Victoria's Vegetable Industry

December 2014 update

Key points

- This Vegetable Industry Profile provides an overview of the location, structure, production and performance of Victoria’s vegetable industry.
- In 2012-13:
  - There were 813 businesses in Victoria producing vegetables for human consumption.
  - The gross value of vegetable production for human consumption in Victoria was $985 million.
  - Port Phillip and Western Port region produced 42 per cent of the value of Victoria’s vegetable production.
- Victoria is the second largest vegetable producing state by value, after Queensland, with 26 per cent of total production value for Australia.
- The Victorian vegetable industry is driven primarily by domestic markets rather than exports.
- Victoria is the largest vegetable exporting state, contributing 31 per cent of Australia’s vegetable exports value in 2013-14.

Structure of the Victorian vegetable industry

In 2012-13, there were 813 businesses in Victoria producing vegetables for human consumption. This includes 208 potato growers, 60 onion growers, 51 lettuce growers, 53 capsicum growers, 34 carrot growers and 17 mushroom growers and the remaining businesses were growing other vegetables. Note that some businesses grow two or more vegetable crops. These businesses had a total area sown to vegetables of 34,916 hectares, of which 25,112 hectares were irrigated.

In 2011-12, 21 per cent of vegetable farms in Victoria were single operator businesses, 76 per cent were partnerships and 2 per cent were companies.

Employment in Victoria’s vegetable industries

In 2010-11, there were approximately 4,000 persons permanently employed in the vegetable growing industry in Victoria, representing 5 per cent of the state’s agricultural employment. Additional employment in processing, marketing and exporting makes a significant contribution to regional economies. In 2011-12, the average age of vegetable farm owners/operators in Australia was 55.

Location of Victoria's vegetable production

Vegetable production occurs in many parts of Victoria (see Figure 1). Of the agricultural land used for vegetable production, 38 per cent is in the region surrounding Melbourne. Significant production also occurs in the West Gippsland (16%), Mallee (14%), East Gippsland (7%) and Goulburn Broken (7%) regions of Victoria.

Where vegetables are grown depends primarily on environmental and climatic conditions, and the limitations of each crop. For example, cucurbits (e.g. pumpkin, cucumber, and zucchini) are grown in northern Victoria in summer, whereas lettuce is grown in the north in winter, the south in summer, and in some areas all year round. In recent decades, production of some crops, such as carrots and tomatoes, has moved into new areas, as growers respond to increasing competition for land and water.
Victorian vegetable industry production

Over the past 15–20 years, while being produced on less land, the value of potato production has increased. In 1993-94, the gross value of Victoria’s potato production was $104 million on an area sown of 12,000 ha. Potatoes were the main crop produced in Victoria in 2012-13, in terms of both area sown (7,174 ha) and gross value ($146 million) (see Figures 2 and 3). In contrast, intensive mushroom production, with a gross value of $80 million, was conducted on an area of just 68 ha. This demonstrates the different amounts of land and other inputs required to produce different vegetables. In 2012-13, Victoria produced around 15,000 tonnes of mushrooms with a gross value of $80 million. This represents 30 and 28 per cent of Australia’s total mushroom production by volume and value respectively.
Victoria's exports and imports of vegetables

In 2013-14, Victoria was the largest exporter of vegetables from Australia with 31 per cent of all vegetable exports. Victorian exports comprised processed vegetables worth $31 million and fresh and dried vegetables worth $31 million, of which perennial vegetables, in particular asparagus, accounted for $16 million\(^{11}\).

Historically Victoria has exported more fresh and dried vegetables than it has processed vegetables. However, in 2013-14, the value of processed vegetable exports caught up to the value of fresh and dried vegetables (see Figure 4). In 2013-14, processed vegetable exports increased by $6 million from the previous year.
The biggest export market in 2013-14 for Victorian fresh and dried vegetables by value was Japan, at $13.5 million. Other key export markets for Victorian fresh and dried vegetables were Singapore ($5 million), Indonesia ($3 million), Thailand ($2.1 Million) and Hong Kong ($2 million).

The biggest export market in 2013-14 for Victorian processed vegetables by value was New Zealand, at $15 million, declining $1 million from 2012-13. Other markets were Japan at $5 million, and Italy, Malaysia and Thailand, each at $1 million.

Victoria is a net importer of vegetables (Figure 5). In 2013-14, the total value of export and import of vegetables from Victoria was $62 million and $266 million respectively. Fresh and dried vegetables imports were mainly sourced from China, the United States, New Zealand, Mexico and Argentina.

Processed vegetables imports into Victoria exceeded that of exports. Processed vegetables imports were mainly from New Zealand followed by Italy, China, and the United States of America.
Financial performance of Victoria’s vegetable farms

Table 1 shows financial performance indicators for vegetable farms in Victoria (2007-08 to 2012-13). Vegetable production is highly capital intensive and, as with many other agricultural industries, subject to variable returns from one season to the next. Despite a dry summer and autumn in 2013, the supply of irrigation water was good and average vegetable yields in 2012-13 were higher than in 2011-12. Although, vegetable receipts increased in 2012-13 by 9 per cent, and estimated cash costs were lower, farm cash income declined by 21 per cent to $90,000 per farm.

Table 1 – Financial performance of Victoria’s vegetable farms

<table>
<thead>
<tr>
<th></th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12p</th>
<th>2012-13y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cash receipts ($)</td>
<td>750,850</td>
<td>1,161,230</td>
<td>816,600</td>
<td>960,710</td>
<td>1,068,400</td>
<td>1,014,000</td>
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<tr>
<td>Total cash costs ($)</td>
<td>526,550</td>
<td>848,840</td>
<td>617,370</td>
<td>760,870</td>
<td>951,200</td>
<td>924,000</td>
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<tr>
<td>Farm cash income ($)</td>
<td>224,300</td>
<td>312,400</td>
<td>199,240</td>
<td>199,840</td>
<td>117,200</td>
<td>90,000</td>
</tr>
</tbody>
</table>

p preliminary estimate. y provisional estimate

Challenges and opportunities

As with many agriculture industries, the Victorian vegetable industry encounters many challenges and opportunities. According to a recent survey by the Australian Bureau of Agricultural Resource Economics and Sciences (ABARES), while a high proportion of vegetable growers indicated that a move to higher yielding varieties would improve farm productivity, an estimated 95 per cent indicated they faced one or more constraints to changing their crop mix. The most common constraints indicated by vegetables growers in Victoria are:

- Knowledge or experience with growing particular crops (38%)
- Climate suitability (32%)
- Water availability (21%)
- Knowledge or experience marketing products (37%)

Competition for land from urban growth threatens the viability of urban/peri-urban horticulture. Traditionally, these urban/peri-urban regions have some of the best environments (soils, climate, close to markets) for horticultural production.

Increased farm input costs were most commonly reported as an impediment to the future viability of vegetable farms. An estimated 79 per cent of vegetable growers in Victoria viewed input costs (such as water, hired labour, fuel and fertiliser) as an impediment. Other impediments reported by the majority of growers included low vegetable prices (48%) and increased marketing costs (52%).

According to the survey main growth opportunities for vegetable farms are seen to come from:

- Selling direct to retail (31%)
- High-quality produce (31%).

An estimated 7 per cent of vegetable growers in Victoria saw export markets as a viable outlet for expanding their vegetable growing business.

However, growers highlighted a number of impediments to developing export markets. Around 81 per cent of vegetable growers believed exporting was too difficult or time-consuming. Inadequate prices for exported vegetables and shipping costs were the most commonly stated impediments to developing export markets.

Government policy and regulation influences

The wholesale vegetable industry is regulated by the Horticulture Code of Conduct, which was introduced in May 2007. Its purpose is to improve the clarity and transparency of transactions between growers and wholesalers of fresh fruit and vegetables. The code is prescribed under the Competition and Consumer Act 2010 and is enforced by the Australian Competition and Consumer Commission.
i Australian Bureau Statistics (ABS) Value of Agricultural Commodities Produced, Australia, 7503.0, 2012-13
ii ABARES Australian vegetable growing farms: an economic survey, 2010-11, 2011-12
iii ABARES–BRS Australian vegetable growing farms: an economic survey, 2010–11, 2011-12
iv ABS, Value of Agricultural Commodities Produced, Australia, 7503.0, 2011-12
v ABS, Based on AGS2011 Mesh Block Boundaries. Production of vegetables sourced from the 2010-11 Agricultural Census. Land use based on ASGS2011 Mesh Block Use Categories. This map was produced using coordinate system: Lat/Long GDA94 © Commonwealth of Australia, 2014 Please note data for this map includes vegetable for human consumption (excludes ‘all other vegetables’ and vegetables for seed)
vi ABS Value of Agricultural Commodities Produced, Victoria, 7503.2, 1993-94
vii ABS Value of Agricultural Commodities Produced, Australia, 7503.0, 2012-13
viii Victorian food and fibre export performance report, 2013-14
ix ABARES Australian vegetable growing farms: an economic survey, 2011-12, 2012-13
x (figures in parentheses response of Vegetable growers and percentages do not add to 100 percent because more than one response was allowed)