beef+lamb new zealand

Mid-Season Update 2021-22

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Beef + Lamb New Zealand
PO Box 121
Wellington 6140
New Zealand
Phone: 04 473 9150
Fax: 04 474 0800
E-mail: econ@beeflambnz.com

Contact:
Andrew Burtt: 027 652 9543
Chief Economist

Rob Davison: 04 471 6034
Executive Director

Rachel Agnew: 027 294 1276
Senior Agricultural Analyst

Angie Fisher: 027 442 0057
Senior Agricultural Analyst

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Executive Summary – Mid-Season Update 2021-22

Overview

The outlook for global sheepmeat and beef trade is positive for the 2021-22 season. Fundamentals in key markets are solid, with demand projected to continue to exceed supply.

Red meat export returns reached record highs in the first quarter of the season. Strong demand from the US and China has underpinned both sheepmeat and beef returns, and a tightening of global beef supply has added fuel to the global beef market.

The positive market sentiment is supported by the outlook for the NZD, which is favourable for NZ exporters. A greater proportion of the strong prices in New Zealand's export markets will flow into farm-gate returns.

Strong commodity prices are underpinning strong returns to farmers, supported by a weaker NZ dollar. Inflationary pressure, is however, causing on-farm costs to lift sharply, eroding the benefit of higher farm-gate returns. The primary sector is also constrained by the shortage of labour and continuing supply chain disruption because of COVID-19.

The red meat sector faces several key challenges domestically in 2022. These include uncertainty regarding the spread of Omicron, in particular, the impact on the processing sector. A severe labour shortage will continue to persist through 2022. The sector also continues to face uncertainty regarding changing climate change and environmental policy.

Economic Conditions

The COVID-19 pandemic remains the dominant driver of current global economic conditions. Despite the pandemic challenges, the global economy experienced a strong recovery in 2021, with some key markets transitioning from recovery to economic expansion. While growth is expected to decelerate in 2022, the global economy is expected to prove resilient against headwinds.

The spread of Omicron has highlighted the persistence of the pandemic and the potential for further variants of COVID-19 to emerge. The ensuing uncertainty will weigh on the global economy, however, there has been a shift in response from governments, with a move away from highly restrictive mitigation measures to an approach that is less disruptive to economies.

China is an exception to this balanced approach as it persists with its zero COVID-19 policy. This policy continues to cause pandemic-induced disruption and is expected to weigh on China's economic growth in 2022.

Economic conditions in New Zealand look firm for 2022. The path of the Omicron outbreak creates significant downside risk, however current economic indicators signal resilience to cope with any uncertainty and short-term disruption caused by the pandemic. Record high product prices are a key contributor to New Zealand's current buoyant economy.

Lamb and Mutton

Market fundamentals for New Zealand lamb and mutton exports are positive for the remainder of the 2021-22 season. Total lamb export receipts are forecast at $3.79 billion FOB, up 13 per cent on 2020-21.

Demand in all key markets for New Zealand lamb is strong. There is a limited global supply of sheepmeat, and strong consumer demand is supporting higher in-market prices.

The average NZD FOB value per tonne for lamb exports is forecast to reach a record high, lifting 14 per cent on 2020-21 to be 18 per cent above the average of the previous five years.

A lower NZD/USD, in comparison to last season, is a supporting factor to the strong outlook for export performance in 2021-22.

Lamb exports are forecast to be down one per cent on 2020-21 at 304,000 tonnes shipped weight.

At an exchange rate of USD0.69, the average lamb price is forecast at 802 cents per kg for 2021-22, up 15 per cent on the previous season and 17 per cent higher than the average for the previous five years.

The outlook for mutton in 2021-22 is strong, driven by strong demand from China. In 2021-22, total mutton meat exports are expected to decline 3.1 per cent to 92,000 tonnes. The average value of mutton exports is estimated to lift 10 per cent and total FOB receipts (including co-products) are expected to be up 7.1 per cent.

The expected lower value of NZD supports the strong outlook for export performance in 2021-22.

The annual average mutton price for the 2021-22 season is forecast at 539 cents per kg, up nine per cent on 2020-21, and 27 per cent up on the five-year average.

Challenges for the global outlook include uncertainty around further spread of COVID-19 and its variants, weaker economic conditions in China, ongoing global freight and supply chain disruption and geopolitical risk.

Beef

The outlook for the global beef market is buoyant, fuelled by strong demand, a lower exchange rate and a continuing favourable balance of demand over supply. However, an increase in Australian beef exports in the later part of the season does have the potential to apply competitive pressure to New Zealand beef exports in key markets.

Export revenue from beef and veal in the 2021-22 season is forecast to be $4.89 billion FOB, up 11 per cent on 2020-21. The increase results from a 1.8 per cent decline in the number of cattle processed being more than offset by a 12 per cent lift in the average export value.

Beef export production is forecast to decline 1.8 per cent on 2020-21 – from a record level – but it is still the second highest; up six per cent on 2019-20 and up 10 per cent up on the five-year average.

At USD0.69, the estimated 2021-22 average annual price for P steer/heifer is 562 cents per kg. It is forecast to average 381 cents per kg for M cow, which includes a large component of cull dairy cows, and 542 cents per kg for M bull.

Key challenges that the global beef trade will face in the 2021-22 season include logistics and shipping disruption, shifting consumer demand patterns in response in high beef prices and tightening monetary policy, and potential risk from further outbreaks of COVID-19.

Livestock Numbers

The total number of sheep at 30 June 2021 is estimated at 25.97 m, negligibly down 0.2 per cent on the previous June and 55 per cent lower than in 1990.

The number of beef cattle at 30 June 2021 is estimated at 4.02 m, up 3.7 per cent on the previous June and down 12 per cent on 1990.

The number of dairy cattle at 30 June 2021 is estimated to have increased 1.3 per cent to 6.28 m.

Wool

The outlook is for wool markets to remain challenging. The re-emergence of COVID-19 in China and a general slower growth in the Chinese economy disrupted manufacturing and is weighing on demand and prices. However, there was some positivity in the wool market in February because there was a lift in global activity, and this was reflected in prices.

Wool export revenue is expected to lift, supported by improving market prices and a sharply lower NZD. Average export receipts are expected to increase close to 30 per cent on last season.

The volume of wool that is exported in 2021-22 is forecast to decline 0.5 per cent on 2020-21 reflecting declining sheep numbers.

Sheep and Beef Farms

Gross farm revenue for 2021-22 under an exchange rate scenario of USD0.69 is forecast to average $667,300 per farm, up 10.8 per cent. This is driven by increased sheep revenue.

Wool revenue increases by 13.0 per cent to $27,800 per farm for 2021-22, as wool prices increase from a low base.

Sheep revenue, which is forecast to contribute around 52 per cent of gross farm revenue on average, increases 18.0 per cent to $344,100 per farm for 2021-22. Farmgate prices are high which offsets expectations for slightly fewer lambs and sheep to be sold.

Cattle revenue increases 1.0 per cent to $165,400 per farm for 2021-22, as international demand for New Zealand beef remains strong and slightly fewer animals are sold.

The weighted average total expenditure for all farms is estimated to increase 4.5 per cent to $500,400 per farm for 2021-22.

Fertiliser, lime, and seeds expenditure increases 15.6 per cent to average $96,300 per farm. High fertiliser prices are driving the large increase in costs for farmers even as they seek to reduce volumes applied. On average, around 19 per cent of total farm expenditure is on fertiliser, lime, and seeds.

Interest expenditure decreases 2.4 per cent to average $53,600 per farm, which reflects a slight reduction in fixed term interest rates and lower term and current debt.

After adjusting for inflation, in 2021-22 Farm Profit before Tax is expected to increase to an average $116,200, up 29 per cent from 2020-21 nonetheless the second lowest Farm Profit before Tax in the previous four years.

Economic Conditions

The Global Economy

The COVID-19 pandemic remains the dominant driver of current global economic conditions. With this, comes volatility and uncertainty. Despite the pandemic challenges, the global economy experienced a strong recovery in 2021, with some key markets transitioning from recovery to economic expansion. While growth is expected to decelerate in 2022, the global economy is expected to prove resilient against headwinds.

Expansionary fiscal and monetary policy underpinned strong global demand patterns in 2021. While this supported global trade and was favourable for exporting nations such as New Zealand, it has created a new set of challenges for 2022.

The surge in consumer demand created a severe supply and demand imbalance across the globe. Supply chains suffered significant disruption and inflation begun to rise. Surging food and energy prices in particular are of paramount concern across the globe. Many countries are experiencing the highest inflation seen in decades, and this has become a key policy issue for many governments in 2022.

In 2022, COVID-19 will become endemic, and the world will shift to learning to live with it. Economically, fiscal policy packages that stimulated the strong recovery in 2021 are expected to tighten, interest rates are forecast to rise and there is expected to be significant uncertainty in the investment sector as the economy adjusts to more change. Inflation and supply chain disruption are expected to persist.

The World Bank (January 2022) reported world economic growth of 5.5 per cent for 2021, following a contraction of 3.4 per cent in 2020. The Bank's forecasts for 2022 is growth of 4.1 per cent; a slight easing compared to 2021. This reflects slower growth in China and the US.

The spread of Omicron through early 2022 has highlighted the persistence of the pandemic and the potential for further variants of COVID-19 to emerge. The ensuing uncertainty will weigh on the global economy, however, with the duration of the pandemic, there has been a shift in response from governments and international organisations. There has been a move away from highly restrictive mitigation measures to a more balanced approached, that is proving to be less disruptive to economies and society while attempting to manage health outcomes.

China is an exception to this balanced approach as it persists with its zero COVID-19 policy, the only country holding on to this measure. This policy continues to cause pandemic-induced disruption to the economy and is expected to weigh on China's economic growth in 2022. Any weakening of the Chinese economy will in turn be felt around the globe.

The World Bank (January 2022) estimates that global trade expanded 9.5 per cent in 2021, reflecting pent-up demand following the disruption of 2020. Forecasts for 2022 signal an easing in the growth in global trade as demand moderates.

Supply chain disruption and the subsequent surge in freight costs have been one of the biggest economic challenges of the pandemic. Surging demand and lockdown restrictions have overloaded the existing capacity of global supply chains. The World Bank expects that supply chain problems are expected to abate later in 2022, assuming that the pandemic eases.

The increasing frequency of adverse climatic events around the world is a risk factor to the global economic outlook. 2021 saw a wide range of extreme weather events and continuation of this trend will add further pressure to global supply chains and pose a threat to developing countries.

Climate change policy and regulation is also on the watch list of potential risks to the global economic outlook.

Geopolitical relationships between China and other countries, in particular the US, will also continue to pose risk to the global economic outlook for 2022. New Zealand's primary sector exports will be sensitive to any deterioration of the relationship between China and New Zealand.

China

The pace of growth in the Chinese economy is forecast to slow in 2022, following strong expansion in 2021.

Table 1 Global Growth Indicators

	Annual Average % Change,					
	2018	2019	2020	2021	2022f	2023f
	%	%	%	%	%	%
US	+1.6	+2.3	-3.4	+5.6	+3.7	+2.6
UK	+1.3	+1.4	-9.8	+6.8	+5.0	+1.9
Euro Area	+1.9	+1.6	-6.4	+5.2	+4.2	+2.1
Japan	+0.5	-0.2	-4.5	+1.7	+2.9	+1.2
China	+6.8	+6.0	+2.2	+8.0	+5.1	+5.3
South Korea	+2.9	+2.2	-0.9	+4.3	+3.3	+2.8
Australia	+2.8	+1.9	-2.4	+3.5	+4.1	+2.6
Global	+3.4	+2.6	-3.4	+5.5	+4.1	+3.2
New Zealand	**+3.4**	**+2.4**	**-2.1**	**+5.1**	**+3.3**	**+1.7**

Note: "Euro Area": Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Slovak Republic, Lithuania, Latvia, Estonia and Slovenia.
e estimate, f forecast | Source: World Bank

The World Bank reported economic expansion of over 8 per cent for China in 2021 and forecasts this to ease to 5.1 per cent in 2022. Key drivers of the deceleration in growth are the tight policy measures the country continues to maintain around COVID-19 and a sharp downturn in the property sector that has impacted house prices and consumer spending. Further downturn in this sector is a downside risk to China's economic outlook.

Government monetary policy support has prevented a sharper downturn. It has implemented support for homeowners and accelerated infrastructure investment.

China has experienced significant supply chain disruption due to its policy of zero-COVID-19. Energy prices soared in the second half of 2021 as adverse events, tougher emission standards, demand and policy all contributed to a severe energy shortage. Power was rationed, impacting households in the middle of winter and manufacturing production. With an ongoing commitment to reduce carbon emissions, energy will continue to be key issue for China in 2022. This will flow into the global economy with high energy prices a contributing factor in rising inflation.

Despite energy shortages and the pandemic, manufacturing activity has maintained momentum and international demand for Chinese goods has been strong. Exports from China to other countries lifted 30 per cent in value in 2021. Import demand was also strong. Imports into China also lifted 30 per cent in 2021. The biggest lifts were in consumer goods from the US and coal.

Total meat imports were down 5.0 per cent in volume compared to 2020. This reflects a decrease in imported pork volumes as the domestic pig herd rebuilds. Pork imports make up over half of China's meat imports. The total value of imports lifted however, reflecting an increase in the volume and value of beef imports.

There was a strong recovery in China's pork production during calendar 2021 – lifting 29 per cent on 2020. China has been quick to point to a successful recovery from African Swine Fever (ASF), however there are other potential causes of the production increase. It is key to note that ASF is still not under control in China, with intermittent outbreaks continuing to occur. Until a commercial vaccine is developed, this will be an ongoing issue for China's pork industry.

The supply of domestic pork in China surged in 2021 as a result of the pig herd recovery. However, consumer demand for pork was weak, amid COVID restrictions and a shift in consumer preference in meat protein towards toward alternatives, including beef and sheepmeat. Domestic pork prices plummeted in response to the oversupply. On the back of record high feed costs and natural disaster, Chinese pig farmers have experienced close to a year of financial losses. Herd liquidation and industry exiting has been a feature of 2021, which will be a leading cause of the increase in pork production.

China has been quick to report recovery of ASF through 2021, downplaying the hardship of its producers. Market fundamentals of demand and price help analysts form a picture of what is happening on the ground in this market, and this will continue to be the case in 2022.

In the medium and long term, Asia, as a whole region, is projected to drive global consumption growth in meat protein. Growth in China, which is the key growth driver within Asia, will be driven by limited resource of land and water to support their own domestic production.

US

The US economy transitioned from recovery to expansion in 2021. Consumer spending has powered the recovery with pent-up demand following the restrictions of the pandemic. The spread of the Omicron variant of COVID-19 in early 2022 weighed on the positive sentiment. However, while the impact was sharp it was relatively short-lived in economic terms.

The pace of economic expansion in 2021 was supported by significant monetary and fiscal policy in response to COVID-19. Rising inflation and buoyant nominal wage growth will be key drivers of tightening monetary policy in 2022, which will moderate the pace of economic growth.

The World Bank (January 2022) reported that the US economy expanded 5.6 per cent in 2021, following a contraction of 3.4 per cent in 2020. US economic growth is expected to moderate to a more normalised growth rate in the next couple of years. Growth of 3.7 per cent is forecast for 2022.

Inflationary pressure will be a key determinant of the speed of interest rate hikes in the US. There is expectation the first hike will come in March 2022. However, despite the expectation of tighter monetary policy, consumer spending is expected to rise again in 2022. It is estimated that US households accumulated more than US$2.5 trillion of excess savings during the pandemic. That is fuelling spending, but also delaying the return of people to the workforce. The US labour market is extraordinarily tight, with the number of unemployed hitting a 50-year low. It is expected more people will return to the workforce this year, however over two million people are estimated to have retired early.

Food prices have been a victim of inflationary pressure. The index for food at home lifted 6.5 per cent over 2021, compared to an average of 1.5 per cent per annum over the prior ten years. The index for meat lifted 12.5 per cent over the year. The abundant money supply in 2021 meant that consumer demand was resilient against the higher prices. There is, however, some uncertainty regarding how inelastic demand will prove in 2022 as high prices persist.

The spread of Omicron in January 2022 interrupted a period of strong economic growth. A return to rising infection and death rates weighed on the nation's confidence. The impacts of the spread were felt along the supply chain adding pressure to already existing bottlenecks. Economic

growth in the first quarter of 2022 is expected to be impacted by Omicron but bounce back in the second quarter.

Economic risk from new variants will remain through 2022. However, the US is learning to live with the virus, without imposing restrictive measures on society or the economy. This will minimise the risk to economic growth.

The geopolitical relationship between the US and China continues to pose ongoing risks to the economic outlook. While the Biden administration eased some of the tension caused by the Trump administration's policies, the US continues to take an assertive position on China.

In 2021, China became the largest export market for US agricultural products, supported by the Phase One agreement in January 2020. The total value of US agricultural and related exports to China lifted 25 per cent in 2021. While a significant lift, the volume fell short of Phase One commitments. The Phase One agreement expired at the end of 2021 and there has been no action around the path ahead. This creates uncertainty around US exports to China and also increases the sensitivity of agricultural exports to geopolitical tension.

Trade negotiations between the US and China that will be favourable for agriculture have proved difficult to gain traction, with intellectual property protection and technology transfer, significant sticking points. The Biden administration is expected to pursue multi-lateral agreements in attempt to engage China in trade reform.

New Zealand

Economic conditions in New Zealand look firm for 2022. The path of the Omicron outbreak does pose significant downside risk, with tourism and hospitality expected to carry much of the burden. Overall, however, current economic indicators signal a very strong economy with resilience to cope with the uncertainty of the pandemic.

The New Zealand labour market is exceptionally tight. The unemployment rate in the December quarter of 2021 fell to 3.2 per cent, the lowest since records began in 1986. This market is expected to tighten further in 2022 as demand for labour remains strong while supply remains limited.

The expected relaxation of border restrictions is expected to bring some much-needed expansion to the labour supply, however there is uncertainty about the numbers of potential employees that will leave New Zealand as the borders open. Continuing labour shortages are expected to remain a constraint in many sectors in 2022.

Strong demand for newly built houses has continued to keep the construction sector a key driver of economic activity. Shortages of supplies and labour will, however, be a limiting factor for the pace in activity in 2022.

Record high export prices are a key contributor to New Zealand's current buoyant economy. Global dairy prices as measured by the GlobalDairyTrade index are at record highs, supported by tightening supply. Meat and horticulture are also at record highs and aluminium prices are soaring.

Strong commodity prices are underpinning strong returns at the farm-gate and are supported by a weaker NZD. Inflationary pressure, is however, causing on-farm costs to lift sharply, eroding the benefit of higher farm-gate returns. The primary sector is also constrained by the shortage of labour and continuing supply chain disruption because of COVID-19.

COVID-19 disruptions continue to cause logistics issues for both importers and exporters. Both shipping and airfreight have experienced surging costs, and a shortage of shipping capacity combined with port closures has created significant bottlenecks and delays. Supply chain disruption is expected to ease through the year.

Climate change will continue to be a challenge to New Zealand's primary sector in 2022. This is both in the form of the increased frequency of adverse events, and the pace of change in policy and regulation.

Consumer Prices

Inflationary pressure is a headline topic in the New Zealand, and global economy.

In New Zealand, the Consumer Price Index (CPI) lifted 5.9 per cent year-on-year in the December quarter of 2021. Key drivers were the housing and transport sectors, in which prices increased 16 per cent and 15 per cent respectively.

Food prices increased 4.0 per cent year-on-year in the December quarter of 2021 and 4.5 per cent for the entire 2021 year. Food price inflation is expected to remain elevated given high global food prices.

Annual CPI inflation is forecast to move over six percent in early 2022.

Interest Rates

The NZ economy performed better than expected in 2021 and started 2022 on a strong note. Inflationary pressure strengthened in the second half of calendar 2021 and will be the predominant driver of monetary policy in 2022. It is inevitable that monetary policy in New Zealand, and across the globe, will be tighter in 2022.

The Reserve Bank of New Zealand (RBNZ) began a series of hikes to the Official Cash Rate (OCR) in November 2021. Lifts of 25bp (basis points) in November 2021 and February 2022 increased the OCR to 1.0 per cent. Analysts expect the RBNZ to continue to tighten monetary policy over the course of 2022. Economists are forecasting a series of 25bp hikes in 2022, to reach 3.00 per cent in the third quarter of 2023 and a peak of 3.35 per cent the following year.

There are risks on either side of the OCR outlook. There is potential that higher interest rates will hit the housing market hard and curb consumer spending, which would make a case for a slower pace to OCR hikes. There is also a risk that the Omicron outbreak may be severe and have a greater impact than anticipated on the economy. On the other hand, the RBNZ will be keeping a keen eye

on inflation and how ingrained this has become, which makes a strong case for a steady pace of OCR hikes.

On-farm, both fixed and overdraft rates are expected to lift (+17%) on the 2021-21 season. While farming businesses have reduced debt somewhat in recent years, the increase in interest rates combined with increasing costs of other inputs will exert pressure on farm finances.

Exchange Rates

The outlook for the NZD in 2022 is driven primarily by global volatility. The NZD has taken a softer trajectory despite the strength of the domestic economy. Global risk appetite is falling, global economies are all experiencing growth and monetary policy is expected to tighten. The expectation for US interest rates to rise is a key factor in the weaker outlook.

The NZD is forecast to depreciate against the USD, which is the major trading currency for New Zealand meat. There is downside risk to the forecast presented in this report, as global economic conditions have evolved since the time of this forecast.

The outlook for the NZD is favourable for NZ exporters and the primary sector. A greater proportion of the strong prices in New Zealand's export markets will flow into farm-gate returns.

Table 2 New Zealand Dollar Exchange Rates

	Annual Average		
Sep Year	USD	GBP	EUR
2019-20	0.64	0.50	0.57
2020-21	0.71	0.52	0.59
2021-22f	0.69	0.52	0.62
2021-22f % change	-1.7%	+0.2%	+4.6%

f forecast

Source: Beef + Lamb New Zealand Economic Service, Reserve Bank of New Zealand

Exchange Rate Sensitivity – 2021-22

In the 2021-22 season, the NZD is expected to decline against the USD and lift against the GBP and EUR (Table 3). The value of the NZD against the USD has the greatest effect. Just under 80 per cent of New Zealand's red meat exports were traded in this currency in 2020-21. The Chinese yuan (CNY) accounted for seven per cent of red meat exports and the EUR and GBP accounted for five per cent and four per cent respectively.

Table 3 shows farm-gate prices under five different exchange rate scenarios. This approach provides an indication of the impact of exchange rate volatility on the prices paid to farmers The shaded column represents our forecasts of exchange rates for the major currencies and the related farm-gate prices used to derive the base estimates of export receipts and farm revenue in this report. The four other scenarios show the impact on farm-gate prices of variations of ±5 and ±10 per cent in the exchange rates for the USD, GBP, and EUR.

Meat and wool production are seasonal with most production sold from late November through to June, which means that the value of the NZD during this period is crucial to farmers and export companies.

Exchange rate movements have a significant leveraged effect on prices received by farmers. All other things being equal, a 10 per cent **depreciation** of the NZD against the USD (i.e. from 0.69 to 0.62) and the associated cross rates against the GBP and the EUR, **increases** the average lamb price received by farmers by 15.5 per cent. Alternatively, if the NZD **appreciates** by 10 per cent – from 0.69 to 0.76 against the USD – then the farm-gate lamb price **decreases** by 12.7 per cent.

Table 3 Exchange Rate Sensitivity

NZD Exchange Rates						Exchange Rate Change from USD 0.69	
						to USD 0.62	to USD 0.76
USD	0.62	0.66	0.69	0.73	0.76	-10%	+10%
GBP	0.46	0.49	0.52	0.54	0.57	-10%	+10%
EUR	0.56	0.59	0.62	0.65	0.68	-10%	+10%
Farm-Gate Prices Received $ / head							
Lamb	176	163	152	142	133	+15.5%	-12.7%
Mutton	166	153	140	129	119	+18.4%	-15.1%
Steer/Heifer	1,829	1,693	1,570	1,460	1,359	+16.5%	-13.5%
Cow	909	842	781	726	676	+16.5%	-13.5%
Bull	1,903	1,762	1,634	1,519	1,414	+16.5%	-13.5%
All Beef	1,502	1,391	1,290	1,199	1,116	+16.5%	-13.5%
¢ / kg							
Lamb[1]	927	861	802	749	700	+15.5%	-12.7%
Mutton[1]	638	586	539	496	457	+18.4%	-15.1%
Steer/Heifer	652	604	560	520	485	+16.5%	-13.5%
Cow	455	421	390	363	338	+16.5%	-13.5%
Bull	632	585	543	505	470	+16.5%	-13.5%
All Beef	590	546	507	471	438	+16.5%	-13.5%
Fine[2]	2,091	1,925	1,776	1,641	1,518	+17.7%	-14.5%
Medium[2]	724	667	615	568	526	+17.7%	-14.5%
Crossbred[2]	280	258	238	220	203	+17.7%	-14.5%
All Wool[2]	437	402	371	343	317	+17.7%	-14.5%

1 includes wool and skin **2** wool ¢/kg greasy | Source: Beef + Lamb New Zealand Economic Service

Sheepmeat Outlook 2021-22 – Opportunities and Challenges

Opportunities

- Continued global economic growth in 2022, although at a slower pace to 2021, will support consumer demand for high quality proteins.
- Sustained demand from Chinese consumers for sheepmeat, despite the increase in domestic pork production.
- The forecast for a lower NZD/USD will increase the competitiveness of New Zealand exports.
- Consumption growth and demand for high quality protein is projected in Asian markets as the size of the middle class increase and a shift of more consumers into urban areas takes place.
- Supply of global sheepmeat exports will continue to be tight in 2022, driven by lower mutton exports.
- Sheepmeat is a niche meat in most developed markets. As such, it has the opportunity to demand a price premium. Export prices for NZ sheepmeat are expected to strengthen in 2022.
- There has been a shift in consumer behaviour towards in-home dining and e-commerce as a result of the pandemic. Lamb gained retail market share as a result during the pandemic. It is expected to maintain retail market share even as foodservice demand recovers to pre-pandemic levels.

Challenges

- The spread of Omicron in New Zealand, and the potential threat of new COVID-19 variants both domestically and globally continue to pose a threat to the global economy.
- Global freight congestion and surging shipping and air-freight costs are challenging exporters' shipping timeframes and eroding margins. This is significant for New Zealand's chilled lamb trade.
- Ongoing global labour shortages may limit meat processing capacity.
- Increased frequency of adverse climatic events, both domestically and globally.
- Tightening monetary policy in key markets, particularly the US, has the potential to impact consumer demand.
- Economic growth in China is expected to slow in 2022. New Zealand's reliance on this market means an increased sensitivity to weakening economic conditions.
- Deterioration in the political relationship between Chinese and New Zealand governments would be a threat to sheepmeat export performance.
- Australia's competitive presence in the US lamb market will increase in 2022.
- Global and domestic climate change policy presents challenges for agricultural production systems and trade.

Lamb & Mutton Exports

Lamb

2021-22 Outlook

The 2021-22 lamb export season (October 2021 to September 2022) started very strongly. Global demand for lamb is benefitting from the surge in consumer demand for meat in 2021 and global supply of sheepmeat has been limited. Strong market fundamentals supported by a favourable exchange rate underpinned record high export values for the first quarter (October 2021 to December 2021) of the season.

The outlook for the remainder of the season is solid, underpinned by strong consumer demand. Prices are expected to soften off the highs of the first quarter but remain above historical levels. Supply of lamb is expected to lift, reflecting an increase in Australian production following recent flock rebuilding, however, global demand is expected to absorb the increased supply without significant price correction.

Demand from China and the US were a highlight for lamb exports in the first quarter of 2021-22. Both markets experienced strong economic growth through 2021, which flowed into consumer confidence and spending. While economic growth is expected to soften and monetary policy tighten, we expect consumer demand for sheepmeat will remain solid through 2022, despite ongoing pandemic-related challenges.

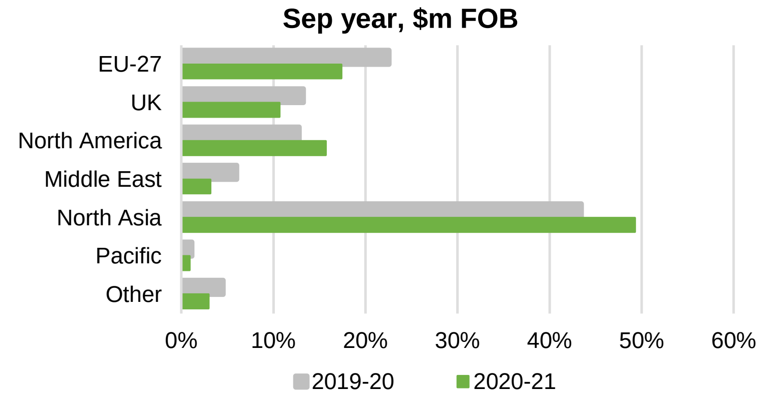
Total lamb export receipts are forecast to lift 12.9 per cent on 2020-21. This reflects a 14.4 per cent lift in the average value of lamb. Lamb export volumes are forecast to be down one per cent on last season.

At just under $12,000 per tonne, the forecast for the average export value is a record high and 18 per cent above the five-year average.

A lower NZD/USD is a supporting factor to the strong outlook for export performance in 2021-22.

Demand patterns from China will be a key driver of export performance for the season. In the first quarter of 2021-22, China accounted for approximately 45 per cent of New Zealand's total lamb exports. Any volatility in this market will be felt in overall export volumes.

Figure 1 New Zealand Lamb Export Value



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

Chinese demand has been strong in the season to date. This was influenced by buying patterns for the Chinese New Year (early February), which is a peak consumption period for the Chinese population. Signals from China suggest that demand and prices may soften in the second quarter of the season. This reflects both the seasonal pattern for Chinese demand and an increase in New Zealand lamb supply through the peak production period. A softening in price will be coming off record highs and is not expected to be sharp.

The average value of lamb exports to China for the first quarter of the season was 16 per cent higher than in the same period in 2020-21 and 35 per cent higher than the five-year average. The increase in average value reflects an overall lift in the in-market prices across all lamb products exported to China rather than any significant change in the product mix.

For the first quarter of the season, the average value of lamb exports to China was NZD10,100 per tonne,

Table 4 New Zealand Lamb Exports

	Lamb meat			Co-Products	Total Lamb	Lamb Meat
Sep Year	000 tonne	$ / tonne	$m FOB	$m FOB	$m FOB	%
2017-18	313	10,086	3,156	199	3,355	94%
2018-19	305	10,445	3,186	203	3,389	94%
2019-20	310	10,822	3,353	154	3,508	96%
2020-21	307	10,427	3,202	151	3,353	95%
2021-22e	304	11,930	3,626	160	3,786	96%
2021-22e % change	-1.0%	+14.4%	+13.3%	+5.8%	+12.9%	

* Lamb Meat value as a percentage of the value of Total Lamb exports, including Co-Products
e estimate, f forecast | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

compared to NZD13,200 per tonne for total lamb exports to all markets. About half the exports to China were breast and flap items, valued at NZD10,900 per tonne. The lower average export value can be attributed to approximately 20 per cent of export volumes comprising lower value bone-in mixed items.

Growth in demand for lamb imports from the US was a highlight of the first quarter of 2021-22. The volume of New Zealand lamb exported to the US was 19 per cent higher than in the same quarter in the 2020-21 season and 38 per cent higher than the five-year average. The US accounted for 12 per cent of total New Zealand lamb exports by volume in the first quarter of the 2021-22 season, up from eight per cent the previous season.

The average export value of lamb exported to the US lifted 36 per cent on the same quarter last season. Exports of higher-value products were higher. Frenched rack export volumes and value lifted 40 per cent, while export volumes of legs (+20%) and loins (+30%) also increased substantially. In addition, the average export values of legs and loins also lifted 15 per cent and 20 per cent respectively.

Chilled exports to the US lifted 20 per cent in the first quarter, compared to the same period in 2020-21. Frenched racks, legs and loins dominate chilled exports.

Export prices for lamb from the UK and EU-27 was also particularly strong in the first quarter. This reflects lower domestic lamb supply in both regions and restocking of inventories following the significant disruption of COVID-19. The demand pull from China and the US also resulted in these markets having to bid competitively to secure product.

The EU-27 accounted for 16 per cent of the total volume of New Zealand lamb exports for the first quarter of 2021-22, up from 12 per cent in 2020-21. Export volumes lifted 30 per cent compared to last season and 13 per cent on the five-year average.

The average value of lamb exports to the EU-27 for the first quarter of the season lifted 19 per cent on the same period in 2020-21 and 15 per cent on the five-year average. The EU-27 accounted for 37 per cent of total chilled New Zealand lamb exports in the first quarter, up from 28 per cent in 2020-21.

The region is dominated by four markets: Netherlands, France, Germany and Belgium.

The UK accounted for 12 per cent of total New Zealand lamb exports for the first quarter of 2021-22, steady on 2020-21. Volumes were steady on the same period last season, but down 30 per cent on the five-year average, reflecting the demand pull from China.

The average value of lamb exports to the UK for the first quarter of the season lifted 24 per cent on the same period in 2020-21 and 26 per cent on the five-year average. The UK accounted for 23 per cent of total chilled New Zealand lamb exports in the first quarter, down from 31 per cent in 2020-21.

The total volume of chilled New Zealand lamb exports declined 23 per cent year-on-year, reflecting the risk involved with chilled shipments amid the current disruption in global freight. However, the average value of chilled lamb exports lifted 47 per cent reflecting both the lower volumes, and very strong market in the US, EU-27 and UK for chilled product.

Demand and prices for sheepmeat co-products have experienced a strong recovery following the disruption of COVID-19. Demand for petfood, tallow and meat-and-bone meals is strong. Demand for skins and hides is recovering, reflecting improving demand from the automotive industry. The largest challenge to the offal market is that the shortage of labour is limiting their recovery in meat processing plants.

Mutton

2021-22 Outlook

Mutton export performance has been strong in recent years, supported by the increasing demand for sheepmeat from China, which accounted for approximately 85 per cent of total export production in the entire 2020-21 season and 88 per cent of total exports in the first quarter of the 2021-22 season.

The value of mutton exports has lifted consistently in recent years, reflecting Chinese demand and limited supply.

Table 5 New Zealand Mutton Exports

	Mutton meat			Co-Products	Total Mutton	Mutton Meat
Sep Year	000 tonnes	$ / tonne	$m FOB	$m FOB	$m FOB	%*
2017-18	94	6,460	606	154	760	80%
2018-19	84	6,715	564	100	664	85%
2019-20	86	7,523	647	105	752	86%
2020-21	95	7,713	729	110	840	87%
2021-22e	92	8,447	774	118	892	87%
2021-22e % change	-3.1%	+9.5%	+6.1%	+7.1%	+6.3%	

* Mutton Meat value as a percentage of the value of Total Mutton exports, including Co-Products

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

In contrast to the higher-valued lamb market, mutton remained unaffected by COVID-19 disruption, and prices continued to strengthen.

Global mutton production was tight in 2021, as Australian producers focused on flock rebuilding following several years of high drought-induced slaughter. Supply is expected to remain tight in 2022. While Australian mutton exports are expected to lift in 2022, volumes remain below historical levels. New Zealand mutton production is also forecast to decline in 2021-22, following two seasons of high production.

In 2021-22, total mutton meat exports are expected to decline 3.1 per cent to 92,000 tonnes. The average value of mutton exports is estimated to lift 9.5 per cent and total FOB receipts (including co-products) are expected to be up 7.1 per cent.

A lower NZD/USD supports the strong outlook for export performance in 2021-22.

Lamb & Mutton - International Situation

Overview

The outlook for global sheepmeat trade for 2021-22 is strong, despite the lingering uncertainty of the pandemic. Global demand is expected to be buoyant, supported by fewer COVID-19 restrictions and more economic certainty.

Economic recovery in key markets following the pandemic underpinned high consumer demand through 2021. Global governments have rolled out significant financial stimulus packages to support economies. Money supply has increased, and consumers have more to spend. Consumer demand for food has surged. Food, and meat, price inflation has been a feature of 2021 and will be a focus for central banks in 2022. Narrative from Central Banks signal a tightening of monetary policy to control the high prices. The impact of continuing high prices on consumer demand will be a factor to watch in 2022, however, it is widely considered demand has the potential to prove inelastic, i. e. consumers will not change purchasing behaviour as high price persist.

Tight global supply will also continue to be a feature in 2022. New Zealand and Australia are the largest exporters of sheepmeat. Total sheepmeat exports from both countries are expected to decline in 2022, driven by lower mutton exports. Australian lamb export production is expected to lift and may cause some competitive pressure for New Zealand lamb, however, there is sufficient product specification and market diversity between the two countries to limit the downside this may cause.

Chinese demand for sheepmeat is expected to continue to underpin export performance in the 2021-22 season. African Swine Fever (ASF) has played a pivotal role in shifting meat preferences for the Chinese consumer from pork to alternatives such as sheepmeat. Even as Chinese pork supply increases, sheepmeat is expected to maintain market share gained during the period of pork deficit.

Forecasts from the 2021 OECD-FAO Agricultural Outlook (June 2021) signal a slight increase (+1%) in global sheepmeat production in 2022 and further expansion in the longer term. Most of the expansion in production is forecast to be in low-income countries, led by China.

Global sheepmeat consumption is forecast to increase slightly (+1%) into 2022. Developing countries account for over two-thirds of global consumption and will underpin future consumption growth.

Disruption to shipping and global supply chain logistics because of COVID-19 provided challenges for sheepmeat trade in 2021 in the form of surging freight costs and delays and cancellations to shipping. The situation is expected to continue into 2022 limiting the volume of chilled lamb exports in the 2021-22 season, as exporters perceive the risk of delays too high. Exporters are also signalling the move to an increase in air freight to mitigate the risk of shipping delays. High export returns for lamb are making this a viable option this season.

The ability of the New Zealand government to maintain current geopolitical relations with China will be critical to the performance of sheepmeat trade in 2022. Further outbreaks of COVID-19 variants will also continue to be a source of downside risk.

China

China continues to dominate the outlook for the 2021-22 season. This market is expected to remain the leading destination for NZ sheepmeat and Chinese sheepmeat import demand is forecast to remain strong, reflecting consumption growth.

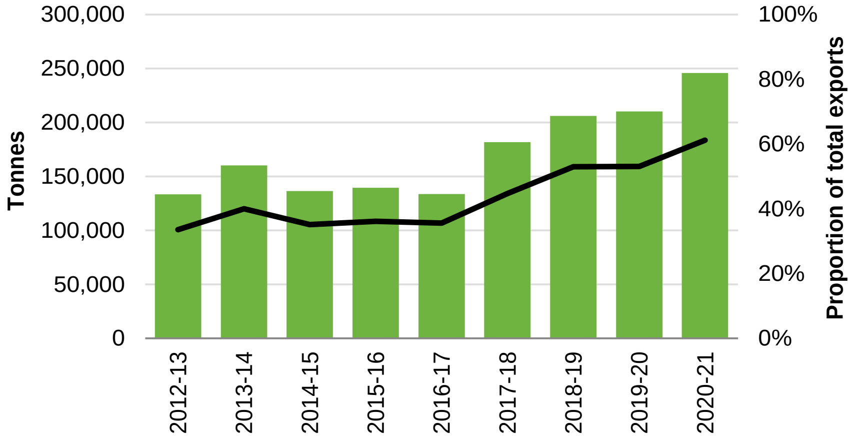
China experienced strong economic growth during 2021, which supported consumer spending on goods, including meat protein. The growing level of urbanisation, the growing affluence of Chinese consumers, combined with the decline in domestic pork because of ASF, has resulted in the Chinese consumer shifting preference to higher quality meat proteins such as sheepmeat and beef.

Total sheepmeat consumption has lifted around three per cent in the past decade because of these factors. Despite this growth, sheepmeat remains a small, niche market, making up only four per cent of total consumption.

Even as the Chinese pig herd recovers from ASF and pork supply increases, sheepmeat is expected to remain part of the Chinese consumer diet.

China is expected to experience weaker economic conditions in 2022, but off high levels. New Zealand's reliance on China for sheepmeat exports increases its exposure to shifts in economic conditions.

Figure 2 New Zealand Sheepmeat Exports to China (Sep Yr)



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

The ongoing pandemic and China's zero tolerance policy towards the virus will continue to pose a risk to New Zealand exporters in 2022. China is the only country persisting with a zero-tolerance policy. Regional restrictions and lockdowns therefore remain a reality for China and create disruption for supply chains and the flow of imports into the country. Some commentators have suggested this stance may change following the end of the Olympic Games in February, to support the weakening economy.

China has the world's largest sheep flock; around 316 million head in 2021. Domestic production accounts for most of the consumption. In 2019, 95 per cent of all consumption was produced domestically. In 2021, however, the reliance on imports lifted to account for eight per cent of total consumption. The increase in reliance on imports reflects environmental policies restricting expansion of domestic sheep production and growth in sheepmeat consumption. These factors are expected to support stable import demand in the medium term.

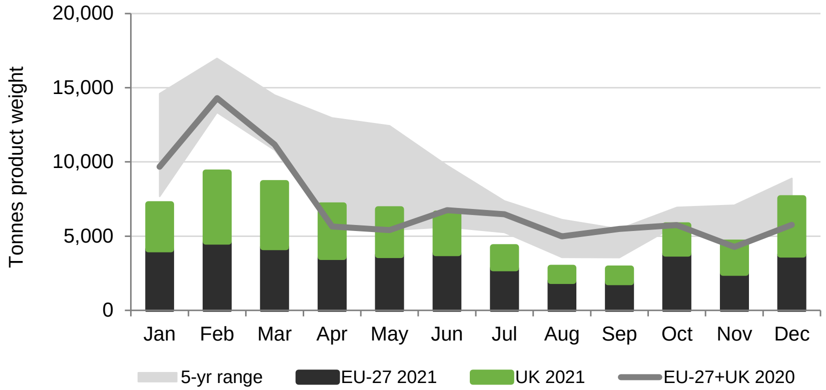
The dynamics of meat production, consumption and trade in China will continue to be a leading driver of New Zealand sheepmeat export performance in 2022 and beyond. For the outlook period, key factors to watch will be signs of a weakening economy, geopolitical tension, and potential pandemic related logistics disruption.

EU-27

The EU-27 markets are the second largest destination for New Zealand lamb exports. The region is dominated by four countries: Netherlands, France, Germany and Belgium.

Sheepmeat import demand from the EU-27 markets experienced significant disruption from COVID-19. Weaker economic conditions, general consumer uncertainty and foodservice sector restrictions were all contributing factors.

Figure 3 Monthly New Zealand Lamb Exports to UK+EU-27



Source: Beef + Lamb New Zealand Economic Service | New Zealand Customs

Economic and import demand recovery was evident in late 2021 as restrictions lifted. Despite the continued threat of COVID-19, the EU economy is expected to grow steadily in 2022 and achieve pre-COVID levels by 2023. This will support sheepmeat import demand.

On a supply and demand basis, sheepmeat production in the EU-27 is expected to increase marginally in the medium term (~3-5 years). This reflects the expectation of tighter world supply and improving producer prices.

British sheepmeat accounts for a third of lamb and mutton consumption in the EU-27, followed by production from Spain and France.

The post-Brexit tension in the trading relationship between the UK and EU-27 may provide opportunity for New Zealand sheepmeat exporters to grow market share in the EU-27. This market is a traditional and lucrative market for New Zealand exporters, however there is also demand pull from other markets and a limited volume of supply.

The EU Commission (2021) forecasts that per-capita sheepmeat consumption will lift marginally in the medium term. This reflects a diversification of meat consumption, away from pork and beef, and also demographic changes in the EU population.

Sustainability, with its environmental, economic and societal objectives, will play an increasingly prominent role in EU meat markets, for both producers and consumers. The EU's Farm to Fork policy is the basis of the European Green Deal, which aims to make agricultural systems healthy, environmentally friendly and responsive to climate change. The implications of the developing policy are not yet clear. New Zealand exporters will be closely monitoring discussions on labelling requirements for imported product. While still expected to be a long way off, they have the potential to impose increased cost and time for New Zealand exporters should they be implemented.

Free Trade Agreement (FTA) negotiations between New Zealand and the EU-27 remain ongoing. It is unlikely this agreement will deliver any notable impact for sheepmeat trade between the two regions in the 2021-22 season.

UK

As an individual market, following Brexit the UK is New Zealand's third-largest export destination for lamb.

The UK has experienced significant upheaval because of Brexit and COVID-19. 2022 is expected be a year of both recovery and learning to live with the change or challenges these disruptions have caused.

UK lamb production in 2021 was impacted by the Brexit influence on production patterns. Lambs were brought forward ahead of Brexit, which occurred at the end of 2020, lowering the available supply in 2021. As such, 2021 lamb production was the second lowest on record.

Domestic production is expected to lift in 2022. This is a result of some

carry-over from 2021, and an expected lift in the lamb crop in 2022. The increase in lamb crop reflects an expectation of ewe flock expansion as producers respond to high global price. The majority of this production will be market-ready in the second half of the year providing a less competitive market during the period of peak supply for New Zealand production.

Domestic sheepmeat production accounts for around 70 per cent of consumption in the UK, with imports making up the remainder. New Zealand sheepmeat accounts for approximately two-thirds of total sheepmeat imports, and Australia and Ireland account for 15 and 10 per cent respectively.

Sheepmeat consumption in the UK lifted during the pandemic years of 2020 and 2021. This reflects the dominance of the retail sector in this market which remained unaffected by COVID-19 related restrictions. The takeaway market also experienced significant growth in 2021, outweighing losses from the restaurant and pub trade. Takeaways account for over half of lamb volumes in foodservice, dominated by the lamb kebab.

It is expected the retail and takeaway channels will continue to dominate in 2022. Foodservice (other than takeaways) is expected to be slow to recover as economic pressure limits out of home eating.

Lamb, and red meat consumption in general, is expected to gradually decline in the UK. Red meat production has increasingly been in the spotlight in the UK in relation to the industry impact on animal welfare, greenhouse gas emissions and food safety. With coverage of the pandemic easing, these concerns are expected to gain momentum with the UK consumer this year.

UK sheepmeat imports have been on the decline for over five years, reflecting lower production from New Zealand and Australia, but more significantly, higher demand from China. Higher freight costs and shipping disruptions have also been a factor in 2021. Imports are forecast to decline a further six per cent in 2022, with the above factors all remaining relevant.

In 2021 the UK negotiated FTA's with Australia and New Zealand. While the deal with New Zealand doesn't change trade significantly from the current status, the UK/Australia FTA opened this market up to Australian sheepmeat and will result in an increase in Australian lamb in the UK market. The impact in 2022 is expected to be minimal, with volumes to be phased in over 15 years.

UK exports have suffered in 2020 and 2021 from declining demand from the EU-27 because of COVID-19, lower supplies of domestic product and a reduction in imports. Brexit tension between the UK and EU-27 was also a contributing factor. However, export growth is expected to be a focus in 2022, with a five per cent lift forecast. Exports account for approximately 30 per cent of production.

Exports of British lamb to the US market can resume this year after more than two decades of restrictions. The USDA has amended the "small ruminant rule" which prevented imports of lamb from the UK into the USA. The amended rule came into force on 3 January 2022. It is estimated that this market will be worth GBP 37 million (NZD 75.5 million) to UK sheepmeat in the first five years of trade.

United States

Demand for imported lamb, and all meat protein, was exceptional in late 2021. US consumer demand for meat was fuelled by extensive fiscal support programmes put in place to support the economy post COVID-19.

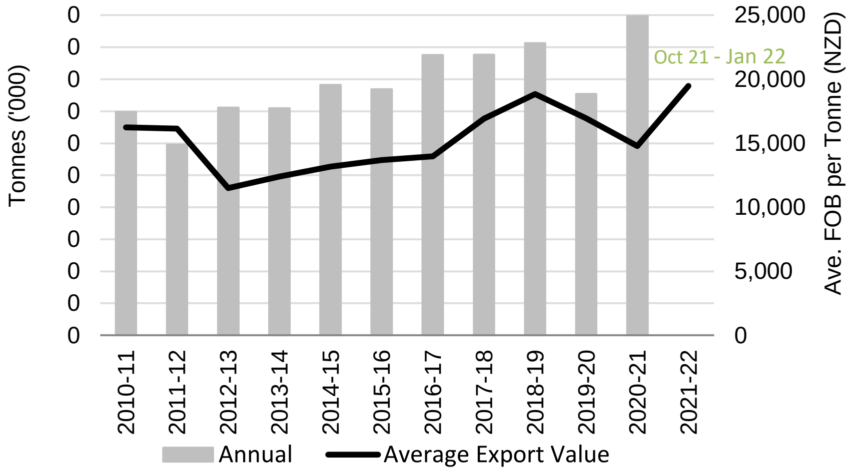
Lamb consumption in the US has also benefited from the shift in supply channels that has been an outcome post COVID-19. Prior to COVID-19 the foodservice sector was the dominant channel for lamb sales.

During the pandemic distribution shifted into the retail channel. Lamb consumption has increased as the availability of lamb cuts in retatl has lifted. As a result, NZ lamb exports to the US are expected to hold onto the retail space gained during COVID-19 as well as recovering foodsector sales.

The growth of lamb sales in the retail sector has led to an increase in demand for chilled lamb products, as this is the dominant channel for chilled product. In 2021 the share of chilled lamb imported to the US from all countries lifted to approximately 40 per cent of total imports, compared to 30 per cent in 2020. New Zealand chilled lamb exports have benefited from this trend, with the volume of chilled exports lifting significantly in the second half of 2021.

Tight supply fundamentals supported the strong demand, creating an ideal market for import demand. US lamb

Figure 4 NZ Lamb Exports to the US (Sep year)



production declined in 2021. Drought conditions in the western US significantly impacted sheep farmers resulting in flock liquidation and lighter average carcase weights of both lambs and sheep. The 2021 lamb crop was 1.6 per cent down on 2020, and it is forecast that the 2022 lamb crop will also be down. Breeding ewe numbers have declined due to drought and are expected to continue to decline in the medium term.

Lower domestic production, strong demand, high prices for competing meat proteins and low cold storage inventories have underpinned record domestic US lamb prices.

Wholesale lamb values in the US reached record levels in the second half of 2021. The average domestic lamb cut-out value for 2021 lifted 48 per cent on 2020. New Zealand imported prices also reached a record high in November 2021.

Lamb was the only meat item to experience both an increase in price and retail sales volume in 2021, signalling the position of sheepmeat as a high-end niche product in the US market. This trend is expected to flow into 2022, although there is some wariness about whether the high retail prices may start to impact consumer demand.

Frenched lamb racks account for approximately 30 per cent of New Zealand lamb export volumes to the US. This is followed by shoulders and legs.

In 2021, imports accounted for approximately 70 per cent of total sheepmeat consumed in the US. Australia and NZ are the dominant suppliers, with Australian lamb having a 80 per cent share of imports (up from 75% in 2020) and New Zealand lamb accounting for 18 per cent.

There is potential for Australian lamb to have more of a competitive presence in the US market in 2022 as export volumes are forecast to lift significantly.

Australia

Australia is New Zealand's primary competitor in global sheepmeat trade. The two countries dominate global sheepmeat exports, accounting for over 80 per cent of sheepmeat trade in 2021. Australian sheepmeat exports accounted for 45 per cent of global exports and New Zealand accounted for 36 per cent.

The short and midterm outlook for the Australian sheepmeat sector is looking strong, underpinned by a continuing forecast for favourable climatic conditions, expanding production and increasing global demand for Australian sheepmeat.

The Australian sheep flock is estimated to have expanded 11 per cent year in the 12 months to 30 June 2021. It is forecast to lift a further five per cent to 30 June 2022. Flock expansion is expected to continue past 2022, if climatic conditions allow.

In line with an expanding breeding flock, production and exports are forecast to lift rapidly in 2022 and 2023.

Lamb export volumes are forecast to reach record levels in 2022 – increasing by 11 per cent. By 2023, Australian lamb exports are forecast to be 17 per cent higher in 2023 than in 2020.

Mutton production will continue to be limited in the short term as the focus on rebuilding continues. Mutton exports in 2022 are expected to lift on 2021 but remain below historical averages. By 2023, mutton exports are expected to rebound to 2017 levels, increasing 20 per cent on 2020. Total sheepmeat export volumes in 2022 are forecast to be higher than volumes prior to the drought.

As a result, New Zealand can expect to experience an increased competitive presence from Australian lamb in export markets during 2022 and beyond.

The US was the leading destination for Australian lamb in 2021, accounting for 26 per cent of total exports. Exceptionally strong demand from US resulted in a seven per cent lift in export volumes on 2020. Mutton exports to the US also experienced significant growth (+27%) compared to 2020. The US market is expected to be focus for Australian lamb exports in 2022.

China accounted for 24 per cent of 2021 lamb export volumes. This is down two per cent on 2020. China was the leading destination for mutton exports, accounting for 40 per cent of the total volume.

Australian lamb exports to the Middle East declined significantly on 2020. Demand from this market has been impacted by the high global prices, logistical disruptions and increasing freight costs.

The UK is expected to become a market of increasing significance for Australian sheepmeat following the agreement in principle of an Australia-UK Free Trade Agreement (FTA). As discussed previously, this agreement is expected to open up the UK market to Australian lamb, with the benefits being phased in over a 15-year time frame. In the long-term any significant increase in lamb supply in the UK market will have the potential to increase competitive pressure for New Zealand exports.

A shortage of labour will continue to be a challenge facing the Australian processing sector in 2022. The spread of the Omicron variant of COVID-19 through the country in early 2022 has severely limited throughput capacity due to employee absenteeism. The Australian Government was forced to exempt meat workers from the close contact isolation as supply of meat to the domestic market was threatened. Slaughter capacity constraints due to Omicron are expected to ease in the short term, however, availability of skilled labour will be an ongoing challenging through 2022.

Similar to New Zealand, freight disruptions and increased costs of shipping are expected to disrupt sheepmeat trade in 2022.

Lamb & Sheep Prices – Farm-gate

Lamb

Farm-gate returns for lamb in the 2021-22 season are forecast to reach record highs, reflecting strong market fundamentals and a favourable exchange rate.

The weighted average farm-gate price for lamb is forecast at $152 per head, or 802 cents per kg, which is 15 per cent above last season and 17 per cent above the five-year average level.

Farm-gate prices for the first four months of the 2021-22 season (October 2021 to January 2022) tracked steadily above historical levels. The two key drivers of farm-gate prices for the beginning of the season were record high export prices, as discussed in earlier sections, and a slow start to the lamb processing season due to slow spring growth rates.

A lower NZD/USD is also a key contributing factor to higher farm-gate prices this season.

The slow start to the processing season means more lambs will come forward in the March and June quarters. The flow of these lambs into processors will be a driver of farm-gate price direction, both as processing space tightens and supply to markets increases.

The processing sector is facing significant challenges this season. The potential spread of the Omicron variant of COVID-19 through the workforce is a key concern heading into the peak production season. The sector is already facing a severe labour shortage. Employee absence due to either illness or isolation requirements will add further pressure to an already tight market. Changes to government policy around timeframes for isolation and rapid antigen tests (RATs) have the potential to alleviate some of the pressure.

Processors will also continue to face freight and supply chain disruption during 2022. As a result of the increased cost and risk associated with shipping, more product is expected to be airfreighted than typical, including frozen product, which will impact margins for exporters.

While export prices for meat are high, exporters are facing significantly higher operational and freight costs. We have accounted for these higher costs in our price forecasts.

Table 6 Lamb Price Sensitivity

		All Class Lamb Price		
Exchange Rate		$ per head	c per kg	
Low NZD				
USD	0.62			
GBP	0.46	176	927	**High**
EUR	0.56			
Mid NZD				
USD	0.69			
GBP	0.52	152	802	**Mid**
EUR	0.62			
High NZD				
USD	0.76			
GBP	0.57	133	700	**Low**
EUR	0.68			

Source: Beef + Lamb New Zealand Economic Service

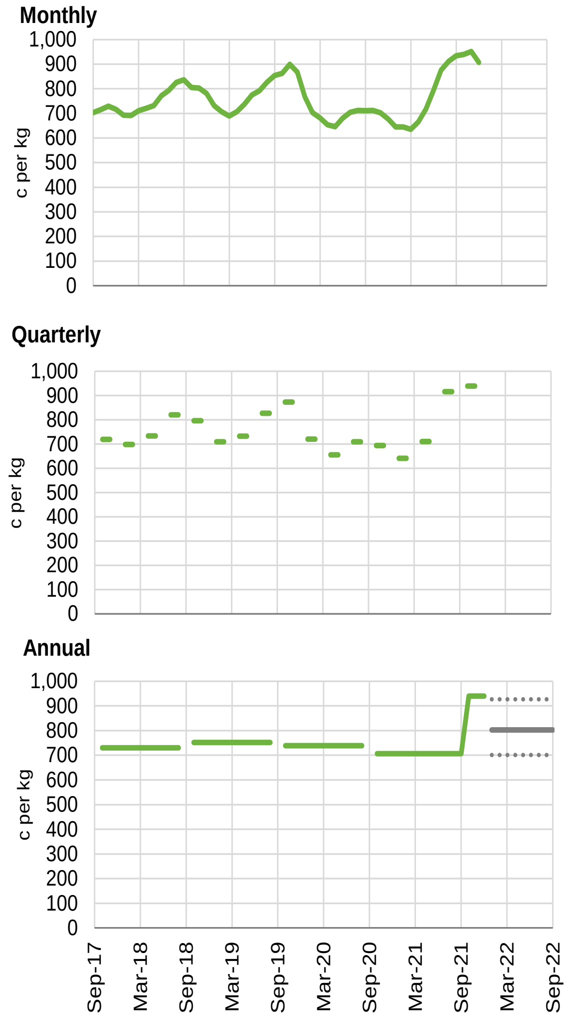
Mutton

The annual average mutton price for the 2021-22 season is forecast to lift by nine per cent on 2020-21 to $140 per head or 539 cents per kg, which is up 27 per cent compared to the five-year average.

The strong forecast for mutton is driven by the strong market demand and tight supply. Mutton exports have a strong reliance on China, which does create higher risk to any downside in Chinese import demand and prices.

Similar to lamb, higher costs of shipping and labour will flow into farm-gate returns for mutton this season.

Figure 5 Weighted Average Lamb Farmgate Price



Source: Beef + Lamb New Zealand Economic Service

Lamb & Mutton Production

Table 7 Export Lamb Production

Sep Year	Lamb Crop million head	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2017-18	24.7	19.9	18.6	368.9
2018-19	24.0	18.8	19.1	359.0
2019-20	23.2	19.1	19.0	363.5
2020-21	23.1	18.3	19.1	349.9
2021-22e	22.6	18.3	19.0	346.3
2021-22e % change	-2.3%	-0.3%	-0.8%	-1.0%

e estimate, f forecast

Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand, New Zealand Meat Board

Lamb

The total number of lambs tailed in the spring of 2021 is estimated at 22.6 million head, down 2.3 per cent or 0.5 million head on the previous spring. The decline reflects a 3.6 per cent drop in South Island lamb numbers, driven by a decline in breeding ewe numbers and decline in lambing percentage in Southland.

The number of lambs tailed in the North Island is estimated to be slightly (0.8%) down compared to 2021. Steady to slight increases in the upper and western North Island lamb crop estimates are offset by a decline in the East Coast lamb crop, reflecting ewe condition and internal parasite challenges.

The national lambing percentage for 2021 is estimated at 131.8 per cent, up 0.5 percentage points on 2020.

The number of breeding ewes continues to decline. At 1 July 2021, the total number was down 1.3 per cent. A further decline (-1%) is forecast to June 2022.

For the year ending September 2022, the number of lambs processed in export-approved premises is estimated to decline marginally (0.3%) to 18.3 million.

Lamb processing numbers were down for the first four months of the 2021-22 season. In the North Island, lamb processing started slowly as lambs were slow to reach finishing weights, reflecting poorer ewe condition at mating, tight feed conditions through early spring, and a lack of sun in November.

The slow start to the North Island processing season, combined with a relatively steady forecast for whole-of-season processing numbers, implies that lamb processing will be strong for the remainder of the season.

Export lamb production for 2021-22 is forecast to decline one per cent from 2020-21 to 346,300 tonnes bone-in.

In the industry, confidence is mixed. While farm-gate prices are at record high levels, farm input costs have surged. Farmers are wary of the volatility of weather events and uncertain but changing environmental regulation. Forestry is also spreading into sheep farming land. All of these factors will weigh on future expansion of breeding ewe numbers.

Mutton

The number of adult sheep processed in 2021-22 is expected to be down 1.3 per cent on 2020-21.

The decline in ewe processing numbers reflects high numbers in the 2020-21 season, but at 3.7 million is still high compared to historical averages, which indicates the mixed confidence in the industry.

Ewe processing numbers for the first four months of the season were significantly down on the same period in 2020-21. This difference reflects the very high level of processing in 2020-21, but processing numbers are also down on the five-year average for the first quarter of the season.

High farm-gate prices for lamb combined with good feed conditions on farm contribute to lower processing numbers in the first four months of the season. Processing numbers are expected to lift as the season progresses.

Export mutton production in 2021-22 is estimated to decline 3.1 per cent on 2020-21.

Table 8 Export Mutton Production

Sep Year	Breeding Ewes million head	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2017-18	17.8	4.0	25.8	102.5
2018-19	17.2	3.4	26.8	90.5
2019-20	16.8	3.5	25.9	91.4
2020-21	16.6	3.8	26.2	100.2
2021-22e	16.3	3.7	26.1	97.1
2021-22e % change	-1.3%	-2.8%	-0.3%	-3.1%

e estimate, f forecast

Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand, New Zealand Meat Board

Beef Outlook 2021-22 – Opportunities and Challenges

Opportunities

- Continued global economic growth in 2022, although at a slower pace to 2021, will support consumer demand for high quality proteins.
- Strong demand from China driven by solid economic growth in 2021 and a shift in consumer preference towards beef following deficits in pork supplies due to African Swine Fever (ASF). Even as the Chinese pig herd recovers from ASF and pork supply increases, beef is expected to remain part of the Chinese consumer diet.
- Continued economic recovery in the US is expected to support consumer demand.
- Declining US production and strong consumer demand are projected to support US imported beef prices in 2022.
- The forecast for a lower NZD/USD will increase the competitiveness of New Zealand exports.
- Consumption growth and demand for high quality protein is projected in Asian markets as the size of the middle class increase and a shift of more consumers into urban areas takes place.
- Increasing consumer awareness and demand for high quality grass-fed beef. Food safety, sustainability and traceability are all becoming more important to the discerning consumer.

Challenges

- The spread of Omicron in New Zealand, and the potential threat of new COVID-19 variants both domestically and globally continue to pose a threat to the global economy.
- Global freight congestion and surging shipping and air-freight costs are challenging exporters' shipping timeframes and eroding margins. This is significant for New Zealand's chilled trade.
- Ongoing global labour shortages may limit meat processing capacity.
- Increased frequency of adverse climatic events, both domestically and globally.
- Beef demand has the potential to be challenged by tightening monetary policy in many central banks and continuing high meat prices.
- Economic growth in China is expected to slow in 2022. China also maintains a zero tolerance COVID-19 policy. New Zealand's reliance on this market means an increased sensitivity to weakening economic conditions.
- Deterioration in the political relationship between Chinese and New Zealand governments would be a threat to beef export performance.
- Australian export beef production is expected to lift significantly in 2022, increasing competition in key markets, including the US and China.
- Global and domestic climate change policy presents challenges for agricultural production systems and trade.

Beef & Veal Exports

2021-22 Outlook

It has been an exceptionally strong start to the 2021-22 season for beef export returns. Global demand for beef has lifted to unprecedented levels, fuelled by tight global supply and strong consumer demand. Solid market fundamentals have been supported by a favourable exchange rate. Average export returns for the first quarter of the season (October 2021 to December 2021) reached record highs.

The outlook for the remainder of the season is positive. Demand for beef in key markets – China and the US – is forecast to remain strong. Global beef supplies are forecast to remain tight in 2022. Australian beef exports are expected to lift following extensive herd rebuilding, but on a global scale these are expected to be offset by lower production from the US and South America. New Zealand beef exports are expected to come up against the increased volumes of Australian beef in the US, with some softening of export prices forecast in the June and September quarters as a result.

For the 2021-22 season, total beef and veal export receipts are forecast to lift 11.1 per cent compared to 2020-21. This is driven by a 14.4 per cent lift in average export value.

The average export value is forecast to reach a record high at $8,781 per tonne and is 18 per cent up on the five-year average.

A lower NZD/USD supports the strong outlook for export performance in 2021-22.

A decline in beef export production of 1.8 per cent will be more than offset by the strong average export value. The decline is off a record level in 2020-21 but is still the second highest; six per cent up on 2019-20 and 10 per cent up on the five-year average.

Demand from China will be a key driver of export performance for the season. In the first quarter of 2021-22, China was the leading destination for New Zealand beef exports, accounting for 45 per cent of total export volumes, up from 40 per cent in 2020-21.

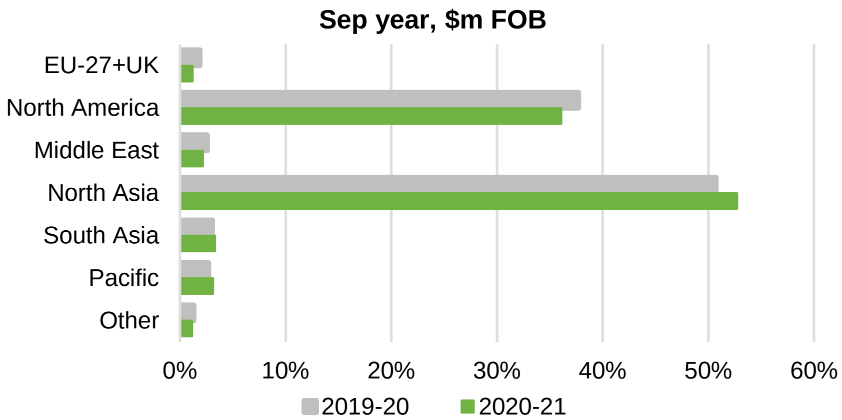
Chinese demand has been strong so far in 2021-22. This was influenced by buying patterns for the Chinese New Year (early February), which is a peak consumption period for the Chinese population. Chinese import demand for beef is expected to remain solid through 2022, supported by both increasing beef consumption and tighter supply of beef imports from South America.

Table 9 New Zealand Beef Exports

	Beef and Veal Meat			Co-Products	Total Beef	Beef Meat
Sep Year	000 tonne	$ / tonne	$m FOB	$m FOB	$m FOB	%
2017-18	431	7,123	3,073	551	3,624	85%
2018-19	453	7,451	3,377	531	3,908	86%
2019-20	465	8,186	3,810	512	4,322	88%
2020-21	502	7,674	3,854	545	4,399	88%
2021-22e	493	8,781	4,331	558	4,888	89%
2021-22e % change	-1.8%	+14.4%	+12.4%	+2.3%	+11.1%	

* Beef and Veal Meat value as a percentage of the value of Total Beef exports, including Co-Products
e estimate, f forecast | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

Figure 6 New Zealand Beef & Veal Export Value



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

The average export value of beef and veal exports to China reached a record high in the first quarter of the 2021-22, lifting 22 per cent on the same period in 2020-21 and 25 per cent on the five-year average.

Secondary cuts make up the largest proportion of exports to China, accounting for 47 per cent of exports for the first quarter of the 2021-22 season. The average export value of secondary cuts was $9,500 per tonne, up 24 per cent on the same period in 2020-21. Processing beef accounted for 40 per cent of the volume for the first quarter and the average export value was up 30 per cent on 2020-21 to $8,900 per tonne. Loins accounted for five per cent of exports. The average value in the first quarter was $11,600 per tonne, up 12 per cent on 2020-21. Bobby veal accounted for around nine per cent of exports with an average value of $5,000 per tonne, up 15 per cent on the same period in 2020-21.

Increasing beef exports from Australia are expected to provide greater competition for New Zealand beef in China, however there are multiple Australian beef plants that remain delisted from China, reflecting a turbulent political relationship between the two countries.

The US continued to be a solid market for beef exports in the first quarter of the season. Strong consumer demand combined with tighter import supplies to underpin record average export values. Twenty-eight per cent or more than one in four tonnes of beef exports were to the US, now taking a definite second place to China. The average value of New Zealand beef exports to the US was 31 per cent for the first quarter of the season to reach $9,700 per tonne.

The outlook for imported beef demand in the US remains positive for 2022. New Zealand beef exporters are expected to face increased competitive pressure from Australia in the second half of the year. While imported beef prices are expected to ease as supply increases, they are expected to remain above historical levels.

Processing beef made up approximately 75 per cent of New Zealand beef and veal exports to the US for the first quarter of 2021-22 season, down from a historical pattern of around 85 per cent. This reflects an increasing volume of chilled beef exports (loins and secondary cuts), which accounted for eight per cent of total volume, up from four per cent in the same period in 2020-21.

The average export value per tonne for processing beef in the first quarter of 2021-22 was $8,800 per tonne; 27 per cent up on 2020-21, but slightly lower than the average export value of processing beef exports to China.

After China and the US, the next most significant markets are Japan (7%), Korea (5%) and Taiwan (3%). Export volumes to Japan increased in significance in the first quarter of the season, reflecting low frozen beef inventories in Japan and a lift in manufacturing beef exports, as this price-sensitive market sought cheaper beef alternatives in a heated global market.

Demand and prices for beef co-products experienced a strong recovery following the disruption of COVID-19. The largest challenge to the offal market is that the shortage of labour is limiting recovery.

Beef – International Situation

Overview

In late 2021, market fundamentals aligned to create an optimal trading environment for New Zealand beef exporters. Consumer demand was red hot against a backdrop of tight global beef supply and supported by a favourable exchange rate.

Similar to sheepmeat, consumer demand for beef in New Zealand's key markets for beef was fuelled by economic recovery following the initial waves of COVID-19 variants. Government support packages proved successful and supported increased consumer spending.

Global beef supply tightened through 2021, adding to import demand. While US beef production reached a record high, factors such as weather, politics, policy, demand and cattle diseases all placed enough downwards pressure on beef supply to offset US production. The continued contraction in Australian beef exports and reduction in beef production in Brazil were leading drivers to supply fundamentals in 2021.

Strong demand and tight supply are expected to continue to feature in 2022, however, market conditions do have the potential to change through the year. On the supply side, the expected lift in Australian beef exports will increase supply. Estimates in early 2022 signal that on a global basis this will be offset lower production from the US, however, in individual markets, the presence of Australian beef will result in increased competition. Beef demand is expected to be buoyant but challenged by tightening monetary policy of many central banks and continuing high meat prices.

China and the US are expected to continue to dominate global beef trade in 2022. In China, demand for beef has continued to grow and maintain market share despite increasing pork supply. ASF has played a critical role in shifting meat preferences for the Chinese consumer towards alternatives such as beef from pork, albeit that pork remains the dominant meat protein in China. There is now an emerging market for beef and consumption is expected to continue to lift independent of ASF and pork supply.

Global beef production for 2022, as estimated by the USDA in January 2022, is expected to lift one per cent on 2021. Growth in Australia is a key driver in 2022. Brazilian beef production is expected to lift because of herd liquidation, following a significant decline in 2021. A decline in US production, from record levels, offsets much of these production gains.

Global beef consumption declined significantly in 2020 as a result of COVID-19. The pandemic impact persisted in 2021. Despite some growth in key markets, overall consumption in 2021 was stable compared to 2020. Consumption is expected to recover slightly (+0.8%) in 2022 and continue to experience slow growth out to 2026. High prices relative to alternative meats such as pork and poultry is a limiting factor for beef consumption, despite being the preferred meat in many countries.

Global beef exports are expected to lift four per cent in 2022 reflecting export growth in Australia and the US. Brazil's beef exports are also expected to increase, following trade suspensions in 2021 and strong import demand from China.

Global beef imports are expected to lift just under five per cent reflecting import growth in China and the US as Australian beef exports increase. Import demand from other Asian countries is also expected to be strong in 2022.

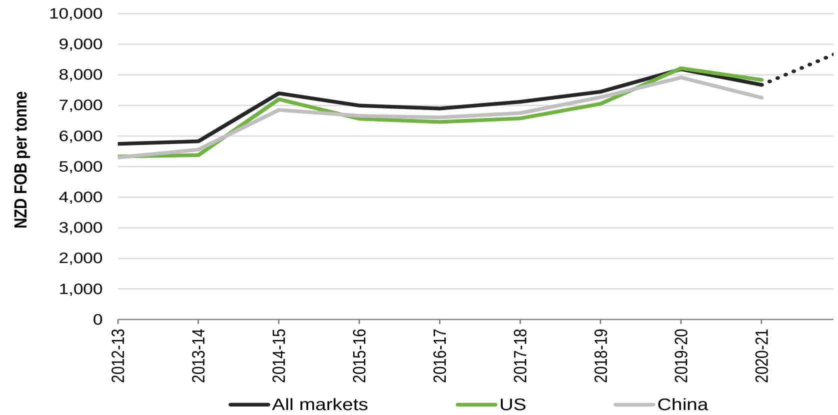
The geopolitical relationship between China and other key beef exporting nations, including the US, Australia and New Zealand, will be a factor to watch in 2022.

Key challenges that the global beef trade will face in the 2021-22 season include logistics and shipping disruption, shifting consumer demand patterns in response in high beef prices and tightening monetary policy, and potential risk from further outbreaks of COVID-19 variants.

China

Chinese beef imports experienced further expansion in 2021. China accounted for approximately 27 per cent of global beef imports in 2021, which places it well above the US that accounted for 12 per cent.

Figure 7 New Zealand Beef Exports FOB Value - Sept Year



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

Chinese beef imports are forecast to lift a further 10 per cent in 2022, reflecting the shift in meat consumption towards beef and increased consumer wealth. In recent years, ASF has been noted as the dominant driver of increasing beef consumption and subsequent imports, driven by the sharp decline in domestic pork production. As the Chinese consumer turned to beef in the absence of pork, a new market for beef emerged. There are signs that beef consumption will retain its increased market share, even as domestic pork production increases. In the second half of 2021, Chinese pork production flooded the domestic market and pork prices plummeted. Beef prices and import demand continued to increase, implying the two proteins are no longer direct substitutes.

Chinese beef consumption in 2022 is forecast to lift four per cent on 2021. This will mean beef consumption will have increased by a significant 30 per cent since 2018.

Against a backdrop of rising consumption, reliance on imports is considered a long-term trend. China lacks the ability to expand its productive capacity by the magnitude required to become self-sufficient. Resource constraints for land and water are the key limiting factors to production expansion. However, production is still forecast to lift one per cent in 2021.

South American beef accounted for just under three-quarters of the Chinese imported beef market in 2021. Brazil is the largest supplier, accounting for 38 per cent of total imports, while Argentina and Uruguay make up 20 per cent and 14 per cent respectively. New Zealand was the fourth-largest supplier in 2021 at nine per cent. Chinese imports of Australian beef suffered a sharp decline in 2021, down over 40 per cent on 2020 to account for six per cent of total imports. In contrast, Chinese imports of US beef experienced an explosion of growth, up over 300 per cent so that the US accounted for six per cent of China's beef imports, up from just one per cent in 2020.

Beef supply to China tightened significantly in 2021, reflecting the sharp decline in Australian exports and unexpected, but very critical export suspensions from both Argentina and Brazil, which was absent from the Chinese market for three months because of the discovery of two cases of atypical BSE, creating a huge void in global beef trade.

China is expected to experience weaker economic conditions in 2022, but off high levels. New Zealand's reliance on China for beef exports increases its exposure to shifts in economic conditions.

The ongoing pandemic and China's zero-tolerance policy towards the virus will continue to pose a risk to New Zealand exporters in 2022. China is the only country persisting with a zero-tolerance policy. Regional restrictions and lockdowns therefore remain a reality for China and create disruption for supply chains and the flow of imports into the country.

The dynamics of meat production, consumption and trade in China will continue to be a leading driver of New Zealand beef export performance in 2022 and beyond. Key factors to monitor for the outlook period will be signs of a weakening economy, geopolitical tension, changes in supply patterns from South America and potential pandemic-related logistics disruption.

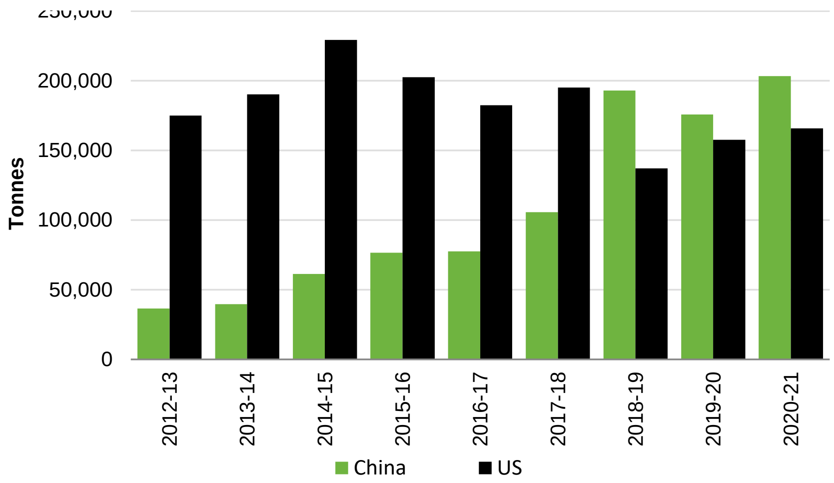
United States

Against a backdrop of pandemic uncertainty, the US beef industry proved remarkably resilient. 2021 was a record-breaking year in the US beef sector with record beef production, record export volumes and record demand. This was against a backdrop of severe labour issues, supply chain disruption and surging inflation.

Beef production in 2021 is estimated to have lifted 2.8 per cent compared to 2020, making it the highest on record. This record was in spite of significant disruption in the processing sector due to COVID-19 and several significant natural disasters.

Accompanying the lift in beef production was a surge in both domestic and international demand for beef. The shift in demand challenged the ability of the processing sector to be able to meet the demand, which resulted in headwinds to domestic market supply at some stages during

Figure 8 New Zealand Beef and Veal Exports to US and China (Sept year)



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

the year, all of which contributed to very strong wholesale beef prices.

Underpinning 2021's record beef production was a faster pace of liquidation of the beef cattle herd in comparison to 2020. Drought in key cattle-producing states was a major factor to the accelerated pace of liquidation. USDA estimated that the drought affected 25-30 per cent of the beef cow herd in 2021.

Beef production in 2022 is projected by the USDA (January 2022) to come off its record high, decreasing 2.8 per cent. However, it is still forecast to be on par with the high production of 2019 and 2020. Persistence in, or recovery from, the current drought conditions will be a factor in production trends.

In the medium-term, US beef production is expected to contract as the US beef cow herd enters a maintenance phase.

Cattle inventories have entered 2022 an estimated 400,000 head down on last year, and nearly one million head down from highs seen at the peak of the cattle cycle. The beef cow herd is estimated by USDA to have been down two per cent as at 1 January 2022.

This bodes well for US demand for imported beef in the medium term. With declining domestic production and the pull of international demand lifting export volumes, US domestic market supply has the potential to be short.

It was a strong year for US beef consumption, underpinned by record production and consumer demand. Consumer demand was unprecedentedly strong, underpinned by strong economic recovery post COVID-19. Consumption is forecast to decline 2.5 per cent in 2022, after lifting 1.5 per cent higher in 2021. While consumer demand is expected to remain firm, the decline in consumption reflects the supply balance on the domestic market. Declining production and export growth are not expected to be matched by higher imports.

US beef imports contracted in 2021, driven predominantly by contracting supply from Australia. Imports of Australian beef declined 40 per cent in 2021. This contraction was, however, partially offset by a lift in supply from Canada and Brazil. Imports of Brazilian beef surged in the later months of 2021 when Brazil was suspended from the Chinese market.

Imported beef supply in 2022 is expected to lift, largely reflecting the increase in supply from Australia. This has the potential to create competitive pressure in the market for New Zealand beef.

As aforementioned, Brazilian beef supply to the US market has been high in recent months. There is, however, much uncertainty about the supply availability of Brazilian beef past April because of quota restrictions.

A decline in domestic lean beef supplies combined with strong demand are expected to support US imported beef prices in 2022, despite rising imported beef supply. However, ongoing liquidation of the cow herd because of drought does introduce downside risk to the projection for the first half of 2022.

Imported prices have performed solidly for two years. In late 2021 and early 2022 imported prices surged. In January 2022, US imported beef prices were close to 30 per cent higher than a year earlier and close to 40 per cent up on the five-year average.US beef exports experienced significant growth in 2021, lifting 15 per cent in volume and 38 per cent in value. Asian markets accounted for most of the growth, particularly China/Hong Kong (+114%), Korea (+14%) and Japan (+5%). The lift in China reflects the market access gains from the US-China Phase One Agreement. Direct beef exports to China were more than four times higher in volume and more than five times higher in value.

While there is some uncertainty around US beef exports to China given the ending of the Phase One Agreement at the end of 2021, all forecasts signal that China will continue to be a key purchaser of US beef.

US beef exports are forecast to lift a further three per cent in 2022. Volumes are expected to be high in the first half of the year, however, declining production may limit export potential in the second half of the year. This will be important timing as Australian beef exports are expected to lift in the second half of the year. Australia and the US are direct competitors in Japan and Korea.

US meat processing capacity was severely impacted by the spread of COVID-19 infection through workers in 2021 and early 2022. The spread of Omicron in January reduced processing capacity and production, however, the severe impact proved short-lived as Omicron peaked quickly and tailed off.

The processing sector is better placed to manage the supply chain in 2022. Cattle supply is forecast to be lower, and the pandemic-related carryover has been largely worked through. Issues around labour and packing capacity will persist, but both are expected to improve through 2022. Meat processing and packing capacity is projected to lift with industry's investment resulting in expansions and new facilities.

The market power of US meat companies is currently under investigation by the Biden Administration. Meat companies have been held responsible for the surge in meat prices. In an attempt to curb meat price inflation, the Biden Administration has introduced new measures targeting the meat processing sector, which has been accused of price fixing and profiteering as a result of the concentration in the industry. The new measures are designed to introduce more transparency.

Trends in the pork and chicken sectors have an impact on the beef market in the US. US pork production is forecast to decline in 2022. A key issue for the US pork industry in 2022 will be attempting to keep the sector free of ASF. Chicken production is forecast to lift significantly in 2022. Chicken and pork consumption are both projected to lift in 2022, supported by the significant price advantage for both over other meats.

Australia

The Australian beef sector looks set to be able to take advantage of solid global market fundamentals in 2022. The national herd is forecast to expand and slaughter numbers are expected to lift following the focus on herd rebuilding in recent years.

Australian beef production has experienced two years of decline, with 2021 production declining 12 per cent on 2020, which in turn was down 12 per cent on the previous year. In 2022, production is forecast to expand 13 per cent on 2021 and continue to expand rapidly in the next two years, to reach record production levels in 2024.

New Zealand beef exporters gained some benefits from the absence of competition from Australian beef in key markets in 2020 and 2021, however, expanding export production in 2022 will increase the competitive pressure in key markets for New Zealand beef.

Australian beef exports for 2021 contracted 12 per cent on 2020, which in turn were down 15 per cent on the previous year. Exports are expected to lift 15 per cent in 2022 and reach record volumes in 2024.

Last year, Japan was the top destination for Australian beef, followed by South Korea and China. Despite the contraction in exports, volumes to Korea increased in 2021. This market will be increasingly important to Australia as tariffs consistently drop in line with the Korea-Australia FTA. The US and China are expected to be the key markets where the increased presence of Australian beef will compete directly with New Zealand beef.

The UK now presents an opportunity for Australian beef following the agreement of the Australia-UK FTA in June 2021. The agreement will not affect the 2021-22 outlook; however, it will provide opportunities for high-value Australian beef in the medium and long term.

The Australian beef industry faces similar challenges to New Zealand in 2022. A severe shortage of labour has the potential to impact the productivity of the herd and capacity of the processing sector. Prices for farm inputs are also surging. Globally, pandemic-related freight and shipping challenges are expected to continue to cause disruption and the potential emergence of new COVID-19 variants is a constant threat.

Brazil

Brazil is a significant player in global beef trade and a serious competitor. It has enormous, long-term production potential supported by the opening of new land for grazing and increasing efficiency in beef production.

The country has experienced a turbulent two years, with economic contraction in 2020 because of COVID-19, high consumer price inflation, and a return to recession in the second half of 2021. Rising energy prices, drought-related disruption and supply chain disruption due to the pandemic all put significant strain on the Brazilian economy in 2021. High government debt is also a concern.

In 2022, inflation remains a primary concern, with monetary policy expected to tighten further. Consumer and business confidence is very low, and the impact of the pandemic, both in health and economic outcomes continues to be felt.

The weak economic conditions and high inflation have resulted in high domestic meat prices and a decline in domestic beef consumption. This is significant in a country that consumes approximately three-quarters of its beef production. Lower domestic consumption, combined with the suspension of beef exports to several markets due to BSE, and drought, have resulted in a challenging year for the Brazilian beef industry.

Brazil is the second-largest beef producer, following the US, and is estimated to have accounted for 17 per cent of global production in 2021.

Brazil's beef production declined 8-10 per cent in 2021. The decline reflects herd retention following the aggressive demand pull of China in 2020 for beef from cattle under 30 months of age (to meet restrictions imposed to deal with BSE) and a delay in slaughter in response to the export ban to China in late 2021. Production is expected to lift in 2022 reflecting both a resurgence in slaughter as the export ban to China was lifted and continuation of the herd liquidation phase that started in the second half of 2021. Production is still expected to be below the peaks of 2018 to 2020.

Brazil is picked to remain the leading exporter of beef in 2022, forecast to account for approximately 20 per cent of total world exports. Beef exports are expected to lift significantly, reflecting production trends.

The steady devaluation of the Brazilian currency (the Real) also continues to support the continuous increase in exports.

The confirmation of two atypical cases of BSE in Brazil in the second half of 2021, initiated a self-imposed restriction on beef exports to China in accordance with sanitary agreement between the two countries. This suspension was extended to three months, as Chinese officials investigated the situation. With approximately two-thirds of Brazilian beef exports typically destined for China and Hong Kong, the suspension resulted in large volumes of Brazilian beef being diverted to alternate markets. The US was a particular focus with Brazilian beef shipments during the time of the suspension surging to more that the entire volume shipped in the previous 12 months. Brazilian beef exports to the US in this period were close to double those of Australia.

In 2022, Brazilian beef exporters are expected to refocus on China. Given the high volumes exported to the US in recent months, it is looking likely that Brazil will run out of tariff-free quota access to this market by the end of the first quarter.

Shifts in Brazilian beef production and trade have the potential to have a major impact on all beef exporting countries. As seen in recent years, there is a degree of volatility to the Brazilian beef trade, with unpredictable swings. This makes Brazil an important market to monitor.

Cattle Prices – Farmgate

Farmgate returns for cattle in the 2021-22 season are forecast to reach record highs, reflecting strong market fundamentals and a weaker NZD.

The weighted average farmgate price for all cattle is estimated at 507 cents per kg. This is 7.3 per cent above last season and 4.5 per cent above the five-year average level on a cents per kg basis.

Farmgate prices for the first four months of the 2021-22 season (October 2021 to January 2022) have tracked steadily above historical levels. The two key drivers of farmgate prices for the beginning of the season have been record high export prices, as discussed in earlier sections, and a lower exchange rate.

Market conditions are expected to remain buoyant for the remainder of the season. Downside risk for farmgate prices may arise from increased competition from Australian beef in key markets and COVID-19 disruption at the processor level.

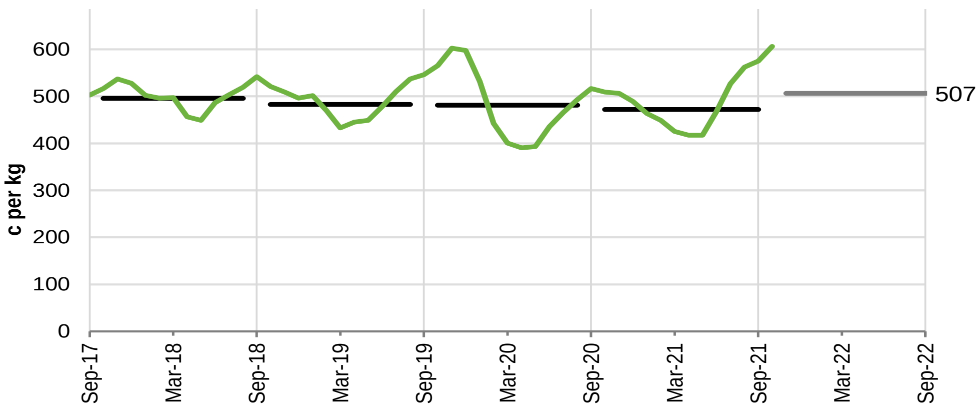
Supply chain disruption due to COVID-19 continues to be a reality both domestically and internationally. Processors will be wary of the risk with the peak cow production season approaching.

Domestically, the severe labour shortage in the processing sector is already resulting in significant delay to cattle processing so far this season. There is potential for this pressure to intensify as the Omicron variant spreads through New Zealand. Processors will also continue to face freight and supply chain disruption and increased costs during 2022.

The recent strong run of dairy product prices may result in a more spread out, or smaller dairy cow cull than estimated this season, as dairy farmers endeavour to maximise their returns. This could result in upside to the M cow farmgate price as an element of procurement competition enters processing. Climate and feed conditions in key dairying areas through autumn will also determine the number and spread of cull dairy cow numbers.

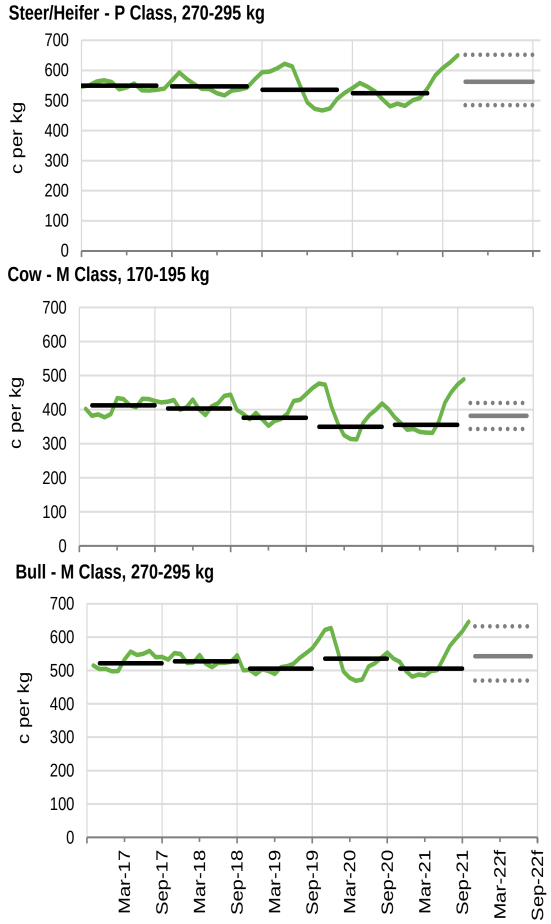
Across the classes the estimated 2021-22 average annual price is 562 cents per kg for P steer/heifer (270-295kg), 381 cents per kg for M cow (170-195kg), which includes a large component of cull dairy cows, and 542 cents per kg for M bull (270-295kg).

Figure 10 Weighted Average All Classes Cattle Farmgate Price



Source: Beef + Lamb New Zealand Economic Service

Figure 9 Weighted Average Cattle Farmgate Price



Source: Beef + Lamb New Zealand Economic Service

Beef Production

Table 10 Export Cattle Processing Composition

	000 head				
Sep Year	Steer	Heifer	Cow	Bull	Total
2017-18	535	454	1,026	542	2,556
2018-19	565	474	1,018	555	2,612
2019-20	588	491	1,048	546	2,674
2020-21	669	550	1,034	553	2,806
2021-22e	660	520	1,018	558	2,756
2021-22e % change	-1.4%	-5.5%	-1.5%	+1.0%	-1.8%

e estimate, f forecast
Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Table 11 Export Cattle Carcase Weights

	kg / head				
Sep Year	Steer	Heifer	Cow	Bull	Total
2017-18	312	241	197	301	251
2018-19	313	243	200	300	254
2019-20	312	243	202	299	254
2020-21	310	244	202	300	256
2021-22e	312	243	200	301	255
2021-22e % change	+0.7%	-0.5%	-1.1%	+0.2%	-0.0%

e estimate, f forecast
Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Table 12 Export Beef Production Composition

	000 tonne bone-in				
Sep Year	Steer	Heifer	Cow	Bull	Total
2017-18	167	110	202	163	642
2018-19	177	115	204	166	662
2019-20	184	120	212	163	679
2020-21	208	134	209	166	717
2021-22e	206	126	204	168	704
2021-22e % change	-0.7%	-5.9%	-2.6%	+1.2%	-1.8%

e estimate, f forecast
Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Cattle Slaughter

For 2021-22, the number of cattle processed for export is estimated to decline by 1.4 per cent to 2.76 million head (Table 10).

The number of steers processed is expected to decline by 1.4 per cent. This follows very high steer processing numbers in 2021-22. The 2021-22 forecast remains high historically reflecting continued input of dairy-beef steer numbers.

The number of heifers processed is estimated to decline by 5.5 per cent following a very high offtake in 2020-21.

The number of cows processed is forecast to decline 1.5 per cent, reflecting the impact of a higher farm-gate milk price forecast on the dairy cow cull.

The offtake of bull beef is dominated by dairy-beef bulls. The small increase in slaughter numbers reflects evidence of an increase in dairy-bull beef calf retentions in the previous two years.

Cattle Weights

On average, export cattle carcase weights are forecast to remain relatively stable in 2021-22. This assumes “normal” climatic conditions in the 2021-22 season.

Beef Production

In 2021-22, New Zealand’s export beef production is forecast to decline 1.8 per cent. This reflects the trend in export processing numbers, given the steady average carcass weight.

The decline in production comes off the back of record production in 2020-21. The estimated production for 2021-22 will be the second highest on record.

Livestock Numbers

Sheep

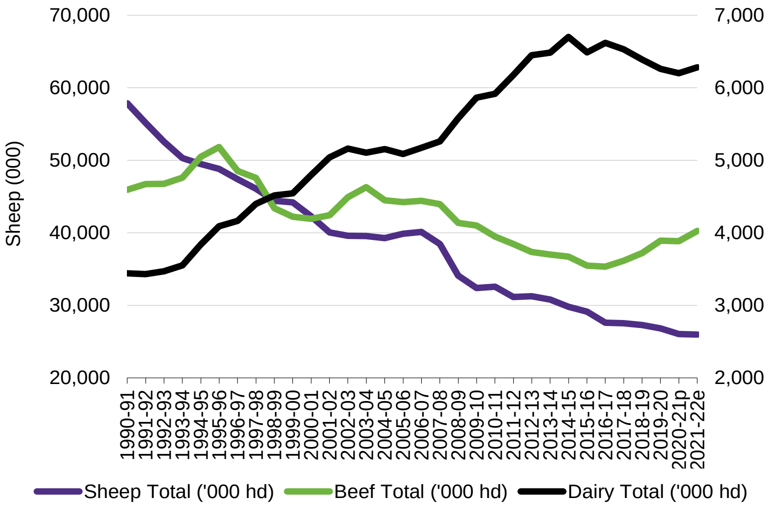
The total number of sheep at 30 June 2021 was provisionally 25.97 million head, 0.2 per cent lower than the previous June. This is the third year in a row sheep numbers have been below 27 million. Within this, the number of breeding ewes declined 1.3 per cent and the number of hoggets decreased 1.5 per cent.

In the North Island, the number of sheep stabilised, up 0.3 per cent (+41,000) to 12.5 million at 30 June 2021 and the number of breeding ewes decreased 1.3 per cent.

Decreases in breeding ewes occurred in Northland-Waikato-Bay of Plenty (-3.3%), East Coast (-1.0%) while Taranaki-Manawatu was stable (+0.1%). The number of hoggets in the North Island increased 2.6 per cent with Taranaki-Manawatu lifting hogget numbers by 9.4 per cent.

In the South Island, the total number of sheep decreased 0.7 per cent (-101,000). The number of breeding ewes decreased 1.4 per cent with fewer breeding ewes in all regions barring Southland, which had a small increase (+1.7%).

Figure 11 Livestock Numbers



Source: Beef + Lamb New Zealand Economic Service | Statistics New Zealand

Table 13 Livestock Numbers (million head)

Livestock numbers
million head

	Breeding Ewes	Hoggets	Total Sheep	Beef Cattle	Dairy Cattle
30 June 2020	16.57	8.67	26.03	3.88	6.20
30 June 2021e	16.35	8.80	25.97	4.02	6.28
18-19 to 19-20 % change	-1.3%	+1.5%	-0.2%	+3.7%	+1.3%

e estimate
Source: Beef + Lamb New Zealand Economic Service | Statistics New Zealand

The number of hoggets in the South Island remained steady, increasing 0.5 per cent. Increased hogget numbers in Marlborough-Canterbury and Otago were offset by a decline in hoggets in Southland.

Beef Cattle

The number of beef cattle at 30 June 2021 is estimated at 4.02 million, up 3.7 per cent on the previous June. This was largely driven by North Island farms.

In the North Island, the number of beef cattle increased 6.4 per cent to 2.81 million at 30 June 2021.

In the South Island, the number of beef cattle decreased 2.1 per cent to 1.22 million at 30 June 2021. The number of beef cows decreased moderately, while the number of other cattle, including weaners, increased.

Dairy Cattle

The number of dairy cattle at 30 June 2021 is estimated to have increased (1.3%) to 6.28 million. The South Island contains 41 per cent of the New Zealand dairy herd.

Wool[1]

Prices

The 2021-22 wool season (July 2021-June 2022) began with a positive sentiment for wool prices. However, the sentiment was not sustained for crossbred and mid-micron wools. The re-emergence of COVID-19 in China and generally slower growth in the Chinese economy disrupted manufacturing and weighed on demand and prices.

The outlook remains uncertain, with industry participants reporting it is difficult to see past the weak demand from China. There is currently little evidence signalling improvement in demand for mid-micron and crossbred wool in the medium term.

Despite the subdued sentiment, the indicators for strong wool types are tracking above 2020-21 and at the time of writing were trending upwards. The sharply lower NZD is currently providing considerable support for wool prices.

At the time of writing in mid-February, the North Island strong wool indicator was around 40 per cent up on the 2020-21 level but relatively on par with where the season ended in June 2021. The South Island strong wool indicator was also approximately 40 per cent up on the same time last year, and also relatively on par with end of season prices in June.

The fine wool market is performing solidly, driven by ongoing demand for active sports and casual wear products made from fine wool.

Exports

The outlook for 2021-22 is for the volume of wool that is exported to decline 0.5 per cent on 2020-21 reflecting declining sheep numbers. Wool export revenue has lifted in response to a lower NZD and improving market prices.

Table 15 Season Average Auction Wool Prices

	cents / kg greasy				
June Year	Fine	Medium	Strong	Lambs	All Wool
2017-18	1,696	624	271	366	369
2018-19	1,859	714	266	408	381
2019-20	1,447	725	221	230	332
2020-21	1,114	421	170	169	254
2021-22e	1,225	455	179	178	271
2021-22e % change	+10.0%	+8.1%	+5.3%	+5.3%	+6.7%

e estimate | Source: Beef + Lamb New Zealand Economic Service, Wrightson Wool, New Zealand Wool Services International Ltd , Statistics New Zealand

Table 14 Auction Prices and Raw Wool Exports

	Auction Price	Wool Exports		
	$ / kg	FOB $ / kg	000 tonnes	$m FOB
June Year	clean	clean	clean	
2017-18	4.93	5.41	100.2	542.5
2018-19	5.19	5.86	93.8	548.9
2019-20	4.53	5.63	76.7	432.1
2020-21	3.47	4.15	95.4	395.7
2021-22e	3.71	5.38	95.0	511.3
2021-22e % change	+6.9%	+29.8%	-0.5%	+29.2%

e estimate | Source: Beef + Lamb New Zealand Economic Service, Wrightson Wool, New Zealand Wool Services International Ltd , Statistics NZ

At the time of writing, export data is available for the first six months of the 2021-22 wool season (i.e., July 2021 to December 2021). New Zealand wool exports were down 9 per cent on the same period in 2020-21. Export receipts at FOB were up 12 per cent following a 24 per cent lift in the average price per tonne of wool across all categories. Currency is a contributing factor to higher returns in this period with a 26 per cent decline in the NZD/USD over that period.

Export data for the first six months of the 2021-22 wool season show a 40 per cent decline in export sales to China. Sales to the EU-27+UK lifted by 20 per cent, but this was not sufficient to offset the declining sales in other markets.

Table 16 Wool Production

June Year	Sheep million head	Shorn 000 tonnes greasy	Slipe 000 tonnes greasy	Total 000 tonnes greasy	Shorn Wool kg / head* greasy
2017-18	27.5	124.4	17.0	141.4	4.52
2018-19	27.3	128.9	15.8	144.7	4.72
2019-20	26.8	109.9	16.4	126.2	4.10
2020-21	26.0	114.2	16.0	130.3	4.39
2021-22e	26.0	113.9	15.7	129.6	4.39
2021-22e % change	-0.2%	-0.3%	-2.1%	-0.5%	-0.0%

*excludes wool on sheepskins

e estimate | Source: Beef + Lamb New Zealand Economic Service, Wrightson Wool, New Zealand Wool Services International Ltd , Statistics New Zealand

Production

For 2021-22, total wool production is estimated to decline slightly on the previous season reflecting declining sheep numbers. At 130,000 tonnes, 2021-22 wool production would be 5 per cent below the five-year average. Slipe wool production is expected to decline in line with falling sheepmeat slaughter numbers.

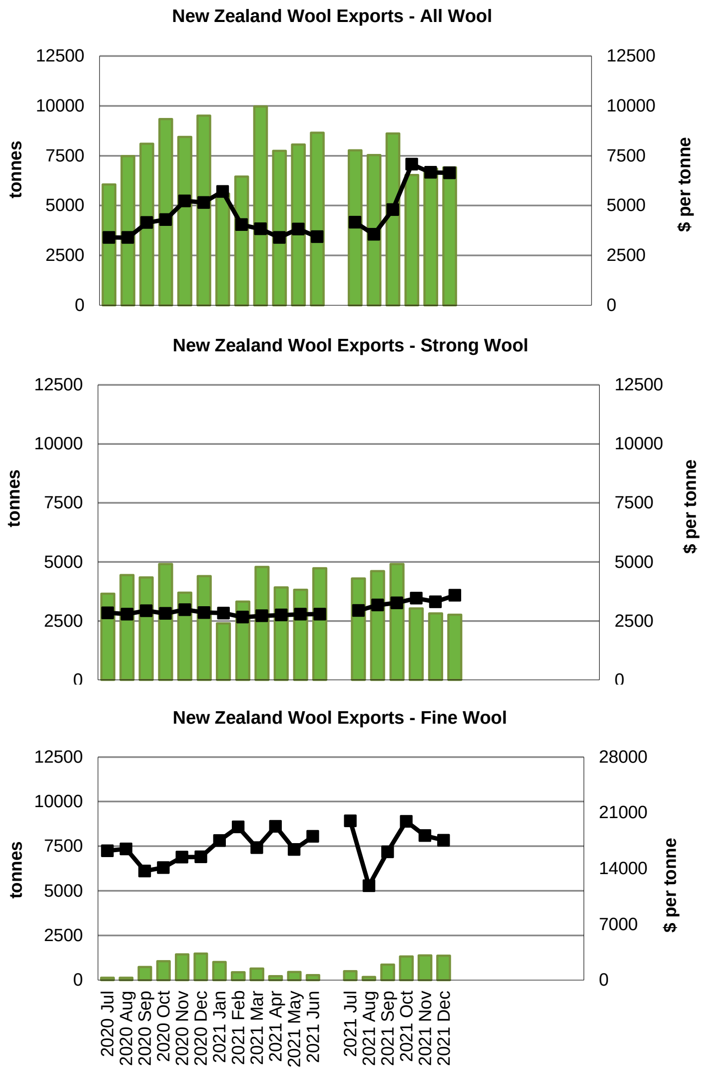
Shearing

Shearing expenditure increases 5.5 per cent in 2021-22 to average $27,480 per farm or $5.73 a head. Five years earlier, shearing expenses averaged $20,300 per farm or $4.22 per head. In 2018-19, shearing expenses jumped by $1.10 per animal (on average) and the upward trend has continued.

On average, most Farm Classes face a deficit in their net wool account (wool revenue less shearing expenses). The exceptions are South Island High Country and South Island Hill Country where wool revenue exceeds shearing expenditure.

To reduce shearing costs, farmers reported a myriad of options they are currently undertaking, including reducing the number of shearings per year, changing sheep breeds for meat or wool-shedding sheep, changing the ratio of cattle to sheep on farm. In recent seasons, labour shortages and an inability to bring in overseas shearers during COVID-19 border restrictions have made it difficult to find shearing contractors, which limits timing options for farmers and can impact animal welfare and, in some cases, wool quality.

Figure 12 New Zealand Wool Exports



[1]Although there is no levy on wool, the Economic Service conducts basic analysis of wool because it contributes to sheep and beef farm revenue.

Farm Revenue, Expenditure & Profit – New Zealand

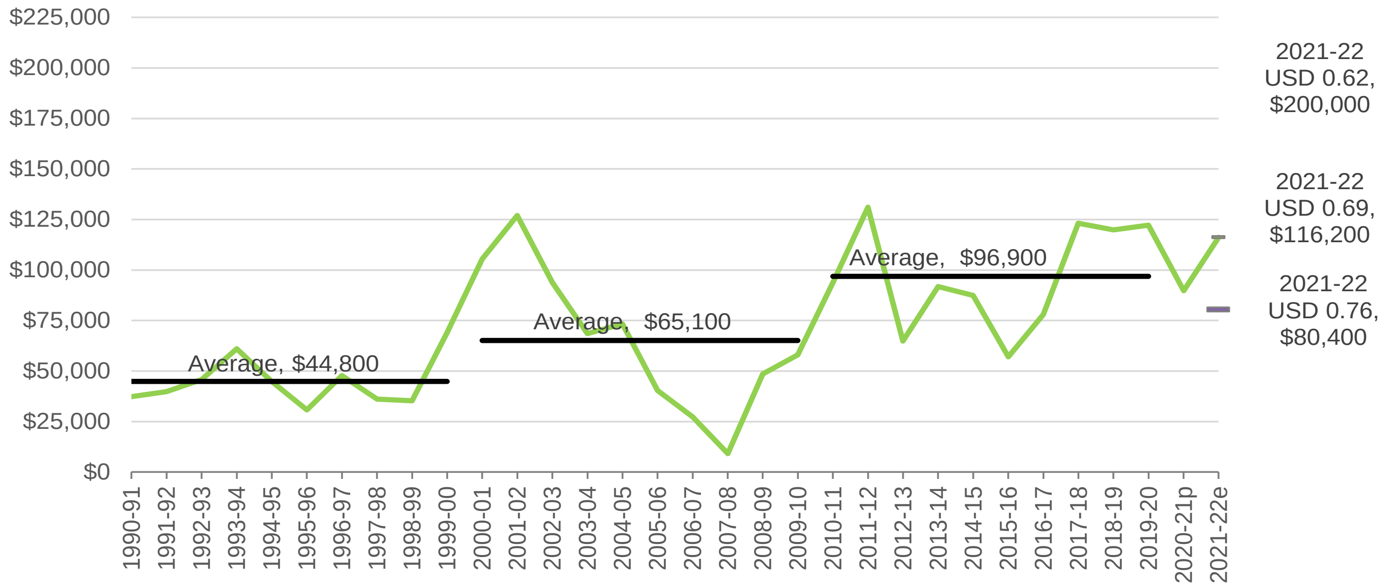
Revenue – Per Farm

Gross farm revenue for 2021-22 is forecast to average $667,300 per farm, up 11 per cent on 2020-21. This is driven predominantly by increased sheep revenue with other categories of revenue also forecast to increase. Forecast revenues are underpinned by good market prices for lamb, mutton and beef and a favourable exchange rate. Volumes of cattle and sheep sold are expected to decline from 2020-21, however, farm-gate prices are expected to more than offset the reduced volumes. Farm-gate prices were higher than historical trends in the first quarter of 2021-22 as markets recovered from the economic shock of the pandemic in 2020.

Sheep revenue, which is forecast to continue to contribute 52 per cent of gross farm revenue on average, increases 18 per cent to $344,100 per farm for 2021-22.

A small increase in average cattle revenue of one per cent to $165,400 per farm is forecast for 2021-22. Farm-gate prices for 2021-22 are promising, however, numbers sold will be down. All regions, except East Coast, are expected to experience an increase in cattle revenue. Overall, cattle revenue is forecast to contribute one-quarter of gross farm revenue in 2021-22.

Figure 13 All Classes Sheep and Beef Farm Inflation-Adjusted[1] Farm Profit before Tax per Farm



p provisional | f forecast | [1]Adjusted to 2004-05 $ terms
Source: B+LNZ Economic Service | Sheep and Beef Farm Survey

On average, wool revenue increases 13 per cent for 2021-22 as prices improve albeit from abysmal levels. Wool revenue accounts for four per cent of gross farm revenue on average, down from 30 per cent in 1990-91.

Dairy grazing revenue is estimated to remain unchanged to average $33,100 per farm in 2021-22. On average, dairy grazing revenue contributes 5 per cent of gross farm revenue.

Cash cropping is forecast to increase for 2021-22 to $66,600 per farm. On average, cash crop revenue accounts for 10 per cent of gross farm revenue, which is double the contribution from dairy grazing. Cash crop revenue is particularly important for Marlborough-Canterbury farms and the South Island more than the North; in Marlborough-Canterbury cash crop revenue is estimated at 26 per cent of gross farm revenue.

Revenue – Aggregate

Aggregate Sheep and Beef Farm Revenue for 2021-22 is forecast at $6.1 billion, up 11 per cent. After adjusting for inflation, aggregate revenue increases slightly – by 0.6 per cent. Gross farm revenue is spent on goods and services including wages, shearing contractors, and agricultural services, then tax, debt-servicing and reduction and personal living expenses.

Expenditure – Per Farm

On average, total expenditure is estimated to increase by 4.5 per cent to $500,400 per farm for 2021-22. Expenditure in most categories is estimated to increase. Overall, the main drivers are Fertiliser, Lime and Seeds; Cultivation, Sowing and Crop expenses; and Repairs and Maintenance.

Inflation in prices for inputs used on sheep and beef farms is estimated at 12 per cent in 2021-22, which follows a 1.1 per cent decrease in 2020-21 and 0.3 per cent increase for 2019-20.

Expenditure on Fertiliser, Lime and Seeds is the largest area of expenditure on average and comprises around 19 per cent of farm expenditure in 2021-22. Fertiliser, lime and seeds expenditure is forecast to increase is by 16 per cent to average $96,300 per farm, which is 28 per cent above the average of the previous five seasons ($75,400 per farm). Large increases in fertiliser costs, especially products containing urea, push up overall expenditure while the volume of fertiliser applied has decreased (on average).

Feed and Grazing expenditure decreases 2.5 per cent to average $22,600 per farm in 2021-22. Feed and grazing costs are highly variable across the country and an average New Zealand figure masks regional differences due to drier conditions, the ability to cut surplus feed in spring and therefore have supplementary feed on hand and climatic events such as flooding. Climatic conditions and shortages of contractors to plant and harvest crops and hay/silage are confounding factors this season.

Repairs and Maintenance spending increases to an estimated $41,611 per farm in 2021-22, up 9.2 per cent as spending increases after a decline in 2020-21. Higher product prices allow farmers to catch up on deferred maintenance.

Interest expenditure decreases 2.4 per cent to $53,600. While interest rates have increased slightly during the 2021-22 season to date, a combination of fixed-interest loans on lower rates and reduced need for overdrafts results in a small decrease for interest expenditure. Interest expenditure accounts for around 14 per cent of total farm expenditure on average.

Shearing expenses continue to climb, reaching $27,480 per farm on average for 2021-22, an increase of 5.5 per cent. On a per head basis, the increase is 2.5 per cent (to $5.73 a head) compared to the five-year average cost per head of $4.87. On average, shearing expenses currently are equivalent to wool revenue with shearing being a loss-making exercise for many and profitable for some.

Expenditure – Aggregate

In aggregate, Sheep and Beef Farm Expenditure for 2021-22 is forecast at $4.6 billion, up five per cent on 2020-21. Such expenditure is spent buying goods and services from local businesses for running the farm business.

Farm Profit before Tax

While Farm Profit before Tax contains the word “profit”, it is what is required to meet taxation payments, personal drawings for family living expenses, debt repayments and the purchase of capital items for the farm business, such as farm machinery.

After adjusting for inflation, in 2021-22 Farm Profit before Tax is expected to increase 29 per cent from 2020-21 but is less than the period from 2017-18 to 2019-20 (Figure 13).

There was a steep fall in profitability from 2001-02 to a 50-year low in 2007-08. This was followed by a recovery that was driven by an improvement in international prices, which exceeded the effect of the strengthening NZD.

Three scenarios are shown in Table 17.

- At the mid exchange rate scenario in which the NZD buys USD0.69, inflation-adjusted Farm Profit before Tax is $116,200 per farm in 2004-05 terms, up 29 per cent from 2020-21. In nominal terms, i.e., without adjusting for inflation, Farm Profit before Tax is $166,900 per farm, up 36 per cent on $123,200 for 2020-21.
- At the lower exchange rate (USD0.62), inflation-adjusted Farm Profit before Tax would be $200,000 per farm in 2004-05 terms for 2021-22, which would be 123 per cent higher than $89,800 for 2020-21. In nominal terms, Farm Profit before Tax would be $248,700, 102 per cent up on $123,200 for 2020-21.
- At the higher exchange rate (USD0.76), inflation-adjusted Farm Profit before Tax would be $80,400 per farm in 2004-05 terms for 2021-22, which would be 10.5 per cent lower than $89,800 for 2020-21. In nominal terms, Farm Profit before Tax would be $100,000, down 19 per cent on $123,200 for 2020-21.

Table 17 Sheep and Beef Farm Revenue and Expenditure
Weighted Average All Classes[1]

					Provisional		Forecast		Forecast % Change		
		2017-18	2018-19	2019-20	2020-21	2021-22	2021-22	2021-22	2020-21 to 2021-22		
						USD 0.62	USD 0.69	USD 0.76	USD 0.62	USD 0.69	USD 0.76
Revenue											
Wool		35,962	38,693	31,673	24,600	32,700	27,800	23,700	+32.9%	+13.0%	-3.7%
Sheep		280,021	306,786	320,255	291,500	400,400	344,100	298,200	+37.4%	+18.0%	+2.3%
Cattle		158,417	160,025	170,746	163,700	192,200	165,400	143,400	+17.4%	+1.0%	-12.4%
Dairy Grazing		28,389	30,957	34,662	33,100	33,100	33,100	33,100	0.0%	0.0%	0.0%
Deer + Velvet		6,104	7,123	6,203	5,000	6,200	5,300	4,600	+24.0%	+6.0%	-8.0%
Goat + Fibre		41	26	72	0	0	0	0			
Cash Crop		55,520	61,561	64,307	61,400	66,600	66,600	66,600	+8.5%	+8.5%	+8.5%
Other		24,682	24,195	23,617	22,800	25,000	25,000	25,000	+9.6%	+9.6%	+9.6%
Total Gross Revenue	**$ per farm**	**589,136**	**629,366**	**651,535**	**602,100**	**756,200**	**667,300**	**594,600**	**+25.6%**	**+10.8%**	**-1.2%**
Expenditure											
Fert, Lime & Seeds		71,178	79,448	83,544	83,300	97,700	96,300	95,200	+17.3%	+15.6%	+14.3%
Repairs & Maintenance		35,119	41,021	42,540	38,100	42,200	41,600	41,100	+10.8%	+9.2%	+7.9%
Interest & Rent		74,411	76,193	76,597	74,200	72,500	72,400	72,500	-2.3%	-2.4%	-2.3%
Other Expenses		248,432	274,391	284,408	283,300	295,100	290,100	285,800	+4.2%	+2.4%	+0.9%
Total Expenditure	**$ per farm**	**429,140**	**471,053**	**487,089**	**478,900**	**507,500**	**500,400**	**494,600**	**+6.0%**	**+4.5%**	**+3.3%**
Farm Profit Before Tax[2]	**$ per farm**	**159,996**	**158,313**	**164,446**	**123,200**	**248,700**	**166,900**	**100,000**	**+101.9%**	**+35.5%**	**-18.8%**
EBITRm[3]	**$ per farm**	**238,478**	**239,397**	**246,571**	**203,089**	**327,400**	**245,126**	**177,900**	**+61.2%**	**+20.7%**	**-12.4%**
Real (2004-05$) Farm Profit[3]		**123,200**	**119,800**	**122,200**	**89,800**	**200,000**	**116,200**	**80,400**	**+122.7%**	**+29.4%**	**-10.5%**
Index of Real Farm Profit		1,681	1,636	1,668	1,226	2,731	1,586	1,098	+122.7%	+29.4%	-10.5%
Fertiliser Use	kg per SU	27.0	28.5	26.1	24.6	24.2	23.9	23.6	-1.4%	-2.8%	-4.0%
Prices											
Wool auction	¢ per kg clean	493	519	453	347	437	371	317	+25.9%	+6.9%	-8.6%
All wool[5]	¢ per kg greasy	289	299	281	196	259	220	188	+32.0%	+12.1%	-4.2%
Lamb	$ per head	134	142	139	133	176	152	133	+31.8%	+14.1%	-0.4%
Mutton	$ per head	108	122	124	127	166	141	119	+30.8%	+10.5%	-6.2%
Prime Steer/Heifer	¢ per kg	540	541	530	522	652	560	485	+25.0%	+7.3%	-7.1%

1 At 1July 2021the average grazing area of commercial Sheep and Beef Farms, which are represented by the Weighted Average All Classes Sheep and Beef Farm, was 698 hectares. The average number of livestock on hand was 2,830 sheep, 395 beef cattle and 32 deer, totalling 4,488 Stock Units (breeding ewe equivalents)."

2. Farm Profit before Tax is required to meet personal drawings, taxation payments, debt repayments and the purchase of capital items.

3. Earnings before Interest, Tax, Rent and any salary paid to Manager(s)

4. Deflated by June year Consumer Price Index.

5. All shorn wool sales (auction 55% and private 45%) net of charges and freight.

Source: Beef + Lamb New Zealand Economic Service, Sheep and Beef Farm Survey

EBITRm

EBITRm is the abbreviation for Earnings before Interest, Tax, Rent and any wages paid to a manager (actual or family). It is a key measure of profitability. EBITRm per grazing hectare is a standardised measure that facilitates benchmarking because it places farm businesses on a consistent basis of being debt-free, owner-operator and freehold.

Table 18 shows per farm measures of financial metrics, including EBITRm, and Table 19 shows these measures per hectare.

North Island Summary

Sheep and Beef Farm Profit before Tax increases 11.3 per cent to average $229,000 per farm for 2021-22, as the increased gross revenue exceeds increased expenditure.

Gross revenue increases by 7.8 per cent to $565,600 per farm on average. Sheep revenue increases by 15.6 per cent to $291,100 due to the increase in average prices for prime and store lambs, and sheep and increased numbers sold.

Cattle revenue decreases moderately by 2.3 per cent to $203,800 per farm on average, while prices increase the mix of cattle sold changes for 2021-22 with fewer prime steers estimated to be sold.

Sheep revenue contributes around 52 per cent of gross farm revenue on average, while cattle revenue contributes around 36 per cent.

Dairy grazing revenue is forecast to increase 4.7 per cent to an average $20,100 per farm in 2021-22, while deer revenue is expected to fall 4.0 per cent to an average around $2,400 per farm.

Total expenditure increases 3.9 per cent to average $406,300 per farm for 2021-22. Increases occur in almost all categories but most noticeably fertiliser expenditure (+13.2%) despite a 6.6 per cent decrease in fertiliser tonnage applied, which is because of the sharp rise in the price of fertiliser. A reduction in both term and current liabilities reduces interest expenditure by 3.3 per cent.

South Island Summary

Sheep and Beef Farm Profit before Tax increases 33 per cent to average $265,100 per farm for 2021-22, again as increased gross revenue exceeds increased expenditure.

Gross farm revenue increases 13.7 per cent to average $790,800 per farm driven by increased revenue from sheep, cattle and cropping.

On average, sheep revenue increases by 20 per cent to $408,300 per farm as more prime lambs go to market at higher prices. High prices for store lambs and mutton also buoy revenue. Wool revenue increases 12.1 per cent to average $43,600 per farm, a welcome upturn however revenue is still significantly below the 10-year average of $52,700.

Cattle revenue increases 8.8 per cent to $119,000 per farm due to increases in livestock prices. Sheep and cattle revenue contribute around 52 per cent and 15 per cent of gross farm revenue respectively.

Cash crop revenue increases by 7.7 per cent to an average $130,400 per farm.

Total farm expenditure increases 4.9 per cent to average $614,300 per farm for 2021-22. Almost all categories of expenditure increase, notably fertiliser (+21%), cultivation and harvesting (+10.3%) and repairs and maintenance (+9.6%).

Table 18 Regional Summary, All Classes Sheep & Beef Farm - $ per Farm

	2019-20	2020-21p	2021-22f				Stock	Grazing
Region	Profit	Profit	Revenue	Expenditure	Profit	EBITRm[1]	Units	Area (ha)
Northland-Waikato-BoP	136,920	102,000	481,000	347,200	133,800	186,600	3,700	380
East Coast	163,290	173,700	625,100	450,500	174,600	264,600	5,000	590
Taranaki-Manawatu	152,602	130,200	637,800	454,500	183,300	251,600	4,700	530
North Island	**149,437**	**133,700**	**565,600**	**406,300**	**159,300**	**229,000**	**4,400**	**480**
Marlborough-Canterbury[2]	182,789	103,500	921,300	742,200	179,100	280,900	4,700	1,010
Otago/Southland[2]	184,585	117,100	650,900	477,400	173,500	249,200	4,500	850
South Island[2]	**182,628**	**110,200**	**790,800**	**614,300**	**176,500**	**265,100**	**4,600**	**960**
New Zealand	**164,446**	**123,200**	**667,300**	**500,400**	**166,900**	**245,100**	**4,500**	**700**

p provisional, e estimate, f forecast | Exchange rate used in the estimate year is USD 0.69

[1] Earnings before Interest, Tax, Rent and Salary paid to Manager(s)

[2] Grazing area is inflated by High Country Farms, which average 8,374 hectares per farm

Source: Beef + Lamb New Zealand Economic Service | Sheep and Beef Farm Survey

Regional Comment – North Island

Northland–Waikato–Bay of Plenty

Gross farm revenue increases 13.8 per cent to average $481,000 per farm for 2021-22. This is the result of increases in sheep and cattle revenue.

Sheep revenue increases by 24 per cent to average $167,700 per farm for 2021-22. Prices are significantly higher for both store and prime lambs.

Cattle revenue is forecast to increase by 6.5 per cent in 2021-22 to average $240,000 per farm. This is driven by increase prices for cattle and number of cattle sold. On average, cattle revenue makes up half of gross farm revenue.

Total farm expenditure increases by 8.2 per cent to average $347,200 per farm for 2021-22. There are increases in all categories of expenditure except for interest.

Fertiliser expenditure increases 22 per cent though tonnages of fertiliser applied decreases 4.3 per cent. Shearing expenses continue to increase annually. For the average farm in the region, wool revenue of $8,300 is surpassed by shearing expenses of an estimated $13,900.

Feed and Grazing expenditure increases 5.1 per cent following dry conditions through the region over summer and expectations for lower yields of crops.

Table 19 Regional Summary, All Classes Sheep & Beef Farm - $ per hectare

	2019-20	2020-21p	2021-22f				Stock Units
Region	**Profit**	**Profit**	**Revenue**	**Expenditure**	**Profit**	**EBITRm[1]**	**per ha.**
Northland-Waikato-BoP	360	268	1,266	914	352	491	9.7
East Coast	277	294	1,059	764	296	448	8.5
Taranaki-Manawatu	288	246	1,203	858	346	475	8.9
North Island	**311**	**279**	**1,178**	**846**	**332**	**477**	**9.2**
Marlborough-Canterbury[2]	181	102	912	735	177	278	4.7
Otago/Southland[2]	217	138	766	562	204	293	5.3
South Island[2]	**190**	**115**	**824**	**640**	**184**	**276**	**4.8**
New Zealand	**235**	**176**	**953**	**715**	**238**	**350**	**6.4**

p provisional, e estimate, f forecast | Exchange rate used in the estimate year is USD 0.69

[1] Earnings before Interest, Tax, Rent and Managers Salary

[2] Grazing area is inflated by High Country Farms, which average 8,374 hectares per farm

Source: Beef + Lamb New Zealand Economic Service | Sheep and Beef Farm Survey

Interest expenditure decreases 5.4 per cent to $33,300 per farm for 2021-22, due to the combined effect of less term and current debt, and lower average fixed interest rates.

On average, Farm Profit before Tax increases in 2021-22 by 31 per cent to $133,800 per farm. On average, sheep and beef farms in the region carry 3,650 stock units on a grazing area of around 376 hectares, and thus have an average stocking rate around 9.7 stock units per hectare (SU/ha).

East Coast

Gross farm revenue remains static on the previous season to average $625,100 per farm for 2021-22. This is due to increased sheep revenue being offset by a drop in cattle revenue and dairy grazing.

Sheep revenue increases 8.0 per cent to $365,900 per farm on average for 2021-22. Lamb prices, prime and store, are forecast to increase and prices for mutton are also high. Sheep revenue contributes around 59 per cent of gross farm revenue, up from 54 per cent in 2020-21 due to the contraction of cattle revenue.

Cattle revenue, which is equivalent to 31 per cent of gross farm revenue, decreases 14.5 per cent to average $191,200 per farm for 2021-22.

Total farm expenditure is down by a marginal 0.2 per cent to $450,500 per farm for 2021-22.

Expenditure on Feed and Grazing is estimated to decrease by 9.8 per cent for 2021-22, after increased

expenditure during a drought last season.

Fertiliser expenditure increases by 3.0 per cent due to escalating fertiliser prices even as farmers respond by reducing the volume of fertiliser applied by 13.1 per cent. Cultivation and sowing expenses are expected to increase by 3.2 per cent.

Shearing expenses increase by 5.4 per cent in 2021-22, exceeding revenue from wool by almost $12,000.

Interest expenditure decreases by 0.9 per cent as interest rates continue to be low (on average) for fixed term liabilities and both term and current debt is reduced.

Farm Profit before Tax increases by 0.5 per cent to $174,600 per farm for 2021-22.

On average, sheep and beef farms in the region run 5,025 stock units. Livestock occupy a grazing area of around 590 hectares, so the stocking rate averages around 8.5 stock units per ha. Farms in the region average around 760 ha total area meaning around 78 per cent is used to produce food and fibre, with 22 per cent in other non-food-producing uses.

Taranaki–Manawatu

Average gross farm revenue is forecast to increase by 13 per cent to $637,800 in 2021-22, with increased revenue from sheep, cattle and wool accounts.

Sheep revenue increases 21 per cent to $412,600, the highest nominal sheep revenue on record for the region, due to good market prices for lamb and mutton and slightly more livestock through to market. Sheep revenue contributes around 65 per cent of gross farm revenue in 2021-22, 10 percentage points above the 10-year average of 55 per cent.

Wool revenue is forecast to increase 12 per cent to $19,400 per farm, which compares to $60,600 per farm in 2015-16.

Cattle revenue is steady, increasing by less than one per cent to $157,700. Cattle revenue contributes around 25 per cent of gross farm revenue in 2021-22.

Dairy grazing revenue decreases 12 per cent to $17,000 per farm.

Total farm expenditure increases 4.4 per cent to average $454,500 per farm for 2021-22. Increases are forecast for all categories of expenditure except for interest. Feed and grazing expenditure increases by 4.1 per cent following a slow spring and the impact of heavy rains on pasture and crops in December 2021.

Interest expenditure decreases 5.3 per cent to $50,000 per farm due to reduced debt levels and lower average interest rates.

Fertiliser expenditure – which is equivalent to 20 per cent of total farm expenditure – increases by 8.9 per cent due to forecast increases in price partly offset by a decrease in volume applied.

Shearing expenditure increases 6.9 per cent to $31,200 per farm.

Farm Profit before Tax increases 41 per cent to $183,300 per farm for 2021-22 with the increase in gross farm revenue exceeding increased expenditure.

On average, sheep and beef farms in the region run 4,750 stock units on a grazing area averaging 530 hectares, which means the stocking rate averages about 9.0 SU per hectare. The total area averages about 650 hectares, which means around 18 per cent is not grazed because it is woody vegetation and wetlands.

Regional Comment – South Island

Marlborough–Canterbury

Gross farm revenue increases 14 per cent to average $921,300 per farm for 2021-22.

Sheep revenue increases 27 per cent to $358,400 per farm for 2021-22. Sheep revenue contributes 39 per cent of gross farm revenue. Wool revenue increases by 9.6 per cent to $43,200 per farm on average, this compares to an average $50,200 per farm over the past 10 years.

Cattle revenue increases 7.3 per cent to average $144,000 per farm for 2021-22 as cattle prices are expected to be higher on average.

Dairy grazing revenue decreases 3.1 per cent to $80,900 per farm on average, which is equivalent to 9 per cent of gross farm revenue.

Cash cropping revenue, which contributes 26 per cent of gross farm revenue, increases 7.6 per cent to $236,400 per farm on average for 2021-22. Mixed finishing and finishing breeding farms average 155 hectares of cash crop area and 110 hectares of small seeds, a significant area of land and share of revenue for this class of farm.

Total farm expenditure increases 4.9 per cent to average $742,200 per farm for 2021-22. Fertiliser expenditure increases by 27 per cent, driven by higher fertiliser prices especially for products containing urea. With the importance of cropping for many farms in the region, fertiliser expenditure is not a cost category that is easily reduced because the impact on revenue is high. The total volume of fertiliser applied for 2021-22 is expected to increase by 2.4 per cent.

Weed and pest control costs increase by 10 per cent as prices for chemicals rise steeply.

Repairs and maintenance and cultivation and sowing expenditure increase by 9.3 per cent and 13.3 per cent respectively.

Interest expenditure is down 3.4 per cent due to reduced current liabilities (short-term borrowing) and lower average interest rates on fixed term debt.

Farm Profit before Tax increases 73 per cent to $179,100 per farm for 2021-22, the biggest increase in profit for any region. Increased expenditure is offset by solid gains in gross farm revenue.

On average, sheep and beef farms in the region run about 4,685 stock units on a grazing area of 1,010 hectares. High Country and foothill farms inflate the average area of farms in the region because Farm Class 1 High Country farms have a grazing area around 9,500 hectares for example, whereas Finishing-Breeding farms (Farm Class 6) have a grazing area averaging around 470 hectares.

Otago–Southland

Gross farm revenue increases 14 per cent to average $650,900 per farm for 2021-22. The largest drivers are the increases in sheep, cattle and wool. Revenue from wool and sheep combined accounts for nearly 80 per cent of gross farm revenue.

Sheep revenue increases 15 per cent to $467,200 per farm for 2021-22. This is due to an increase in prices and is the highest nominal sheep revenue on record.

Wool revenue increases 16 per cent to $41,100 per farm. Wool prices remain low overall and therefore while increasing prices are positive for farmers, overall returns are abysmal.

Cattle revenue increases 11 per cent to average $92,400 per farm for 2021-22. Numbers of cattle on farm are steady on the previous season and prices are relatively high.

Total farm expenditure increases 4.8 per cent to $477,400 for 2021-22 with increased expenditure across all categories. Expenditure for repairs and maintenance, fertiliser and fuel all increase – by nine to 19 per cent. The most significant increase in expenditure is on fuel (+19%). However, fertiliser is a major component of farm expenditure and increased prices for fertiliser products drives a 12 per cent increase in fertiliser expenditure to average $74,000 per farm (this excludes lime and seeds). This increase is despite farmers changing fertiliser policies and reducing tonnages applied.

Interest expenditure is forecast to increase slightly, by 1.7 per cent.

Farm Profit before Tax increases 48 per cent to average $173,500 per farm for 2021-22.

On average, sheep and beef farms in the region run 4,540 stock units on a grazing area averaging 850 hectares. As in other parts of the South Island, the average farm size is inflated by Farm Class 1 High Country farms, which average 6,800 hectares, whereas Finishing-Breeding farms average 590 hectares and Finishing farms that are typical in Southland average 260 hectares.

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