

Domestic and Export Market Access and Trade Viability Issues – A Strategy to Address

Michael Clarke
AgEconPlus Pty Ltd

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VEGETABLE INDUSTRY: Domestic and Export Market Access and Trade Viability Issues – A Strategy to Address

Project Number: VG12042 Draft Report

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Prepared for

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Abbreviations / Glossary

AANZFTA	ASEAN-Australia-New Zealand FTA
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
APAL	Apple and Pear Australia Limited
ASEAN	Association of South East Asian Nations
ASIC	Australian Securities Investment Commission
ABL	Australian Business Limited
AHEA	Australian Horticultural Exporters Association
ASEAN	Association of South East Asian Nations
BOM	Bureau of Meteorology
CIQ	China Inspection and Quarantine
DA	Dairy Australia
DC	Distribution Centre
DFAT	(Australian Government) Department of Foreign Affairs and Trade
DPI	Department of Primary Industries
EEP	Export Efficiency Powers
ERS	USDA Economic Research Service
FTA	Free Trade Agreement
GAP	Good Agricultural Practice
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GVP	Gross Value of Production
HAL	Horticulture Australia Limited
HS	Harmonised Standard Code
IPM	Integrated Pest Management
MAFF	(Japanese) Ministry of Agriculture, Forestry and Fisheries
MRL	Maximum Residue Limit
NESOI	Not Elsewhere Specified or Included
NZHEA	New Zealand Horticulture Export Authority
OHMA	Office of Horticultural Market Access
PNG	Papua New Guinea
PRC	Peoples Republic of China
QDAFF	Queensland Department of Agriculture, Fisheries and Forestry
QSR	Quick Service Restaurant
RMB	Chinese currency
ROK	Republic of Korea (South Korea)
SIP	Strategic Investment Plan
SPS	Sanitary, Phytosanitary
UAE	United Arab Emirates
USDA	United States Department of Agriculture
VAT	Value Added Tax
WTO	World Trade Organisation

DISCLAIMER

All description, figures, analyses, forecasts and other details have been prepared in good faith from information furnished to Mike Titley, John Baker and Michael Clarke by other parties. These data are believed to be correct at the date of preparation of this report.

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Project Summary

This document details a strategy to assist the Australian vegetable industry to open new domestic and export markets and make existing markets more viable. To deliver the strategy it was necessary to focus on three key issues: domestic and export impediments; relevant leviabile products; and existing and potential markets.

Despite a long and somewhat obvious set of impediments, Australia retains a foundation in vegetable exporting that can be used to deliver additional export success. Comparative advantages include commercial and personal relationships in Asia; world class food safety systems; mechanisation of production in some crops; relative proximity to Asia and the Middle East; technological developments that improve fresh vegetable shelf life; and innovations in domestic market value-adding and category management that have potential in overseas markets.

The research has shown that a subset of levied Australian vegetables has potential for additional sales in export markets. Products with additional export potential include beans; broccoli; capsicum; carrots; celery; leeks; lettuce (baby leaf salad and head) and sweet corn. Australia is not competitive on price in export markets selling traditional undifferentiated commodity lines. Australia's successful carrot export sector has demonstrated how a sector can differentiate itself on the basis of food safety, quality and reliability. Additional sales in both domestic and export markets will require a 'package' that includes product development; targeting market segments; building relationships; promotion and long term commitment.

Markets with additional sales potential were selected following application of appropriate criteria including current and future market access; trade relationships with Australia; demographics and capacity to pay; vegetable consumption and production; relative size of market segments; supply windows; freight and logistics. Preferred destinations and specific market segments were selected in East Asia, the Middle East and New Zealand. China may not be as prospective for sales of fresh Australian vegetables as believed by some industry stakeholders.

Recommendations to assist the Australian vegetable industry to open new markets and make existing markets more viable include domestic and export market access, as well as specific actions for priority levied crops, industry development, market development, marketing and a program of policy initiatives. Twenty seven actions are identified, prioritised and presented in a format that facilitates their funding under the Vegetable Industry's Strategic Investment Plan.

Specific actions within the trade improvement plan target improved domestic market access. The most important action is research to support improved interstate access for Queensland vegetables through continued investment in fruit fly research – additional data sets, appropriate lures and a trial of the domestic protocol for fruit fly irradiation.

To facilitate export development the potential of an export/import agent accreditation program was explored. The goal of such a program would be to provide additional assurance of payment to vegetable growers contemplating export for the first time. The program would also be applicable to established vegetable exporters interested in expanding their business. Despite a number of prima facie benefits associated with a legislation backed accreditation scheme, it is unlikely that government, and many established businesses in the vegetable export industry, would be convinced of its overall merit. The preferred approach for vegetable growers concerned about credit risk is a combination of Credit Risk Assessment Training and the keeping of a simple information register by AUSVEG or a similar body.

Finally, an export viability checklist is provided for growers contemplating expansion of their business into export markets.

1 Introduction

1.1 Study Purpose and Objectives

Consistent with the Vegetable Industry Strategic Investment Plan 2012 – 2017 Strategic Priority 2, *Market and Value Chain Development*, research was required to identify and address vegetable industry market access and trade viability issues. The project was to deliver a strategy to assist the Australian vegetable industry to open new markets and make existing markets more viable.

Study objectives were to:

1. Prioritise export market opportunities for leviabile vegetable products – i.e. build upon past work to identify and prioritise existing and potential new export markets for relevant exportable vegetable products taking into account that trade policies and sanitary and phytosanitary protocols are product specific.
2. Identify key impediments in both Australia and in priority export markets – identify key impediments to trade in both the domestic market and in priority export markets.
3. Prepare a trade improvement plan – develop a clear, prioritised domestic and export market access and trade viability improvement plan outlining strategies and programs to address the impediments to trade in priority markets.
4. Explore the potential of an export/import agent accreditation program – that provides greater confidence to growers wishing to develop their export business through the use of local and international agents.
5. Document and communicate relevant trade information to vegetable growers – to assist them to evaluate whether it is viable to expand their business into the export market or provide information on how they can improve their existing export operations.

The research was completed by MHT Consulting, Produce Marketing Australia and AgEconPlus between December 2012 and June 2013.

1.2 Project Approach and Analysis Scoping

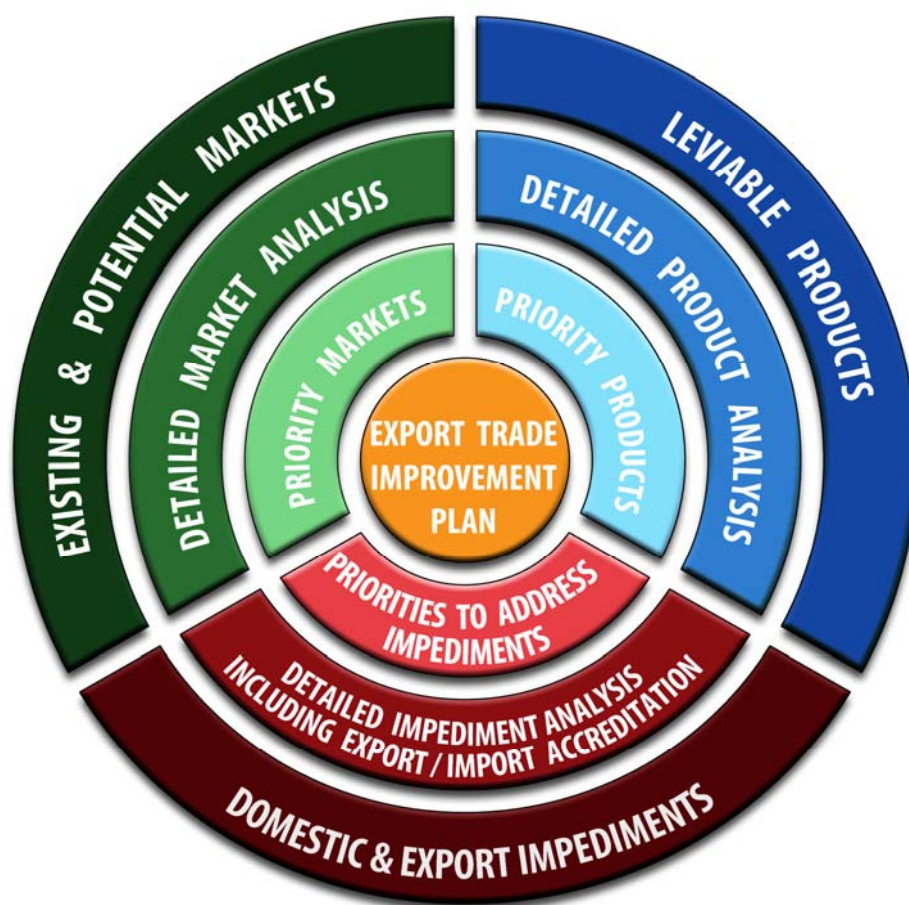
The study was delivered using a combination of desk based research, detailed analysis of trade data, project team experience in many of the potential markets in Asia and the Middle East and stakeholder consultation.

A list of references and online resources consulted is provided at Chapter 9 of this report. Wayne Prowse of Fresh Intelligence Consulting was commissioned by the study team to interrogate the United Nations (UN) Comtrade database and assemble relevant Australian and export competitor data in time series by value and volume for prospective export markets.

Consultation included Horticulture Australia Limited (HAL) Program Manager and Market Access, the Office of Horticulture Market Access (OHMA), AUSVEG, the market place (including supermarkets in Asia and the Middle East), and Australian vegetable growers. An Industry Reference Group was convened by HAL and included AUSVEG and a vegetable grower representative from Western Australia. A complete list of those consulted, including an extensive list of vegetable growers and exporters is included as Chapter 10.

To deliver a vegetable export trade improvement plan it was necessary to focus on three key issues: relevant leviabile products; domestic and export impediments; and existing and potential markets. The process of plan development is summarised in Figure 1.1.

Figure 1.1 Vegetable Industry Market Access and Trade Improvement Plan Schematic



2 Analysis of Leviable Vegetable Products

The focus of investigations was the levied Australian vegetable crops i.e. carrots, cucurbits (cucumber, pumpkins, squash and zucchini, but excluding melons), sweet corn, beans, peas, lettuce, broccoli, cabbage, cauliflower, sweet potatoes, beetroot, celery and capsicums along with smaller volume vegetables, including Asian leafy greens and babyleaf (mainly spinach) lines.

With the agreement of the Industry Reference Group, emphasis was placed on fresh and value-added fresh products. Frozen and processed vegetable products are a mature sector and largely controlled by multinational enterprises. Australian businesses have little, if any, influence or impact on decisions made by multinational vegetable processors.

2.1 Key Vegetable Characteristics Relevant to Export

Table 2.1 summarises key points pertinent to Australian fresh and value-added fresh vegetables considered in this study.

Table 2.1 Key Vegetable Characteristics Relevant to Export Market Development

Vegetable	Key points relevant to priority setting
Beans	<ul style="list-style-type: none"> • 2012 export value \$4.1m, compared with \$2.1m in 2002. • In 2002, 93% of Australian bean exports were shipped to NZ with the balance to Malaysia. In 2012, 99% of Australian bean exports were shipped to NZ with the next most important market being Papua New Guinea. • In 2013 NZ are growing beans in greenhouses for transplanting in late winter. In the future beans from this source may compete with Australian exports, although Australia will have a price advantage. • Beans are widely consumed in Asia (e.g. snake beans) and Australian beans can be airfreighted cost effectively as far north as Hong Kong. • Some Australian beans are consumed in the Middle East. • Bean production is mechanised which gives Australia a basis to establish an export comparative advantage. • Value added 'top and tailed', hydro cooled, pre-packed and microwavable beans are available in Australia (e.g. www.Mulgowie.com.au) and could provide a point of difference for Australia on export markets.
Beetroot	<ul style="list-style-type: none"> • No history of fresh export sales • Competent large scale growers, highly mechanised and low labour input, year round supply. Traditionally grown for processing. Would need to be a value added product for export. Vaccine packaging par cooked potential. Not part of traditional Asian or Middle Eastern cuisine. • Beetroot is excluded from the export market development shortlist.
Broccoli	<ul style="list-style-type: none"> • 2012 export value \$6.0m, compared with \$15.7m in 1998. • Main export markets in 1998: Singapore \$6.5m, Malaysia \$3.2m, Japan \$2.3m, Hong Kong \$1.2m and Taiwan \$1.1m. • Main markets 2012: Singapore (77%); UAE (5%); and Malaysia (4%). • Broccoli was a major Western Australian (WA) export industry in the 1990s and a major export crop from S E Queensland into Japan since late 80's until 2007. Strong competition from other Australian states resulted in oversupply. The commodity end of the Asian market is now dominated by China. • Mechanisation of broccoli harvesting is well advanced in Australia and commercialisation of this technology will assist with our competitiveness in the medium term. • QDAFF (pers com) concurred with this sentiment drive cost out of the system with mechanical harvesting research, direct seeding and sound post-harvest care. • In the short term Australia may be able to secure additional export broccoli sales through further product differentiation on food safety and quality grounds.
Broccolini	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m, no data available for 1998 or 2002. • Four international seed companies have this product and China will be well placed to supply other parts of Asia. Domestic sales offer Australian growers higher returns than they can achieve on export markets. • Broccolini is excluded from the export market development shortlist.
Cabbage	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m, in 2002 it was \$2.2m. • Cabbage is a high volume low value product. • Australian cabbage must compete in many export markets against locally grown product and cabbage supplied at low cost by China. • Asian countries which once purchased Australian exports are now self-sufficient • Asian consumers prefer a smaller variety (1.2-1.5 kg) than that grown by Australia and this small variety is supplied cost effectively by China. • Cabbage is excluded from the export market development shortlist.

Chinese cabbage	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m, no historical statistics available. • In the past WA industry produced two types – a barrel/Wong Bok type and a rocket/ ‘Michihili’ shaped. • While Chinese cabbage has more export potential than regular cabbage it must also compete against large volumes of local supply and low cost product sourced from China. Chinese cabbage is excluded from the export development shortlist.
Asian leafy greens	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m, no historical statistics available. • Australian export sales would be limited to small volumes in 5 star hotels. However, even ‘top end’ food service is price conscious. • This category includes baby bok choy, pak choy and choy sum. • Asian leafy greens are excluded from the export development shortlist.
Capsicums	<ul style="list-style-type: none"> • 2012 export value \$1.4m, compared with \$2.2m in 1998. • In 1998 the main export market was NZ (\$2.1m). In 2012 NZ is increasingly self-sufficient through covered production and the market is closed to Australia in the absence of an approved fruit fly control post de-registration of dimethoate. Industry advice is that the NZ market will soon reopen for irradiated capsicum. • Asian countries are large producers of high quality capsicum and are increasingly using sophisticated and low cost covered production to generate an exportable surplus. Asian markets prefer a non-block shaped varieties. • Most Australian capsicum is grown in Qld (~70%) and the logistics are such that transport times do not allow for seafreight to the Middle East. • Nutraceutical capsicum only successful with a major marketing budget. • Field grown capsicum has potential in NZ in the medium term for QSR trade.
Carrots	<ul style="list-style-type: none"> • 2012 export value \$52.4m, compared with \$40.0m in 1998. • Main (>\$1.0m) export markets in 1998 were Malaysia \$15.9m, Singapore \$8.6m, Hong Kong \$6.0m, Japan \$2.6m, Thailand \$2.3m, Taiwan \$2.2m and UAE \$1.9m. Approximately 90% to North East / South East Asia. • In 2012 main export markets were UAE, Singapore, Malaysia, Saudi Arabia, Qatar, Bahrain, Japan, Kuwait and Hong Kong, with approximately 73% to sales directed into the Middle East. • Carrots are a major Australia export commodity. Approximately 16 significant Australian growers – 1 Qld, 6 NSW, 2 Tas, 2 SA, 5 WA. Exports of carrots from Victoria have halved since Japan lost interest in carrot juice in the early 2000s. • The only significant tariffs in place in the region are in Taiwan, the Philippines and Japan with tariffs of 20%, 20 - 40% and 3% respectively (AUSVEG). There is a seasonal tariff in place in Saudi Arabia that does not constrain sales. • WA is able to supply all year round – suitable soil and climate, good varieties, high yields, good product quality, mechanical harvesting, world class pack houses, long shelf life suitable for sea freight exporting, proximity to markets and sound cool chain. This is the model for further levied vegetable export growth. • Japanese Kuroda carrot variety may offer additional potential (in the past Australian yields of this variety have been disappointingly low). • Export trade improvement strategy may need to include a defensive component i.e. protection of market share from carrots of improving quality sourced from China. There is evidence that further growth in export carrot sales is possible and will need to be supported by additional Australian production.

Cauliflower	<ul style="list-style-type: none"> • 2012 export value <\$0.5m, compared with \$22.8m in 1998. • Main (>\$1.0m) export markets in 1998 were Malaysia \$12.5m and Singapore \$8.7m. Approximately 99% of exports were destined for North East or South East Asia. • Was a major industry in WA in the 1990s centred out of Manjimup. WA cauliflower was a very well presented product wrapped in rice paper for export. • Plant breeders in Asia have developed early maturing heat tolerant cauliflower cultivars suitable for the tropics and subtropics (www.eastwestseeds.com) which have effectively closed the market gap previously filled by WA. • Furthermore, newer brassica types (e.g. broccoli and leafy brassicas) have taken market share away from cauliflower in Australia and overseas. • Cauliflower is excluded from the export market development shortlist.
Celery	<ul style="list-style-type: none"> • 2012 export value \$1.0m, compared with \$2.7m in 1998. • Main (>\$1.0m) export market in 1998 was Malaysia \$1.4m. 92% to NE/SE Asia. Main export markets in 2012 were to Malaysia (57%) and Singapore (17%). WA did well with export celery and Sumich had a consumer brand presence in Asia. Australian export sales into Malaysia and Singapore have been slowly contracting and less celery is being grown in WA. California USA has captured this market. • In 2012 some 75% of Australian production is grown in Cranbourne and South Gippsland Victoria. • Australia has a seafreight advantage over product originating in California but would need to improve presentation techniques if it was to be competitive in export markets. Multinational Dole is growing celery in Asia and this may also be a threat to future Australian exports.
Cucumber	<ul style="list-style-type: none"> • Exports are low and declining – 86 tonnes in 2012, 203 tonnes in 2008. • Potential markets are either significant lower cost producers (Malaysia) or can source cheap product (Singapore from Malaysia). • Product, which is relatively low value, needs to be air freighted, making it generally uncompetitive. • SE Asia is able to produce high quality Lebanese (Beit Alpha types) and continental cucumber using protective cropping. • The only significant market has been NZ in winter and access has been impacted by de-registration of dimethoate for fruit fly control. Even if resolved this market is unlikely to expand. • Cucumber is excluded from the export market development shortlist.
Leeks	<ul style="list-style-type: none"> • 2012 export value of \$0.6m, compared with \$1.7m in 2002. • In 2002 major export market was Japan (92%), Singapore and Hong Kong. In 2012 major markets are Japan (60%) and Singapore (20%). • Leek production in Australia has made major mechanisation advances which favour future export growth. • Target export growth in Singapore and Japan by addressing market share lost to NZ when the Millennium Drought constrained production. Well-trimmed and presented leeks are required in Japan.

Baby leaf	<ul style="list-style-type: none"> • 2012 export value \$3.1m, with no historical statistics available • Category includes lettuce, spinach, rocket, chard and other brassicas • Finished product in bags to Quick Service Restaurants (QSR) • Pre- packed fresh is restricted to markets close to Australia e.g. Singapore, Malaysia. • Two categories of this product in Asia – local hydroponic favoured by food service sector, field grown supplied by importers for supermarket trade • Potential to develop strategy based around superior food safety, supply of retail-ready bagged product to supermarkets and bulk bagged product to food service sector (airline catering) in SE Asia and Middle East via airfreight. Australia has comparative advantage in airfreight supply and cost.
Lettuce - head	<ul style="list-style-type: none"> • 2012 export value \$1.7m, compared with \$9.1m in 2002 • In 2002 Australian lettuce was exported to Singapore (23%), Malaysia (18%) and Hong Kong (13%). • The category includes iceberg, Cos (Romaine) and fancy varieties. • Australian exporters find it difficult to compete with China and the US • Chinese product travels overland in Asia i.e. it benefits from low transport costs • Australia is a contingent supplier at best i.e. provided with opportunity to bid on supply when preferred suppliers fail. • One of the major international QSR's currently reviewing the supply of hearts into key SE Asian markets and the possibility of shipping during the months of November-March (USA product ex Arizona) is being revisited. • Most of this product is grown on the Australian east coast, freight into Asia is therefore expensive and the product spoils quickly if refrigeration fails. • No growth in exports and domestically the category is contracting (growth is in pre-packed and bulk baby leaf salads). Some opportunity identified for NZ during winter months if a quarantine solution for Rutherglen bug can be identified.
Peas, snow peas and sugar snaps	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m and data not recorded in 2002 • In 2003 Australia exported 27 tonnes of peas and the three most important markets were Fiji, New Caledonia and French Polynesia • Australia does not have a lot of export history with these products • Difficult to create scale, high production costs and reliant on hand trellising • Fresh shell peas have lost market share in both domestic and export destinations. Australia consumes all its snow pea and sugar snap production and imports significant fresh supply from Kenya and China • No export potential identified.
Pumpkins	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m. No exports identified in 2002 • A very small volume of organic pumpkin was exported in 2002 • Limited export market demand for varieties such as Jap, Kent and hybrid Jarrahdale types. • Not widely eaten outside South Africa, Australia and NZ. • We have restricted access to NZ due to Rutherglen Bug

Squash (Kabocha)	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m • A very small volume of organic squash was exported in 2002 • Kabocha squash was exported to Japan from Tasmania (which has access) until 2010, when it ceased, because the market is dominated by NZ and Pacific Islands (to a lesser extent) • NZ (marketing as buttercup squash) have been very professional in export marketing squash. • In 2012 NZ exported 98,000 tonne of butternut squash and the top 4 markets were Japan (72%); Korea (25%); China (2%) and the US (<1%). • Competition from NZ with lower cost labour and supply chains limits opportunity for Australia. • This product is excluded from further consideration.
Sweet corn	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m. Small volumes of frozen sweet corn were exported to Japan (99% of sales), NZ, PNG and Indonesia. In 2002 Aust exports were dominated by Japan with the balance to NZ, Singapore and Malaysia. • NZ is a major exporter of sweet corn (25,000t valued at \$50m) and frozen product is available all year in both cob and kernel form. • Australia has a potential comparative advantage in sweet corn exports - production is highly mechanised and a year round supply program could be put together: Dry Tropics and Bowen Qld (winter and early spring); Bundaberg and Gatton for the transition months; and East Gippsland Victoria in the summer. • Value added products have shown potential on the domestic Australian market. • Aust has developed lines with eye health qualities (Vegetables Australia Feb 13).
Sweet potatoes	<ul style="list-style-type: none"> • 2012 export value was \$0.3m. Sales were dominated by the UAE (77%); and Singapore (16%). NZ was a significant importer in 2010. No data for 2002. • Australia used to do well in Kuala Lumpur Malaysia with sweet potatoes • Varieties grown in Australia are not those preferred in Japan and Korea. Hong Kong is well supplied by China (pers com Qld Sweet Potato Association). • US exports receive USDA assistance e.g. subsidised crop insurance. • Sweet potatoes are an expensive crop to grow. R&D investment needed in mechanical planting and machine harvesting before this crop is export ready (pers com Qld Sweet Potato Association). • This product is excluded from further consideration.
Zucchini	<ul style="list-style-type: none"> • 2012 export value less than \$0.5m. There were no export statistics for 2002. • Export niche to NZ was lost with the de-registration of dimethoate. It is noted that irradiation of zucchini is technically possible. • Labour intensive at harvesting, packing and grading stages. • Predominately Qld grown which constraints seafreight exports to Asia and the Middle East. Short shelf live means expensive airfreight is required. • Market analysis indicates limited potential. Even if irradiation is approved for fruit fly treatment in NZ there is limited market potential for zucchini. • This product is excluded from further consideration.

NB: Asian vegetables like snake beans grown in Darwin are a RIRDC responsibility and do not pay the vegetable levy

2.2 Levied Vegetables Shortlisted for Detailed Analysis

A number of leviable vegetables listed in the above table have been discounted from the more detailed analysis, based on one or more of the following criteria:

- There is no history of export demand
- Australia has become uncompetitive in export markets, compared to other suppliers
- Appropriate production cannot be developed e.g. the crop does not suit mechanisation
- Market access is limited or prohibited and change will not occur in even the medium term.

However, there will always be opportunities for individual businesses with some of these commodities, either by:

1. Offering the products as part of just-in-time air-freight 'providoring' sales
2. Developing market segments with unique offerings, such as innovative products, packaging, service/relationships etc.
3. Building on personal relationships established over many years and resulting in profitable niches.

Products excluded from further analysis are:

- Broccolini
- Cabbage
- Chinese cabbage
- Cucumber
- Asian Leafy greens
- Cauliflower
- Peas, snow peas and sugar snaps
- Pumpkins
- Squash
- Sweet potatoes.
- Zucchini.

Products with additional export potential are:

- Beans
- Broccoli
- Capsicum
- Carrots
- Celery
- Leeks
- Lettuce – baby leaf
- Lettuce – head
- Sweet corn.

The above analysis informs development of the Market Access and Trade Viability Improvement Plan.

Chapter 3 provides an overview of existing Australian fresh and value added fresh vegetable exports. It also includes a review of both export and domestic market impediments.

3 Impediments and Opportunities for Australian Vegetables

3.1 Australian Situation Assessment

Australian vegetable exports have remained relatively steady over the four years 2009 – 2012. They account for between 5% and 7% of total Australian production (AUSVEG and HAL 2012). Never the less total vegetable exports have declined since levels achieved in the late 1990's (Table 3.2).

Approximately 50% by value of Australian fresh vegetable exports are destined for four markets – Singapore, Japan, the United Arab Emirates (UAE) and New Zealand (Table 3.1). Major exports were carrots, onions (non-vegetable levy) and potatoes (non-vegetable levy). Exports of most other vegetables are relatively minor – Figure 3.1. In 2012 carrots accounted for approximately two thirds of vegetable leviable crop export sales (Table 3.2).

Table 3.1 Fresh Vegetable Exports by Country of Destination - Top 20 Countries in 2011-12 (\$M)

Country	2009	2010	2011	2012
Singapore	22.6	22.9	22.0	22.5
Japan	27.0	20.5	24.4	22.3
UAE	13.9	14.8	16.4	16.4
New Zealand	12.9	14.8	13.0	11.2
Malaysia	11.2	12.4	11.8	10.9
Indonesia	5.2	8.5	11.1	8.3
South Korea	2.0	3.1	7.3	8.3
Germany	3.3	7.5	6.4	8.1
Saudi Arabia	4.8	5.5	6.9	7.5
Hong Kong	5.9	5.5	5.2	4.7
Qatar	2.9	3.6	3.4	3.9
PNG	1.0	1.4	2.1	2.8
Bahrain	3.1	3.2	3.2	2.6
Thailand	1.7	1.3	2.0	2.2
Kuwait	1.6	1.7	2.1	2.2
Belgium	9.3	1.6	8.2	2.1
Netherlands	1.2	3.1	3.1	1.9
UK	1.3	0.9	1.6	1.6
Taiwan	2.3	1.5	1.2	1.5
Italy	2.0	1.4	1.3	1.3
Top 20 Total	135.2	135.2	152.7	142.3

Source: AUSVEG using Global Trade Atlas/World Trade Atlas data supplied by ABS

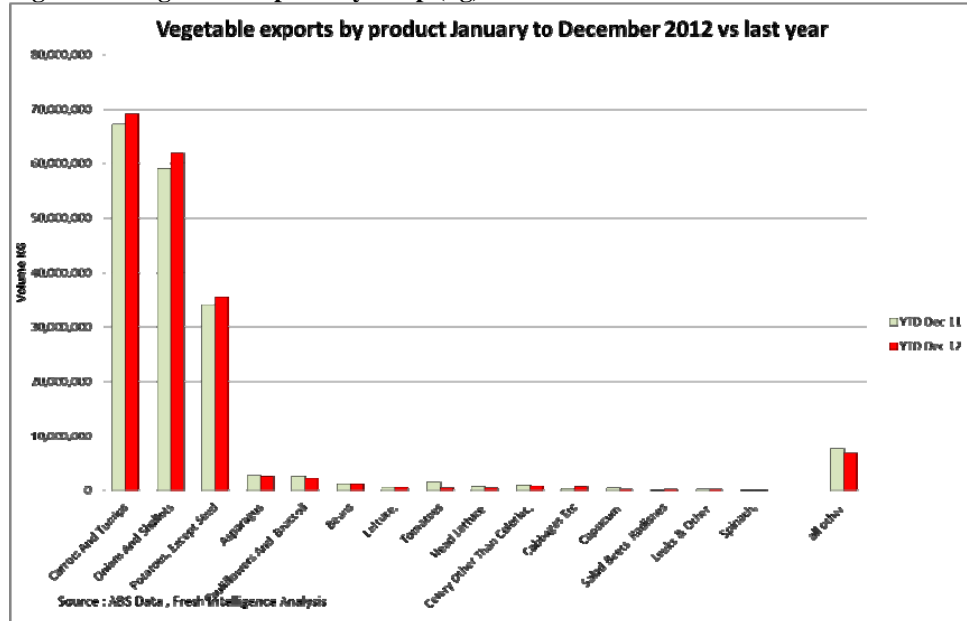
Table 3.2 Fresh Vegetable Exports by Leviable Vegetable (\$' million)

Vegetable	1998	2003	2008	2009	2010	2011	2012
Carrots and turnips	42.3	47.5	38.3	46.1	51.5	52.0	51.3
Broccoli	15.7	13.3	4.6	5.4	5.0	5.9	6.5
Beans	1.7	1.9	3.2	3.3	3.9	3.7	3.6
Lettuce – other	2.4	2.9	2.4	2.9	3.6	3.8	3.1
Lettuce – head	5.2	2.9	2.5	2.7	1.7	1.7	1.8
Capsicum	2.2	1.8	3.7	2.6	2.9	2.4	1.4
Celery	2.7	3.1	1.0	1.4	1.2	1.0	1.0
Cabbages	7.9	1.9	1.3	1.2	0.8	0.8	0.7
Cauliflower	22.8	23.4	0.7	0.6	0.5	0.3	0.5
Total	102.9	98.7	57.7	66.2	71.1	71.6	69.9

Source: AUSVEG using Global Trade Atlas/World Trade Atlas data supplied by ABS

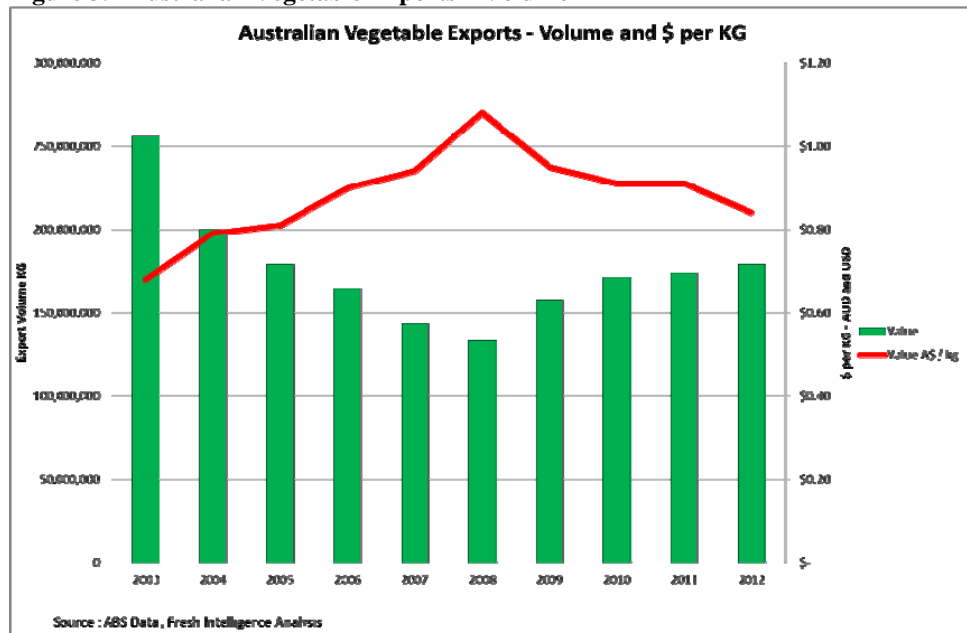
NB: Decline in vegetable exports since the early 2000s has been most pronounced in broccoli and cauliflower. The decline in broccoli exports has been due to the rise of China as a broccoli exporter. Cauliflower has lost both market place popularity and been replaced by 'home grown' tropical cultivars in South East Asia.

Figure 3.1 Vegetable Exports by Crop (kg)



In 2012 total fresh vegetable exports were valued at \$151.2 million (Table 3.2) for 179,000 tonnes of produce with an average unit value of \$AUD0.84/kg. Volume overall has marginally increased since 2008 driven by increasing potato exports to Indonesia and South Korea and carrot exports to the Middle East. Although the average price of exported vegetables appears to be reducing, the influence of higher volumes of lower value potato is the main driver of this trend. The higher unit value of Australian vegetable exports in 2008 (see Figure 3.2) was also influenced by a low Australian dollar during the peak of the Global Financial Crisis (GFC).

Figure 3.2 Australian Vegetable Exports – Volume



3.2 Export Market Impediments

Exporters comprise a very small share of growers, with only 4% of vegetable farms selling offshore in 2007-08 (ABARE 2009). ABARE identified a range of factors explaining the Australian vegetable industry's poor export performance:

- Additional complexity above domestic sales
- Lack of understanding of crop scheduling for continuity of supply
- Lack of knowledge and relationships in export markets
- An absence of local (in-market) agents
- Returns that are not high enough to compensate for additional costs
- High freight costs / the non-availability of transport
- Lack of competitive scale and infrastructure.

The ABARE-generated list of export impediments was supplemented and expanded through project consultation and analysis. Export market impediments were grouped into 'generic', 'product specific' and 'market specific'.

Generic impediments include:

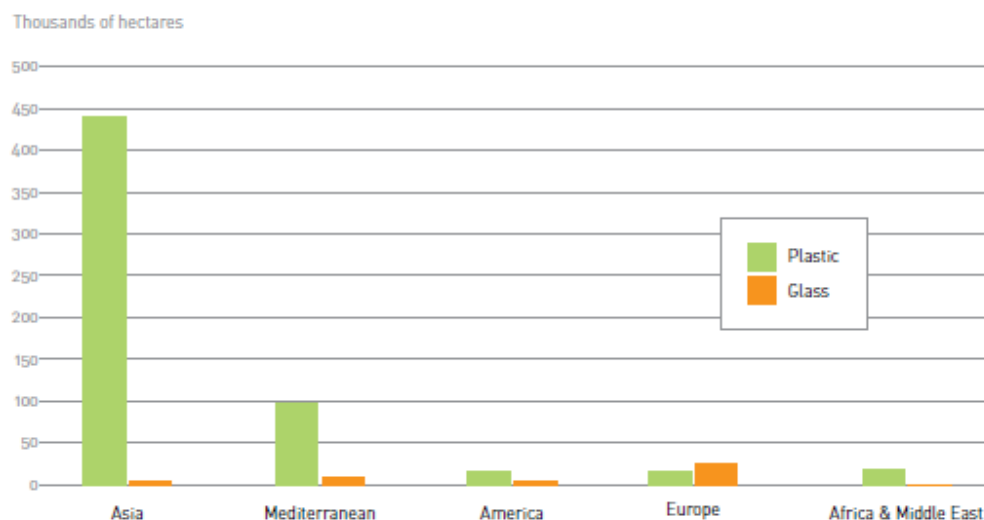
- High levels of global self-sufficiency – world trade as a share of vegetable production (3%) is half that of fresh fruit (6%) indicating that there is a higher level of individual country self-sufficiency in vegetables (Rabobank 2006). World vegetable trade is dominated by tomatoes; onion; watermelon; capsicum; and cucumber. Only capsicum and cucumbers are relevant to this study.
- A number of Asian markets that have traditionally imported Australian vegetables are becoming self-sufficient and even net exporters of temperate vegetable crops. Self-sufficiency has been aided by the rapid adoption of modern production systems i.e. covered production. (See **Figure 3.3** below). This expansion in covered production is relevant to China, South Korea, Thailand, Malaysia (e.g. Cameron Highlands) and Vietnam (e.g. Dalat).
- International seed companies have bred vegetable varieties specifically for the tropics and subtropics. For example new lines of cauliflower are available for the subtropics in Asia, which effectively close a niche previously filled by Australian exports.
- Additional non-tariff barriers in the form of sanitary-phytosanitary (SPS) restrictions are emerging, especially in Asian markets, as traditional tariffs are rolled back (Simon Hegarty, NZ Horticultural Export Authority in Asia Fruit Magazine March 2013).
- The exchange rate – including a strong Australian dollar relative to levels from the late 1990s / early 2000s and an undervalued Chinese currency. Most vegetable export sales are completed in US dollars which has moved from AUD\$1.68 to below AUD\$1.00 over the ten year period to 2013. The outlook for the period to 2017-18 is for the \$AUD to remain at parity with the US currency (**Figure 3.4**). China is a major competitor in vegetable export markets and has held its currency at what is believed to be artificially low levels over the period 2000 to 2013.
- High production costs – including labour and government imposed regulatory charges. In many markets Australia competes against developing countries with low wage rates. There are also high costs associated with export documentation and compliance. In particular, Australian export inspection has moved to full cost recovery.
- Contraction of production during the extended drought of the first decade of the twenty first century – most of the major Australian production areas were severely impacted by multi-year drought (the Millennium Drought), resulting in commercial vegetable growers concentrating on satisfying highest returning domestic markets.

- Faltering rates of productivity gain – linked to declining real rates of investment in research, development and extension (ABARES 2013).
- A lack of scale – which results in small volumes, less capacity to harvest, grade and pack cost-effectively, and a lack of cost economies through the supply chain. Countries whose production systems are ‘geared’ for export are able to produce long lines of quality product on a consistent basis at competitive prices.
- Lack of export marketing/promotion support - i.e. there is no vegetable marketing levy and for many of Australia’s competitors growers have either joined together or a large enough in their own right to support their vegetable products with marketing and promotion.
- Lack of collaboration to achieve production and infrastructure scale – Australian growers, with few exceptions, tend to market and work through the supply chain as individuals rather than form domestic or even international supply partnerships. Possibly because of Australia’s capacity to supply for most of the year by drawing from various regions the industry has not developed international partnerships.
- Lack of knowledge and relationships in export markets – small scale works against growers and packers developing business relationships in other countries. A common comment received during consultation was in relation to not knowing where to start.
- Inadequate returns to cover costs associated with export – relative to export, Australian domestic market prices are favourable and when risk is taken into account, exporting is perceived not to yield an appropriate return. Risk includes the threat of non-payment.
- Decline in international container trade, combined with significant cost increases. Growers point out that the cost of shipping is increasing, with major sea freight lines having lost money since the GFC, now trying to recoup it from surviving exporters.

Figure 3.3 Protected Crop Area in Greenhouses and Tunnels (‘000 ha)

(estimated areas under plastic and glass, thousands of hectares, year 2000)

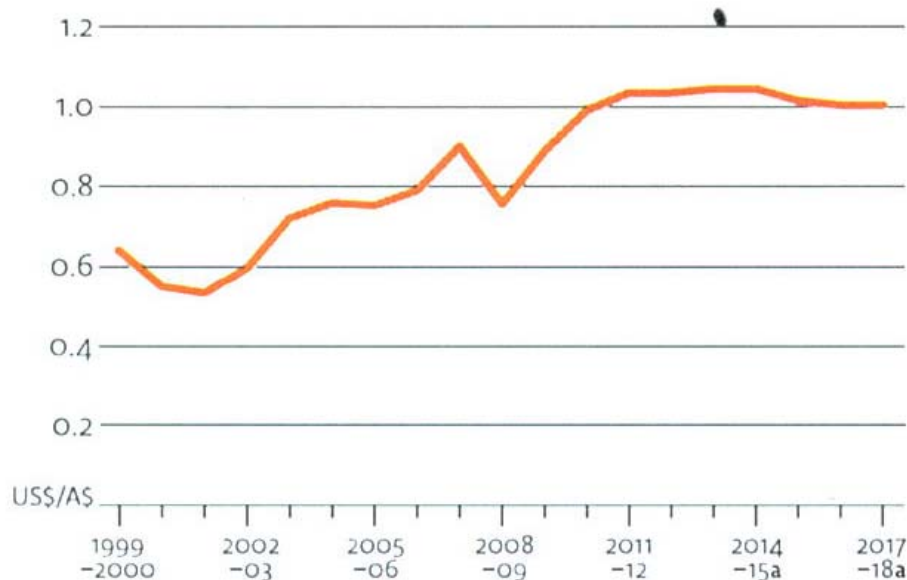
SOURCE: ‘GREENHOUSE HORTICULTURE.’ *ENCYCLOPEDIA OF FOOD & CULTURE*. ED. SOLOMON H KATZ. VOL 2. GALE CENGAGE, 2003. ENOTES.COM. 2006. 18 SEP, 2011. [HTTP://ENOTES.COM/FOOD-ENCYCLOPEDIA/GREENHOUSE-HORTICULTURE](http://enotes.com/food-encyclopedia/greenhouse-horticulture)



Source: International Society for Horticultural Science 2012

Figure 3.4 US\$/A\$ Exchange Rate 1999-00 to 2017-18

Australian exchange rate



a ABARES assumption.

Source: ABARES Australian Commodities – Vol 3 No1 March quarter 2013

Product specific export impediments (i.e. impediments within Australia) include a lack of:

- Suitable infrastructure, including appropriate packing houses and refrigerated supply chains
- Declining levels of service as production has declined. This includes input providers, transport and extension services
- Understanding of crop scheduling for continuity of supply
- Product and packaging innovation.

Market specific export impediments include:

- Trade and quarantine barriers – market access is a slow and painstaking process that may be held hostage to broader trade negotiation priorities. Access is also product specific; for example Australian mainland grown fruiting vegetables are subject to widespread restrictions in export markets due to fruit fly contamination concerns (see Appendix 1).
- Market structures within importing countries – including supply chain structures, product form requirements and competing sources of supply.
- Domestic policies, including policies aimed at self-sufficiency and development of export markets. This is relevant to many South East Asian countries, including Indonesia and Thailand.
- Strong competition from China – with an exchange rate, labour cost, domestic policy and proximity advantage, China has increased market share at Australia's expense.
- Strong competition from New Zealand – NZ vegetable production is focussed on export. NZ provides strong competition for Australia in buttercup squash, carrots, glasshouse capsicums and

in the past broccoli (but their exports have declined like those from Australia). The New Zealanders are aware that their export windows are shortening and are looking at opportunities to send more produce to Australia.

- Shipping scheduling and infrastructure compared with other competitors like California and NZ. Both these sources have access to reliable and regular shipping services, plus appropriate equipment, crew knowledge on temperature control, regular supply and lower cost shipping that facilitates the export process. The possible Australian source that has a similar advantage is WA which has a solid trade based on carrots and is closer to Asian and Middle East ports.

Market specific export impediments are further detailed in Chapter 4 of this report.

In addition to export market impediments, the Australian vegetable industry faces a range of domestic barriers that hinder market expansion and retention.

3.3 Domestic Market Impediments

Impediments that impact on the interstate trade in vegetables include both economic and quarantine barriers:

- The high cost of trucking vegetables from northern Australia to southern markets and population centres.
- The loss of the Freight Equalisation Scheme to help offset expenses incurred by Tasmanian vegetable growers shipping product to the mainland.
- Restrictions on Queensland growers supplying vegetables to southern states – including restrictions resulting from the loss of dimethoate as a post-harvest fruit fly control. Improved data sets and appropriate lures are a high priority for improved domestic access (pers com QDAFF).
- Restrictions on eastern states supplying vegetables into WA – quarantine barriers are applied on the basis of both Queensland fruit fly and snails.
- Inconsistent state regulations and residue testing; inconsistent data sharing on state border activities and across industries that share regions; lack of coordination in establishing area freedom status and the threat posed by viruses in imported seeds (McMichael 2008).
- Gaps that create domestic market impediments include insufficient awareness, commitment to, preparedness and response capacity in relation to vegetable industry biosecurity (McMichael 2008).
- R&D investments needed include coordinated regional and national surveillance, coordinated data acquisition and sharing mechanisms, human capacity building and communication (McMichael 2008).
- Increasingly the vegetable industry will be required to monitor pest status on farm and collate farm data into regionally accessible surveillance data if it is to access export and even domestic interstate markets (McMichael 2008).
- The spread of production across several regions means many growers are not fully aware of developments in other areas.

These domestic market impediments inform the Market Access and Trade Viability Implementation Plan developed in Chapter 5.

3.4 Current and Potential Competitive Advantages

Current Competitive Advantages

Despite a reasonably long list of export market impediments, Australia is able to offer a valuable package of vegetable export comparative advantages. These include:

- A successful export history and commercial and personal relationships in Asia (e.g. personal relationships throughout South East Asia developed with those who trained under the Colombo Plan or through a long established and trusted export – import partnership).
- Food safety - capacity to differentiate our vegetable products against market-dominating China on the basis of credible Maximum Residue Limits (MRLs) and robust food safety programs. For example if one of the international QSR's implements its proposed Global GAP ++ it will be very difficult for salad vegetables grown in Asia to meet its standards. Australia is a trusted supplier and this will be increasingly important in most export markets.
- Mechanisation – with Europe (France, Holland and Germany) and the US, Australia has world leading mechanisation technology. Mechanisation drives labour cost out of the supply chain and will be increasingly important as wage costs increase in Asia. This is one reason why the Australian baby leaf salad industry is a commercially successful exporter - Australia no longer hand harvests baby leaf lines. Twomey (2005) identified the following crops as having mechanised harvest potential: Asian vegetables; celery; cauliflower; baby leafy salad; tomato; wong bok (Chinese cabbage); and zucchini.
- Relative proximity and shipping service frequency from Western Australia to South East Asia– e.g. Fremantle is five to six days from Singapore and 8 to 10 days to Kuala Lumpur. However, for other destinations and from Australia's east coast there are no time advantages, as the following table shows:

Table 3.3 Shipping Time – Major Australian Ports

Depart	Arrive Singapore	Arrive Hong Kong	Arrive Dubai
Fremantle	5-6 days	16 days	28 days
Brisbane	14 days	14 days	None found
Melbourne	11-13 days	20 days	28-31 days

Source: www.australiatrade.com.au

- Technological developments are assisting to improve fresh vegetable shelf life and make relatively short sea freight distances even more commercially viable.
- Climate – including counter seasonal supply for some commodities and year round supply for others (e.g. carrots from Western Australia are available fifty two weeks of the year).
- Human capital – the Australian vegetable industry is now being driven by young, well-educated and visionary growers. Precision farming is the norm and Australia has a well-funded and effective research, development and extension (RD&E) base.
- Packaging capacity and ability to innovate with packaging.
- Traditional advantage in the ability to provide mixed consignments of airfreight vegetables at short notice to a range of markets in Asia and the Middle East.

Potential Competitive Advantages

Review of the literature reveals a range of modern domestic and overseas market trends that might be garnered into competitive advantages for the Australian vegetable industry in the future:

Domestic Market Trends

1. Changing perceptions on pre-packs – moving from lower grade and small size to premium price points and smaller proportions. Pre-packs suit consumers doing ‘top up shops’ and align with sensitivity to home waste.
2. Maturation of bagged salads following year on year growth of 30% since 1995. Bagged salads are now tracking back to simpler lines and the need to deliver value as well as quality.
3. Packaging for vegetables - less product damage / less waste; bar codes can be used – easier at the checkout and for inventory control; packaging can be used for marketing and other messages; modern packaging can also be eco-friendly (Retail World November 2012).
4. Growth of alternative channels – including fresh food and complete meal delivery services. Three supplier tiers – ‘traditional’ comprehensive offering (Coles and Woolworths), ‘Lite and Easy’ Style corporates and local greengrocers offering a home delivery service. The growth in alternative channels includes home delivery services like Aussie Farmers Direct.
5. Home cooking with a gourmet twist – but preparing the ingredients takes time. Enter Dinner Hero – online home delivery service. Service includes chef and nutritionist prepared recipe and all ingredients. Five meals home delivered early on a Monday. Based on a Swedish model and inspired by Aussie Farmers Direct.

International Market Trends

1. Fruit and vegetable products that can be eaten ‘on-the-go’; even smaller portion sizes for children; organics; more packaging and supplier branding; wider range of salad mixes (Fresh Insight 2012)
2. Fresh cut ‘hard’ vegetables such as squash - demand for fresh cut hard produce is on the rise, packaging companies are innovating to meet the challenge e.g. peel and reseal packs for fresh-cut squash. Advantages include convenience and portion control; marketing / branding space.
3. Tesco new range of 39 different fresh prepared salads and vegetables - products are ready to cook vegetable kits for casseroles and stews; salad kits; micro steamers, sliced and diced vegetables. Offers convenience plus labels to help consumers with their health goals i.e. how many serves of recommended daily intake. Products in the new line include kale salad, gourmet veggie salad, baby gem salad, broccoli cranberry salad kit, spinach bacon salad kit, shredded red cabbage and broccoli coleslaw (Tesco – ‘Fresh and Easy’ Stores – ‘Made Easy’ range press release October 2012).
4. Micro-greens (also known as micro-herbs, micro-leaves) for garnishing – herbs, vegetables and even fruit for upper-end restaurant garnishing.
5. Duo packs – two varieties of potato, say potatoes for chips and mash, in the one clean, well labelled, cooking instruction driven pack (Potatoes Australia, October / November 2012).
6. Consumer education e.g. howtoherbs.com – teaching consumers use and storage of fresh herbs (Asia Fruit Magazine July 2012).
7. Bello Rosso baby red capsicums – small, single serve, no waste, round, sit well on the plate for entertaining (Retail World November 2012).
8. In developing countries in Asia and the Middle East, middle-class growth is bringing more modern supermarkets online. Today, there are 352,000 supermarkets worldwide versus 220,000 in 2002. It is projected that by 2017, Asia will have 226,000 supermarkets, which is just over half of the 431,000 expected worldwide (Source: Good Fruit Grower, Feb 2013). These stores, with their up-to-date storage and merchandising fixtures, are significant markets for imported produce.

3.5 Why Exporting is Important to Growers

Export is important to growers. The reality is that unless an industry is competitive in some export markets, it ultimately becomes an export target for other countries. Sanitary and phytosanitary (SPS) barriers are less likely to protect horticultural industries in the future, as would-be importers seek redress for ‘unfair’ quarantine barriers through the World Trade Organisation (Balmer 2012).

Small producers will be even less likely to be able to export in the future as supply chains continue to consolidate, but may be able to participate by supplying export packers. Consistent product quality suited to specific market requirements becomes critical. Small growers must supply fit-for-purpose product. Export is important to small growers, as its absence impacts on domestic prices as export product is diverted onto local supply chains.

For large growers, export should be on an ongoing and consistent basis. It provides options for dealing with an oversupply of product and opportunities for marketing product with a wider range of specifications e.g. large or small grades, certain varieties, etc. It also contributes to redressing the current domestic grower-retailer power imbalance.

Supply chain relationships allow commitment to export programs on an annual basis, build direct relationships with retailers, build reputation and a brand, joint promotions and contribute to category management.

These principles behind export development and their importance to small and large vegetables growers are articulated in the ‘real world’ through a series of international and domestic case studies.

3.6 Lessons from Case Study Analysis

The project team reviewed domestic and international case studies in order to draw out principles relevant to the selection of priority export markets. Case studies reviewed included:

International

- Prince de Bretagne, France – successful cooperative marketing by 2,500 small to medium sized vegetable growers (Appendix 1)
- Love Sweet Potatoes, US – created a new vegetable category in Europe with grower cooperation (Appendix 1)
- Grimmway Carrots, California – domestic and export are an integrated part of total marketing mix (www.Grimmway.com)
- Washington Apple Commission, US – a grower commodity board supporting high cost producers delivering grower profits in India (Appendix 1)
- Fresh Fruit Association, Chile – a unified industry body with consistent clear sighted goals, long term effort, investment before entering markets and frequent evaluation (www.fruitsfromchile.com)
- Zespri Gold Kiwifruit, NZ – grower owned company, with unique product, effective single desk marketing, which generates additional returns.

Domestic

- Australian Chilli – internationally successful exporter of branded products (Appendix 1)
- Gourmet Garden – an internationally successful company in fresh produce with squeeze tube herbs (www.gourmetgarden.com)
- Center West Carrots – expanding in the Middle East in spite of a high Australian dollar (www.centerwest.com.au)
- Flowerdale Sprout Farm – exports of ‘micro-greens’ to Singapore, Indonesia, HK, Philippines, Dubai and Malaysia (www.flowerdalesproutfarm.com.au).

‘Four of the best’ case studies are presented in Appendix 1. Common case study success features are summarised in Table 3.4. Product price does not seem to be the feature that determines export success across the fresh produce case studies analysed.

Table 3.4 Lessons from Case Study Analysis

<p>PRODUCT</p> <ul style="list-style-type: none"> • Vegetable varieties that meet the demands of consumers in the importing country • Packaging that adds to product appeal • Product sophistication – vegetables are low interest products that can become more appealing • A clear and sustainable point of difference • Health benefits - a key selling point • A strong brand with QA underpinnings • Compulsory grading and food safety standards • Consistency – size, taste, etc. • Crop scheduling and forecasting to ensure demand at the required quality can be met • Investment in new product development R&D • Develop new uses for the product (e.g. sweet potato ice cream and beer) 	<p>PLACE</p> <ul style="list-style-type: none"> • Strong and routine communication and cooperation right through the supply chain • An in country marketing arm • Profitable partnerships with importers • State of the art cool chain systems • Targeting premium retail customers • Direct supply arrangements • Collaboration with retailers to market supplier-branded products at the store level • Look for efficiency in supply chains, but avoiding indiscriminate cost cutting .
<p>PROMOTION</p> <ul style="list-style-type: none"> • Investment in educating the trade –so they can be ambassadors for the product • Training – product management, use and features • Dedicated marketing team / on ground representatives in major markets • Monitor consumer and competitor trends • Innovative merchandising to add to the shopping experience • Qualitative (dialogue with consumer) as well as quantitative market research • Recognise the importance of promotion and fund accordingly 	<p>OTHER</p> <ul style="list-style-type: none"> • Price – needs to be competitive but not the driving determinant for success • Avoid spot selling (ABL 2002) • Export must be considered as part of the overall product placement mix – e.g. this size and grade for supermarkets, this one for wholesale markets and this one for export to Indonesia • Target upper end consumers with capacity to pay • Scale – for cost savings and consistent product • Satisfying stakeholders who are now constantly demanding innovative, differentiated, sustainable and cost-efficient products

Review of the case studies shows the emergence of a new export paradigm – see Table 3.5.

Table 3.5 Old and New Export Model

Old Export Model	New Export Model
Export when domestic market is oversupplied	Long term commitment to targeted export markets
Supply what is grown, in excess of domestic demand: <ul style="list-style-type: none">• Small sizes• Composite grade	Supply what is in demand: <ul style="list-style-type: none">• First grade produce• Premium varieties
Supply to importer / wholesalers who target 'wet markets' or secondary wholesalers	Direct to retailers or to importers with strategic relationships with retailers Assist the retailer to 'grow the category'
Ship and forget	Supply programs not short opportunistic 'windows'

Source: Patrick Vizzone, Rabobank in Asia Fruit Magazine July/August 2012

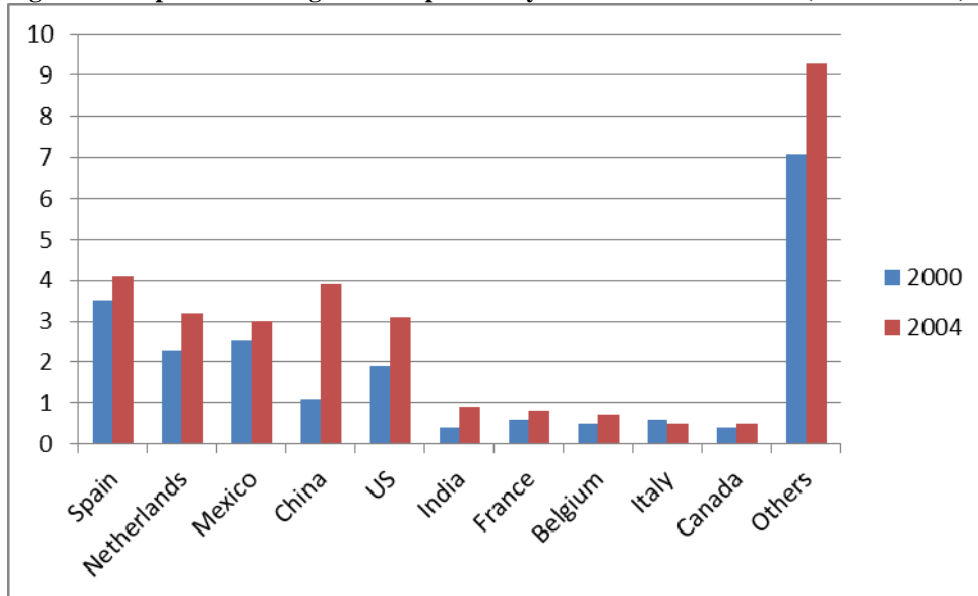
Success features inform Chapter 4 Priority Export Markets and Chapter 5 Market Access and Trade Viability Implementation Plan. Case study detail is provided in Appendix 1.

4 Priority Export Markets

4.1 World Situation Assessment

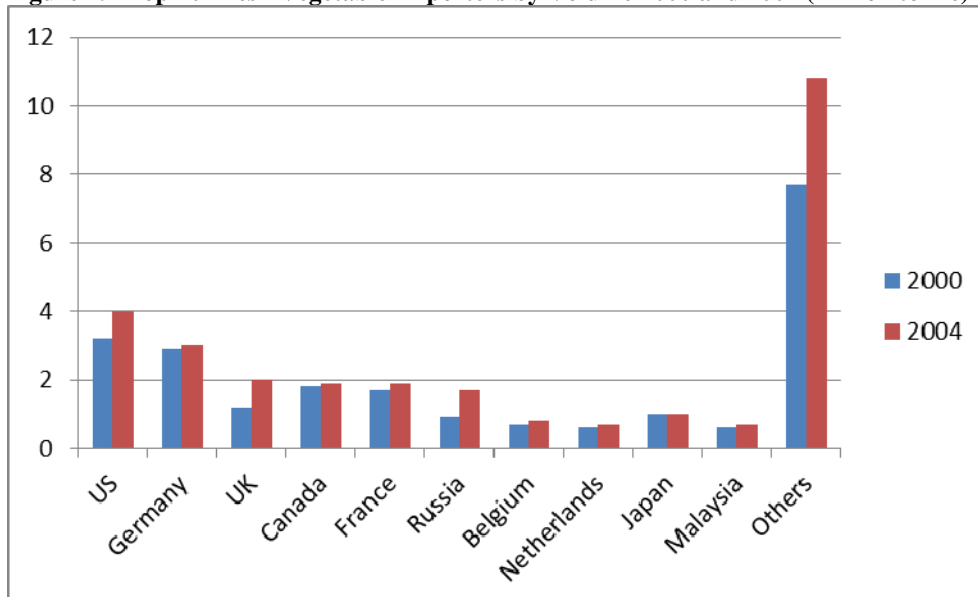
Figure 4.1 shows the world's ten largest fresh vegetable exporters and volumes of fresh vegetables exported. Figure 4.2 shows the world's ten largest fresh vegetable importers.

Figure 4.1 Top 10 Fresh Vegetable Exporters by Volume 2000 and 2004 (million tonne)



Source: Rabobank 2006 using FAO data

Figure 4.2 Top 10 Fresh Vegetable Importers by Volume 2000 and 2004 (million tonne)



Source: Rabobank 2006 using FAO data

NB: Within the Australian region Japan and Malaysia are the two largest fresh vegetable importers while China and India dominate exports. Most imports in Europe and Russia are sourced from within the EU.

4.2 Initial Market Selection

Potential Australian fresh vegetable export markets were selected following a review of world trade data, current Australian vegetable export statistics, team knowledge and stakeholder consultation, which revealed:

- Strong potential for growth in East Asia and South East Asia – eleven of nineteen markets selected for initial consideration were Asian markets. Asian markets evaluated included China, Hong Kong, Taiwan, Japan, Republic of Korea (ROK, South Korea), Vietnam, Thailand, Philippines, Malaysia, Singapore and Indonesia. Note two Asian markets are already ‘Top 10’ importers of fresh vegetables (Figure 4.2).
- New Zealand – an important export destination for Australian vegetable products with clear cultural and physical proximity advantages. Seasonal (winter) advantage for cold-sensitive field grown crops.
- Strong potential for growth in the Middle East and potentially the Indian Subcontinent – seven markets selected for initial consideration. These included the United Arab Emirates (UAE), Saudi Arabia, other Middle East (Qatar, Kuwait, Bahrain and Oman), Jordan, Iran, India and Sri Lanka.
- A number of markets receiving relatively high volumes of Australian vegetables were discounted after initial consideration given that they were either mixed consignment provider markets (e.g. those servicing the likes of international airlines), ‘parallel importers’ (those that receive Australian fresh vegetables and re-export them to other destinations) or ‘mature’. These markets included the Pacific Islands and Brunei.
- The European Union (EU) – this market was excluded due to the increasing burden of regulatory costs and additional requirements such as retailer-specific Good Agricultural Practice (GAP) and more.
- Russia and Eastern Europe – distance and infrastructure constraints, along with a lack of shared horticultural business history, excluded this group of countries.
- North America – is well served by supplies from within the Americas e.g. domestic production plus seasonal supplies from Mexico and Central America.
- Africa – lack of infrastructure, shipping, ability to pay and an absence of horticultural business history with Australia.

Table 4.1 summarises countries under initial consideration in this study. Analysis results for all countries shortlisted in Table 4.1 are reported in Appendix 3.

Table 4.1 Export Markets within Initial Project Scope

Countries Under Initial Consideration	
East Asian Markets (eleven)	
China	Thailand
Hong Kong	Philippines
Taiwan	Singapore
Japan	Malaysia
South Korea	Indonesia
Vietnam	
Oceania (one)	
New Zealand	
Middle East and Indian Subcontinent (seven)	
United Arab Emirates	India
Other Middle East (Qatar, Kuwait, Bahrain, Oman)	Sri Lanka
Saudi Arabia	
Jordan	
Iran	

The group of nineteen countries shown in Table 4.1 was agreed with the Industry Reference Group prior to commencing the study at the project launch meeting 9 January 2013. Further shortlisting was completed by the study team after initial research using the analysis criteria described below.

4.3 Explanation of Detailed Analysis Criteria

Seven criteria were established in order to prioritise export market opportunities shortlisted for Australian fresh vegetables. The criteria were used in the analysis as ‘filters’ with export opportunity needing to pass successfully from one to seven in order to be considered in the Market Access and Trade Viability Improvement Plan.

The criteria were:

1. Market access – this criterion includes analysis of the general access status for Australian vegetables; the existence and level of any import tariffs; and quarantine certificate requirements. Appendix 2 includes a tabular summary of access status. Comment is also provided on the likelihood and impact of any potential changes in access regimes such as the existence of negotiations on a Free Trade Agreement (FTA) or likely changes in importing country domestic policies (e.g. drives for food self-sufficiency).
2. Trade relationships with Australia – including the existence and longevity of trade relationships and any history of cultural ties. The relative importance of the country as a purchaser of the Australian vegetables targeted by this study is also reported.
3. Demographics and capacity to pay – covers the potential market’s population, its population growth rate, the percentage of the population that lives in urban centres and major cities. Urbanised populations are more inclined to purchase imported vegetables than are poorer rural communities. This criterion also includes Gross Domestic Product (GDP) per capita. Low GDP per capita means that an ordinary person cannot afford imported fresh vegetables. Low GDP per capita is defined in this study as being less than \$US5,000 per annum. Data to inform development of the demographics and capacity to pay criteria was sourced from the CIA World Fact Book (<https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>)¹.
4. Vegetable consumption and production – works through UN Comtrade and other data for vegetables shortlisted in Chapter 2 and where relevant, provides comment on domestic production, sources of imports and possible Australian supply windows.
5. Relative size of market segments – provides comment on the size of any Australian fresh vegetable market opportunity identified in criterion four.
6. Supply windows – provides a summary of each prospective vegetables possible supply period.
7. Freight and logistics – addresses seafreight time, air freight availability, and in-country supply chain data.

¹ NB: A low GDP per capita does not necessarily exclude Australian vegetables from this country – for example profitable markets may be available in the food service sector and this is considered in the analysis.

4.4 Markets with Additional Export Potential

Following application of the above criteria, the list of nineteen prospective export destinations was further shortlisted and the following countries were excluded:

- Thailand – relatively small consumer demand for imported vegetables with limited capacity to pay for imports. Thailand is further developing domestic supply capacity and receives product overland from neighbouring producers.
- South Korea – major vegetable grower, government investing in self-sufficiency, supplied overland by China, zealous inspection and subsequent fumigation make access difficult in commercial turns regardless of written protocols.
- Vietnam – limited premium market, access to large volumes of low cost Chinese vegetables plus local seasonal production that satisfies domestic needs. Vietnam is working towards an exportable surplus of vegetables and will compete with Australia in SE Asian markets within 5 to 10 years.
- Philippines – limited capacity to pay across the general population, limited premium market sector, poor growth outlook and opaque market structures.
- Jordan – limited capacity to pay, distant market with higher freight costs than say the UAE, limited trade history with Australia in fresh vegetables.
- Iran – subject to United Nations trade sanctions for the foreseeable future.
- India – no market access for Australian fresh vegetables and no access likely in the medium to longer term. Domestic vegetable production is a sensitive political issue. India, the world's second largest vegetable producer, is also a significant net vegetable exporter.
- Sri Lanka – limited capacity to pay and no vegetable trade history with Australia. The diverse Sri Lankan climate allows for temperate vegetable production.

Countries with additional export potential for Australian fresh vegetables are:

- China – see case study analysis below.
- Hong Kong
- Taiwan
- Japan
- Singapore
- Malaysia
- Indonesia
- New Zealand
- United Arab Emirates
- Other Middle East (Qatar, Kuwait, Bahrain, Oman)
- Saudi Arabia

The above analysis informs development of the Market Access and Trade Viability Improvement Plan.

4.5 China – A Vegetable Market Case Study

Consultation completed as part of this study revealed considerable enthusiasm for China as a high priority market for Australian vegetables. Given this high priority, it was appropriate to summarise the positives and negatives of this destination in addition to the analysis presented in Appendix 3 – Table 4.2.

Table 4.2 Positive and Negative Features of China as a Market for Australian Fresh Vegetables

Positive Market Features	Negative Market Features
1. Rapidly expanding modern retail including international supermarket and hypermarket chains from the US and EU ⁽¹⁾	1. Competition from increasingly high quality domestic product. Quality and safety are improving and eroding imported produce's point of difference ^(1,2,3)
2. Some of these retailers also operate in other markets, where local and or Chinese product is sold alongside more expensive imported vegetables ⁽⁵⁾	2. Larger scale cooperative and corporate vegetable production farms are developing and supplying import equivalent vegetables ⁽¹⁾
3. Increasing demand for 'safe' foods ⁽¹⁾⁽²⁾	3. Government pressure on modern retailers to source locally displacing imports before they become established ⁽⁵⁾
4. Price increases and seasonality will create opportunities for certain vegetable categories ⁽²⁾	4. Government's 'Farmer-Supermarket Partnership' Initiative has shaped the market since 2008 ⁽¹⁾
5. Potential customer base, which is expanding. Over 200 cities with 1+million population compared to 35 in Europe ⁽³⁾	5. Retailers have programs to assist local vegetable growers to deliver high quality, safe vegetables e.g. Metro 'Star' program. Carrefour have developed a similar initiative ^(1,5)
6. Incomes and consumption of fruits/vegetables are increasing ⁽¹⁾	6. Late start (1990s) then rapid expansion of modern retail has resulted in lack of skilled staff at all levels – imported vegetables poorly managed with excessive waste ⁽¹⁾
7. Distribution/supply chain is shortening ^(1,2,3)	7. Inexperienced buyers use price as their main/only tool with suppliers – imports are not competitive ^(5,7)
8. At some stage the RMB has to move to a more realistic (expensive) level and that will make imports more competitive ⁽⁵⁾	8. Category management has generally not been adopted- imported vegetables fail to 'slot' into planned supermarket programs ^(5,7)
9. Cold chain is improving ⁽¹⁾	9. Wastage is high, due to lack of product management skills in store ^(1,7)
10. E-commerce and TV sale increasingly popular (for imported fruits) ⁽¹⁾	10. High (20% to 25% estimate) wastage for vegetables along the supply chain – erodes margins on imported vegetable lines ⁽¹⁾
11. Market access is available for some Australian vegetables including carrots – 20 tonnes valued at \$11,580 were exported in 2012 ⁽⁹⁾	11. Most retailers do not have Distribution Centres (DCs), relying on suppliers for delivery to stores and adding to the cost/difficulty of importing vegetables (NB: in 2013 Wal Mart are investing in DCs) ^(5,7)
	12. Rest of the world is focusing on fruit opportunities, not vegetables. Imported fruit is given as a prestige gift ^(5,7)
	13. Lack of or broken cold chains ^(1,3,5)
	14. Long internal transit times ⁽¹⁾

	15. High internal logistics (transport plus cold storage) costs ⁽¹⁾
	16. China's vegetable production is the world's largest and is increasing: 356mt in 2000 increasing to 561mt in 2011 (up 58%). Main crops: tomatoes, cucumbers, brassica, eggplant, onions, garlic, spinach, carrots, beans , peppers/chilli ⁽⁶⁾
	17. A range of climates for year-round production of most vegetables (see Figure 4.3) plus investment in greenhouse production ⁽⁵⁾
	18. Modest US vegetable imports have actually declined: 10,366 tonnes in 2000 v. 438 tonnes in 2010 reflecting poor prospects for imports from Australia- Table 4.3 ⁽⁸⁾ .
	19. Wet markets continue to dominate, due to cost, freshness, range and convenience e.g. almost 900 wet markets in Shanghai ⁽¹⁾
	20. Restricted market access for Australian vegetables including those susceptible to fruit fly (i.e. cucurbits and solanaceae). An Import Risk Assessment (IRA) would be required by China before imports would be allowed. An IRA would take several years to complete and approve ^{(5) (8)}

1. Fresh Produce Distribution in China, PMA December 2012
2. Patrick Vissone, Rabobank, PMA Fresh Connections China March 2013
3. Mabel Zhuang, PMA Fresh Connections China March 2013
4. USDA Foreign Agricultural Service
5. Exporter/others observations during consultation
6. FAOSTAT
7. John Baker, via retail training for modern retailers in China 2008-2012
8. Chris Langley Office of Horticultural Market Access
9. UN Comtrade data

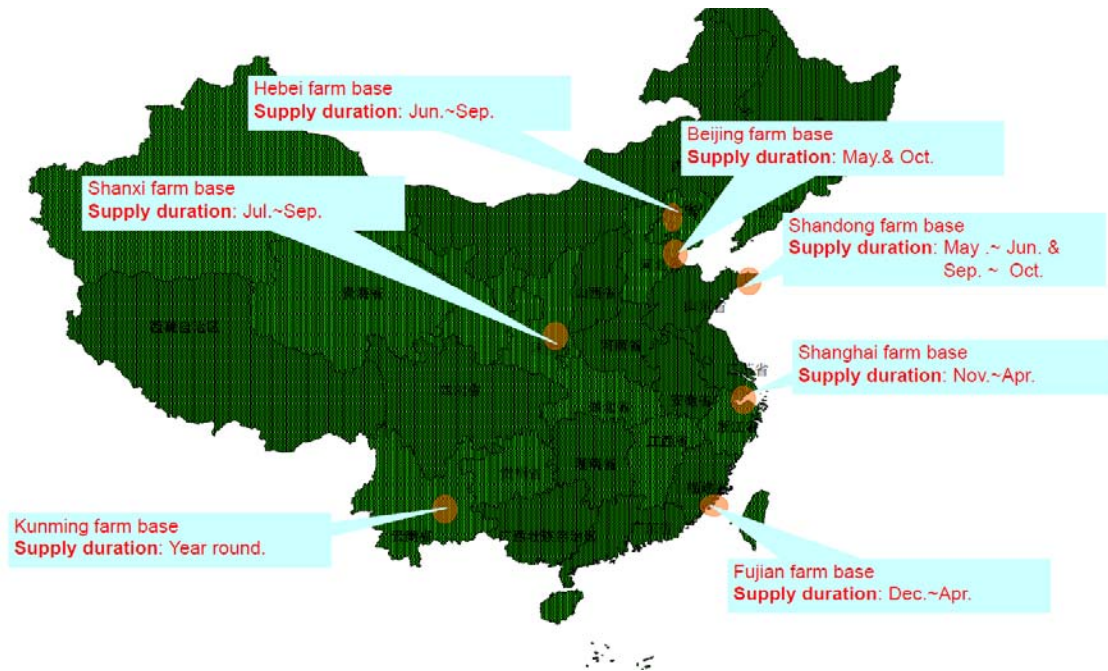
China is the biggest vegetable producer in the world. It offers low cost year round supply (see **Figure 4.3**) as well as rapid adoption of improved growth systems and covered production. Planted area is estimated at close to 20 million hectares and continues to rise. The area under protected cultivation has increased significantly, extending the supply season and consistency for many vegetables. Access to this market is constrained for vegetables susceptible to fruit flies and an IRA will take time to complete and have approved.

Table 4.3 US Exports of Fresh Vegetables to China (tonnes)

Product	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Fresh Veg (not potatoes)	10,366	6,682	2,453	1,961	1,139	556	286	433	368	303	438
Celery	6,678	2,458	364	105	50	154	26	0	25	0	19
Onions/shallots	166	1,230	1,074	1,098	346	119	1	59	3	2	29
Broccoli	868	590	0	80	18	35	3	38	0	0	35
Peas	0	149	200	0	306	0	15	19	0	0	107
Beans	0	0	3	48	27	13	0	56	60	62	56
Peppers	0	56	0	0	19	0	4	0	0	0	44
Other	2,653	2,199	813	631	375	237	237	261	280	239	148

Source: USDA Foreign Agricultural Service 2011

Figure 4.3 China has Capacity to Produce Vegetables and Export All Year Round



Source: Mike Titley 2013

Following this analysis China has been included in the Market Access and Trade Viability Improvement Plan (Section 5.1, Action 5)

5 Market Access and Trade Viability Improvement Plan

The following actions address both domestic and export market access and trade viability issues. They are consistent with the Vegetable Industry Strategic Investment Plan 2012 – 2017 Strategic Priority 2, *Market and Value Chain Development*. Actions have been structured in a way that is consistent with the HAL Strategic Investment Planning Guidelines Version 2 October 2011. Each action includes a:

- Description of the proposed action
- Rationale – why it is being proposed
- Priority – high, medium or low based on estimated future sales and grower profit
- Key performance indicator (KPI)
- Outcome expected.

Trade Improvement Plan actions are grouped into programs that address Market Access; Specific Actions for Levied Crops; Industry Development to Facilitate Market Growth; Market Development; Marketing; and a suggested program of Policy Research.

5.1 Market Access Program

Actions to improve market access include both domestic and export market initiatives.

Action 1	Domestic market access – Queensland vegetables into southern states
Description	<ul style="list-style-type: none"> • Improve domestic market access for Queensland vegetables through continued investment in fruit fly research - additional data sets (e.g. data for the fruit fly species <i>Bactrocera cucumis</i>), appropriate lures and a trial of the domestic protocol for fruit fly irradiation.
Rationale	<ul style="list-style-type: none"> • The presence of various species of fruit flies in Queensland has resulted in restrictions in market access to Tasmania, Victoria, South Australia and Western Australia.
Priority	<ul style="list-style-type: none"> • High.
KPI	<ul style="list-style-type: none"> • Improved domestic access for Queensland vegetables within two years of strategy commencement.
Outcomes	<ul style="list-style-type: none"> • Additional sales of Queensland vegetables in Tasmania, Victoria, South Australia and Western Australia.

Action 2	Export market access – quarantine investment planning
Description	<ul style="list-style-type: none"> • Continually review market access priorities with the OHMA based on potential market size; capacity to supply; and ability of R&D to give an outcome that will allow Australia to meet importing country quarantine requirements.
Rationale	<ul style="list-style-type: none"> • Improved export market access is the foundation on which export sales growth can be built. However, it is noted that from research completed as part of this project that there are no export market opportunities for Australian vegetables that would allow Australia to meet project description specifications in the medium term. The possible exception is NZ for fruit fly controls other than the use of dimethoate.
Priority	<ul style="list-style-type: none"> • Low (except for NZ alternatives to dimethoate which is a high priority).
KPI	<ul style="list-style-type: none"> • Market access resources appropriately allocated over the life of the current and future SIPs.
Outcomes	<ul style="list-style-type: none"> • Quarantine research that aligns with market access opportunities.

Action 3	Export market access – non-quarantine (i.e. tariffs and FTAs)
Description	<ul style="list-style-type: none"> Negotiate improved market access for Australian vegetable exports including elimination of tariffs on carrots in Taiwan, the Philippines, Japan and Saudi Arabia. Longer term market access priorities for the vegetable industry include the completion of current FTA negotiations with China (commenced 2005), Japan (commenced 2007), the Gulf Cooperative Council (commenced 2007) and South Korea (commenced 2009) and the commencement of negotiations with India.
Rationale	<ul style="list-style-type: none"> Lower tariffs improve the competitiveness of Australian exports.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Tariffs eliminated on Australian carrots by 2015 in three key markets. AUSVEG priorities incorporated into one completed FTA within five years.
Outcomes	<ul style="list-style-type: none"> Additional carrot sales in Taiwan, the Philippines, Japan and Saudi Arabia.

Action 4	Export market access – joint investment, dimethoate alternatives for New Zealand
Description	<ul style="list-style-type: none"> Invest jointly with other industries to continue to develop post-harvest solutions for fruit fly control following the de-registration of dimethoate for this purpose. This urgent action is relevant to capsicum, pumpkin, zucchini and other fruiting vegetables particularly for access to NZ. The possible approval of irradiation for use on capsicum and other vegetables exported to NZ will be a significant step, however some vegetables are unlikely to withstand irradiation treatment and further alternatives need to be found.
Rationale	<ul style="list-style-type: none"> Australian capsicums fill a low cost niche with field grown product in winter compared to more expensive domestic NZ greenhouse production. Furthermore there is an opportunity to supply NZ QSRs with fresh Australian capsicum for processing during the winter months. In addition whole head lettuce hearts for processing in winter may be possible with a solution, acceptable to NZ quarantine authorities, for Rutherglen Bug. NZ market access is a high priority action.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Alternative to dimethoate in place one year from strategy commencement.
Outcomes	<ul style="list-style-type: none"> Profitable sales of capsicum and potentially head lettuce in New Zealand.

Action 5	Export market access - China
Description	<ul style="list-style-type: none"> Confirm the future importance of China as an export market for Australian vegetables.
Rationale	<ul style="list-style-type: none"> There are mixed messages on the value and importance of achieving market access into China. On the one hand, there is data and experience to suggest the market for imported vegetables in China is, and will continue to be, negligible. For example, imports of fresh US Vegetables declined from 10,366 tonnes in 2000 to 438 tonnes in 2010 (Source: USDA Foreign Agricultural Service). In addition, some Australian exporters familiar with the China market have observed there is potential for fresh fruit imports, but not for vegetables. This view is supported by one of the project team, who has delivered retail training in the past four years to major international and national chains present in China, including Wal-Mart, Carrefour, RT-Mart and CRC-Vanguard. On the other hand, there is also a view that China could be a two-tier market, with demand for both low cost local vegetables and higher-cost western, safe vegetables, as is the case in some other Asian markets. It has not been possible to fully test and confirm this hypothesis. Action: test and confirm the hypothesis through a separate R&D project that includes field investigations.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Research project report which ‘fleshes out’ the preliminary conclusions reached for China by this project.
Outcomes	<ul style="list-style-type: none"> Efficient and effective future research investment through confirmation of the extent of China’s potential for Australian fresh vegetables.

5.2 Specific Actions for Levied Crops

Specific actions for levied crops target high priority vegetables identified in Chapter 2 of this report. Actions are listed in simple alphabetical order.

Action 6	Beans – New Zealand
Description	<ul style="list-style-type: none"> Implement a market monitoring strategy to ensure this important winter trade continues at the existing level (based on mechanised production from Queensland, seafreight via the Port of Brisbane).
Rationale	<ul style="list-style-type: none"> An Australian monopoly during the seasonal window may expose the trade to other competitors.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> New Zealand purchases of Australian beans remains at \$4 million pa.
Outcomes	<ul style="list-style-type: none"> Profitable trade is protected.

Action 7	Beans – South East Asia and the Middle East
Description	<ul style="list-style-type: none"> Direct sales of value added beans to ‘high end’ supermarkets, restaurants/hotels and other food service sectors (e.g. airline catering) in SE Asia and the Middle East
Rationale	<ul style="list-style-type: none"> Beans are a staple of Asian cuisine and some Australian beans are already consumed in the Middle East. Bean production is mechanised which gives Australia a basis to establish a comparative advantage. Value added bean lines have proved to be successful in Australian supermarkets.
Priority	<ul style="list-style-type: none"> Medium.
KPI	<ul style="list-style-type: none"> Value added bean sales to South East Asia and the Middle East valued at \$1 million within three years of strategy commencement
Outcomes	<ul style="list-style-type: none"> Direct sales established for ready to eat fresh green beans

Action 8	Broccoli – reinvigorate broccoli exports especially Japan
Description	<ul style="list-style-type: none"> Reinvigorate broccoli exports through a recovery strategy based on investment in crop scheduling for continuity of supply, alternative cost effective establishment methods, improved varieties with white blister tolerance, mechanical harvesting, and seafreight. Priority market is Japan.
Rationale	<ul style="list-style-type: none"> Australia has had a proven track record of seafreight exports to Japan, the market has continued to expand, potential clients in Japan are concerned by residues in Chinese product and are impressed with Australia’s sound track record in brassica IPM.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Research projects commissioned that work toward the goal of reinvigorating exports to Japan in the first year of strategy commencement.
Outcomes	<ul style="list-style-type: none"> If Australia was able to secure 10% of the Japanese broccoli market it would be equivalent to 5,000 tonnes with a value of \$10 million. Specifically investigate the supply window outside when broccoli is not sourced from the Salinas Valley. There were no sales of Australian broccoli to Japan in either 2011 or 2012.

Action 9	Carrots – export market expansion and defence strategy
Description	<ul style="list-style-type: none"> Develop a market expansion and defensive strategy to protect Australian carrot exports in six key markets, currently valued at \$52 million pa. A defensive strategy would include diversifying production to reduce risks associated with disease, climate change and drought; collaboration between growing regions including east coast production regions; and researching alternatives to the soil fumigant metham sodium. Market based actions include building on the current good reputation of key Australian exporters, through deeper analysis of price differentials in export markets (those valued over \$1million pa), value adding (e.g. alternative sizes, packaging), cementing trade relationships through communication; retail training; and promotion.
Rationale	<ul style="list-style-type: none"> There is evidence for further market growth, through a combination of additional markets and more customers in existing markets, particularly in the Middle East. Currently Australian carrot supply is a constraint. In addition, Australian carrot exports are under increasing threat from lower cost Chinese product of improving quality.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Increase Australian carrot exports by \$20 million within three years of strategy commencement.
Outcomes	<ul style="list-style-type: none"> A secure and expanded future for Australia’s most successful fresh vegetable export.

Action 10	Celery – recover lost market share in Singapore and Malaysia
Description	<ul style="list-style-type: none"> Recover lost market share in Singapore and Malaysia markets by displacing US sales (currently valued \$9 million in 2012). Examine the potential of value added products including sleeved celery sticks. Value added uses product that has been a waste material outside of domestic supermarket specs. Source product from Tasmania , Southern Victoria and Queensland to complement WA production and create a year-round supply. Understand any threat posed by Dole’s production of celery in Asia.
Rationale	<ul style="list-style-type: none"> Make the most of Australia’s ‘time on water’ seafreight advantage and do this by utilising undervalued celery ‘waste’.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Capture 30% of current US celery market in Singapore and Malaysia within 3 years.
Outcomes	<ul style="list-style-type: none"> A new \$3 million per annum celery trade in Singapore and Malaysia within three years of strategy commencement.

Action 11	Lettuce – iceberg hearts for QSR’s to New Zealand
Description	<ul style="list-style-type: none"> Expand exports to NZ during the winter months when it is too difficult to grow lettuce domestically. This initiative will require deeper action to understand reasons for the loss of market share and explore ways to re-establish competitive advantage.
Rationale	<ul style="list-style-type: none"> A \$0.5 million trade to NZ in 2011 has dropped to \$50k in 2012 and should be resurrected.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Levy investments allocated to understand and resurrect lost NZ lettuce sales.
Outcomes	<ul style="list-style-type: none"> Annual sales of lettuce to NZ valued at \$0.5 million.

Action 12	Lettuce - baby leaf/bulk shredded to South East Asia and the Middle East
Description	<ul style="list-style-type: none"> Become a preferred baby leaf / bulk shredded lettuce supplier through a strategy to shift Australia's status in Asia from contingent to regular shipments. Strategy to address service, packaging and food safety. Higher levels of food safety are required for this product including triple wash, no manures in production, regular MRL monitoring - initiatives already practised by suppliers servicing the Australian domestic market. Strategy to be based around supply of retail packs to supermarkets and bulk packs to the food services sector (e.g. airline catering) in South East Asia and Middle East via airfreight.
Rationale	<ul style="list-style-type: none"> Australia has comparative advantage in airfreight (destinations and frequency), as well as mechanised harvest systems. Australian product has a shelf life and flavour advantage over Asian grown hydroponic lines.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> KPI: Target is for \$10 million in sales across SE Asia and the Middle East within 3 years (current sales to these destinations are approximately \$3 million pa).
Outcomes	<ul style="list-style-type: none"> Profitable sales of higher value lettuce in line with Australia's competitive advantage in mechanisation and food safety.

Action 13	Leeks – target market recovery in Singapore and Japan
Description	<ul style="list-style-type: none"> Target export growth in Japan and Singapore by addressing market share lost to NZ due to a drought-induced decline in production of Australian leeks in prime growing areas (e.g. Adelaide Hills SA, Mangrove Mountain NSW, and Stanthorpe Qld). Target market recovery with identification of best growing regions, an appropriate package of agronomy (varieties, seedling size and mechanised planting) and pack house mechanisation.
Rationale	<ul style="list-style-type: none"> Japan is the world's largest importer of leeks and Australia has a 1% and growing share of this market. Australian market share also grew in Singapore 2010 to 2012.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Within three years of strategy commencement turn \$0.6m in export sales to Japan and Singapore into \$1.2 million.
Outcomes	<ul style="list-style-type: none"> Market recovery with identification of best growing regions, an appropriate package of agronomy and pack house mechanisation.

Action 14	Sweet corn – explore value added potential Asia and the Middle East
Description	<ul style="list-style-type: none"> Explore the potential for sales of value added Australian sweet corn in Japan, Singapore, Malaysia and the Middle East. This action would support private supplier level market research/ intelligence. There is no data currently available on this potential opportunity.
Rationale	<ul style="list-style-type: none"> NZ has demonstrated market potential in Japan. Sweet corn is a highly mechanised product so Australia could be competitive. Varieties required in overseas markets must be super sweet and may be bicolour which Australia can supply. Recent innovations in value adding on the Australian domestic market could be applicable to overseas supermarkets.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Market research generated that confirms this opportunity within twelve months.
Outcomes	<ul style="list-style-type: none"> Market research completed for Japan, Singapore, Malaysia and the Middle East. Conclusion reached on the prospectivity of Australian sweet corn exports.

5.3 Industry Development

Industry development actions target research, development and extension to improve Australia’s capacity in both domestic and export markets.

Action 15	Industry development – support ongoing mechanisation research
Description	<ul style="list-style-type: none"> Support ongoing mechanisation research, to improve cost-efficiencies in production, harvest and post-harvest, for the broccoli, carrot, celery, cauliflower, baby leaf salad, Chinese cabbage and leek, sectors. These crops have been identified as providing the most potential for further mechanisation of production.
Rationale	<ul style="list-style-type: none"> Reduce reliance on high cost and short supplied Australian labour. This must always be a high priority for Australian vegetable industry regardless of whether the domestic or export markets are being targeted.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Projects relevant to each of the broccoli, carrot, celery, cauliflower, baby leaf salad, Chinese cabbage and leek are funded over the next five years.
Outcomes	<ul style="list-style-type: none"> The total units of high cost Australian labour used to produce and market each tonne of levied vegetables decreases over time.

Action 16	Industry development – export production training
Description	<ul style="list-style-type: none"> Develop and deliver training packages focused on advanced crop scheduling (timing and volume) for existing and prospective export oriented growers. Critical crops include those with value adding potential i.e. sweet corn, beans, leek, broccoli and baby leaf lines as well as capsicum. In addition, include training on the role of growers in supply chain and category management.
Rationale	<ul style="list-style-type: none"> To ensure continuity of supply to international customers and to address changing climate conditions (e.g. colder winters in Gatton). Contribute to creating value-added points of difference in servicing export customers. Training will be valuable for growers targeting both domestic as well as export markets.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Relevant training courses prepared and delivered to interested growers.
Outcomes	<ul style="list-style-type: none"> Increased capacity to reliably service export markets.

Action 17	Industry development – export vegetable genetics symposium
Description	<ul style="list-style-type: none"> Arrange a symposium of Asian / Middle East supermarket buyers, seed companies and Australian growers and exporters to review market and agronomic performance of key Australian vegetable crop varieties and identify gaps. Key crops include broccoli, capsicum, celery, leeks, lettuce, and baby leaf lines. Consider a wider set of vegetables beyond levied crops to ensure market participation in the forum.
Rationale	<ul style="list-style-type: none"> To ensure Australia has the best genetics for production and marketing. This action has been completed for carrots, in the form of the Carrot Conference Australia in Perth WA in 2000 and Australia is still competitive in this commodity. Furthermore, communication has been less than ideal between key players (seed companies, the market and growers) in accessing varieties for Australian conditions as a result of loss of key person expertise in places like Gatton UQ and flow on impact in the seeds industry. There is a need to develop varieties with uniform maturity that can be ‘once over’ harvested (e.g. to support mechanised harvesting).
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Symposium held for one crop, say broccoli in the next twelve months with additional events planned in subsequent years.
Outcomes	<ul style="list-style-type: none"> Improved genetics and linkages through the vegetable export supply chain.

5.4 Market Development

Market development actions include cross industry collaboration, intelligence gathering and investment in international benchmarking of new vegetable products.

Action 18	Market development – cross HAL industry collaboration targeting food service
Description	<ul style="list-style-type: none"> Collaborate with other HAL industries to address areas of common interest and endeavour in export markets, including understanding the potential and distribution systems used in the food service sector in South East Asia and the Middle East, market intelligence, trade communication and logistics. HAL industries with an interest in export market development include but are not limited to table grapes, citrus, apple/pear and avocado.
Rationale	<ul style="list-style-type: none"> To build goodwill in markets and create a 'Brand Australia' – see for example Fruits from Chile – www.fruitsfromchile.com. This initiative would build on goodwill generated at HAL's 2012 Export Forum and is a cost effective way of sharing export resources. In addition the food service sector is largely undeveloped for Australian suppliers.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> A cross sector planning forum including exporters as well as growers is held within twelve months of the 2012 HAL Export Forum.
Outcomes	<ul style="list-style-type: none"> Cost effective collection and dissemination of market development intelligence.

Action 19	Market development – export market intelligence
Description	<ul style="list-style-type: none"> Develop detailed market intelligence possibly including an 'on ground' presence in major markets and specific strategies to protect and grow markets where Australia has either individual crop or collective critical mass. These markets include Singapore (for carrots \$11m, broccoli \$6.5m and specialty lettuce \$2m); Malaysia (for carrots \$10m); and the Middle East (for carrots \$28m).
Rationale	<ul style="list-style-type: none"> Even larger individual vegetable exporters lack the resources to collect and analyse market trends and opportunities in all prospective export markets.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Projects initiated and initial market intelligence generated within twelve months of strategy commencement.
Outcomes	<ul style="list-style-type: none"> Improved knowledge leading to protection of existing export markets and development of new opportunities.

Action 20	Market development – value added sweet corn, bean, celery and leek products
Description	<ul style="list-style-type: none"> Allocate R&D funding to support business level research into market and value added product development for four levied vegetables - i.e. sweet corn, beans, celery and leek directed at modern retailers in Asia and the Middle East.
Rationale	<ul style="list-style-type: none"> Provide businesses with resources to identify enterprise-level opportunities for new products and/or new value added products and create additional export value. Care will be needed to ensure management of public and private good outcomes.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Three levy funded projects let within twelve months of strategy commencement.
Outcomes	<ul style="list-style-type: none"> New Australian fresh vegetable products that recognise the reality of Australia's future comparative advantage being in vegetable 'products' rather than 'commodities'.

Action 21	Market development – international benchmarking of new vegetable innovation
Description	<ul style="list-style-type: none"> Complete a global scan of innovation in relation to new varieties, new value added initiatives, new forms of packaging and new uses for levied vegetables.
Rationale	<ul style="list-style-type: none"> It is well established that in the long term Australia is unable to compete on the international commodity market. Products tailored for specific markets is the fresh vegetable industry’s export future. This sector is highly dynamic and understanding and investment in innovation is essential.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Scan completed within two years of strategy commencement.
Outcomes	<ul style="list-style-type: none"> A listing of potential new vegetable innovations that has been prepared in consultation with leading Australian packers and exporters.

5.5 Marketing

Marketing actions are only possible with an export marketing levy in place - see action number 25 below. An export marketing levy could be established on either a statutory (compulsory) or voluntary basis.

Action 22	Marketing – category management support for exporters
Description	<ul style="list-style-type: none"> Support those exporters providing category management services to their customers. Encourage and support those vegetable marketers who are practising category management with domestic retailers, and who have expressed interest in utilising those skills to develop exports. Support might include training, tools, data and other resources.
Rationale	<ul style="list-style-type: none"> Category management is one of the best tools to develop and cement relationships with customers, and acts as a defence against spot or commodity selling by competitors. Some of the best category manager-suppliers are to be found in the Australian vegetable sector. Effective category management may include partnerships with exporters from the northern hemisphere.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Appropriate existing and aspiring exporters receive support in developing category management capacity
Outcomes	<ul style="list-style-type: none"> Exporters with additional skill and capacity who are able to drive exports and create additional profitable sales for vegetable growers.

Action 23	Marketing – support and promotion in South East Asia and the Middle East
Description	<ul style="list-style-type: none"> Develop market-based cross product marketing support and promotion strategies in Singapore, Malaysia, the UAE and Saudi Arabia with leading supermarket chains (training, relationships and planned programs).
Rationale	<ul style="list-style-type: none"> These are markets where there is critical mass for vegetables and other products sufficient to create a presence, profile and preference for Australian product. Examine the feasibility for the vegetable industry and exporters to utilise ‘Australia fresh’ and alternative promotion models, such as those developed by ‘Prince de Bretagne’ (see Appendix 1) and ‘Fruits from Chile’ (www.fruitsfromchile.com).
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Understanding of the potential of umbrella marketing for Australian fresh vegetables in overseas markets within three years of strategy commencement.
Outcomes	<ul style="list-style-type: none"> Branded product that creates additional and less price sensitive sales.

Action 24	Marketing – build capacity in airfreighting mixed vegetable consignments
Description	<ul style="list-style-type: none"> Build on Australia’s capacity to supply air-freighted mixed vegetable consignments to Asia and the Middle East. Increase awareness of this opportunity with existing and prospective export oriented growers. Provide appropriate training including use of improved crop forecasting capacity from the likes of the Bureau of Meteorology.
Rationale	<ul style="list-style-type: none"> Australian exporters are in a unique position to provide ‘just in time’ product across Asia and the Middle East via airfreight with product sourced from a combination of domestic wholesale markets and direct relationships with growers. Developing this trade takes supply out of the domestic market and pressure off price.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> Training programs developed and delivered to existing and potential mixed consignment providers.
Outcomes	<ul style="list-style-type: none"> Additional ‘value added’ export sales. Value is added through a more informed schedule of exports that profits the mixed consignment exporter, the grower and does not interrupt category management programs.

5.6 Policy Research

Trade Viability Improvement plan actions include measures that address both industry and government policy.

Action 25	Policy – establish either a voluntary or statutory export marketing fund
Description	<ul style="list-style-type: none"> Canvass support for the establishment of a vegetable industry export marketing fund, to be used specifically for export development including promotion. While HAL industry marketing levies are statutory and address both domestic and export marketing, the vegetable levy is for R&D purposes only. This proposal; suggests investigating either a statutory (HAL) levy or a voluntary fund, drawing on success in NZ with voluntary arrangements. (See for example the NZ Fresh Produce Importers Association).
Rationale	<ul style="list-style-type: none"> Marketing and promotion support would facilitate differentiation of Australian product on attributes other than price.
Priority	<ul style="list-style-type: none"> Medium
KPI	<ul style="list-style-type: none"> The feasibility of an export marketing fund is tested with vegetable industry stakeholders, including current and/r potential exporters and their grower suppliers.
Outcomes	<ul style="list-style-type: none"> Feasibility tested by the end of third year of strategy implementation.

Action 26	Policy – measures to address the high Australian dollar
Description	<ul style="list-style-type: none"> Commission research to identify policy responses to help counter the effect of a high Australian dollar compared with competitors such as China (trades in US dollars), the US, the EU and NZ. Policy options for research might include changes to the Export Market Development Grant Scheme, tax rebates for new products and new markets.
Rationale	<ul style="list-style-type: none"> Assist businesses establish a track record with a new vegetable products and/or market combinations.
Priority	<ul style="list-style-type: none"> Low (there will be considerable work in convincing Government of the merit of this proposal)
KPI	<ul style="list-style-type: none"> Research completed to identify policy responses within four years of strategy commencement.
Outcomes	<ul style="list-style-type: none"> Research on the merit of incentives for new export product development.

Action 27	Policy – export accreditation including credit risk training and a bad debts register
Description	<ul style="list-style-type: none"> Communicate findings from this study on the merits of an export accreditation program requiring legislation. Fill current market gap with credit risk training and a bad debts register.
Rationale	<ul style="list-style-type: none"> A program is required to address medium sized grower concerns regarding non-receipt of payment from export partners. Non-receipt of payment was identified as an issue during consultation, by ABARES and through the study terms of reference.
Priority	<ul style="list-style-type: none"> High
KPI	<ul style="list-style-type: none"> Credit risk training delivered to growers new to export and a bad debtor's register maintained by AUSVEG or a similar industry body.
Outcomes	<ul style="list-style-type: none"> An increase in Australian vegetable exports facilitated by payment assurance.

Action 27 is further detailed in Chapter 6 Export Accreditation Program Analysis.

6 Export Accreditation Program - Analysis of Options

6.1 Analysis Purpose

The terms of reference for the study requested an examination of the potential of an export / import accreditation program to provide greater confidence to growers wishing to develop their businesses into export markets or provide information to growers on how they can improve their existing export operations.

At the project launch meeting of 9 January 2013, the Industry Reference Group clarified the request, stating that it related to vegetable growers who are of medium scale who are not big enough to export on their own but who receive inquiries from exporters/agents and are unsure of the exporters' capacity to pay.

The request is echoed in the ABARES survey of 2007-08 which found that a lack of relationships was one of seven major reasons why Australian vegetable growers did not export.

Research revealed six potential options to address lack of payment certainty and each is analysed below.

6.2 Use of HAL's Export Efficiency Powers (EEP)

HAL managed Export Efficiency Power (EEP) legislation provided for the licencing of exporters of apples, pears, oranges and dried grapes. Licenses were not issued to companies that were under financial administration or were without experience in exporting horticultural produce. Licensing was aimed at providing a measure of protection to growers, packers and importers.

The legislation was repealed in 2012 following an ABARES review which found that 'more effective industry arrangements to accredit exporters and provide insurance against failure could be adopted outside of the EEP system if industry considered this to be beneficial' (ABARES 2012).

Statutory powers requiring export agent licencing are no longer available to HAL and are unlikely to be revived. Consequently this option to address lack of payment certainty is rejected.

6.3 Copy the New Zealand Horticulture Export Authority (NZHEA) Model

A program based on the New Zealand Horticulture Export Authority (NZHEA) model addresses both concerns raised through the study terms of reference – payment assurance and the provision of information to growers.

NZHEA provides an export structure and support network to the NZ horticultural export industry. This structure and network takes the form of an export licensing system for grower groups who choose to come under the NZHEA banner. This structure requires export groups to develop an Export Marketing Strategy (i.e. their rules for exporting). NZHEA also provides support and information through newsletters, and occasional conferences/workshops to assist industry development. NZHEA liaises with sector stakeholder groups on matters relating to market access, trade barriers and their removal, and plays a role in lobbying government on such matters on behalf of the industry (<http://www.hea.co.nz/>).

The operation of NZHEA is dependent on supporting government legislation.

Positives of this approach include:

- Exporters could be required to prove they are 'of sound financial standing' – e.g. NZHEA requires exporters to confirm their equity investment in exporting via a minimum Paid-Up Share Capital of NZ\$100,000 or similar in the case of applications by partnerships.
- A mechanism to manage the product export marketing strategy.

- Potential to provide specific product by market conditions to support orderly marketing e.g. import panels, minimum pricing, quality specs etc.
- Potential to collect data in real time e.g. what is being shipped, market returns etc.
- Potential to plan marketing support/trade communication, knowing where product is destined.
- A mechanism to stop unmanaged spot selling – which undermines planned marketing programs.

Negatives aspects of the NZHEA model include:

- Interventions of this type are not supported by exporters/or their association in Australia (i.e. AHEA).
- NZHEA's legal advice is that relying on regulatory powers (such as an accreditation scheme) to enforce minimum selling prices is likely to breach WTO rules.
- Additional costs are incurred in complying, participating, implementation and enforcement.
- Indirect costs in the form of market distortions and losses in economic efficiency do occur (see for example the Productivity Commission's review of Wheat Accreditation Scheme 2008).
- Practical difficulties arise with implementation (e.g. convincing established exporters of their need to participate).
- Initiatives must be funded – by exporters or by using a vegetable export levy/fund.
- The NZ model does not include the whole supply chain i.e. growers, pack-houses and importing country retailers.

The Australian Government continues to 'wind back' these types of market interventions (e.g. HAL Export Efficiency Powers, deregulation of Australian wheat export arrangements) and is unlikely to support new market initiatives. Consequently, attempting to establish a New Zealand style Horticulture Export Authority model is not recommended.

6.4 Expansion of Existing Central Market Credit Systems

Central wholesale markets operate credit systems to ensure grower payments. For example the Credit Service operated by Brismark is a clearing house for wholesalers, buyers and other related businesses operating in the Brisbane Produce Market. (<http://www.brismark.com.au/cms/index.php/Wholesaler-Credit-Service.html>).

All Credit Service users are given a unique buying or selling code to identify them at the time of any transaction inside the market. Following each day's trade invoices are sent to the Credit Service for sorting and collection. At the end of each week buyer's statements are sent to the Credit Service and the information is consolidated onto a single billing statement for each buyer. Credit Service staff follow up buyers to ensure that payments are received on time. The payments received from buyers are subsequently distributed to the relevant wholesalers.

Benefits include:

- Payment terms of 7 to 14 days with on time payment rates of around 96%
- An extremely low bad debt rate of 0.000012%.
- A Bad Debt Reserve of over \$3 million which guarantees up to 90% of each debt
- A credit risk evaluation of all buyers
- Follow up of all overdue payments.

Consultation was completed with Stephen Hunt, Brismark Credit Service Manager who advised that Brismark's Credit Service was not available for exporters and is only applicable to wholesalers who operate at the Rocklea Brisbane Markets. He understood the situation to be similar in other wholesale markets including the Sydney Wholesale Markets, Sydney Markets Credit Service. Stephen advised that the only current option available to growers wishing to engage export agents and concerned about payment risk would be commercial insurance.

6.5 Insurance to Cover Non Payment by Export Agents

Insurance to cover non-payment by export agents can be arranged through, for example, National Credit Insurance Brokers (www.nci.com.au). Adelaide based National Credit Insurance Brokers specialise in Indemnity Insurance i.e. cover to ensure that the recipient of goods will pay for them. Insurance is commensurate with risk and premiums are substantial.

6.6 Training including Credit Risk Assessment for Growers New to Export

Growers establishing business relationships with export agents are able to reduce the risk of non-payment by completing their own credit risk assessments. The efficacy of these assessments could be improved with training and could be funded using the vegetable industry R&D levy. Training course material could include how to use various online resources such as the Australian Securities and Investment Commission (ASIC) website (<http://www.asic.gov.au/asic/asic.nsf>).

Resources on the ASIC website relevant to credit risk assessment include:

- Banned Bodies Corporate Register
- Credit and ASIC Act Infringements
- Company alerts
- Enforceable Undertakings Register
- Insolvency Notices
- Summary prosecutions of companies and directors

Training in Credit Risk Assessment is only applicable to Australian entities and would not reduce the risk of non-payment if the agent was overseas based.

6.7 AUSVEG Maintain a Bad Debtors Register

AUSVEG role is to provide advocacy, R&D management and services to Australian vegetable growers. One possible service that it might consider is the establishment of a Bad Debtors Register for growers who have had difficulty in securing payment from an export agent.

The base model would be a simple online listing of export agents who have been in dispute with growers over payment with appropriate caveats around responsibility (i.e. the register would need to note that non-payment could be for any number of reasons not related to the agent's trustworthiness). A more sophisticated model requiring additional resources would include voluntary accreditation whereby export agents with a secure payment history could also be listed and or receive some form of AUSVEG branding. Both options would need to be tested for demand and their standing in the law.

As an aside it is noted that Apple and Pear Australia Limited (APAL) are currently in the process of building an Information Register to connect growers with overseas buyers and potential export opportunities (APAL Industry News, 2 April 2013). Provision of export services is consistent with this Peak Industry Body's role.

6.8 Conclusions on the Potential of an Export Accreditation Program

Despite a number of prima facie benefits associated with a legislation backed accreditation scheme, it is unlikely that government, and many established players in the vegetable industry, would be convinced of its overall merit. The preferred approach for mid-sized vegetable growers concerned about credit risk is a combination of Credit Risk Assessment Training and the keeping of a simple information register by AUSVEG or a similar body.

7 Information for Growers Considering New Markets

7.1 Checklist Purpose

The final term of reference for the study was to document and communicate relevant trade information to vegetable growers to assist them to evaluate whether it is viable to expand their business into the export market or provide information on how they can improve their existing export operations.

Chapters 1 to 6 of this document provides information for growers on which levied vegetables have the most potential in export markets; which are the priority export markets; impediments faced and investments needed to secure export success. This chapter provides a checklist for growers who have considered the above information and wish to either expand their business into the export market or improve their existing export operations.

7.2 Viability of Growers Expanding their Business into Exports – A Checklist

The export viability checklist is a template for the preparation of a vegetable export plan. Checklist questions one to six provide a framework for individual business export planning.

1. What am I growing/could grow:
 1. Products
 2. Varieties
 3. Seasonality
 4. Volume
2. Where is their demand for these products to match what I am growing
 1. Market/ country
 2. Market segments/target markets e.g. supermarkets, food service
3. Can I supply what is required:
 1. Product specifications
 2. Volume specifications
 3. Packaging specifications
 4. Post-harvest/cool chain specifications
 5. Quality/food safety requirements and acceptable documentation
 6. Distribution options
 1. Direct to customer
 2. Via import agent/distributor
 3. Via exporter
 4. Via packer/exporter
 5. Collaboration with similar growers/packers
 7. What resources do I need:
 1. Human resources e.g. production, post-harvest, marketing, financial
 2. Physical resources
 3. Financial resources
 4. Marketing resources e.g. local representation, promotion
 5. Timeframe for implementation
 8. Ability to expand
4. Am I competitive
 1. Price competitive
 2. Service competitive
 1. Reliability/consistency of supply
 2. Relationships/communication
 3. Marketing support and promotion

5. Financial:
 1. Terms of trade/payment
 2. Reliability of others in the supply/marketing chain
 3. Legal requirements
 4. Am I eligible for EMDG grants
6. Results
 1. When and how will I measure results
 2. Timeframe for reviewing the export plan

8 Study Conclusions

The research has shown that a subset of levied Australian vegetables has potential for additional sales in export markets in East Asia, the Middle East and New Zealand. China may not be as prospective for sales of fresh Australian vegetables as believed by some industry stakeholders. Australia is not competitive on price in export markets selling traditional undifferentiated commodity lines. Even our successful carrot export sector differentiates itself on the basis of food safety, quality and reliability.

Despite a long and somewhat obvious set of impediments, Australia retains a foundation in vegetable exporting that can be used to deliver additional export success.

Recommendations to assist the Australian vegetable industry to open new markets and make existing markets more viable target domestic and export market access; specific actions for priority levied crops, industry development, market development, marketing and a program of policy initiatives. The market access and trade viability improvement plan prioritises proposed investments.

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10 Stakeholders Consulted

Stakeholder
Growers
Jeff McSpedden, (Springfield the Lagoon Bathurst, NSW)
Kim Martin (Frias Farm, East Gippsland Victoria)
Jeremy Haw (Rootz, South East Melbourne Victoria)
Troy Cukro, (Supafresh, WA)
Anthony Houston (Houston Farms, multiple locations)
Nick Tana (Sumich WA)
David East (Bewray, Manjimup WA)
Andrew and Michael Bogdanich (Bogdanich Farms Gin Gin WA)
Luc Monte (Lancelin, WA)
Linda and Tran Do (TC Do Gin Gin WA)
Eric Coleman, Grower and Consultant to Qld sweet potato industry
Integrated Grower/Packer/Marketers
Peter Schreurs (Peter Schreurs & Sons, South East Melbourne, Victoria)
Chris Schreurs (J & J Schreurs, South East Melbourne, Victoria))
Peter Wauchope (Centre West Exports, WA)
David de Paoli (Austchilli Pty Ltd, Qld)
Neil Armstrong (Harvest Moon, Tasmania)
Fabien Carniel (Mulgowie Farms, multiple locations)
John Said (Fresh Select, Werribee, Victoria)
Exporters
John Antico and Hugh Molloy (Antico International, Sydney)
Malcolm McLean (Perfection Fresh, Sydney)
Neil Barker (BGP International, Melbourne)
Michael Worthington (PMA-ANZ and ex-CEO Sumich Group, Melbourne)
Bruce Bergmans (Fresh Express, Perth WA)
Alistair Scott (Hannay Douglas, Brisbane Qld)
Tony Walsh (MG Marketing, Brisbane Qld)
Alistair Brown (Harrowsmiths International, Brisbane Qld)
Murray McCallum (Delica, Melbourne)
Quentin Carter (QC Fresh, Brisbane Qld)
Produce Buyers and Other
John Wafer (GSF Australia and New Zealand)
Richard Dickmann (New Business Development, Bayer Crop Science)
DPIs and Researchers
Jodie Campbell (Business Manager with DAFF Qld)
Ray Collins (Gatton, Qld)
Peter Leach (Biosecurity, Fruit Fly and Irradiation with DAFF Qld)
Market Accreditation
Stephen Hunt (Brismark Credit Service Manager)
AUSVEG
Jamie Racicos
Courtney Burger
Andrew White
Simon Coburn
Kurt Hermann
HAL and OHMA
Kim James
Will Gordon
Byron de Kock

Project Team Experience with International Retailers

Country	Participating Retailers
China	CRC Vanguard/Ole, Suguo, RT-Mart, Pagoda, Ito Yokado, Jusco, Lotus, E-Mart, BHG, Carrefour, Century Mart, Walmart, Park 'n Shop
India	More, Nilgiris, Spencers, Bharti Walmart, Kovai Pazhamudir Nilayam, Pazmudir Nilayam, Reliance, Mithra, Hypercity, Gokul Vatika, Big Bazaar, Tesco Star Bazaar, Fresh@, Max Hypermarket, Carrefour, Mother Dairy, Natures Basket, Le Marche, Garden Fresh, Namdhari, Foodworld, Spar, Fresh & Fresh, Shoprite, Surya
Indonesia	Yogya/Griya, Hypermart/Foodmart, Alfa Midi
Malaysia	Giant/Cold Storage/Bintang, Jaya Grocer, MBG, Isetan, Hero, Central Hypermarket, Eonsave, UO, Carrefour, Jusco/MaxValu, The Store
Sri Lanka	Cargills, Keells, Arpico
Thailand	Makro Cash & Carry, Big C, Siam Makro, Tops, Carrefour, Tesco-Lotus
UAE	Choithram, Union Coops, Sunrise City, Al Maya, Spinneys, Nine West Zone, Waitrose, Geant, Emirates Coop, LuLu, Giant/Safestway, Lifco, Abu Dhabi Coop, Abela, Sharjah Coop, Aswaaq
Vietnam	Big C, Metro Cash & Carry, Co-op Mart, Maxi Mark, LotteMart, HaproMart, FiviMart, Citimart, Mela, Saigon Center, Klever Fruits, Parkson, Vinatax, Wellcome, Satra

Project Team International Vegetable Agronomy Experience

Country	Experience
China	Training in production systems to grow vegetables for QSR suppliers
Japan	Training in production systems to grow vegetables for QSR suppliers
Taiwan	Training in production systems to grow vegetables for QSR suppliers
Thailand	Training in production systems to grow vegetables for QSR suppliers
Malaysia	Training for QSR and protected cropping systems for vegetables
Vietnam	Implementing 'safe vegetable' production systems
Philippines	Protected cropping systems for vegetables
Indonesia	Training in production systems to grow vegetables for QSR suppliers
India	Training in production systems to grow vegetables for QSR suppliers
NZ	Training in production systems to grow vegetables for QSR suppliers
PNG	Vegetable production for import replacement

Appendix 1 Case Studies on Export Success – Four of the Best

Case Study 1: US ‘Love Sweet Potatoes’ Increasingly Popular in Europe

At a time when produce exports from the United States to the European Union (EU) are generally in decline, sweet potatoes are certainly bucking the trend. Between 2003 and 2011 US sweet potato exports grew from 6,300 tonnes to almost 43,000 tonnes, according to USDA statistics. A number of family based companies were behind the success story. What has contributed to the continuing success of one of the main companies involved, Scott Farms, an integrated grower/exporter/marketer?

- Selecting and marketing varieties according to the demands of customers – consistent size and sweet taste, features found in the Covington variety
- Establishing their own UK-based marketing arm, to drive trade and consumer programs
- Coordinating trade and consumer education and promotions under the umbrella “Love Sweet Potatoes”
- Educating the trade about sweet potatoes, a product new to Europeans, via trade shows such as Fruit Logistica to build trade relationships across Europe and using high-visibility “Love Sweet Potatoes”/“Scott Farms” trucks to move product around the UK and Europe. Key messages include the value of the product to the trade, their versatility and ease of storage and handling. This has led to profitable supply arrangements
- Building business with a major UK foodservice company by developing new and innovative uses for sweet potatoes
- Using profile-raising media activities, celebrity chefs and social media to lift the profile of sweet potatoes.

The situation is not without challenges – the largest being how to keep growing the market. With a planned approach, building on activities to date and developing new recipe ideas, like sweet potato ice cream, Scott Farms intends to continue to generate interest and excitement from both the trade and consumers.

Case Study 2: French Regional Growers Working Together Under a Single Brand

The “Prince de Bretagne” brand was created in 1970 to provide a clear identity and emphasise the regional heritage of the vegetables produced along Brittany’s northern coast of France.

Brittany is the leading vegetable production region in France and is number one for cauliflowers, artichokes, early potatoes, shallots, broccoli, iceberg lettuces. Over one third of production is exported. Although the family farms are smaller than in many other parts of France, the 2,500 member-producers grow almost 650,000 tonnes of fresh vegetables each year, growing 46 different products.

The vegetables produced by growers participating in six cooperatives which are members of CERAFEL Bretagne (the regional producer organisation) are marketed under this brand. The brand is underpinned by a focus on quality, and is much more than a regional logo. For example, the Prince de Bretagne network is committed to an Environment-Quality plan which sets the rules for operators at regional, cooperative, grower and packer levels. Features include product specifications, adherence to Good Agricultural Practice and authorised crop protection treatments.

Sales are undertaken through around 60 companies, based on crop forecasts and daily actual volumes supplied and collated from the participating packing stations. These companies sell to the full range of customers – retailers, wholesale markets, food service etc – across 23 countries.

The use of the unifying “Prince de Bretagne” brand means the brand image can be shared right across the network of growers, cooperatives, sales force, retailers and through to the final consumer by their dedicated marketing team.

Marketing support for the products and the brand is provided in many ways, including:

- Communication to consumers via the media: press, magazines, internet sites, newsletters, in-store promotion activities etc.
- Support to shippers and distributors (supermarkets, wholesalers, greengrocers) by providing point of sale material, in-store activities, participation in exhibitions etc.
- Monitoring of consumer trends and competition
- Creation of packaging formats and innovative solutions
- Research and assessment of new products to broaden the product range available, and
- Responding to customer queries.

The activities of the marketing team covers not only the French market; it also extends across most of Europe, as well as Asia and North America.

Case Study 3: US Apple Producers Developing Emerging Export Markets

The Washington Apple Commission (WAC) is an industry-funded commodity board, responsible for promoting Washington state apples internationally. Success for apple growers has come from the industry and the Commission working and investing together to develop and expand export markets.

Industry investment has included:

- R&D into new varieties, production systems and IPM
- New planting systems, based on R&D outcomes
- State-of-the-art cool chain systems, including controlled atmosphere technology
- Funding the WAC, which has resulted in attracting additional USDA funding for export activities

In the past decade, there has been significant consolidation at the packer/marketer level of the industry, meaning these now-larger operations are better able to justify significant investment along the supply chain. At the same time, apple growers still have a range of choices in selecting packer/marketers to supply.

Other features of the industry include:

- Gazetted product grade standards and food safety standards, providing international customers with certainty and confidence and
- A wide range of varieties

WAC support has played a key role in developing and expanding apple export markets for the industry. A feature of their programs is differentiating Washington apples from competition, by having on-the-ground representatives in all their major markets, which are mostly developing markets and economies, such as China and India. Activities include building trade and retail relationships, promotions, via both modern retail and traditional markets, retail training and support, and providing market information back to the industry.

This combination has resulted in exports continuing to grow, even though Washington is a high-cost producer, relative to competitors such as China and India. The Commission and the industry have successfully combined to differentiate their product, backed by the internationally recognised “Washington” brand, to establish a profitable premium for growers, packers and marketers.

Case Study 4: Austchilli Value Added Export Success

Austchilli supply fresh chilli and value-added fruit, vegetable and herb products to Australian multi-national food companies, and export to 14 countries around the world. Founded by David De Paoli in 1995, Austchilli and its subsidiary companies have grown into a major value adding success.

David De Paoli was interviewed for the study and firmly believes there is very little or no future for Australian vegetable exports as a commodity, unless there is a natural disaster somewhere, and then it will only be short-term. However, there is a future for value-added products, if:

- There is a point of difference / uniqueness
- Gaps are identified and something different is supplied
- Long-term relationships are established with end-users/retailers.

He gave the example of supplying value added chillies to a QSR in Malaysia. When the A\$ went through 80 cents, a cheaper supplier was appointed, but Austchilli is now back, even though the dollar is at \$1+, because the alternative 'cheaper' supplier was not reliable and could not manage the 'just in time' supply required by the QSR.

He felt it was important to reach the position where end users need you more than you need them, through category management, staff and consumer education, and they can't do without the product. He is applying his lessons from the domestic retailer relationships to export. Consistent supply and quality is achieved "given". If customers want 'just in time supply', provide it to them. It is not easy and it reduces the competition. The end user/retailer recognises the value – in the product, the service and the consistency.

Furthermore, value-adding product helps eliminate/minimise some of the duty and quarantine access barriers. With value-adding there is sometimes flexibility in how product is classified, to minimise/eliminate barriers.

It is important for crop protectants / seed companies, end users/retailers and those in between to work together to develop the varieties most suited to the market. We need to know, via benchmarking, what the competition is doing and what we are up against – costs, returns, value-adding and government support.

What can be done by government: provide tax breaks on returns generated from new exports, for a period of say up to 5 years, to allow exporters to develop new products/export markets. For example, if a 30% tax rebate (equal to an exchange rate of A\$0.70) was applied on returns generated from new exports, it would make Australian exports more competitive, result in an increase in exports, provide a hedge against oversupply/supermarket duopoly pressures and result in more business (and taxes) along the supply chain.

What can be done by government with industry: be better coordinated on market access, like the Chileans. The Chilean industry works alongside government to gain access, then provides the coordinated marketing support, under which the individual growers and exporters get on with the business of exporting.

What can be done by industry: allocate a significant proportion of R&D funds to 'genetic pooling', to identify unique points of difference for new Australian vegetable products (a form of value adding in itself). Encourage whole-of-chain collaboration, from seed companies to end users/retailers, to develop unique points of difference. Revisit the benchmarking studies undertaken by HAL some years ago, to bring the information up to date.

What can be done by businesses: apply the concepts of value-added exports, be competitive; and get on and do it when the above are in place or move offshore where you have the knowledge with a lower cost of production with government support.

Appendix 2 Export Market Access Process and Assessment Summary

Country	General Situation	Quarantine	Tariffs	Other	Website/National Plant Protection Org
China	Specific requirements for fruiting veg	Phyto		Fruiting veg: cucurbits, solanaceae	General Administration of Quality, Supervision, Inspection & Quarantine
Hong Kong	Specific requirements for fruiting veg	No, except fruiting veg	Zero?	Fruiting veg: cucurbits, solanaceae	Agriculture, Fisheries & Conservation Department Kowloon
Taiwan	Access	Phyto		Additional quarantine Declaration	www.baphiq.gov.tw
South Korea	Beetroot(Tas), Carrots, Kohl Rabi	Phyto			www.npqs.go.kr
Vietnam	Specific requirements for fruiting veg	Phyto		Fruiting veg: cucurbits, solanaceae	Ministry of Agriculture & Rural Development
Thailand	Access	Phyto		Reports of a review currently underway – January 2013	Plant Protection Research & Development Office, Department of Agriculture
Philippines	Access	Phyto			www.acfs.go.th
Singapore	Access	Phyto	Zero?		Agri-Food & Veterinary Authority
Malaysia	Specific requirements for fruiting veg	No, except fruiting veg	Zero?	Fruiting veg: cucurbits, solanaceae	Department of Agriculture
Indonesia	Specific requirements for fruiting veg	Phyto		Fruiting veg: cucurbits, solanaceae	Ministry of Agriculture
India	Prohibited				
United Arab Emirates	Specific requirements for fruiting veg	Phyto		Fruiting veg: cucurbits, solanaceae	http://moew.gov.ae/portal/en/home.aspx
Saudi Arabia	Access	??			www.moa.gov.sa/public/portal
Iran	No information				

Source: Quarantine: www.daff.gov.au/micor/plants

Appendix 3 Detailed Market Analysis – 19 Export Destinations

Appendix 3 reviews nineteen markets against seven analysis criteria.

Markets analysed are:

- China – Peoples' Republic
- Hong Kong
- Taiwan
- Japan
- South Korea
- Vietnam
- Thailand
- Philippines
- Singapore
- Malaysia
- Indonesia
- New Zealand
- United Arab Emirates
- Other Middle East – Qatar, Kuwait, Bahrain and Oman
- Saudi Arabia
- Jordan
- Iran
- India
- Sri Lanka

Criteria employed are:

1. Market access
2. Trade relationships with Australia
3. Demographics and capacity to pay
4. Vegetable consumption and production
5. Relative size of market segments
6. Supply windows
7. Freight and logistics

China – Peoples' Republic

Market Access

- Specific restrictions on fruiting vegetables from Australia (e.g. capsicum, pumpkins, etc.). Concerns relate primarily to fruit flies and a full IRA would be required before imports would be allowed
- Phytosanitary certificates required for fresh vegetables
- IRA's are time consuming and improved access would not occur inside a 3 to 5 year period
- An Australia – China FTA has been in negotiation since 2005
- The FTA offers the potential for elimination of tariffs over a three to five year period
- Other nations (e.g. NZ and Chile), which have already concluded successful FTAs, have a competitive advantage over Australia in China
- Historically produce has entered China duty free via Hong Kong, through what is known as the 'grey trade'. The Chinese Government makes periodic crackdowns on this 'grey trade' and border closures persist.

Trade Relationships with Australia

- Australia and China have a strong and rapidly growing trade relationship (DFAT website <http://www.dfat.gov.au/fta/acfta/> accessed 6 February 2013)
- China is Australia's largest two-way trading partner (DFAT website).

Demographics and Capacity to Pay

- Population: 1.3 billion (2012 estimate)
- Population growth rate 0.48% (2012 estimate)
- Urban population: 50% (2012) and will be 70% by 2050
- Urban Chinese spend 2.5 times more on food than do rural dwellers
- GDP per capita: US\$8,400 (2011)
- Major cities: Shanghai (16.575 M); Beijing (12.214 M); Chongqing (9.401 M); Shenzhen (9.005 M); and Guangzhou (8.884 M). There are 200 cities with 1+million population
- Middle class estimated at 248 million in 2012
- China is one of the world's fastest aging countries.
- Longer term a supply of low cost labour will be a problem.
- Second tier cities offer growth potential for fresh fruit imports. These include Tianjin, Dalian, Shenzhen and Qingdao and twenty one others.
- Washington apples are one product moving into second tier cities such as Chengdu, Xian and Shenyang, demonstrating there is a market and an adequate distribution system at least for this product.

Vegetable Production

- China has an active food security policy which supports self-sufficiency.
- China is currently ranked as the world's largest producer of vegetables.
- Until the mid-2000s most of this production was consumed domestically. Increasingly China is a major player in world vegetable export markets, especially in the East and South East Asian region.
- China's extensive range of latitude allows for year round growing of most vegetable types including vegetables that are 'in scope' for this study.
- The vegetable seed industry is representing itself in China rather than just having distributorships; this means the market is growing and becoming more sophisticated – moving from open pollinated varieties to hybrids. All the major vegetable seed companies (Monsanto Seeds, Bayer Seeds (as Nunhem Seeds), Syngenta Seeds, Enza Zaden Seeds, Rijk Zwaan and Clause HM Seeds have breeding stations and commercial wholesaling operations in China. This is a major indicator of an expanding industry embracing western style systems.
- In 1999 China's food safety was substandard but by 2005 there was a massive improvement.
- US agribusinesses and processors have invested and supplied state of the art food safety systems.
- Slowly China is assembling sophisticated supply chains supported by international companies.

- Large scale commercial vegetable farming has been adopted in the productive Kunming Region.
- The Kunming Region is located in the country's south and is well serviced with infrastructure that makes it able to supply large Chinese cities as well as those in countries like Thailand, Malaysia and Singapore via road.
- By 2009 – farmer social status was improving; educated vegetable growers were forward looking and seeking new production technology. Chinese farmers haven't grasped that they are a major risk from rising labour costs – all Chinese vegetables are presently hand grown and harvested. In time, scale of production and mechanisation will be needed.
- Technical competence is now internal rather than reliant on those trained in the western world.
- Chinese production is moving away from animal manures to properly composted fertilisers, drip irrigation, crop monitoring and use of IPM rather than scheduled spraying. Chinese vegetable growers know they will be audited and must pass relevant food safety requirements.
- More growers are applying agricultural chemicals correctly and adhering to the relevant MRL's.

Vegetable Consumption

- China is importing fruit to supply the rising middle and higher income groups who are shopping for premium products as a definition of class and style.
- This demand for fresh fruit has not translated in the same way to fresh vegetables.
- Vegetables are not given as gifts in the same way as fruit, and preferences remain for low-cost, fresh product sourced daily from traditional markets.
- Small import volumes from the US in 2000 have fallen away over the last ten years.
- At this point in time China is not a major market for Australian fresh vegetables – see table.

China Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	0	18,390	0
Beans	0	0	0
Capsicum	0	0	0
Carrots	0	0	11,580
Celery	0	0	0
Leek	0	0	0
Lettuce	0	0	0
Squash and pumpkin	0	0	0
Sweet corn	0	0	0
Sweet potato	0	0	0
Total	0	18,390	11,580

Source: ITC Comtrade

Relative Size of Market Segments

- Because few retailers have their own distribution centres they rely on preferred suppliers/importers to deliver stock direct to stores. In some instances suppliers have been given a 'franchise' to retail a line of products at store level. As a result, relationships with these preferred suppliers are essential
- Retailers present in China include the major global operations, such as WalMart, Tesco and Carrefour, Asian retail chains such as E-Mart, RT-Mart and Jusco, and domestic chains such as CRC Vanguard/Ole. The majority are hypermarket formats.
- In time more direct to supermarket supply programs will emerge.
- Ongoing investment will be needed in cool chain infrastructure

Supply Windows

- Year round domestic production of most 'in scope' vegetables limits Australian supply windows.
- Better opportunities are likely in the period December to March when northern parts are under snow.

Freight and Logistics

- Sea freight Sydney direct 16 days
- Sea freight Brisbane direct 14 days
- Sea freight Melbourne takes 19 days
- Sea freight Fremantle is direct and takes 16 days
- Longer freight distances and hence costs than Australia supplying SE Asia

Market Access and Trade Viability Improvement Plan

- China warrants inclusion in the market access and trade viability improvement strategy given industry enthusiasm for this destination. Actions address additional research aimed at 'proving' the market in the event of enhanced access.

Hong Kong

Market Access

- Hong Kong (HK) is a free trade port. There are no duties or tariffs imposed on food imports
- Phytosanitary certificates are not required for fresh vegetables.

Trade Relationships with Australia

- Australia has a long history of supplying fresh produce to Hong Kong
- By value HK was the tenth largest purchaser of Australian fresh vegetables in 2012.

Demographics and Capacity to Pay

- Population: 7.2 million (2012 estimate)
- Population growth rate 0.42% (2012 estimate)
- Urban population: 100%
- GDP per capita: US\$49,400 (2011).

Vegetable Consumption

- HK is an affluent economy and a net food importer. The Island has a developed modern retail trade with an interest in novelty, new and different imported food products.
- There is a large expat community with a high disposable income that demands safe, reliable and premium food. There is some resistance to cheap and historically unreliable Chinese vegetables
- The key drivers of HK food trends are food safety, increasing health consciousness, changing demographics and busy lifestyles. Some emerging food consumption trends include organic food, functional food, convenience food, snack food and food for gifts.
- Australia's food safety programs are well regarded in Hong Kong.
- Hong Kong is a mature market with modest growth potential.
- While there is a market for premium fresh produce, Australia faces strong competition in vegetable markets from China which has production cost, culture and freight advantages.

Hong Kong Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	93,480	104,510	137,3670
Beans	21,740	2,900	2,900
Capsicum	0	0	0
Carrots	1,545,760	1,077,070	1,359,200
Cauliflower	0	970	673
Celery	0	970	0
Leek	1,090	1,940	970
Lettuce - head	157,620	162,580	124,530
Lettuce – other	597,870	438,380	566,650
Peas	29,350	17,420	0
Squash and pumpkin	0	0	182,450
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	3,260	3,870	0
Sweet potato	2,170	5,810	4,830
Total	2,452,340	1,816,420	3,615,873

Source: ITC Comtrade

Australian sales are dominated by carrots and pre packed and bulk baby leaf salads. Profiles are provided for all 'shortlisted' levied vegetables (see Chapter 2).

Beans

- A small and stable market for Australian product.

Broccoli

- Chinese sourced product dominates the winter (December, January and February) as does the US (California) product in summer (June, July and August).
- Australian product from Queensland production would compete with Salinas Valley California i.e. both arrive at the same time.
- Californian broccoli is all sea freighted and there were some reports that their freight rates are lower than those available from Australia.
- No Asian markets will accept broccoli with purple colouring in the head which is associated with broccoli growing in cooler weather and florets become purple (anthocyanin pigment) – rejected in market.

Capsicum

- HK imports relatively small quantities of capsicum.
- Imports are supplied by Canada, Australia, China, Indonesia, and the Netherlands.
- Capsicums have limited post-harvest shelf life – 14 days and non-Asian product is airfreighted
- Netherlands offer ‘spectacular quality’ from greenhouses, Australian are currently field grown

Carrots

- In 2002 most HK carrot imports came from Taiwan (38%), Australia (29%), China (20%) and NZ (9%). Medium to large Kuroda were required in 1kg packs. Australian carrots are marketed primarily through supermarkets. Chinese/Taiwan carrots are marketed through wet markets (variable size and colour).
- In 2012 China has increased market share, Taiwan has fallen away. NZ and Australia remain competitive. The low pack out rate of Kuroda (40%) make profitability on this line difficult. Nantes-Berlicum types from Western Australia are acceptable in the HK market.

VOLUME		CARROTS	HONG KONG													
				HONG KONG IMPORTS Tonnes												
				Product : 070610 Carrots and turnips, fresh or chilled												
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
China	25,158	21,733	16,337	67%	2,347	3,193	1,669	1,195	1,063	1,070	921	945	1,043	876	968	1,047
Australia	2,526	1,763	2,172	9%	173	123	132	185	188	176	202	194	224	188	171	216
Taiwan	6,971	9,091	5,689	23%	387	482	599	653	694	798	709	638	472	168	91	
United States	48	90	114	0%	5	4	13	10	10	14	7	17	11	6	8	10
Total Tonnes	34,736	32,730	24,316	100%	2,912	3802	2414	2044	1954	2058	1839	1794	1750	1238	1238	1273
VALUE		CARROTS	HONG KONG													
				HONG KONG IMPORTS A\$ '000												
				Product : 070610 Carrots and turnips, fresh or chilled												
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	3,564	3,540	4,321	63%	640	958	498	378	237	268	149	198	246	186	203	360
Australia	1,546	1,077	1,358	20%	94	80	71	99	110	96	127	134	154	132	113	147
Taiwan	1,221	1,568	991	14%	68	86	105	123	122	139	119	108	81	26	14	
United States	79	173	196	3%	10	7	23	20	19	27	7	20	16	12	14	20
Total A\$ '000	6,448	6,404	6,882	100%	813	1,132	704	620	488	530	406	460	497	356	345	533
A\$ per kg		CARROTS	HONG KONG													
				HONG KONG IMPORTS A\$ per kg												
				Product : 070610 Carrots and turnips, fresh or chilled												
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	0.14	0.16	0.26		0.27	0.30	0.30	0.32	0.22	0.25	0.16	0.21	0.24	0.21	0.21	0.34
Australia	0.61	0.61	0.63		0.55	0.65	0.54	0.54	0.59	0.55	0.63	0.69	0.69	0.70	0.66	0.68
Taiwan	0.18	0.17	0.17		0.18	0.18	0.18	0.19	0.18	0.17	0.17	0.17	0.17	0.16	0.16	
United States	1.65	1.92	1.71		2.06	1.96	1.70	1.94	1.99	1.89	0.98	1.19	1.44	2.04	1.85	2.11
A\$ per kg	0.19	0.20	0.28		0.28	0.30	0.29	0.30	0.25	0.26	0.22	0.26	0.28	0.29	0.28	0.42

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis based on MIRROR data supplied by exporters to Hong Kong

Notes :
 Hong Kong records data to 2011 though for consistency all above is Mirror data.
 The Hong Kong direct data is consistent for Australia and Taiwan though records around 20% of the recorded China export data to Hong Kong.
 Carrots and Turnips are combined

Celery

- Minimal celery exports from Australia between 2000 and 2012.
- The US dominates this market with 95% market share and year round supply.
- US product is well trimmed and tightly bunched.
- Australia has potential in this market.

VOLUME		CELERY	HONG KONG	HONG KONG IMPORTS Tonnes												
Product : 070940 Celery, other than celeriac, fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
United States	4,093	4,622	5,512	55%	132	163	337	461	742	605	546	616	484	547	645	234
China	5,311	4,896	4,529	45%	462	436	407	461	277	238	268	223	265	463	546	485
Taiwan	2		17	0%			6	10								
Australia	-	-	-	0%												
Total Tonnes	9,506	9,525	10,058	100%	594	599	750	932	1019	843	814	838	749	1010	1191	719

VALUE		CELERY	HONG KONG	HONG KONG IMPORTS A\$ '000												
Product : 070940 Celery, other than celeriac, fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
United States	3,857	2,813	3,395	80%	93	127	227	269	462	358	321	353	300	324	380	180
China	1,273	977	847	20%	156	113	113	126	37	30	29	27	30	55	63	68
Taiwan	1		14	0%			6	9								
Australia	-	-	-	0%												
Total A\$ '000	3,857	3,807	4,242	100%	232	240	346	404	499	389	350	380	330	380	446	248

A\$ per kg		CELERY	HONG KONG	HONG KONG IMPORTS A\$ per kg												
Product : 070940 Celery, other than celeriac, fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
United States	0.94	0.61	0.62		0.71	0.78	0.67	0.58	0.62	0.59	0.59	0.57	0.62	0.59	0.59	0.77
China	0.24	0.20	0.19		0.34	0.26	0.28	0.27	0.13	0.13	0.11	0.12	0.11	0.12	0.12	0.14
Taiwan	0.55		0.79				0.88	0.86								
Australia																
A\$ per kg	0.41	0.40	0.42		0.39	0.40	0.46	0.43	0.49	0.46	0.43	0.45	0.44	0.38	0.37	0.34

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis based on MIRROR data supplied by exporters to Hong Kong
Notes : Australia supplied up to 71 tonnes per year until 2004. Since then trade has been nil or negligible and was NIL in 2012

Leeks

- A small and stable market for Australian leeks.

Pre packed and bulk baby leafed salads

- The high \$A has been problematic for this trade.
- Leaf salads are supplied from China via US Fresh Express / Chiquita and OSI, so technology and food safety is improving. This product would be field grown. Hydroponic produce is also available from China and Malaysia. Hydroponic is generally thought to be less flavoursome than field grown
- There is some market place resistance to low cost unreliable Chinese grown salads.
- With HK only 7 hours flight from Perth Australian growers are able to harvest, wash, pack and deliver leafy salads within 24 hours providing an edge in freshness.
- In time Australia will export fresh herbs to complement packaged baby leaf salads – especially for the food service sector.
- Pre-packed salad demand has spread from expats to local white collar consumers – advice received from supermarket chain Pick n Pack
- Australia will need to compete with EU product sourced from Koppert Cress, Chiquita's Fresh Express brand from US, also Ready Pac, Earthbound and Dole
- Sales through hotel salad bars are possible.
- US chain store Just Salad has closed one store in HK due to high rent costs; UK chain Pret a Manger has scaled back due to rent costs; UK M&S has opened sandwich – salad sections; Pizza Express and Pizza Hut are serving salads in HK (but both use low cost Chinese salads)/

Lettuce - head

- Australia is a contingent supplier at best– hard to compete with China and the US.
- Chinese product travels overland by refrigerated truck at low cost.
- There are opportunities in this market as food safety standards are raised eg QSR restaurants require global GAP++ as well as the new ISO standard.
- There is a trend toward increased packaging and Australia would need to respond to this requirement.

Sweet Corn

- Majority of Australian and New Zealand exports are destined for Japan rather than Hong Kong.
- Baby corn is not currently an option. This product is sourced from Thailand or even Africa as it requires labour intensive handpicking. Research into mechanical baby corn harvesting is underway
- Value added sweet corn may be possible. Sweet corn is well suited for export - it offers a long ship and shelf life. Long life packaging further extends the retail window. Opportunities may be present in Asian fresh and QSR markets. Australian growers are mechanised and a year round supply program is possible. Import competition is Thailand and New Zealand.

Relative Size of Market Segments

- Modern retail is well developed, with Wellcome Supermarkets comprising 270 stores and Parkn Shop with over 250 stores, along with other Asian retailers. Both major chains are launching new formats to attract a wider range of customers.
- Traditional markets remain popular for fresh vegetable purchase.
- The food service sector includes hotels, restaurants and institutions (e.g. airlines and hospitals). Due to growth in tourism, demand for quality food is expected to increase at 5-star hotels and high end restaurants. There is also a trend for non-Chinese restaurants including Japanese food, fast food, coffee and snacks and casual dining.
- In- country infrastructure is well developed

Supply Windows

- Year round supply is possible given the absence of domestic production.

Freight and Logistics

- Longer freight distances and hence costs than Australia supplying SE Asia
- Sea freight Sydney direct 10 days
- Sea freight Brisbane direct 9 days Sea freight Melbourne takes 19 days
- Sea freight Fremantle is direct and takes 9 days

Market Access and Trade Viability Improvement Plan

- Hong Kong warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket / hypermarket sector.

Taiwan

Market Access

- Specific restrictions on fruiting vegetables from Australia (e.g. capsicum, pumpkins) with concerns particularly related to fruit flies
- Phytosanitary certificates required for fresh vegetables
- Access for fresh carrots from NSW and Qld was cancelled in 2010, and has since been reinstated
- Tariffs on Australian lines include a 27% duty on broccoli.

Trade Relationships with Australia

- No FTA agreement under negotiation between Australia and Taiwan
- Australia's trade relationship with Taiwan is mature.

Demographics and Capacity to Pay

- Population: 23.2 million (2012 estimate)
- Population growth rate 0.29% (2012 estimate)
- GDP per capita: US\$37,700 (2011).

Vegetable Consumption and Production

- Historically Taiwan has had a strong self-sufficiency focus, plus an emphasis on supply from the US, linked to defence provision (ABL 2002).
- Domestic production is constrained during the countries seven month long wet season. QSRs import all their vegetable needs during this period. Taiwan is low lying and vegetable farms tend to be small scale, uneconomic sized units. The Asian Vegetable R&D Centre is based in Taiwan and assists with the provision of technology.
- By value Taiwan was the nineteenth largest purchaser of Australian fresh vegetables in 2012

Taiwan Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	0	0	0
Beans	353,280	26,130	0
Capsicum	0	0	0
Carrots	210,880	20,320	193,070
Cauliflower	0	0	0
Celery	0	0	0
Leek	0	0	0
Lettuce - head	0	0	0
Lettuce – other	0	0	0
Peas	0	0	0
Squash and pumpkin	0	0	0
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	0	0	0
Sweet potato	0	0	0
Total	564,160	46,450	193,070

Source: ITC Comtrade

Beans

- Small trade with Australia that offers potential for additional, possibly value added sales e.g. top and tailed, microwavable and ready to eat.

Broccoli

- The US accounts for 95% of broccoli imports which are seasonal and co-inside with the northern summer/autumn monsoon season.

Capsicum

- Taiwan is a significant capsicum producer with Thailand, Netherlands, Indonesia and New Zealand also supplying this market. Taiwan grows capsicums December through August.
- The major Taiwanese import season is from August to November.
- Fruit fly restrictions prevent import of capsicum from the Australian mainland.

Carrots

- Market supplied by China, New Zealand and Australia.
- The New Zealand supply early in the season (May and June) and there may be opportunity to take market share from them with Nantes/Berlicum sourced from WA/ Queensland or Kuroda from Tasmania.

Celery

- Minimal exports from Australia between 2000 and 2012.
- The US dominates with 95% market share and year round supply. The US offers a range of varieties and consistent quality.

Lettuce – baby leaf and bulk shredded

- There is some potential to establish a market for Australian lines through QSR during the period from May-December.

Supply Windows

- The supply window for ‘in scope’ vegetables is generally from March through to and including October.

Freight and Logistics

- In- country infrastructure is well developed
- Longer freight distances and hence costs than Australia supplying SE Asia
- Sea freight Sydney direct 18 days
- Sea freight Brisbane direct 16 days
- Sea freight Melbourne direct 22 days
- Sea freight Fremantle is direct and takes 13 days

Market Access and Trade Viability Improvement Plan

- Taiwan warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be Quick Service Restaurants and potentially supermarkets with value added lines.

Japan

Market Access

- Specific restrictions in place for fruiting vegetables (e.g. capsicum and pumpkin)
- OHMA has the negotiation of access for pumpkins as a stated industry priority
- Tariffs are a modest 5%

Established Trade Relationships with Australia

- Japan is a vital and long standing export market for Australian business (DFAT website)
- Australia has been in negotiation with Japan on a FTA since April 2007 (DFAT website)

Demographics and Capacity to Pay

- Population: 127.4 million (2012 estimate)
- Population growth rate: minus 0.8% (2012 estimate)
- Urban population: 67%
- Major cities: Tokyo (36.5 M); Osaka-Kobe (11.3 M); Nagoya (3.3 M); Fukuoka-Kitakyushu (2.8 M); and Sapporo (2.7 M)
- GDP per capita: US\$34,700 (2011)
- The number of people in Japan is falling due to an aging population and declining birth rates.

Vegetable Production and Consumption

- Domestic vegetable production has been decreasing since the mid-1980s and has accelerated through the 1990s and into the new century. Japanese farmers are retiring and the next generation continue to seek off-farm employment.
- Consequently fresh vegetable imports as a share of consumption continue to rise.
- Japan is the world's ninth largest importer of vegetables (Rabobank 2006).

Vegetable Imports as a Percentage of Japan's Total Consumption ('000 tonnes)

	Production	Imports	Consumption	Imports Share (%)
1990	15,845	1,550	17,394	9%
1995	14,671	2,628	17,229	15%
2000	13,704	3,124	16,826	19%
2011	8,784	2,899	11,672	25%

Source: MAFF data reproduced by Promar Consulting and published in Asia Fruit Magazine July/August 2012

- The Japanese consume relatively large amounts of vegetables compared to most other countries.
- Health conscious consumers and an aging population are expected to propel future demand.
- Japanese consumers are fastidious about product freshness, safety and appearance. The slightest suggestion of chemical contamination will see purchases cease. Consequently the market is characterised by stringent safety and quality controls on fresh vegetable imports. There is a preference for domestic production followed by imports from countries with recognised food safety systems. These countries include the US, NZ and Australia.
- Regardless of these China is the leading supplier of imported vegetables to Japan.
- By value Japan was the second largest purchaser of Australian fresh vegetables in 2012

Japan Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	5,440	0	0
Beans	0	0	0
Capsicum	0	0	0
Carrots	2,413,210	1,443,830	2,164,290
Celery	0	0	0
Leek	317,410	329,020	379,380
Lettuce – other	0	0	63,710
Peas	0	0	33,790
Squash and pumpkin	0	0	0
Sweet corn – frozen	0	0	152,520
Sweet potato	0	0	0
Total	2,736,060	4,734,030	2,793,690

Beans

- Fresh beans are not a significant part of the Japanese diet.

Broccoli

- In 2012 imported broccoli was sourced from the US and China, but not Australia.
- In the past Japan has been an important Australian broccoli market and product was supplied mid-May to end October. From late 80's until 2007 'Matilda' were dominant in this market and their success was attributable to programmed crop scheduling, appropriate varieties, establishment by direct seeding scale in layout, laser levelling and good rotations to minimise diseases. Product was pre-sold and this is what was produced. Most of Matilda's broccoli was sea freighted from the eastern Darling Downs through port of Brisbane.
- There is potential to resurrect the Matilda model and Japan is supportive of Australia's low chemical / IPM success.

VOLUME		BROCCOLI		JAPAN													
JAPAN IMPORTS Tonnes																	
Product : 070490010 Cabbages,kohlrabi,kale and sim edible brassicas nes,fresh or chilled: Broccoli																	
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	
United States	35,281	34,111	45,090	91%	2,506	4,450	3,593	4,889	5,032	4,290	3,453	3,321	3,655	4,420	2,207	3,274	
China	299	2,347	6,175	12%	2,506	1,062	612	85			27	223	233	336	298	791	
Taiwan	-	24	22	0%		17	5										
Australia	2			0%													
Total Tonnes	35,683	36,580	49,735	100%	3,400	5530	4210	4975	5032	4290	3480	3544	3889	4755	2505	4127	
VALUE		BROCCOLI		JAPAN													
JAPAN IMPORTS A\$ '000																	
Product : 070490010 Cabbages,kohlrabi,kale and sim edible brassicas nes,fresh or chilled: Broccoli																	
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
United States	74,004	67,675	83,238	92%	5,386	7,904	5,849	8,845	8,612	8,197	6,743	5,627	6,493	8,940	3,831	6,811	
China	447	3,461	7,059	8%	1,328	1,533	946	134	-	-	42	366	412	552	465	1,282	
Taiwan	-	46	29	0%	-	21	9	-	-	-	-	-	-	-	-	-	
Australia	11	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	
Total A\$ '000	74,737	71,372	90,441	100%	6,713	9,457	6,803	8,980	8,612	8,197	6,784	5,993	6,904	9,492	4,297	8,207	
A\$ per kg		BROCCOLI		JAPAN													
JAPAN IMPORTS A\$ per kg																	
Product : 070490010 Cabbages,kohlrabi,kale and sim edible brassicas nes,fresh or chilled: Broccoli																	
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
United States	2.10	1.98	1.85		2.15	1.78	1.63	1.81	1.71	1.91	1.95	1.69	1.78	2.02	1.74	2.08	
China	1.49	1.47	1.14		0.53	1.44	1.55	1.57			1.54	1.64	1.76	1.64	1.56	1.62	
Taiwan		1.93	1.31			1.20	1.66										
Australia	5.23																
A\$ per kg	2.09	1.95	1.82		1.97	1.71	1.62	1.81	1.71	1.91	1.95	1.69	1.78	2.00	1.72	1.99	
Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis.																	
Notes : China supplied up to 15,000 tonnes p.a until 2006, then out of market for a few years and has started to supply again																	
Australia supplied up to 800 tonnes per year until 2006. Since 2006 has supplied 2 t in 2008 and 2010 only																	

Capsicum

- Historically the key suppliers to Japan have been the Netherlands, New Zealand and South Korea. South Korea supplied Japan all year round. Netherlands supplied July, August and September. NZ imports were concentrated between October and March.
- Concern was expressed in the literature about the reliability of South Korean exporters who will supply the local market if prices are higher in Seoul. The Dutch have moved to fill this gap.
- NZ send lots of capsicums but there are the smaller types grown in glasshouses with 3-4 lobes
- Capsicums from Tasmania were identified as a market growth opportunity by ABL in 2002. Increased production from covered sources in Asia has now closed this market opportunity.

Carrot

- Imports are dominated by China with significant sales also achieved by Taiwan, Australia and NZ.

- NZ carrot sales would ‘piggy back’ off squash and onion shipments i.e. share shipping space and be handled by the same agents.
- There may be some additional medium term potential for Australian carrot sales to Japan.
- Carrot juice was a short lived fad in Japan that temporarily lifted sales from Australia’s east coast.

Carrot Exports to Japan (Calendar Year 2011)

	Value (US\$ million)	Quantity (tonnes)	Market Share (%)	Price (US\$ per tonne)
China	33.4	66,471	83.0	500
Taiwan	4.7	5,355	6.7	680
NZ	3.7	5,314	6.6	880
Australia	2.2	2,621	3.3	860

Source: Ian James Vegetables Australia July / August 2012 using World Trade Atlas data

VOLUME		CARROTS		JAPAN		JAPAN IMPORTS Tonnes												
Product : 070610 Carrots and turnips, fresh or chilled																		
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes		
China	55,817	66,471	71,282	86%	5,154	4,805	7,862	6,403	5,656	4,978	10,003	4,434	5,312	6,954	4,738	4,983		
New Zealand	3,588	5,314	4,527	5%	-	-	1,119	1,254	1,116	397	424	218	0	-	-	-		
Taiwan	2,251	5,355	3,682	4%	125	499	1,683	1,182	193	-	-	-	-	-	-	-		
Australia	3,302	2,621	3,048	4%	104	207	408	318	223	475	577	183	49	185	205	113		
Total Tonnes	65,187	80,059	82,951	100%	5,395	5527	11132	9365	7209	5862	11021	4849	5373	7149	4959	5111		

VALUE		CARROTS		JAPAN		JAPAN IMPORTS A\$ '000												
Product : 070610 Carrots and turnips, fresh or chilled																		
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
	China	26,986	32,297	35,999	79%	1,843	1,909	3,359	3,578	4,086	3,704	5,073	2,320	2,797	3,535	1,923	1,872	
New Zealand	2,958	4,619	3,865	8%	-	-	960	1,107	995	308	330	161	3	-	-	-		
Taiwan	1,331	3,658	2,660	6%	83	333	1,165	932	148	-	-	-	-	-	-	-		
Australia	3,128	2,192	2,641	6%	96	191	383	300	208	324	416	179	53	189	190	111		
Total A\$ '000	34,769	43,179	45,700	100%	2,053	2,478	5,907	6,031	5,494	4,370	5,862	2,695	2,884	3,751	2,150	2,026		

A\$ per kg		CARROTS		JAPAN		JAPAN IMPORTS A\$ per kg												
Product : 070610 Carrots and turnips, fresh or chilled																		
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
	China	0.48	0.49	0.51		0.36	0.40	0.43	0.56	0.72	0.74	0.51	0.52	0.53	0.51	0.41	0.38	
New Zealand	0.82	0.87	0.85		-	-	0.86	0.88	0.89	0.78	0.78	0.74	12.80	-	-	-		
Taiwan	0.59	0.68	0.72		0.66	0.67	0.69	0.79	0.77	-	-	-	-	-	-	-		
Australia	0.95	0.84	0.87		0.92	0.92	0.94	0.94	0.93	0.68	0.72	0.98	1.07	1.03	0.93	0.98		
A\$ per kg	0.53	0.54	0.55		0.38	0.45	0.53	0.64	0.76	0.75	0.53	0.56	0.54	0.52	0.43	0.40		

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis.

Celery

- Japan is not a significant celery consumer and there is no opportunity for Australian product.

Leek

- Japan is both a significant producer and consumer of leeks. A colder climate favours dishes which include leek. Australia has lost market share in Japan due to reduced local production during the Millennium Drought. There is opportunity to recover Australian leek export sales to Japan.

Lettuce – head and other

- Japan sources most of its lettuce imports from China and USA. Australia is too far away to be competitive on freight. Japan has a seasonal schedule based on local supply summer sourced from cool mountain regions; contracts from China to supply (year round) and US (California– June till October)

- Australian producers have been asked to quote for supply of lettuce to Japan but are simply too expensive. There is no medium term opportunity for Australian lettuce or lettuce products except as a contingent supplier for the QSR sector.

Sweet Corn

- Traditionally Japan is a major importer of sweet corn, and most was sourced from New Zealand. The market wanted bi-colour and super sweet and Australia was a late adopter of bi-colour and super sweets, which are difficult to grow.
- There is opportunity in Japan for Australian sweet corn.

Relative Size of Market Segments

- Modern retail dominates Japanese vegetable sales
- In-country infrastructure is well developed
- The key feature of imports of vegetables into Japan is not so much about price but windows of seasonal opportunity

Supply Windows

- Broccoli – April to November
- Carrots – February to August
- Leek – January to October
- Sweet corn – year round

Freight and Logistics

- Longer freight distances and hence costs than Australia supplying SE Asia
- Sea freight Sydney direct 10 days
- Sea freight Brisbane direct 8 days
- Sea freight Melbourne direct 12 days
- Sea freight Fremantle is direct and takes 16 days

Market Access and Trade Viability Improvement Plan

- Japan warrants inclusion in the market access and trade viability improvement strategy. The focus of efforts needs to be completion of the relevant Free Trade Agreement; broccoli, carrots, leek, and sweet corn.

South Korea (ROK)

Market Access

- Specific restrictions on fresh vegetables susceptible to fruit flies
- Phytosanitary certificates required for fresh vegetables
- Access for carrots achieved in 2006 (freedom from nematode was the issue)
- FTA under negotiation since May 2009
- FTA offers potential for elimination of 30% duty on carrots and 20% duty on broccoli
- Zealous inspection and subsequent fumigation make access to this market difficult on commercial terms.

Trade Relationships with Australia

- ROK is one of Australia's largest export markets and overall trading partners
- By value the ROK was the seventh largest purchaser of Australian fresh vegetables in 2012

Demographics and Capacity to Pay

- Population: 49 million (2011 estimate)
- Population growth rate 0.2% (2012 estimate)
- Urban population: 83%
- Major cities: Seoul (9.8 M); Busan (3.4 M); Incheon (2.6 M); Daegu (2.5 M); Daejeon (1.5 M)
- GDP per capita: US\$22,778 (2011)

Vegetable Consumption and Production

- South Korea is a major vegetable grower with annual production approaching 10 million tonnes.
- The country is fairly self-sufficient in vegetables and can grow most types year round open field and protected cropping.
- The Korean Government supports vegetable production with financial assistance for infrastructure, building and equipment. This is expected to continue through to at least 2020 (USDA conclusion).
- Extreme weather conditions mean that most vegetables are grown in greenhouses, the balance are imported from China.
- Vegetable exports are growing e.g. capsicum to Japan.
- The consumption of vegetables in Korea is mainly through stews, soups and condiments (i.e. kimchee). Consequently there is little need for appearance, texture or taste and purchase is price driven. Traditionally the Koreans are large users of cabbage for kimchee and carrots and there is less awareness of vegetables such as broccoli, celery, capsicum and cauliflower.
- Consumers generally favour locally produced agricultural products. Many consumers still maintain the idea that local products are superior in quality and safety to imported products.
- Historically Australia has exported small volumes of carrots, broccoli and celery to Korea. Between 2010 and 2012 there were no exports of vegetables to the ROK.

South Korea Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	0	0	0
Beans	0	0	0
Capsicum	0	0	0
Carrots	0	0	0
Celery	0	0	0
Leek	0	0	0
Lettuce - head	0	0	0
Lettuce – other	0	0	0
Squash and pumpkin	0	0	0
Sweet corn – fresh	N/a	N/a	N/a
Total	0	0	0

Source: ITC Comtrade

Relative Size of Market Segments

- There is a large Korean middle class some of whom are concerned with food safety
- This group is driven by an interest in western diets and is health conscious
- There is a large and well established food service sector
- Premium markets include hotels, department stores and institutions
- In- country infrastructure is well developed

Supply Windows

- Supply is most prospective in the period April through November.

Freight and Logistics

- High cost of shipping, documentation, inspection, and labelling, coupled with high distributor mark-ups deteriorate price competitiveness of many imported products. Imports of agricultural products may require clearance from several agencies and are, thus, more likely to encounter port delays than other imported products. All new-to-market products are subject to mandatory laboratory testing conducted by the relevant inspection agency. (USDA GAIN Report)
- Sea freight Sydney direct 14 days Sea freight Brisbane direct 12 days
- Sea freight Melbourne takes 16 days
- Sea freight Fremantle is direct and takes 12 days

Market Access and Trade Viability Improvement Plan

- South Korea is not included in the Market Access and Trade Development Strategy. The ROK is a major vegetable grower in its own right, government is investing in self-sufficiency, it is supplied overland by China, and zealous inspection and subsequent fumigation make access difficult in commercial turns.

Vietnam

Market Access

- Specific restrictions on fruiting vegetables due to fruit fly concerns (e.g. capsicums and pumpkin).
- Phytosanitary certificates required for fresh vegetables.
- Under the ASEAN-Australia-New Zealand FTA (AANZFTA) vegetable tariffs will be phased down from 15% to zero for most Australian vegetable types.

Trade Relationships with Australia

- There are strong expat links between Australia and Vietnam
- Vietnam is a rapidly emerging economy

Demographics and Capacity to Pay

- Population: 91.5 million (2012 estimate)
- Population growth rate: 1.1% (2012 estimate)
- Urban population: 30%
- Major cities: Ho Chi Minh City (6.0 M), Hanoi (2.7 M); Haiphong (1.9 M); Da Nang 807,000
- GDP per capita: US\$3,300 (2010 estimate)

Vegetable Production and Consumption

- Vietnam is one of the world's top 15 vegetable producing countries (Rabobank 2006).
- The Dalat area of Vietnam is able to grow a wide range and abundance of temperate vegetables. Other major vegetable production areas include Salat; Red River Delta, and Cuu Long River Delta
- A range of latitudes in Vietnam means that year round production is possible.
- Vegetable production policy is directed toward import replacement with sophisticated crop scheduling and year round supply. By 2018 Vietnam will be a major competitor for Australia in Thailand, Malaysia and Singapore. Vietnam is already exporting lettuce and capsicum to QSRs in these markets.
- In addition to Vietnam becoming more self-sufficient in vegetables, they are well supplied with low cost imports from China. There is some concern among consumers about food safety in local and Chinese vegetables and this may be a point of difference for Australian vegetables.
- International Vegetable seed companies are basing themselves in Vietnam rather than just having distributorships, this means market is growing and getting more sophisticated – transitioning from open pollinators to hybrids. A big indicator of being more self-sufficient in vegetables.
- Vietnam's domestic post-harvest technology is lacking and this may provide opportunity for imports in the short term.
- Research completed by the study team concluded that 60% of supermarket consumers stated that safe certification of vegetables was either important or very important to them and 82% said product country of origin was either important or very important.
- Vietnam does not currently feature in the list of 'Top 20' importers of Australian vegetables

Vietnam Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	0	0	0
Beans	0	0	0
Capsicum	0	0	0
Carrots	0	0	0
Cauliflower	0	0	0
Celery	0	0	0
Leek	0	0	0
Lettuce	0	0	0
Squash and pumpkin	0	0	0
Sweet corn	0	0	0
Sweet potato	0	0	0
Total	0	0	0

Source: ITC Comtrade

Relative Size of Market Segments

- Ho Chi Minh City boasts 200 supermarkets in 2012 up from 100 in 2005
- Modern retail includes hypermarkets, supermarkets, trade centres, specialty fruit shops and convenience stores, accounting for an estimated 35% of retail in Ho Chi Minh City and less in other cities
- Major international chains such as Metro Cash & Carry, Big C and Dairy Farm are in place in Vietnam and more, such as Korea's E-Mart are scheduled to establish in 2013 (see table below).
- For all modern retailers, a major challenge is to source fruit and vegetables from reputable sources to ensure products are safe for their customers. In this area imported products with assured food safety and quality programs have a distinct advantage

Key Players in Vietnams Modern Retail Sector

Saigon Co-op Mart	<ul style="list-style-type: none"> • Vietnam's largest retailer • Established 1996 and locally owned • 61 stores in 2012 with plans to grow to 100 stores by 2015
Maxi Mark	<ul style="list-style-type: none"> • Hypermarket chain • Established 1995 and locally owned • Fivestores
Lotte Mart	<ul style="list-style-type: none"> • Korean owned • Established in Vietnam in 2008 • Four stores, with a further four planned for end of 2012
Big C	<ul style="list-style-type: none"> • Part of the French Casino Group • Hypermarket chain with 21 stores
Metro Cash & Carry	<ul style="list-style-type: none"> • German international self-service wholesale retailer • 19 stores in Vietnam, 18 outside Ho Chi Minh City
Citimart	<ul style="list-style-type: none"> • Supermarkets and hypermarkets • 20 stores in Ho Chi Minh City
Dairy Farm	<ul style="list-style-type: none"> • Hong Kong based • First Wellcome supermarket in Vietnam 2007 • Now with two stores and further expansion planned
Hapro Mart	<ul style="list-style-type: none"> • Vietnam Government owned and Hanoi based • 3 supermarkets, 16 convenience stores and 14 specific commodity shops
Fivimart	<ul style="list-style-type: none"> • Locally owned • 16 stores, 14 of which are in Hanoi • Chain has enough scale to directly import Washington apples
Mela	<ul style="list-style-type: none"> • Locally owned and established 2011 • Single supermarket in Ho Chi Minh City with plans for expansion

Source: John Baker, Asia Fruit Magazine April 2013

Freight and Logistics

- Infrastructure is developing, driven by country-wide distribution of vegetables from Dalat. The biggest constraint is the relative lack of refrigerated road transport for internal distribution.

Market Access and Trade Viability Improvement Plan

- Vietnam is not included in the Market Access and Trade Development Strategy. Vietnam still has only a limited premium market, is able to access large volumes of low cost Chinese vegetables plus local seasonal produce that satisfies domestic needs. Vietnam is working towards an exportable surplus of vegetables and will compete with Australia in South East Asian markets by 2018.

Thailand

Market Access

- FTA with Australia negotiated in 2003 and effective since 2005 (DFAT website)
- Phytosanitary certificates required for fresh vegetables
- Tariffs abolished in 2010

Trade Relationships with Australia

- The FTA has resulted in a doubling of trade between Australia and Thailand
- Thailand is the second largest economy in South East Asia
- Politically Australia has had a close association with the Thais

Demographics and Capacity to Pay

- Population: 67.1 million (2012 estimate)
- Population growth rate 0.54% (2012 estimate)
- Urban population: 34%
- Major cities: Bangkok (6.9 M)
- GDP per capita: US\$5,394 (2011)

Vegetable Production

- Thailand is the world's ninth largest vegetable producer.
- Since the late 1990s the Thai Government has pursued a food development and export policy.
- This policy has included development of temperate vegetable production in both Chang Mai and Chang Rai. Cold climate vegetables (cauliflower, broccoli, carrots and celery) are now grown domestically where previously they were imported, primarily from Australia (ABL 2002).
- International vegetable seed companies are basing themselves in Thailand.
- Despite the progress made Thailand still uses a lot of traditional open pollinated cultivars, grower skills need to be developed and post-harvest technology is poor. A lack of mechanisation and increasing labour costs will constrain future growth in vegetable production.
- There may be opportunities for carrots as these are difficult to grow in Thailand.

Vegetable Consumption

- Thailand's major supermarket chains (e.g. Supavadee at Central / Tops) report that many of their customers, particularly in their upscale chains, want to know the origin of vegetables being stocked because of concern for the safety of vegetables from some countries
- Despite this concern Thailand is a very price competitive market and product which cannot be sourced domestically is supplied overland from China. A lot of this trade is 'leakage' and does not show up in the official data. There are strong bilateral trade between Thailand and China (Thais supply tropical fruits and Chinese supply temperate vegetables).
- By value Thailand with the fourteenth largest purchaser of Australian fresh vegetables in 2012

Thailand Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	23,910	8,710	4,276
Beans	1,090	0	0
Capsicum	0	0	0
Carrots	776,140	601,920	862,050
Cauliflower	3,260	970	554
Celery	3,260	3,870	33,790
Leek	3,260	7,740	6,760
Lettuce - head	6,520	1,940	5,790
Lettuce – other	20,650	26,130	72,400
Peas	25,000	0	0
Squash and pumpkin	0	0	0
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	6,520	6,770	2,900
Sweet potato	0	0	0
Total	869,610	658,050	988,520

Source: ITC Comtrade

Beans

- Fresh beans are not a significant part of the Thai diet.

Broccoli

- Broccoli stem is a key ingredient in Thai cooking
- Thai production in Chang Mai and Chang Rai is year round
- Australia has maintained a modest market for broccoli since at least 2000
- China has also created a window of opportunity between local and Australian supply for broccoli that is better than domestic production but cheaper than Australian sourced supply.
- There is little opportunity to grow broccoli exports outside the food service and upscale supermarket sectors. Ordinary Thai consumers have limited capacity to pay and are price sensitive.

Capsicum

- Australia was the sole exporter in 2000 with a modest 6 tonnes; by 2010 there were no Australian capsicum exports.
- Domestic production of capsicum is now too strong for Australia to compete and Holland dominates any upscale imports (colours, sizes, shapes, etc.).

Carrots

- Thai domestic product is available all year but quality is poor (small, skinny, pointy, dark, not sweet)
- Consequently Thailand is a significant carrot importer.
- Imported product is sourced from China, Australia, New Zealand and Taiwan.
- China and Taiwan are an emerging threat and their season coincides with Australia
- Nevertheless there are likely to be opportunities to grow carrot exports to Thailand over both the short and medium term.

Celery

- Thailand has a year round production sector and only small volumes are required for augmentation
- Celery is used in Thai stir fries, Australian imports are directed to the food service sector
- The market for Australian celery is mature.

Leek

- Leeks are not a significant part of the Thai diet.

Lettuce

- China can supply lettuce from Kunming province (like Atherton Tablelands) to Thailand in less than two hours by road. They grow a wide range of temperate vegetables in Kunming.
- The balance of Thailand's lettuce needs are met by Vietnam, when the wet season destroys local production
- At best Australia is a contingent supplier and QSR is less popular in Thailand.

Sweet Corn

- Significant domestic producers, net exporters, no opportunities for Australia.

Relative Size of Market Segments

- Thailand has a modern retail sector in major urban areas, and world class retail in the major cities.

Urban Thailand – Expenditure by Trade Channel (%)

Channel	Upper Income	Middle Income	Lower Income
Hypermarket	13	10	7
Supermarket	4	3	2
Wet Market	77	81	84
Other	6	5	7
Total	100	100	100

Source: The Neilson Company (presented by Supavadee Central Tops Thailand to Asia Fruit Congress 2012)

Supply Windows

- Broccoli – April to November
- Carrots – August to February
- Celery – September to January

Freight and Logistics

- Infrastructure exists to service major population centres
- Sea freight Sydney involves transshipment and takes 22 days
- Sea freight Brisbane via Singapore 14 days
- Sea freight Melbourne involves transshipment and takes 22 days
- Sea freight Fremantle is direct and takes 11 days

Market Access and Trade Viability Improvement Plan

- Thailand is not included in the Market Access and Trade Development Strategy. Thailand is a relatively small consumer of imported vegetables with limited capacity to pay for imports. Thailand is developing domestic supply capacity, plus it receives product overland from neighbouring producers.

Philippines

Market Access

- Under the ASEAN-Australia-New Zealand FTA vegetable tariffs will be phased down to zero for most vegetables but for vegetables with high tariffs only modest reductions will be made. Tariffs on Australian vegetables are typically around 25%. Fresh vegetables with high tariffs include celery, carrots, cauliflower, broccoli and lettuce (DFAT website).
- Phytosanitary certificates required for fresh vegetables.
- Specific restrictions on capsicums due to fruit fly but not for Tasmania, the Northern Territory and South Australia.

Trade Relationships with Australia

- Relative to other ASEAN countries, the Philippines is a less significant Australian trading partner
- The Philippines business culture is challenging for Australian nationals.

Demographics and Capacity to Pay

- Population: 103.8 million (2012 estimate)
- Population growth rate 1.9% (2012 estimate)
- Urban population: 49%
- Major cities: Manilla (11.4 M); Davao (1.48 M); Cebu City (845,000); Zamboanga (827,000)
- GDP per capita: US\$4,100 (2011).

Vegetable Production

- The Philippines does not have a strong vegetable growing culture and vegetable production does not have the same prestige as fruit and cattle grazing. Corporates dominate fruit production (e.g. banana and pineapple), however there are no standout large scale vegetable producers.
- East West Seeds (owned by Dutch seed company Enza Zaden) is supporting modern vegetable varieties in the Philippines
- However the Philippines have not adopted hybrids at the same rates as other Asian vegetable producing countries.
- At the present time there is investment in low cost protected cropping (ACIAR international project) to deal with what is a difficult vegetable producing climate that is subject to widespread flooding.
- There is a production shortfall during the monsoon.

Vegetable Consumption

- The demand for imported vegetables is small – price premiums place consumption beyond most consumers. Demand for imports is derived from the hospitality industry and upscale supermarkets
- Capacity to pay for imports is limited to these niches.
- Both Australia and the US have been traditional suppliers to the Philippines
- Importers have preferred Australia because of the freight cost advantage
- Costs for air and sea freight are similar for Australia, and the US but US only supplies sea freight in 40 foot reefers and these are often too large for the market to absorb.
- Growth in the sector has been through QSR and has created demand for tomatoes, lettuce head, capsicum, corn, potato and onion. However, imports are only used to fill domestic supply shortfalls.
- HAVI Foods – logistics company are probably relying on imported product for its QSR business. Consequently the Philippines with its narrow production is import dependent. Australia receives offers to quote to supply the QSR sector but is usually beaten by US (e.g. airfreight lettuce).
- The Philippines was not one of the ‘Top 20’ purchasers of Australian fresh vegetables in 2012

Philippines Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	58,700	13,550	20,555
Beans	0	0	0
Capsicum	0	0	0
Carrots	0	0	970
Cauliflower	4,350	4,840	2,615
Celery	11,960	6,770	3,860
Leek	0	0	0
Lettuce - head	0	0	0
Lettuce – other	80,440	67,740	67,570
Sweet corn – fresh	0	0	0
Sweet potato	0	0	0
Total	155,450	92,900	95,570

Source: ITC Comtrade

Beans

- Fresh beans are not a significant part of the Philippine diet.

Broccoli

- Australia has had a small market for broccoli in the Philippines since at least the late 1990s
- Australian product has been used in food service and upscale supermarkets
- Imports normally supplied to Manilla by airfreight
- Domestic production is small scale and lacks quality
- China has started to supply Philippines with broccoli in 20 foot reefers – cheaper than Australia and better quality than local. China has the capacity to saturate the Filipino broccoli market

Capsicum

- Capsicum is only imported in small volumes.
- There is adequate domestic production – average production between 8,000 and 10,000 tonnes pa

Carrots

- Philippines is a significant carrot producer
- Domestic product is of average quality and low cost
- Import volumes are very small.

Celery

- Philippines is a minor celery producer.
- Celery is not a popular vegetables in the Philippines, it is not part of traditional cooking
- The US and Australia supply modest volumes and transport logistics favour Australian supply

Leek

- Leek is not a significant part of the Philippine diet.

Lettuce

- Australia receives offers to quote during the monsoon season/floods but usually beaten by US on price. Product is airfreighted to Manilla.

Sweet corn

- There is ample local sweet corn supply

Relative Size of Market Segments

- Imported vegetable market is confined to hospitality and upscale supermarket sector

Supply Windows

- Supply opportunities are best during the Philippine monsoon season which runs from May till October.

Freight and Logistics (ABL 2002)

- Poor internal roads make domestic supply difficult
- Sea freight Sydney involves transshipment and takes 20 days
- Sea freight Brisbane via Kaohsiung 14 days (
- Sea freight Melbourne direct and takes 22 days (
- Sea freight Fremantle is direct and takes 19 days

Market Access and Trade Viability Improvement Plan

- The Philippines is not included in the Market Access and Trade Development Strategy. The Philippines has limited capacity to pay across the general population, a limited premium market sector, poor growth outlook and opaque market structures.

Singapore

Market Access

- The Singapore-Australia Free Trade Agreement (SAFTA) became operational in July 2003. Tariffs on Australian products exported to Singapore were eliminated.
- Singapore has an open import regime and food products are imported from all over the world.

Trade Relationships with Australia

- Singapore was the single most important purchaser of Australian fresh vegetables by value in 2012.
- Australia is perceived as ‘traditional’ supplier by Singapore.

Demographics and Capacity to Pay

- Population: 5.4 million (2012 estimate)
- Population growth rate: 2% (2012 estimate)
- Urban population: 100%
- GDP per capita: US\$59,700 (2011)

Vegetable Consumption

- Singapore is highly reliant on imported vegetables, with Australia a major supplier of fresh vegetables.
- Other major sources of supply include China, Malaysia and Thailand.
- It is estimated that between 25% and 75% of Singapore’s food imports are re-exported to neighbouring countries. A small local population limits total food demand.
- Nevertheless Singaporeans spend an estimated 22% of their income on food – this is very high by world standards and Singapore residents have an enviable lifestyle (pers. comm.. QDAFF 2012).
- There is capacity to pay for imported vegetables however for the middle income group, which is most Singaporeans, there is price sensitivity on staples such as fresh vegetables.
- Singaporean consumers are becoming increasingly health conscious and local supermarket chains like NTUC Fair Price and Dairy Farm have been developing their upmarket stores to capture premium sales.
- Wealth and health trends have led to an increasing interest in organic produce albeit off a low base however demand is sensitive to pricing. At the premium end of the market consumers are also displaying a strong interest in novelty and variety.
- Australia has a good reputation for quality, a time zone that is convenient for business and both air and sea freight shipping services that are fast, frequent and relatively cheap.

Singapore Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	4,113,320	3,697,650	4,630,832
Beans	7,610	0	0
Capsicum	0	0	0
Carrots	10,043,070	9,291,050	8,887,890
Cauliflower	80,440	51,290	78,098
Celery	183,710	160,640	164,110
Leek	56,530	71,6100	122,600
Lettuce - head	270,670	441,280	548,310
Lettuce – other	1,962,090	1,489,320	1,388,160
Peas	22,830	1,940	2,900
Squash and pumpkin	N/a	N/a	1,109,180
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	0	8,710	0
Sweet potato	102,180	86,130	51,160
Total	16,842,450	15,944,110	16,983,240

Source: ITC Comtrade

Beans

- Indonesia has 20% market share but is three times more expensive than Malaysia which is the major source country.
- Australia has potential to increase sales in this market, potentially through the development of value added lines for supermarket retail. Close links with the two main supermarket groups Cold Storage and NTUC would be required.

Broccoli

- In 2001 Australia exported 3,800 tonnes of broccoli to Singapore.
- In 2012 Australia supplied 1,719 tonnes of broccoli or 20% of the market which was dominated by imports from China with a 74% market share. Australia's share has increased since 2009 (15%) despite price rises. Importers say quality of Qld broccoli is superior; regular supply and price is an issue.
- AUSTRADE: 50% of consumers purchase on head size or price, 30% on country of origin.
- Individual packaging for broccoli was seen as appealing to 20% of consumers for convenience, hygiene and food safety reasons.
- Importers looking to direct source from Australian farmers, selling directly to supermarkets.
- Growers, exporters and importers need to work together to develop a set of product specifications.
- Clean and green status of Australian broccoli offers opportunity to expand sales.
- Use quality and reliability of supply to offer an alternative to cheap Chinese broccoli.

Broccoli Exports to Singapore (Calendar Year 2011)

	Value (US\$ million)	Quantity (tonnes)	Market Share (%)	Price (US\$ per tonne)
Australia	4.8	1,550	18.2	3,094
China	8.3	6,479	76.1	1,281

Source: Ian James Vegetables Australia July / August 2012 using World Trade Atlas data

NB: balance of market was Malaysia and US (pers. comm. QDAFF)

VOLUME		BROCCOLI	SINGAPORE	SINGAPORE IMPORTS Tonnes												
Product : 07041020 Headed broccoli fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
China	5,419	6,479	6,259	74%	716	585	612	501	332	368	426	548	415	542	527	687
Australia	1,751	1,549	1,719	20%	36	63	46	136	250	208	213	151	183	206	144	83
Malaysia	201	250	248	3%	17	18	21	19	19	21	24	22	20	23	22	22
United States	80	78	154	2%	4	3	4	4	67	23	4	5	25	6	5	4
Total Tonnes	7,596	8,515	8,506	100%	786	698	724	666	672	623	687	730	643	778	701	798
VALUE		BROCCOLI	SINGAPORE	SINGAPORE IMPORTS A\$ '000												
Product : 07041020 Headed broccoli fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	7,748	8,030	9,273	54%	887	702	808	771	625	576	664	871	696	825	768	1080
Australia	5,334	4,644	6,527	38%	152	228	163	459	1028	821	858	639	725	775	418	262
Malaysia	350	565	532	3%	37	40	49	37	40	45	47	45	43	51	49	50
United States	287	286	447	3%	22	21	23	19	115	66	24	24	47	31	30	25
Total A\$ '000	14,038	13,771	17,041	100%	1,120	1,038	1,129	1,303	1,817	1,515	1,628	1,592	1,515	1,690	1,272	1,423
A\$ per kg		BROCCOLI	SINGAPORE	SINGAPORE IMPORTS A\$ per kg												
Product : 07041020 Headed broccoli fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	1.43	1.24	1.48		1.24	1.20	1.32	1.54	1.88	1.57	1.56	1.59	1.68	1.52	1.46	1.57
Australia	3.05	3.00	3.80		4.23	3.61	3.54	3.37	4.11	3.95	4.03	4.23	3.96	3.76	2.91	3.16
Malaysia	1.74	2.26	2.14		2.15	2.23	2.34	1.93	2.10	2.15	1.94	2.04	2.16	2.20	2.23	2.26
United States	3.59	3.67	2.90		5.54	6.84	5.68	4.83	1.72	2.88	6.07	4.77	1.88	5.18	5.96	6.22
A\$ per kg	1.85	1.62	2.00		1.42	1.49	1.56	1.96	2.70	2.43	2.37	2.18	2.36	2.17	1.82	1.78

Sources : ITC calculations based on International Enterprise Singapore, Ministry of Trade and Industry statistics; Fresh Intelligence analysis

Capsicum

- Major supplier is Malaysia (Cameron Highlands) year round via truck without the cost of airfreight.
- Australia tends to be used as the fall back supplier for Malaysia. Malaysia has a freight/proximity advantage with this time sensitive vegetable and is reported as supplying quality product into Singapore year round. Indonesia provides an alternative source when needed. A small amount is also sourced from the Netherlands. Opportunities for Australia to significantly increase exports seem remote.

Carrots

- ABL 2002: in 2002 Australia had an 80% market share and the only competitor was NZ who can only supply February to August. Chinese carrots were unwashed and poor quality but perceived as a threat for the future. The Nantes variety was well regarded in Singapore.
- Australia has been the dominant supplier of carrots to Singapore in the last three years 2010 to 2012 with a market share in 2012 of 56%, followed by China and Malaysia with market shares of 37% and 4% respectively. The price received by Australia has been significantly higher than China over the last three years: in 2012, Australia's price was 82% higher.

Carrot Exports to Singapore (Calendar Year 2011)

	Value (US\$ million)	Quantity (tonnes)	Market Share (%)	Price (US\$ per tonne)
Australia	11.0	11,651	57.7	948
China	3.4	6,915	34.2	491
NZ	0.7	398	2.0	876

Source: Ian James Vegetables Australia July / August 2012 using World Trade Atlas data

VOLUME		CARROTS	SINGAPORE	SINGAPORE IMPORTS Tonnes													
		Product : 07061010 Carrots fresh or chilled															
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	
Australia	12,253	11,652	11,874	56%	890	976	898	863	1062	943	949	1299	815	1257	1024	897	
China	5,656	6,916	7,924	37%	994	419	875	519	622	541	690	544	659	585	663	813	
Malaysia	599	798	849	4%	76	63	69	64	71	67	73	77	65	72	73	79	
United States	186	240	236	1%	19	19	24	21	16	16	23	12	24	24	21	17	
New Zealand	158	399	239	1%				61	51	74	50						
Total Tonnes	19,073	20,200	21,212	100%	1993	1485	1879	1541	1826	1642	1790	1938	1568	1945	1786	1819	

VALUE		CARROTS	SINGAPORE	SINGAPORE IMPORTS A\$ '000													
		Product : 07061010 Carrots fresh or chilled															
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Australia	10,902	10,694	11,032	65%	807	876	831	799	967	844	863	1363	746	1144	962	829	
China	2,788	3,285	4,041	24%	457	171	400	283	445	384	358	294	380	298	264	318	
Malaysia	366	774	898	5%	93	66	64	63	74	69	76	82	73	77	79	80	
United States	554	642	630	4%	51	50	62	55	41	45	59	39	60	59	55	53	
New Zealand	110	337	219	1%				54	45	64	45						
Total A\$ '000	15,102	16,051	17,037	100%	1,435	1,187	1,388	1,275	1,584	1,416	1,411	1,794	1,274	1,597	1,374	1,312	

A\$ per kg		CARROTS	SINGAPORE	SINGAPORE IMPORTS A\$ per kg													
		Product : 07061010 Carrots fresh or chilled															
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Australia	0.89	0.92	0.93		0.91	0.90	0.93	0.93	0.91	0.90	0.91	1.05	0.92	0.91	0.94	0.92	
China	0.49	0.48	0.51		0.46	0.41	0.46	0.55	0.72	0.71	0.52	0.54	0.58	0.51	0.40	0.39	
Malaysia	0.61	0.97	1.06		1.23	1.05	0.93	0.98	1.04	1.03	1.04	1.07	1.12	1.07	1.08	1.02	
United States	2.98	2.67	2.67		2.69	2.65	2.60	2.62	2.56	2.82	2.58	3.26	2.48	2.47	2.61	3.09	
New Zealand	0.69	0.84	0.92					0.89	0.88	0.87	0.89						
A\$ per kg	0.79	0.79	0.80		0.72	0.80	0.74	0.83	0.87	0.86	0.79	0.93	0.81	0.82	0.77	0.72	

Sources : ITC calculations based on International Enterprise Singapore, Ministry of Trade and Industry statistics; Fresh Intelligence analysis

Celery

- Australia has not performed well in Singapore with celery – 500 tonnes in 2001 (sourced from WA), dropping to 146 tonnes in 2012.
- In 2012, the US (California) had 77% market share with their product being cheaper than the Australian product with a 3% market share and having a longer shelf life and better packaging. However the US product was 32% more expensive than the Chinese celery which had a market share of 11% in 2012.

VOLUME	CELERY	SINGAPORE	SINGAPORE IMPORTS Tonnes													
Product : 070940 Celery, other than celeriac, fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
United States	3,933	3,646	4,489	77%	343	320	337	392	426	383	444	251	385	493	414	301
China	807	1,186	651	11%	99	61	54	26	27	37	42	36	50	60	62	97
Malaysia	524	399	451	8%	26	35	37	37	31	36	33	52	44	42	39	39
Australia	189	157	146	3%	9	12	11	13	12	9	10	16	14	15	13	12
Total Tonnes	5,479	5,456	5,817	100%	493	432	451	491	501	468	531	358	497	611	532	451
VALUE	CELERY	SINGAPORE	SINGAPORE IMPORTS A\$ '000													
Product : 070940 Celery, other than celeriac, fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
United States	3,926	3,617	4,292	77%	318	311	299	352	382	351	406	251	395	534	405	288
China	587	745	478	9%	60	35	36	25	33	34	29	30	46	48	40	63
Malaysia	575	496	433	8%	37	35	27	32	27	30	31	45	33	34	46	56
Australia	249	218	198	4%	13	16	15	17	16	12	14	21	20	20	17	16
Total A\$ '000	5,392	5,171	5,574	100%	457	409	399	446	472	440	489	358	509	645	517	434
A\$ per kg	CELERY	SINGAPORE	SINGAPORE IMPORTS A\$ per kg													
Product : 070940 Celery, other than celeriac, fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
United States	1.00	0.99	0.96		0.93	0.97	0.89	0.90	0.90	0.92	0.91	1.00	1.03	1.08	0.98	0.96
China	0.73	0.63	0.73		0.60	0.57	0.67	0.97	1.22	0.92	0.69	0.82	0.92	0.79	0.65	0.65
Malaysia	1.10	1.24	0.96		1.41	1.01	0.72	0.86	0.87	0.84	0.94	0.86	0.74	0.81	1.18	1.45
Australia	1.32	1.39	1.35		1.39	1.32	1.38	1.34	1.33	1.34	1.36	1.31	1.44	1.36	1.33	1.35
A\$ per kg	0.98	0.95	0.96		0.93	0.95	0.88	0.91	0.94	0.94	0.92	1.00	1.02	1.06	0.97	0.96

Sources : ITC calculations based on International Enterprise Singapore, Ministry of Trade and Industry statistics; Fresh Intelligence analysis

Lettuce – head

- In 2012, the US and Malaysia dominated imports, with a market share of 34% each, followed by China with a market share of 20%. In 2012, Australia had a negligible volume of lettuce exports to Singapore with its price being more than twice that of the three main suppliers.
- Chinese product travels overland by truck at low cost.
- Australia is a contingent supplier at best – hard to compete with China and the US.

VOLUME

SINGAPORE IMPORTS Tonnes

Product : 070511 Cabbage lettuce (head lettuce) fresh or chill

Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
United States	4,113	2,769	3,791	34%	174	243	290	397	333	281	486	314	418	454	284	117
Malaysia	2,079	2,521	3,775	34%	237	232	230	177	211	256	415	382	420	471	387	357
China	2,914	3,492	2,252	20%	456	194	130	203	211	226	124	107	124	58	160	259
Australia	129	38	39	0%	4	2	1	14	5	2	3	4	3	1	0	0
Total Tonnes	10,479	10,414	11,185	100%	1101	864	875	971	817	828	1089	860	1017	1032	901	830

VALUE

SINGAPORE IMPORTS A\$ '000

Product : 070511 Cabbage lettuce (head lettuce) fresh or chilled

A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	United States	5,442	3,392	4,552	35%	222	283	318	402	364	386	544	343	518	587	391
Malaysia	2,191	3,236	3,863	30%	226	219	262	236	283	286	390	349	379	467	388	379
China	2,921	3,302	2,395	19%	499	198	139	206	233	230	150	123	140	66	142	270
Australia	289	160	112	1%	20	13	7	17	11	5	12	13	9	4	1	0
Total A\$ '000	12,492	12,155	12,867	100%	1,316	935	974	1,075	995	1,011	1,192	909	1,139	1,248	1,049	1,024

A\$ per kg

SINGAPORE IMPORTS A\$ per kg

Product : 070511 Cabbage lettuce (head lettuce) fresh or chilled

A\$ per kg	2010	2011	YEAR 2012	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
United States	1.32	1.22	1.20	1.28	1.16	1.10	1.01	1.09	1.38	1.12	1.09	1.24	1.29	1.38	1.65
Malaysia	1.05	1.28	1.02	0.95	0.94	1.14	1.33	1.34	1.12	0.94	0.91	0.90	0.99	1.00	1.06
China	1.00	0.95	1.06	1.09	1.02	1.07	1.01	1.10	1.02	1.21	1.15	1.13	1.14	0.89	1.04
Australia	2.24	4.20	2.87	5.06	6.53	6.63	1.24	2.20	2.51	3.89	3.34	2.88	3.89		
A\$ per kg	1.19	1.17	1.15	1.20	1.08	1.11	1.11	1.22	1.22	1.09	1.06	1.12	1.21	1.16	1.23

Sources : ITC calculations based on International Enterprise Singapore, Ministry of Trade and Industry; Fresh Intelligence analysis

Pre packed and bulk baby leaf salads

- In the last three years Malaysia has dominated imports with an 81% market share in 2012 followed by China with a 9% market share. Australian exports over these three years have averaged approximately 270 tonnes with a market share of 7% in 2012, with the Australian product more than three times the price of the Malaysian and Chinese product.
- Supafresh WA (Asia Fruit Mag July 2012) export baby leaf salad to Singapore on a 'random and un-programmed basis'. The high \$A has been a problem. This is a market with plenty of opportunity; it has a large expat community with a high disposable income that demands safe, reliable and premium food product. There is resistance to cheap unreliable Chinese grown salads.
- With Singapore only 5 hours flight from Perth, Australian growers can harvest, wash, pack and deliver leafy salads within 24 hours, giving Australian sourced produce the edge in freshness.
- In time Supafresh will export fresh herbs to complement packaged baby leaf salads – especially for the food service sector. International airlines are re-provisioning in Singapore so this creates a market.

VOLUME	LETTUCE	OTHER	SINGAPORE IMPORTS Tonnes													
Product : 070519 Lettuce, fresh or chilled nes																
Exporters	2010	2011	YEAR 2012	share	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
Malaysia	3,425	3,426	3,552	81%	234	302	285	288	305	295	318	316	274	294	327	314
China	476	652	374	9%	35	33	32	31	30	28	31	24	28	27	35	40
Australia	262	258	295	7%	34	21	23	24	27	23	16	21	22	26	27	31
Netherlands	31	32	54	1%	3	3	3	4	4	5	6	5	5	5	5	6
Total Tonnes	4,244	4,524	4,387	100%	328	362	349	356	372	361	377	374	334	360	406	408
VALUE	LETTUCE	OTHER	SINGAPORE IMPORTS A\$ '000													
Product : 070519 Lettuce, fresh or chilled nes																
A\$ '000	2010	2011	YEAR 2012	share	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Malaysia	6,240	6,196	6,539	65%	535	547	539	519	551	524	567	556	497	561	564	580
China	624	781	552	5%	50	47	43	44	45	48	47	40	45	44	45	54
Australia	1,741	1,807	2,035	20%	185	149	159	163	185	152	119	172	171	188	184	207
Netherlands	290	273	395	4%	22	25	30	30	27	33	47	29	31	40	36	46
Total A\$ '000	9,217	9,496	10,088	100%	856	793	804	795	856	810	820	841	793	883	892	946
A\$ per kg	LETTUCE	OTHER	SINGAPORE IMPORTS A\$ per kg													
Product : 070519 Lettuce, fresh or chilled nes																
A\$ per kg	2010	2011	YEAR 2012		Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Malaysia	1.82	1.81	1.84		2.29	1.81	1.89	1.80	1.81	1.78	1.78	1.76	1.81	1.91	1.72	1.85
China	1.31	1.20	1.48		1.43	1.41	1.33	1.43	1.50	1.72	1.50	1.67	1.61	1.62	1.29	1.36
Australia	6.65	7.00	6.90		5.44	7.11	6.92	6.80	6.85	6.59	7.47	8.17	7.78	7.25	6.80	6.69
Netherlands	9.36	8.53	7.31		7.38	8.40	10.10	7.48	6.75	6.62	7.77	5.72	6.15	7.97	7.12	7.65
A\$ per kg	2.17	2.10	2.30		855.89	792.90	803.91	794.64	855.83	809.95	819.88	841.21	793.20	883.13	892.45	945.50

Sources : ITC calculations based on International Enterprise Singapore, Ministry of Trade and Industry statistics; Fresh Intelligence analysis

Sweet corn

- Value adding may be feasible; competition would be New Zealand.

Relative Size of Market Segments

- Supermarket retailing is dominated by NTUC Fair Price with over 230 stores and Cold Storage/ Market Place with 55 stores.
- The market is extremely competitive. Powerful retailers control access to shoppers and have strong bargaining power over suppliers. There is a hotly contested battle amongst supermarkets for market share and margin – consequently Singaporean retailers are stepping up their push to buy fresh produce direct from the exporting country to secure a better profit margin.
- The major supermarket and hypermarket operators control the entire retail market by segmenting it around different store concepts and merchandising strategies that target low income groups through to high income groups and expatriates.
- Singapore is often seen as a mature, less exciting market for fresh produce. It lacks the large population and rapidly emerging economy or swelling middle class that make many other countries in the region attractive to marketers. However the economy grew at 14.7% in 2010 and 5% in 2011.
- With market maturity in Singapore comes new segments for fresh produce marketers to mine. Singapore is evolving from a manufacturing centre to a tourist hub which has positive spin off opportunities for the food service sector. For example in 2010 the Singaporean Government opened two new major casinos, in 2011 a major new botanic garden was completed and a new sports hub for regional games will be ready in 2014. Tourism grew 20% in 2010.
- Accordingly, the QSR sector is also growing rapidly in Singapore. Burger King and McDonalds are both aggressively marketing and growing sales.
- Despite the success of supermarkets there remains strong support for traditional wet markets and small fruit and vegetable vendors remain an integral part of the Singaporean culture.

Supply Windows

- Opportunities are available throughout the year through the supermarket sector.

Freight and Logistics

- Sea freight Sydney direct and takes 13 days
- Sea freight Brisbane via Tanjung, Pelepas 9 days but can take up to 12 days from Qld
- Sea freight Melbourne takes 15 days (
- Sea freight Fremantle is direct and takes 5 days
- Sea freight: although Australian west coast much quicker than east coast, Taiwan can supply in 3 to 5 days and China in 9 to 10 days
- Air freight: air freight is overnight and in the market the next morning – Changi Airport is very efficient, it is much easier to service Singapore than say Kuala Lumpur.

Market Access and Trade Viability Improvement Plan

- Singapore warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket.

Malaysia

Market Access

- Under the ASEAN-Australia-New Zealand FTA (AANZFTA) tariffs will be phased down to zero. AANZFTA commenced for Australia and Malaysia in 2010.
- Malaysia-Australia Free Trade Agreement (MAFTA) was signed in Kuala Lumpur in May 2012 and entered into force on 1 January 2013.
- There are no tariffs on fresh vegetables and this has been the case since at least 2000.
- Phytosanitary certificates required for fresh vegetables

Trade Relationships with Australia

- Malaysia is Australia's tenth largest trading partner (DFAT website)
- By value, Malaysia was the fifth largest purchaser of Australian fresh vegetables in 2012
- There are very good trade and personal relationships between the Australian vegetable industry and Malaysia especially WA vegetable growers.

Demographics and Capacity to Pay

- Population: 29.2 million (2012) with a sizable middle and upper income group of about 15 million persons (Sarah Xu)
- Population growth rate: 1.5% (2012 estimate)
- Urban population: 72%
- Major cities: Kuala Lumpur 1.493 M; Klang 1.071 M; Johor Bahru 958,000
- GDP per capita: US\$16,200 (2011) Household incomes are continuing to grow in Malaysia
- GDP per capita would indicate capacity to pay for imported vegetables beyond the hotel sector.

Vegetable Production and Consumption

- Malaysia is the world's tenth largest importer of vegetables (Rabobank 2006)
- Malaysia has developed a modern retail sector.
- Malaysia has highly productive vegetable growing regions in the Genting and Cameron Highlands. Their food safety programs in these areas are also well organised (Bicknell 2012)
- Quality of produce from Cameron Highlands, predominately grown under protected cropping is excellent quality – across high value tomato, capsicum, eggplant, cucumber, lettuce and leafy lettuce. , Primarily for domestic consumption, with some export to Singapore.

Malaysia Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	202,190	167,420	213,849
Beans	0	970	970
Capsicum	4,350	5,810	11,580
Carrots	6,863,510	5,516,950	6,499,630
Cauliflower	139,140	25,160	95,061
Celery	617,430	569,020	551,210
Leek	10,870	4,840	10,620
Lettuce - head	70,660	67,740	111,010
Lettuce – other	442,420	348,380	372,620
Peas	9,780	970	14,480
Squash and pumpkin	N/a	N/a	100,400
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	5,440	2,900	7,720
Sweet potato	9,780	13,550	5,790
Total	8,375,570	6,723,710	7,994,940

Source: ITC Comtrade

Beans and Peas

- Not widely consumed in Malaysia.

Broccoli

- Malaysia imported approximately 2,000 tonnes of broccoli in 2000, 90% came from Australia. Chinese (8%), Vietnamese and local product regarded as inferior (ABL 2002)
- Most imports were supplied by Victoria
- In 2002 there seemed to be prospects to grow this market June to April (WA or Tasmanian supply)
- Vietnam and China are now competitors and supply with low cost road freight. Consequently Australia needs to differentiate, can't do label or shrink wrap but can do bigger head size (very important) and quality (no purple tinged product).

Capsicum

- Malaysia is a minor market for Australian capsicums
- Local produce is of good quality and available year round (glass house Cameron Highlands)
- Low cost capsicum imports serving traditional markets are available from Indonesia.

Carrots

- ABL 2002: Malaysia imported approximately 31,000 tonnes of carrots in 2000, 80% came from WA Australia. Chinese carrots were not well regarded. NZ carrots are well regarded.
- In the last three years China has dominated imports with an 83% market share in 2012 followed by Australia with a 15% market share. Australian carrots have enjoyed a price premium over the Chinese product in the last three years; however in 2012 the price premium had decreased to 44%.
- Australia supplies all year round but there may be opportunities to build market share January to June
- January to June: WA finds it hard to supply during this period, Tasmania is an option during this window.

VOLUME	CARROTS	MALAYSIA	MALAYSIA IMPORTS Tonnes													
Product : 070610 Carrots and turnips, fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
China	53,293	54,235	59,164	83%	4,845	4,554	6,320	4,761	4,338	4,341	5,855	4,566	4,901	5,306	4,514	4,865
Australia	11,033	9,862	10,509	15%	912	878	981	600	933	729	933	1,061	1,041	753	845	841
United States	239	273	390	1%	21	18	28	30	68	41	36	29	29	21	47	23
New Zealand	217	271	366	1%				14	52	88	108	104				
Total Tonnes	65,942	65,147	70,925	100%	5,837	5,489	7,357	5,419	5,442	5,253	6,984	5,780	5,986	6,105	5,438	5,836
VALUE	CARROTS	MALAYSIA	MALAYSIA IMPORTS A\$ '000													
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	29,039	29,661	37,503	78%	2,485	2,366	3,673	3,223	3,508	3,746	3,849	3,042	3,397	3,465	2,374	2,375
Australia	9,531	9,032	9,543	20%	801	808	859	560	867	676	836	956	938	691	779	772
United States	413	432	700	1%	42	41	65	63	95	81	79	61	61	38	45	29
New Zealand	163	230	311	1%	-	-	-	14	45	97	77	77	-	-	-	-
Total A\$ '000	39,544	39,659	48,294	100%	3,358	3,233	4,613	3,877	4,560	4,637	4,869	4,154	4,412	4,219	3,214	3,217
A\$ per kg	CARROTS	MALAYSIA	MALAYSIA IMPORTS A\$ per kg													
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
China	0.54	0.55	0.63		0.51	0.52	0.58	0.68	0.81	0.86	0.66	0.67	0.69	0.65	0.53	0.49
Australia	0.86	0.92	0.91		0.88	0.92	0.88	0.93	0.93	0.93	0.90	0.90	0.90	0.92	0.92	0.92
United States	1.73	1.58	1.80		2.06	2.31	2.36	2.13	1.40	1.98	2.20	2.12	2.06	1.81	0.95	1.25
New Zealand	0.75	0.85	0.85					1.02	0.87	1.11	0.71	0.74				
A\$ per kg	0.60	0.61	0.68		0.58	0.59	0.63	0.72	0.84	0.88	0.70	0.72	0.74	0.69	0.59	0.55

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligenc analysis.

Notes : Over the longer term (not shown) China has increased from 6,900 tonnes in 2002 to 59,000 tonnes in 2012 while Australia has dipped from 34,000 tonnes in 2002 to 10,000 tonnes now

Celery

- Current data (ITC Comtrade 2010 to 2012) shows that Malaysia is Australia's best celery export market
- Malaysia imported approximately 1,000 tonnes of celery in 2000, 56% came from Australia
- Supply came from Qld, Victoria and WA (dominant)
- In 2012, the US and China dominated imports with a market shares of 62% and 29% respectively with Australia having a 6% market share. Over the last three years, the price of Chinese celery has been significantly higher than the price of the Australian product. As Australia supplies all year round, there should be significant opportunities to build market share.

VOLUME		CELERY	MALAYSIA	MALAYSIA IMPORTS Tonnes												
		Product : 070940 Celery, other than celeriac, fresh or chilled														
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
China	2,018	1,737	2,712	29%	152	149	162	255	207	370	278	198	243	234	212	252
United States	6,269	7,087	5,705	62%	934	483	411	424	346	475	421	339	421	299	507	646
Australia	608	589	572	6%	63	34	32	21	39	56	54	57	58	56	58	45
Thailand	68	102	71	1%	13	6	3	7	15	9	4	2	6	1	4	2
Total Tonnes	9,126	9,619	9,220	100%	1,163	723	619	726	616	922	767	615	729	594	782	965

VALUE		CELERY	MALAYSIA	MALAYSIA IMPORTS A\$ '000												
		Product : 070940 Celery, other than celeriac, fresh or chilled														
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000	A\$ '000
China	4,342	4,460	4,681	55%	681	326	290	452	370	436	350	292	373	264	387	461
United States	2,175	1,797	2,822	33%	161	155	168	255	254	345	260	204	245	279	241	255
Australia	839	786	784	9%	82	46	45	37	53	79	77	75	76	76	79	59
Thailand	30	45	52	1%	6	5	4	6	8	6	3	2	4	2	5	3
Total A\$ '000	7,630	7,198	8,475	100%	933	549	531	767	695	879	703	585	701	627	715	792

A\$ per kg		CELERY	MALAYSIA	MALAYSIA IMPORTS A\$ per kg												
		Product : 070940 Celery, other than celeriac, fresh or chilled														
A\$ per kg	2010	2011	YEAR 2012	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	A\$ per kg	
China	2.15	2.57	1.73	4.47	2.18	1.79	1.77	1.79	1.18	1.26	1.47	1.54	1.13	1.82	1.83	
United States	0.35	0.25	0.49	0.17	0.32	0.41	0.60	0.73	0.73	0.62	0.60	0.58	0.93	0.48	0.40	
Australia	1.38	1.33	1.37	1.30	1.36	1.42	1.71	1.37	1.42	1.43	1.32	1.32	1.35	1.36	1.33	
Thailand	0.45	0.45	0.74	0.45	0.83	1.50	0.82	0.54	0.64	0.66	1.22	0.61	3.05	1.37	1.23	
A\$ per kg	0.84	0.75	0.92	0.80	0.76	0.86	1.06	1.13	0.95	0.92	0.95	0.96	1.06	0.91	0.82	

Sources : ITC calculations based on Department of Statistics Malaysia; Fresh Intelligence analysis

Leeks

- Limited opportunity for Australian leeks in Malaysia.

Pre packed and bulk baby leaf salads

- Malaysia has stepped up hydroponic production and can supply considerably cheaper than imports from Australia, EU and US.
- Hydroponics is cleaner and has less food safety risk than field grown salads but lacks flavour and texture and discerning chefs in Asia recognise this limitation
- Australia is able to offer food safety with a wider range of salad varieties e.g. European wild rocket, snow pea tendrils (Bicknell 2012)
- Local hydroponic product dominates the food service sector (Bicknell 2012) but not the QSR sector – hydroponics does not offer sufficient shelf life to meet their logistics needs.

Lettuce – head

- Chinese product travels overland by truck at low cost.
- Australia is a contingent supplier at best – hard to compete with China and the US.
- Local from Cameron Highlands is OK for domestic market, for QSR with high shelf life requirements imports are needed.

Sweet Corn

- Baby sweet corn used in stir fry but this would be supplied, if imported by Thailand.

Relative Size of Market Segments

- Supermarket retailers (2011 data) include: 142 Giant/Cold Storage/Bintang/Mercato hypermarkets and supermarkets (Dairy Farm Group), The Store 56 supermarkets, Jusco and MaxValu (AEON) 28 stores. In mid-2012 AEON also bought Carrefour's 26 Malaysian hypermarkets.
- Malaysia's demand for sophisticated food and beverage is increasing, especially with regard to quality aspects, food health, safety and nutrition.
- Urban Malaysians are brand conscious and prefer to shop in stores which offer convenience and good product selections
- Hypermarkets are now the dominate format in urban / metropolitan areas with about 45% to 60% of urban household shoppers using them as the main outlet for packaged groceries (Sarah Xu, DA)
- The modern retail sector continues to expand its footprint in Malaysia. Those present include Tesco Malaysia, Giant, Econ-save (locally owned), and Jusco/Aeon (Japanese owned). These chains mainly target medium to low income customers and work on a low price, high volume model. They advertise heavily in local newspapers.
- Also present are rapidly growing chains that target middle to high income groups. This group is expanding their floor space and chiller capacity for fresh produce. This demographic is serviced by the likes of Cold Storage, Mercato, Village Grocer and MBG Fruit Shop. These chains hardly advertise but are service-oriented and have strong loyalty programs – this group of retailers has the infrastructure and desire to conduct promotional activities.
- Despite overall growth in the modern trade its overall share of fresh produce sales in Malaysia remains very low compared with that of the traditional retail trade – some say as low as 10% of the total.
- Traditional retail is structured around morning markets, night markets and farmers' markets, and small fresh produce vendors in these markets do very well.

Supply Windows

- Broccoli – January to December
- Carrots – January to December
- Celery – January to December

Freight and Logistics

- Sea freight Sydney direct and takes 10 days
- Sea freight Brisbane direct and takes 8 days Sea freight Melbourne takes 18 days
- Sea freight Fremantle is direct and takes 5 days

Market Access and Trade Viability Improvement Plan

- Malaysia warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket / hypermarket sector.

Indonesia

Market Access

- Under the ASEAN-Australia-New Zealand FTA (AANZFTA) vegetable tariffs will be phased down to zero for most vegetables but for vegetables with high tariffs only modest reductions will be made.
- Vegetables with high tariffs include carrots (DFAT website <http://www.daff.gov.au/market-access-trade/fta/the-association-of-southeast-asian-nations-asean-australia-newzealand-free-trade-area-aanzfta#horticulture>)
- Indonesia implemented the ASEAN-Australia-New Zealand FTA in January 2012.
- In 2013 Australia and Indonesia are in the early stages of negotiating a Comprehensive Economic Partnership Agreement
- Indonesia announced a temporary ban on 15 types of horticultural products for the period January to June 2013. Products included broccoli, cabbage, cauliflower, carrots and capsicum.
- Regional trade agreements involving Indonesia and the rest of ASEAN, China, Australia, New Zealand, and India have lowered tariff barriers to imports from those areas, while leaving barriers intact for the remaining major competitors, the United States and the EU. ASEAN, China, and Oceania have obvious advantages in shipping to Indonesia in a more timely way than can U.S. exporters. On the other hand, U.S. advantages include the strength of its branded products in the eyes of consumers and the vast size and diversity of U.S. food production (Source: USDA ERS 2011).

Trade Relationships with Australia

- Indonesia has introduced a number of new and revised regulations governing the importation of horticultural products to minimise the risk of exotic plant and pest organisms entering Indonesia and to ensure the safety of imported food. The regulations include extensive testing and certification requirements for horticulture and grain imports that Australia had previously avoided through Indonesia recognising Australia's food safety system for plant products. Australia is currently undergoing a verification process for Indonesia to extend its recognition of our food safety system for plant products.
- Indonesia announced on 19 June 2012 that countries with recognised food safety systems would maintain access to all international ports of entry for horticulture goods.
- Separately, Indonesia has passed further trade regulations to give effect to additional verification requirements of Australian horticulture exports.

Demographics and Capacity to Pay

- Population: 248.6 million (2012 estimate)
- Population growth rate: 1%
- Urban population: 44%
- Major Cities: Jakarta (9.121 million); Surabaya (2.509 million); Bandung (2.412 million); Medan (2.131 million); and Semarang (1.296 million)
- GDP per capita: US\$4,700 (2011)
- 56.6% of the population (131 million individuals) now classified as middle class. 7 million people added to the middle class each year between 2003 and 2010. Swelling middle class is seeking out healthy food choices.

Vegetable Production and Consumption

- Indonesia is the sixth largest vegetable producer in the world
- Indonesian vegetable imports increased by 98% in the 10 years to 2010. This was due, in part, to internal transport in Indonesia often being slow, and sometimes perishable foods can be obtained more cheaply through import channels than domestic supply.
- East West Seeds (owned by Dutch seed company Enza Zaden) is supporting modern vegetable varieties in Indonesia in a joint venture using hybrids and local open pollinated selection for their climate.

- Indonesian food consumption patterns have also changed since the late 1990s. Packaged and prepared food sales have grown strongly. Changes in food retailing and in food consumption patterns in Indonesia have been slower than in some comparable countries and might occur more quickly if economic barriers and constraints were removed.
- Growth in consumption of vegetables and fruits has been modest. (Source: USDA ERS 2011).
- Indonesia is one of the best performing economies in the G20, growing at 6% pa in 2010
- Food is a very important part of household expenditure: in 2010 consumers spent over half of their monthly shopping budget on fresh produce. Upper middle class are seeking premium products that deliver health, convenience and lifestyle - consumers are becoming quality rather than price focussed.
- Food imports have grown, but not as a proportion of food spending. In part, this may be the result of regulations by the Indonesian Government, which has voiced support for free trade in goods but often encourages food self-sufficiency in practice. Farmers sometimes wish to slow or stop competition from imports. At the border, imports of some products are effectively banned and many other foods face slow and uncertain import procedures. Indonesia's requirements for Government-issued registration numbers for each import can be a particularly serious impediment. Recent restrictions on the number of ports through which horticultural imports are allowed to pass could lead to lower imports in the future. Other regulations limit the location of new large stores. As a result, modern food retailing in Indonesia faces constraints in procuring products efficiently from both international and domestic sources and in obtaining sites for expansion. (Source: USDA ERS 2011)
- Access for horticultural products to Indonesia has become more opaque since Indonesia's Ministry of Trade published new regulations in September/October 2012 in relation to imports. The regulations relate to new requirements not only for port access, but also documentation (third party surveys, certificates of origin, import permits etc.) and labelling. The practical implications are to make access significantly more difficult.
- In broad terms, the regulations establish a registration system for all importers of fruits and vegetables. Importers must obtain an import recommendation letter from the Ministry of Agriculture and then submit the recommendation letter to the Ministry of Trade to apply for an import permit. Additionally, the regulations also impose pre-export survey requirements for horticulture exports. (Source: DAFF)

Indonesia Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	284,800	127,740	88,516
Beans	0	0	0
Capsicum	4,350	31,930	5,790
Carrots	396,770	321,280	448,880
Cauliflower	64,130	67,740	28,294
Celery	44,570	37,740	33,790
Leek	17,390	24,190	17,380
Lettuce - head	690,260	464,500	477,840
Lettuce – other	104,350	116,130	92,670
Peas	2,170	0	0
Squash and pumpkin	0	0	141,900
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	70,660	54,190	68,540
Sweet potato	1,090	970	0
Total	1,680,540	1,246,410	1,403,600

Source: ITC Comtrade

Beans

- Little opportunity for Australian beans.

Broccoli

- Indonesia grows broccoli of reasonable quality that is affordable to middle income families

- Makro Supermarket prefers to source local broccoli rather than use imports but use Australian imports to fill short term supply gaps
- In 2000 Australia exported 45 tonnes of broccoli to Indonesia and had a 95% share of the import market. Australian broccoli was destined for the hotel and restaurant sector and upmarket supermarkets.
- In 2002 importers was examining the feasibility of importing Chinese broccoli in 20 foot reefers – this product would be considerably cheaper than that supplied by Australia

Capsicums

- In 2000 Indonesia imported 155 tonnes of capsicums – China (68.3%), Australia (22.5%) and India (9%)
- New growing techniques have been introduced to Sumatra and Java allowing Indonesia to grow and export high quality capsicums (ABL 2002)
- ABL 2002: import market has been subsumed by domestic production

Carrots

- In 2000 Australia supplied 306 tonnes of carrots – 66% of imports. Other suppliers included Thailand (8.8%), Malaysia (6.8%), China (9.5%), Taiwan (4.2%) and NZ (4.2%)
- The market is relatively small and is supplied by average quality domestic production
- The Koyo variety from Qld is preferred and importers will switch suppliers to secure it
- ABL 2002: further growth opportunities for Australia if exporters maintain consistent quality and set prices at a level that can be afforded by most average income families. China and Thailand are the major threats to further market growth

Celery

- In 2000 Australia exported 118 tonnes of celery and was the sole supplier
- Celery is not part of traditional Indonesian cooking and is used primarily in food service - Chinese and western restaurants
- In 2000 local growers were still refining celery production techniques
- Outlook is for a small but stable Australian import demand

Lettuce – head

VOLUME HEAD LETTUCE INDONESIA

INDONESIA IMPORTS Tonnes

Product : 070511 Cabbage lettuce (head lettuce) fresh or chilled

Exporters	2010	2011	YEAR 2012	share	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
China	58	50	58	53%	1.3	5.3	7.5	5.7	9.8	6.4	3.8	2.8	5.4	4.2	3.7	1.9
Australia	6	16	23	21%		0.1	0.1		4.2	3.7	5.4		3.8	3.4		2.7
India	-	-	28	26%		28.0										
Total Tonnes	67	66	109	100%	1.3	33.4	7.7	5.7	14.0	10.1	9.1	2.9	9.2	7.6	3.7	4.6

VALUE HEAD LETTUCE INDONESIA

INDONESIA IMPORTS A\$ '000

Product : 070511 Cabbage lettuce (head lettuce) fresh or chilled

A\$ '000	2010	2011	YEAR 2012	share	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
China	76	51	63	40%	1	6	7	6	11	7	5	3	7	5	5	2
Australia	22	62	89	56%		0	0		16	15	20		15	13	0	10
India	-	-	6	4%		6										
				0%												
Total A\$ '000	103	113	157	100%	1	12	7	6	27	22	25	3	21	17	5	12

A\$ per kg HEAD LETTUCE INDONESIA

INDONESIA IMPORTS A\$ per kg

Product : 070511 Cabbage lettuce (head lettuce) fresh or chilled

A\$ per kg	2010	2011	YEAR 2012		Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
China	1.31	1.03	1.09		0.75	1.10	0.87	0.99	1.08	1.09	1.32	1.04	1.24	1.15	1.32	1.00
Australia	3.62	3.87	3.79						3.91	4.06	3.75		3.99	3.64		3.58
India			0.21			0.21										
A\$ per kg	1.54	1.72	1.44		0.75	0.35	0.97	0.99	1.93	2.18	2.74	1.02	2.27	2.27	1.32	2.51

Sources : ITC calculations based on BPS - Statistic Indonesia; Fresh Intelligence analysis

Relative Size of Market Segments

- While traditional markets still dominate, supermarket growth continues at a significant pace. Modern retailers include:
 - Giant hypermarkets and supermarkets (Hero Group), with around 50 hypermarket format stores and over 100 supermarkets
 - Hypermart hypermarkets and Foodmart supermarkets, with over 100 outlets
 - Alfa Midi, with over 150 small to medium supermarkets
 - Yogya Group, approaching 100 stores, and focusing on regional cities outside Jakarta
- Import, distribution and modern retail infrastructure are sufficient for the successful supply and sales of imported produce. For example, retailers generally have cool rooms and refrigerated display units sufficient to store and merchandise higher-value imported produce.
- Modern retail is becoming more important for fruit and vegetable sales, although sales through traditional markets still predominate. Modern retail also provides the best opportunity to undertake targeted marketing support, as well as being able to supply a rapidly expanding sector of the market. Accelerating growth has been due to a combination of two developments – expansion in the number of retailers and new store openings in second-tier and regional cities, providing a wider spread of markets.
- Most modern retailers have preferred importers/suppliers to source product on their behalf. This includes deliveries direct to stores, as investment in assembly/distribution centres is not seen as a high priority. A modern food retail chain has an interest in exploiting global supplies of foods unavailable in Indonesia or lower priced than domestic production, and has the advantage of being able to place large orders, which can often be filled at a lower per-unit price.
- Food service: The Indonesian foodservice industry grew at a rate of 6.1% between 2004 and 2008, and has grown continuously since that time, led by tourism, rising disposable income and an increase in the population of working women. (MC: the food service sector is price conscious)

Supply Windows

- Opportunities are available throughout the year through the supermarket sector.

Freight and Logistics

- Sea freight Sydney via Singapore and takes 15 days
- Sea freight Brisbane direct and takes 11 days
- Sea freight Melbourne direct and takes 10 days
- Sea freight Fremantle is direct and takes 7 days

Market Access and Trade Viability Implementation Plan

- Indonesia warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket / hypermarket sector.

New Zealand

Market Access

- Specific restrictions on fruiting vegetables from Australia (e.g. capsicum, pumpkins and zucchini)
- Phytosanitary certificates required for fresh vegetables
- Australia has restricted access to NZ for products like lettuce due Rutherglen Bug
- Loss of access to dimethoate for fruit fly control has further restricted trade opportunities short term
- There are no tariffs on fresh vegetables imported from Australia.

Trade Relationships with Australia

- Culturally, politically and legally the two nations are closely aligned.
- Australia has proximity and freight advantages over other importers targeting NZ
- By value NZ was the fourth largest purchaser of Australian fresh vegetables in 2012.

Demographics and Capacity to Pay

- Population: 4.3 million (2012)
- Population growth rate: 0.9% (2012 estimate)
- Urban population: 86%
- Major cities: Auckland (1.4 M); Wellington 391,000
- GDP per capita: US\$28,800 (2012 estimate)

Vegetable Production and Consumption

- NZ has ample capacity to produce temperate vegetables relevant to the scope of this project
- Market opportunities will be limited to smallish seasonal supply windows – until 2009 this was: winter tomatoes zucchini and Capsicum. Now this has all stopped due to deregistration on the fruit fly control dimethoate.
- July, Aug Sept – wet and cold in NZ so supermarkets supply Australian broccoli into this market.

New Zealand Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	31,520	355,150	15,450
Beans	3,463,280	3,486,680	4,067,940
Capsicum	1,914,260	1,222,230	0
Carrots	0	0	0
Cauliflower	0	0	0
Celery	0	0	0
Leek	0	0	0
Lettuce - head	121,750	542,890	52,130
Lettuce – other	0	0	0
Squash and pumpkin	0	0	0
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	351,110	350,310	352,350
Sweet potato	63,050	0	0
Total	5,944,970	5,957,260	4,487,870

Source: ITC Comtrade

Beans

- NZ is an important market for Australian fresh beans. Supply is sourced during winter months from Bowen & Ayr in north Queensland.

Capsicum

- NZ was an important market for Australian capsicums but loss of dimethoate for fruit fly control has closed this market to Australia (see table above).

- NZ are now growing capsicums in greenhouses and exporting to Australia

Lettuce

- Opportunities would be iceberg lettuce hearts exported into Auckland for shredding for the QSR market in the months, July, Aug and Sept when it is too cold to produce quality and high yielding local lettuce . Would likely be supplied from Lockyer Valley Qld via sea freight – Port of Brisbane to Auckland is 3 days

Relative Size of the Market Segments

- New Zealand retailing is dominated by two chains. Under the three regional Foodstuffs cooperatives are 138 independently owned Foodstuffs supermarkets and 49 Pak n Save large format discount stores. Progressive Enterprises (Owned by Australian company Woolworths) has over 160 Countdown stores nationwide.

Supply Windows

- Primarily winter, when Qld is able to offer a seasonal growing advantage.

Freight and Logistics

- Port of Brisbane to Auckland is 3 days

Market Access and Trade Viability Improvement Plan

- New Zealand warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to on market access, capsicums and lettuce plus defence of the Australian fresh bean market.

United Arab Emirates (UAE)

Market Access

- Specific restrictions on fruiting vegetables from Australia (e.g. capsicum, pumpkins)
- Phytosanitary certificates required for fresh vegetables
- Free Trade Agreement negotiations with the Gulf Cooperation Council (GCC), comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates, commenced in July 2007.
- GCC has paused its trade negotiations with all partners pending a review of its trade agreement policy. The Australian Government is committed to resuming the negotiations with the GCC (DFAT website).

Trade Relationships with Australia

- Bilateral relations between Australia and the UAE are warm, multi-faceted and growing rapidly.
- They are underpinned by extensive trade relations as well as people-to-people contacts arising from the strong growth of direct air links, including 91 flights per week from the UAE to Australia, and a large population of approximately 12,000 to 15,000 expatriate Australians living and working in the UAE (DFAT website). By value, the UAE was the third largest purchaser of Australian fresh veg in 2012

Demographics and Capacity to Pay

- Population: 5.31 million (2012 estimate)
- Population growth rate: 3.0% (2012 estimate)
- Median age 30.2 years
- Urban population: 84% (2010 estimate)
- Major cities: Abu Dhabi (666,000), Dubai, Sharjah, Al Ain, Ajman, Ras al Khaymah
- GDP per capita US\$48,800

Vegetable Consumption and Production

- The UAE supplies Saudi Arabia, Bahrain, Qatar and others with a very wide range of re-exported fresh produce (Trade Middle East Magazine 2012)
- A lot of fresh produce exported to the UAE is re-exported to other markets in the region – Saudi Arabia, Iraq, Kuwait, Oman, Qatar, Bahrain, and Jordan and there is a trend toward these regional countries doing their own direct sourcing, ‘the days of the UAE being the fresh produce conduit for the region may be numbered’ (Trade Middle East Magazine 2013)
- UAEs statistics look very encouraging but it is mainly re-export. A lot of it goes to Saudi Arabia where there are 33 million people. The population of UAE is small – better to think Saudi Arabia.
- The UAE normally sources its vegetables from Turkey and Syria – both interrupted by the civil war in Syria (Trade Middle East Magazine 2013)
- The UAE has recovered from the GFC linked construction crash of 2009.
- Some 80% of the UAE’s food spend is on imports which totalled US\$6.9 billion in 2010. Food spend will increase 5% from 2012 to 2014 (*Trade Middle East Magazine 2012*)
- Organic products are on the rise in the UAE. In 2010 organic greenhouse farming increased by 15%, an output of 5,000 tonnes. Specialist organic retailers have been able to grow their store numbers in Dubai and expand into Abu Dhabi, Saudi Arabia and Qatar. This trend started with the expat population but has not been embraced by the locals.

UAE Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	977,240	317,410	320,250
Beans	0	0	0
Capsicum	0	1,940	0
Carrots	11,821,450	11,009,720	13,835,250
Cauliflower	0	970	240
Celery	7,610	16,450	2,900
Leek	0	0	0
Lettuce - head	10,870	970	5,790
Lettuce – other	269,580	127,740	112,940
Peas	1,090	0	1,930
Squash and pumpkin	N/a	N/a	188,240
Sweet corn – frozen		970	970
Sweet potato	293,500	270,960	244,230
Total	13,381,340	11,747,130	14,712,740

Source: ITC Comtrade

Beans

- There is no history of trade in fresh beans in this market.

Broccoli

- Over the last three years Jordan has dominated imports and in 2012 had a market share of 88% whilst Australia had a market share of 1%. Over the last three years, the price of Australian broccoli has been between 3 and 6 times that of Jordan.

VOLUME		BROCCOLI	UAE	UAE IMPORTS Tonnes												
		Product : 070410 Cauliflowers and headed broccoli, fresh or chilled														
Exporters	2010 Tonnes	2011 Tonnes	YEAR 2012 Tonnes	share Tonnes	Nov-11 Tonnes	Dec-11 Tonnes	Jan-12 Tonnes	Feb-12 Tonnes	Mar-12 Tonnes	Apr-12 Tonnes	May-12 Tonnes	Jun-12 Tonnes	Jul-12 Tonnes	Aug-12 Tonnes	Sep-12 Tonnes	Oct-12 Tonnes
Jordan	15,318	13,704	11,681	88%	1,060	377	298	400	192	2,041	2,898	1,263	1,101	775	689	586
Iran	8,480			0%												
Spain	293	648	977	7%	81	59	31	30	70	104	222	118	52	30	67	113
Oman	61	1,265		0%												
Australia	348	146	104	1%	22.4	8.7	10.1	0.1	3.6	5.9	1.1	5.1	10.5	12.6	6.8	17.2
Total Tonnes	27,855	16,422	13,283	100%	1,163	445	418	474	357	2191	3159	1450	1170	848	796	813
* Excl Iran	19,375															
VALUE		BROCCOLI	UAE	UAE IMPORTS A\$ '000												
		Product : 070410 Cauliflowers and headed broccoli, fresh or chilled														
A\$ '000	2010	2011	YEAR 2012	share	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Jordan	8,589	8,578	7,672	75%	548	200	106	354	186	1,171	1,600	951	1,001	681	591	283
Iran	5,824			0%												
Spain	532	648	1,634	16%	139	102	46	49	115	173	386	183	81	46	102	214
Oman	57	874		0%												
Australia	952	297	359	4%	38	23	29	1	11	21	5	30	46	42	28	86
Total A\$ '000	17,904	11,426	10,198	100%	758	369	251	444	368	1,405	2,043	1,221	1,141	818	780	598
* Excl Iran	12,080															
A\$ per kg		BROCCOLI	UAE	UAE IMPORTS A\$ per kg												
		Product : 070410 Cauliflowers and headed broccoli, fresh or chilled														
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
Jordan	0.56	0.63	0.66		0.52	0.53	0.36	0.88	0.97	0.57	0.55	0.75	0.91	0.88	0.86	0.48
Iran	0.69															
Spain	1.81	1.00	1.67		1.72	1.72	1.49	1.62	1.64	1.66	1.74	1.55	1.55	1.53	1.52	1.89
Oman	0.93	0.69														
Australia	2.74	2.03	3.45		1.68	2.62	2.85	8.23	3.19	3.59	4.47	5.87	4.33	3.34	4.13	4.96
A\$ per kg	0.64	0.70	0.77		0.65	0.83	0.60	0.94	1.03	0.64	0.65	0.84	0.98	0.96	0.98	0.74

Sources : ITC calculations based on UN COMTRADE statistics based on MIRROR data from suppliers to UAE; Fresh Intelligence analysis.

Notes :

- Data is sourced from supplier data as UAE has no recorded import data since 2008
- Iran appears to be No 2 based on 2010 figure though has not reported since - average trade from Iran pre 2010 was 1059 tonnes so treat 8000 tonnes with caution.
- Jordan is clearly the major supplier with peak supply from April to July
- Oman appears to have supplied over 1000 tonnes in 2011 though has not reported in 2012 to date and had minimal trade pre 2011

Carrots

- Over the last three years China has dominated imports of carrots and in 2012 had a market share of 66% whilst Australia had a market share of 29%. Over the last three years, the price of Australian carrots has been approximately 50% higher than the price of carrots from China.
- Carrots from China are available all year round, plus local produce from Oman is of good quality and is available January to March.
- Demand for Australian product is gaining momentum.

VOLUME		CARROTS		UAE		UAE IMPORTS Tonnes											
Product : 070610 Carrots and turnips, fresh or chilled																	
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	
China	31,371	34,925	39,487	66%	1,738	2,378	3,046	1,238	1,885	4,246	4,771	3,231	5,118	4,702	4,191	2,944	
Australia	15,988	15,191	17,417	29%	1,207	1,138	1,331	1,433	1,492	1,351	2,080	1,093	1,357	1,433	1,505	1,997	
Oman	2,170	1,866	2,018														
United States	243	457	506	1%	21	6	39	56	59	48	18	10	119	47	33	49	
Total Tonnes	51,958	53,289	59,952	100%	3,235	3,674	4,813	3,827	3,436	5,776	6,948	4,436	6,816	6,232	5,733	5,025	

VALUE		CARROTS		UAE		UAE IMPORTS A\$ '000											
Product : 070610 Carrots and turnips, fresh or chilled																	
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
China	15,065	16,798	20,141	56%	839	1,088	1,460	678	1,282	3,056	2,502	1,657	2,607	2,139	1,770	1,064	
Australia	11,821	11,010	13,848	38%	921	905	1,029	1,118	1,205	1,143	1,635	833	1,120	1,139	1,218	1,583	
Oman	1,339	1,006	1,179	3%													
United States	266	574	803	2%	37	12	44	70	76	64	28	18	188	80	87	99	
Total A\$ '000	29,467	29,722	35,972	100%	1,379	2,058	2,554	1,874	2,563	4,345	4,218	2,574	4,055	3,375	3,077	2,774	

A\$ per kg		CARROTS		UAE		UAE IMPORTS A\$ per kg											
Product : 070610 Carrots and turnips, fresh or chilled																	
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
China	0.48	0.48	0.51		0.48	0.46	0.48	0.55	0.68	0.72	0.52	0.51	0.51	0.45	0.42	0.36	
Australia	0.74	0.72	0.80		0.76	0.79	0.77	0.78	0.81	0.85	0.79	0.76	0.83	0.79	0.81	0.79	
Oman	0.62	0.54	0.58														
United States	1.10	1.26	1.59		1.76	2.04	1.11	1.27	1.29	1.35	1.54	1.73	1.58	1.68	2.62	2.02	
A\$ per kg	0.57	0.56	0.60		0.43	0.56	0.53	0.49	0.75	0.75	0.61	0.58	0.59	0.54	0.54	0.55	

Sources : ITC calculations based on UN COMTRADE statistics based on MIRROR data from suppliers to UAE; Fresh Intelligence analysis.

Notes : Data combined Carrots and Turnips - carrots estimated as more than 90%

There is no data available for Oman in 2012 - used average of previous 2 years

Relative size of Market Segments

- Supermarket retailing continues to develop in the UAE and retailers include:
 - Choithram is one of the biggest supermarket groups in the Middle East. They have 27 stores in the UAE. In addition, they also have a Food Service division, servicing hotels, restaurants etc
 - Union Coops is a local chain, with four hypermarkets and eight large supermarkets
 - Sunrise City has around 10 smaller-format supermarkets
 - [Spinneys](#), the South African backed chain, has at least 25 stores in the UAE
 - Al Maya Group has a mix of 13 to 14 large supermarkets and hypermarkets
 - LuLu has 20 hypermarkets
 - Emirates Coop has 11 stores
 - Abu Dhabi Coop has at least 10 stores, covering a range of hypermarket, class A supermarkets and smaller store formats.
- The international makeup of consumers in the UAE means that the widest selection of fruit and vegetables is sold in Dubai supermarkets.

Supply Windows

- Opportunities are available throughout the year through the supermarket sector.

Freight and Logistics

- 14 days sea freight from Fremantle WA to Dubai

Market Access and Trade Viability Improvement Plan

- UAE warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket / hypermarket sector.

Other Middle East (Qatar, Kuwait, Bahrain, Oman)

Market Access

- Free Trade Agreement negotiations with the GCC commenced in July 2007 (DFAT website).
- The GCC has paused its trade negotiations with all partners pending a review of its trade agreement policy. The Australian Government is committed to resuming the negotiations with the GCC (DFAT website accessed 18 February 2013).

Trade Relationships with Australia

- The GCC is a key market for agricultural exports such as livestock, meat, dairy products, vegetables, sugar, wheat and other grains. An FTA agreement provides an opportunity to address a range of tariff and non-tariff barriers related to Australia's food exports (DFAT website).

Demographics and Capacity to Pay

	Qatar	Kuwait	Bahrain	Oman
Population:	2 million (estimate 2012)	3.2 million (estimate 2012)	1.2 million (estimate 2012)	3 million (estimate 2012)
Population growth rate:	4.9% (estimate 2012)	1.9% (estimate 2012)	2.7% (estimate 2012)	2.0% (estimate 2012)
Urban population:	96%	98%	89%	73%
Major cities:	Doha (487,000)	Kuwait (2.2 million)	Manama (163,000)	Muscat (634,000)
GDP per capita:	US\$102,800 (2012 estimate)	US\$43,800 (estimate 2012)	US\$28,200 (estimate 2012)	US\$28,500 (estimate 2012)

Source: CIA World Fact Book\

Vegetable Consumption and Production

- Australian carrots had a 85% market share in Qatar in 2011-12
- Australian carrots had a 20% market share in Oman in 2011-12
- Competition is from Chinese carrots which are available all year round and local produce from Oman which is of good quality and is available January to March

Other Middle East Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	176,100	335,800	127,830
Beans	1,090	970	970
Capsicum	0	0	0
Carrots	9,208,220	7,347,870	10,002,860
Cauliflower	1,090	1,940	560
Celery	43,480	15,490	44,410
Leek	0	1,940	0
Lettuce - head	17,400	1,940	970
Lettuce – other	35,880	31,940	36,070
Peas	0	0	0
Squash and pumpkin	0	0	2,900
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	6,520	0	0
Sweet potato	17,390	11,610	0
Total	9,507,170	7,888,910	10,216,570

Source: ITC Comtrade **NB:** Oman does not register outside of carrots ~ \$1m

Carrots – Qatar

- Over the last three years Australia has dominated imports of carrots and in 2012 had a market share of 51%, followed by Saudi Arabia 36% and China 4%.

VOLUME		CARROTS		QATAR												
QATAR IMPORTS Tonnes																
Product : 070610 Carrots and turnips, fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
Australia	4,593	4,021	4,919	51%	402	426	301	351	478	278	506	405	434	403	378	557
Saudi Arabia*	2,917	3,105	3,435	36%												
China	921	884	433	4%	27	27	27	-	-	56	74	-	27	63	-	81
Oman*	169	223	254	3%												
Total Tonnes	9,233	8,819	9,622	100%												

VALUE		CARROTS		QATAR												
QATAR IMPORTS A\$ '000																
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Australia	3,322	2,798	3,894	72%	304	323	230	267	362	211	381	495	335	305	276
Saudi Arabia*	917	928	980	18%												
China	419	407	194	4%	32	9	10			35	38		13	29		28
Oman*	121	158	180	3%												
Total A\$ '000	4,927	4,453	5,416	100%												

A\$ per kg		CARROTS		QATAR												
QATAR IMPORTS A\$ per kg																
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Australia	0.72	0.70	0.79		0.76	0.76	0.77	0.76	0.76	0.76	0.75	1.22	0.77	0.76	0.73
Saudi Arabia*	0.31	0.30	0.29													
China	0.45	0.46	0.45		1.18	0.35	0.39			0.63	0.51		0.51	0.46		0.34
Oman*	0.72	0.71	0.71													
A\$ per kg	0.53	0.50	0.56													

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis based in MIRROR data supplied by exporters to Qatar

Notes : There were no current direct data records for Qatar - Australia and China data was MIRROR data (ie supplied by Australia and China exports)

* Saudi Arabia and Oman based on Qatar imports 2002 - 2008 extrapolated using trend analysis formula. Saudi Arabia and Oman have not reported export data.

Carrots – Kuwait

- Over the last three years Australia has dominated imports of carrots and in 2012 had a market share of 48% whilst China had a market share of 39%.

VOLUME		CARROTS		KUWAIT		KUWAIT IMPORTS Tonnes											
Product : 070610 Carrots and turnips, fresh or chilled																	
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	
Australia	2,216	2,785	2,583	48%	207	151	230	281	228	178	306	230	206	204	181	181	
China	1,907	2,540	2,102	39%	110	138	111	28	28	291	260	234	330	175	326	72	
United States	633	602	475	9%	18	43	63	49	77	11	13	8	63	30	44	56	
Oman	404			0%													
Total Tonnes	6,392	6,149	5,390	100%													
VALUE		CARROTS		KUWAIT		KUWAIT IMPORTS A\$ '000											
Product : 070610 Carrots and turnips, fresh or chilled																	
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Australia	1,662	2,013	1,933	49%	151	122	164	197	166	137	238	182	159	156	132	129	
China	966	1,226	1,094	28%	49	45	47	16	19	227	133	126	190	93	122	26	
United States	716	861	850	22%	26	85	120	76	97	14	17	12	90	78	122	112	
Oman	263			0%													
Total A\$ '000	3,880	4,173	3,924	100%													
A\$ per kg	CARROTS		KUWAIT		KUWAIT IMPORTS A\$ per kg												
Product : 070610 Carrots and turnips, fresh or chilled																	
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Australia	0.75	0.72	0.75		0.73	0.81	0.71	0.70	0.73	0.77	0.78	0.79	0.77	0.77	0.73	0.71	
China	0.51	0.48	0.52		0.45	0.32	0.43	0.60	0.69	0.78	0.51	0.54	0.58	0.53	0.37	0.36	
United States	1.13	1.43	1.79		1.47	1.96	1.92	1.56	1.27	1.25	1.33	1.50	1.43	2.56	2.80	1.99	
Oman	0.65																
A\$ per kg	0.61	0.68	0.73														

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis based on MIRROR data supplied by exporters to Kuwait
Notes : There is no recent data supplied by Oman

Carrots – Bahrain

- Over the last three years Australia has dominated imports of carrots and in 2012 had a market share of 39% whilst China had a market share of 35%.

VOLUME		CARROTS	BAHRAIN	BAHRAIN IMPORTS Tonnes												
Product : 070610 Carrots and turnips, fresh or chilled																
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
				2011												
Australia	5,394	3,520	4,223	39%	178	141	156	348	449	434	637	312	345	406	438	480
China	3,260	3,158	3,121	35%	-	189	190	108	108	467	603	136	245	353	585	135
Saudi Arabia*	351	2,156	No data	24%												
Oman	65	79	No data													
Total Tonnes	9,233	9,050		100%												

VALUE		CARROTS	BAHRAIN	BAHRAIN IMPORTS A\$ '000												
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
				2011												
Australia	5,101	3,220	3,291	57%	140	129	106	253	331	329	489	241	276	325	332	356
China	2,103	1,722	1,524	30%		73	80	59	74	327	320	70	121	166	203	44
Saudi Arabia*	80	533	No data	9%												
Oman	30	37	No data													
Total A\$ '000	7,403	5,698		100%												

A\$ per kg		CARROTS	BAHRAIN	BAHRAIN IMPORTS A\$ per kg												
Product : 070610 Carrots and turnips, fresh or chilled																
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
Australia	0.95	0.91	0.78		0.79	0.91	0.68	0.73	0.74	0.76	0.77	0.77	0.80	0.80	0.76	0.74
China	0.65	0.55	0.49			0.38	0.42	0.55	0.69	0.70	0.53	0.51	0.49	0.47	0.35	0.33
Saudi Arabia*	0.23	0.25														
Oman																
A\$ per kg	0.80	0.63														

Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis based on direct data (2010 & 2011) and MIRROR data (2012) supplied by exporters to Bahrain
Notes : Consider with caution where the volume from Saudi Arabi has been re exported, also value appears very low. Bahrain also appear to re export

Relative size of Market Segments

Outside the United Arab Emirates, supermarket retailing is a major outlet for fresh produce. Retailers include:

- Abu-Dhabi based LuLu has 100 stores across the GCC (Gulf Cooperation Council) state – UAE, Saudi Arabia, Oman, Bahrain, Kuwait and Qatar, as well as Yemen and Egypt.
- Carrefour, in partnership with Majid Al Futtaim Retail, has around 50 stores across the Middle East.
- Geant, a French-backed hypermarket retailer, has stores in Kuwait and Qatar (in addition to the UAE)

Market Access and Trade Viability Improvement Plan

- Other Middle East warrants inclusion in the market access and trade viability improvement strategy. The focus of investments needs to be value added lines direct to the supermarket / hypermarket sector.

Saudi Arabia

Market Access

- Free Trade Agreement negotiations with the GCC commenced in July 2007 (DFAT website).
- GCC has paused its trade negotiations with all partners pending a review of its trade agreement policy.
- Access to this market is not problematic; a 15% import duty on carrots is imposed for a few weeks starting in May but can be accommodated.

Trade Relationships with Australia

- Saudi Arabia was the ninth largest purchaser of Australian fresh vegetables in 2012.
- The Saudi culture is somewhat different to that of Australia but can be successfully negotiated.

Demographics and Capacity to Pay

- Population: 26.5 million (2012 estimate)
- Population growth rate: 1.5% (2012 estimate)
- Median age: 25.7 years
- Urban population: 82%
- Major cities: Riyadh (4.725 million); Jeddah (3.234 million); Mecca (1.484 million); Medina (1.104 million); and Ad Dammam (902,000)
- GDP per capita: US\$24,500 (2012 estimate)
- High unemployment rates in the country and development of horticulture is viewed, amongst other things as an employment generating opportunity (*Trade Middle East Magazine 2012*)
- Since King Abdullah came to power in 2005 wealth is being redistributed and there are a large number of building projects including schools, hospitals and universities. (*Trade Middle East Magazine 2013*).

Vegetable Production and Consumption

- Cucumbers and tomatoes are the most important greenhouse crops, contributing more than 94% of the total Saudi production.
- The Saudis are willing to pay for guaranteed safe product/don't want dubious Chinese quality
- Saudi Arabia relies on a combination of direct imports and re-export from the UAE for Saudi Arabia attracts 2 million visitors each year to religious festivals (food service opportunities), has rising consumer purchasing power and a 'burgeoning middle class'.
- Saudis have recently banned the export of produce grown in open fields as a way of conserving depleted groundwater; this includes onions, water melons and potatoes.
- Saudi Arabia supplies the whole Gulf with potatoes which have very strong demand – French fries
- Major sources of imported vegetables include the Netherlands, the US, Kenya, Australia, South Africa, Thailand and India. The Saudis are phasing out wheat production to grow more fruit and vegetables for domestic consumption. Vegetables whose production base is likely to grow include carrots.
- The organic vegetable sector is growing in Saudi Arabia and the US is one of the main suppliers (*Trade Middle East Magazine 2013*)

Saudi Arabia Vegetable Imports from Australia 2010 to 2012 – Vegetables in Scope (\$AUD)

Vegetable	Value 2010	Value 2011	Value 2012
Broccoli	397,850	257,410	56,960
Beans	0	970	0
Capsicum	0	0	0
Carrots	6,308,040	6,228,230	6,358,690
Cauliflower	0	0	0
Celery	3,260	0	0
Leek	0	0	0
Lettuce - head	0	0	0
Lettuce – other	0	0	0
Peas	0	0	0
Squash and pumpkin	0	0	1,930
Sweet corn – fresh	N/a	N/a	N/a
Sweet corn – frozen	0	0	0
Sweet potato	2,170	0	0
Total	6,711,320	6,486,610	6,417,580

Source: ITC Comtrade

Carrots:

- There has been significant growth in demand for Australian carrots despite a 15% tariff (*Asia Fruit Magazine December 2012 / January 2013*)
- Over the last three years Australia has dominated imports of carrots and in 2012 had a market share of 42% with Turkey the next largest supplier with a market share of 28%. Australia has received a significant price premium over Turkey during the last three years with the price of Australian carrots approximately 3 times the price of carrots from Turkey.
- Competition is also from Chinese carrots which are available all year round and local produce from Oman which is of good quality and is available January to March.

VOLUME		CARROTS	SAUDI ARABIA															
SAUDI ARABIA IMPORTS Tonnes																		
Product : 070610 Carrots and turnips, fresh or chilled																		
Exporters	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
Australia	8,650	9,763	9,146	42%	554	24	435	812	1,129	992	1,579	837	736	654	682	712		
Turkey	6,004	7,348	5,958	28%		23	15		89	161	1,353	1,242	1,894	798	381			
China	2,154	4,350	3,858	18%	2	162	351	108	55	710	850	467	359	303	329	163		
Bahrain	3,004	1,682	1,998	9%														
Total Tonnes	20,367	23,502	21,602	100%	556	209	805	929	1276	1883	3890	2597	3086	1824	1424	943		
VALUE		CARROTS	SAUDI ARABIA															
SAUDI ARABIA IMPORTS A\$ '000																		
Product : 070610 Carrots and turnips, fresh or chilled																		
A\$ '000	2010	2011	YEAR 2012	share	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
Australia	6,308	6,228	6,359	60%	395	20	352	582	745	659	1095	607	541	456	462	483		
Turkey	1,457	1,594	1,341	13%		4	4		18	33	284	310	499	155	83			
China	1,006	1,800	1,972	19%	1	59	148	51	45	472	422	265	185	152	131	57		
Bahrain	995	433	713	7%														
Total A\$ '000	9,978	10,245	10,639	100%	396	82	512	641	809	1174	1800	1212	1294	787	700	581		
A\$ per kg		CARROTS	SAUDI ARABIA															
SAUDI ARABIA IMPORTS A\$ per kg																		
Product : 070610 Carrots and turnips, fresh or chilled																		
A\$ per kg	2010	2011	YEAR 2012		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12		
Australia	0.73	0.64	0.70		0.71	0.82	0.81	0.72	0.66	0.66	0.69	0.72	0.74	0.70	0.68	0.68		
Turkey	0.24	0.22	0.23			0.16	0.25		0.20	0.21	0.21	0.25	0.26	0.19	0.22			
China	0.47	0.41	0.51		0.48	0.36	0.42	0.47	0.81	0.66	0.50	0.57	0.51	0.50	0.40	0.35		
Bahrain	0.33	0.26	0.36															
A\$ per kg	0.49	0.44	0.49		0.71	0.39	0.64	0.69	0.63	0.62	0.46	0.47	0.42	0.43	0.49	0.62		
Sources : ITC calculations based on UN COMTRADE statistics; Fresh Intelligence analysis. Saudi Arabia data is MIRROR data - data from exporters to Saudi Arabia.																		
Notes																		
FAO STAT records Saudi Arabia as a producer of around 50,000 tonnes of carrots - may explain lower demand from October - May.																		
Bahrain is most likely a source for re export of carrots from elsewhere - their annual production is recorded by FAO STAT as 260 tonnes.																		

Relative Size of Market Segments

- The market in Saudi Arabia is increasingly modern with western style supermarkets and hypermarkets and include:
 - Azizia Panda with 50 supermarkets and 6 hypermarkets
 - Al Oithaim with over 40 supermarkets
 - Farm superstores, with 19 major outlets
 - LuLu and Carrefour
- There is plenty of sophisticated retail in Saudi Arabia – the grocery market is now valued at US\$20 billion per annum (Planet Retail data) and is supported by burgeoning middle class and rising GDP per capita.
- Retail sector is becoming ever more concentrated - domestic and foreign (e.g. Carrefour and Casino) owned hypermarkets are winning market share. Hypermarkets are squeezing out small independently owned fruit & vegetable retailers and emptying out traditional wholesale markets. Hypermarkets are also attempting to move back down the supply chain and squeeze out wholesalers and capture their margins.
- The convenience sector is expanding quickly from a small base.
- While direct supply to retailers has been forecast, wholesalers still appear to play an important function. Wholesalers are able to segregate and grade produce for individual retailers.

Supply Windows

- Carrots – August to February

Freight and Logistics

- Shipping is good and takes only 22 days.

Market Access and Trade Viability Improvement Plan

- Prospective market for Australian vegetable exports

Jordan

Demographics and Capacity to Pay

- Population: 6.5 million (2012 estimate)
- Population growth rate: -0.96% (2012 estimate)
- Urban population: 79%
- Major cities: Amman (1.01 M)
- GDP per capita: US\$6,000 (2012 estimate)

Market Access and Trade Viability Improvement Plan

- Low opportunity market
- Little capacity to pay
- Distant with higher freight costs than UAE

Market Access and Trade Viability Improvement Plan

- Jordan is not included in the Market Access and Trade Development Strategy. There is limited capacity to pay and it is a distant market with higher freight costs than say the UAE. There is a limited trade history with Australian fresh vegetables.

Iran

Market access:

- This country was initially included as a speculative longer term prospect
- Current crippling sanctions imposed by the US and EU in response to Iran's nuclear program mean that even basic foodstuffs are beyond the capacity to pay of many Iranians.
- Sanctions have resulted in higher shipping costs and longer transit times. Logistical bottlenecks at ports – ports are not state of the art.
- Transport is problematic, with major shipping companies refusing to service the market due to the risk of retaliatory action from the US. Iran is losing its re-export market.

Demographics and Capacity to Pay

- Population: 78.9 million
- Median age 27.4 years
- GDP: US\$1,003 billion
- GDP per capita: US\$13,200
- Sanctions have hit the value of the rial and given limited sources of foreign currency, the risks associated with importing have increased.

Vegetable Production and consumption:

Trade Middle East Magazine 2012

- Second largest population in ME, youthful population and strong culture of fruit consumption
- Large importers of bananas, citrus, apples, pears, garlic and ginger.
- Short duration import bans are often imposed to protect domestic production. Bans can be seasonal or be duty based with duties of up to 90% common.
- Iran is a major year round producer of watermelons and tomatoes
- Around 70% of Iran's fresh produce is imported (*Trade Middle East Magazine 2013*)
- There is evidence of products being re-exported from Dubai to Iran

Market Access and Trade Viability Improvement Plan

- Iran is not included in the Market Access and Trade Development Strategy.

India

Market access:

- Access is difficult - fresh vegetable imports are prohibited
- World Bank 'Ease of Doing Business' report 2012 ranked India 132 out of 183 countries. The Federal structure means that importers face conditions that change across state and local levels due to political leadership, quality of governance, regulations, taxation, labour relations and education levels.
- Agriculture, horticulture, food ownership and imports are all politically sensitive issues in India.
- India is a difficult place to do business

Demographics and Capacity to Pay

- In 2013, GVP is expected to reach US\$2,000 billion, in 2016 it is expected to reach US\$3,000 billion
- Population will increase from 1 billion plus to 1.3 billion by 2016
- Unlike Japan and China, India does not have a problem with an aging workforce
- India has a rising middle class with increasing purchasing power with a desire to try new and better quality products

Vegetable Production and consumption:

- India is the world's second largest (after China) vegetable producer, with an estimated 133 million tonnes in 2011
- The vegetable seed industry is representing itself in India rather than just having distributorships; this means the market is growing and becoming more sophisticated – moving from open pollinated varieties to hybrids. All the major vegetable seed companies (Monsanto Seeds, Bayer Seeds (as Nunhem Seeds), Syngenta Seeds, Enza Zaden Seeds, Rijk Zwaan and Clause HM Seeds have breeding stations and commercial wholesaling operations in India.
- Rising incomes are fuelling increased consumption of fresh produce
- Imports are only affordable by upper income families
- Cucumber and cauliflower (and tomato) are traditional Indian staples. Good quality lettuce can be grown, but there is basically no cool chain
- In terms of horticultural production, India has an under developed resource base with considerable potential to expand output.
- Appalling post-harvest: estimates suggest that post-harvest losses are as high as 40% of production.
- Food safety is a huge cultural problem.
- Seed industry has tried with seeds and found it too difficult – poor areas can't afford to purchase seeds. Too poor for protected cropping. Land tenure – best areas are Punjab and this is highly fragmented and very small holdings.

Relative Size of Market Segments:

- Supermarkets and other forms of modern retail only account for a modest 4% to 5% of fresh produce sales in 2012. Nevertheless this is up from less than 1% in 2005 and is widely forecast to be between 20% and 30% by 2020 (Professor Thomas Reardon, Michigan State University in Asia Fruit Magazine July / August 2011).
- Many of the 'modern' retailers, such as Spencers, Reliance, More and Fresh @, have only small areas at the store-front for fruits and vegetables, reflecting the difficulty they have in managing and competing with traditional markets and street vendors, especially with vegetables.
- Larger formats, such as Big Bazaar, Star Bazaar, Easy Day and Hyper City have been more successful with vegetables, catering to more upscale customers with better quality and generally assured safe product.
- While retail reforms have in theory allowed for foreign direct investment, foreign direct investment in multi-brand retail remains effectively blocked (Asia Fruit Magazine March 2012). Foreign supermarket chains such as Metro Cash & Carry and Walmart have Indian joint venture partners

Market Access and Trade Viability Improvement Plan

- India is not included in the Market Access and Trade Development Strategy. There is no market access for Australian fresh vegetables nor is access likely in the medium to longer term. Domestic vegetable production is a sensitive political issue. India is also a significant net vegetable exporter.

Sri Lanka

Market access:

- Access is available
- There are specific requirements for fruiting vegetables
- Lettuce and sweet potato imports are prohibited

Demographics and Capacity to Pay

- Population: 21.5 million (2012)
- Population growth rate: 0.93% (2012 estimate)
- Urban population: 14%
- Major cities: Colombo 681,000
- GDP per capita: US\$6,100 (2012 estimate)

Vegetable Production and consumption:

- Production is estimated at around 700,000 tonnes, across over 40 vegetables.
- A range of climates means production can be scheduled at different locations over the year
- Vegetable production has expanded in the North East, at the end of the long-running civil war
- Less than 4 per cent of total production of fruits and vegetables undergo some sort of added-value in the form of export, processing or marketing to the high value market through supermarkets (Esham *et al.*, 2006). The main vegetables that are exported include green beans, leeks, capsicum, cabbage, carrot, tomato, bell pepper and gherkin. Tomato, chili and gherkin are the major vegetables used for processing, mainly to produce chutney, pickles, sauce and gherkin in brine and vinegar.

Relative Size of Market Segments:

- Sri Lanka has a well developed and long-standing supermarket sector, with three chains dominating. They all have small to medium-sized formats, with fruit and vegetable departments to match. All have refrigerated display sections, for high-value products.
- The largest is Cargills Food City with 230 stores at the end of 2012. Keells has 42 stores and Arpico 17 (late 2012)
- All are expanding into the north of the country, following the end of the civil war.

Market Access and Trade Viability Improvement Plan

- Sri Lanka is not included in the Market Access and Trade Development Strategy. There is limited capacity to pay and no vegetable trade history with Australia. The diverse Sri Lankan climate allows for temperate production.