industry
- Understand effective business models for the Australian industry
- Identify as Australian (not a silver bullet)
- Push fruit and veg Australia collectively
Promoting
- Monitor/research what the consumer wants
- Match promotion to consumer research
- Target consumer segments - consumers of the future
- Break down gap between urban and rural communities
- Sell the right industry image sustainability etc ……
- Appeal to consumers social environmental conscience
- Transparency in value chain
- Closer relationship with retail/food service
Target post farm gate investment
- Lever VG dollars into the R&D&M investment
- Link with health professionals and messages
- Emphasis on buy AUSTRALIAN not imported
- Fresh is not as hard as processed
- More emphasis on fresh consumption can have a negative effect on processed – people eat more, fresh then buy less processed
- Do you promote more consumption? – does it really help the grower? If you promote - more consumer demand but then other producers go – ‘Let’s grow more’ – more product available then drives price down and grower gets nothing
- Food safety issue – do we talk about this? If food scare on lettuce then everyone stops eating it! Don’t promote negative but promote positive aspect to consumers?
- No – this won't drive sales – how do you explain this to consumers – can’t assume all Chinese stuff is bad
- Retailer home brand will demand very high food safety to protect brand
- Is enough done to promote Australian vegetables?
Eat fresh has been done to death - no it hasn’t. Shift to eat healthy. Vegetables are healthy – promote this. Government should advertise fresh food to save money on health costs related to bad eating. Go for 2 and 5 worked well in WA but disorganised in east coast – didn’t give time for retailers to respond. Disappointing. Relationship between retailer and grower. How the products are packed will be how they appear on shelf. Garlic – recent publicity has caused retailers to ask where do we get Aus garlic? (currently from China) – political pressure to buy it but it costs more. Some crops maybe we can’t grow here. If get Australian stuff focused on has to be a pay back in supermarket. Labelling on fresh has had an impact – any benefits in long term promotion – only if consumers are willing to pay? Need continuous supply. Integrate vegetables into how consumers eat – EAT HEALTHY. Seasonal promotion plans – product promotions as opposed to just price – just drives margins down. Keep communication open between growers and retailers – need dialogue to know what consumers want. Find out what consumers want. Wholesalers need to be part of the game. Better relationships between sellers and buyers.

SESSION 2: SUPPLY CHAIN

Question 8 – What relationships within the supply chain are respected most highly

All participants responded to this question. The responses have been categorised under the headings: attributes, values, relationships, incentives and perceptions.

A high degree of consensus was reached on the following:
- relationships need to be mutually beneficial
- relationships are strengthened by trust, honesty, respect and sound ethics
- good communication (two way and ongoing) is essential
- ability to adapt and to respond quickly and to specifications is highly valued.

Raw data:
Most important?: The one that is not working!

Attributes
Common sense
Professional
Flexibility
Innovative
Support for the industry (cooperation)
Enthusiasm
Embrace change
Forward thinking – 1 step ahead
Long term supply – sustainability
Mutually beneficial
Values
Open and honest – trust
Integrity
Ethics
Trust
For producers trust is needed with their 1st point of sale
More respect to growers in order to improve relationship between consumers and growers
Good business ethics
Loyalty long term security
Ethical – honest

Relationships
People do business with people = good business
shared expectations
good communications
Even handed
One up and one down from your position (important)
Every relationship within the supply chain is important
A relationship that values your input and allows some leverage in the market
Vertical integration is very important
Joint ownership of the supply chain works better (joint ventures)
Link to consumers is the most valuable factor
All links appreciate the difficulties faced by partners
Need a more balanced risk sharing structure
Consumer should be most respected by all parties in the supply chain
Routine communication
- daily phone
- regular face to face
- group contacts
For many consumers the most important relationship is with the supermarkets as they want cheap and good. For other consumers (those who are interested in nutrition and food safety) it is the growers – rise in popularity of farmers’ markets
An understanding of the importance of each part of the supply chain
Secure contracts to allow for the rationalisation/mainly processing
Awareness of capability of various components of supply chain
Each member of supply chain needs to demonstrate their value
Short transparent supply chains
Cooperative rather than adversarial
Understanding of each others needs and problems
Trust between consumer and retailer most important
Relies on perception on intermediaries
Along the chain – most respected relationship is with the next one up the chain

Incentives
Win-win arrangements (profit sharing)
The most respected are those that add the most value
Good communication so each party is aware if quality changes

Signals
Good and clear product standards and specifications

Management
Good planning. No over market driven production
Able to share costs and profit of production and distribution for the benefit of everyone
Joint strategic planning
Strong business relationship based on quality, reliability, and sustainability
Consistent supply – quality – price
Rapid feedback
Legislative compliance – chemical, quarantine
Allow realistic time to develop new products to commercialisation
Total respect of total cost structures including rejects – quality food safety act
Ability to change and respond to market
Can create demand from supplier end of chain with marketing strategies
This could be used to promote a “point of difference”, eg organic, hydroponic, GMO free, clean and green etc.
Most critical for all: between consumer and their supplier – consistent ‘delivery’ to expectations

Perceptions
Government and consumer needs to acknowledge role farmers have in environmental conservation and food security
PRIVATE LABELLING – leads to NO respect being given to growers from consumers. Consumers see supermarkets as sole food supplier due to break in supply chain as a result of private labelling. This weakens consumer/grower relationship in the supply chain.
Relationship between consumer and producer is purposely broken by the gatekeeper (major supermarket chains)

Question 9 – What lessons can be gleaned from these (successful supply chain) relationships and how might they be applied to other relationships?

35 participants responded to this question.

Some degree of consensus was reached on the following:
- build more networks and alliances, ensuring that they provide mutual benefits to all
- engage in collective problem solving and opportunity exploration
- understand and respect the respective roles, obligations and requirements of other players in the supply chain.

Raw data:
All relationships (good) need:
- trust
- transparency
- satisfaction
- grower recognition and equitable distribution within the value (wealth) chain
Negotiate collaboratively
Time to reflect and develop a strategy
Nice to have / see more:
R&D from down supply chain (post farm gate)
Coordinated approach in use of marketing fees
Re-alignment of profit take % back to grower?
More network groups/alliances
Identification of shared interest
Grower cooperation – continuity of supply
Education and training – understanding of each others business  
Local, stable, long term  
Mutual benefit  
Degree of flexibility when relationship exists  
Knowledge and awareness of each parties requirements  
Collective problem solving  
Constructive open communication  
Shorter, less complex supply chains the better  
Balanced and healthy working relationship – understand each others business and sharing the details of the businesses  
Hard to cooperate in a competitive market – have a customer – collaborate - innovate

**Question 13 – What are the critical business relationships that need to be constructed with government?**

28 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- key relationships need to be built with government in respect to dealing with issues of:</td>
</tr>
<tr>
<td>- labour – (payroll tax, industrial relations laws and capacity to access imported labour)</td>
</tr>
<tr>
<td>- generic promotion</td>
</tr>
<tr>
<td>- cost to businesses compliance to regulations</td>
</tr>
<tr>
<td>- food safety</td>
</tr>
<tr>
<td>- country of origin labelling</td>
</tr>
<tr>
<td>- market access and promotion</td>
</tr>
</tbody>
</table>

**Raw data:**

Relationship with government needs to be open and transparent  
Government must listen and act with industry to address issues to allow global competitiveness in a sustainable manner  
Fast track import labour  
Government to continue generic fruit and veg promotion  
Cost of doing business in Australia is too much – currency strength – tax credits  
Equitable free trade agreements – casualties if not done properly  
Payroll tax – disincentive for businesses to employ  
Need for government to understand the reality of farming  
Over regulation of farming industry – up to 20% of farm costs (Ammonium Nitrate)  
Need to reduce costs ie self auditing (AQIS)  
Need a way to influence decisions made that will affect our industry  
Government would have to regulate food safety requirements for both Australian and imported produce  
Government to explain what systems have been set up to check imported produce  
APVMA should be properly funded to get general chemical registration or at least faster permits  
Clarify and enforce country of origin labelling  
Our grower organisations that interact with government need to be funded (not by R&D) If peak body is funded by R&D, levy payers should elect peak body representatives
Levy payers should be able to elect R&D representatives in each state
Key players (including government) should meet regularly
More assistance to develop business skills
Single political mouth piece to represent veg industry
PIB must be resourced such that they can perform role effectively
PIB must have some funding from sources other than R&D levy
Direct and open communication
PIB able to deal with respective govt agencies/dept
PIB to engage state members and state govs on state/local specific issues
R&D $$ focused on strategic issues not traditional R&D priorities
Help with structural adjustment like dairy/sugar
More hard nosed in bilateral relationships eg FTAs
Government incentives do not line up with industry needs eg EMDG/Austrade KPIs, more exporters
Food standards – level playing field for domestic and imports
Reduce costs of doing business eg regulation

**Question 14 – What are the costs and benefits associated with having many specialised organisations and committees dedicated to specific vegetable industries and issues?**

14 participants responded to this question.

<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of united and coherent voice</td>
<td>greater engagement</td>
</tr>
<tr>
<td>high transaction costs</td>
<td>greater specialisation</td>
</tr>
<tr>
<td>lack of capacity to deal with issues strategically</td>
<td></td>
</tr>
<tr>
<td>confusion about roles and responsibilities</td>
<td></td>
</tr>
</tbody>
</table>

**Raw data:**
Costs
Cost in not having a united voice (govt, needs a united voice from industry)
Consistency of processes (eg collecting levies)
Dissemination of info difficult when dealing with many grower groups – for govt, for R&D etc
Are the roles of all the grower bodies defined and understood? NO
When you have fragmentation who is the representative organisation that gets to talk to Ministers/Govt?
Time/travel and overall costs to the individual and their business if they are an industry rep.
People don’t feel part of wider industry – only see themselves as part of their local group
Imposed restraints eg market research vs promotion, on what certain groups can do
Duplication ie Associations, organisations, committees, produce groups
To have one body – where do you get funds to resource it
Fragmentation – little lobbying power with government
Boundaries not clear as to who looks after what
Needs structure
Not set up in strategic way – therefore duplication of costs and resources
Prevents level of collaboration
Inconsistent levies across industry

**Benefits**
Voice representing all the different groups
Engaging more growers to participate in industry
Can address the vast distances between growing regions
Specialised info from groups
Deals with local/state issues

**Question 15** – What would be the characteristics of an effective industry capacity to deal with strategic issues and industry development?

35 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- broader participation is essential: there is potential to reconfigure an existing body, or develop a new alliance, to cover the broader participants relevant to the industry</td>
</tr>
<tr>
<td>- the right human resources are required: leadership, skills, ability to communicate and develop relationships across the supply chain</td>
</tr>
<tr>
<td>- resources must match aspirations: there is potential to review the levy arrangements in terms of their effectiveness at dealing with the broad array of issues now facing industry.</td>
</tr>
</tbody>
</table>

Raw data:
What do mean by industry? Process supply chain not just one sector eg. Growers
Need one point of contact that can initiate issue
Need to get common view that crosses all industry sectors
Need to have relevant and accurate information on the industry – have one point of contact to stop duplication eg like a PMA in USA
A characteristic would be a body having relevance to all those sectors involved
A body with representatives that sits above all sector groups
How do you get others to follow on agreed vision. Compare with commercial businesses which can implement change
Industry body needs to clearly define its objective, role and responsibility and communicate to its members and others
Members of the body need to feel empowered to participate in decision making process
Need to have financial and human resources to make organisation effective
Any organisation needs to have ‘business plan’ on how it would resource in the future – even if get an initial ‘kick on’ from, say govt
Need to identify building blocks on how an organisation can get to the capacity that industry wants – operationalise the vision for the organisation
Across sector industry body needs to have empathy with each other sector that it represents
Characteristics –
Consistent structure
National – state body
National registration of all growers
Consistent levy across all of industry
Simplistic structure
MLA – as an example
Can provide solutions for whole of industry
Representation comes back to resources
Representatives for different groups brought together in unity
- coordinated at strategic level
- single point to deal with institutional issues facing producers
- single point of consultation and communication for government etc, retailers etc.
Coordinate participatory research to fill information gaps (involve supply chain_
- wide sharing of findings
- repositions for info that can be easily accessed
Understanding of each point in the supply chain
- able to identify challenges and opportunities of each point in the chain
- willing to engage
Development and promotion of new schemes/programs – ie eco veg
Ability to explore use of levy for more flexible purposes – ie strategic planning – market research – promotion/marketing
Tailored education and training - business management – initial set up – for young people coming into the industry
Focus on young people and future issues
“2005“ equivalent plan – what enterprises will do – what industry will do – what govt will do
Benchmark data - how does my business stack up?
Encourage international co-investment partners in processing

**Question 16** – What can R&D investment beyond production offer to both growers and those elsewhere in the supply chain?

7 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- R&amp;D needs to match the issues of today and tomorrow, particularly in respect to exports and meeting market requirements.</td>
</tr>
</tbody>
</table>

**Raw data:**
Address over supply by increasing demand
Involves growers in total supply chain – increase business and marketing skills
Establish long term contractual model in domestic and export markets
R&D for export bases in key overseas markets
$ on domestic education and awareness programs eg schools
$ for product differentiation and innovation in domestic and export markets
Community supported agriculture – farm units/field days for kids and general public
Targeted market research - $ from levy for specific demographics to drive product development focus

**Question 17** – What is the place of social capital in dealing with issues centered around industry restructuring in the face of globalisation?

7 participants responded to this question.

<table>
<thead>
<tr>
<th>Some degree of consensus was reached on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- investment in leadership and resources to build capacity is important</td>
</tr>
<tr>
<td>- need to focus on addressing causes of problems rather than the symptoms.</td>
</tr>
</tbody>
</table>

**Raw data:**
As commodities return less, so environment impact increases
Coordination of competitive for domestic advantage and united marketing approach
Need to coordinate resources and funding to facilitate effective leadership and direction setting
National registration of producers through parliament and then acquire accreditation
Cost of compliance to enable competitiveness and how it affects how the industry is restructured
Reaction time to issues by govt is too slow to be effective
Loss of food security and production capacity – has severe social, economic and environmental impact
Govt endorsement in investment in cooking education (Jamie Oliver style) promotion
Tax Relief Credits per input to assist in enabling fair competition – or levelling the field
Investment by government in the health of Australians (Health funds redirect to the cause rather than treat the symptoms)

**Question 18 – How have other industries successfully dealt with changes?**

7 participants responded to this question.

Some degree of consensus was reached on the following:

- Economy of scale is an important survival and growth characteristic.

Raw data:
Economies of scale for processing suppliers, eg consolidation
Export fresh – maximise marketable yields at minimum cost
Fresh domestic - have a customer(s)

**Question 19 – What are the elements that define trust in relationships across sectors of the supply chain?**

7 participants responded to this question.

Some degree of consensus was reached on the following:

- Meeting expectations and delivering on requirements helps build trust
- Communication is critical to maintaining trust.

Raw data:
Forward looking
Outcome focus
Agreeing and meeting on expectations – planning collaboratively
Business methods and practices – eg staff changes; terms; confidence
Sharing information
Doing what you say you will
Solving problems through communications
Building trust over time
Appendix C:
Setting Directions Workshop Outputs

Workshop Date: 31 October 2005
Location: Stamford Plaza Hotel, Sydney Airport
Workshop Hosts: The Australian Government Department of Agriculture, Fisheries and Forestry, Australian Vegetable and Potato Federation (AUSVEG), and Horticulture Australia Limited (HAL).
Project Service Providers: Kiri-ganai Research
Workshop Facilitator: Michael Williams

Introduction Session: What really excites you about the ideas and suggestions?

Wendy Erhart – business management skills of farmers to be lifted. $120,000 for training – take to next level. Maintain consistent quality and look after customers and have systems in place.

Ian Neeland – Coles – report gives opportunity to move forward. Decisions in fresh and process of food for health. Opinion in Australia has secured respect in general public – mature and professional approach to move forward. How can industry take learnings and convert to knowledge. Recruitment policy, training policy, new product development, more effective training.

Paul Gazzola – industry training important. (On phone missed)

David de Paoli, Aust Chilli – congratulated consultants on report but should have gone further. Business side very important – more astute – innovation. Comparative analysis (benchmarking) – need to know who fighting – need to understand benchmarking which needs to be ongoing. An opportunity or a problem? Industry and government bodies – need to become more focused and work together – listen and coordinate. Consolidation of industry bodies.

Jeff Yost, Simplot – Need trust in supply chain. Share knowledge across the industry. Improve productivity – a great opportunity.

George Balyck, CEO of AusVeg – need to understand the market place globally. Need right information, right data, send people overseas – more proactive –work with government and industry and have a holistic approach. Hopes to come out of workshop with unity and a common purpose.

Clive Stevens – Strategies and structure to be put together properly. Report good and should build on it.
Terry Hill, HAL – Challenge to work with industry to ensure dollars invested get a good return. Good planning.


Tony Byrne, RIRDC – Excellent and comprehensive report. R&D to be looked at – focus on supply chain and consumers.

Mike Badcock – Should be developing the formation of strategic groups to do things jointly. Joint ventures and partnerships for exporting. New crops.

Jeff McSpedden – No politicians own vegetable properties. We do have an industry – set ground right it will flourish.

Figaro Natoli – need to form partnerships – 365 supply line. This is a great opportunity as a group Cultural shifts – growers have to accept the report and understand it is a science base – State organisations to help constituents understand.

Dom Della Vedova – communication through states – networking to get message to masses.

Elisa Maquire – from communication perspective needs a great deal of commitment and will be a significant change for growers. Networking is critical and will need a transition period to take people through and then follow up.

Wendy Erhart – need to sell change to the growers – profitable. Deliver to farmers some simple tools to use – transfer of corporate knowledge.

Clive Stephens – important linkages from AusVeg to supply chain.

**Report Back Session: Gaps and feedback on Setting Directions Report**

Table 1
Funding arrangements to compensate growers for pest incursion (Plant Health Australia)
Better alignment of industry R&D priorities with grower needs
Improved govt commitment to industry (freight, transport etc)
Better grower self-diagnosis of business health to assess options
Social structure of the Vegetable Industry (structural adjustment - exit strategies / succession)

Table 2
Overarching : Delineate fresh and processing
Domestic – options – promote Brand Australia
Export – utilise effective HMAC where trade barriers exist
Profitability – blue sky uses of veg
Export – strategies to create “export cultures’
Export – build commitment of supply chains to search for innovative approaches that create export demand
Export – collaborative export development
Options – cease programs of governments that promote internal competition – programs should complement industry initiatives
Profitability – identify and monitor operating structures and costs and market strategies of leading overseas competitors (incl use of technology).
Options – fresh and processing
Self Reliance – options too prescriptive and AusVeg focused.
Self Reliance – challenges: communication to community on importance and value of industry: communicate industry’s new approach internally and externally
Plan and implement effective communication plan to all stakeholders.

Table 3
Biosecurity
Government’s role – reduce regulation – enabling environment
Need for ongoing science and innovation

Table 4
Domestic market access
Using some QA standards for food coming into market
Market systems

Table 5
Under export:
Market Access – Quarantine and non-quarantine
Maybe export and domestic need to be together??
Developing relationships with govt to raise awareness of industry key issues (2-way interaction) (in wrong section)
Managing/communication change to industry

Table 6
Report too grower focused
Relationships with whole chain
Food service opportunities
Water/environmental stewardship
Isolated from other work
Science not well represented
Marketing and promotion
Food security debate
Collaboration with competitors

Identification of priorities session:
The following were the top seven priorities identified for immediate action:

Equal 1st – Benchmarks
– Information

Equal 3rd – Points of difference (market development)
– Leadership
– Capacity and plans
– Business skills

Equal 7th – Strategies for export
– Business models
Action Planning Session

Business Models
What are the business models currently operating and their costs, effectiveness?
What are successful/unsuccessful models – globally – what situation do they work/not work?
Success according to who? – grower – retailer – process
Ensure model analysis incorporates different parts of the industry – processed/fresh – category specific
What options could apply to Australian case studies/circumstances?
Assess opportunity to incorporate into Australian industry – swot analysis
Decision making output – for businesses to choose and develop
How?
Desktop to start – global supply – domestic supply – other industries
Involving chain/growers in analysis and developing – information sharing
Alliances to pilot approaches

Export Development
Improve efficiency of how export information gathered and linked
Link existing govt and industry networks to facilitate – R&D planning – identifying impediments to trade – lower operational cost structures (freight)

Business Skills
Self assessment tools and opportunities – discussion groups – benchmarks – identify business and personal priorities – provide material in comfortable environment
Tailored Packages – link to existing providers – link to existing courses – provide horticultural bent material into courses.

Industry Leadership
AusVeg develop industry leadership plan – eg Board and Co-op
Leadership Exec Plan – Executive Network : Forum : All sectors : invitations
Strategic Plan – Business plan – commercial plan

Develop and leverage points of difference
Process/criteria for establishment
Aim – expand domestic and export markets
Strategy – Global research to identify unrealised value within Australian products and how to release
1 – Process/criteria for estab research priorities – higher level issues
2 – Right team to collect – reps from s/chain – participants to pay $
3 – Supported by market Development Officer
4 – Obligation to transfer information
5 – To compliment existing studies
6 – 2 x missions per annum – activity – industry pro-active – quick wins

1 - What information is required? Domestic and Export
Generic : (HAL) Market segments and how accessed : Supply chain developments : Consumer demographics : Consumer purchasing habits
Product : (HAL/AusVeg/Other Sectors) : Product and packaging specs/trends:
Production x region (competitor) x season : Supply and demand analysis (incl domestic and import competition) : Seasonal windows
– What is available? : Can it be accessed? Can it be analysed?
– Gaps (a) prioritise (b) commission
– Analyse
– Communicate – ask recipients how they want it
– Update

**Global Benchmarking Study in Selected Markets**
benchmark cost and market trends
incl overseas and domestic
incl varieties and yields
incl innovation – benchmark current and future
benchmark quantitative and qualitative government
short term New Zealand
benchmark technology
benchmark quality?
National benchmarking and reward scheme (dairy)
$ per hectare, yield and return on investment
Benchmarking processors and other sectors of the supply chain
AusVeg to lead in cooperation role

**Concluding statements**

**ROBERT MCLEISH**
Real message – lot more to be gained by working with supply chain – packaging etc.
Knowledge to be shared – grower incentive
Doing business in different ways
Work with others and collaborate, eg overseas
Industry change : lot happening already as people respond quickly
Export development – good information out there and networks – identify where people can work together
Industry leadership

**VICKI MANSON**
Industry committed to this process and will communicate this to the Minister.
Need to develop a strategy to put some things in action. Out in public eye that activity is worthwhile.
How to develop projects to build on relationships. $3M committed to this.

**IAN NEELAND – COLES**
Not an AusVeg issue but a whole-of-industry issue
Commercial and business approach has been shown today.
Shared values and trust to be carried forward.
Confidence in being engaged and communicate to peers to proceed.
Positive and well structured collaboration
Rigor to be applied – obligation out there

**MARK HAWTHORNE – MACDONALDS**
Worldwide quality and benchmark
Industry leading the way
Total veg solution to end users
AusVeg brand – package of vegetables
Focus on New Zealand is the clear and present danger – quality/supply/cost
TERRY HILL
Very strong commitment and purpose. To make changes and confront the changes.
Need for more information – market, economics etc – new opportunities – industry to gain to do planning and lead – get over the hump.
Challenge for HAL: whole range of products with different focus

GEORGE B Alyck – AUSVEG
Thanked Mike Williams, Consultants and participants, especially Coles, McDonald etc for input.
Need to take ownership of business – through honesty and not blame
Provide leadership and information
Take on positive and resist negative
Interact with customers
Not an AusVeg issue – it is an industry issue
If more workshops and invite Coles, Woolworths, McDonalds etc – to be part of decision making process
Understand what the customer needs
Look at global marketplace
Engage with govt in a professional manner eg business plan
Look at other industries and bring into thinking process
Will add value to membership