INVESTMENT OPPORTUNITIES IN THE NEW ZEALAND CHERRY INDUSTRY

Part of Emerging Growth Opportunities, Food and Beverage Information Project, 2018
FINAL REPORT; v1.00; completed late 2017; released March 2018
STEERING & GUIDANCE

This project would not have been possible without the strong guidance of our Steering Committee. In particular, we would like to thank Andrew McCallum of MBIE for his tireless energy in keeping this project on track, while at the same time pushing us forward.

Draft versions of parts of this document were distributed to key firms for comment, addition or correction. This was done in the form of emails and phone calls. We thank those who helped us in this process for their time and effort. We also thank those who provided their photos.

We are grateful for all of the input we have received, but the report is ours and any errors are our own.

Finally, we acknowledge the support of the Ministry of Business, Innovation and Employment (MBIE), New Zealand Trade and Enterprise (NZTE) and the Ministry for Primary Industries (MPI). It is their funding that has made this report possible.

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- It is the currency most used in international trade
- It allows for cross country comparisons (e.g. vs. Denmark)
- It removes the impact of NZD exchange rate variability
- It is more comprehensible to non-NZ audiences (e.g. foreign investors)
- It is the currency in which the United Nations collects and tabulates global trade data

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The objective of this project is to identify and profile Emerging Growth Opportunities (EGO) in New Zealand’s food and beverage exports

**SITUATION**

New Zealand has a clear comparative advantage in food & beverage (and the wider agricultural value chain). Food & beverage exports are $29b and account for 43% of New Zealand’s total exports of goods and services.

New Zealand has a long history in producing and exporting food & beverages. New Zealand has a limited number of large export categories, namely dairy, beef, lamb, seafood, apples and more recently kiwifruit. Wine has also emerged in the last 20 years to become a billion dollar export. Growth has come from more volume but more importantly more value.

Past research as part of the Food & Beverage Information Project (see Emerging Growth Opportunities 2012) identified a range of growing and emerging export sectors.

Industry and government recognise that high growth industries need new capital and new capabilities to grow and develop.

**OBJECTIVE**

The objective of the Emerging Growth Opportunities research is to identify emerging high potential food and beverage export categories from New Zealand. Answering the question - What will be the next wine industry?

The research draws conclusions on potential industry strategic directions, highlights opportunities for further investment and identifies categories which have the potential to contribute to the goal of growing exports. The most promising categories are analysed further in separate reports (e.g. Cherries).

The research forms a part of – and builds on the information in - the wider Food & Beverage Information Project.

**AUDIENCE**

The report is designed to be used by four audiences:

- **Investors** (domestic or international)
- **Industry** participants (firms & individuals)
- **Government** (across all roles and responsibilities)
- **Scientific researchers** (academic, government & corporate)
The Emerging Growth Opportunities (EGO) research is part of the wider New Zealand Food and Beverage Information Project

The Food & Beverage Information Project

SECTOR REPORTS

Beverages
The New Zealand wine industry has achieved phenomenal growth, producing world-renowned wine varieties.

Dairy
New Zealand is a global leader in dairy trade, gaining export market share in the past decade.

Meat
New Zealand is the global leader in lamb and deer meat exports, with a strong position in beef exports and growing chicken exports.

Processed foods
New Zealand has a rapidly growing processed foods sector, leveraging on available raw and unique ingredients.

Produce
New Zealand is a major producer and exporter of kiwifruit and apples, with significant growth achieved in other categories.

Seafood
New Zealand has a large and sustainable wild catch fishery, with aquaculture showing huge theoretical growth potential.

INVESTOR GUIDES

Investor guides
Our research has identified twenty categories achieving success in doing growing markets.

EMERGING MARKETS

Emerging markets
New Zealand food and beverage sector has significant opportunities in Australia, ASEAN and Chinese markets due to FTA and geographical proximity.
Cherries emerged from a multi-stage industry screen (Stages I & II) designed to identify, develop & highlight Emerging Growth Opportunities in New Zealand food and beverage exports.

See related document for details available at www.foodandbeverage.govt.nz

Stage I  
Preliminary Screen  
Met criteria  594

Stage II  
Secondary Screen  
Met criteria  51

Stage III  
Develop Opportunities  
Identified  20

Explored in depth  4

Fresh cherries  
Chocolate, blocks  
Muesli bars, similar  
Flavoured beverages, other

Initial input to process  697
ELEVATOR TEST  New Zealand cherry exports can grow through a focus on building a super-premium position with Chinese consumers around Chinese New Year*

* See page 19
DRIVERS OF SUCCESS New Zealand’s success in cherries has three key drivers

- Temperate climate similar to Italy and France
- Temperature extremes moderated by surrounding ocean
- Isolated location protected by natural barriers
- Further land potentially available for expansion: 0.02% of Otago Region under cherries

- Long history of fruit growing and breeding
- Industry is focused on export markets
- Pool of skilled orchard operators and managers
- Strong systems and support networks
- Advanced capabilities in packhouse systems
- Organised industry

- Close proximity to East & South-East Asian markets
- Excellent market access across Asia
- NZ was the first developed country to sign a free trade deal with China (2008)
- Counter-seasonal to Northern Hemisphere

IDEAL CLIMATE & SOILS
Low production cost

EFFICIENT PEOPLE & SYSTEMS
Trusted by consumers

LOCATION & MARKETS
High share in key products

* Closer Economic Relationship; Source: photo credit (purchased or creative commons (Dollar Photo Club; freenzphotos.com), Compac)
**SWOT ANALYSIS** New Zealand has a strong niche position in the global cherry trade, but the environment is challenging and continued success cannot be taken for granted

<table>
<thead>
<tr>
<th><strong>STRENGTHS</strong></th>
<th><strong>WEAKNESSES</strong></th>
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<tbody>
<tr>
<td>- New Zealand track record of success in new fruit development (e.g. kiwifruit) and in breeding of new cultivars (e.g. Zespri Gold)</td>
<td>- Lack of large supply of “guest workers” like some countries; seasonal labour shortages, accommodation shortages</td>
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<tr>
<td>- Strong plant science capabilities at Plant &amp; Food Research and elsewhere</td>
<td>- Limited air freight availability</td>
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<tr>
<td>- Counter seasonal to Northern Hemisphere in a narrow climatic window only shared by four competitors (Chile, Argentina, South Africa and Australia)</td>
<td>- Too much area still in older varieties, older rootstocks and older planting systems (low average yields)</td>
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<td>- Proximity to fast growing Asian markets</td>
<td>- Low/no ability to supply fruit year-round</td>
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<tr>
<td>- Strong biosecurity; free from many diseases and pests</td>
<td>- Higher cost structure than others in seasonal window (e.g. Chile)</td>
</tr>
<tr>
<td>- High yields per hectare/high levels of export packout in export fruits relative to peers</td>
<td>- Lack of superior and differentiated New Zealand IP-Controlled cherry varieties beyond Freshmax activity (where is the NZ cherry version of Enza Jazz or Zespri Sungold?)</td>
</tr>
<tr>
<td>- Unsubsidised industry competing successfully in world markets</td>
<td>- Many smaller orchards and farms; benchmarking suggests fewer, larger farms preferable</td>
</tr>
<tr>
<td>- Industry consolidating into fewer, larger operations at scale</td>
<td>- New cultivar development funding model needs improvement</td>
</tr>
<tr>
<td>- Transition to integrated grower/packer/shipper model underway</td>
<td>- Structure of kiwifruit exporting impacting scale of other (beyond Zespri) NZ fruit exporters</td>
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<tr>
<td>- Supportive industry structure (Summerfruit, HEA), requiring all exporters to be registered and setting and overseeing</td>
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<thead>
<tr>
<th><strong>OPPORTUNITIES</strong></th>
<th><strong>ISSUES/THREATS/RISKS</strong></th>
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<tbody>
<tr>
<td>- Further develop narrow “Chinese New Year” window into Eastern Asian Markets</td>
<td>- Growing production of cherries in Chile; improving quality, strong marketing (US$5m Chinese promotional activity across 36+ cities 2016)</td>
</tr>
<tr>
<td>- Continued growth of middle-class in Asia</td>
<td>- Disease outbreaks (cf. PSA)</td>
</tr>
<tr>
<td>- Aging baby boomers focusing on positive living &amp; eating for illness prevention</td>
<td>- The risk of disease outbreaks must be balanced against biosecurity retarding or preventing introduction of new genetics and new rootstocks</td>
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<tr>
<td>- Continued work on FTAs to develop tariff free markets (e.g. ASEAN); especially focussing on the high volume, high impact products and markets</td>
<td>- The foreign phyto-sanitary protocols of other countries limiting extent and speed to market, particularly Australia, Japan and South Korea</td>
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<tr>
<td>- Growing demand for fresh, convenient produce especially into Asian markets</td>
<td>- Time frame for protocols to gain access to new markets</td>
</tr>
<tr>
<td>- Continued orchard-level technological innovation and management improvement leading to increased yields, automated pruning, rain protection</td>
<td>- Re-labelling Chilean fruit as “Made in New Zealand” in-market endangering NZ reputation</td>
</tr>
<tr>
<td>- Production of New Zealand developed/IP controlled varieties in counter-seasonal regions</td>
<td>- Changing climatic conditions impacting production rates, quality (e.g. hail damage)</td>
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<td>- Growth of nutraceuticals and functional foods; fruits as “superfoods”</td>
<td>- Other global centres of fruit development coming up with better products</td>
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<tr>
<td>- Potential for research into specific health effects of New Zealand cherries</td>
<td></td>
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<tr>
<td>- Potential to utilise waste streams and convert them into high value products</td>
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</table>
SUPPLY CHAIN New Zealand has a simple supply chain that transports and delivers fresh cherries to consumers in New Zealand and across Asia and the world.

SIMPLIFIED MODEL OF NEW ZEALAND CHERRY SUPPLY CHAIN
(Model: 2017)

1. There may be one or more layers of wholesaling, depending on product or market; some wholesale functions maybe captive inside retailers or foodservice operators; Source: Coriolis
Potential Investment Themes

+ Growing production
+ Supply chain efficiencies
+ Improved marketing
+ Value-added products
The industry is excited about cherries and their future

“Cherries are a glamorous industry to be a part of, it is very exciting. We have a great future ahead of us.”

Sales and Marketing, Large packhouse, Central Otago

“Cherries are such a sexy product and easy to sell compared to other products.”

Export Manager, Large grower, packer shipper

“There is a lot of future growth in the industry, it’s very exciting.”

Manager, Large grower, packer shipper

“We produce a great premium product and we need to make sure we continue to do this into the future.”

CEO, Large grower, packer shipper

“We could be the next golden kiwifruit story.”

CEO, Large grower, packer shipper

“We had 1,500 tonnes this year, but will grow to 3,000 by 2019”

Manager, Large grower, packer shipper
Four broad investment themes exist for driving export growth in the New Zealand cherry industry

<table>
<thead>
<tr>
<th>I. GROWING PRODUCTION</th>
<th>II. SUPPLY CHAIN EFFICIENCIES</th>
<th>III. IMPROVED MARKETING</th>
<th>IV. VALUE-ADDED PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase production to meet market demand</td>
<td>Drive down packing &amp; logistics costs</td>
<td>Engage more effectively with the consumer</td>
<td>Monetise waste streams where it makes sense</td>
</tr>
<tr>
<td>More land</td>
<td>Longer shelf life</td>
<td>Consistent messaging</td>
<td>Select super-premium foods and beverages</td>
</tr>
<tr>
<td>Higher yields &amp; New varieties</td>
<td>Reduced packing costs</td>
<td>Embracing Chinese New Year</td>
<td>Select extracts, natural health products &amp; nutraceuticals</td>
</tr>
<tr>
<td>Better export packout</td>
<td>More efficient logistics</td>
<td>Facilitating gifting</td>
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Significant opportunity exist for industry to work together across these themes to share learnings and ideas, benchmark performance and co-ordinate activity, in particular in export focused regions.
Many industry participants think a more collaborative approach would benefit the industry

“It would be great to share more learnings, to do orchard walks and talk best practice, who drives this?”

Sales and Marketing, Large packhouse, Central Otago

“Gathering and sharing data would be useful, it would make everyone realise what was coming online, and prepare for it in a more coordinated way.”

Export Manager, Large grower, packer shipper

“Benchmarking across the industry would be useful, it would be really beneficial to all companies.”

Manager, Large grower, packer shipper

“It would be great if we could share ideas. A collaborative approach would enhance the industry.”

CEO, Large grower, packer shipper
First, there are opportunities to grow cherry production

<table>
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<th>Situation creating opportunity</th>
<th>Potential investment theme</th>
<th>What you would need to believe</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Otago is a large region, similar in size to Belgium, Taiwan or Switzerland, with a climate</td>
<td>More land</td>
<td>- Additional land suitable for cherries is available</td>
</tr>
<tr>
<td>- Currently only 0.02% of land is planted in cherries</td>
<td></td>
<td>- Land and orchard establishment costs will deliver a competitive economic return</td>
</tr>
<tr>
<td>- Otago has almost four times as much area in wine grapes (1,937ha) compared with cherries (546</td>
<td></td>
<td>- Export market demand exists to absorb more New Zealand cherries</td>
</tr>
<tr>
<td>ha)</td>
<td></td>
<td>- Increase in domestic demand to absorb non-export fruit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Affordable rain cover developed to allow access to more areas of land</td>
</tr>
<tr>
<td>- Realised, real-world cherry yields vary for a wide range of reasons, including genetics,</td>
<td>Higher yields &amp; New varieties</td>
<td>- Yield is not a simple trade-off with quality</td>
</tr>
<tr>
<td>management and systems</td>
<td></td>
<td>- Orchard management skills for improving systems can be taught</td>
</tr>
<tr>
<td>- Yields vary across countries, regions and farmers</td>
<td></td>
<td>- Higher yielding cherry genetics and rootstocks exist in NZ or can be brought into the</td>
</tr>
<tr>
<td>- While NZ achieves good yields, competing regions achieve as good or better yields</td>
<td></td>
<td>country through biosecurity barriers</td>
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<tr>
<td>- Demand for large size early fruiting variety</td>
<td></td>
<td>- New variety able to be breed for early fruiting and large size</td>
</tr>
<tr>
<td>- The NZ cherry industry is highly dependent on export markets and exports sell for twice the</td>
<td>Better export pack-out</td>
<td>- On-farm skills and systems impact export grade pack-out rates in the packhouse</td>
</tr>
<tr>
<td>value of local fruit</td>
<td></td>
<td>- Packhouse skills, systems and equipment impact export grade packout (e.g. rapid cooling</td>
</tr>
<tr>
<td>- Currently two thirds of fruit achieve export grade and are exported and one third is sold in</td>
<td></td>
<td>of fruit</td>
</tr>
<tr>
<td>the domestic market</td>
<td></td>
<td>- Research around affordable retractable rain cover increases packout and efficiencies</td>
</tr>
<tr>
<td>- Export pack-out rates vary by grower and by packhouse</td>
<td></td>
<td></td>
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<tr>
<td>- If all fruit were export grade, the added value would be an additional +$18-20m per annum</td>
<td></td>
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<tr>
<td>(based on 2015-16)</td>
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</table>
Industry is investing in growth across existing orchards, new orchards and packhouses

“It’s a real boom industry with a lot of development and investment in new orchards and packhouses.”

GM, Large packhouse, Central Otago

“The industry will double in size over the next 5-6 years as new orchards come online.”

CEO, Industry Body

“We will double over the next few years, we don’t have any problems with demand for our cherries, we have a problem with supply.”

GM, Large packhouse, Central Otago

“We have plenty of great horticultural land around that is being converted, or already converted, into orchards and millions is being invested in new packhouse technology. It’s really exciting.”

Sales and Marketing, Large packhouse, Central Otago

“As a guideline, it costs between $150-200,000/ha to set up the orchard (based on a 20-40ha block), we are seeing a lot of new blocks being developed.”

Director, HortInvest, Central Otago
Second, the supply chain can be improved to increase efficiency

**Situation creating opportunity**

- Cherries have a relatively short interval between maturity and ripening leading to a short shelf life
- Refrigerated cherries with a well managed cool chain can last for about four weeks
- Unlike other New Zealand fruit (e.g. kiwifruit, apples), cherries are air-freighted to Asia at a high cost
- Three major variable costs the the greatest effect on the total cost of packing cherries. These are: labour, electricity and packaging material
- Packaging directly impacts both total shipping weight and fruit to packaging ratios, both of which are particularly critical with airfreight
- New Zealand has a large number of packhouses relative to crop size (22 export certified over 3,397t in 15/16)
- Cherry packhouses average (154t/unit) achieve a low throughput relative to kiwifruit (10,600t/unit) or apples (7,200t/unit)
- Total freight and logistics costs are a significant part of the final price of cherries; any reductions in this cost could be shared between the producer and the consumer
- Airfreight is significantly more expensive than seafreight
- NZ cherries are predominantly airfreighted to key markets
- Key S.H. competitor Chile uses a mixture of air and sea

**Potential investment theme**

- Longer shelf life
- Reduced packing costs
- More efficient logistics

**What you would need to believe...**

- Post harvest management and systems impact shelf life
- Modified atmosphere packaging can work for cherries?
- Plant genetics can influence shelf life, with variation across trees; new breeds could be developed with longer shelf life?
- A “Smartfresh” (1-MCP) type solution could be developed that would work on cherries?
- Unit packaging costs are cheaper for larger orders/at scale
- Packaging is not purely a trade-off between rigidity/strength and weight; it is possible to be lighter and stronger
- Larger packhouses have lower costs per unit than smaller businesses
- Further industry consolidation would improve relative scale economics and competitiveness
- Key firms in key regions would be willing to merge
- Opportunities exist to improve speed and increase industry coordination to reduce net freight cost per kilogram
- Opportunities exist to increase the efficiency of logistics in local trucking (e.g. full trucks, return loads)
- Chilean work with shipping lines to (1) reduce shipping times by 5 days (to 22-25 days), (2) have last minute loading and (3) priority unloading on arrival in Asia could work for NZ
Industry highlight the availability of freight and labour as significant challenges going forward

“We have to ensure air freight is available. Our key advantage in market is our premium quality. When you open a box of cherries picked 48 hours ago compared to a box that’s been on the sea for 4 weeks, there is no comparison.”

GM, Large packhouse, Central Otago

“We have to make sure that we have the logistics and labour to keep up with growth in cherry exports.”

CEO, Industry Body

“The industry has real freight issues. We rely on the cargo availability in planes out of Christchurch airport, but we mainly have to transport cherries to Auckland.”

GM, Large packhouse, Central Otago

“Getting labour and accommodation for labour over such a small window is difficult. This will get worse with additional supply over the next few years.”

GM, Large packhouse, Central Otago

“Sea freight is definitely an option for us, we need to ensure that the quality of fruit is maintained throughout the supply chain so it’s in premium condition when it reaches market.”

Export Manager, Large grower, packer shipper

“There is an acute shortage of potential managers and skilled workers, which doesn’t look like being alleviated in the near future, NZIS [NZ Immigration Service] don’t recognise experience only qualifications.”

Owner, Medium packhouse, Central Otago
Third, the marketing of New Zealand cherries can be improved

**Situation creating opportunity**  
- NZ cherries represent “a drop in the ocean” of total Asian fruit consumption; in this environment, achieving “cut through” and getting the attention of the consumer is very difficult  
- Key competitor Chile has significantly larger market share and in-market presence or “shelf weight”  
- Current messaging in key markets on NZ cherries is fragmented with multiple messages  
- Cherries can learn from other sectors who show a common industry story, brand, quality mark or slogan

**Potential investment theme**  
- Consistent messaging  
- Embracing Chinese New Year  
- Facilitating gifting

**What you would need to believe...**  
- A coordinated “Why Otago cherries?” story with shared talking points would increase prices and sales  
- It is possible to get all key stakeholders to agree to implement a shared message  
- Shared messaging could be linked to regional tourism (e.g. an “Otago cherry blossom festival”)  
- Shared messaging could be tied into traceability systems  
- Opportunities exist to better tie NZ cherries to CNY through marketing, packaging and regional activity  
- NZ cherries could create “ownership” of CNY (cf. fabrication by De Beers that diamonds = engagement rings)  
- NZ can identify cultural similarities between Matariki & CNY to enhance relationships  
- Quality assurance and track-and-trace systems have value  
- It may be possible to gift pack more cherries before export  
- It is possible to support in-market gift packing (e.g. through stickers) without facilitating counterfeiting  
- It is possible to co-pack other Otago goods into gift packs (e.g. red wines)
Gifting is associated with special events and occasions across most cultures, with both country and regional similarities and differences.

**NZ MAORI**

New beginnings

- Matariki - named for the Pleiades star cluster; Matariki disappears during Autumn for two months and rises again around the winter solstice
- The beginning of a new life cycle, a new year
- A time to remember family and make offerings to land-based gods, plant new crops to signal new beginnings
- In modern day Maori acknowledge family, celebrate the respect for the land, hold events, fly kites, celebrate, feast and give gifts

**EUROPEAN**

Merry Christmas

- Key Holidays - Christmas (biscuits, cake), New Year (wine, champagne), Easter (chocolate)
- Historically many events were based on harvests and changing seasons (Christmas = winter solstice, Easter = Spring)
- Key Gifting Occasions/Events - Valentines Day (chocolate), Weddings, Birthdays, Birth of a child, Mother’s Day, Father’s Day, Visiting, Travel (returning)
- Food and/or Drink is brought when invited for a meal (e.g. wine or chocolate)

**EAST ASIAN**

Gifts and Rituals for Harmony

- Key Holidays - Chinese New Year, Dragon Boat Festival, Mid Autumn Festival
- Key Gifting Occasions/Events - Valentines Day, Weddings, Birthdays, Birth of a child, Visiting, Travel (during and returning)
- Work - Introductions, Client meetings, Building relationships
- Gifts - Food, Beverages, Health Supplements, Tea, Regional Specialties, money in red packets
- Colour - favour red and gold
- Sets of 6 or 8 (not 4)
- Associated with fireworks and lanterns
Many New Zealand firms produce premium products appealing to the gifting market

**EXAMPLES OF NEW ZEALAND GIFTING PRODUCTS**
*Select; 2017*

- **Wine**
- **Gin**
- **Whisky**
- **Butter**
- **Abalone**
- **Assorted Chocolate**
- **Biscuits/Baked Goods**
- **Cherries**
- **Health Supplements**
- **Infant Formula**
- **Honey**
- **Venison**

*Photo credit: fair use/fair dealing; low resolution; complete product/brand for illustrative purposes; Creative Commons; Coriolis*
As these New Zealand and Australia examples show, the cherry category has strong appeal as a gifting item.

**EXAMPLES OF PREMIUM GIFT CHERRIES**

*Select; 2017*

**NEW ZEALAND**

- Cherry Corp – Premium Pack
- Pure Pac – Pure Gold
- Caythorpe - Wine & Cherries

**AUSTRALIA**

- Reid Cherries and Cider - Tasmania
- Koala Cherries – Black Label - VIC
- Glenburn Orchards - Tasmania
Finally, there are select opportunities to create value-added products from New Zealand cherry waste streams

<table>
<thead>
<tr>
<th>Situation creating opportunity</th>
<th>Potential investment theme</th>
<th>What you would need to believe...</th>
</tr>
</thead>
<tbody>
<tr>
<td>- There is strong demand across all key Asian markets for New Zealand cherries and premium and super-premium foods and beverages</td>
<td>Select super-premium foods and beverages</td>
<td>- Select foods and beverages that use cherries as an ingredient (e.g. liqueurs, liqueur-filled chocolates, powdered and freeze dried cherries) can be made from NZ processing grade/export-reject cherries</td>
</tr>
<tr>
<td>- Premium/super-premium foods and beverages are often given as gifts (e.g. French Cognac)</td>
<td></td>
<td>- Products could be differentiated such that they could demand a premium</td>
</tr>
<tr>
<td>- Gift shops, souvenir shops, and duty-free shops are major outlets for super-premium foods and beverages</td>
<td></td>
<td>- NZ firms have the marketing skills to deliver on super-premium items</td>
</tr>
<tr>
<td>- Often in highly competitive food sectors, successful firms are those that best monetise their waste streams</td>
<td>Select extracts, natural health products &amp; nutraceuticals</td>
<td>- It is possible to extract and market New Zealand cherry extracts as nutraceuticals</td>
</tr>
<tr>
<td>- There is growing demand for natural health products and supplements, both in the Western world and East Asia</td>
<td></td>
<td>- Research supports NZ cherries are higher in characteristics that support functional benefits (e.g. antioxidants, melatonin, beta-sitosterol etc.)</td>
</tr>
<tr>
<td>- Most nutraceuticals are, in practice, value added to existing waste streams (e.g. calcium, green tea)</td>
<td></td>
<td>- New Zealand cherry extracts can compete in a global market</td>
</tr>
<tr>
<td>- New Zealand has proven capabilities in nutraceutical science R&amp;D, product development and production (e.g. manuka honey, green lipped mussel extract)</td>
<td></td>
<td>- New Zealand cherry extracts can create a point of difference such that they can command higher prices than competitors</td>
</tr>
<tr>
<td>- There is a growing body of research linking cherries to various positive health benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The NZ cherry industry generates a wide range of waste streams, including skins, pits, bark and leaves</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Koala Cherries in Victoria, Australia adds value to cherries by producing a variety of derivative lines:

- Christmas Cherries
- Chutney
- Sauce
- Ice Cream
- Liqueur

Source: Koala cherries website; Coriolis
Opportunities exist to research New Zealand cherries unique health benefits

“Summerfruit are a long way off the nutraceutical space but there is an opportunity to develop the sector further.”  
_Sales and Marketing, Large Exporter_

“We need more R&D into the health properties of NZ cherries. The high UV impacts on antioxidant levels and melatonin levels. We could develop a real story around that.”  
_GM, Large packhouse, Central Otago_

“Cherries have real health benefits, but we don’t want to be a processed product, then it’s just another ingredient. We need research around New Zealand cherries in particular.”  
_Director, Large packhouse, Central Otago_
New Zealand Cherry Industry

+ Area
+ Yield
+ Production
+ Supply chain
+ Packhouse operations
New Zealand area planted in cherries is showing steady growth

“We are seeing growth of 30 to 50 hectares each year around us.”

CAGR Compound Annual Growth Rate; Note: data are a Coriolis synthesis; existing data has minor disagreements in places; *2017 industry estimate; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis
Most of the New Zealand area planted in cherries is in Central Otago and the region is continuing to increase plantings.
New Zealand cherry yields were drifting, until a move to new varieties at the dawn of the new millennium reset the industry, leading to growing productivity.

**Note:** data is a Coriolis synthesis; existing data has disagreements in places; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis

### AVERAGE CHERRY YIELD IN NEW ZEALAND
*Tonnes/hectare; 1961-2016*

- **40y CAGR**
  - (1961-2000) -3.1%
- **15y CAGR**
  - (2001-2016) 7.7%

Industry shifting to new varieties, new rootstocks, new management systems & exit from secondary areas.
A range of drivers are contributing to yield increases

### Average Number of Cherry Trees per Hectare

<table>
<thead>
<tr>
<th>Year</th>
<th>Trees/hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960's</td>
<td>200-230</td>
</tr>
<tr>
<td>1980's</td>
<td>330-350</td>
</tr>
<tr>
<td>Current</td>
<td>700-900</td>
</tr>
</tbody>
</table>

### Drivers of Real-World Yield

- **Farm Management**
  - Skills & Training, Intelligence & Experience
  - Soil Management & Improvement Programs
  - Agronomy Systems/Timing
- **Farm Size**
  - Larger Orchards
  - More Automation
  - Better Skills
- **On-Farm Capital**
  - More/Better Equipment
  - More On-Farm Investment (e.g., irrigation)
  - More On-Farm Storage
- **Agri-Chemicals**
  - Pesticides
  - Herbicides
  - Fertiliser
- **Environment**
  - Soils
  - Rainfall
  - Elevation
- **Plant Genetics**
  - Availability
  - Suitability
  - Improvement
- **Macro-Environment**
  - Labour Laws
  - Regulations
  - Economic & Political Stability
- **Inter-Year Climate Variation**
  - Sun & Rain
  - Temperature
  - Weather Events

*Source: New Zealand Department of Agriculture; interviews; past Coriolis work; Coriolis analysis*
As a result of growing area and growing yields, New Zealand is achieving solid cherry production growth rates (20y CAGR 6.3%)
Recent production growth is coming from more output per farm unit (5y CAGR 23%) and some modest growth in the farm size (CAGR 2%), as the number of growers is static.

**NUMBER OF CHERRY GROWERS**
*Actual; 2011-2016*

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>87</td>
</tr>
<tr>
<td>2012</td>
<td>87</td>
</tr>
<tr>
<td>2013</td>
<td>87</td>
</tr>
<tr>
<td>2014</td>
<td>88</td>
</tr>
<tr>
<td>2015</td>
<td>88</td>
</tr>
<tr>
<td>2016</td>
<td>88</td>
</tr>
</tbody>
</table>

**AVERAGE UNIT SIZE**
*Hectares/grower; 2011-2016*

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Unit Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>6.7</td>
</tr>
<tr>
<td>2012</td>
<td>7.1</td>
</tr>
<tr>
<td>2013</td>
<td>7.1</td>
</tr>
<tr>
<td>2014</td>
<td>7.5</td>
</tr>
<tr>
<td>2015</td>
<td>7.3</td>
</tr>
<tr>
<td>2016</td>
<td>7.3</td>
</tr>
</tbody>
</table>

**AVERAGE OUTPUT PER FARM UNIT**
*Tonnes/grower; 2011-2016*

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>22</td>
</tr>
<tr>
<td>2012</td>
<td>25</td>
</tr>
<tr>
<td>2013</td>
<td>29</td>
</tr>
<tr>
<td>2014</td>
<td>35</td>
</tr>
<tr>
<td>2015</td>
<td>51</td>
</tr>
<tr>
<td>2016</td>
<td>60</td>
</tr>
</tbody>
</table>

Note: data are a Coriolis synthesis; existing data has disagreements in places; Source: UN FAO; Plant & Food Fresh Facts; Statistics NZ; Coriolis analysis
Cherries have a short shelf life and therefore require a supply chain which can deliver top quality products to key markets rapidly.

**SIMPLIFIED MODEL OF NEW ZEALAND CHERRY SUPPLY CHAIN 2017**

**Harvest**
- 88 growers; small number of large operators
- Almost totally export focused (80+% of crop) into a narrow seasonal window
- Exports targeting Chinese New Year (which has a shifting date)
- Picking starts mid-Dec, ramps up in early January and runs through mid-Feb
- Requires 2,000-2,500 pickers at any one time in season; large farms may use 200+ at a time
- Need to be Global GAP certified
- Weather can dramatically impact the crop

**Packhouse**
- -24 export certified
- Cherries gradually cooled on arrival to 0-2 degrees
- Highly mechanised, but still needs 700-900 seasonal labour staff at any one time in season
- Packhouses vary in size based on local production volumes
- Huge seasonal spike; key weeks in January may move 15-20% of total crop
- Registered members of Summerfruit

**Logistics & Exporters**
- 11* export certified
- Four week shelf life
- Refrigerated airfreight cargo containers
- Airfreighted to key markets; airfreight operators may divert cargo planes
- “Best case” can get cherries to market in 72 hours of picking (24 hours possible)
- Exporting may be packhouse direct (e.g. NZCC) or by larger exporter with a wide range of produce exports (e.g. Freshmax)
- License required to export, managed by HEA

**In-Market Distribution**
- Relationship driven
- Received by larger import-focused wholesaler brokers
- Multiple layers of regional wholesalers/distributors
- Cool chain quality varies from excellent to poor

*Often vertically integrated and managed by one group as a grower packer shipper (GPS) – total of 24 export licenses*

*MPI Korea Export licenses; Source: Coriolis from a wide range of sources and interviews*
New Zealand cherry production and exports are highly seasonal, with ~80% of volume moving in January, so that it can arrive in market for Chinese New Year.

### NEW ZEALAND CHERRY EXPORT VOLUME BY MONTH

**Tonnes; 12/13-16-17**

<table>
<thead>
<tr>
<th>Month</th>
<th>Export Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>79%</td>
</tr>
<tr>
<td>Feb</td>
<td>12%</td>
</tr>
<tr>
<td>Rest</td>
<td>1%</td>
</tr>
</tbody>
</table>

Chinese New Year (CNY) is fixed by traditional Chinese lunisolar calendar making it variable to the Western calendar. It is traditionally a time for family gatherings and gift giving. It is traditionally associated with the colour red.

### AVERAGE EXPORT VOLUME BY MONTH

**% of tonnes; 6y average; 11/12-16/17**

<table>
<thead>
<tr>
<th>Month</th>
<th>Export Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNY 8 Feb</td>
<td>19%</td>
</tr>
<tr>
<td>CNY 28 Jan</td>
<td>23%</td>
</tr>
<tr>
<td>CNY 19 Feb</td>
<td>3%</td>
</tr>
</tbody>
</table>

---

1. The calculation of this calendar is too complex to explain here; for further information see: [https://en.wikipedia.org/wiki/Chinese_New_Year](https://en.wikipedia.org/wiki/Chinese_New_Year); Source: Statistics NZ; Coriolis analysis
There is a large number of growers; two packhouses handle over a third of the crop volume.

### ESTIMATED CHERRY PACKHOUSE MARKET SHARE

% of total volume throughput; 2016/17

- **45 South**: 28%
- **NZ Cherry Corp**: 12%
- **Suncrest**: 9%
- **Dunstan Hills**: 6%
- **Fortune**: 5%
- **Alpine**: 5%
- **Central Pac**: 5%
- **Others**: 31%

Total = 5,284t

### NZ CHERRY PACKHOUSE VOLUME BUILD-UP/MODEL 2016

<table>
<thead>
<tr>
<th>Firm</th>
<th>Location</th>
<th>Supplying Area</th>
<th>Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 South</td>
<td>Cromwell</td>
<td>150ha</td>
<td>1,500t</td>
</tr>
<tr>
<td>NZ Cherry Corp</td>
<td>Cromwell</td>
<td>40ha (own)</td>
<td>650t</td>
</tr>
<tr>
<td>Suncrest</td>
<td>Cromwell</td>
<td>55ha</td>
<td>450t*</td>
</tr>
<tr>
<td>Dunstan Hills</td>
<td>Earnscleugh</td>
<td>21ha</td>
<td>300t*</td>
</tr>
<tr>
<td>Fortune Fruit</td>
<td>Cromwell</td>
<td>34ha</td>
<td>270t*</td>
</tr>
<tr>
<td>Alpine Packhouse</td>
<td>Alexandra</td>
<td>30ha (own)</td>
<td>250t*</td>
</tr>
<tr>
<td>Central Pac (Clyde Orchards)</td>
<td>Central Otago</td>
<td>35ha</td>
<td>250t</td>
</tr>
<tr>
<td>Others</td>
<td>Central Otago</td>
<td>302ha</td>
<td>1,614t*</td>
</tr>
</tbody>
</table>

**TOTAL**: 645ha, 5,284t

**NOTE**: PurePac NZ start packing from their new facility in the 2017/18 season (450t); many hectares are not in production or full production; *calculated based on ha; tonnes based only on their area, excludes other orchards; Source: Coriolis from a wide range of sources and interviews.
Key Markets for NZ Cherries

+ Market strategy
+ Growth
+ Market mix
+ Market share
+ Opportunities
The New Zealand cherry industry needs different strategic priorities for key market segments

**DEVELOPED, HIGH INCOME E/SE ASIA**
- Improve access
- Reduce tariffs
- Grow per capita consumption of imported counter-seasonal cherries
- Position NZ as luxury/super-premium
- Ensure high biosecurity requirements are maintained

**EMERGING SE ASIA**
- Develop awareness
- Suggest usage occasions; focus on seasonal gift giving, particularly CNY/Tet
- Position NZ as premium
- Improve access

**CHINA, CHINA, CHINA**
- Embrace and own Chinese New Year
- Position NZ as “the premium cherry” or “the Cognac of cherries”
- Better gift packs
- Ensure best leverage of FTA*
- Potential for Chinese investment to improve route-to-market and ensure “green lane” access
The value of NZ cherry exports has been growing rapidly, driven by strong volume increases (20y CAGR 14%) and moderate price increases (20y CAGR 3%), leading to strong export value growth (20y CAGR 17%).
New Zealand’s growth in cherry exports over the past twenty years has come predominantly from countries that celebrate Chinese New Year*, particularly Taiwan, China, Hong Kong, Vietnam (Tet¹) and Thailand².

NEW ZEALAND CHERRY EXPORT VALUE BY MARKET
US$; m; 1996-2016

1. Tet Nguyen Dan is Vietnamese New Year (same day as Chinese New Year); 2. Including countries with a large Chinese population; Note: Data is calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis
As an observation; rich countries that celebrate Chinese New Year* spend the most per capita on counter-seasonal cherries.

TOTAL PER CAPITA SPENDING ON IMPORTED COUNTER-SEASONAL/SOUTHERN HEMISPHERE CHERRIES
US$/person; FOB sender; 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>$1.68</td>
</tr>
<tr>
<td>Singapore</td>
<td>$1.03</td>
</tr>
<tr>
<td>South Korea</td>
<td>$0.28</td>
</tr>
<tr>
<td>Japan</td>
<td>$0.00</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>$1.59</td>
</tr>
<tr>
<td>China</td>
<td>$0.52</td>
</tr>
<tr>
<td>Thailand</td>
<td>$0.18</td>
</tr>
<tr>
<td>Malaysia</td>
<td>$0.08</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$0.05</td>
</tr>
<tr>
<td>Philippines</td>
<td>$0.01</td>
</tr>
<tr>
<td>Indonesia</td>
<td>$0.01</td>
</tr>
</tbody>
</table>

CHINESE POP.

- Taiwan: 23m
- Singapore: 3m
- South Korea: 1m
- Japan: 1m
- Hong Kong SAR: 7m
- China: 1,372m
- Thailand: 9m
- Malaysia: 7m
- Vietnam: 1m
- Philippines: 1m
- Indonesia: 3m

Clearly Chinese New Year is not the only reason consumers in Asia buy counter-seasonal cherries; however, it appears to be a major contributor (it is the “easy sell” or “low hanging fruit”).

* or Tet: including countries with a large Chinese population; Note: Data is calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3); Source: UN Comtrade database; Coriolis analysis.
The export market for New Zealand cherries has moved from a dependence on Taiwan in the mid-90’s, to a wider range of destinations today; with China and Vietnam standing out for recent growth in share.

NEW ZEALAND SHARE OF CHERRY EXPORTS VALUE BY MARKET
US$; m; 1996-2016

Note: Data are calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis
The price realised for New Zealand cherries varies by market, with Hong Kong and China standing out as paying the highest prices and Japan and South Korea paying less with flat to falling values.

AVERAGE REALISED PRICE FOR NEW ZEALAND CHERRIES BY MARKET
US$, FOB, 2006-2016

Note: Data are calendar years and uses HS96 trade code 080920; Source: UN Comtrade database; Coriolis analysis

IMPORTANT NOTE:
- All $/kg data in this document is US dollars per kilogram of “apportioned gross weight”.
- We use this value so that the value can be compared with the same value from other countries (i.e. Chile, Australia) in the competition section of this report (see pages 56, 58, 60).
- Values are higher in “net product weight”. If you are interested in this value, see Statistics NZ Infoshare database.
New Zealand counter-seasonal cherry market share varies by country and region; performing well in SE Asia and developing East Asia, but underperforming in China

NEW ZEALAND VALUE MARKET SHARE OF COUNTER-SEASONAL (S.H.) CHERRIES
% of US$, 2016

South Korea Japan Singapore Taiwan Hong Kong SAR China Vietnam Thailand Malaysia Philippines Indonesia

Developed, high income E/SE Asia China Emerging SE Asia

Unweighted average 30% 22% 29% 30% 39% 6% 2% 89% 47% 25% 18% 0%

MARKET SIZE

$14m $1m $6m $40m $12m $718m $5m $12m $3m $1m $14m

S.H = Southern Hemisphere; Note: Data are calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3 by value); Source: UN Comtrade database; Coriolis analysis
Per capita spending on imported S.H. cherries is influenced by GDP per capita; China stands out as a large market with significant growth prospects as income grows.

GDP PER CAPITA VS. TOTAL PER CAPITA SPEND ON IMPORTED S.H. CHERRIES VS. MARKET SIZE
US$/capita; FOB sender; 2016

- Size of bubble is proportional to total value of imported S.H cherries in 2016
- China: High income, Large Chinese population
- Hong Kong: High income, No major CNY celebration
- Taiwan: Likely Growth Path, Increased Spending
- Singapore: High income
- Indonesia, Thailand, Malaysia, Vietnam, Philippines, Japan, South Korea: Options to increase consumption?

Source: UN Comtrade database; Coriolis analysis

S.H = Southern Hemisphere; Note: Data are calendar years and uses HS02 trade code 080920; Hong Kong is net of adjustment for estimated further grey market on-shipment to China (est. 2/3)
The success of counter-seasonal New Zealand apples and kiwifruit in key East and South East Asian markets shows success is possible; China stands out as having the greatest potential to grow market share.

NEW ZEALAND VALUE SHARE OF IMPORTS OF SELECT SOUTHERN HEMISPHERE SELECTS
% of US$, FOB sender; 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>APPLES</th>
<th>KIWIFRUIT</th>
<th>CHERRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>98%</td>
<td>99%</td>
<td>29%</td>
</tr>
<tr>
<td>Singapore</td>
<td>58%</td>
<td>93%</td>
<td>30%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>45%</td>
<td>98%</td>
<td>39%</td>
</tr>
<tr>
<td>South Korea</td>
<td>0%</td>
<td>86%</td>
<td>22%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>82%</td>
<td>93%</td>
<td>6%</td>
</tr>
<tr>
<td>China</td>
<td>70%</td>
<td>90%</td>
<td>2%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>97%</td>
<td>100%</td>
<td>89%</td>
</tr>
<tr>
<td>Thailand</td>
<td>97%</td>
<td>98%</td>
<td>47%</td>
</tr>
<tr>
<td>Philippines</td>
<td>92%</td>
<td>99%</td>
<td>18%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>84%</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>16%</td>
<td>96%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Cherries clearly underperform in China.

Source: UN Comtrade database; Coriolis analysis
In terms of potential market size, China again stands out with the potential to grow into a US$274-638m market for New Zealand cherries.

### ESTIMATED EXPORT MARKET VALUE FOR NEW ZEALAND CHERRIES UNDER GIVEN SCENARIOS

**US$m; 2016 vs. hypothetical future year**

<table>
<thead>
<tr>
<th>Country</th>
<th>Current NZ Exports</th>
<th>Growth Scenario 1: NZ Matches Share in Taiwan (39%) in This Market</th>
<th>Growth Scenario 2: NZ Matches Share in Taiwan in This Market and Consumption Per Cap Grows to Taiwan Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>$16</td>
<td>$16</td>
<td>$16</td>
</tr>
<tr>
<td>China</td>
<td>$13</td>
<td>$274</td>
<td>$638</td>
</tr>
<tr>
<td>Thailand</td>
<td>$5</td>
<td>$5</td>
<td>$40</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$4</td>
<td>$4</td>
<td>$61</td>
</tr>
<tr>
<td>South Korea</td>
<td>$3</td>
<td>$6</td>
<td>$29</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>$2</td>
<td>$14</td>
<td>$14</td>
</tr>
<tr>
<td>Singapore</td>
<td>$2</td>
<td>$2</td>
<td>$2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>$1</td>
<td>$1</td>
<td>$19</td>
</tr>
<tr>
<td>Philippines</td>
<td>$0</td>
<td>$0</td>
<td>$67</td>
</tr>
<tr>
<td>Japan</td>
<td>$0</td>
<td>$0</td>
<td>$84</td>
</tr>
<tr>
<td>Indonesia</td>
<td>$-</td>
<td>$1</td>
<td>$169</td>
</tr>
</tbody>
</table>

**Source:** Coriolis
Competitive Situation

- Global situation
- Southern Hemisphere window
- Key competitors
- Key markets
Only temperate regions with cold winters can produce sweet cherries commercially.

APPROXIMATE REGIONS WHERE SWEET CHERRIES CAN BE PRODUCED IN COMMERCIAL QUANTITIES

*Conceptual model; 2017*

Source: Coriolis analysis of production data
Global cherry production is 3.6m tonnes, split two thirds sweet (62%), one third sour (38%); global production growth is low and relatively stable; New Zealand only competes in sweet
Global sweet cherry production is concentrated in the colder and/or mountainous regions of Europe, Central Asia, North America, East Asia, Australia and New Zealand.

SWEET CHERRY PRODUCTION BY COUNTRY/REGION
Tonnes; 000; 2014

Total = 2,245

Australia
13

USA
330

Canada
16

Chile
84

Argentina
7

New Zealand
3

AU/Pacific

Americas

Europe

NA/ME/CA

Other E Asia

*NA/ME/CA = North Africa/Middle East/Central Asia; Source: UN FAO database; Coriolis analysis
As a Southern Hemisphere producer, New Zealand faces a very narrow competitive set, being effectively Australia, Chile and Argentina.

APPENDIX 1: APPROXIMATE REGIONS WHERE SWEET CHERRIES CAN BE PRODUCED COMMERCIALLY IN SOUTHERN HEMISPHERE

Source: Coriolis analysis of production data
The Southern Hemisphere accounts for 5% of global sweet cherry production; Chile is the leading producer accounting for over three quarters, while New Zealand is the fourth largest regional producer.

**SWEET CHERRY PRODUCTION BY HEMISPHERE**
*Tonnes; 000; 2014*

- **Northern**
  - Argentina: 7,132 (6%)
  - South Africa: 299 (0%)
  - Peru: 3 (0%)
- **Southern**
  - Australia: 12,694 (12%)
  - Bolivia: 830 (1%)
  - Chile: 83,903 (78%)

**TOTAL = 2,245 tonnes (000)**

**SWEET CHERRY PRODUCTION IN SOUTHERN HEMISPHERE**
*Tonnes; actual; 2014*

- **Chile**: 83,903 (78%)
- **Australia**: 12,694 (12%)
- **New Zealand**: 3,047 (3%)
- **South Africa**: 299 (0%)
- **Argentina**: 7,132 (6%)
- **Peru**: 3 (0%)

**TOTAL = 107,908 tonnes**

*Source: UN FAO database; Coriolis analysis*
Southern Hemisphere sweet cherry production is growing, led by Chile.

Source: UN FAO database; Coriolis analysis
While a relatively small producer in the global picture, the Southern Hemisphere accounts for 49% of global sweet cherry export value; Chile is the leading S.H. exporter (88%), followed by New Zealand (5%).

**SWEET CHERRY EXPORT VALUE BY HEMISPHERE**

- **Northern Hemisphere**
  - Value: $941 m
  - Percentage: 51%

- **Southern Hemisphere**
  - Value: $914 m
  - Percentage: 49%

**TOTAL = US$1,855 m**

**SWEET CHERRY EXPORT VALUE IN SOUTHERN HEMISPHERE**

- **Chile**
  - Value: $803 m
  - Percentage: 88%

- **New Zealand**
  - Value: $48 m
  - Percentage: 5%

- **South Africa**
  - Value: $2 m
  - Percentage: 0%

- **Argentina**
  - Value: $17 m
  - Percentage: 2%

**TOTAL = US$914 m**

*Source: UN FAO database; Coriolis analysis*
Chile ($803m) is the largest global sweet cherry exporter, followed by the US ($456m), Turkey ($183m), Spain ($67m), Canada ($59m) and New Zealand ($48m).

### Global Sweet Cherry Exports by Country/Region

**US$ m; 2016**

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>$803</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$48</td>
</tr>
<tr>
<td>Australia</td>
<td>$43</td>
</tr>
<tr>
<td>USA</td>
<td>$456</td>
</tr>
<tr>
<td>Canada</td>
<td>$59</td>
</tr>
<tr>
<td>South Africa</td>
<td>$12</td>
</tr>
<tr>
<td>Argentina</td>
<td>$317</td>
</tr>
<tr>
<td>Other Europe</td>
<td>$33</td>
</tr>
<tr>
<td>Turkey</td>
<td>$183</td>
</tr>
<tr>
<td>Spain</td>
<td>$67</td>
</tr>
<tr>
<td>Greece</td>
<td>$35</td>
</tr>
<tr>
<td>Germany</td>
<td>$25</td>
</tr>
<tr>
<td>Italy</td>
<td>$23</td>
</tr>
<tr>
<td>France</td>
<td>$12</td>
</tr>
<tr>
<td>Serbia</td>
<td>$11</td>
</tr>
</tbody>
</table>

**Total = $1,858**

Source: UN FAO database; Coriolis analysis
Based on the global trade data, New Zealand achieve premium prices ($11.79/kg) for cherry exports, followed by Australia, Chile, the USA and Canada.

**GLOBAL SWEET CHERRY EXPORTS: VOLUME VS. AVERAGE PRICE PER KILOGRAM**

*Tonnes; US$/kg; 2016*

**Average export value per kilogram (US$, 2016)**

- **New Zealand**: $10.64
- **Australia**: $2.29
- **Argentina**: $2.31
- **USA**: $3.05
- **Canada**: $2.15
- **Italy**: $2.11
- **South Africa**: $2.39
- **Germany**: $2.64
- **France**: $2.64
- **Spain**: $2.75
- **Other**: $2.93
- **Turkey**: $2.99
- **Greece**: $1.54
- **Serbia**: $1.51
- **Other Europe**: $1.51

**Proportional to export volume (T; 2016)**

Source: UN FAO database; Coriolis analysis

**IMPORTANT NOTE:**
- All $/kg data in this document is US dollars per kilogram of “apportioned gross weight”.
- We use this value so that the value can be compared with the same value from other competing countries (i.e. Chile, Australia) in this report (see pages 42, 58, 60).
- Values are higher in “net product weight”. If you are interested in this value, see Statistics NZ Infoshare database.
“Greater China” is the key market for Southern Hemisphere cherry exports as it accounts for ~84% of export dollars.

**VALUE OF S.H. CHERRY EXPORTS BY SOURCE**
US$m; FOB; 2016

- Chile $803 88%
- New Zealand $48 5%
- Australia $44 5%
- Argentina $18 2%
- South Africa $2 <1%

**VALUE OF S.H. CHERRY EXPORTS BY DESTINATION**
US$m; FOB; 2016

- China $694 76%
- North America $50 5%
- Europe $29 3%
- Other $24 3%
- Vietnam $5 1%
- Thailand $12 1%
- Other SE Asia $11 1%
- S Korea $14 2%
- Taiwan $40 4%
- Hong Kong $35 4%
- Japan $1 <1%

**TOTAL = US$914m**

Note: data here includes some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis
New Zealand cherries maintain a substantial price premium over Chilean cherries

**AVERAGE CHERRY EXPORT PRICE**
*US$/kg; FOB; 2001-2016*

**AVERAGE CHERRY EXPORT PRICE INDEXED TO CHILE**
*Chile = 100%; 2001-2016*

**IMPORTANT NOTE:**
- All $/kg data in this document is US dollars per kilogram of "apportioned gross weight".
- We use this value so that the value can be compared with the same value from other competing countries (i.e., Chile, Australia) in this report (see pages 42, 58, 60).
- Values are higher in "net product weight". If you are interested in this value, see Statistics NZ Infoshare database.

Note: data here include some very small amounts of sour cherries. Source: UN FAO database; Coriolis analysis.
Market growth for Southern Hemisphere cherries has come from China (15y CAGR 61%) and a range of other East & SE Asian countries.

**TOTAL SOUTHERN HEMISPHERE CHERRY EXPORT VALUE**

US$m; FOB; 2001-2016

**Note:** data here include some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis
Markets vary in average FOB price per kilogram they pay for Southern Hemisphere cherries

**AVERAGE DECLARED FOB CHERRY EXPORT PRICE PER KILOGRAM FOR S.H. FRUIT**

US$/kg; FOB; 2001-2016

**IMPORTANT NOTE:**
- All $/kg data in this document is US dollars per kilogram of "apportioned gross weight".
- We use this value so that the value can be compared with the same value from other competing countries (i.e. Chile, Australia) in this report (see pages 42, 58, 60).
- Values are higher in "net product weight". If you are interested in this value, see Statistics NZ Infoshare database.

**FOB** Free On Board, Note: data here include some very small amounts of sour cherries; Source: UN FAO database; Coriolis analysis
Key NZ Cherry Firms - Packhouses

+ Themes
+ Firm Profiles
The New Zealand cherry crop is packed and exported by a mix of dedicated cherry operators and more general summerfruit firms.

### SELECTED NEW ZEALAND CHERRY OPERATIONS 2017

<table>
<thead>
<tr>
<th>DEDICATED CHERRY ORCHARD/PACKHOUSE OPERATIONS</th>
<th>SUMMERFRUIT ORCHARD/PACKHOUSE OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="45' SOUTH" /></td>
<td><img src="image2" alt="Dawsons" /></td>
</tr>
<tr>
<td><img src="image3" alt="Pure Pac" /></td>
<td><img src="image4" alt="C V Exports" /></td>
</tr>
<tr>
<td><img src="image5" alt="New Zealand Cherry Corp." /></td>
<td><img src="image6" alt="Central Organics" /></td>
</tr>
<tr>
<td><img src="image7" alt="Dunstan Hills" /></td>
<td><img src="image8" alt="HNZ Orchard Direct" /></td>
</tr>
<tr>
<td><img src="image9" alt="Eden Oranges" /></td>
<td><img src="image10" alt="Darling's" /></td>
</tr>
<tr>
<td><img src="image11" alt="Central Pac" /></td>
<td><img src="image12" alt="Hinton Orchard &amp; Packhouse" /></td>
</tr>
<tr>
<td><img src="image13" alt="Fortune Fruit Company" /></td>
<td><img src="image14" alt="New Zealand Gourmet" /></td>
</tr>
<tr>
<td><img src="image15" alt="Suncrest Orchard" /></td>
<td><img src="image16" alt="saraT Orchards" /></td>
</tr>
<tr>
<td><img src="image17" alt="RD8 Fresh Produce" /></td>
<td><img src="image18" alt="Le Fresh" /></td>
</tr>
<tr>
<td><img src="image19" alt="45 Degrees" /></td>
<td><img src="image20" alt="Fresh Produce" /></td>
</tr>
<tr>
<td><img src="image21" alt="Dawsons" /></td>
<td><img src="image22" alt="C V Exports" /></td>
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<tr>
<td><img src="image23" alt="Fresh Produce" /></td>
<td><img src="image24" alt="Dawsons" /></td>
</tr>
<tr>
<td><img src="image25" alt="T &amp; G Foodview" /></td>
<td><img src="image26" alt="Oravida" /></td>
</tr>
</tbody>
</table>

Source: Coriolis analysis
The majority of export orchards and packhouses are located in Central Otago.

Source: Google Maps; Coriolis
New Zealand has a vibrant cherry industry that continues to attract new entrants

**TOP 32 NEW ZEALAND CHERRY PACKHOUSE/ORCHARD OPERATORS BY DECADE ESTABLISHED**
*Count: n = 32; 1862-2017*

- Growth in numbers of export packhouse/orchard operators in the 1990s and 2000s align with the increase in area planted in cherries
- New operations in this decade are larger scale to meet New Zealand’s increasing cherry production volumes (5,284 tonnes in 2016)
- Select new ventures have been collaborative in nature e.g. group of growers investing in new packhouse and brand

Source: Coriolis analysis from various public sources
The industry is moving towards more collaborative branding efforts for exports

CENTRAL OTAGO PREMIUM FRUIT LTD
Example: 2017

- Central Otago Premium Fruit Ltd is a premium global brand established in 2012 and owned by group of local growers
- Shareholders - Duncan Mathers (Sarita Orchard), Tim Jones (45 South), Earnscy Weaver, Stephen Darling (Darling’s Fruit)
- Markets and sells Central Otago cherries in Malaysia, Vietnam, Hong Kong, China, New Zealand, and apricots in USA. Partnerships with Food View (China focus), RD8 (Vietnam, Malaysia, USA focus), MG Marketing
- Grower suppliers - 45 South, Sarita Orchards, Ripponvale Orchards, Teviot Orchard Company & Clutha Packing Centre, Fairview Orchard, Remarkable Orchards, Webbs Fruit & Darling’s Fruit

Source: Central Otago Premium Fruit website; http://www.centralotagofruit.co.nz; New Zealand Companies Office; various published articles; Coriolis analysis
A new collaborative grower-owned packhouse has launched and will begin packing in the 2017/18 season

PURE PAC LTD
Example: 2017

- State of the art packhouse built in partnership with Compac; utilising new End View visual sizing and grading technology. 1,200 tonnes per season capacity. Plan to pack 450 tonnes in 2017/18 season with volumes increasing to 1,000 tonnes over the next four to five years

- Grower owners - Malmuzza Holdings (Felton Park Cherries) 15%, Moonshine Cherries 15%, Pisa Range Orchards 15%, Gold Cow 15%, Somerville 10%, G.A. Young & Co 10%, JK Tyler 10%, Little (Felton Park Cherries) 10%

- 40 hectares in production as a group, 30 hectares developing

Source: Pure Pac website; New Zealand Companies Office; various published articles; Coriolis analysis; Photo credit: Compac
## PACKHOUSE FIRMS

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Owner/Manager</th>
<th>Description</th>
<th>Key Products</th>
<th>Ownership</th>
<th>Company Number</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
<th>Year Formed</th>
<th>Staff Employed</th>
<th>Revenue</th>
<th>Company Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>45 SOUTH MANAGEMENT / ORCHARD FRESH</strong></td>
<td>Tim Jones</td>
<td>Cherry grower, packer, exporter; orchard management and domestic fresh fruit business; controls 150ha of orchards; export 70-80% of production; NZ largest cherry exporter producing 30-40% of NZ export cherries</td>
<td>Cherries, plums</td>
<td>NZ; Private (Hinton, Cook, Jones)</td>
<td>964255</td>
<td>Corner Ord Road &amp; State Highway 6, Cromwell</td>
<td>+64 3 445 1402</td>
<td><a href="http://www.orchardfresh.co.nz">www.orchardfresh.co.nz</a>; <a href="http://www.45s.co.nz">www.45s.co.nz</a></td>
<td>1984</td>
<td>35-400 peak</td>
<td>$20-30m*</td>
<td>Recent investment in new packhouse equipment.</td>
</tr>
<tr>
<td><strong>CENTRALPAC</strong></td>
<td>Michael Stuart</td>
<td>Growers and packers; sustainability focus; minimal application of chemicals; 12 ha of red and white cherry varieties; onsite packhouse; contract packing; orchard mngr service via sister company Central Orchard Management; exports and packs the J&amp;P Turner 1885 brand</td>
<td>Cherries</td>
<td>NZ; Private (Turner family)</td>
<td>1609826</td>
<td>828 Luggate-Cromwell Road, State Highway 6, Cromwell</td>
<td>+64 3 445 4600</td>
<td><a href="http://www.centralpac.co.nz">www.centralpac.co.nz</a></td>
<td>2016</td>
<td>150 peak</td>
<td>$2.5-4m</td>
<td>Recent investment in new packhouse equipment.</td>
</tr>
<tr>
<td><strong>CLYDE ORCHARDS / ALPINE PACKHOUSE</strong></td>
<td>Kevin Paulin</td>
<td>100 ha of orchards; one third cherries, one third Flatto peaches and nectarines, rest a mix of summer fruit; exclusive rights to Flatto varieties; exports to Russia, Europe, China; growing partner with Freshmax in developing IP cherry variety Lani; export under CV Exports</td>
<td>Cherries, nectarines, peaches, apricots</td>
<td>NZ; Private (Paulin family)</td>
<td>460752</td>
<td>Earnscleugh Road, Alexandra</td>
<td>+64 3 449 2873</td>
<td><a href="http://www.clydeorchards.co.nz">www.clydeorchards.co.nz</a></td>
<td>1990</td>
<td>100</td>
<td>$2-5m*</td>
<td></td>
</tr>
<tr>
<td><strong>DARLINGS FRUIT</strong></td>
<td>Stephen Darling</td>
<td>Fruit grower and packer; exports mostly apples and apricots</td>
<td></td>
<td>NZ; Private (Darling family)</td>
<td>686586</td>
<td>5133 Ettrick-Raes Junction Road, Ettrick</td>
<td>+64 3 446 6703</td>
<td><a href="http://www.darlingsfruit.co.nz">www.darlingsfruit.co.nz</a></td>
<td>1995</td>
<td>N/A</td>
<td>$2-5m*</td>
<td></td>
</tr>
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<td>N/A</td>
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<td>+64 3 446 6703</td>
<td><a href="http://www.darlingsfruit.co.nz">www.darlingsfruit.co.nz</a></td>
<td>1995</td>
<td>N/A</td>
<td>$2-5m*</td>
<td></td>
</tr>
</tbody>
</table>

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
### PACKHOUSE FIRMS

<table>
<thead>
<tr>
<th>DUNSTAN HILLS</th>
<th>EDEN ORCHARDS</th>
<th>FORTUNE FRUIT COMPANY</th>
<th>H&amp;J ROBERTS ORCHARD</th>
</tr>
</thead>
</table>
| **Ingrid Hofma**
Director | **Steph Bignell**
Director | **Hugh Dendy**
Owner | **Harry Roberts**
Owner |
| **DESCRIPTION:** Fruit grower and packer; 200 ha property, 50 ha fruit trees; 26 ha apricots, 21 ha cherries, 1.4 ha nectarines, 1.25 ha peaches; predominantly exports; co-own Le Fresh International NZ exporting company | **DESCRIPTION:** Fruit grower, marketer, exporter; 30 ha of cherry orchard in Waihopai Valley, Marlborough; Eden Orchards (growing), Legacy Cherries (export sales), Cherry Club (corporate sales), The Cherry Man (local sales), The Cherry Man Juice; source 40ha from Central Otago | **DESCRIPTION:** Cherry grower and packer; 34ha cherry orchard; original family owned orchard in Canada; Morning Glory brand | **DESCRIPTION:** Fruit grower, packer and retailer; Southern Fresh brand; three orchard blocks |
| **KEY PRODUCTS:** Cherries, apricots, peaches, nectarines | **KEY PRODUCTS:** Cherries, apricots, nectarines, peaches | **KEY PRODUCTS:** Cherries | **KEY PRODUCTS:** Apricots, cherries, nectarines, peaches, plums |
| **OWNERSHIP:** NZ; Private (Ingrid Hofma) | **OWNERSHIP:** NZ; Private (Bignell, Purdue) | **OWNERSHIP:** NZ; Private (Hugh Dendy) | **OWNERSHIP:** NZ; Private (Roberts family) |
| **COMPANY NUMBER:** 1294091 | **COMPANY NUMBER:** 3980659 | **COMPANY NUMBER:** 947366 | **COMPANY NUMBER:** 146144 |
| **ADDRESS:** 253 Strode Road, Earnscleugh | **ADDRESS:** 825 Waihopai Valley Road, Blenheim | **ADDRESS:** Lowburn Valley Road, Cromwell | **ADDRESS:** 8 McIntosh Road, Earnscleugh |
| **PHONE:** +64 3 449 2203 | **PHONE:** +64 3 572 4406 | **PHONE:** +64 3 445 3504 | **PHONE:** +64 3 449 2047 |
| **WEBSITE:** www.dunstanhills.co.nz; www.lefresh.co.nz | **WEBSITE:** www.edenorchards.co.nz | **WEBSITE:** www.fortunefruit.com | **WEBSITE:** www.hjroberts.co.nz |
| **YEAR FORMED:** 2003 | **YEAR FORMED:** 2010 | **YEAR FORMED:** 1999 | **YEAR FORMED:** 1961 |
| **STAFF EMPLOYED:** N/A | **STAFF EMPLOYED:** N/A | **STAFF EMPLOYED:** 154 | **STAFF EMPLOYED:** N/A |
| **REVENUE:** $3-7m* | **REVENUE:** $2-5m* | **REVENUE:** $2-5m* | **REVENUE:** $2-5m* |
| **COMPANY HIGHLIGHTS:** | **COMPANY HIGHLIGHTS:** | **COMPANY HIGHLIGHTS:** Expanding capacity | **COMPANY HIGHLIGHTS:** |

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
# PACKHOUSE FIRMS

<table>
<thead>
<tr>
<th>HINTON ORCHARD &amp; PACKHOUSE</th>
<th>LEANING ROCK CHERRIES</th>
<th>MCINTOSH ORCHARD</th>
<th>NEW ZEALAND CHERRY CORP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigel Hinton</td>
<td>Peter Bennie</td>
<td>McIntosh Family</td>
<td>Henry van der Velden</td>
</tr>
<tr>
<td>Managing Director</td>
<td>Director &amp; Orchard Manager</td>
<td>Owner</td>
<td>Director</td>
</tr>
<tr>
<td>DESCRIPTION: Fruit grower and packer; exports under C.V. Exports brand; Taiwan (70-80%), China, Australia, UK, USA; Hinton Estate Vineyard business, tasting room beside packhouse</td>
<td>DESCRIPTION: Fruit grower and packer; 42ha orchard, 21ha of cherries; 15 varieties; one of the largest exporters of cherries in South Island; 150t of cherries exported, 100t of cherries and 150t of nectarines and peaches for domestic market; partnership with MG Marketing</td>
<td>DESCRIPTION: Fruit grower, packer, processor; exports to Asia; 40ha orchard; 34,000 fruit trees; 10ha of cherry net canopy; supply ~5% of peach and nectarine domestic market; cherries 40% of income; smallest cherry packhouse in Central Otago, hand sorts to keep the cherries in bunches</td>
<td>DESCRIPTION: Vertically integrated growers and packers of cherries; 40ha netted orchard; 23,000 trees; NZ’s largest fully climate controlled netted orchard; harvest 700t; 3,500 sqm Cherrypac packhouse in Cromwell; exports to 12 markets across Asia, Russia</td>
</tr>
<tr>
<td>KEY PRODUCTS: Apricots, cherries, nectarines, peaches, plums</td>
<td>KEY PRODUCTS: Cherries, peaches, nectarines, organic apples and pears</td>
<td>KEY PRODUCTS: Cherries, apricots, peaches, nectarines, plums, apples</td>
<td>KEY PRODUCTS: Cherries; 7 varieties; Red Envy, Cherry Delight, Kiwi Delight export brands, Red Sensation, Mr Henry domestic brand</td>
</tr>
<tr>
<td>OWNERSHIP: NZ; Private (Hinton family)</td>
<td>OWNERSHIP: NZ; Private (Bennie family 31%, Shearer 18%, lbbotson 18%, others)</td>
<td>OWNERSHIP: NZ; Private (McIntosh family)</td>
<td>OWNERSHIP: NZ; Private (van der Velden)</td>
</tr>
<tr>
<td>COMPANY NUMBER: 147890</td>
<td>COMPANY NUMBER: 614490</td>
<td>COMPANY NUMBER: 1259215</td>
<td>COMPANY NUMBER: 1506443</td>
</tr>
<tr>
<td>ADDRESS: 19 Chicago Street, Alexandra</td>
<td>ADDRESS: 93 Rock View Road, Alexandra</td>
<td>ADDRESS: 115 McIntosh Road, Earnscleugh</td>
<td>ADDRESS: 19 Ree Crescent, Cromwell</td>
</tr>
<tr>
<td>PHONE: +64 3 448 8231</td>
<td>PHONE: +64 3 448 8497</td>
<td>PHONE: +64 3 449 2044</td>
<td>PHONE: +64 3 443 0474</td>
</tr>
<tr>
<td>STAFF EMPLOYED: 250</td>
<td>STAFF EMPLOYED: N/A</td>
<td>STAFF EMPLOYED: 58</td>
<td>STAFF EMPLOYED: 8 perm. 320 seasonal</td>
</tr>
<tr>
<td>REVENUE: $5-10m*</td>
<td>REVENUE: $2-5m*</td>
<td>REVENUE: $2-4m*</td>
<td>REVENUE: $10-15m*</td>
</tr>
<tr>
<td>COMPANY HIGHLIGHTS: Supplied supermarkets directly for first time in 2016; invested in new cherry grader; recently invested in early stage conversion diary farm</td>
<td>COMPANY HIGHLIGHTS:</td>
<td>COMPANY HIGHLIGHTS:</td>
<td>COMPANY HIGHLIGHTS: State-of-the-art cherry packhouse with 10-lane Compac grader, including firmtech machine commissioned in ’15; launched two new export brands and new logo at Asia Fruit Logistica ’16</td>
</tr>
</tbody>
</table>

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
## PACKHOUSE FIRMS

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Executive/Owner</th>
<th>Description</th>
<th>Key Products</th>
<th>Ownership</th>
<th>Company Number</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
<th>Year Formed</th>
<th>Staff Employed</th>
<th>Revenue</th>
<th>Company Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW ZEALAND GOURMET</td>
<td>Paul Martin</td>
<td>Fruit and vegetable grower, packer and exporter; Gourmet Paprika, Blueberries, Mokai, Summerfruit, Waikato, and Sweet Red Gourmet operations across New Zealand; 59ha of cherries and blueberries in Roxburgh; import business in USA, Gourmet Trading</td>
<td>Blueberries, strawberries, tomatoes, capsicums, cherries, chillies</td>
<td>NZ; Private (Lawler, Marin, Lineen)</td>
<td>1522263</td>
<td>83 Pukaki Road, Mangere</td>
<td>+64 9 275 3415</td>
<td><a href="http://www.nzgourmet.net">www.nzgourmet.net</a></td>
<td>1993</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>NZ ORCHARD DIRECT</td>
<td>Gary Bennetts</td>
<td>Fruit grower, packer and exporter; comprises of Fairview Orchard, Teviot Orchard (49ha of orchard, 30% cherries, 40% apricots), Clutha Packing Centre companies</td>
<td>Apricots, cherries</td>
<td>NZ; Private (Bennetts, Alison family)</td>
<td>2150255</td>
<td>3474 Fruitlands-Roxburgh Road, Roxburgh</td>
<td>+64 3 446 8151</td>
<td><a href="http://www.nzorcharddirect.co.nz">www.nzorcharddirect.co.nz</a></td>
<td>2008</td>
<td>150</td>
<td>$2.5m</td>
<td></td>
</tr>
<tr>
<td>PURE PAC</td>
<td>Malcolm Little</td>
<td>Grower owned cherry packhouse and marketing company; Pure Gold, Gold Reserve brands; 70ha in production through shareholders; planting additional 16,000 trees in 2017; 450t estimated to pack in 2017/18 (increasing to 1,000t)</td>
<td>Cherries</td>
<td>NZ; Private (7 grower suppliers)</td>
<td>6257470</td>
<td>84 Felton Road, Cromwell</td>
<td>+64 27 484 5099</td>
<td><a href="http://www.purepac.nz">www.purepac.nz</a></td>
<td>2017</td>
<td>N/A</td>
<td>N/A</td>
<td>New state of the art packhouse, commencing packing operations in Dec 2017</td>
</tr>
<tr>
<td>REMARKABLE ORCHARDS</td>
<td>Sid Birtles</td>
<td>Fruit grower and packer; 99ha property; 33ha orchard; 50% apples, 30% apricots, 10% cherries, 10% peaches; all apples and cherries are exported; new 1,250 sq m packing shed in 2014</td>
<td>Cherries, apricots, nectarines, peaches, apples</td>
<td>NZ; Private (Birtles, van der Voort)</td>
<td>2178056</td>
<td>McElligot Road, Roxburgh East</td>
<td>+64 3 446 8240</td>
<td><a href="http://www.remarkableorchards.co.nz">www.remarkableorchards.co.nz</a></td>
<td>1994</td>
<td>165</td>
<td>$2.5m*</td>
<td></td>
</tr>
</tbody>
</table>

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
## PACKHOUSE FIRMS

<table>
<thead>
<tr>
<th>SARITA ORCHARD</th>
<th>SUNCREST ORCHARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duncan Mathers</td>
<td>Michael Jones</td>
</tr>
<tr>
<td>General Manager</td>
<td>Director</td>
</tr>
</tbody>
</table>

**DESCRIPTION:**
- **SARITA ORCHARD:** Cherry grower and packer; 34.6 ha; exports to China, Vietnam, Taiwan, Singapore, Hong Kong, USA, Australia; supply to Central Otago Premium Fruit cooperative brand
- **SUNCREST ORCHARD:** Fruit grower, packer and retailer; Mrs Jones’ Fruit Stall, 7th Heaven Vineyard; 70 ha orchard, 55 ha of cherries; growing partner with Freshmax in developing IP cherry variety Lani

**KEY PRODUCTS:**
- **SARITA ORCHARD:** Cherries
- **SUNCREST ORCHARD:** Cherries, apricots, nectarines, peaches, plums, apples, pears, grapes

**OWNERSHIP:**
- **SARITA ORCHARD:** NZ; Private (Bouton Paper Co, Lewis, Vosper, Deaker family, others)
- **SUNCREST ORCHARD:** NZ; Private (McKay)

**COMPANY NUMBER:**
- **SARITA ORCHARD:** 965036
- **SUNCREST ORCHARD:** 972968

**ADDRESS:**
- **SARITA ORCHARD:** State Highway 6, Cromwell
- **SUNCREST ORCHARD:** 330 Ripponvale Road, Cromwell

**PHONE:**
- **SARITA ORCHARD:** +64 3 445 1184
- **SUNCREST ORCHARD:** +64 3 445 3444

**WEBSITE:**
- **SARITA ORCHARD:** www.saritaorchard.co.nz
- **SUNCREST ORCHARD:** www.suncrestorchard.co.nz

**YEAR FORMED:**
- **SARITA ORCHARD:** 1999
- **SUNCREST ORCHARD:** 1979

**STAFF EMPLOYED:**
- **SARITA ORCHARD:** 120
- **SUNCREST ORCHARD:** 280

**REVENUE:**
- **SARITA ORCHARD:** $2-5m*
- **SUNCREST ORCHARD:** $5-10m*

*Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
Key New Zealand Cherry Firms – Exporters

+ Firm Profiles
## EXPORT FIRMS

<table>
<thead>
<tr>
<th>Company</th>
<th>CEO/Managing Director</th>
<th>Description</th>
<th>Key Products</th>
<th>Ownership</th>
<th>Company Number</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
<th>Year Formed</th>
<th>Staff Employed</th>
<th>Revenue</th>
<th>Company Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOOD VIEW</strong></td>
<td>Sue Carter</td>
<td>Managing Director</td>
<td>Markets NZ fresh produce in China and USA; works with NZ exporters and also hold export licenses. NZ offices in Cromwell, Auckland, and Tauranga in New Zealand; office in Shanghai, repacking facility for retail and direct to consumer logistics.</td>
<td>Cherry, plum, apricot, apple, pear, kiwifruit, kiwiberry, passionfruit, feijoas, orange, lemon, persimmon.</td>
<td>NZ; Private (Carter, Miller, Zhou, Zhang)</td>
<td>4347080</td>
<td>+64 9 368 9166</td>
<td><a href="http://www.foodview.nz">www.foodview.nz</a></td>
<td>2013</td>
<td>12</td>
<td>$15-25m</td>
<td>Strong growth throughout 2017: largest Shanghai based importer and social media marketer of NZ cherries, first company to introduce NZ persimmons to Chinese consumers, and largest importer and marketer of NZ lemons; utilise online and offline sales channels; 2017 started direct to retail sales in Texas and opened Cromwell office.</td>
</tr>
<tr>
<td><strong>FRESHMAX NZ LTD</strong></td>
<td>Peter Ellis</td>
<td>Group CEO</td>
<td>Vertically integrated Southern Hemisphere fresh produce business; significant exporter from NZ and major importer into Australia; orchards, operations and facilities throughout NZ, Australia, USA, Canada and South America</td>
<td>Fresh fruit and vegetables; material positions in apples, bananas, stone fruit, citrus</td>
<td>AU; PE (Maui Capital (NZ) &amp; Stahl (Singapore) 62%); Private (Mgt 38%)</td>
<td>1842723</td>
<td>+64 9 573 8500</td>
<td><a href="http://www.freshmax.co.nz">www.freshmax.co.nz</a>; <a href="http://www.valleyfresh.co.nz">www.valleyfresh.co.nz</a></td>
<td>1997</td>
<td>492 (plus 700 seasonal)</td>
<td>$219m (FY16)</td>
<td>Expanding warehousing and undergoing operational restructuring to gain efficiencies</td>
</tr>
<tr>
<td><strong>FRESH PRODUCE GROUP</strong></td>
<td>Russell Faulkner</td>
<td>Managing Director</td>
<td>Produce marketer and exporter; export to Asia, North America, Australia; blackberry extract processing; Sea Fresh Trading Co seafood exporting business</td>
<td>Blackcurrents, cherries, berries, summerfruit, tamarillos, kiwiberries, citrus, feijoas, tomatoes, yams</td>
<td>NZ; Private (Faulkner, Moffatt, Tavendale, Dineen)</td>
<td>2383256</td>
<td>+64 7 543 2839</td>
<td><a href="http://www.freshproducegroup.co.nz">www.freshproducegroup.co.nz</a></td>
<td>2009</td>
<td>N/A</td>
<td>N/A</td>
<td>Focused on Asian markets; developing a major position in IP and new varieties in pipfruit, cherries, berries, citrus and stonefruit; Avora, new avocado procurement and distribution for ’16; launched Dazzle apple collaboratively in ’16; multi-million investment in ripening and warehousing in Brisbane and Melbourne in 2017</td>
</tr>
<tr>
<td><strong>J &amp; P TURNER</strong></td>
<td>Peter Turner</td>
<td>Managing Director</td>
<td>Fresh produce and flower wholesalers, importers &amp; exporters; Fresh Direct, JP Exports, Purefresh Organics, Fresh Direct Floral</td>
<td>Cherries, stone/summerfruit, avocados, bananas, fresh flowers, apples, berryfruit, subtropicals and Purefresh organics brand</td>
<td>NZ; Private (Turner)</td>
<td>643531</td>
<td>+64 9 573 4100</td>
<td><a href="http://www.jpt.co.nz">www.jpt.co.nz</a>; <a href="http://www.jpexports.co.nz">www.jpexports.co.nz</a>; <a href="http://www.freshdirect.co.nz">www.freshdirect.co.nz</a>; <a href="http://www.turnersglobal.com">www.turnersglobal.com</a></td>
<td>1994</td>
<td>400 + 250 seasonal</td>
<td>$150-200m (FY14)</td>
<td>COMPANY HIGHLIGHTS: Expanding warehousing and undergoing operational restructuring to gain efficiencies</td>
</tr>
</tbody>
</table>

*Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis*
## EXPORT FIRMS

<table>
<thead>
<tr>
<th>Company</th>
<th>Logo</th>
<th>Managing Director</th>
<th>Description</th>
<th>Key Products</th>
<th>Ownership</th>
<th>Company Number</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
<th>Year Formed</th>
<th>Staff Employed</th>
<th>Revenue</th>
<th>Company Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAVIDA NZ</td>
<td><img src="image" alt="Logo" /></td>
<td>Julia Xu</td>
<td>Producer, processor, exporter and marketer; select premium New Zealand food products to China; multiple sales channels including ecommerce and own retail store in Shanghai</td>
<td>Cherries, bottled water, milk, honey, seafood, lamb, wine</td>
<td>NZ; Private (Gilligan Sheppard Nominees, Shi)</td>
<td>2356805</td>
<td>3rd Floor, 139 Quay Street, Auckland</td>
<td>+64 9 379 7308</td>
<td><a href="http://www.oravida.com">www.oravida.com</a></td>
<td>2011</td>
<td>10-30</td>
<td>N/A</td>
<td>Successfully procuring and exporting a range of premium NZ products throughout China; forging strong relationships with our supply channels and working alongside premium NZ food brands; obtained a Certificate of Recognition from NZ Story in addition to becoming a member of the New Zealand FernMark Licence.</td>
</tr>
<tr>
<td>RD8 FRESH PRODUCE</td>
<td><img src="image" alt="Logo" /></td>
<td>Craig Hall</td>
<td>Fresh produce export company; exports to Australia, Asia, Sri Lanka, United Kingdom, Europe, Russia, Middle East, North America; export brands Brookevale, Molyneux, Red Pearl, Central Organics, Sarita; exports 700t of cherries, ~20% of NZ’s cherry exports</td>
<td>Apples, cherries, stonefruit, blueberries, persimmons, feijoas</td>
<td>NZ; Private (Hall, Smith, Astill)</td>
<td>2332054</td>
<td>2/1 Picton Street, Ponsonby</td>
<td>+64 9 969 1522</td>
<td><a href="http://www.rd8.co.nz">www.rd8.co.nz</a>; <a href="http://www.freshberrycompany.co.nz">www.freshberrycompany.co.nz</a></td>
<td>2010</td>
<td>N/A</td>
<td>$10-50m*</td>
<td></td>
</tr>
<tr>
<td>T&amp;G GLOBAL</td>
<td><img src="image" alt="Logo" /></td>
<td>Alastair Hulbert</td>
<td>Global grower, seller, marketer and distributor of quality fresh produce; 1,100ha farmed; 32 global locations; offices in 12 countries; owns a variety of subsidiaries and brands, ENZA, Delica, Floramax, Kerifresh, and the plant variety rights to Jazz™ Envy™, Pacific Rose™ apples</td>
<td>Pipfruit, grapes, asparagus, citrus, tomatoes, kiwifruit, cherries, berries, fruit juice concentrate, processed fruit and vegetables</td>
<td>Germany; Public (BayWa Aktiengesellschaft (FWB:BYW6) 74%); China; Private (Wo Yang Limited 20%)</td>
<td>41406</td>
<td>1 Clemow Drive, Mt Wellington, Auckland</td>
<td>+64 9 573 8700</td>
<td><a href="http://www.tandg.global">www.tandg.global</a>; <a href="http://www.delicaglobal.com">www.delicaglobal.com</a></td>
<td>1897</td>
<td>1,500 perm. +2,500 seas.</td>
<td>$872m (FY16)</td>
<td>MOU signed with Zespri in ’16 to develop export market opportunities for kiwifruit in SE Asia; sold Fruit Case Co crate hire business to Pact Group for $21m in ’16; opened offices in Washington state and Bangkok ’16; launched ‘FirstPick’ online ordering in NZ ’16; first commercial harvest of grapes in Peru; Golden Wing Mau acquired 20% of T&amp;G Global in ’16</td>
</tr>
<tr>
<td>TE MATA EXPORTS</td>
<td><img src="image" alt="Logo" /></td>
<td>Murray Tait</td>
<td>Fresh produce exporter; exports to Europe, North America, Middle East, India, Australia, Asia</td>
<td>Apples, avocados, cherries, citrus, vegetables</td>
<td>NZ; Private (MG Marketing 50%, Tait 25%, Thompson 25%)</td>
<td>3757476</td>
<td>22 Aotea Crescent, Havelock North</td>
<td>+64 9 431 5352</td>
<td><a href="http://www.temataexports.co.nz">www.temataexports.co.nz</a></td>
<td>2000</td>
<td>N/A</td>
<td>$30-40m</td>
<td></td>
</tr>
</tbody>
</table>

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
## EXPORT FIRMS

### THE FRESH FRUIT COMPANY OF NZ

- **Glenn Pool**  
  General Manager

**DESCRIPTION:** Vertically integrated fresh fruit and vegetable exporter; 4,000 TEU container equivalent/year; orchards in Nelson and Hawkes Bay; JV Freshco Nelson Ltd with apple growers; JV to export squash to Japan and Korea; sole marketer for Tendertips Asparagus and Leaning Rock Cherries

**KEY PRODUCTS:** Apples, squash, asparagus, cherries; Breeze, Sonya, Cheekie proprietary apple varieties

**OWNERSHIP:** NZ; Private (Taylor, Owens, Mangan, Petter, Pool)

**COMPANY NUMBER:** 412966

**ADDRESS:** 46 Jervois Road, Herne Bay, Auckland

**PHONE:** +64 9 376 9990

**WEBSITE:** www.freshco.co.nz

**YEAR FORMED:** 1988

**STAFF EMPLOYED:** 135-400 seasonal

**REVENUE:** $20-50m*

**COMPANY HIGHLIGHTS:**

### LE FRESH INTERNATIONAL

- **Ingrid Hofma**  
  Director

**DESCRIPTION:** Vertically integrated exporter of cherries and apricots; sourcing fruit from Dunstan Hills

**KEY PRODUCTS:** Apricots (10 varieties) and cherries

**OWNERSHIP:** NZ; Private (Taylor, Owens, Mangan, Petter, Pool)

**COMPANY NUMBER:** 689136

**ADDRESS:** PO Box 101 269 NSMC North Shore City

**PHONE:** +64 9 489 3399

**WEBSITE:** www.lefresh.co.nz

**YEAR FORMED:** 1995

**STAFF EMPLOYED:** N/A

**REVENUE:** $5-10m*

**COMPANY HIGHLIGHTS:**

* Estimate; Source: various companies annual financial statements (NZ Companies Office or company website); various press releases and news articles, interviews; Coriolis analysis
Appendices

+ Industry bodies
+ Glossary of terms
INDUSTRY ORGANISATIONS
New Zealand has a broad range of produce organisations that support industry

- Represent the entire supply chain from seed producer to consumer on pan-produce issues
- Funding from voluntary membership fees, 5+ A Day logo user fees and sponsorship
- www.unitedfresh.co.nz

- Represent 5,500 growers
- Commodity Levy (FruitFed and VegFed) Order 2007 ($XXm)
- 22 product groups pay levy
- www.hortnz.co.nz

- Mandatory exporters licencing fees (52 Companies, holding 77 licences)
- NZHEA Amendment Bill 2016
- Product Group under HEA fees (10 groups)
- www.hea.co.nz

- Represent the summerfruit industry (cherries, apricots, nectarines, peaches, plums etc.)
- Primarily levy funded; Summerfruit Commodity Levy Order (2014)
- www.summerfruitnz.co.nz

- Science company providing research and development that adds value to fruit, vegetable, crop and food products
- NZ government owned, Crown Research Institute
- www.plantandfood.co.nz

Industry Strategy & Vision
Industry科学
Industry Regulation

Source: Coriolis from various websites, annual reports and other sources
New Zealand cherry exports are regulated by the New Zealand Horticulture Export Authority

What is the HEA?

A statutory authority charged with the application of legislation – NZ Horticulture Export Authority Act 1987.

The primary function of the HEA is “to promote the effective export marketing of horticultural products” (section 6 of the HEA Act).

Since its creation in 1987, the HEA Act has provided an option for horticulture industries to assist with the development of their sectors. The HEA system is based around sectors developing their own export marketing strategy and applying this through the HEAlicensing of exporters. This framework for industry cooperation and collaboration encourages growers and exporters to develop export opportunities.

Industry Product Groups opt (vote) to come under the HEA model. There are currently 9 sector product groups operating under the structure: avocados, blackcurrants, buttercup squash, chestnuts, kiwifruit to Australia, persimmons, summerfruit, tamarillos and truffles. Collectively these 9 achieved export earnings of $346m in y.e. 30 June 2017.

The HEA framework is based on 2 key tools:

1. **The Export Marketing Strategy** (exporting rules) for each product group &

2. **Licencing exporters**

**HEA’s Goal:** exports under the structure to reach $600million by 2020.

**How does HEA provide value?**

The HEA legislative framework enables Product Groups to enforce their agreed standards. These standards may cover:

- Developing and enforcing export quality grade standards.
- Operating a food safety programme.

The HEA framework also enables Product Groups to:

- collect industry information from all participants on product exports,
- generate funding for industry good functions, develop a co-ordinated industry structure encompassing growers, packers and exporters.

How is HEA funded?

While the HEA reports to the Minister for Primary Industries, the HEA is **funded 100% by its industry sector participants** via:

1) statutory fees on Recognised Product Groups &

2) Fees on export licence holders (application fees and annual monitoring fees).

HEA expenditure in 2016 amounted to 0.12% of the value of the exported products under the HEA framework. This translates to on average $1.20 for every $1,000 of exported product.

Source: hea.co.nz
## GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A$/AUD</td>
<td>Australian dollar</td>
</tr>
<tr>
<td>ABS</td>
<td>Absolute change</td>
</tr>
<tr>
<td>ANZSIC</td>
<td>AU/NZ Standard Industry Classification</td>
</tr>
<tr>
<td>AU</td>
<td>Australia</td>
</tr>
<tr>
<td>Australasia</td>
<td>Australia and New Zealand</td>
</tr>
<tr>
<td>b</td>
<td>Billion</td>
</tr>
<tr>
<td>CAGR</td>
<td>Compound Annual Growth Rate</td>
</tr>
<tr>
<td>CN</td>
<td>China</td>
</tr>
<tr>
<td>C/S America</td>
<td>Central &amp; South America (Latin America)</td>
</tr>
<tr>
<td>CRI</td>
<td>Crown Research Institute</td>
</tr>
<tr>
<td>CY</td>
<td>Calendar year (ending Dec 21)</td>
</tr>
<tr>
<td>E Asia</td>
<td>East Asia</td>
</tr>
<tr>
<td>EBITDA</td>
<td>Earnings before interest, tax, depreciation and amortization</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
</tr>
<tr>
<td>FOB</td>
<td>Free on Board</td>
</tr>
<tr>
<td>FY</td>
<td>Financial year (of firm in question)</td>
</tr>
<tr>
<td>GBP</td>
<td>British pounds</td>
</tr>
<tr>
<td>HK</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>IQF</td>
<td>Individually quick frozen</td>
</tr>
<tr>
<td>JV</td>
<td>Joint venture</td>
</tr>
<tr>
<td>m</td>
<td>Million</td>
</tr>
<tr>
<td>n/a</td>
<td>Not available/not applicable</td>
</tr>
<tr>
<td>NA/ME/CA</td>
<td>North Africa / Middle East / Central Asia</td>
</tr>
<tr>
<td>N. America</td>
<td>North America (USA, Canada)</td>
</tr>
<tr>
<td>Nec/nes</td>
<td>Not elsewhere classified/not elsewhere specified</td>
</tr>
<tr>
<td>N/C</td>
<td>Not calculable</td>
</tr>
<tr>
<td>N.H</td>
<td>Northern Hemisphere</td>
</tr>
<tr>
<td>NZ</td>
<td>New Zealand</td>
</tr>
<tr>
<td>NZ$/NZD</td>
<td>New Zealand dollar</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>S Asia</td>
<td>South Asia (Indian Subcontinent)</td>
</tr>
<tr>
<td>SE Asia</td>
<td>South East Asia</td>
</tr>
<tr>
<td>S.H</td>
<td>Southern Hemisphere</td>
</tr>
<tr>
<td>SS Africa</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>T</td>
<td>Tonne</td>
</tr>
<tr>
<td>US/USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>US$/USD</td>
<td>United States dollar</td>
</tr>
</tbody>
</table>
Coriolis is the leading Australasian management consulting firm specialising in the wider food value chain. We work on projects in agriculture, food and beverages, consumer packaged goods, retailing & foodservice. In other words, things you put in your mouth and places that sell them.

WHERE WE WORK

We focus on the Asia Pacific region, but look at problems with a global point-of-view. We have strong understanding of, and experience in, markets and systems in Australia, China, Japan, Malaysia, New Zealand, Singapore, South Korea, Thailand, the United Kingdom and the U.S. We regularly conduct international market evaluations and benchmarking.

WHAT WE DO

We help our clients assemble the facts needed to guide their big decisions. We develop practical, fact-based insights grounded in the real world that guide our clients decisions and actions. We make practical recommendations. We work with clients to make change happen. We assume leadership positions to implement change as necessary.

HOW WE DO IT

All of our team have worked across one-or-more parts of the wider food value chain, from farm-to-plate. As a result, our recommendations are grounded in the real world. Our style is practical and down-to-earth. We try to put ourselves in our clients’ shoes and focus on actions. We listen hard, but we are suspicious of the consensus. We provide an external, objective perspective. We are happy to link our fees to results.

WHO WE WORK WITH

We only work with a select group of clients we trust. We build long term relationships with our clients and more than 80% of our work comes from existing clients. Our clients trust our experience, advice and integrity.

Coriolis advises clients on growth strategy, mergers and acquisitions, operational improvement and organisational change. Typical assignments for clients include...

FIRM STRATEGY & OPERATIONS

We help clients develop their own strategy for growing sales and profits. We have a strong bias towards growth driven by new products, new channels and new markets.

MARKET ENTRY

We help clients identify which countries are the most attractive - from a consumer, a competition and a channel point-of-view. Following this we assist in developing a plan for market entry and growth.

VALUE CREATION

We help clients create value through revenue growth and cost reduction.

TARGET IDENTIFICATION

We help clients identify high potential acquisition targets by profiling industries, screening companies and devising a plan to approach targets.

DUE DILIGENCE

We help organisations make better decisions by performing consumer and market-focused due diligence and assessing performance improvement opportunities.

EXPERT WITNESS

We provide expert witness support to clients in legal cases and insurance claims. We assist with applications under competition/fair trade laws and regulations.