



Situation and Outlook for Primary Industries

December 2019



Contents

Acknowledgements

Natasha Abram, Paul Berentson, Annette Carey, Matt Dilly, Loretta Dobbs, Daniel Hamill, Geoff King, Bijaya Poudyal, Robert Radics, Claudia Riley, Wido van Lijf.

Cover photo: NZ Apples and Pears

Notes

Annual figures are for the year ended June unless otherwise noted. Currency figures are in New Zealand dollars unless otherwise noted. Some totals may not add due to rounding.

MPI welcomes feedback on this publication at **SOPI@mpi.govt.nz**.

Publisher

Ministry for Primary Industries
Economic Intelligence Unit
Charles Fergusson Building, 34-38 Bowen Street
PO Box 2526, Wellington 6140, New Zealand
Tel: 0800 00 83 33

This publication is available on the Ministry for Primary Industries website at **www.mpi.govt.nz**

Further copies may be requested from **SOPI@mpi.govt.nz**

ISBN No. 978-1-99-001724-7 (online)
ISBN No. 978-1-99-001725-4 (print)

Overview	4
Dairy	12
Meat and Wool	16
Forestry	18
Horticulture	20
Seafood	24
Arable	26
Other primary sector exports and foods	28

Disclaimer

While care has been used in compiling this document, the Ministry for Primary Industries do not give any prediction, warranty or assurance in relation to the accuracy of or fitness for any particular purpose, use or application of any information contained in this document. To the full extent permitted by law, neither the Ministry for Primary Industries nor any of its employees shall not be liable for any cost (including legal costs), claim, liability, loss, damage, injury or the like, which may be suffered or incurred as a direct or indirect result of the reliance by any person on any information contained in this document.



This work is licensed under the Creative Commons Attribution 3.0 New Zealand licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the Crown and abide by the other licence terms.

To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/nz/>. Please note that no departmental or governmental emblem, logo or Coat of Arms may be used in any way which infringes any provision of the Flags, Emblems, and Names Protection Act 1981. Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms. Photographs may not be reproduced without permission.

Minister's foreword

I am pleased to release the latest *Situation and Outlook for Primary Industries* (SOPI) for December 2019. Primary sector export revenue is expected to rise by 3.3 percent in the year ending June 2020 and it's forecast to further increase in 2021 as our sectors continue to build on a number of years of stellar growth.

When our primary sectors do well, New Zealand does well and this Government wants to work alongside industry to develop sustainable and valuable pathways forward.

New Zealand's future wellbeing depends on an economy that is both environmentally sustainable and delivering high value. Growing food in the volumes and quality we've come to expect depends both upon the availability of land and the quality of our soil and freshwater.

Many of New Zealand's farmers and growers are modelling fantastic environmental practice, and we need to work together across the food and fibres sector to lift everyone's operations. Best practice needs to become normal practice.

To support the sustainable growth of our primary sectors and the Government consulted to protect our best land for growing a range of fruits, vegetables or fibre, or pasture for livestock, on the proposal for a "National Policy Statement for Highly Productive Land". In addition, to improve water quality within a generation, we also consulted on the "Action for Healthy Waterways" discussion document throughout New Zealand.

Our work is being further supported by that of the Primary Sector Council, which I appointed last year to establish a shared vision for the future of our primary sector. Following 18 months of extensive consultation, the Council will release its vision for the future of the sector.

We are continuing to explore a range of initiatives to support farmers and growers to respond to regulatory changes and to improve wellbeing for rural communities. Innovation, from small grassroots community projects to large-scale industry development, will continue to play an important part.

We must continue to build the foundations now to deliver an enriched future for all New Zealanders.



Hon Damien O'Connor
Minister of Agriculture



Director-General's introduction

As Director-General, it is my job to ensure that the MPI is in the best possible position to build the trust and confidence of New Zealanders in the important work that we do, and enable the primary industries to continue to thrive well into the future. Essential to that work is having up-to-date, reliable information on the challenges and opportunities facing New Zealand's primary industry sectors.

The December Situation and Outlook for Primary Industries (SOPi), produced by MPI's Economic Intelligence Unit, outlines the current state of New Zealand's primary industries and their prospects for growth over the next four years.

The December report highlights the continued success of the primary industries, with export revenue forecast to reach \$47.9 billion in the year ended June 2020, up 3.3 percent on the previous year. Our traditional areas of strength continue to grow with dairy export revenue forecast to rise 8.4 percent to \$19.6 billion for the year ending June 2020. Meat and wool exports remain robust with export revenues forecast to reach \$10.4 billion – up 2.5 percent. Some of our other star performers this quarter include horticulture with a 4.7 percent rise in revenue forecast, driven by increases in kiwifruit, wine, apple and pear exports. Meanwhile seafood annual export earnings could surpass \$2 billion for the first time, with growth forecast at 6.5 percent. Innovation continues to be a big factor in this growth, with processed foods such as dairy blends being particularly popular in our South Korean and Japanese markets.

There have been plenty of gains for the primary industries over the last few months. We've made huge strides in market access this quarter, with the Regional Comprehensive Economic Partnership (RCEP) text agreed in November. RCEP participants take 62 percent of New Zealand's primary sector exports, so it is a high priority for us to get the full agreement concluded and signed in 2020.

MPI has also successfully established its new Agriculture and Investment Services branch, designed to partner with the sector on emerging issues and sponsor investment in ideas and innovation. We're already starting to see how a joined up branch, focused on the needs of the agriculture sector, can have real benefits.

An example of MPI's support for innovation is through Sustainable Food and Fibre (SFF) Futures co-investment funding. With \$40 million available each year from MPI, SFF Futures supports problem-solving and innovation in New Zealand's food and fibre industries that will make a positive and lasting difference. It offers a single gateway to apply for investment, and provides grants of less than \$100,000, right up to multi-million dollar, multi-year partnerships.

We are here to back the Primary Industries to win and to support them in a changing world.



Ray Smith
Director-General, Ministry for Primary Industries





Dairy

New Zealand's dairy export revenue is forecast to rise 8.4 percent to \$19.6 billion for the year ending June 2020. Expectations of another strong production season, combined with robust global dairy prices and a weak outlook for the New Zealand dollar, are expected to support solid export revenue growth in the year ahead. For New Zealand's dairy farmers, this is expected to translate into higher farmgate milk prices, supporting robust sector profitability for the season ahead.



Meat & Wool

The outlook for meat and wool exports remains robust with export revenues forecast to reach \$10.4 billion for the year ending June 2020, 2.5 percent higher than the previous year. The positive outlook for the sector is being driven by high international meat prices as a result of African Swine Fever (ASF) reducing China's pork herd and increasing demand for imported protein. Strong schedule prices as a result of international demand have also helped maintain on-farm profitability.



Forestry

Forestry exports for the year ending June 2020 are forecast to fall 12.8 percent to \$6.0 billion compared to the year ended June 2019 when prices and volumes were at record highs. This is \$0.2 billion higher than the September forecast for year ending June 2020 as log prices are recovering more quickly than expected from their sharp fall over June and July of this year.



Horticulture

Horticulture sector revenue is forecast to rise 4.7 percent for the year ending June 2020 driven by increases in kiwifruit, wine, and apple and pear exports. This will elevate the horticulture sector to be the third largest primary sector industry by value, edging ahead of the forestry sector. Kiwifruit exports are expected to rise by 8.6 percent to \$2.5 billion, while wine exports are predicted to rise by 1.8 percent to \$1.8 billion, and apple and pear export revenue to rise by 7.2 percent to \$0.9 billion.



Seafood

Seafood export earnings are forecast to grow 6.5 percent in the year ending June 2020 to \$2.1 billion, the first time annual export earnings will surpass two billion dollars. This growth is expected to be underpinned by an increase in export prices and rising aquaculture production. Increasing demand from key markets along with limited supply growth, particularly of wild capture fisheries, is expected to keep prices high. The forecast growth in aquaculture production is expected to result in higher export volumes in the coming years.



Arable

The 2019/20 year has begun positively with export revenue up 43 percent for the September 2019 quarter compared to September 2018 quarter, and a reasonable growing season to date in most areas. Export sales in all categories increased with vegetable seeds the main contributor, up \$16.4 million on the September 2018 quarter. As a result, arable export revenue is expected to rise 10 percent for the year ending June 2020 to \$260 million with slightly lower levels forecast for 2021.



Other

Export revenue for New Zealand's other primary sector exports and foods is expected to increase to \$3 billion for the year to June 2020, up 7.3 percent from 2019. This builds on the 5.3 percent growth for 2019. This growth is being led by the other products (such as dairy blends and soft drinks), innovative processed foods and live animals categories. Demand for these products is expected to continue to develop in coming years.

Overview

Primary industries export revenue 2015-21 (NZ\$ million)

						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
 Dairy	14,050	13,289	14,638	16,655	18,107	19,630	19,450	
 Meat and Wool	9,000	9,200	8,355	9,542	10,176	10,430	10,680	
 Forestry	4,683	5,140	5,482	6,382	6,883	6,000	6,600	
 Horticulture	4,185	5,000	5,165	5,392	6,111	6,400	6,530	
 Seafood	1,562	1,768	1,744	1,777	1,963	2,090	2,210	
 Arable	181	210	197	243	236	260	255	
 Other primary sector*	2,417	2,714	2,639	2,709	2,852	3,060	3,140	
Total	36,079	37,323	38,220	42,700	46,329	47,870	48,865	
% Change year on year	-6.8%	+3.4%	+2.4%	+11.7%	+8.5%	+3.3%	+2.1%	

Source: Stats NZ and MPI.

* Other Primary Sector Exports and Foods includes live animals, honey, and processed food.

Export revenue is forecast to reach \$47.9 billion in the year ending June 2020, up 3.3 percent from the previous year. This forecast is \$1.7 billion higher than the previous forecast round, with upward revisions to dairy, meat and wool, and forestry. A lot of these gains can be attributed to rising global commodity prices and the drivers behind rising prices are likely to be sustained through 2020 and 2021.

In particular, a weaker New Zealand dollar over the course of this year has helped support strong returns for New Zealand exporters. Since June, the NZD/USD rate has declined from 0.67 to 0.64 boosting commodity prices in NZD terms.

For the dairy sector, following a period of initial early season weakness, commodity prices have been on the rise. After a strong start, growing conditions across the country have become more variable in spring, with production of milk solids in the month of October falling behind last season's exceptional result. This will feed into an international market characterised by tight global supply. Due to strong demand out of Asia, this should sustain continued price strength for the remainder of the season. Red meat prices continue to exceed expectations due to rising demand from China that is transforming global protein markets. The African swine fever (ASF) outbreak in China is the main driver of increased import demand, and the drought in Australia has further reduced global beef and sheep meat supply. The situation in those

countries is unlikely to reverse soon, so it is expected that the current run of high red meat prices will persist over at least the next two years.

Following a sharp fall in June, log prices are recovering faster than expected. However the flow on effect on export volumes is expected to restrict forestry sector export revenues in the year ahead.

Variable weather impacting production

Following a hot dry summer and autumn, New Zealand had the seventh warmest winter on record. A wet end to winter returned soil moisture levels to normal, but did not catch up the annual rainfall accumulations which remained below normal in many regions. During spring the North Island received lower than normal rainfall and higher than normal temperatures, resulting in lower soil moisture levels than normal. In parts of the South Island, spring brought a lot of wet spells, making farm management challenging.

A hailstorm in November caused considerable damage to Canterbury cereal, seed and vegetable crops, while in Hawke's Bay an October hailstorm caused significant damage to early summer fruit crops. Heading into summer, the El Niño/Southern Oscillation is neutral and does not look like it will play a significant role. Over the 3 months to February 2020, the National Institute for Water and Atmospheric Research predict near normal rainfall and soil moisture levels.

Rural confidence

The positive export outlook and the flow on effects to farmer incomes appears to be starting to reflect in sentiment at the farm level. After a series of rural surveys indicating declining rural confidence, ANZ's November Business Outlook has indicated that profitability expectations in the agriculture sector have improved significantly in the past few months. While employment and export intentions are strong relative to other parts of the economy, investment intentions remain weak, potentially weighed down by uncertainty associated with the pace and scale of change of some environmental regulatory policy proposals.

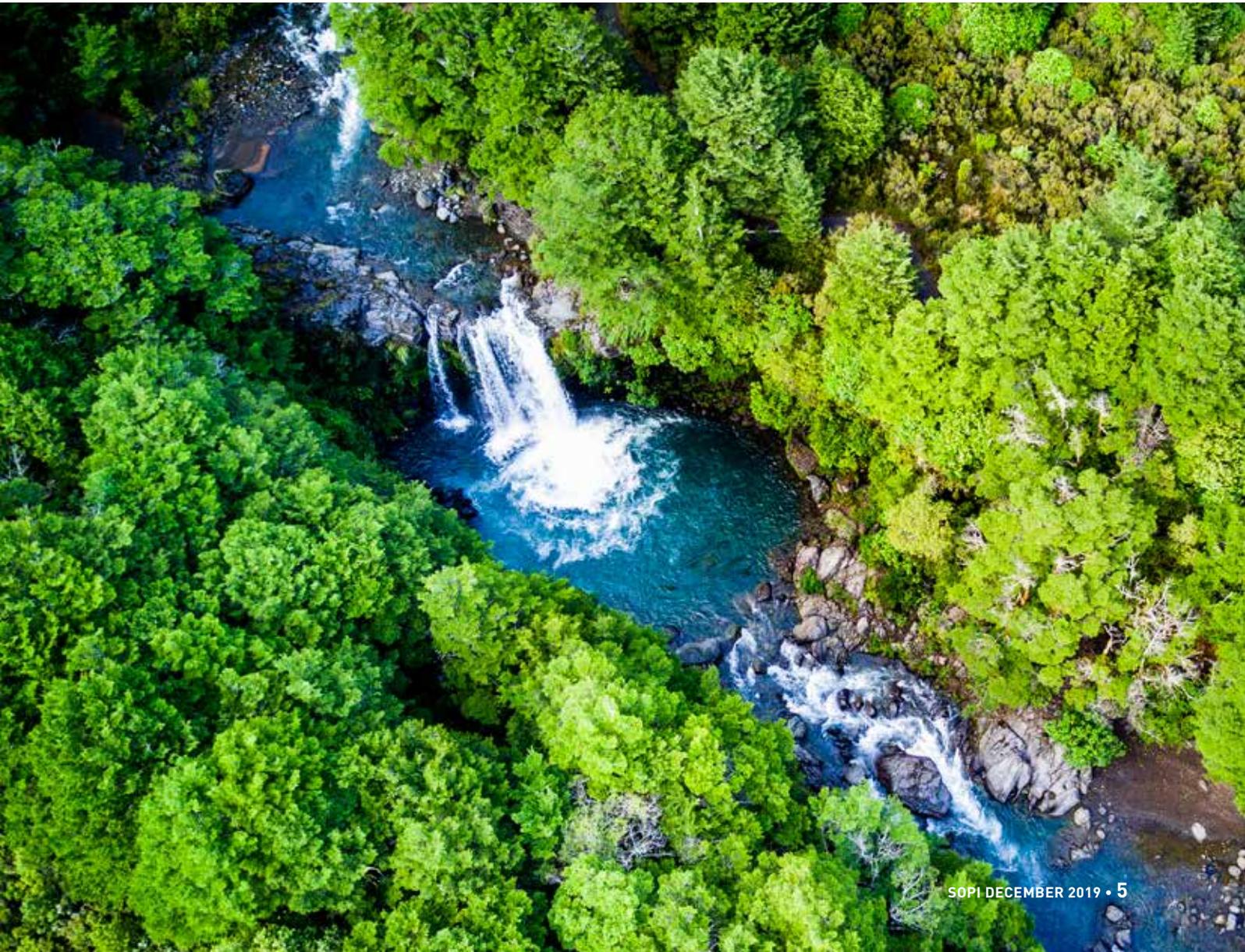
In September 2019, the Government consulted on a package of freshwater policy proposals. This Essential Freshwater programme has three main objectives: stopping further degradation and loss, reversing past damage, and addressing water allocation issues. Some farmers are concerned that these policies will be costly to

implement and that farming systems will need to change in some areas of the country.

The Zero Carbon Act, passed in November 2019, include targets for agricultural methane emission reductions of 10 percent by 2030 and 24-47 percent by 2050. The Government has also announced that it will enter into a world first programme of action with the agriculture sector aimed at introducing farm gate emissions pricing by 2025.

Farm debt remains high, particularly in the dairy sector. Banks have been tightening lending policies over the past year, and a RBNZ policy requiring banks to hold more capital may add to that trend. This could reduce farmers' ability to borrow money to invest in environmental mitigations where required.

At the international level, key risks to the sector's export performance in the years ahead remain. Global economic growth is beginning to weaken, driven in part by the effects of increased geopolitical uncertainty and heightened trade protectionism.



Brexit

Currently a major source of international uncertainty are the timing and terms of the United Kingdom (UK)'s planned exit from the European Union (EU). The UK and EU recently agreed to an extension of the Brexit date to 31 January 2020.

However, the concerns for New Zealand exporters are the risk of supply chain disruption, the new trading environment that will emerge, and a possible decrease in UK consumer expenditure, especially if the UK were to leave the EU without a deal in place.

In an effort to mitigate these risks, MPI has continued to work closely with other government agencies to ensure, where possible, that trade disruption is minimised. In the meantime, the existing conditions for primary sector trade between New Zealand and the UK are expected to remain the same during the extension period. Advice on the implications of Brexit for primary industry exporters and what they can do to prepare can be found on MPI's website.

Other trade disruptions

Currently, a range of indicators is pointing to weaker GDP growth for two of New Zealand's key export trading partners: the US and China. These two countries accounted for 40 percent of New Zealand's primary sector export revenues in the year ended June. Trade tensions

have also had an impact on global prices. The avoidance of further tariff escalation or timely retraction of the current set of tariff measures may help lift confidence about future growth prospects.

Regional Comprehensive Economic Partnership (RCEP)

In November 2019, the RCEP completed negotiation of the text of the agreement, and agreed virtually all market access issues between 15 of the 16 participating countries. RCEP comprises the 10 ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam) and six of its existing FTA partners – Australia, China, India, Japan, Korea, and New Zealand. The RCEP participants take 62 percent of New Zealand's primary sector exports.

With the text negotiations completed, negotiations on market access will now continue with the aim of concluding and signing the full agreement in 2020.

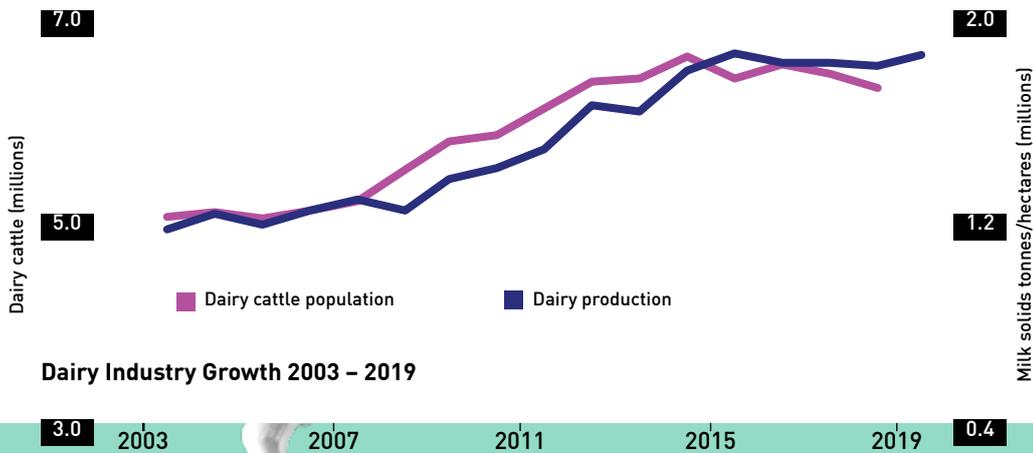
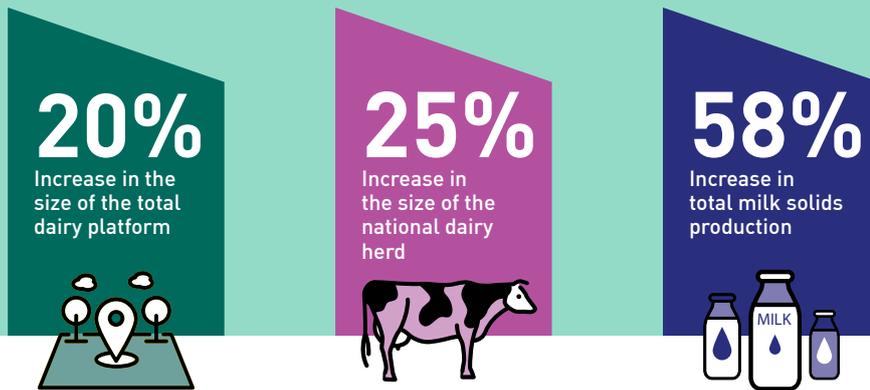
While India still has some outstanding concerns, all RCEP participants are continuing to work with India to enable it to join the agreement in 2020.

The agreement is expected to increase New Zealand exporters' security in the region, while protecting their competitive interests in countries which include seven of New Zealand's top 10 trading partners.



Dairy's growth and vulnerability

The New Zealand dairy industry has grown rapidly over the past two decades, driven by land conversions and productivity improvements. Since 2003, these shifts have resulted in:



3.0 2003 2007 2011 2015 2019 0.4

Dairy platform increase

The national total dairy platform has steadily increased, rising significantly between 2006 and 2015, before stabilising at its current level of 1.744 million hectares, with much of this growth being driven by dairy farm conversions.

Productivity drivers

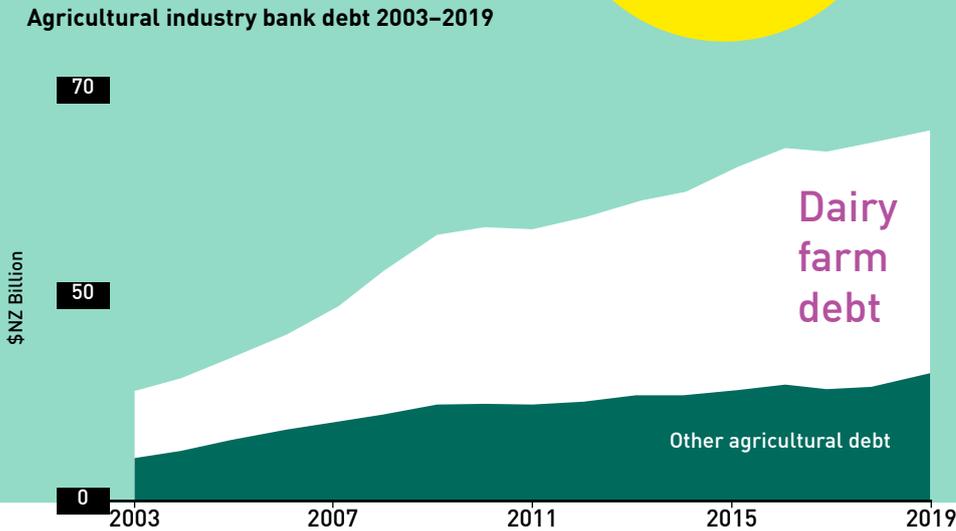
In addition to growth in the total land area, improvements and advances in herd genetics, breeding techniques, on-farm management practices, forages, and new technology have driven consistent increases in on-farm productivity for the dairy sector.



Financial vulnerability of the dairy sector

This increase in national dairy production has largely been funded with bank debt. On-farm bank debt has increased by \$30.1 billion since 2003 and currently stands at \$41.4 billion.

= **267%**
increase since 2003

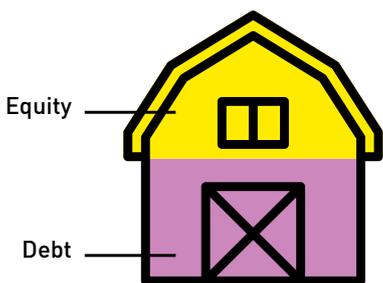


Source: Reserve Bank of New Zealand



How does this affect the financial vulnerability of the dairy sector?

While use of debt to fund business and industry growth can play an important role in economic success, it appears that the level of financial risk associated with the recent expansion of New Zealand's dairy production has increased significantly in recent years.



- In the 2017–2018 season dairy farms on average had a debt-to-asset ratio of 50.7 percent.
- However, many farms are holding high levels of debt:

24 percent have ratios over 70 percent; and

4 percent have ratios over 90 percent.

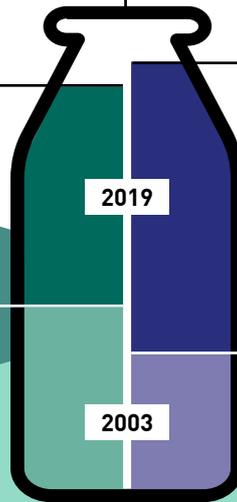
The level of debt held relative to farm assets and production has increased significantly across the sector.

Debt to production

Relative to production, farm debt levels have more than doubled from \$9.48 per kilogram of milk-solids in 2003 to \$21.99 in 2019.

\$22.0
per kg

\$9.5
per kg



\$23.6k

\$7.7k

Debt per hectare

The average level of bank debt held per hectare has more than tripled since 2003, rising from \$7,700 to \$23,600 in 2018.

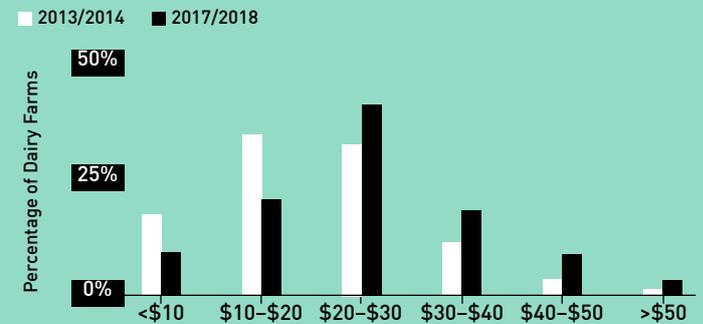
Source: StatsNZ & Reserve Bank of New Zealand

In addition, the number and proportion of farms holding high levels of debt have also increased.

In particular, the percentage of farms holding greater than \$30 of debt per kilogram of milk solids produced annually has increased from 16 percent in 2014 to 30 percent in 2018.

Despite falling interest rates over recent years, the burden of servicing this elevated debt has increased. Since 2014, the average annual cost of servicing this elevated debt has increased by 11 cents to \$1.22 per kilogram of milk solids in 2018.

Distribution of dairy sector debt per kg of milk solids 2014 and 2018



Source: DairyNZ

Debt to income ratio by sector 2018



Ratio of debt to income

Source: Reserve Bank of New Zealand

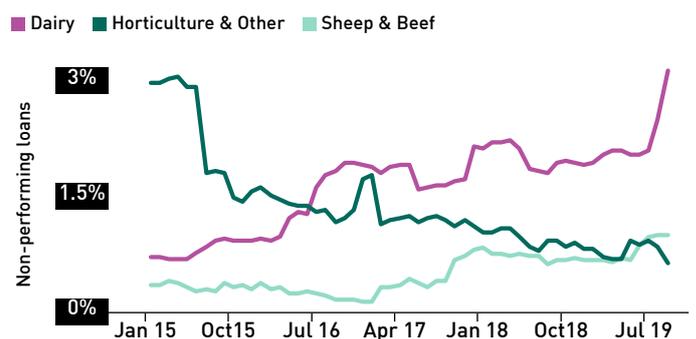
Relative to its income, the dairy industry holds a lot more debt than other agricultural producers.

In fact, despite having enjoyed relatively good milk price pay-outs in recent years, the dairy industry still currently holds 60 percent more debt compared with other agricultural producers.

Early warning signs may now be beginning to appear, with the number of farms experiencing financial distress increasing in recent years.

The ratio of non-performing loans in the dairy sector has doubled over the past three years. Currently at 2.1 percent of the dairy sector total, this figure is three times higher than that of other comparable primary sector industries.

Non-performing loans as a percentage of total sector debt 2015-2019



Source: Reserve Bank of New Zealand

Upcoming challenges

The high levels of debt currently held by vulnerable dairy farms may inhibit their ability to successfully meet the challenges ahead and adapt to changes in their operating environment.

Financial pressures associated with this highly indebted sector may constrain the ability of financially vulnerable farms to invest and adapt to the changes associated with increased environmental and other regulatory requirements on the sector over the longer term.



These changes include investment in on-farm technology and infrastructure, to reduce the sector's impact on freshwater quality and climate change.

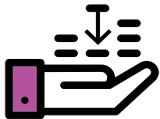
These new regulatory constraints may have the effect of limiting future intensification of farming practices and further growth in the national milking platform area. The national milking platform area's size, total dairy herd, and level of intensification are thus expected to experience modest declines in the medium to long term.



As a result, further investment in on-farm productivity gains will need to continue if the sector is to achieve future industry growth.



The appetite of banks to keep funding sector growth through the provision of credit is decreasing. Evidence indicates that the banking sector is positioning itself with a more conservative approach to dairy sector debt in its portfolios, reducing credit lines and requiring active repayment of loans. This has the potential to increase the cash flow burden on many of those farmers who are already facing squeezed margins.



In addition, for some financially distressed farmers, their options for addressing these problems are becoming increasingly constrained by falling demand for dairy farm land and signs that rural asset values may be falling.

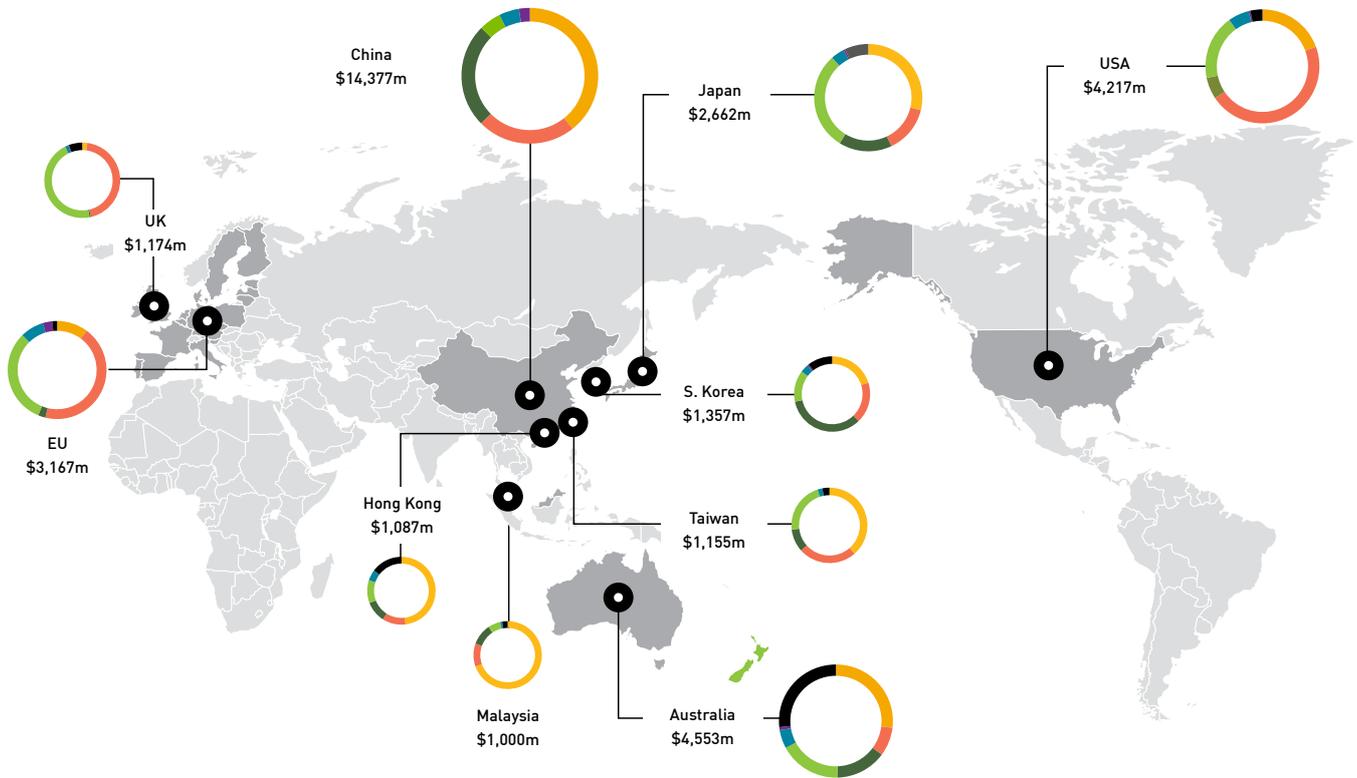
The Government has introduced several initiatives to support the primary sectors through these upcoming challenges.

MPI's Agricultural and Investment Services business unit is supporting work to increase farm business resilience by linking farm advisers and accountants with farmers to enable better strategic and financial planning and create effective business cases where required.

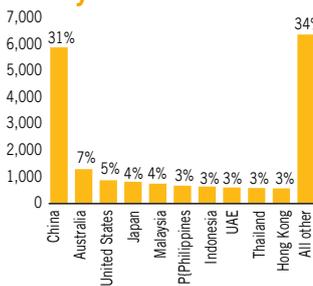
The farm debt mediation scheme recognises the pressure debt places on farmers and rural communities. The scheme will help farmers by addressing the power imbalance between farmers and banks and providing a consistent platform for constructive discussions. The aim is to improve outcomes for both farmers and banks through early engagement.

The Productive and Sustainable Land Use package promotes farm land-use practices that deliver more value and improved environmental outcomes.

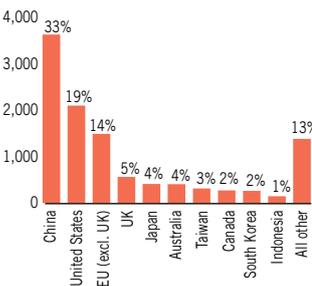
Top 10 Export Destinations



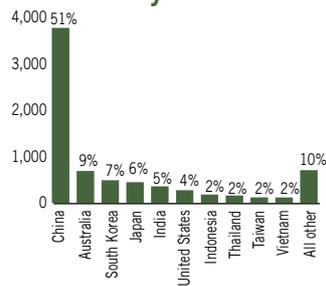
Dairy



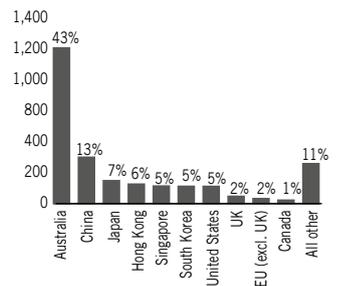
Meat & Wool



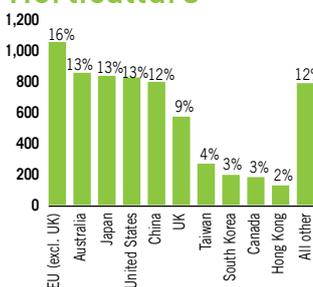
Forestry



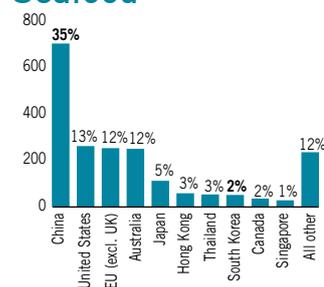
Other



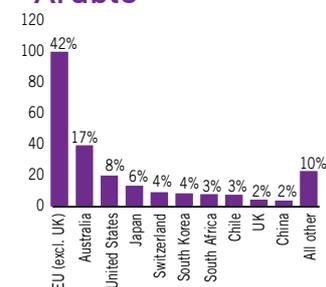
Horticulture



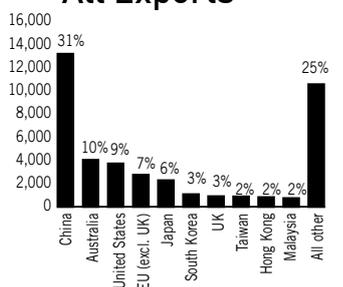
Seafood



Arable



All Exports



Dairy

New Zealand's dairy export revenue is forecast to rise 8.4 percent to \$19.6 billion for the year ending June 2020. Expectations of another strong production season, combined with robust global dairy prices, and a weak outlook for the New Zealand dollar, are expected to support solid export revenue growth in the year ahead. For New Zealand's dairy farmers, this is expected to translate into higher farmgate milk prices, supporting robust sector profitability for the season ahead.



Dairy export revenue 2015-21 (NZ\$ million)

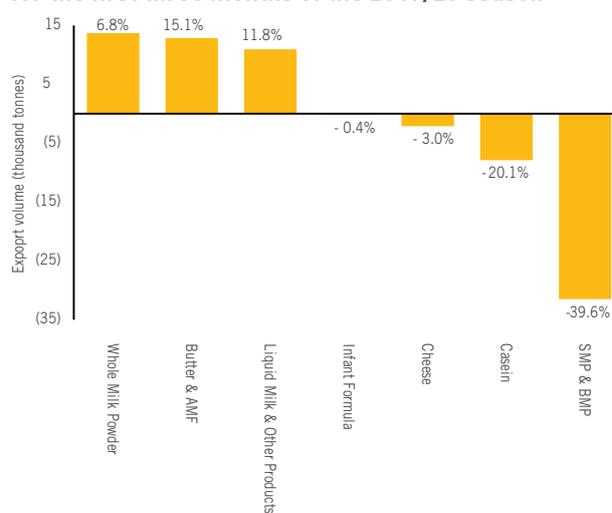
Year to 30 June						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
Whole milk powder	5,385	4,609	5,271	5,818	6,675	6,980	6,460	
Butter, AMF, and cream	2,219	2,378	2,794	3,812	3,612	3,530	3,730	
Skim milk & butter milk powder	1,762	1,347	1,385	1,228	1,323	1,720	1,630	
Casein & protein products	2,129	1,834	1,735	1,601	1,574	1,810	1,740	
Cheese	1,557	1,720	1,830	1,905	1,965	2,150	2,140	
Infant formula	415	685	778	1,240	1,641	1,900	2,090	
Other dairy products*	582	716	845	1,050	1,318	1,550	1,670	
Total	14,050	13,289	14,638	16,655	18,107	19,630	19,450	
% Change year on year	-21.0%	-5.4%	+10.1%	+13.8%	+8.7%	+8.4%	-0.9%	

Source: Stats NZ and MPI.

* Other dairy products include: liquid milk and cream, ultra-high temperature milk, yoghurt, and ice cream.

- Dairy production has made a positive start to the 2019/20 season. Mild winter conditions have supported pasture growth which, combined with increased winter milking, have boosted early season production. However spring growing conditions have been more variable in September and October, with below average temperatures and wet conditions across some key dairying regions.
- This has resulted in total milk solids collections as at October tracking 0.4 percent higher than at the same time last year. However, we do not expect production to match the record levels achieved during the December 2018 quarter and accordingly, are forecasting milk solids production to be up only 0.2 percent for the 2019/20 season, compared to the previous year.
- Despite the strong start to the season, overall export volume growth has been relatively mixed for the September quarter, compared to the same period as last year. Volume growth for whole milk powder (WMP), butter, and liquid milk products were offset by falls in skim milk powder (SMP) and casein products (Figure 1).
- Expectations of relatively flat New Zealand milk solids production growth this season will feed into a global dairy supply chain that remains relatively constrained. Modest milk production growth in Europe (up 0.3 percent) and the US (up 0.1 percent) over the year to date, is being offset by weakness in Australia (down 6.9 percent) so far this season.

Figure 1: Dairy export volume growth has been mixed for the first three months of the 2019/20 season

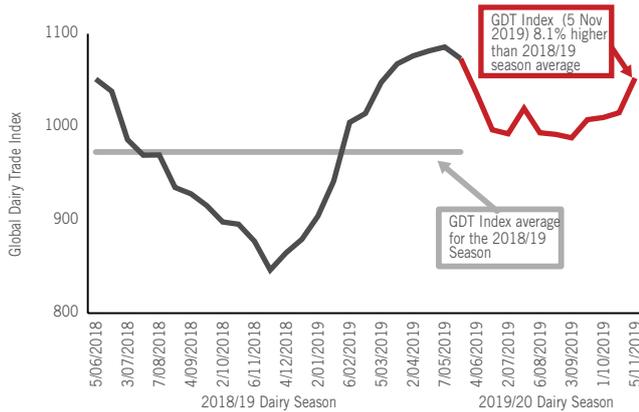


Change in dairy export volumes: September quarter 2019 compared to the same period in previous year.

Source: Stats NZ.

- As a result, global dairy markets have remained relatively resilient in the face of slowing global growth and the ongoing US-China trade dispute. In particular, despite slowing economic growth in China (the world's largest dairy importer) and a weakening in the purchasing power of its currency, there appears to be resilience in the China's household sector which is underpinning demand.
- This has helped support prices for global dairy commodities. Despite some initial weakness in dairy prices for butter and cheese early in the season, Global Dairy Trade auction prices have subsequently firmed in September and October, with WMP prices now 3.9 percent higher and SMP prices 18.7 percent higher than the start of the season (Figure 2).

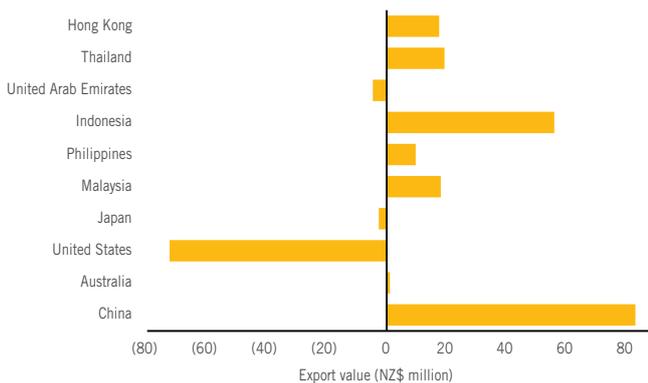
Figure 2: Global commodity prices have risen since September



Global dairy trade index: June 2017 to November 2019.
Source: Global Dairy Trade.

- Strong milk solids production supported by robust global prices and a weakening NZD has translated into a \$261 million (8.4 percent) increase in export revenues for the September quarter compared to the previous year. Across our major markets, export growth into China, Indonesia, and Sri Lanka has been somewhat offset by a significant fall in exports to the US.
- For China, our largest export destination, exports rose 9.1 percent to \$993 million for the first three months of the season, driven by volume growth in butter (up 18.3 percent), liquid milk products (up 12.6 percent), improved prices for infant formula (up 11.2 percent) and WMP (up 7.5 percent). However, this has been offset somewhat by a 40 percent decline in SMP volumes (Figure 3).

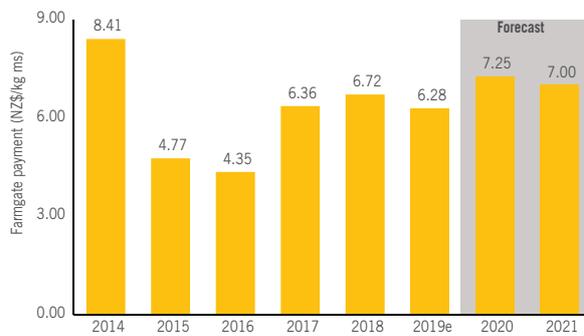
Figure 3: Growth in export revenues to China and Indonesia have been partially offset by declines to the US



Change in dairy export revenues (Top 10 export nations): July-September 2019 compared to 2018.
Source: Stats NZ.

- Given the strong demand from key Asian markets and weak international supply growth, we are expecting global dairy markets to remain resilient and supportive of strong dairy prices over the short term. Combined with a soft outlook for the NZD, this is expected to support an 8 percent growth in export revenues for New Zealand producers to \$19.6 billion for the year ended June 2020. In particular, we expect to see strong revenue growth in higher added value dairy products such as infant formula (forecast rise of 12.9 percent) and liquid milk products (forecast rise of 15.1 percent) in the year ahead, driven by continued volume growth into China.
- These factors should support the profitability for New Zealand's dairy farmers in the current season. We have accordingly adjusted upwards New Zealand's all company average milk solids payout forecast (including dividend) for the 2019/20 season to \$7.25 per kilogram of milk solids (Figure 4).

Figure 4: Farmgate milk solids price outlook revised upwards from previous forecast



New Zealand all company average farmgate milk solids payment (including dividend), year ended May 2014-21.
Source: DairyNZ and MPI.



ICE CREAM IN NEW ZEALAND

The retail value of the New Zealand ice cream market is estimated at \$419 million in 2019 and is expected to reach \$533 million by 2024.

Home ice cream still leads the category, with bulk ice cream enjoying the highest rate of growth, which totalled 5 percent in 2019. Single portion ice cream enjoyed faster growth compared with this category in previous years. This was driven by impulsive supermarket and convenience store purchases during summer, a trend that is expected to continue. Other significant market trends also shaping the New Zealand industry are listed below.



KEY TRENDS



Shift to premium products and product innovation is driving value and increased customer interest.



Growth in health and wellness product (e.g. with non-dairy, low calories, high protein benefits).



Asia Pacific is a key export market, with 42 percent of exports by value in 2018 going to China.



Rise in demand for unique flavors such as "matcha" to cater specifically to the Asian population



Mess-free, single-portion formats (cups, bars) gaining traction as "convenience" continues to gain importance



Innovation in visual and sensory features of ice cream to target new social media and "eat-with-your-eyes" focused customers

KEY TRENDS



Global production of 11.5 million tonnes in 2018



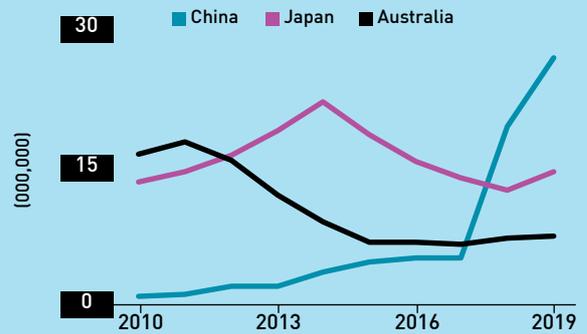
Global market estimated at \$US77 billion in 2018



Global market enjoying an average growth rate between 4.1 percent and 4.9 percent

New Zealand ice cream exports to China have experienced dramatic growth in the last few years. This leap in growth is in part driven by catering to the China market demand for unique flavours (as noted in the key trends).

ASIA-PACIFIC ICE CREAM EXPORTS



Meat and Wool

The outlook for meat and wool exports remains robust with export revenues forecast to reach \$10.4 billion for the year ending June 2020, 2.5 percent higher than the previous year. The positive outlook for the sector is being driven by high international meat prices as a result of African Swine Fever (ASF) reducing China's pork herd, increasing demand for imported protein. Strong schedule prices as a result of international demand have helped maintain on-farm profitability.



Meat & Wool export revenue 2015-21 (NZ\$ million)

Year to 30 June						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
Beef & veal	2,980	3,096	2,706	2,943	3,324	3,560	3,570	
Lamb	2,504	2,569	2,441	3,018	3,227	3,280	3,410	
Mutton	418	419	417	575	576	560	600	
Wool	805	760	522	543	549	490	490	
Venison	174	182	162	196	186	180	190	
Other meat*	466	503	513	543	610	600	660	
Hides & Skins	570	509	416	396	354	330	330	
Animal by-products	578	598	587	700	729	770	780	
Animal fats & oils	118	125	156	147	115	120	120	
Animal products for feed	216	247	273	332	376	400	400	
Carpets & other wool products	172	192	163	148	130	130	130	
Total	9,000	9,200	8,355	9,542	10,176	10,430	10,680	
% Change year on year	+10.3%	+2.2%	-9.2%	+14.2%	+6.6%	+2.5%	+2.4%	

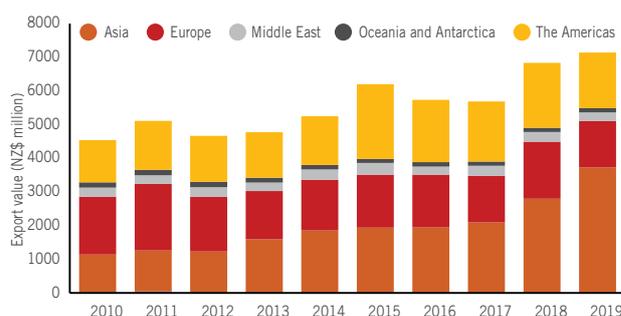
Source: Stats NZ and MPI.

* Other meat includes: edible offal, processed meat, and poultry.

- The impact of ASF outbreaks in China has changed the face of global protein trade. China is the world's largest producer and consumer of pork, home to just over half of the world's pig population. Over 40 percent of China's pig herd is estimated to have been lost as a result of the disease. This gap in domestic protein production is being met by increased imports of all meat products, not only pork.
- Growing demand from China for New Zealand meat products as a result of ASF continues to support export growth and schedule prices. Since September 2017 exports to China have grown from 20.8 percent to 39.9 percent of New Zealand's total beef and sheep meat exports (Figure 5). The shift in trade to China can also be seen in an increase in the proportion of Chinese yuan denominated trade for meat products. From October 2018 to June 2019, 7.5 percent of beef and sheep meat trade was denominated in Chinese yuan, compared to 1.6 percent for the same period the previous year.
- The value of beef and veal exports is surging due to increased demand from China. Beef and veal exports are forecast to reach \$3.6 billion for the year ending June 2020, a 7.2 percent increase from the previous year. The increase in revenue is predominantly driven by prices that are forecast to increase by 6.8 percent, while volumes are forecast to remain flat. This growth builds off the strong previous season that saw massive spikes in demand in China for beef as a result of ASF. Growth in

Chinese demand for prime cuts and manufacturing beef has continued in the early season, creating competition with the US, resulting in rising global beef prices.

Figure 5: Red meat exports shifting to Asia



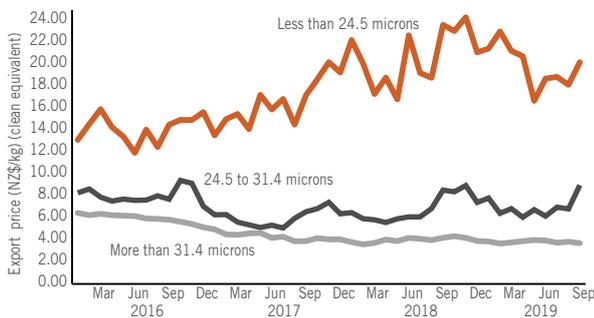
Beef exports by region 2010-2019, year ended June.

Source: Stats NZ

- The changing consumption trend for beef in China predates ASF as boneless beef exports to China have been rising steadily since late 2015. This is alongside a rising chilled beef trade to China which has nearly doubled in the past year from \$32 million to \$61 million.
- New Zealand's beef herd is expected to remain relatively static with beef cattle numbers expected to be at 3.66 million for the year ending June 2020. This is a 0.5 percent fall from the previous year of 3.68 million.

- New Zealand's sheep meat exports have also continued to perform well with lamb and mutton exports expected to reach \$3.3 billion and \$560 million respectively for the year ending June 2020. Export quantities are expected to be flat, while prices are expected to increase as a result of ASF.
- The retention of lambs from last season has increased the hogget population while ewe numbers are falling. This is forecast to result in 2 percent fewer lambs being born this coming year, assuming a similar lambing rate to last season. Global sheep meat production is also constrained as Australia's sheep flock shrinks from drought creating upward pressure on prices.

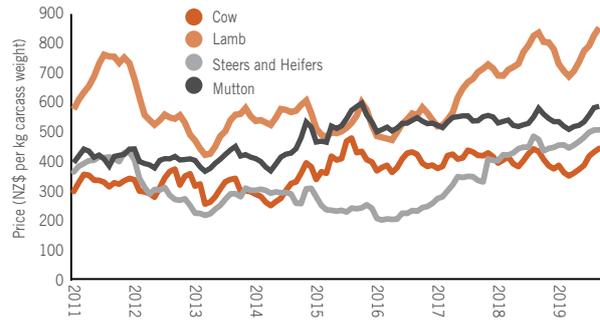
Figure 6: Strong wool export prices remain low while fine prices remain variable



Source: Stats NZ

- Wool export revenue is forecast to fall to \$490 million for the year ending June 2020, an 11 percent decrease from the previous year. Export quantities are expected to remain stable as a result of the stable sheep flock looking forward. Strong wool export prices remain low, whereas fine and mid-micron wool prices remain variable (Figure 6). This is due to reduced demand from China as they are exporting fewer clothes and textiles to the US due to trade tensions.

Figure 7: Schedule prices remain high early in the season



Schedule prices for steers and heifers, cows, mutton, and lamb: Year ending December 2011 – 2019

Source: Beef and Lamb NZ

- Schedule prices for livestock are at near record levels resulting in continued strong on-farm profitability (Figure 7). Although a small drop is expected compared to last season as higher on-farm revenues are being offset by rising farm expenditure. Beef and Lamb NZ forecast earnings before interest, tax, and managers' wages, are expected to be 0.7 percent lower for the year ending June 2020.
- Poultry exports to Australia have been falling as a result of Infectious Bursal Disease Virus (IBDV) being discovered in New Zealand. Last year poultry export revenue reached \$91 million, of which 56 percent went to Australia. Poultry meat must now be heat treated to remove the virus before it is exported to Australia, which reduces the range of products available to export.



Forestry

Forestry exports for the year ending June 2020 are forecast to fall 12.8 percent to \$6.0 billion compared to the year ended June 2019 when prices and volumes were at record highs. This is \$0.2 billion higher than the September forecast for year ending June 2020 as log prices are recovering more quickly than expected from their sharp fall over June and July of this year. If prices continue their sharp recovery, export volumes may increase faster than currently forecast.



Forestry export revenue 2015-2021 (\$NZ million)

Year to 30 June	Actual					Forecast	
	2015	2016	2017	2018	2019	2020	2021
Logs	2,059	2,224	2,687	3,337	3,806	3,080	3,640
Sawn timber & sleepers	751	860	830	890	936	920	970
Pulp	628	683	651	828	812	640	620
Paper & paperboard	473	522	488	491	491	480	440
Panels	451	512	476	501	514	560	600
Chips	52	64	59	56	67	70	80
Other forestry products*	268	275	290	281	257	250	260
Total	4,683	5,140	5,482	6,382	6,883	6,000	6,600
% Change year on year	-9.9%	+9.8%	+6.7%	+16.4%	+7.9%	-12.8%	+10.0%

Source: Stats NZ and MPI.

* Other forest products include: structural or moulded wood, furniture, and prefabricated buildings.

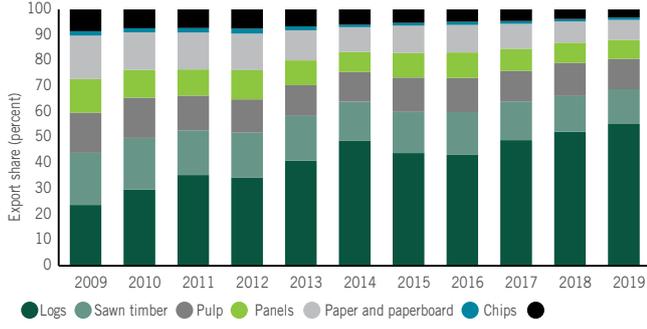
Figure 8: Log prices are beginning to recover



Log export volumes and prices 2017-2019.
Source Stats NZ.

- Forestry exports for the year ended June 2019 reached \$6.9 billion. Just over half of this value was from log exports, through record high export volumes and prices.
- Log export prices for A grade logs dropped sharply (down 11 percent to a low of \$138.0/m³ in July due to a build-up of softwood inventories in China following very high log export volumes from New Zealand. At the same time, the supply of logs increased from Europe and Russia. Prices recovered to \$143.5/m³ in September (Figure 8), and are expected to continue rising to \$155-\$165 m³ by the middle of 2020. This has driven a forecast fall of \$726 million (nearly 20 percent) for New Zealand log export value for the year ending June 2020.
- The price recovery during August and September was driven by log inventories at China's ports declining much quicker than expected. This recovery is unlikely to continue over the next few months as sales to China traditionally slow in January and February. High volumes of logs from beetle-damaged forests are continuing to arrive in China from Europe. As these have a similar use as New Zealand logs they are slowing the export volume recovery. However, we are expecting to see volumes increasing in subsequent years as both small and corporate growers respond to the log price recovery by increasing harvest volumes.
- China's construction market remains active and there is no sign of decreased demand. Therefore, industry is expecting export volumes to China to recover over the next year, but for prices to be slightly lower than recent levels. However, any increase in shipping costs resulting from new requirements on the sulphur content of fuels from 2020 could slow down the export volume recovery by impacting the marginal returns on harvest.
- Longer-term, the recent log price drop has underlined the importance of increasing domestic processing and diversifying export markets. Interestingly, the price of wood products has not followed the log price drop, and demand from other export markets such as Japan, South Korea, and India, has remained stable with potential to increase.
- Additionally, log exports have grown from 24 percent of forestry exports in 2009 to 55 percent in 2019 (Figure 9). With 75 percent of New Zealand's exports going to China, forestry is heavily exposed to risks of changing demand in this market. The key drivers for this are New Zealand's increased log supply, the increasing log demand from the China's construction industry and New Zealand's wood processing capacity remaining relatively static over the last decade.

Figure 9: Log exports continued to gain proportion of export share until the June 2019 year

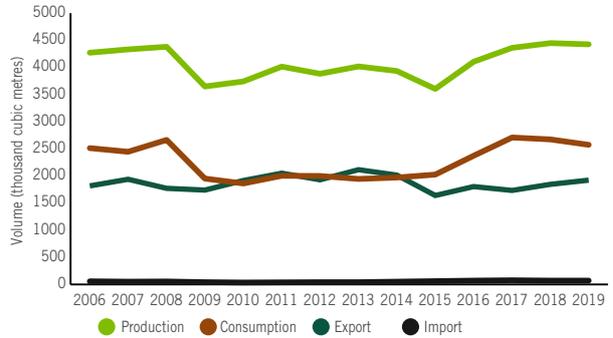


Proportions of Log export volumes and prices 2009-19.
Source Stats NZ.

- Exports of pulp, paper, and panels remain steady despite pulp prices decreasing by 15 percent in the last 12 months (to \$766/t from \$904/t). The key reasons for the pulp price drop were increased supply from Brazil to China and a slowdown in China's paper exports to the US, due to increased tariffs applied by the US.
- Sawn timber export revenue for the year ended June 2019 increased 5.2 percent to \$936 million. Both export and domestic market demand remains stable (Figure 10). Domestic market demand is expected to increase due to an increase in the number of new dwelling consents. In the year ended June 2019, the number of

new dwellings consented was 34,804, up 6 percent from the June 2018 year. The number of consents is accelerating, with an increase of 20 percent for the September 2019 quarter compared with the same quarter in 2018.

Figure 10: Sawn timber production remains robust



Sawn timber production, consumption, and trade, year ended June 2006-19.
Source: MPI.



Horticulture

Horticulture sector revenue is forecast to rise 4.7 percent for the year ending June 2020 driven by increases in kiwifruit, wine, and apple and pear exports. This will push the horticulture sector to the third largest primary sector industry by value, edging ahead of the forestry sector. Kiwifruit exports are expected to rise by 8.6 percent to \$2.5 billion, while wine exports are predicted to rise by 1.8 percent to \$1.8 billion, and apple and pear export revenue to rise by 7.2 percent to \$0.9 billion.



Horticulture export revenue 2015-21 (NZ\$ million)

Year to 30 June						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
Kiwifruit	1,182	1,673	1,664	1,861	2,302	2,500	2,560	
Wine	1,408	1,558	1,661	1,694	1,807	1,840	1,840	
Apples & pears	571	701	701	745	839	900	910	
Fresh & processed vegetables*	588	612	614	622	696	650	660	
Other horticulture**	436	456	525	471	466	510	560	
Total	4,185	5,000	5,165	5,392	6,111	6,400	6,530	
% Change year on year	+10.0%	+19.5%	+3.3%	+4.4%	+13.3%	+4.7%	+2.0%	

Source: Stats NZ and MPI.

* Fresh vegetable exports include onions, squash, capsicum, potatoes and other fresh vegetables. Processed vegetable exports include frozen vegetables (including frozen potatoes, peas, sweetcorn, etc.), dried vegetables, dry legumes, prepared and/or preserved vegetables, and vegetable juices.

** Other horticulture exports include: other fresh fruit (including avocados, cherries, blueberries, etc.), frozen and processed fruit, fruit juices, nuts and ornamentals.

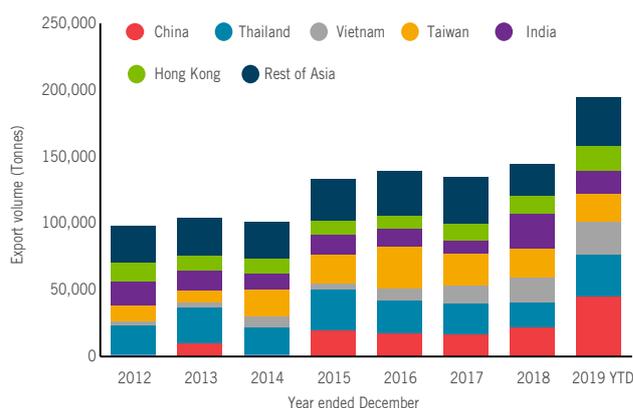
Apples and pears

- The 2019 apple and pear export season is near completion, with new records being set for export volumes and prices. Exports are expected to reach 395,000 tonnes (21.9 million cartons) and \$870 million for the year ending December 2019. Favourable climatic conditions during ripening and harvest helped lift the proportion of export-grade fruit.
- Strong demand from Asian markets, in particular China, driven in part by a reduction in China's 2018 apple crop by an estimated 25 percent, increased the average export price to a new high of \$39.50 per carton. A lower New Zealand dollar also assisted. Asia will account for around 50 percent of New Zealand apple exports in 2019, up from 40 percent in the prior year. The increased demand in Asia helped offset lower demand from Europe due to large domestic stocks from the 2018 harvest (Figure 11).
- Apple and pear exports are forecast to increase in 2020 and beyond due to trees maturing and the ongoing increase in planted area. However, there may be some downside risk to the 2020 crop forecast once the impacts of several localised spring hail events are fully realised. The lower prices received for Braeburn in 2019 will likely speed up growers' timelines for the replacement of Braeburn with apple varieties in higher consumer demand. Orchard replanting and new plantings are expected to continue, with the total planted area on track to reach 11,000 hectares by 2021.
- Export revenue for the year ended December 2020 is forecast to be similar to the 2019 year, with higher export volumes offset by a slightly lower price forecast of \$38.00 per carton. Price expectations for New Zealand

apples and pears in the year ended December 2020 are influenced by:

- a return to normal production levels in China in 2019;
- a reduced apple crop in Europe in 2019 due to adverse weather, estimated to be down by 20 percent on the prior year, although production is up in France and the Netherlands;
- tariffs on US apple imports into China and India; and
- a slightly lower New Zealand dollar against the US dollar and Euro compared with the 2019 exporting season.

Figure 11: China's reduced apple crop provided more opportunities for apple exports to Asia in 2019



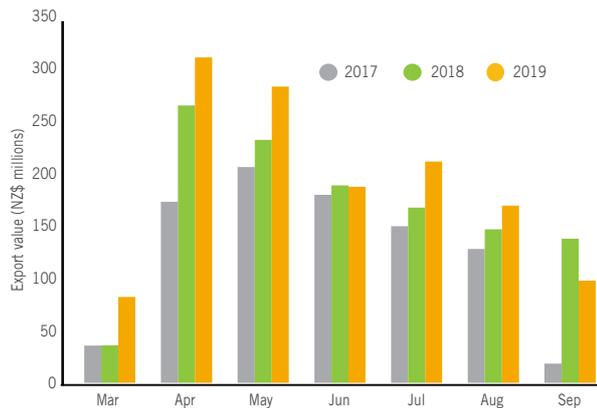
New Zealand apple exports to Asia, 2012-2019.

Source: Stats NZ and MPI.

Kiwifruit

- After emerging from the impact of Psa, the kiwifruit industry is in a period of strong growth. Kiwifruit export revenue is forecast to grow to \$2.5 billion in the year ending March 2020, based on total export volume of 149 million trays. While this overall volume is forecast to be down slightly on the previous season's crop volume, the balance continues to shift from green (down 14 percent) to gold (up 11 percent). Sustained growth is forecast based on improving prices and maturing Gold3 vines further increasing production.

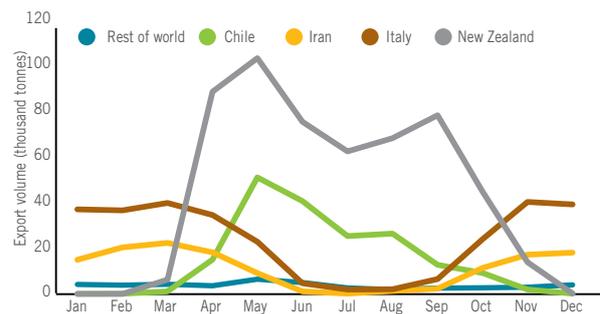
Figure 12: Monthly export value for gold kiwifruit, year to date (March to September 2017 – 2019)



Gold export values up on previous two seasons
Source: Stats NZ.

- A hot, dry summer produced an early start to the Gold3 season with increased dry matter and taste, but these conditions also reduced fruit size. A favourable exchange rate and growing demand has seen prices above those of last season in five out of seven months, despite the smaller fruit size, which is a great result given the increasing supply. For the March to September year to date Gold3 volumes and prices were up 8 and 2 percent respectively, resulting in 11 percent more revenue compared to the same point last year (Figure 12).
- The tail of the export season sees remaining green kiwifruit from the reduced crop facing increasing competition from northern hemisphere grown fruit as summer production comes on line (Figure 13).

Figure 13: Global kiwifruit exports are dominated by four countries; southern hemisphere countries generally supply to the northern hemisphere during their production off season.



Top 4 Kiwifruit exporting countries by volume, 2018
Source: GTA

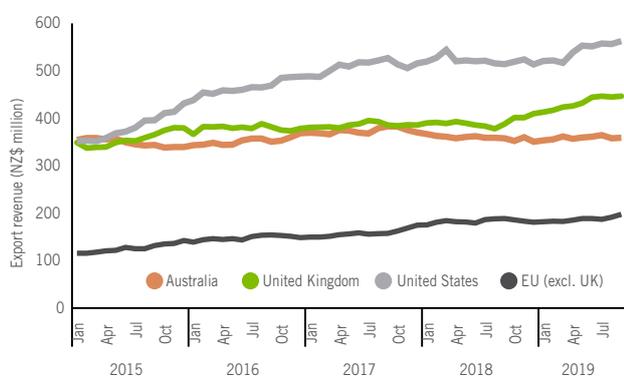
- As production switches from green varieties to gold, the green producing area is decreasing alongside some variability in yields. This season's green yields are down on the previous year, which were close to the record. Gold yields have climbed steadily for the last three years, and it is yet to be seen what the long term average yield might be for mature Gold3 orchards.
- While the smaller fruit size this season has not reduced prices, larger kiwifruit are generally more highly sought in premium markets. As the crop for the coming season establishes, growers will be carefully managing vines to maximise value from a balanced yield, fruit size and taste.
- Although Gold3 has consistently outperformed Hayward green kiwifruit in terms of orchard gate return, there are opportunities to exploit other segments of the fruit market with new kiwifruit varieties. The new red kiwifruit variety will be available in New Zealand and other international markets, after being well received in a Singapore trial this season. This variety is likely to be popular in other Asian markets, where the shorter shipping times make this a more realistic destination than Europe. Earlier maturing varieties such as Sweet Green enable green fruit to reach the market earlier in the season, ensuring longer seasonal supply of New Zealand grown fruit.



Wine

- Wine exports are forecast to reach \$1.84 billion in the year ending June 2020, up 1.7 percent from the previous year. In the September 2019 quarter, export volumes were up 4 percent from the same period last year, continuing the strong export volume growth seen in the first half of calendar year 2019.
- Given that the 2019 vintage is down 1.4 percent from the previous year, it is unlikely this pace can be sustained throughout the current export season. As a result, export volumes are expected to rise just 0.5 percent during the year ending June 2020. While export volumes are maintained, the reduced vintage will likely result in falling inventories and less New Zealand wine consumed domestically.
- The main markets driving growth are the US, UK, and Europe, with export revenues up 9.5, 15.1, and 4.8 percent respectively, in the year to September 2019. Wine sales to the US are expanding again following a lull in mid-2018. The UK has been a strong market for New Zealand wine over the past year, although exports have slowed in the past few months, possibly due to uncertainty created by Brexit (Figure 14).
- While wine export revenues from Australia have held constant in recent years, Australia remains our third largest export market.

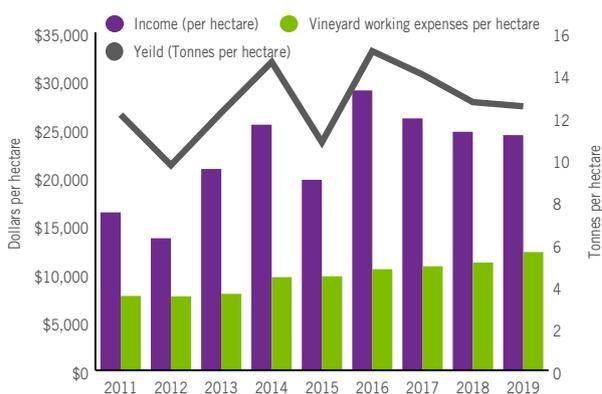
Figure 14: Wine exports strong to UK and US



Wine export revenue by destination (12 month rolling average) 2015-19.
Source: Stats NZ.

- The latest Vineyard Benchmarking Report was released in August 2019, covering Marlborough vineyard profitability for the vintage harvested in early 2019. The report shows profit before tax of \$8,700 per hectare for a 30 hectare vineyard model.
- This is 13 percent lower than 2018, and the third straight year of falling returns after an excellent result in 2016. Incomes have fallen slightly as production has slipped, while working expenses continue to increase.
- Production per hectare is the largest source of variability in vineyard income, and is largely out of growers' control. After bumper crops in 2014 and 2016, the weather hasn't been as cooperative, and as a result, yields have fallen. (Figure 15). At the same time, production expenses have increased, rising by 10 percent in the past year alone.
- Increases in the minimum wage are a significant factor, contributing to higher labour costs for pruning, canopy/crop management, and other wages. This trend is expected to continue with further minimum wage rises scheduled in 2021. Expenditure has also increased on electricity, fuel, and fertiliser over the past year.

Figure 15: Vineyard profitability hindered by lower yields and rising expenses



Vineyard income, expenses, and yields 2011-19.
Source: MPI and New Zealand Winegrowers.

Wine production and trade, year ended June 2014-21.

	2014	2015	2016	2017	2018	Actual 2019	Forecast 2020	Forecast 2021
Area harvested (hectares)	35,511	35,463	36,226	36,943	38,073	38,680	39,200	39,600
Grape production (metric tonnes)	445,000	326,000	436,000	396,000	419,000	413,000	431,000	436,000
Wine production (million litres)	320.4	234.7	313.9	285.1	301.7	295.0	310.0	315.0
Export volume (million litres)	186.2	206.7	211.4	252.2	253.9	269.0	270.5	271.8
Export price (NZ\$ per litre)	7.11	6.81	7.37	6.59	6.67	6.70	6.80	6.75
Export revenue (NZ\$ million)	1,323	1,408	1,558	1,661	1,694	1,810	1,840	1,840

Source: MPI, New Zealand Winegrowers, Stats NZ.

Other horticulture

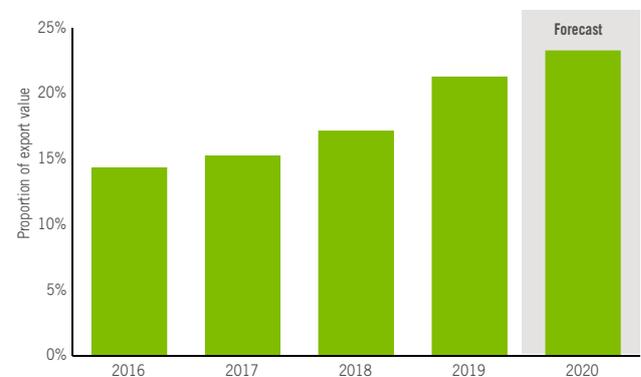
- After topping a record \$170 million in export revenue in the year to December 2019 (Figure 16), onion growers are anticipating a return to more typical export market conditions for the 2020 crop, with the planted area remaining stable. Brown onions are the predominant onion type grown with red onions accounting for around 10-12 percent of the total planted area.
- The 2019 avocado harvest is underway and estimates are for a moderate crop, though up on last year. Two years of increasing volumes following the low bearing crop of 2017-18 shows a disruption to the biennial bearing cycle. Industry has been working on stabilising the bearing cycle using new horticultural management techniques and expansion into warmer growing areas in Northland. Export prices in the September 2019 quarter are down slightly on the same quarter last year, consistent with the increased supply, resulting in a rise in forecast export revenue of 14 percent to \$118 million in the year to June 2020.
- Traditionally, over 80 percent of our avocados were exported to Australia. However, New Zealand's avocados are likely to face increasing competition in Australia, with the removal of tariffs following the CPTPP agreement and expansion of global exports from Mexico and other large South American producers. There has also been an increase in avocados exported from South America to Asia, particularly to South Korea and Thailand (Figure 17).

Figure 16: A shortage of onions in Europe led to strong market demand and record prices for New Zealand onion exports in 2019



Export volumes and prices for New Zealand onion exports, 2010-2019.
Source: Stats NZ and MPI.

Figure 17: Proportion of avocados exported to Asia expanding



Proportion of New Zealand avocados exported to Asia by value 2016-2020.
Source: Stats NZ.



Seafood

Seafood export earnings are forecast to grow 6.5 percent in the year ending June 2020 to \$2.1 billion, the first time annual export earnings will surpass two billion. This growth is expected to be underpinned by an increase in export prices and rising aquaculture production. Increasing demand from key markets along with limited supply growth, particularly of wild capture fisheries, is expected to keep prices high. The forecast growth in aquaculture production is expected to result in higher export volumes in the coming years.

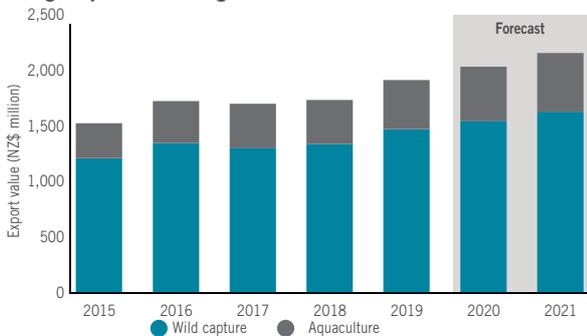


Seafood export revenue 2015-21 (NZ\$ million)

Year to 30 June	Actual					Forecast	
	2015	2016	2017	2018	2019	2020	2021
Wild Capture	1,242	1,380	1,338	1,372	1,509	1,580	1,670
Aquaculture	321	388	406	406	454	500	540
Total	1,562	1,768	1,744	1,777	1,963	2,090	2,210
% Change year on year	+4.1%	+13.2%	-1.4%	+1.9%	+10.4%	+6.5%	+5.7%

Source: Stats NZ and MPI.

Figure 18: Strong prices and growing aquaculture lifting export earnings

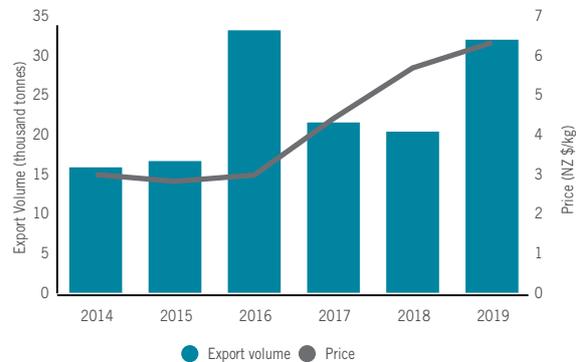


Seafood export earnings, year ended June 2015-21.
Source: Stats NZ and MPI

- New Zealand wild capture export volumes are likely to be slightly down at least in the short term due to an expected decrease in Hoki catch volumes following the Government’s decision to reduce the catch limits for the 2019/20 fishing year to ensure recovery of the stock. The industry had already been implementing a voluntary catch reduction.
- Despite an expected fall in export volumes, export earnings from wild capture seafood are expected to increase by 5.2 percent per year over the next two years. The main driver for this growth is an expected increase in export prices resulting from limited global supply of wild capture seafood, combined with increasing demand. Export earnings from wild capture fisheries grew by 10 percent in June 2019 compared to the previous year, mainly due to increased prices despite a small decrease in export volumes (Figure 18).
- Squid export earnings have increased by an average of 34 percent per year over the last five years, reaching just over \$202 million in June 2019. The growth in export earnings is driven by increased prices over the past five years, and a spike in volume in the past year. Actual

catch levels have remained well below the allowable commercial catch limit (quota level), which was set at 82 thousand tonnes in the 2016/17 fishing year. Squid prices have increased by 16 percent per year over the last five years, driven by strong demand and global shortages in supply due to overfishing and possible stock depletion. Key markets driving demand include China, the US, the EU, and South Korea (Figure 19).

Figure 19: Rising prices contributing significant growth in squid exports

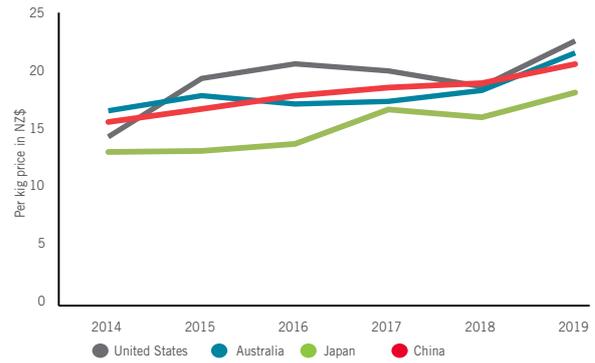


Squid exports by volume and value, year ended June 2014-19.
Source: Stats NZ and MPI.

- Global supply of wild capture seafood is constrained by sustainability and environmental factors and production is expected to remain stable in the coming years. The Food and Agriculture Organisation (FAO) Organisation for Economic Co-operation and Development (OECD) Agricultural Outlook 2019-2028 estimates total seafood (including aquaculture) production growth of just over 1 percent annually over the next decade, with aquaculture contributing all production growth. A key driver of this slow global growth is the restrictions placed by China’s 13th five-year plan (2016-2020) on its seafood production.

- New Zealand's aquaculture export earnings are expected to grow by 10.2 percent in the year ending June 2020 to \$500 million on the back of both rising prices and volumes.
- Aquaculture export volumes are expected to increase over the short to medium-term. The supply for hatchery-bred mussel spat is expected to gradually lift mussel production, with trial results showing faster growth than wild capture varieties (16.7 months to reach market size rather than 28 months). Salmon production is also expected to grow gradually as recently established farms begin to reach their full capacity. The Government recently released its Aquaculture Strategy, with a goal for the industry achieving \$3 billion in annual sales by 2035. Research and investment towards open ocean aquaculture and land-based aquaculture systems are important components of this strategy.
- Overall, aquaculture export prices have performed well in recent years (up 13.9 percent in the year to June 2019) due to strong demand in key markets. Salmon prices, in particular, have led the way with a 19.4 percent up in the year ended June 2019. Prices improved across all the key export markets. This is mainly due to supply shortages caused by production losses at Norwegian farms following an algal bloom in mid-2019 (Figure 20). Reports also suggest worsening biological performance at Chilean farms due to high levels of sea lice. As a result, salmon prices are expected to remain strong in the short-term.

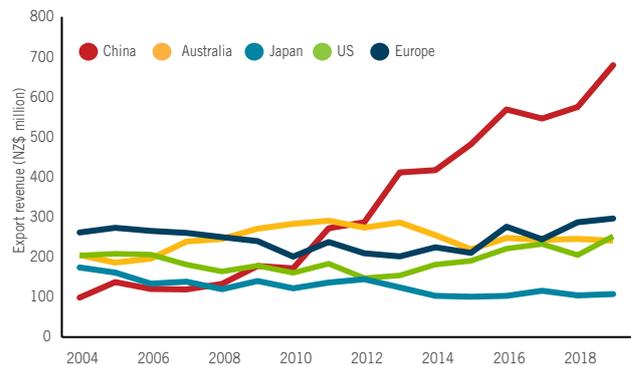
Figure 20: Supply shortages, along with strong demand, driving salmon prices up



New Zealand salmon prices in key export markets, year ended June 2014-2019. Source: Stats NZ and MPI.

- Strong prices have been lifting export earnings up in the key markets in recent years. Over the past four years, export earnings have increased 9 percent annually in China and Europe, 7 percent in the US, and 2 percent in Australia and Japan. Given the strong demand along with limited global supply of seafood, particularly of wild capture production, prices are expected to remain strong during the forecast period (Figure 21).

Figure 21: Strong prices driving export earnings up in key markets



New Zealand's key seafood export markets by earnings, year ended June 2005-19. Source: Stats NZ and MPI.



Arable

The 2019/20 year has begun positively with export revenue up 43 percent for the September 2019 quarter compared to September 2018 and a reasonable growing season to date in most areas. Export sales in all categories increased with vegetable seeds as the main contributor; up \$16.4 million on the September 2018 quarter. As a result, arable export revenue is expected to rise 10 percent for the year ending June 2020 to \$260 million, with slightly lower levels forecast for 2021.



Arable export revenue 2015-21 (NZ\$ million)

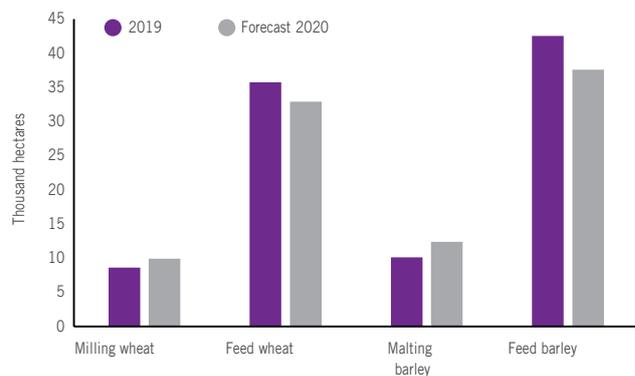
Year to 30 June						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
Vegetable seed	62	74	64	92	87	105	100	
Ryegrass seed	49	46	46	55	60	60	60	
Clover/legume seed	22	20	23	28	20	25	25	
Other grains and seeds*	48	70	63	68	69	70	70	
Total	181	210	197	243	236	260	255	
% Change year on year	-21.6%	+15.6%	-6.0%	+23.2%	-2.7%	+10.0%	-1.9%	

Source: Stats NZ and MPI.

* Other arable products include: maize, other grains, and oilseeds.

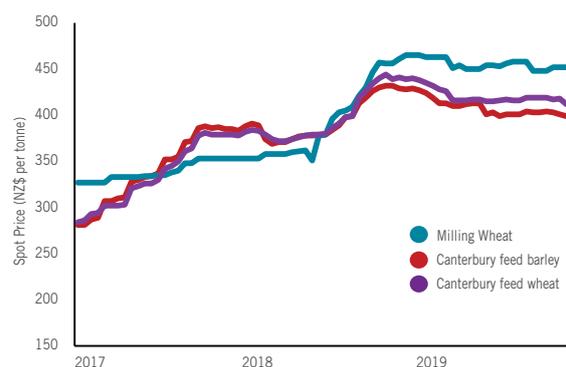
- Seasonal conditions were favourable in Canterbury with crops looking exceptionally good until a hail storm in late November caused considerable damage to cereal, seed and vegetable crops. A mild winter allowed autumn and winter sown crops to come through it well, but the cool spring delayed some spring planting. Conditions in Southland have been more difficult with a cold wet spring making it difficult to get crops planted, and similarly in the North Island the cool spring delayed planting.
- Nationally, areas sown in feed wheat and feed barley are estimated¹ to be down 7 percent and 12 percent on last season, while areas of milling wheat and malting barley are up 20 and 23 percent. Areas of maize planting in the North Island based on seed sales are expected to be up for silage and similar to 2018 for grain (Figure 22).
- Demand for feed wheat and barley has been subdued with unsold stocks up on this time last year. Prices for feed wheat and barley are about \$30 per tonne lower than last year but remain above the four year average by about \$50 per tonne, while milling wheat prices have held (Figure 23). End user contracts for maize grain have been difficult to negotiate due to carry over stocks from the influx of maize imports from Romania last year.
- Domestic demand for forage seeds is strong while the dairy and dry stock sectors get good returns.

Figure 22: NZ total hectares planted for 2019 harvest and predicted for 2020 harvest



Source: AIMI 10 October 2019

Figure 23: Domestic spot grain prices



Source: NZX Grain & Feed Insight

- A recent economic impact assessment report² commissioned by the Arable Food Industry Council found that for 2018, the value of grain and seed sales was \$781 million, split 62:38 percent between grain and seed production. Adding indirect and induced impacts³

1 Source: Arable Industry Marketing Initiative (AIMI) New Zealand Survey of Cereal Area and Volumes: October 10, 2019 [Foundation of Arable Research]

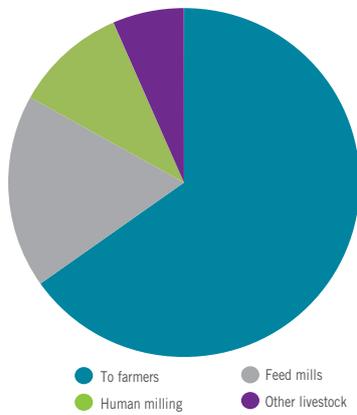
2 Source: BERL Arable Production 2018 – Economic Impact Assessment

3 Impacts: Direct – initial spending; Indirect – additional inter-industry spending as a result of the direct impact; Induced – the impact of additional household expenditure resulting from the direct and indirect impact.

the gross output was \$ 2,089 million and contributed 0.3 percent of national GDP.

- The bulk of the grain crop (including maize silage) is sold directly to farmers as animal feed with feed mills as the next largest consumer (Figure 24).

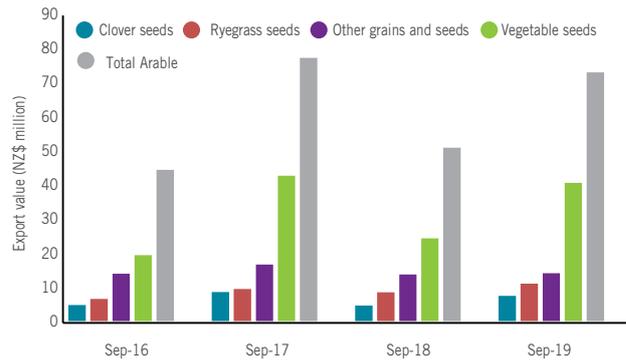
Figure 24: Grain flows to farms and industry, 2018



Source: BERL Arable Production 2018 – Economic Impact Assessment

- Export revenue for the 2019 September quarter was up 43 percent on the previous year to \$ 73.5 million, due to higher export volumes and prices.
- Returns for all the arable export categories rose with vegetable seeds being the greatest contributor. There has been an improvement in the global vegetable seed market following a slowdown last year and the outlook is good for the next few years. Export revenue for the 2019 June and September quarters (the main export period for vegetable seeds) was \$91.0 million, up from \$62.8 million and \$75.9 million for the same periods in 2018 and 2017 (Figure 25).

Figure 25: September quarter arable exports



Source: Stats NZ

- An increase in ryegrass seed to China and clover seed to the EU drove the 30 and 62 percent increases in export returns for the September on September quarter for these categories. The forage seed market is buoyant in Europe with a mixed 2019 harvest following three poor years, and regrassing following the dry years driving the demand for seed.
- Arable export revenue is expected to rise 10 percent for the year ending June 2020 to \$260 million with smaller increases forecast for the years out to 2024.



Other primary sector exports

Export revenue for New Zealand's other primary sector exports and foods is expected to increase to \$3.0 billion for the year to June 2020, up 7.3 percent from 2019. This builds on the 5.3 percent growth in 2019. This growth is being led by the other products (such as dairy blends and soft drinks), innovative processed foods and live animals categories. Demand for these products is expected to continue to develop in coming years.



Other export revenue 2015-21 (NZ\$ million)

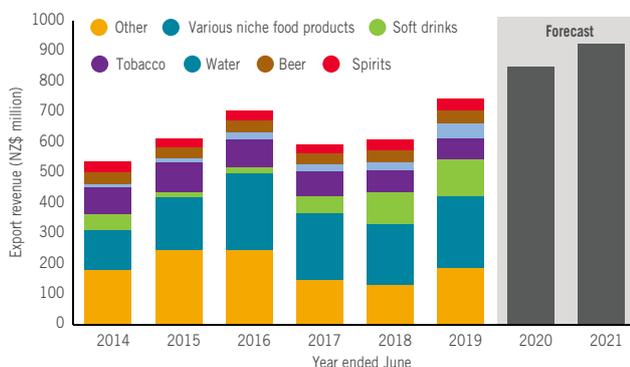
Year to 30 June						Actual	Forecast	
	2015	2016	2017	2018	2019	2020	2021	
Innovative processed foods	471	681	664	759	788	820	840	
Honey	233	315	329	348	355	340	350	
Sugar & confectionery	293	312	305	263	225	230	230	
Cereal products	255	274	285	306	304	310	310	
Live animals	370	242	274	241	239	310	270	
Soup & condiments	183	187	186	184	196	200	210	
Other products*	612	704	595	609	745	850	920	
Total	2,417	2,714	2,639	2,709	2,852	3,060	3,140	
% Change year on year	+20.8%	+12.3%	-2.8%	+2.7%	+5.3%	+7.3%	+2.6%	

Source: Stats NZ and MPI.

* Other products include: beverages, vegetable-based dyes, and spices.

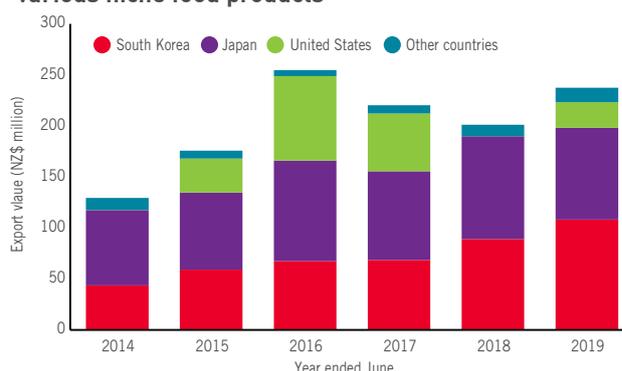
- Innovative processed foods exports are on track to build on the growth in 2019 into 2020. Exports to Australia continue to be lower than 2018 and previous years, balanced by increased exports to China, Singapore, and Hong Kong.
- The other products category is continuing to exceed forecasts, with the forecast for the year to June 2020 up from \$830 million in the last quarterly forecast to \$850 million for this forecast. The key categories driving this increase are various niche food products, mineral water and soft drink exports (Figure 26). Various niche food products are mostly dairy blends (for example mixes of milkfat or butter and vegetable oil, lecithin or salt) and premixes of food ingredients (for example for cakes or biscuits). The top markets for various niche food products are South Korea and Japan (Figure 27).

Figure 26: Various niche food products, mineral water and soft drinks leading growth in Other Products



Other Product export revenue: year ended June 2014-21.
Source: Stats NZ and MPI.

Figure 27: South Korea and Japan are key markets for various niche food products

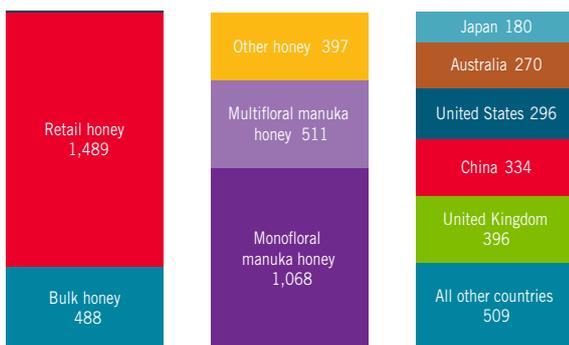


Various niche products export revenue: year ended June 2014-19.
Source: Stats NZ.

- The value of live animals is expected to increase 29 percent in the year ended June 2020 to \$310 million, mainly due to more cattle expected to be exported to China than in 2019.
- Over 9,000 cattle were exported in the September 2019 quarter, and a further 14,000 are expected to leave in the December quarter. The total for the year to June 2020 is expected to top 40,000 as compared to around 25,000 cattle in recent years. These cattle will be used to improve genetics in China's dairy herds to increase productivity. High numbers of cattle exported in particular years have historically not continued in following years, so we expect cattle export volumes to drop back again from 2021 onwards.
- Exports of live poultry reached \$36 million for the year to June 2019, a 20 percent increase on the previous year, with growing demand from China continuing to be the key force driving this increase. We expect this growth to continue into future years.

- Honey exports are now only forecast to reach \$340 million (down from \$360 million in the previous forecast) in the year to June 2020. Export volumes are expected to continue to recover from just over 8,065 tonnes in 2019 to levels similar to those of earlier years at around 8,500 tonnes.
- Growth in the average honey export prices is looking less likely to continue, so the average export forecast price for 2020 onwards has been reduced. The average export price for monofloral mānuka honey is expected to remain steady or increase, while the average export price for multifloral and non mānuka honey is expected to remain soft. Prices for multifloral mānuka honey and non mānuka honey are expected to remain soft, or decrease, as long as surplus inventories of honey continue to overhang the market.
- New export codes were introduced in 2018 to capture honey exports by three floral types: monofloral mānuka, multifloral mānuka, and non-mānuka honey. A review of these new codes earlier this year identified that industry needed more assistance with the new process. Now that more assistance has been provided, the data is much more reliable (particularly since the beginning of July 2019) and it is feasible to explore the data at a more detailed level. Figure 28 shows a detailed analysis of the 1,985 tonnes of honey that was exported in the September quarter 2019: the UK was our largest export partner, followed by China, and 75 percent of this honey was retail, while 54 percent was monofloral mānuka honey.

Figure 28: Most honey exported in the September quarter 2019 was retail packed monofloral mānuka honey

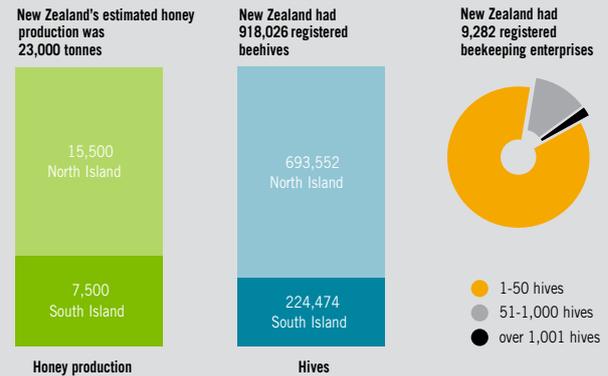


Honey export volumes by category, September quarter 2019.
Source: Stats NZ.

Advance Snapshot: Apiculture Monitoring Programme 2019

- New Zealand honey production for the year to June 2019 has been estimated at 23,000 tonnes, up 3,000 tonnes from last season
- This rise is due to increasing hive numbers and a modest increase in the average hive yield.
- The number of registered beekeeping enterprises in 2019 increased 8.5 percent to 9,282 registered beekeeping enterprises, up from 8,552 registered beekeeping enterprises in 2018.

Figure 29: Apiculture monitoring programme statistics



Source:ASUREQuality Limited, Registered beekeeping enterprises and hives under the National American Foul Brood Management Plan.

The full apiculture monitoring programme report on the 2019 honey production year will be released in early 2020.



Forecast tracking

The export forecast of \$47.9 billion for the year to June 2020 is up \$1.7 billion from the previous forecasting round in September 2019. The main drivers for this revision are expectations of a solid production season, a strong outlook for red meat prices and favourable exchange rates.

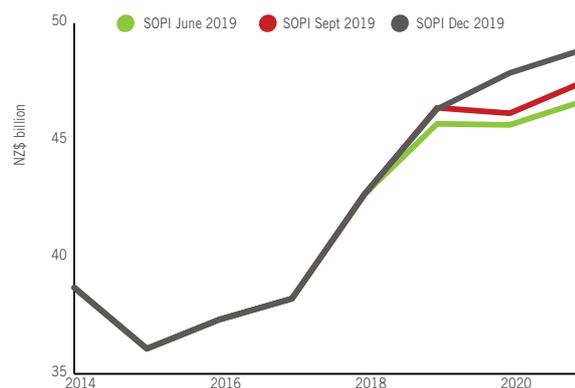
Expectations of a solid production season, combined with strong global dairy prices, has pushed the dairy forecast upward by \$1,010 million.

Strong global red meat prices are driving an upwards revision of \$360 million in the meat and wool sector.

A faster recovery in log export prices than expected last quarter resulted in the forestry forecast being revised upwards by \$190 million.

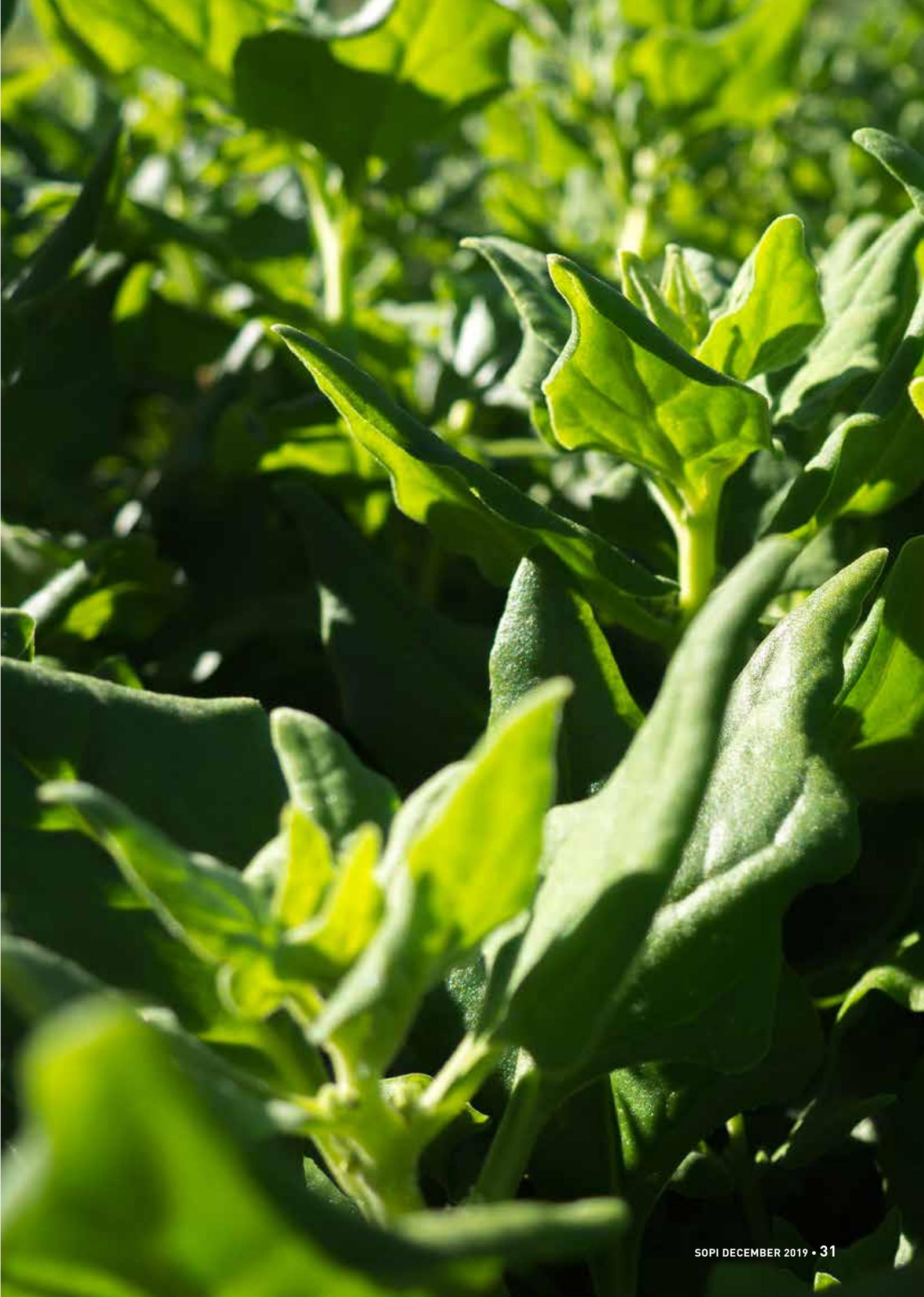
Small revisions across the remaining sectors have been driven by expectations of a solid horticulture and arable production season, rising prices for seafood and increasing demand for other agricultural products including innovative processed foods, soft drinks and dairy blends.

Figure 30: MPI export revenue forecasts 2015-23



Source: Stats NZ and MPI.

	Year to 30 June					Actual	Forecast	
	Forecast round	2015	2016	2017	2018	2019	2020	2021
Dairy	Dec 2019	14,050	13,289	14,638	16,655	18,107	19,630	19,450
	Sept 2019	14,050	13,289	14,638	16,655	18,120	18,620	18,940
	Difference	-	-	-	-	-12	+1,010	+510
Meat & wool	Dec 2019	9,000	9,200	8,355	9,542	10,176	10,430	10,680
	Sept 2019	9,000	9,200	8,355	9,542	10,168	10,070	10,150
	Difference	-	-	-	-	+8	+360	+530
Forestry	Dec 2019	4,683	5,140	5,482	6,382	6,883	6,000	6,600
	Sept 2019	4,683	5,140	5,482	6,382	6,931	5,810	6,350
	Difference	-	-	-	-	-48	+190	+250
Horticulture	Dec 2019	4,185	5,000	5,165	5,392	6,111	6,400	6,530
	Sept 2019	4,185	5,000	5,165	5,376	6,110	6,340	6,510
	Difference	-	-	-	+15	+1	+60	+20
Seafood	Dec 2019	1,562	1,768	1,744	1,777	1,963	2,090	2,210
	Sept 2019	1,562	1,768	1,744	1,777	1,963	2,070	2,180
	Difference	-	-	-	-	-	+20	+30
Arable	Dec 2019	181	210	197	243	236	260	255
	Sept 2019	181	210	197	243	236	240	245
	Difference	-	-	-	-	-	+20	+10
Other	Dec 2019	2,417	2,714	2,639	2,709	2,852	3,060	3,140
	Sept 2019	2,417	2,714	2,638	2,706	2,852	3,000	3,090
	Difference	-	-	+1	+3	-	+60	+50
Total exports	Dec 2019	36,079	37,323	38,220	42,700	46,329	47,870	48,865
	Sept 2019	36,079	37,323	38,219	42,682	46,380	46,150	47,465
	Difference	-	-	+1	+19	-52	+1,720	+1,400







Economic Intelligence Unit online resources:

More primary industry data can be found on the MPI website: www.mpi.govt.nz/EIU



Market insights

Reports that provide insights into consumer preferences and purchasing behaviour, as well as in-depth research into the channels that supply them.



Situation and Outlook for Primary Industries

The latest update and underlying data for our outlook on the primary industries, plus access to previous SOPI reports.



Farm monitoring

Reports assessing the annual production and financial performance of typical farm or orchard businesses.



Data

A range of publically available data covering primary industry production and trade.

