



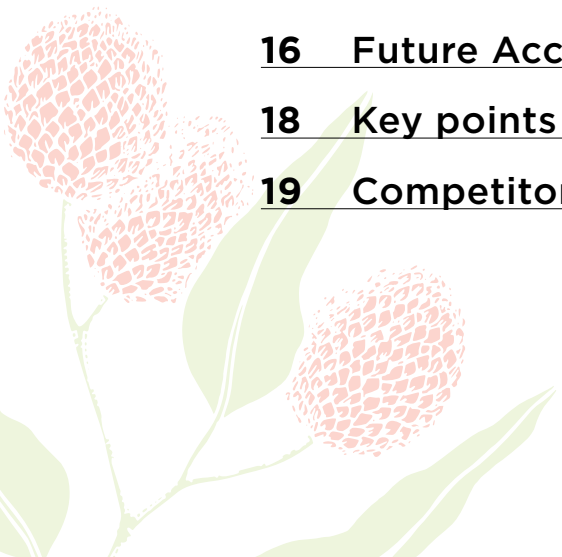
EXPORT MARKET INTELLIGENCE REPORT

Summary & Insights



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Scope and Limitations

This Market Insights Report has been created & funded by the Australian Lychee Growers Association, the Peak Industry Body for the Australian Lychee Industry. The objectives of these insights & summaries are to assist the Australian Lychee Industry in identifying potential export opportunities to improve trade performance and long-term industry sustainability. The content of this report has been developed by researching current international markets where the commodity is exported to as well as sourcing content & information to assist in future export opportunities. This report has been compiled by using:

- Industry desktop analysis
- Lychee growers & stakeholder consultation
- Market access submissions

The industry is currently exporting between 20-25% of annual production although due to the anticipated growth in production expected within the next few years, the industry is looking to increase exports to existing markets and open up new export markets. The lychee domestic market can become oversupplied with lower and uneconomical returns to growers if export markets are not maintained and grown.

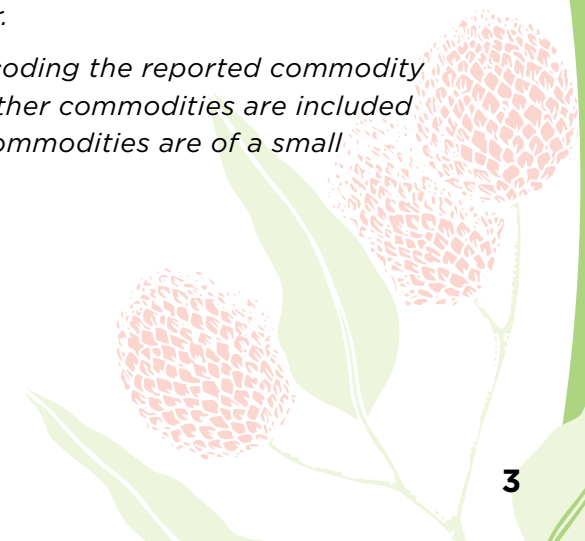
Export markets and supply chains have changed since the onset of Covid-19, which resulted in limited international flights, a lack of freight space, increase in freight costs as well as an increase in fuel costs. The information provided in this report is current as of June 2022 although the information has not been independently verified or cross-checked for accuracy. Reliance should not be placed upon data provided in this report and individuals/organisations are accountable for any decisions made using the information provided.

Note: all price per kilogram figures mentioned in this report are FOB prices listed in AUD, calculated using the export data provided and are therefore exclusive of freight and agent returns. For Australian lychee export figures this data is sourced from ITC Trade Map database, UN Comtrade, Hort Innovation and the Australian Lychee Growers Association while competitor analyses is sourced from Trade Map database and UN Comtrade.

ITC Trade Map - in the form of tables, graphs and maps - indicators on export performance, international demand, alternative markets and competitive markets, as well as a directory of importing and exporting companies.

Trade Map covers 220 countries and territories and 5300 products of the Harmonized System. The monthly, quarterly and yearly trade flows are available from the most aggregated level to the tariff line level.

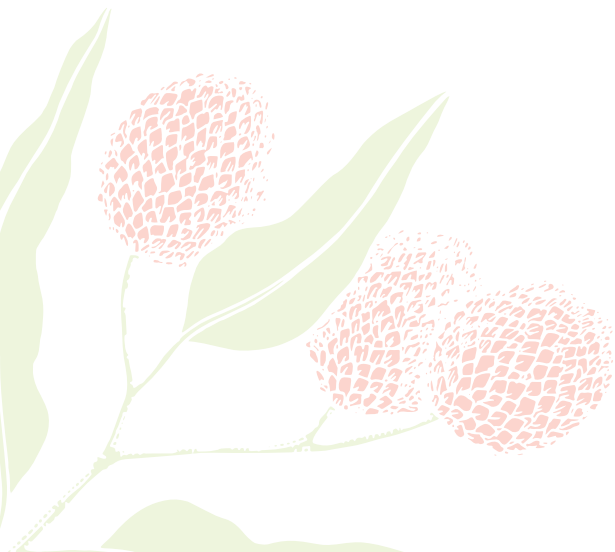
- *The values of the reported detailed commodity data do not necessarily sum up to the total trade value for a given country dataset. Due to confidentiality, countries may not report some of its detailed trade. Countries do not necessarily report their trade statistics for each and every year.*
- *Due to the Harmonized System coding the reported commodity is not reported on individually, other commodities are included in the HS code although these commodities are of a small nature.*





INDUSTRY

Summary



Industry Summary



Lychees were introduced into Australia more than 100 years ago and over this time the industry has developed from a “small exotic fruit” industry into a progressive and robust industry. The Australian Lychee industry is represented by the industry’s Peak Industry Body, the Australian Lychee Growers Association (ALGA). Lychees are grown and harvested from October in Far North Queensland to early March in New South Wales and the industry has a significant advantage over other suppliers on world markets, as no other country can offer such a long line of supply of quality controlled fresh lychee product.

Research has been conducted on the following non-quarantine markets:

- Canada
- Hong Kong
- Malaysia
- Middle East
- Singapore
- UK

Research has been conducted on the following quarantine markets:

- USA (excl the state of Florida)
- New Zealand
- Indonesia

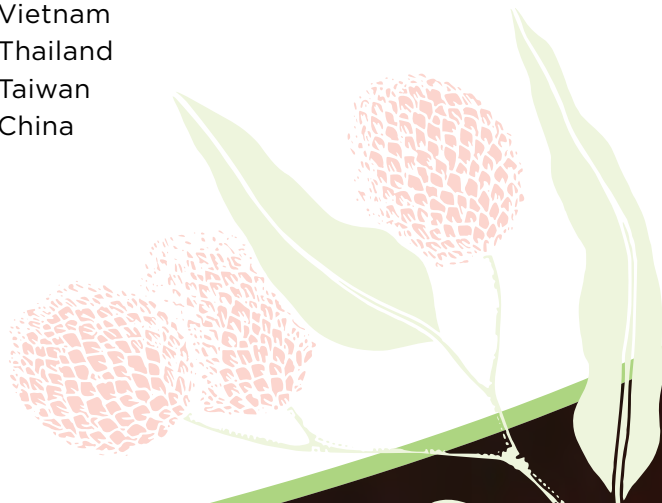
Research has been conducted on the following Export Market Access countries:

- Vietnam
- Thailand
- Taiwan
- China

Research has been conducted on the following future Export Market Access countries:

- Japan
- South Korea
- India

Most world production is counter seasonal to Australia. The main competitor for Australian lychee in the Southern Hemisphere is from South Africa, Madagascar and Mauritius, with emerging small supplies from some South American countries.

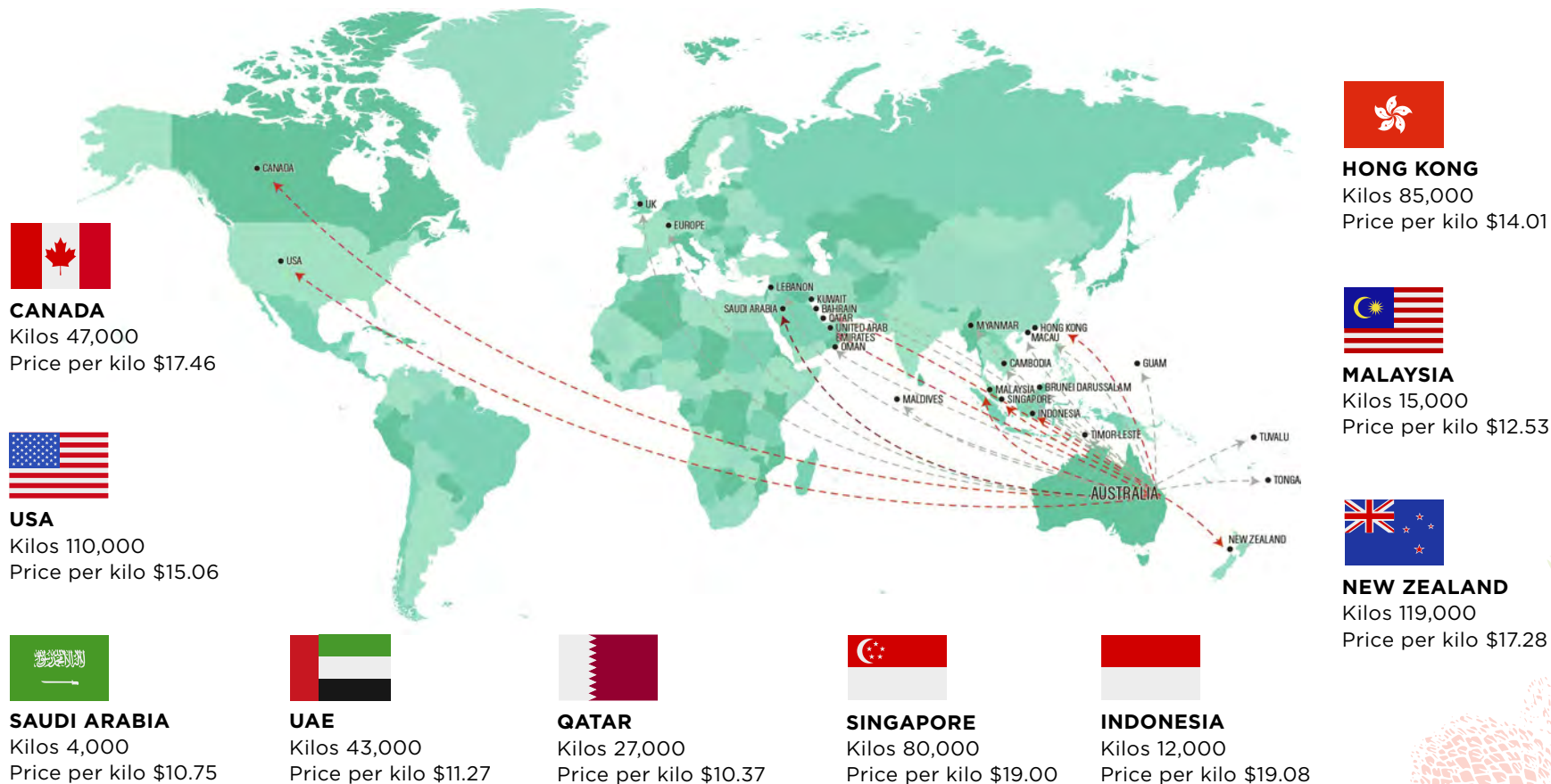


Where were Australian lychees exported to in 2021?

An overview of the top 10 export markets.



The map below indicates the top ten destinations of Australia lychee in 2021 and their respective value (AUD), volume (kilograms), price per kilogram, and share of the total volume of Australia lychee exports. Australia also exports lychees to: United Kingdom, Europe, French Polynesia, Lebanon, Kuwait, Bahrain, Oman, Brunei Darussalam, Maldives, Macau, Cambodia, Myanmar, Guam, Timor-Leste, Tuvalu, and Tonga.





An overview of the top 10 export markets

NEW ZEALAND

- 119,000kilos
- \$2,056,000m
- 22% of exports
- \$17.28ppk



USA (excl State of Florida)

- 110,000kilos
- \$1,656,600
- 20% of exports
- \$15.06ppk



HONG KONG

- 85,000kilos
- \$1,190,850
- 15% of exports
- \$14.01ppk



SINGAPORE

- 80,000kilos
- \$1,520,000
- 14% of exports
- \$19.00ppk



CANADA

- 47,000kilos
- \$820,620
- 9% of exports
- \$17.46ppk



UAE

- 43,000kilos
- \$484,610
- 8% of exports
- \$11.27ppk



QATAR

- 27,000kilos
- \$279,990
- 5% of exports
- \$10.37ppk



MALAYSIA

- 15,000kilos
- \$187,950
- 3% of exports
- \$12.53ppk



INDONESIA

- 12,000kilos
- \$228,600
- 2% of exports
- \$19.05ppk



SAUDI ARABIA

- 4,000kilos
- \$430,000
- 1% of exports
- \$10.75ppk





ITC Trade Map

Australian Lychee Exports for 2021 using HS code of 081090 *(includes other commodities)*

List of importing markets for a product exported by Australia
 Product: 081090 Fresh tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, pitahaya

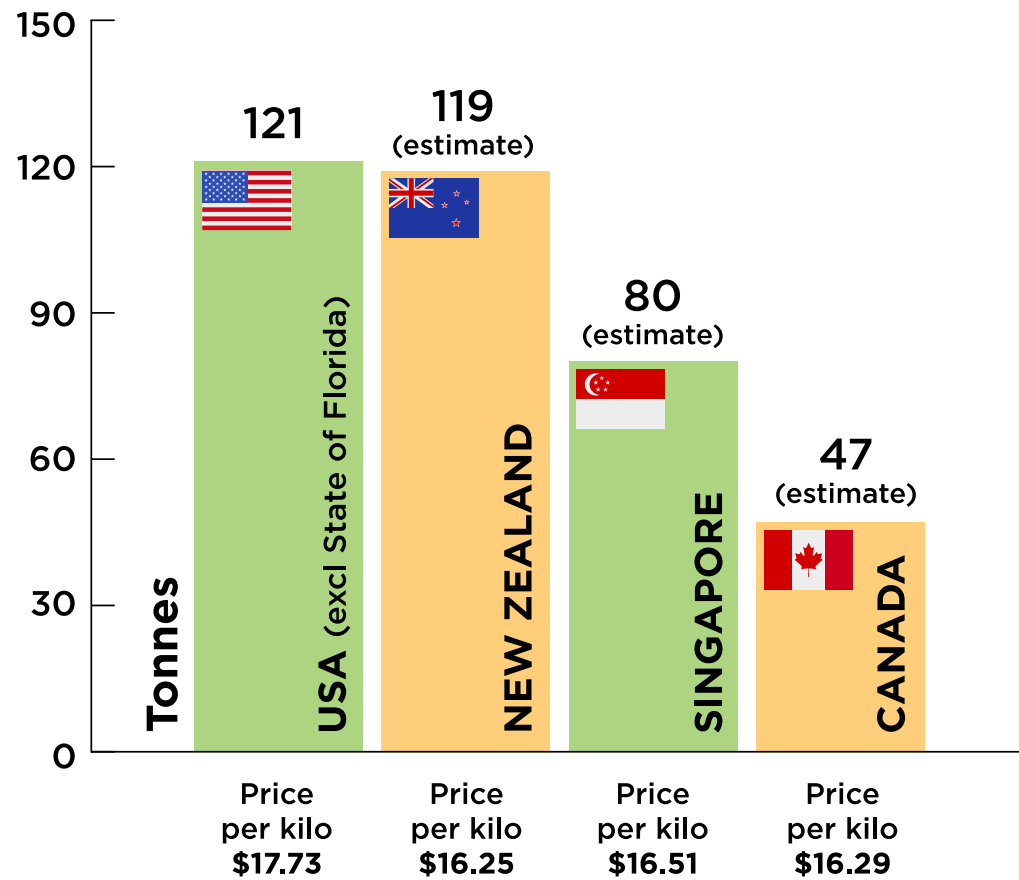
Sources: ITC calculations based on Australia Bureau of Statistics statistics.

Product: 081090 - List of importing markets for a product exported by Australia		
Importers	Protocol	2020/21 I
		Total exported, tonnes
World		546
New Zealand	Irradiation of 150gys or 400gys or 500gys	119
United States of America	Irradiation 400gys	110
Hong Kong, China	Free entry	85
Singapore	Free entry	80
Canada	Free entry	47
United Arab Emirates	Phytosanitary Cert	43
Qatar	Phytosanitary Cert	27
Malaysia	Free entry	15
Indonesia	Irradiation	12
Saudi Arabia	Phytosanitary Cert	4
Kuwait	Phytosanitary Cert	3
Cambodia	Phytosanitary Cert	1

The USA accounted for the largest amount of 2022 Australian lychee exports by volume



The graph below displays the value and volume of Australian lychee exports by the top 4 destinations, the price points charged over combined lychee varieties as well as the highest price points overall.



Consumer preferences by variety by export market



Country	Variety	Avg selling price 2022
USA	Kwai Mai Pink	\$17.73ppk
	Wai Chee	\$17.45ppk
New Zealand	Kwai Mai Pink	\$13.52ppk
	Wai Chee	\$11.63ppk
	Kaimana	\$26.62ppk
	Sah Keng	\$22.84ppk
	Baitaying	\$26.29ppk
Canada	Kwai Mai Pink	\$16.29ppk
	Wai Chee	\$15.00ppk
Singapore	Salathiel	\$16.51ppk
Hong Kong	Kwai Mai Pink	\$20.88ppk



Lychee growing countries and competitors in the market



Seasonal production in Northern and Southern hemisphere lychee producing countries

World Lychee Production Statistics

World production of lychee is dominated by China which produces 63% of the total world production, although much of its output does not enter world trade. Similarly, India which produces approximately 19% of world production, has a mainly domestic market. Taiwan and Thailand are also significant producers (approximately 3% and 2% respectively of world production) and have aggressive export strategies. China, Vietnam and Thailand have protocols in place to export lychee to Australia during the Australian off-season. China, Taiwan, South Africa and Mexico export to the USA. The bulk of world lychee production takes place in developing or emerging countries; the exceptions are Israel, Australia and the USA.

Country	J	F	M	A	M	J	J	A	S	O	N	D
<i>Northern Hemisphere</i>												
China												
Taiwan												
Vietnam												
Thailand												
India												
Israel												
Mexico												
USA												
<i>Southern Hemisphere</i>												
Australia												
South Africa												
Madagascar												
Mauritius												
Brazil												
New Caledonia												
Reunion												



Market Access & export opportunities to Vietnam, Thailand, Taiwan & China



Vietnam



Vietnam has an estimated population of 97.33 million (mid 2020) which is 1.25% of the world's population. Lychee production in Vietnam is concentrated in the upper northern provinces of Bac Giang, Haiduong, Quangninh and Hatay. The Australian lychee harvest is counter seasonal to the production in the Northern Hemisphere. Vietnam produces lychee from May to July compared to the Australian harvest from October to March.

(i) Proportion of market & anticipated added value Australia lychee could secure: The potential buying population of the 10 largest cities in Vietnam is approximately 8 million people, assuming 10% purchased 1kg of lychee, Australia would need to supply 800 tonnes of fruit with a value of \$10 million. This would equate to 100% market share for Australian lychee as no other country is exporting lychee into Vietnam during this period.

(ii) Total existing volume: During Vietnam's Northern Hemisphere harvest, the total production area of the whole country is approximately 80,000 hectares with the total production of about 380 thousand tonnes (2018-Statista.com).

In 2018, Vietnam's lychee exports to China sold for US\$9.46pk (A\$13.25pk) A\$1.325 billion and local sales were US\$2.15pk (A\$3.00) A\$840 million. Average return on 380 thousand tonnes could be estimated @ A\$2.2 billion.

(iii) Imports from other trading partners: Vietnam currently imports fresh lychees during the Northern Hemisphere season from Thailand, China, Lao PDR and Cambodia although this is a counter seasonal period to the Australian harvest. Percentage of lychee imports from other countries during the period when Australian lychees could be exported to Vietnam is nil, 0%.

In summary, access to the Vietnam market provides an excellent opportunity for the Australian lychee industry as it allows for growers to supply to an existing and growing market where there is demand and little to no competition; it will provide opportunity for expansion and long-term growth, and it will ensure long term returns for the industry.

Thailand



Thailand has an estimated population of 69.79 million (mid 2020) which is .9% of the world's population. Lychee production in Thailand is concentrated in the upper northern provinces where more than 80 percent of the crop is grown. Thailand has a harvest period from late April through to mid-June, which is counter seasonal to the Australian lychee season.

(i) Proportion of market & anticipated added value Australian lychee could secure: The potential buying population of the ten major cities in Thailand is approximately 20 million people, assuming if 3 % purchased 1 kilo of lychee, Australia would need to supply 600 tonnes of fruit with a value of \$6.9 million. This would equate to 100% market share for Australian lychee as no other country is exporting lychee into Thailand during this period.

(ii) Total existing volume: During Thailand's northern hemisphere harvest, the total production area of the whole country is approx. 18,210 hectares with the annual production of about 46,200 tonnes. Thailand exports approx. 11,000 tonnes of lychee valued at A\$71.4 million per year to China, Malaysia, Indonesia and UAE. (Tridge.com)

(iii) Imports from other trading partners: Thailand currently imports fresh lychees during the Northern Hemisphere season from Vietnam, China, Lao PDR and India although this is a counter seasonal period to the Australian harvest. Percentage of lychee

imports from other countries during the period when Australian lychees could be exported to Thailand is nil, 0%. In summary, access to the Thailand market provides an excellent opportunity for the Australian lychee industry as it allows for growers to supply to an existing and growing market where there is demand and little to no competition; it will provide opportunity for expansion and long-term growth, and it will ensure long term returns for the industry.

Taiwan

Taiwan has an estimated population of 23.82 million (mid 2020) which is .31% of the world's population. Spread across a total land area of about 36,000km², it is the seventeenth most densely populated country in the world. Taiwan is in the Northern Hemisphere and has a lychee harvest period from June to August, which is counter seasonal to the Australian lychee season.

(i) Proportion of market & anticipated added value Australian lychee could secure: The potential buying population of the 6 largest cities in Taiwan is approximately 16.5 million people assuming 2% purchased 1 kilo of lychee, Australia would need to supply 495 tonnes of fruit with a value of \$6 million. This would equate to 100% market share for Australian lychee as no other country is exporting lychee into Taiwan during this period.

(ii) Total existing volume: Taiwan's total production area is 11,580 hectares with an annual lychee production of approx. 131,000 tonnes. Taiwan exported 93 tonnes of lychee in 2019 with an estimated value of A\$1.4 million of this figure 90 tonnes were exported to Japan.

(iii) Imports from other trading partners: Taiwan currently imports fresh lychee from mainland China during the Northern Hemisphere season with 42 tonnes imported in 2019. Mainland China remains Taiwan's most important non-domestic market and accounted for approx. 80% of total fruit exports followed by Japan and Hong Kong with export values to these 2 markets reaching \$21 million. The top 3 fruit suppliers to Taiwan in 2019 by export value were USA \$259 million, New Zealand \$154 million and Chile \$98 million.

The Council of Agriculture (COA) of the Executive Yuan states that the production season for lychee in Taiwan lasts roughly from May to August of every year, while the production season in Australia, which is in the Southern Hemisphere is the opposite of Taiwan's, and lychee can be produced from October/November to March/April.

In order to raise the visibility of Taiwan lychee varieties and extend the supply period each year, the governments of Taiwan and Australia have cooperated to establish counter-seasonal production areas and manage the Taiwan lychee brand under an MOU agreement. Through complementarity between markets in the Northern and Southern Hemispheres, Taiwan's fruit tree industry can be internationalized, developing a new framework for agricultural cooperation based on exports of plant varieties and creating new international commercial opportunities.

(Memorandum of Understanding MOU 2016)

In summary, access to the Taiwanese market provides an excellent opportunity for the Australian lychee industry as it allows for growers to supply to an existing and growing market where there is demand and little to no competition; it will provide opportunity for expansion and long-term growth, and it will ensure long term returns for the industry.

China

China, the home of lychee (*Litchi chinensis* Sonn.) is the world largest producer of lychee with seven provinces producing >2,000,000 tonnes from an area of 600,000 ha.

- The China market rates well on the market potential analysis for all fruit categories because of the size of the population and the strong socio-economic situation with a large and growing affluent class. China is also the world's largest producer of fresh fruit.
- China is by far the biggest market in the world for lychees, consuming 2.3 million tonnes last year, even though this is almost all during the northern season from June to August.



- China is largely self-sufficient in lychees importing only 69,000 tonnes. Imports are growing steadily, suggesting an increasing reliance on imports.
- China is currently closed to direct imports of lychees from Australia, but industry representatives suggest that Australian product is entering the market via other routes.
- Australia has good direct airfreight connections with Mainland China to tier 1 and tier 2 cities.
- Most of the 69,000 tonnes of lychee imports to China came from Vietnam.
- Thailand is a minor supplier of lychees to China and is losing market share. Industry believes that a reason for this could be Sulphur treatment.
- Overall lychee imports to China are growing at 4% year.
- Some in the industry believe that the exports from Vietnam could include re-exports from other growing countries, potentially even Australian fruit that is being re-exported via Singapore.

China is an extremely price driven market with the average import price for lychees being US\$0.48 per kilo (A\$0.63). At these prices, Australia would not be competitive, so would need to market Australian fruit with a highly differentiated quality and flavor proposition. **Although Australia exports in a different seasonal window to Thailand and Vietnam, the competitor product will set price expectations to some extent.** The superior eating quality of the varieties grown in Australia would assist in differentiating from cheaper competitors, but this fact would require promotion and considered branding (being mindful also of measures to prevent counterfeiting) and promotional programs would not be possible without market access.

- I. Import prices for lychees to China are extremely low at around \$0.63 in Australian dollars, which is well below the Australian export price threshold and domestic market prices.

- II. Australia's opportunity for a viable return lies in being able to service a high-end market sector with premium fruit at a time when there are no other fresh lychees in the market.

Although China ranks well in terms of market potential, the opportunities for Australia would seem extremely limited at face value, but if there is an opportunity to hold an exclusive supply window for Chinese New Year, that would change the outlook significantly. China scores well in the analysis because it is a very large market and showing strong import growth rates.

The issue for Australian exporters in this market is firstly market access and then secondly, price. Australia could not be price competitive at the price expectations of most consumers for lychees, so the market positioning needs to be very premium, targeting high end consumers and the Chinese new year gift trade.

Notwithstanding the price ceiling, there may be premium niche markets for Australian product. Australia's counter-seasonal advantage and an ability to supply into the Chinese New Year celebration period is the 'game changer'. However, this is a time of year in China when temperatures can be very cold which could reduce consumption and create fruit quality issues in transit.



Future Market Access opportunities for Australian lychee exports to Japan, South Korea & India



Japan

Japan is driven by the strong demographic and socio-economic factors. Japan is a sophisticated market and has a well-developed retail and food service sector.

Compared with China, South Korea and Taiwan, Japan is a small market for lychees and is showing steady decline. The per capita consumption is low and the propensity to consume in the MPI ranking indicated that this is not a fruit that the Japanese consumer is familiar with.

- Australia has not had market access for lychee to Japan since 2005/06.
- The attraction of the Japanese market is that it offers counter-seasonal supply windows at reasonable prices.
- Imports of lychees into Japan have shown a steady decline over the past 15 years.
- In 2016/17 Japan imported 264 tonnes of lychees.
- The Japanese lychee market is shared by China, Taiwan & Vietnam.
- All imports have been during the May to September period.
- Japan imported 40 tonnes of lychee from Vietnam in 2020 & 400 tonnes in 2021.
- Australia has not exported lychees to Japan since 2005/06.
- Because Australian lychees are not currently exported to Japan, it is not possible to calculate the competitiveness score
- Import prices for lychees in Japan are variable but in general, superior to the Australian domestic market price.

There are currently no imports of lychees to Japan during the Australian season. If Australia was the sole supplier during this window, it would suggest that prices could spike for a period, if consumers accepted a counter-seasonal offer. The potential for premium pricing windows should be investigated.

- The attraction of the Japanese market is the opportunity to supply the northern hemisphere counter-season when there are no competitor imports occurring. There may be potential to achieve higher pricing at that time if consumers are willing to purchase in those months.
- It would be worth conducting in-market trade research to assess the counter-season opportunity in Japan before committing to a market access application, given the cost and effort involved in trying to gain access to Japan is substantial.
- If this market is targeted, the Australian industry would need consistent promotional messages to highlight the point of difference in fruit quality between Australian lychees and the Chinese fruit that the market is accustomed to.

South Korea

The Korea-Australia Free Trade Agreement (KAFTA) came into force in December 2014, bringing significant benefits for Australian exporters. When KAFTA is fully implemented, tariffs on 99.7 per cent of exports to Korea will be eliminated. The agreement helps level the playing field for Australian food exporters competing with companies from the US, EU, Chile and the Association of Southeast Asian Nations, which all benefit from existing trade deals with Korea.

Korea imports more than 70 per cent of its food and agriculture products. The market for imported premium fruit, nut and vegetable products is rapidly growing and diversifying. Consumer tastes are changing and demand for luxury and high-quality food products is increasing. Local Korean production of fruit, nuts and vegetables is limited and on the decline, resulting in a heavy reliance on imported products. Korea is self sufficient in producing apples, summer fruit and strawberries, even exporting pears to Australia. However, it is reliant on imports of tropical fruit, table grapes and cherries, to name a few.

Some premium fruit such as cherries, avocados and mangoes used to only be available at department stores; however, with improved market access for a number of countries, these products, along with oranges, bananas and table grapes, are now more broadly available at supermarkets. Department stores and hypermarkets directly source certain fresh items to achieve cost savings and gain a larger market share. Korean Customs has strict import requirements for fruit, nut and vegetable products, so exporters should work closely with their importer or retailer to provide the necessary documentation and information required to meet the regulations.

In 2015, South Korea imported US\$1.7 billion of fruit and nuts. The categories with current market access and the greatest export potential for Australian suppliers include oranges, table grapes, mangoes, cherries, almonds and macadamias. Citrus imports accounted for US\$249 million, dominated by the US (86.5 per cent), followed by South Africa (5 per cent) and Chile (5 per cent). Fresh grapes worth US\$201 million largely came from Chile (76.9 per cent), Peru (13.6 per cent) and the US (8.9 per cent). Cherries worth US\$126 million largely came from the US (95 per cent), with smaller amounts imported from Australia (3 per cent) and New Zealand (2 per cent). Mangoes worth US\$43 million largely came from Thailand (51 per cent), the Philippines (34 per cent) and Taiwan (13 per cent).

India



India is the second largest producer of litchi in the world after China. However, with an average productivity level of just 7.6 tonnes per hectare, India lags behind many other exporting nations. Litchi has very specific climatic and soil requirements, restricting litchi cultivation to only a few countries, yet Indian exports of fresh fruit and processed litchi products are low. Nevertheless, India has tremendous potential to export litchi because of the existence of a window of opportunity in the European market and the presence of a wide range of litchi germplasm. However, the lack of infrastructure and the non-availability of export quality fruit, due to improper preharvest practices, coupled with low productivity and high prices, make Indian exports non-competitive in the world market. In view

of the rising need to export chemical-free fruit, litchi will benefit from integrated pest management. IPM strategies and their proper implementation in orchards to promote sustainability and to reduce the application of hazardous chemicals are important. To promote litchi cultivation and export, the Government of India has developed three commercially important litchi growing zones in the country, namely Uttaranchal, Bihar and West Bengal.

With favourable agroclimatic conditions and free marketing opportunities, there is a bright prospect for high-quality litchi production and export from these litchi export zones in India. Due to very short production season of around two months in a year, market gluts lead to distress sales.

The short span of fruit availability coupled with poor shelf life limits the duration of availability of litchi fruits in the domestic as well as international market. Shelf life of litchi fruits varies from 2 to 3 days under ambient conditions. With proper post-harvest treatment (pre-cooling, sulphuring, acidification and storage at low temperature), the shelf life can be extended up to 2-3 weeks. Diverting a part of the produce towards processing is a safe solution to the problem and has been successfully adopted in other fruits like grape. Growers need to be educated on these possibilities in order to get better price for their produce and to minimize market risk.

In India the availability of fresh fruits coincides with the lean period for other fruits i.e. May and June. Arrival commences during the first week of May in Tripura and by the third week of May in Bihar continuing up to the first week of June. In Uttar Pradesh and Punjab the crop is ready for harvest during the second and third week of June while in Himachal Pradesh it comes to harvest by the last week of June, thereby extending the total season of its availability to around two months in a year.

At present litchi fruits are exported by India mainly to the Netherlands, U.A.E., Saudi Arabia and Canada. APEDA and NAFED are the major export promoters of litchi. The demand from Arab countries, Europe and USA is increasing day by day. However, very little effort has been made by India to capture some part of the world market from China, the main player.





Summary

Key points to consider for export:

- The supply chain efficiency for lychees is critical due to the acute temperature sensitivity and short shelf life.
- Supply chains also need to be ultra-efficient to maximise the seasonality of supply along all of Australia's production zones, particularly if targeting Chinese New Year windows.
- Lack of access to irradiation facilities between growing areas and ports adds cost to the supply chain.
- Long distances between production areas and high costs of transporting to wholesale markets and airports adds significant costs to export supply chains. Fruit from the northern growing areas in particular incur substantial freight costs and time in the supply chain just to get to Sydney, let alone offshore.



Key competitor analysis:

Due to the seasonal difference, Australia has no real competitors within its prime prospect export zone other than South Africa which represents minimal competitive threat. Madagascar and Mauritius are also active in Australia's window presenting some competition and some activity is emerging from South America.

Australia enjoys an exclusive seasonal window in the December to February period in all the South East Asian markets. The greatest opportunity in Australia's production window is the fact that this supply window coincides with Chinese New Year, which presents opportunities in a number of markets. The Australian lychee window is the longest in the world stretching from October (far North Queensland) to April (Northern NSW).

Australia's competitive weakness is that the perception of irradiated product in some markets is a negative.





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