



Situation and Outlook for Primary Industries

March 2017

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 via SOPi@mpi.govt.nz

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Overview

New Zealand's primary industry exports are forecast to increase 1.4 percent to \$37.5 billion for the year ending June 2017, up \$0.8 billion from our December forecast¹. Dairy export volumes were much stronger over the December quarter than we had previously forecast.

Strong global prices for forestry and dairy products, combined with rising horticulture production volumes, more than offset falling beef and lamb exports due to lower stock numbers in our latest forecast.

We expect dairy prices to continue to remain relatively stable (at higher levels than in the previous year) over the remainder of the season, buoyed by lower production coming out of the Southern Hemisphere. In addition, record forestry harvest volumes are expected to drive an increase in log exports, particularly for use in the Chinese housing market.

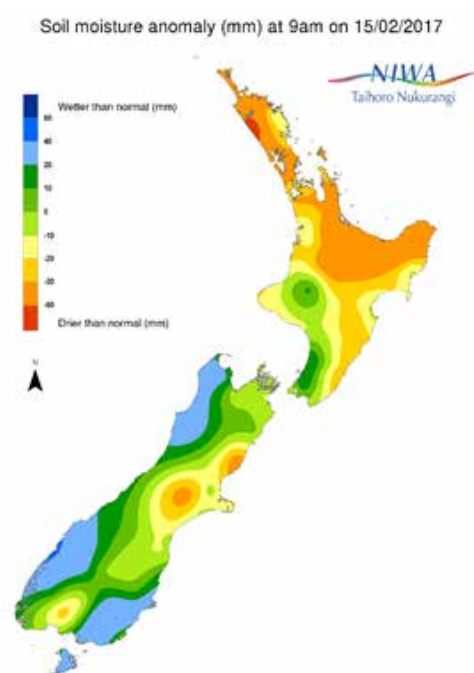
SUMMER WEATHER IMPACTING PRODUCTION

Above average rainfall through the winter and spring for much of the country impacted milk production, livestock growth rates, and caused some disruption to crop planting and early season growth.

The wet spring transformed into a cooler than normal summer in much of the country. Additionally Northland and the eastern North Island were dry through December










and January. The drought in Northland was classified a medium-scale adverse event. More recently, these areas have suffered flooding as well.

Persistent wind and a lack of rainfall contributed to very poor pasture conditions in these areas through the summer and have impacted the growth of some vegetable crops. However these same conditions have also contributed to a record apple crop.



¹ Refer to the table on page 29 for more detail on how our forecast has changed since the December SOPI publication

TABLE 1: PRIMARY INDUSTRIES EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
 DAIRY	13 139	17 791	14 050	13 289	14 450	16 780
 MEAT & WOOL	7 794	8 162	9 001	9 201	8 170	8 510
 FORESTRY	4 527	5 199	4 682	5 140	5 440	5 920
 HORTICULTURE	3 540	3 780	4 165	4 982	5 170	5 440
 SEAFOOD	1 546	1 500	1 562	1 766	1 780	1 920
 ARABLE	225	228	177	205	180	190
 OTHER	1 691	1 677	2 089	2 376	2 270	2 330
 TOTAL	32 461	38 338	35 727	36 959	37 460	41 090
 Y/Y % Change	+0.5%	+18.1%	-6.8%	+3.4%	+1.4%	+9.7%



North Canterbury received some respite late in 2016 but rainfall was not sufficient to fully recharge soils and water supplies. This leaves the district vulnerable to further drought-like conditions in 2017.

For the remainder of the country, good pasture cover has eventuated from the cooler and wetter than normal conditions. But, animal growth rates and dairy production have been suboptimal as a result of poor pasture quality and periods of inclement weather. The fruit crops from Otago and Southland were also impacted by the wet and cool conditions during their key harvest period.

MACROECONOMIC UPDATE

Although primary sector export revenue growth is forecast to continue, uncertainty in New Zealand's trading environment has also been on the increase. Protectionist sentiment is on the rise in Europe and the US, which will have direct effects on New Zealand as these are major trading partners. There also could be indirect effects through the impact that these policies can have on China and the rest of Asia.

The US withdrawal means the Trans-Pacific Partnership trade agreement cannot enter into force in its current form, but New Zealand continues to actively seek enhanced market access arrangements, including through Regional Comprehensive Economic Partnership (RCEP) negotiations, with TPP partners, and with the EU and the UK post-Brexit.

In the US, further interest rate rises are expected as GDP growth appears to have picked up slightly, which could lead to a stronger US dollar. This may lead to increased exports to the US in the short-term, but it remains to be seen how the protectionist sentiment manifests and potentially impacts New Zealand products exported to the US.

China's GDP growth rate remained around 6.7-6.8 percent during 2016, though it is expected to ease slightly in 2017. Some Southeast Asian economies, such as Indonesia, Vietnam, and Malaysia, are expecting stronger growth, which will help offset lower growth from China in the East Asian region. Continued growth in these regions should be positive for New Zealand exporters, particularly for dairy.

EXCHANGE RATE UPDATE

The New Zealand dollar has climbed steadily against the US dollar since September 2015 to sit at 72 US cents. It has also strengthened against the Euro, the Chinese renminbi, and the British pound.

Treasury forecasts that the dollar will ease back to under 70 US cents by the end of the year, and then stabilise at around 68.5 US cents. Similarly, the New Zealand dollar is also forecast to fall against most other major trading currencies in a reversal of the general trend over the past 18 months.

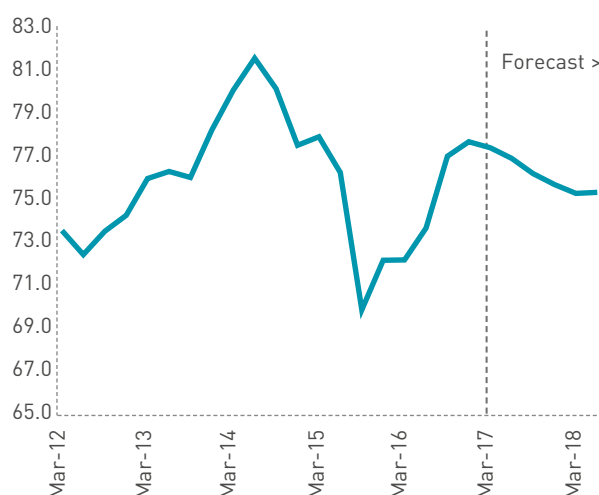
IMPACTS FROM THE KAIKŌURA EARTHQUAKE

The Kaikōura earthquake of 14 November 2016 had a significant impact on our primary industries, mostly through damage sustained to buildings and infrastructure. Minister Guy announced a \$5 million support package for primary sectors on 18 November 2016. This includes \$4 million for an Earthquake Relief Fund for primary industries to help with non-insurable assets such as tracks, fences, some on-farm bridges and water infrastructure repair.

The wine industry faces the largest impact from the earthquake, with many storage tanks and processing facilities sustaining damage. Around 2 percent (\$38 million) of the 2016 harvest was lost as a result of damage to storage tanks, while around 60 million litres of storage capacity in Marlborough was impaired in some way.

Some business interruption losses are likely to have occurred but have been moderated by the use of temporary storage and processing solutions. There is also less pressure on storage capacity with variable weather conditions during flowering translating into forecast 2017 yields in Marlborough lower than previously forecast.

FIGURE 1: TRADE-WEIGHTED INDEX (TWI) 2012-2018



The earthquake also affected pastoral farmers in the Kaikōura and Hurunui regions, with some dairy farmers having to dump milk for up to 3 weeks after the earthquake. The most significant impact to sheep, beef, and dairy operations is expected to be related to damage to homesteads, milking sheds, farm roads, and fencing.

Kaikōura and eastern Marlborough's paua and rock lobster fisheries were also disrupted as a result of the earthquake. The quake caused major seabed displacement, destroying habitats. The temporary emergency closure of the rock lobster (crayfish) fishery along the east coast of the South Island expired on 20 December 2016 and catch limits are still expected to be harvested within the current fishing season.

However, habitat loss will affect Kaikōura and eastern Marlborough's paua fisheries for some time. MPI is administering a \$2 million emergency research package for the Kaikōura region to investigate the impacts of the earthquake on these fisheries, other marine fauna and the associated habitat. The results of this research will enable MPI to build a far better picture of the long term effects and the most appropriate actions to manage sustainably for the future. The affected portions of the paua fisheries, and all other shellfish and seaweed fisheries (excluding rock lobster and scampi), have been closed until at least November 2017 while this work takes place.

Many other primary industry businesses will also have been affected by the quakes, although the impacts are more difficult to quantify. For example, around 13 percent of New Zealand's honey crop comes from the Canterbury/Kaikōura region and some hives may have been destroyed by landslides. Forestry access roads and plantations will also have sustained some damage.

GLOBAL COMMODITY PRICES

Global commodity prices are expected to start to edge upward in 2017, led by oil prices. Agricultural prices were flat or lower from 2015 to 2016 due to a combination of strong grain production and low oil prices pulling other commodity prices down with it. In late 2016, OPEC nations reached an agreement on limiting oil supply, and China has reduced coal capacity, which has led to a rise in energy prices.

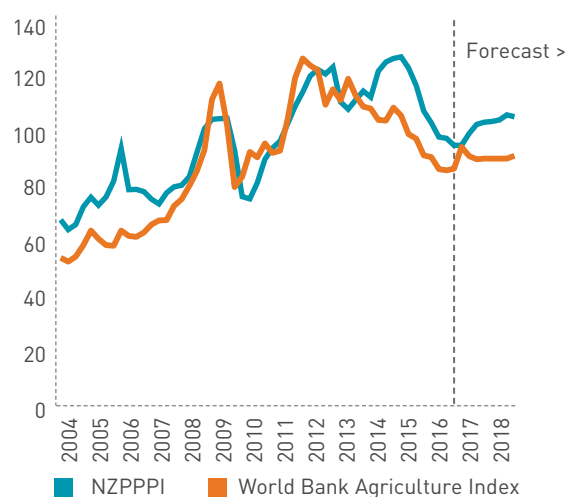
The NZPPPI, which is an index tracking movements in New Zealand's primary product export prices, continues to recover from 2017 onwards, while the World Bank Agriculture Index stabilises. This divergence is a result of dairy receiving a greater weighting in the NZPPPI (due to

its dominance as a sector), so our forecast recovery in global dairy prices has more of an impact on New Zealand's average export prices.

Ample grain supplies will continue to suppress prices which could keep a lid on other agricultural price rises. Oil and grain prices have flow on effects into many aspects of New Zealand primary industries; as an example, the impacts on dairy include:

- **Fuel costs:** Direct vehicle and fuel costs are a small proportion of dairy farm working expenses – just 4.4 percent in 2014/15², but are a larger component of dairy processing costs.
- **Fertiliser costs:** Direct fertiliser costs account for 11.6 percent of dairy farm working expenses. Most nitrogen-based fertiliser is made with natural gas, so fertiliser costs closely match energy prices.
- **Grain prices:** grain is a significant input into dairy production globally and to a lesser degree in New Zealand. Fuel and fertiliser costs are significant inputs into grain production. In 2012/13, fuel and fertiliser expenses accounted for 7.9 percent and 25.7 percent of arable cropping working expenses³, respectively. Corn-based ethanol further strengthens the link between grain and energy prices.
- **Global dairy production:** These impacts affect not only New Zealand dairy producers, but also global dairy production costs, which can influence global prices and New Zealand's price competitiveness.

FIGURE 2: COMPARING THE NZPPPI TO THE WORLD BANK AGRICULTURE INDEX (2010=100)



² DairyNZ Economic Survey 2014-15

³ Ministry for Primary Industries, Arable Monitoring 2012.



FARM MONITORING

In this report we highlight the information available that describes the annual production and financial performance of typical farm or orchard businesses. Not only can we assess how these businesses have performed from year to year, but we can also see how typical systems have adapted over time to improve resilience and take advantage of emerging opportunities.

What's in it?

The farm monitoring outputs vary across each of the sectors covered, but in general they cover these areas:

- **Physical and production characteristics:** Total farm size, distribution of plantings/stock units, production numbers and ratios (e.g. per hectare or per stock unit).
- **Revenue and input costs (per hectare or per farm):** Income from primary production and other sources, expenses such as wages, fertiliser, fuel, repairs and maintenance, and overhead costs such as insurance, interest, and depreciation.
- **Balance sheet and cash flow statements:** includes the capital structure of each farm model – assets such as land, machinery, and value of livestock, liabilities such as loans, and cash flows.

How is it used?

This information can be used by farmers/growers, processors and other industry participants, and government for two main purposes:

- **Benchmarking:** Farmers and their advisers use farm monitoring models and reports to compare their farm's performance to others and identify opportunities to improve productivity and profitability.
- **Monitoring:** Farm monitoring allows industry participants and observers to understand and analyse a range of factors such as changes in farm practice, input costs, and market conditions. Farm monitoring can also help people evaluate the impacts of climate events and new/proposed government policies.

What are its sources?

The work underlying these farm monitoring outputs is organised in different ways for each sector:

- Data sets for dairy and the red meat sector are provided by DairyNZ and Beef+LambNZ respectively. These organisations and their predecessors have been conducting similar surveys since the 1950s and 1960s.
- Pipfruit orchard data is collected for MPI from several pipfruit businesses in the main growing regions of Hawke's Bay and Nelson. The monitored panel includes grower suppliers, grower-packers and grower-packer-exporters.
- For viticulture, New Zealand Winegrowers and MPI co-fund and co-publish benchmarking reports.
- New kiwifruit reports are being developed in conjunction with Zespri, and will be published in the first half of this year.
- The apiculture monitoring report provides a summary from multiple information sources, such as trade data and surveys of beekeepers, to provide an overview of the industry.

As there are multiple approaches to data collection the data is best for within-sector comparisons. Comparisons across sectors need to account for different methods and sources.

The methods for collecting Farm Monitoring data were revised over 2013-14 to reduce farmer burden and increase data quality. Prior to 2013 all data for the Farm Monitoring programme was collected via bespoke on-farm surveys and interviews. More information on the original approach can be found in earlier publications.

For an overview of each sector's farm monitoring financial reports, see the end of each sector commentary in the following pages.

Sector Summaries

Dairy

 **+8.7%**

Poor spring weather conditions are expected to have driven a 2.5 percent fall in milk solids production for the 2016/17 season. Dairy export revenue is forecast to rise to \$14.5 billion for the year ending June 2017 despite the fall in production as global prices have risen compared to the previous year, despite recent falls at Global Dairy Trade auctions.

Meat and Wool

 **-11.2%**

Lower production volumes, particularly for beef, are forecast to push meat & wool export revenue 11.2 percent lower in the year ended June 2017. Lower provisional livestock numbers for sheep and beef and lower availability of surplus dairy cows point towards lower production and export volumes in the current season. Export prices remain soft, but beef and lamb prices have been higher than expected so far this season despite the recent strength of the New Zealand dollar.

Forestry

 **+5.8%**

Rising log exports are behind a forecast 5.8 percent increase in forestry export revenue (to \$5.4 billion) for the year ending June 2017. Strong Chinese demand for logs, due to an expanding housing market, combined with low shipping costs have driven harvesting to record levels. Wood is expected to be plentiful over the next five years due to high planting rates in the 1990s.

Horticulture

 **+3.8%**

Horticulture exports are forecast to reach \$5.2 billion for the year ending June 2017, before increasing steadily to exceed \$6.3 billion by 2021. Growth is expected to be led by apples and wine for the year ending 2017 as a record apple harvest boosts export volumes and global demand for our wine remains strong. Increasing plantings of higher value gold kiwifruit varieties will support future growth, but lower production yields for green kiwifruit is expected to keep export revenue steady in 2017.

Seafood

 **+0.8%**

Strong international demand for seafood combined with falling global stocks of major wild capture species is expected to keep prices rising, pushing export revenue forecasts above \$1.9 billion by 2018. Volume growth will be primarily driven by aquaculture (mainly mussels and salmon) due to sustainability constraints around wild capture fisheries.

Arable

 **-12.1%**

A thriving international vegetable seed industry provides growth opportunities for the arable sector, but low demand for herbage seeds combined with a strong New Zealand dollar have driven our arable export revenue forecast down 12.1 percent, to \$180 million for the year ending June 2017.

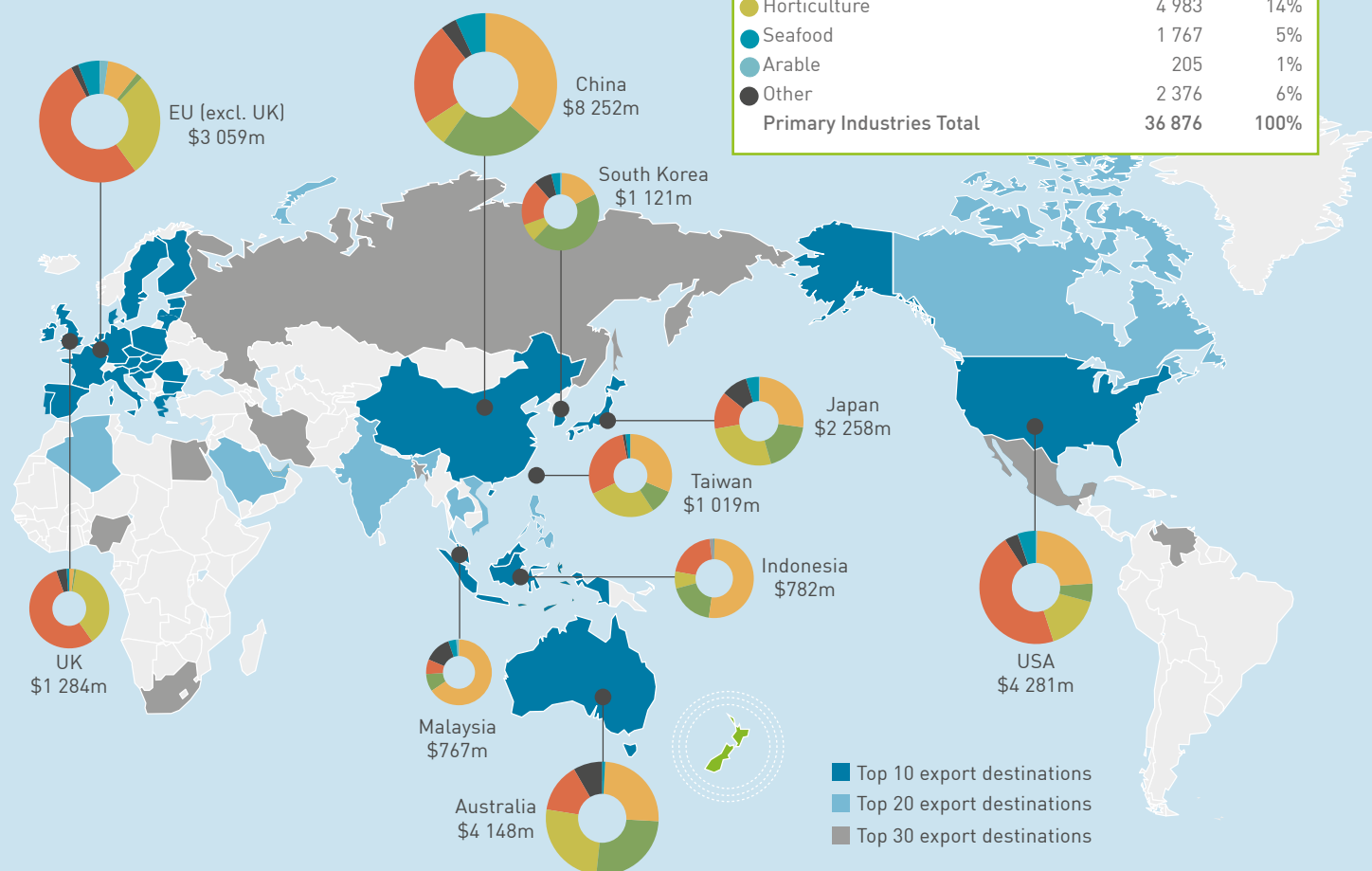
Other

 **-4.5%**

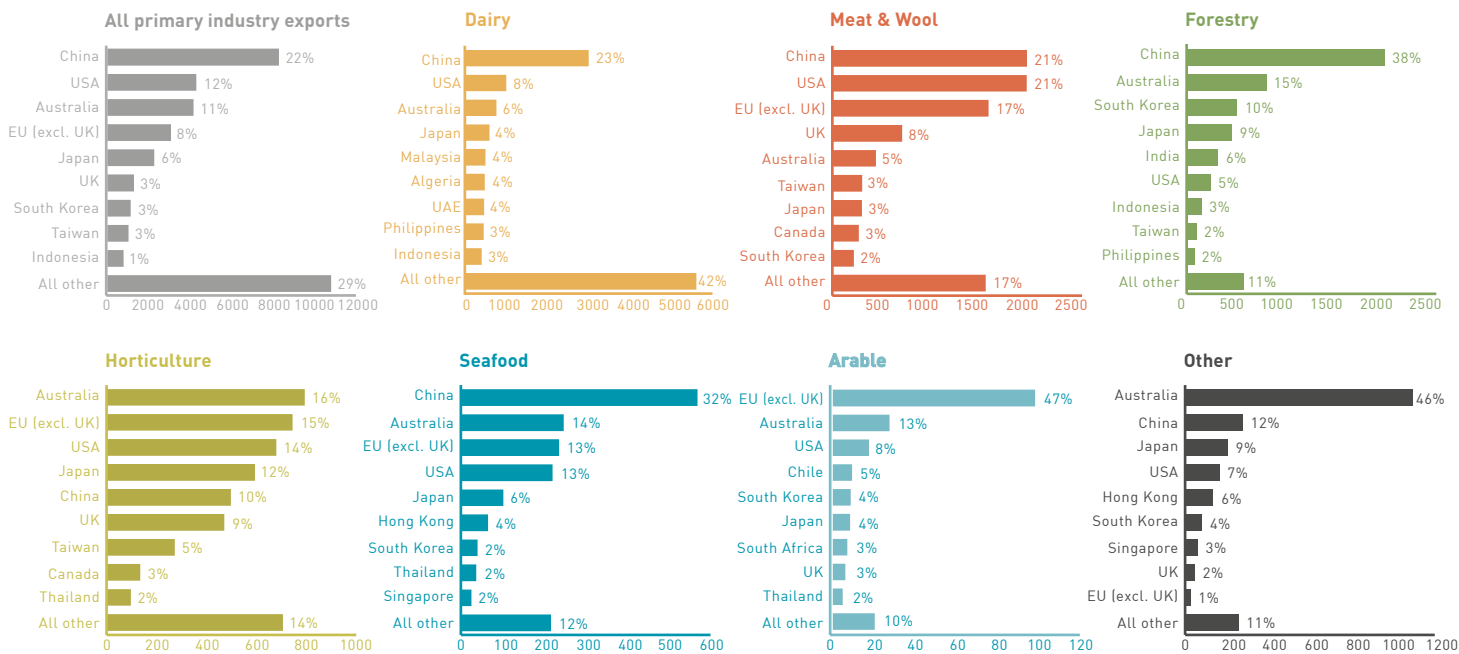
Other primary sector export revenue including processed foods, honey, and live animals, is forecast to fall 4.0 percent to \$2.3 billion in 2017 as lower volumes are shipped to Australia, China, and Hong Kong. An expected weather-related fall in 2017 honey production also contributes to the overall fall in export revenue.



Top 10 Export Destinations



TOP MARKETS (NZ\$ millions, year ended June 2016)





Dairy



New Zealand's all company average farmgate milk solids price (including Fonterra's forecast dividend of \$0.50 to \$0.60) is unchanged from our previous forecast of \$6.41 per kilogram of milk solids for the year ending May 2017.



Opening dairy cow numbers increased 1.3 percent for the 2016/17 season, despite near record cull numbers during the year ended June 2016.



We expect New Zealand's milk solid production to fall 2.5 percent in the 2016/17 season before rebounding in the following season.

NZ EXPORTS RISE AS GLOBAL PRICES RECOVER

- Dairy export revenue is forecast at \$14.5 billion for the year ending June 2017, up \$1.2 billion from the June 2016 year as global prices continue to recover. This forecast has been revised upward from the December update by nearly \$0.8 billion, largely due to strong export volumes in the December 2016 quarter.
- A production recovery, coupled with an expectation that dairy prices will stabilise near current levels, drive our dairy export revenue forecast up to \$16.8 billion for the year ending June 2018.
- Global supply and demand appear to be rebalancing. Reduced supply from the Southern hemisphere is preventing prices from falling, while at the same time an expectation of more production coming out of the EU is preventing prices from rising too quickly. US production is also rising, which has led to increased export volumes during the latter half of 2016.
- The EU's voluntary milk supply reduction scheme concluded at the end of January which raises the possibility that farmers will increase production again, particularly in the current price environment. EU production is down 2.5 percent for the July-November 2016 period compared to the same time last year.
- The EU has been exporting more butter and cheese this season, but exports of Skim Milk Powder (SMP) and condensed milk have fallen significantly. SMP continues to be stored in intervention stocks and private storage aid (PSA) while butter continues to be sold out of PSA.
- As at 31 December 2016 there were 351 029 tonnes of SMP in intervention stocks, down slightly from the peak of 355 173 at 30 September 2016. There was a further 68 335 tonnes of SMP in PSA. Butter stocks held in PSA have fallen to 26,875 tonnes from a peak of over 100 000 tonnes at 31 July 2016.

TABLE 3: DAIRY EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Whole milk powder	5 104	8 393	5 385	4 609	5 130	5 990
Butter, AMF, & cream	1 910	2 699	2 219	2 378	2 910	3 620
Skim Milk & Butter Milk Powder	1 832	2 285	1 762	1 347	1 490	1 710
Casein & protein products	1 674	1 925	2 129	1 834	1 690	1 880
Cheese	1 441	1 482	1 557	1 720	1 720	1 840
Infant formula	555	401	415	685	780	930
Other dairy products	623	607	582	716	730	810
Total exports	13 139	17 791	14 050	13 289	14 450	16 780
% Change	-1.8%	+35.4%	-21.0%	-5.4%	+8.7%	+16.1%

- When SMP held in intervention stocks and PSA is sold this is likely to suppress SMP prices. As we approach the EU's seasonal peak production period in May, even more SMP will be produced, leading to further downwards price pressures.
- So far the European Commission has only accepted bids on 40 tonnes of SMP to be sold out of intervention stocks. Further offers were made at lower prices, but these were not accepted by the Commission.
- Strong world demand for butter is expected to continue as western consumers show a preference for natural fats over processed fats. Chinese demand for butter is also on the rise, around 85 percent of which is imported from New Zealand.
- On the demand side, lower domestic production in China this year and rising consumption has increased China's demand for imported dairy products. Whole milk powder imports (of which New Zealand makes up around 95 percent of China's imports) have increased 20.9 percent for the 2016 calendar year as compared to the previous year.

WET CONDITIONS PUSHING POOR PRODUCTION

- According to Statistics New Zealand's provisional Agricultural Production Survey for 2016 the number of milking cows as at 30 June 2016 rose 1.3 percent compared to the previous season. The size of the increase was a surprising result considering the near-record cow cull in the June 2016 year. The high cull may have been more heavily weighted towards farmers getting rid of dry cows rather than carrying them over to the following season.
- Despite the increased cow numbers, New Zealand's milk solid production is expected to fall 2.5 percent for the 2016/17 season. Current production for the season through January 2017 is down 2.8 percent, slowed by a wet spring which has negatively affected pasture growth and quality, particularly in the key dairying region of Waikato.
- Wet spring weather is also reported to have had a negative effect on silage production. In addition, many farmers will not be in a position to purchase much supplementary feed after two financially challenging seasons.

FIGURE 3: NEW ZEALAND DAIRY EXPORT PRICES (\$US PER TONNE)

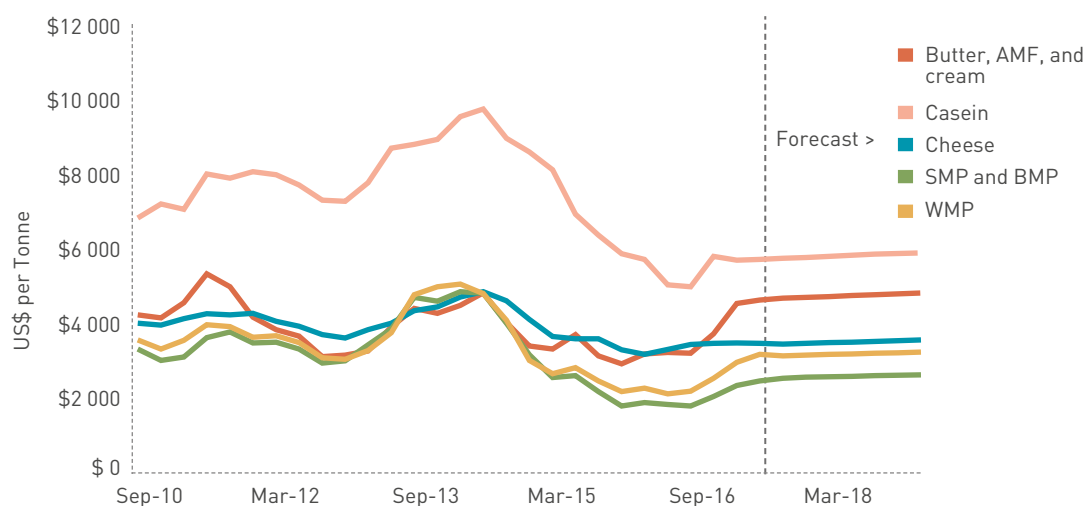
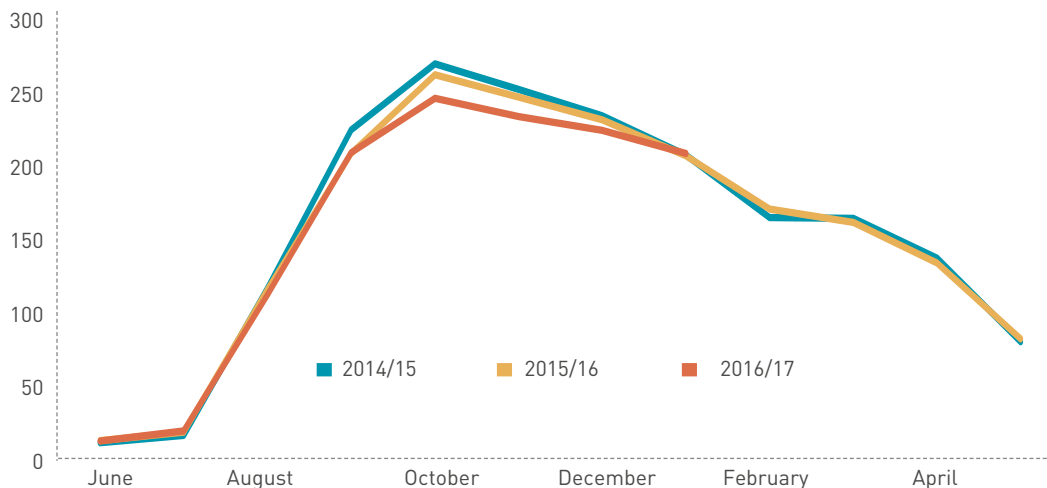




FIGURE 4: NEW ZEALAND MONTHLY MILK PRODUCTION (MILLION KILOGRAMS MILK SOLIDS)



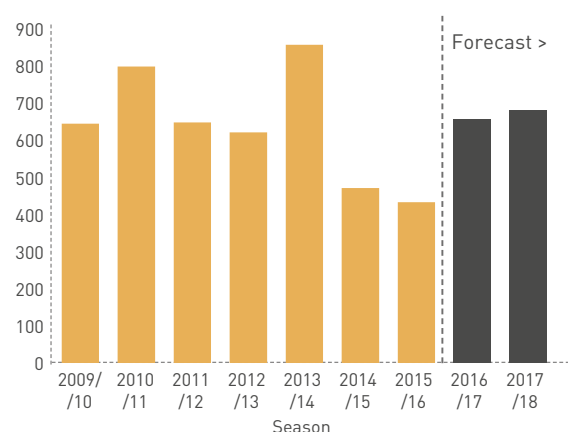
- Production is expected to rebound 3.3 percent in the following season, assuming normal weather conditions. Expectations of stronger global dairy prices may encourage New Zealand farmers to return production to 2015/16 levels where possible. The total dairy herd is forecast to remain stable in 2018, although the number of cows in milk is expected to fall slightly.

DOMESTIC PRICE OUTLOOK IMPROVING

- New Zealand's all company average farm-gate milk solids price forecast for the season ending May 2017 is unchanged from our previous forecast of \$6.41 per kilogram of milk solids (including dividends where applicable).
- Most product prices traded in the global dairy trade auctions have remained strong over the past few months and are expected to remain near these levels for the remainder of the season.

- The most recent activity on the NZX milk price futures market for the 2016/17 futures contract continues to exceed \$6.00 per kilogram of milk solids (excluding any dividends), reinforcing our outlook for the current season.
- Our price forecast (including dividends) increases to \$6.65 for the 2017/18 season in anticipation of global prices settling near levels seen over the past three months.
- Strong production responses to higher prices from farmers in the EU and US remain a downside risk to both our export price and farm-gate price forecasts.

FIGURE 5: AVERAGE MILK SOLIDS PAYMENT (CENTS PER KILOGRAM INCLUDING DIVIDENDS)



DAIRY FARM MONITORING

The DairyNZ Economic Survey has been published by Dairy NZ since 2006, and has been in production by predecessor entities since 1963. This information is published annually to evaluate the dairy industry and enable individual farms to be benchmarked against its peers.⁴

The information summarised below shows average financial returns for owner-operators, which make up 70 percent of total dairy herds. In addition, DairyNZ provides detailed physical, financial, and cash flow data for 50/50 sharemilkers, which make up another 17 percent of total dairy herds. DairyNZ also provides farm performance information by region and production system.

On-farm profitability has certainly been quite variable, which reflects the volatility of the international dairy market. As figure 6 below shows, dairy farm revenue also varies more year to year than expenses. However, there is a strong correlation between the two as dairy farmers have some levers available to respond to lower prices, particularly with regard to supplemental feed purchases and repairs and maintenance.

When dairy prices fell in 2014/15, the graph shows that farmers responded by cutting farm working expenses. These were further reduced in the following year when gross revenue fell for a second consecutive season. Working expenses like repairs and maintenance cannot be deferred forever, so eventually working expenses will rise again. We expect both to increase in the 2016/17 season in line with an expected rise in the milk solids price.

⁴ For more information, see: <https://www.dairynz.co.nz/publications/dairy-industry/>

FIGURE 6: CHANGE IN DAIRY FARM REVENUE AND EXPENSES, 2010-2016

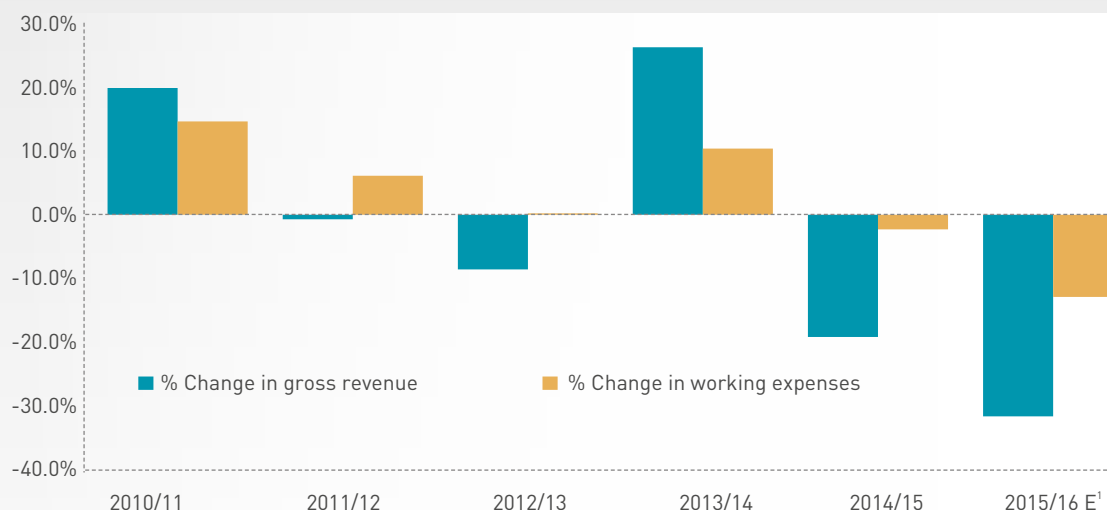


TABLE 4: NEW ZEALAND AVERAGE OWNER-OPERATOR DAIRY FARM PERFORMANCE PER HECTARE 2010-2016

YEAR TO 30 JUNE	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16 E ¹
Net dairy cash income	7 509	7 455	6 822	8 597	6 968	4 788
Farm working expenses ²	3 14	4 152	4 161	4 590	4 485	3 914
Cash operating surplus	3 595	3 302	2 661	4 007	2 483	874

Notes

¹ Final Dairy NZ figures for the 2015/16 season will be published in May 2017

² Excludes depreciation, rent, and interest



Meat and Wool



Production and exports have started slowly in the 2016/17 season, especially for lamb, but we expect activity to pick up over the next 6 months.



Growing conditions have been good in the South Island so far this season, but in parts of the North Island a wet spring has given way to a dry summer.



Provisional livestock population numbers have come in lower than previously estimated, leading to lower production and export volume forecasts for beef, lamb, and mutton.

PRODUCTION FORECAST TO RETURN TO 2014 LEVELS

- Falling volumes are forecast to push meat and wool exports down to \$8.2 billion in the year ending June 2017, a fall of 9.6 percent from the previous year. This is \$40 million lower than the previous forecast in December 2016.
- The main driver behind the forecast fall in meat revenue is an expectation that fewer dairy cows will be culled this season compared to the previous two years.
- Overall, lower livestock numbers indicate slightly lower production volumes for both beef and sheep meat. This is partly offset by higher prices.

- Weather conditions this season have been good in the South Island but variable in the North Island. Excessive rain earlier in the season has given way to dryness in northern and north-eastern parts of the North Island (and more recently flooding), limiting livestock growth potential.
- The strengthening New Zealand dollar has constrained export prices so far this year. All else remaining equal, exporters would receive around \$4.60 less for a leg of lamb (in NZD) compared to the same time a year ago due to our appreciation against the British pound. Nevertheless, there are signs that beef and lamb prices have slowed their descent and may begin to increase if current trends continue.

TABLE 5: MEAT & WOOL EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Beef & Veal	2 143	2 199	2 980	3 095	2 580	2 610
Lamb	2 263	2 485	2 504	2 569	2 310	2 420
Mutton	395	488	418	419	370	390
Wool	654	726	809	761	620	660
Venison	171	187	174	182	160	170
Other meat	435	438	466	503	540	580
Hides & skins	608	624	570	510	440	470
Animal by products	511	484	573	595	570	610
Animal fats & oils	162	130	118	125	140	140
Animal products for feed	229	209	216	247	280	310
Carpets and other wool products	223	191	172	195	170	180
Total exports	7 794	8 162	9 001	9 201	8 170	8 510
% Change	+0.2%	+4.7%	+10.3%	+2.2%	-11.2%	+4.2%



LAMB AND MUTTON

- Lamb export revenue is forecast to fall 10 percent in the year ended June 2017, to \$2.3 billion. Falling breeding ewe numbers and an increase in retained stock to rebuild flock numbers are behind this forecast fall.
- Provisional data shows that total sheep numbers fell 1.5 million in the year to June 2016 to 27.6 million, which was a bigger decline than previously estimated.
- A slight improvement in the lambing rate compared to last year has partly offset a fall in the number of breeding ewes. Spring weather (in late 2016) was more favourable for lambing than the year before, particularly in the South Island. Gains were more limited in the North Island because of wet weather and issues with facial eczema.
- The current slaughter season has started slowly as a result of low growth rates combined with low schedule prices. However, store prices have been strong, indicating that farmers have good pasture availability and are confident that finishing stock to higher weights later in the season will pay off.
- Mutton export revenue is forecast at \$370 million for the year ending June 2017, a decrease of 11.6 percent from the previous year. Similarly to the lamb story, this fall is primarily due to lower production as we expect farmers to retain more ewes and rebuild their flocks.
- Although lamb and mutton prices remain low, there are some positive signs in Europe and China. New Zealand isn't quite benefiting from these rising prices just yet because of the strong New Zealand dollar, but if these trends continue and the dollar falls, New Zealand should start to see better export and farmgate prices.
- MPI has signed an arrangement with Iran providing sanitary requirements for beef and sheep meat exports, which aims to revive a long-dormant trading relationship. Iran was a major destination for New Zealand lamb in the 1980s, but trade ceased in the 1990s.

WOOL

- Wool export revenue is forecast to fall 19 percent to \$620 million in the year ending June 2017. Average export prices have fallen from last year's high levels, and are now forecast to fall from \$NZ6.75 in the year ended June 2016 to \$6.00 per kg.
- Exports continue to suffer from a lack of demand, particularly from China. China is the largest destination country for New Zealand wool, but over the past year our wool exports to China were down 33 percent.
- Recent reports note that consumer demand has shifted towards Merino and other fine wool and away from the crossbred wool that comprises most of New Zealand's production. Fine wool export prices have risen over the past year in contrast to coarser grades.
- Volumes are forecast to recover in 2018, but wool export prices may remain subdued until inventory is worked through and demand from China returns.

BEEF & VEAL

- Beef export revenue for the year ending June 2017 is forecast to fall 16.8 percent to \$2.6 billion. This is little changed from the previous forecast, as a brighter price outlook mostly offsets lower production and export volumes.
- Provisional livestock data shows that the total beef herd was 3.5 million as at 30 June 2016, 2.1 percent lower than the year before.
- Beef production is forecast to decline by 70 000 tonnes to 605 000 tonnes, most of which is due to cow slaughter numbers returning to normal levels.
- Weather conditions affecting lamb production are also affecting the beef market. Poor pasture quality has impacted both cattle growth rates and processing numbers.
- Beef production from July to December 2016 was 9.1 percent below the same period last year but 2.5 percent above the five-year average. Most of the year on year decline was expected based on the lower dairy cow cull rate. Weather and market conditions are pointing towards a slightly backloaded season with somewhat higher production rates (compared to the previous season) expected through to June 2017.



- Average export prices have fallen by less than previously forecast so far this year. One driver behind this is increased sales to the higher priced markets of South Korea and Japan and fewer sales to the United States so far this year.
- Meanwhile in Australia, beef cattle herds are still in a rebuilding phase following drought, so production and exports are constrained this season.
- The US remains the primary destination for New Zealand beef exports, and US prices remain soft. US beef production has been expanding, leading to downward price pressure and fewer opportunities for imported beef.
- This year ten New Zealand meat plants will begin exporting chilled beef and sheep meat to China on a trial basis. Chilled meat sells at a premium to frozen meat, so if successful this trial will provide additional opportunities to expand the value of New Zealand's exports.
- Until the recent food safety investigation was announced, Brazilian beef exports had a positive outlook, with market access gains into China resulting in increased export volumes over the past year. Market access into the US has not yet resulted in significant export volumes, and New Zealand will continue to have better access to the US via larger tariff quotas.
- In late January, Russia suspended imports of New Zealand beef and offal. The Russian market accounted for under \$15 million beef and offal exports in the 2016 calendar year.

VENISON

- Venison exports are forecast to decrease 10.4 percent to \$160 million in 2017, as lower production volumes offset slightly higher prices.
- Provisional livestock data shows New Zealand's deer population at 853 000 as at 30 June 2016, down from 900 000 in the previous year.
- Venison slaughter rates continue to be much lower than the declining deer population would indicate. This could mean that more hinds will be retained for breeding next year.
- Average export prices for venison remain strong and are forecast to remain elevated, at least partially due to good volumes of higher priced chilled venison being sold.





FARM MONITORING: PROFIT FALLING AND REVENUE REMAINS VOLATILE

Beef + Lamb New Zealand (B+L) regularly publish data on farm performance and profitability to monitor the sector and provide baseline data against which farms can be benchmarked. The data below is based on B+L's Sheep and Beef Farm Survey Class 9, reflecting a weighted average of all 8 farm classes. B+L also publish an array of regional and system-specific surveys. For example, sheep and beef farmers in the Eastern North Island can refer to the physical and financial data for either hard hill country, hill country, or intensive finishing systems⁵.

B+L's most recent forecast for the current 2016/17 season indicates an expectation of significantly lower farm profit. This is the third consecutive year of falling profits. Lower gross revenue has been offset somewhat by lower expenditures in fuel, fertiliser, and particularly in interest expenses.

The key drivers of the expected lower revenue are prices for sheep and wool. MPI expects both of these to remain low over the coming two years, while commodity prices and interest costs are expected to rise. This will prevent any noticeable improvements in farm profitability in the near future.

⁵ For more information, see:

<http://www.beeflambnz.com/information/on-farm-data-and-industry-production/sheep-beef-farm-survey/>

FIGURE 7: CHANGE IN SHEEP AND BEEF FARM REVENUE AND EXPENSES, 2010-2017

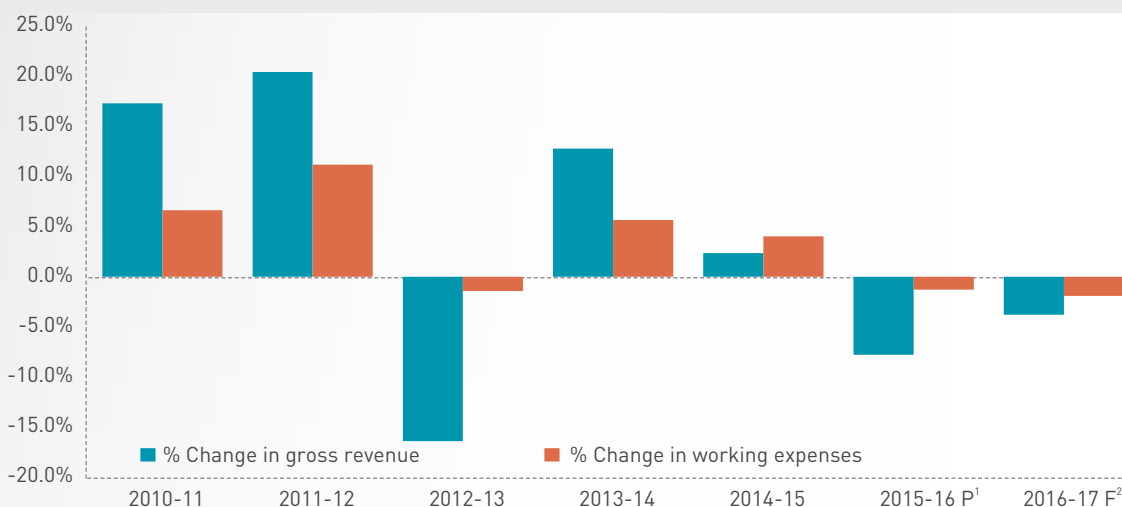


TABLE 6: NEW ZEALAND AVERAGE SHEEP AND BEEF FARM PERFORMANCE PER HECTARE, 2010-2017

	Actual					Provisional Forecast	
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Total Gross Revenue	671	808	675	762	780	719	692
Total Farm Expenditure ³	501	557	549	581	604	596	585
Farm Profit before Tax	+169	+250	+126	+181	+175	+123	+107

Notes:

1 Provisional.

2 Forecast.

3 Includes all working expenses, depreciation, interest, rent, and managerial salaries.



Forestry



Log harvesting and exports were at a record rate in 2016, driven by high log prices.



An increasing supply of harvestable wood over the next 5 years is driving an increase in the export forecast.



A growing domestic housing market is driving increases in sawn timber production.

HARVEST RECORDS BEING FELLED

- Strong Chinese demand is once again driving log exports to record highs. Low shipping costs and greater demand from China are combining to drive harvesting to record levels.
- Over 70 percent of New Zealand's log exports were sent to China in the 2016 calendar year. This market has been extremely volatile in the past, with import demand being driven by fluctuations in the housing market. This creates a downside risk to our forecast if China continues to follow a boom and bust pattern.
- China has significantly increased imports of logs and sawn timber in the past year. An expanding housing market is stimulating demand and reforms to environmental law to protect natural forests are reducing China's domestic supply, leaving the door open for greater imports. However, New Zealand sawn timber exporters have missed out due to strong competition from other exporters. Russian and Canadian timber is cheaper than ours, and also has more end uses so

Chinese importers prefer to source timber from those countries (plus the US) if there is product available.

- Sawn timber export volumes fell 3 percent in the 2016 calendar year, with big drops in exports to China (-16 percent), Australia (-13 percent) and Viet Nam (-12 percent). Prices and volume of sawn timber exported to the US both increased, although at a slower rate than the previous year.
- US imports of sawn timber from Canada are expected to be hit with an import tariff of up to 27 percent after the expiry of the Softwood Lumber Agreement between the countries. Demand for timber in the US is so high at the moment that this may not have a significant impact on the volume crossing the border but this could push up prices in New Zealand's highest value export market.
- Pulp and paper export values fell in 2016, but we still expect long-term price increases for chemical pulp in Asia. Paper consumption will rise with increasing wealth and urbanisation in these areas.

TABLE 7: FORESTRY EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Logs	1 855	2 541	2 059	2 224	2 640	2 920
Sawn Timber & Sleepers	880	885	779	892	900	980
Pulp	552	611	634	689	620	680
Paper & Paperboard	546	519	520	569	550	580
Panels	436	407	451	512	480	500
Chips	67	51	52	64	70	70
Other Forestry Products	190	185	186	190	180	180
Total exports	4 527	5 199	4 682	5 140	5 440	5 920
% Change	+4.6%	+14.9%	-9.9%	+9.8%	+5.8%	+8.8%



- Panel product exports increased in 2016, with stronger prices in Japan, New Zealand's main export market. Exports to the Philippines and the US also increased, but the higher value market of Australia has continued to fall away.

HARVEST SET TO CLIMB

- The annual harvest reached a new record in 2016 and is set to climb further, driven by high log prices. Over 30 million m³ was harvested in the 2016 calendar year, an increase of 5.4 percent from the previous year.
- Wood availability will increase over the next five years due to the high rate of planting in the early 1990s. The Wood Availability Forecasts published in 2016 show that a long term sustainable rate for harvesting would reach about 32 million m³ in 2022. Harvest levels above this would end up being balanced by future reductions. However, we now expect this rate to be exceeded by 2018 as strong log prices encourage earlier harvesting.
- The September quarter harvest was 10 percent larger than in the June quarter, continuing a trend of greater volumes of wood being available for harvest. We expect most of this increased harvest volume to be exported as logs as there are no strong signals that domestic processing capacity is going to expand to handle the extra volume in the next 2-3 years.

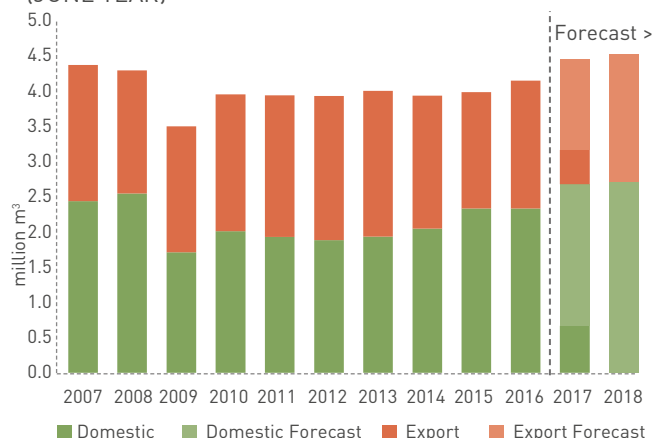
DOMESTIC DEMAND DRIVING SAWN TIMBER PRODUCTION

- Recent sawn timber production increases have been driven by the domestic market. Increased building activity in Auckland and Canterbury has driven domestic consumption of sawn timber up 7 percent in the year to September 2016.
- This has affected the export market, with companies redirecting product towards the domestic construction market where possible. This suggests that there is some risk to our sawn timber export forecast if the domestic market continues to expand.
- Growth in residential building is forecast to slow, but remain at high rates over the next five years. This means that a large proportion of sawn timber consumption will continue to be consumed in the domestic market.
- In order for sawn timber production to exceed current forecasts extra processing capacity would be required. Exports of sawn timber are likely to be constrained by strong competition from China and the US, while exports of pruned products will also be constrained by a lack of pruned log availability.

FIGURE 8: QUARTERLY LOG PRICES AND HARVEST VOLUMES



FIGURE 9: SAWN TIMBER PRODUCTION FORECAST (JUNE YEAR)





Horticulture



Wine export growth is not expected to be significantly affected by the Kaikōura earthquake, but growth prospects are slightly more conservative due to some uncertainty in key markets.



Apple and pear exports remain on track to reach \$1.0 billion within the next five years



Kiwifruit export forecasts are similar to the December Outlook – approaching \$1.8 billion by 2018.

DIVERSE SOURCES OF GROWTH IN HORTICULTURE EXPORTS

- Growth in export value to \$6.3 billion by 2021 will be led by kiwifruit and supported by strong ongoing growth prospects for wine, and apple and pear exports.
- Vineyard expansion, the release of more Gold3 kiwifruit licences, and the replanting and expansion of apple orchards are driving an expectation of strong volume growth in the next 3-4 years.
- Marlborough's wine area is potentially expanding by five thousand hectares (25 percent) towards 2020, Zespri is planning to release 400 hectares of Gold 3 Kiwifruit licences annually for the next three years, and apple and pear planted areas could exceed eleven thousand hectares (an increase of 11 percent from current levels) by 2020.

KIWIFRUIT PRODUCTION STEADY

- Kiwifruit exports for 2017 are forecast to be \$1.7 billion, relatively unchanged from the previous year. With increased plantings of gold varieties expected over the next few years, exports are forecast to exceed \$1.8 billion by 2018.
- June 2017 year exports include a large proportion of the record crop from 2016, which is why our forecast remains steady for the year despite production receding in 2017. Export of the 2017 crop will commence in April.
- Green kiwifruit production is expected to fall in 2017 as lower spring flower numbers signal orchard productivity falling back to normal levels after last year's record crop. Green kiwifruit export prices are expected to increase around 10 percent in response to the lower volumes.

TABLE 8: HORTICULTURE EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Kiwifruit	934	931	1 182	1 673	1 670	1 780
Wine	1 204	1 323	1 408	1 558	1 610	1 710
Apples & pears	484	547	571	701	770	830
Fresh & processed vegetables	600	606	588	612	610	650
Other horticulture	318	373	416	438	510	470
Total exports	3 540	3 780	4 165	4 982	5 170	5 440
% Change	-0.4%	+6.8%	+10.2%	+19.6%	+3.8%	+5.2%



- In contrast, gold kiwifruit production is expected to increase again in 2017 as maturing orchards increase in productivity. This trend is expected to continue with further expansion of the Gold3 variety forecast for the next few years.
- Prices for gold kiwifruit are forecast to remain at current levels. Higher export volumes are expected to be met with increasing demand which will serve to stabilise prices.
- Green kiwifruit volumes are forecast to gradually decline over the outlook period. Around half of the anticipated release of further gold kiwifruit licences are expected to be grafted onto green rootstock.

SLOWER WINE EXPORT GROWTH FORECAST

- Wine exports are forecast to reach \$1.6 billion for the year ending June 2017. This represents a small improvement on the previous year, but is slightly lower than our previous estimate in December.
- The November 2016 earthquake is causing logistical and storage challenges for wine companies in the Marlborough region. Wineries are working to repair and/or replace tanks. Although some wineries will not complete this work prior to this season's harvest, business loss will be constrained given the use of temporary storage and processing solutions.
- The export price per litre expectations for 2017 have been lowered by 55 cents to \$6.70 per litre. A spike in export volumes post-earthquake partly reflects an effort by wineries to free up tank space for the upcoming 2017 vintage. Consequently there has been an increase in the proportion of bulk wine exported, currently tracking at around 37 percent of total exports by volume (usually around 30 percent). Bulk wine export prices are lower than those for bottled wine.
- The 2017 vintage is forecast to be 410 000 tonnes, which is slightly lower than 2016, but will comfortably be the third largest New Zealand vintage recorded.
- Exports of wine are forecast to reach \$1.7 billion by 2018. This is slightly more conservative than the previous December forecast of \$1.8 billion, and reflects

trade uncertainty in the US and the EU, where protectionist sentiment may affect demand for imported wine.

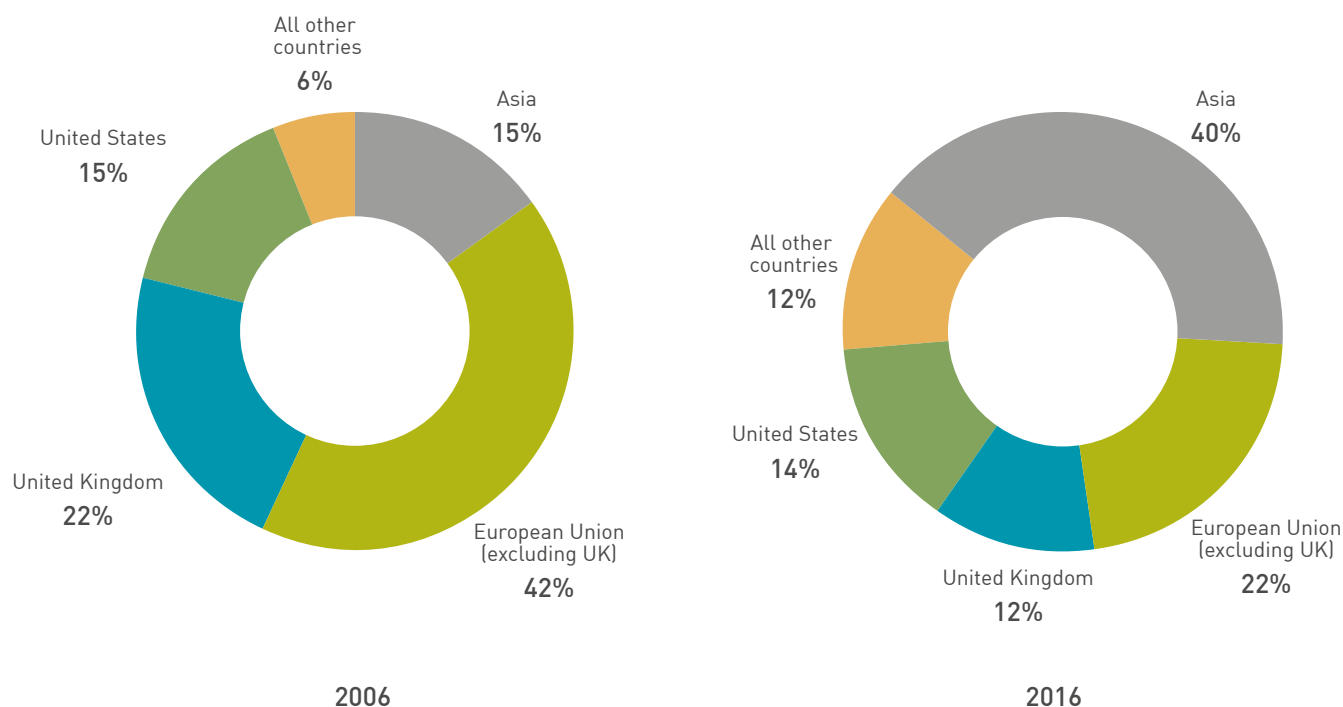
- On a positive note, the industry body New Zealand Winegrowers, is working closely with Auckland Airport to drive wine tourism across all New Zealand regions. The goal of the *NZ Wine Pure Discovery Project* is to grow participation in wine tourism and increase the availability of high quality tourism experiences. It is anticipated that positive in-bound visitor experiences will enhance the demand for New Zealand wine when visitors return to their home countries.

RECORD APPLE EXPORTS EXPECTED

- Apple and pear exports are expected to reach record levels for the 2017 harvest, at 387 000 tonnes. This is slightly higher (9000 tonnes) than our December estimate, due to favourable growing conditions and minimal hail damage.
- Diversification of variety mix towards Intellectual Property protected varieties continues. A new apple variety was launched from the New Zealand apple and pear breeding programme in December 2016, to be marketed under the Dazzle® brand.
- Our outlook for export prices in New Zealand dollar terms for 2017 and beyond remains unchanged. We retain a conservative view, with modest year on year increases compared with recent years.
- Changes in the variety mix and further expansion into higher-paying markets (particularly Asia) are expected to lift export prices. However, these increases will be tempered by the following factors:
 - the need for better alignment of supply with market demand for niche varieties such as New Zealand Queen;
 - rising global apple supply providing increased competition;
 - a forecast higher New Zealand dollar against the euro and British pound compared with the 2016 exporting season.



FIGURE 10: APPLE AND PEAR EXPORT VOLUMES BY DESTINATION, 2006 AND 2016 (YEAR ENDED 31 DECEMBER)



ORCHARD/VINEYARD MONITORING FOR THE HORTICULTURE SECTOR

The farm monitoring data below shows selected orchard and vineyard models for the three largest horticulture sectors⁶.

Unlike the pastoral farm monitoring data which include nationally representative farms, horticulture monitoring data is only presented for the main growing areas. Horticulture production systems vary widely from one region to the next based on local microclimates and the suitability of different varieties in different areas:

- **Apples and pears:** a Nelson pipfruit orchard model is available in addition to the Hawke's Bay model shown on the following page.
- **Wine:** in addition to the Marlborough vineyard model summarised below, NZ Winegrowers and MPI co-produce reports on gross margins of selected grape varieties grown in Gisborne, Hawke's Bay, Wairarapa, and Marlborough.
- **Kiwifruit:** the kiwifruit monitoring report will include green and gold orchards, as well as mixed-variety orchards. The model presented below is based on a 6 hectare orchard with 4 hectares in green and 2 hectares in gold kiwifruit.

Like other sectors, horticulture orchard and vineyard data show considerable variability. The Marlborough vineyard model, for example, has had several good years since 2010 but has experienced larger swings in revenue than expenses. This is due more to swings in production per hectare rather than volatile prices. A smaller vintage is forecast for 2017 which is expected to produce lower vineyard revenue, thus continuing the volatile trend shown in the chart over the page.

Viticulture expenses are also less exposed to commodity prices relative to the pastoral sectors—fuel and fertiliser make up just 3 percent of expenses, while wages account for nearly 40 percent.

⁶ Monitoring data for pipfruit and viticulture are available at the link below, and the kiwifruit sector will be added later in 2017: <http://www.mpi.govt.nz/news-and-resources/open-data-and-forecasting/agriculture/>



FIGURE 11: CHANGE IN WINE VINEYARD REVENUE AND EXPENSES, 2010-2016

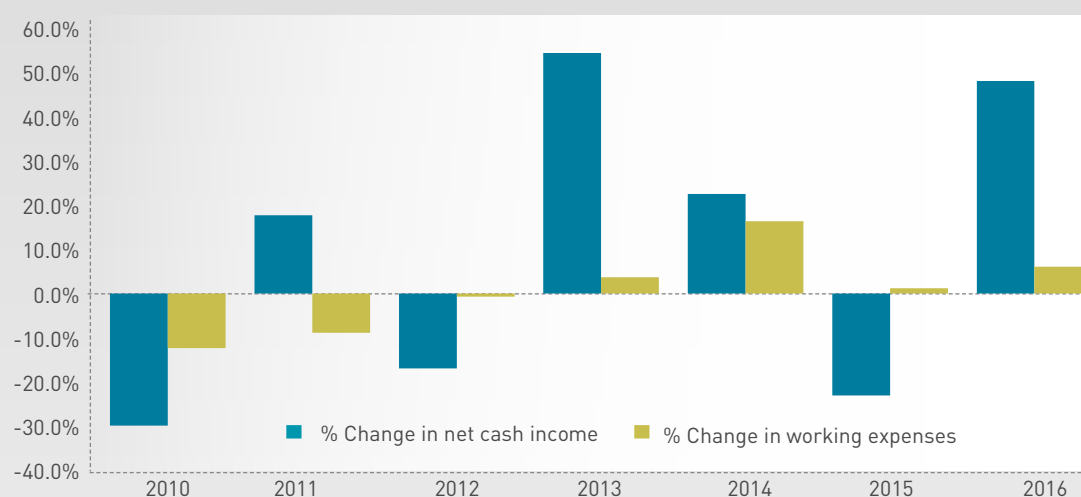


TABLE 9: ORCHARD/VINEYARD MODEL FINANCIAL DATA FOR APPLES & PEARS, WINE, AND KIWIFRUIT, 2013-2016

	Actual			Forecast
	2013	2014	2015	2016
Hawke's Bay pipfruit orchard model				
Net cash income (\$/ha)	39 633	40 073	46 113	49 485
Orchard working expenses (\$/ha) ¹	25 660	25 223	27 583	28 325
Cash operating surplus (\$/ha)	13 973	14 850	18 530	21 160
Marlborough vineyard model				
Net cash income (\$/ha)	20 860	25 437	19 733	28 960
Vineyard working expenses (\$/ha) ²	10 420	12 076	12 220	12 945
Cash operating surplus (\$/ha)	10 440	13 360	7 513	16 015
Bay of Plenty kiwifruit orchard model				
Net cash income (\$/ha)	58 734	55 908	63 177	72 222
Orchard working expenses (\$/ha) ³	29 874	28 850	33 955	35 874
Cash operating surplus (\$/ha)	28 859	27 058	29 222	36 347

Notes:

1 Excludes depreciation, interest, and lease expenses and includes wages of management.

2 Monitoring data for pipfruit and viticulture are available at the link below, and the kiwifruit sector will be added later in 2017: <http://www.mpi.govt.nz/news-and-resources/open-data-and-forecasting/agriculture/>

3 Also excludes overhead expenses.



Seafood



New Zealand seafood exports are forecast to reach \$1.8 billion in the year ending June 2017 and \$1.9 billion by 2018. This is expected to be mostly driven by price rises rather than volume increases.



Due to the limited growth potential for wild capture fisheries due to sustainability objectives, volume growth is forecast to be driven primarily by aquaculture as new salmon farms begin production and more hatchery-bred mussel spat become available.



Export prices (in USD) are starting to recover following a softening since mid-2014 and are expected to rise further as the global economic outlook improves. Prices will also be buoyed by the limited supply potential of global wild capture fisheries.

SEAFOOD PRODUCTION STEADY

- New Zealand's seafood export earnings rose 13.1 percent (\$204 million) to \$1.8 billion in the year ended June 2016. This was primarily driven by rising prices due to increased demand and a depreciating New Zealand dollar.
- Seafood sector export earnings are expected to grow by an average of 4.6 percent per year and reach \$1.9 billion in the year ending June 2018.
- Forecast growth in total seafood export values are expected to be mostly underpinned by an increase in prices (3.7 percent per year).
- Production from wild capture fisheries contributes nearly 80 percent to New Zealand's total seafood export revenue. However, there is a limited scope for production growth from wild capture fisheries due to sustainability objectives.
- We expect a slight improvement in wild capture export volumes in the latter part of the outlook period as fisheries are expected to rebuild, resulting in an average 0.5 percent increase in export volumes per year.
- Aquaculture, however, has growth potential. We expect a further increase in salmon production from three new farms in the Marlborough Sounds. The first two farms are already operational and production from the third

TABLE 10: SEAFOOD EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Wild capture fisheries						
Volume (000 tonnes)	266	244	269	256	242	249
Price (\$/kg)	4.70	4.76	4.61	5.38	5.70	5.95
Revenue (\$NZ million)	1,250	1,161	1,240	1,375	1,380	1,480
Aquaculture						
Volume (000 tonnes)	38	37	34	36	39	41
Price (\$/kg)	7.74	9.10	9.43	10.85	10.35	10.75
Revenue (\$NZ million)	296	339	322	392	400	440
Total seafood sector						
Volume (000 tonnes)	304	281	303	292	281	291
Price (\$/kg)	5.09	5.34	5.15	6.06	6.35	6.60
Revenue (\$NZ million)	1 546	1 500	1 562	1 766	1 780	1 920
% Change	+0.1%	-2.9%	+4.1%	+13.1%	+0.8%	+7.9%

farm will be available from 2018. Similarly, mussel production is expected to be supported by hatchery-bred juveniles, which are currently being trialled and are expected to gradually come online from 2018.

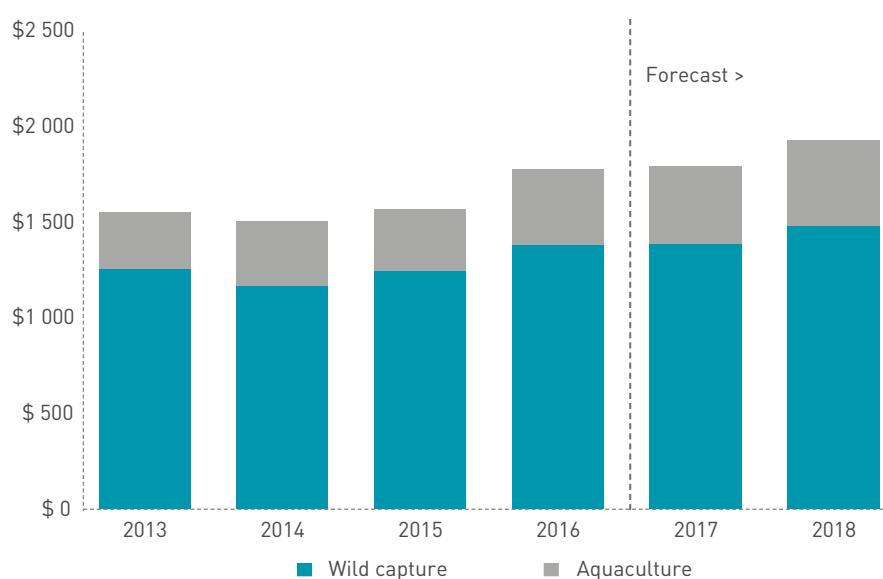
- As a result, aquaculture export volumes are forecast to grow by 4.8 percent annually during the outlook period.

DEMAND SCALING UP IN KEY EXPORT MARKETS

- Demand from our key export markets continued to grow in the June 2016 year compared to the previous year. Key export markets continue to be China (32 percent of the total value), Europe (15 percent), Australia (14 percent), the US (13 percent) and Japan (6 percent). Exports to the Australian market in terms of value has remained resilient, despite a depreciating Australian dollar against the NZD.

- Seafood prices, mainly of wild capture fisheries, have significantly improved since mid-2016 (up 14 percent in the last two quarters). This is potentially due to lower global supply of major wild species such as Alaska pollock and anchoveta in 2016 combined with increased demand. As supply recovers, prices are likely to be softened in the short run, but are expected to recover alongside an improving global economic outlook in the out years.
- During the outlook period, seafood export prices in NZD are expected to increase by 3.7 percent per year driven by increasing demand from our key export markets, combined with limited global supply of wild capture fisheries.

FIGURE 12: SEAFOOD EXPORT REVENUE 2013-2018 (\$NZ MILLION)





Arable



Export seed revenue is expected to fall to \$180m in the year ending June 2017, down 11 percent from the previous year.



Weak demand for herbage seeds and a stronger NZ dollar are the main contributors to the decrease.



The outlook in the domestic market for feed grain is improving with demand starting to pick up from the dairy sector but low international prices will keep a cap on domestic prices.

PRODUCTION OUTLOOK VARIABLE ACROSS SECTOR

- Harvesting is underway for cereals and herbage seeds with yields generally expected to be average to above average.
- The growing season started well for most crops with a mild winter and moist spring but December and January were variable with some cooler temperatures and a shortage of sun, impacting on quality and yields for some growers. There was some pressure from diseases in cereal crops and wind causing lodging in some areas.
- Maize grain had a difficult season with planting delayed by cold and wet conditions. The planted area was down 2750 hectares (15.6 percent ⁷) on the previous year. Crops are reported to be picking up and yields are expected to be average.
- Vegetable seed crops to be harvested in February and March are reported to be doing well with above average yields expected.

⁷ Source: Arable Industry Marketing Initiative: Survey Of Maize Areas And Volumes – October 31 2016

MARKET STRONGER FOR VEGETABLE SEED THAN HERBAGE SEED

- The outlook for herbage seeds is subdued with low international demand and the high NZ dollar affecting the export market. Overseas buyers are reluctant to increase stocks while agricultural commodity prices are low. Some increase in demand is expected in the domestic market with a better outlook for the dairy sector.
- We forecast export prices of \$2.61 for ryegrass seeds (down 4 percent from 2016) and volumes of 14.4 thousand tonnes (down 15 percent from 2016).
- Although the export value of vegetable seeds is expected to be down 3 percent on 2016, the outlook remains positive. A poor harvest in Europe last year should strengthen demand in 2017 and demand is expected to remain stable in other markets. The exchange rate has less impact on these high value seeds with limited options for sourcing them in the southern hemisphere.

TABLE 11: ARABLE EXPORT REVENUE, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Vegetable seed	80	66	62	74	70	75
Ryegrass seed	68	55	49	46	40	40
Clover/Legume seed	21	20	22	20	15	15
Other grains and seeds	55	87	44	65	55	60
Total exports	225	228	177	205	180	190
% Change	+30.4%	+1.3%	-22.1%	+15.5%	-12.1%	+5.6%



GRAIN DEMAND FROM DAIRY SECTOR STARTING TO RETURN

- The outlook for domestic feed grain is improving with demand starting to pick up from the dairy sector. Most of last year's wheat and barley stocks have been delivered but little of the 2017 crop has been contracted yet. Spot sales are showing a gradual lift in prices for feed wheat, barley and maize grain. A significant reduction of 8600 hectares⁸ in sown barley (down 21 percent) from the previous year may help lift its price.
- While the industry feels more optimistic and demand is returning for domestic grain, low international prices due to a global oversupply will keep a cap on prices. Australia, the main source of grain imports to New Zealand, is on track to have a record breaking wheat harvest of 32.6 million tonnes. The strong NZ dollar is also making imported grain an economical option.

⁸ Source: Arable Industry Marketing Initiative: Survey Of Cereal Areas And Volumes – October 10, 2016

ARABLE OPPORTUNITIES & CHALLENGES

- The arable sector is currently managing incursions of velvetleaf, black-grass, pea weevil and red clover case bearer moth.
- Infrastructure damage from the Kaikōura earthquake has increased the cost of moving grain from the South Island to the North Island. Transport companies have added considerable surcharges to freight, increasing the competitiveness of imported grain. At the time of writing (February 2017), Australian feed wheat was \$256 per tonne landed in Auckland while feed wheat in Canterbury was \$293 per tonne.





Other Primary Sector



Export revenue for Other Primary Sector Exports and Foods are now forecast to reach \$2.3 billion in 2017 and to grow slightly in the following year.



Honey export volumes continue to remain low due to increasing stocks and a poor production season. While export volumes have continued to slow to Australia, China and Hong Kong, volumes have increased to the United Kingdom.



In 2016, 22 796 cattle were exported to China, and in 2017 this is expected to raise to 30 000-35 000 cattle.

GROWTH IN OTHER PRODUCT EXPORT VOLUME SLOWING

- Recent trends indicate that exports of other primary sector products is forecast to fall 4.5 percent in the year ending June 2017, to \$2.3 billion. Exports are forecast to recover in 2018.
- Lower volumes of innovative processed foods and honey continue to be the main drivers of change in this outlook.
- This category includes a wide range of products such as live animals, honey, and processed foods such as chocolate and tomato sauce.

INNOVATIVE PROCESSED FOOD VOLUMES DROPPING

- The rapid expansion in innovative processed food exports to China, Hong Kong, and Australia in 2015 and 2016 has slowed in 2017.
- While the average price for innovative food products dropped back slightly in the December quarter, it is still higher than during much of 2016.

HONEY EXPORT VOLUMES REMAIN LOW: PRICES STEADY

- The fall in export volumes in the September quarter has continued into the December quarter, with the volumes exported to Australia, Hong Kong and China continuing to be much lower than in recent years.

TABLE 12: OTHER PRIMARY SECTOR EXPORT REVENUE FORECAST, 2013-2018 (\$NZ MILLION)

YEAR TO 30 JUNE	Actual				Forecast	
	2013	2014	2015	2016	2017	2018
Innovative Processed Foods	339	330	468	679	600	610
Sugar & Confectionery Products	263	290	293	312	320	330
Honey	145	187	233	315	280	290
Cereal Products	264	253	253	271	290	280
Live Animals	238	208	370	242	260	270
Soups & Condiments	196	192	183	187	180	190
Other Products	246	217	289	370	350	360
Total exports	1 691	1 677	2 089	2 376	2 270	2 330
% Change	+9.2%	-0.8%	+24.6%	+13.7%	-4.5%	+2.6%

Exports and Foods

- The New Zealand honey crop for 2017 is predicted to be much smaller than recent years due to unfavourable climatic conditions impacting flowering and nectar flows and/or bee activity in several districts.
- Prices in the December quarter held steady in most markets, with some markets starting to show signs of a slight fall in prices.
- MPI is developing criteria and test methods for identifying New Zealand mānuka honey. MPI is engaging with the sector on how this definition will be applied through changes to the requirements for export honey.

SWEETS AND SOUPS EXPORTS STICKING NEAR CURRENT LEVELS

- Exports of sugar and confectionery, and soups and condiments in 2017 are continuing at similar levels to 2016 at around \$500 million. Recent trends indicate that growth in these sectors is likely to remain low for the forecast period.
- The owners of the Dunedin Cadbury factory recently announced that it will be closed in 2018, so exports may begin to decrease in the sugar and confectionery sector.

SMALL INCREASE IN LIVE ANIMAL EXPORTS

- The value of exports of live cattle is predicted to increase in 2017. However long term trends are difficult

to forecast and can fluctuate due to the nature of this trade which is subject to an intermittent demand from a range of countries, changing regulatory requirements and the supply of animals.

CEREAL PRODUCT EXPORTS TO CHINA EMERGING

- Exports to China are small but growing fast, with the key products being biscuits and breakfast cereal. While the strong increase in the September quarter 2016 did not continue into the December quarter, exports are still on track to be up on last year. Exports for the September and December quarters were \$8 million: only 3 million less than exports for the whole of 2016.
- Australia continues to be a reliable destination for almost 80 percent of our exports.

SLOWING GROWTH IN OTHER PRODUCTS

- Products in this category are a mixture of various low volume niche products.
- Growth in this sector between 2014 and 2016 is not continuing into 2017. Exports to Japan and the United States began to slow in the December quarter. The decline in exports to Australia has continued into the December quarter.

APICULTURE MONITORING: MORE HIVES ENTERING PRODUCTION

The 2016 Apiculture Monitoring Report shows strongly increasing numbers of registered beekeepers and hives. Good market demand for New Zealand mānuka honey is the main driving force behind these increases.

Although the 2015/16 honey crop is estimated at record levels, honey production per hive fell 15 percent from the previous year. This is likely due to a combination of the increasing focus on maximising economic return per hive rather than honey yield per hive, adverse climatic effects in some areas, irregular flowering of certain crops, and hive stocking issues.

TABLE 13: NEW ZEALAND HONEY PRODUCTION 2011-2016

YEAR TO 30 JUNE	2011	2012	2013	2014	2015	2016
Number of registered bee hives	390 523	422 728	452 018	507 247	575 872	684 046
Honey yield (kg/hive)	24.2	24.6	39.4	34.7	34.2	29.1
Annual honey production (tonnes)	9 450	10 385	17 825	17 600	19 710	19 885

Appendix

Primary Industries in the New Zealand Economy

78%

of exports

Over 78 percent of New Zealand's merchandise exports are from the primary sectors. This figure has increased over the past five years from 72 percent in 2012, indicating that the primary industries will continue to be the dominant exporting sector for the foreseeable future.



16%

of employment

16 percent of New Zealand's workforce is employed in production, manufacturing, and support services in the primary sector. While the largest number of these jobs are located in Auckland, Canterbury, and Waikato, the regions with the highest percentage of the workforce in the primary sector are Tasman, Marlborough, Gisborne, and Hawke's Bay.



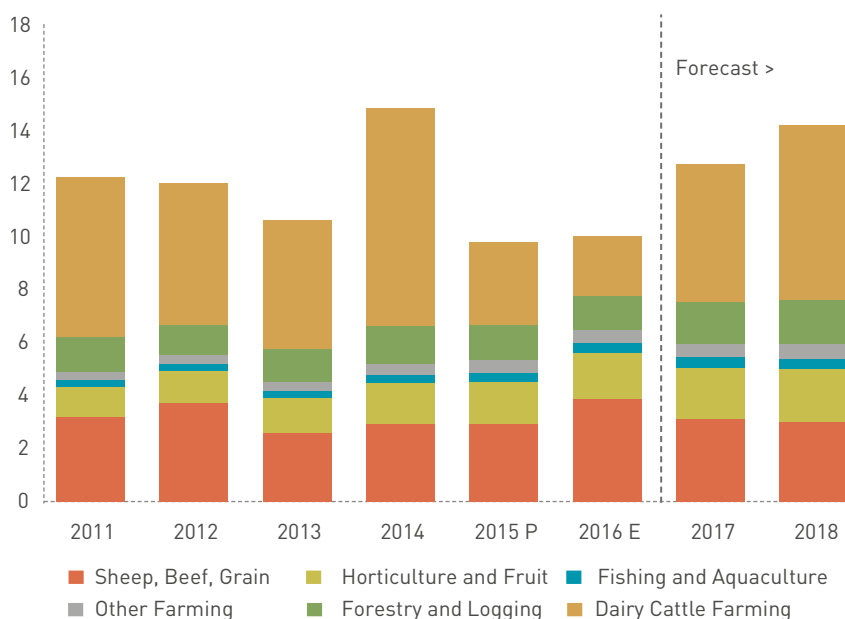
10%

of GDP

The primary industries contribute \$22.2 billion annually to the New Zealand economy, which is 10 percent of New Zealand's total GDP of \$224 billion. This includes the \$10 billion from primary production shown in figure 13 below, as well as food manufacturing, wood processing, and primary production support services of \$12.2 billion.



FIGURE 13: PRIMARY INDUSTRIES CONTRIBUTION TO GDP (EXCLUDING PROCESSING SECTORS), YEAR ENDED MARCH 2011-2018 (\$NZ BILLIONS)





CHANGES IN FORECAST SINCE LAST PUBLICATION

Since our last publication in December 2016, our outlook for 2017 exports has increased by \$800 million.

The main driver for this is higher dairy export revenue driven by a strong December quarter. The outlook for forestry has also been raised notably due to Chinese log demand continuing to expand.

FIGURE 14: EXPORT FORECAST CHANGES FROM DECEMBER (NZ\$ BILLION)

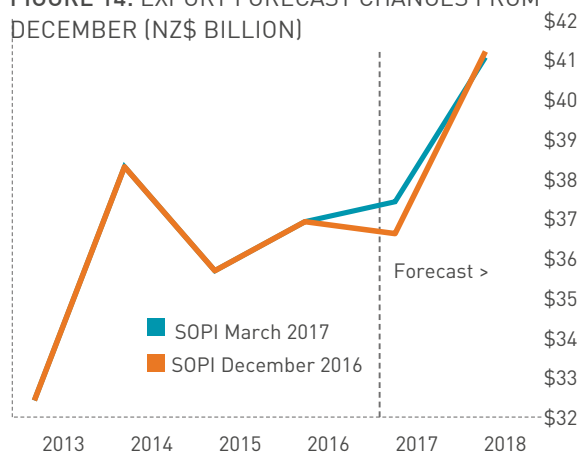


TABLE 14: EXPORT FORECAST COMPARISON (NZ\$BILLION)

	YEAR TO 30 JUNE	Actual				Forecast	
		2013	2014	2015	2016	2017	2018
Dairy	March update	13 139	17 791	14 050	13 289	14 450	16 780
	December Update	13 139	17 791	14 050	13 289	13 690	17 030
	Difference	-	-	-	-	+ 760	- 250
Meat & Wool	March update	7 794	8 162	9 001	9 201	8 170	8 510
	December Update	7 794	8 162	9 001	9 201	8 210	8 520
	Difference	-	-	-	-	- 40	- 10
Forestry	March update	4 527	5 199	4 682	5 140	5 440	5 920
	December Update	4 527	5 199	4 682	5 140	5 330	5 630
	Difference	-	-	-	-	+ 110	+ 290
Horticulture	March update	3 540	3 780	4 165	4 982	5 170	5 440
	December Update	3 540	3 780	4 165	4 982	5 190	5 460
	Difference	-	-	-	-	- 20	- 20
Seafood	March update	1 546	1 500	1 562	1 766	1 780	1 920
	December Update	1 546	1 500	1 562	1 766	1 790	1 890
	Difference	-	-	-	-	- 10	+ 30
Arable	March update	225	228	177	205	180	190
	December Update	225	228	177	205	180	205
	Difference	-	-	-	-	-	- 15
Other	March update	1 691	1 677	2 089	2 376	2 270	2 330
	December Update	1 691	1 677	2 089	2 376	2 270	2 500
	Difference	-	-	-	-	-	- 170
Total exports	March update	32 461	38 338	35 727	36 959	37 460	41 090
	December Update	32 461	38 338	35 727	36 959	36 660	41 235
	Difference	-	-	-	-	+800	- 145



More primary industry data can be found on the MPI website:
www.mpi.govt.nz/news-and-resources/open-data-and-forecasting/

SOPi supplemental data

- Historical and forecast export volumes, values and prices

Agriculture

- Agriculture Production Statistics
- Livestock slaughter statistics

Forestry

- Wood Availability Forecast
- National Exotic Forestry Description
- Quarterly production and log prices

Agricultural Greenhouse Gas Inventory

Farm monitoring links

- DairyNZ Economic Survey 2014-15 (DairyNZ)
<https://www.dairynz.co.nz/publications/dairy-industry/dairynz-economic-survey-2014-15/>
- Sheep & beef farm survey reports (Beef + Lamb New Zealand)
<http://www.beeflambnz.com/information/on-farm-data-and-industry-production/sheep-beef-farm-survey/>
- 2016 Viticulture Model Vineyard Benchmarking Report Marlborough
<http://www.mpi.govt.nz/document-vault/13356>
- 2016 Viticulture Gross Margin Benchmarking Report
<http://www.mpi.govt.nz/document-vault/13353>
- 2016 Kiwifruit Benchmarking Report (not yet published)
- 2016 Pipfruit Monitoring Report
<http://www.mpi.govt.nz/document-vault/15292>
- 2016 Apiculture Monitoring Report
<http://www.mpi.govt.nz/document-vault/16621>

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