



Primary Industries Scorecard

2021-22



Government of South Australia
Department of Primary Industries
and Regions

Contents

Executive summary	3
Introduction	5
Overview	7
Economic overview	7
Primary industries and agribusiness revenue	8
Economic contribution and employment	10
Exports	11
Total international exports, interstate trade and change in stocks	13
Sector summaries	15
Field crops	17
Livestock	18
Horticulture	19
Wine	20
Seafood	21
Dairy	22
Wool	23
Forestry	24
Primary production values	25
Food and wine supply chain	28
Glossary of terms	30
References	30
Updates and changes in methods	31
Food and wine specific measures	31

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Acknowledgment of Country

The Department of Primary Industries and Regions respects Aboriginal people as the state's first people and nations. We recognise Aboriginal people as traditional owners and occupants of South Australian land and waters. We pay our respects to Aboriginal cultures and to Elders past, present and emerging.

Executive summary

South Australia's primary industries are a vital contributor to the state. In 2021-22, primary industries and agribusiness revenue increased by 12% totalling \$17.3 billion, while the sector also supported 71,000 jobs.

As the global economy continued to recover in 2021-22, we saw disruptions to global commodity markets and supply chains, both of which were already stressed, due to the war in Ukraine. Pandemic-related lockdowns in China also caused uncertainties as they disrupted manufacturing chains. However, the Australian, as well as the South Australian economy has been resilient. In 2021-22, Australian Gross Domestic Product (GDP) was 3.6% higher year-on-year and South Australia's State Final Demand (SFD) was 4.7% higher year-on-year. Australian agriculture increased its gross value of production (GVP) with this estimated to be \$91 billion in 2021-22. Favourable seasonal conditions and very strong agricultural pricing meant even for those sectors where production had been lower, high pricing still delivered strongly profitable positions.

Overseas exports of agriculture, food, wine and forestry products increased by 24% and totalled \$7.5 billion, accounting for 51% of South Australia's total overseas merchandise exports (\$14.7 billion). Growth in grain exports, up by 59% in terms of value, mostly contributed to this increase. Total wine exports fell by 16% to \$1.38 billion as wine exports to China fell by around 96%. Despite total exports falling by 35%, China remained the biggest overseas market accounting for 9% of the state's agriculture, food, forestry and wine exports.

In 2021-22, contribution to Gross State Product (GSP), in terms of Industry Gross Value Added, from primary production activity (agriculture, forestry and fishing) was \$7.6 billion, up 26% compared with 2020-21.

Overall, results for the full food and wine industry supply chain were up. Combined gross food and wine revenue increased by 9.8% to reach \$24 billion, with increases in food commodities exports as the main driver.



Introduction

To track the performance of the state's primary industries, the Department of Primary Industries and Regions (PIRSA) has developed a series of industry scorecards which provide value chain measures of annual performance.

The 2021-22 scorecard includes primary industries sectors and associated processing such as field crops, livestock, horticulture, wine, seafood, dairy, forestry, wool, skins, seeds and animal feed.

Headline indicators to help describe the economic contribution and performance of the industry in South Australia are also included in the report.

The first of these is primary industries and agribusiness revenue which measures the revenue of primary production and associated processing. This includes the final sales of primary industries products (largely international and interstate exports of unprocessed grains and live animals) plus the value of locally processed products (such as fresh and processed food, wine and wood products at wholesale value).

The value of these industries to the state is reflected in the included measures of employment and contribution to the GSP.

For continuity with previous scorecard reports (the SA Food and Wine Scorecard that was published until 2016-17), the full food and wine supply chain measures are included in the food and wine supply chain section of this report. The food and wine scorecards expand beyond primary production and processing to include the value of final local retail and food service sales.

While retail and food service sales are included in this section of the food and wine scorecards, for the purpose of measuring the employment and economic impact of the primary industries and agribusiness sectors, retail and food service contributions are not included.



Overview

Economic overview

The global economy continued to recover from the pandemic in 2021-22. However, the momentum was disrupted in the second half of the financial year due to Russia's invasion of Ukraine and the impact that had on global commodity markets and the supply chain, both of which were already stressed from tightening supply that was struggling to meet the post-pandemic rebound in global demand.

One of the most prominent supply bottlenecks was the COVID-19 related lockdowns in China that severely disrupted global manufacturing chains and have resulted in increasing global price pressures. This has led to a rise in inflation and tightening monetary policy (South Australian Centre for Economic Studies, 2022).

Inflation, largely driven by high energy prices as a result of the Russian invasion of Ukraine and COVID-related disruptions, has continued to rise and has globally dampened growth prospects. Inflation rates have also risen sharply in Australia because of price increases overseas and very tight supply in some parts of the economy. Australia's recovery has progressed with loosening of COVID-19 restrictions and reopening the country to tourists and other international travellers. Australian Gross Domestic Product (GDP) rose by 0.9% in June quarter 2022, which was 3.6% higher than a year earlier (Department of Treasury and Finance, 2022).

The South Australian economy has been resilient and managed the COVID-19 outbreaks in 2021-22 relatively well and with minimal disruption to economic growth overall, while recognising it has impacted some sectors. State Final Demand (SFD), a measure of total spending in the South Australian economy by households, business and governments, rose 1.5% in the June quarter to be 4.7% higher than a year earlier (Department of Treasury and Finance, 2022). This is well above the pre-COVID decade-average rate of 1.7% (South Australian Centre for Economic Studies, 2022).

In 2021-22, Australian agriculture increased its gross value of production (GVP) for the fourth consecutive year (Rabobank, 2022), with this estimated to be \$91 billion (ABARES, 2022), well on-track to achieve its goal of GVP exceeding \$100 billion by 2030 (National Farmers' Federation, 2019), after a year of high commodity prices and production recovery. Very strong agricultural pricing came as a result of hardship globally but coincided with favourable to very favourable Australian production conditions for the second straight year. For those sectors where production had been lower, high pricing still delivered strongly profitable positions (Rabobank, 2022).

Challenges faced by the Australian agricultural industry in 2021-22 include freight rates which, despite having fallen considerably, remained high on several routes. The price of farm inputs remained elevated despite some reprieve and labour force continued to be a challenge with the COVID-19 situation ever-evolving and persisting. Winegrape growers and wine producers continued to face the consequences of China's wine tariffs on Australian wine.

The Bureau of Meteorology (BOM) declared that a La Niña was underway on November 23, 2021, which is the second time in a row after 2020-21. This brought significant rainfall to south-east Australia in particular and caused flooding in New South Wales and Queensland.

Primary industries and agribusiness revenue

Primary industries and agribusiness revenue (referred to as revenue hereafter) is a headline measure in the scorecard. It includes the final sales of primary industries products (largely sales of unprocessed grains and live animals) and the value of locally processed products (mostly food, beverages and wine).

Total primary industries and agribusiness revenue for 2021-22 totalled \$17.3 billion (Figure 2), an increase of 12% compared with 2020-21. The main drivers of this increase were the field crops and livestock industries. Overall revenue of the field crops industry (\$5.6 billion) was up by 23% resulting from increased export prices that eventuated from drought in some grain growing regions in the northern hemisphere, global supply chain constraints and the war in Ukraine. On average, the export price of South Australian grains in 2021-22 increased by around 46% compared with 2020-21, which resulted in grain export increasing by 59% in terms of value.

In 2021-22, the largest sectors (Figure 1) in terms of revenue were field crops with \$5.6 billion (32%), livestock with \$4.1 billion (23%), wine with \$2.4 billion (14%), horticulture with \$2.0 billion (12%), and forestry with \$1.4 billion (8%).

The value of the livestock industry increased by 29% to reach \$4.1 billion and was one of the primary drivers of total revenue. Favourable seasonal conditions helped support herd/flock rebuild and improved carcass weight, especially in beef cattle. The availability of labour hindered slaughter volumes, however this was offset by an increase in average export prices of beef (up 23%), lamb (up 26%), and mutton (up 20%), and the farmgate price of beef cattle (up 31%) drove up livestock exports by 18% to reach \$979 million. An increase in the number of pigs processed (up 18%) also contributed to the positive revenue result.

The wool industry is rebounding after being severely impacted by the pandemic. Revenue increased by 27% to reach \$509 million due to the increase in direct wool exports which were up by 40% to reach \$146 million. Dairy industry revenue increased by 17% to reach \$690 million in 2021-22 with higher farmgate milk prices and the increase in exports of milk powder and cheese.

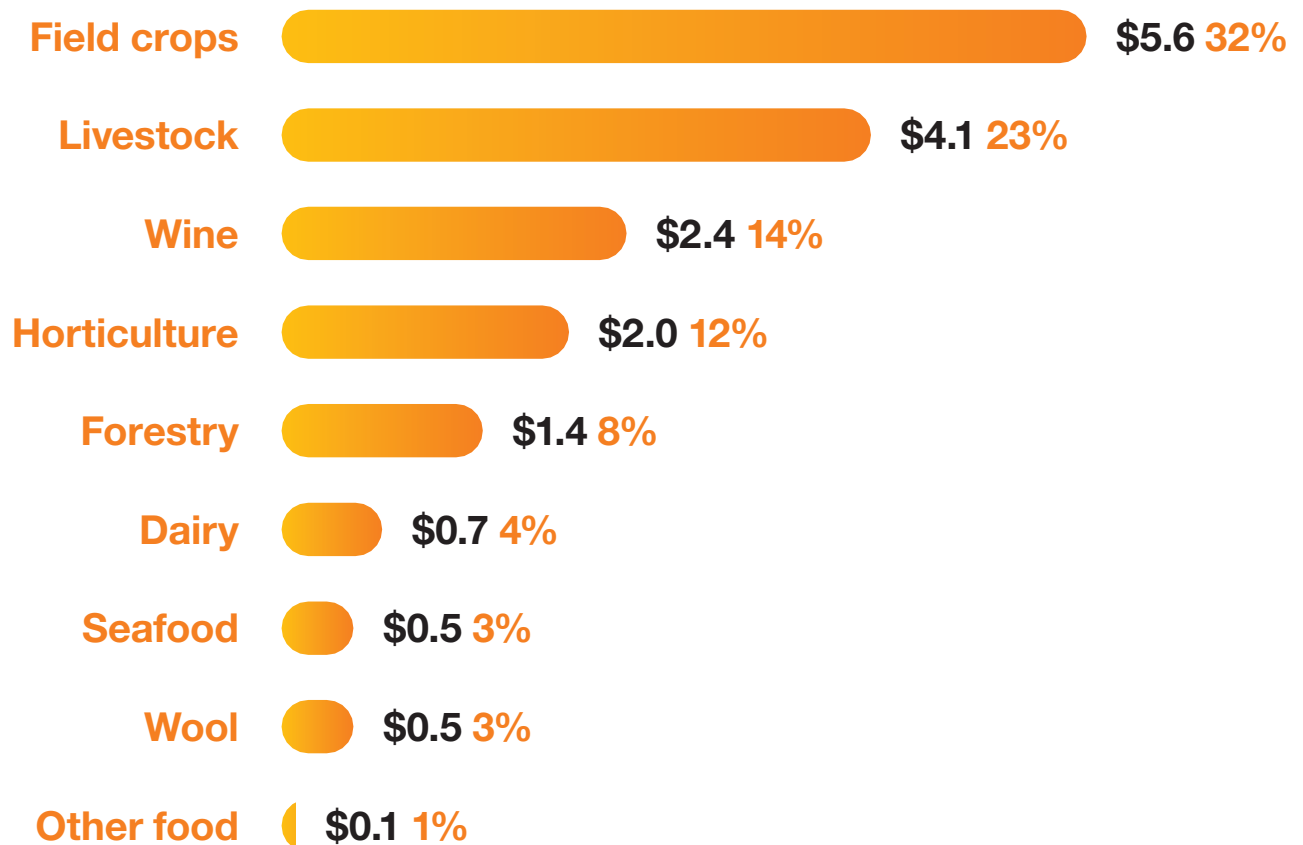
Horticulture, seafood and forestry industries also recorded modest growth in revenue over the year. Horticulture revenue increased by \$110 million to reach \$2 billion, a 6% increase compared with 2020-21. Growth in the value of almonds (up 31%), potatoes (up 21%) and mushrooms (up 19%) was due to increased farmgate prices (30% increase in potatoes and 10% in mushrooms) and production volume (up 47% in almonds and 8% in mushrooms).

Seafood industry revenue totalled \$457 million, an increase of 5% on the previous year. Southern Bluefin Tuna recorded revenue of \$105 million, up by 15% in 2021-22 compared with the previous year. Forestry industry revenue in 2021-22 increased by 4% to reach \$1.4 billion, driven by an increase in the sales of wood products, paper and paper products (ABARES, 2022).

The scorecard reports wine industry revenue as the wholesale value of wine produced including sales and change in inventory of wine, which in 2021-22 totalled \$2.4 billion (down by 17%). Total reported crush of South Australian winegrapes was 805,851 tonnes, which was 6% above the 10-year average crush but 14% below the record 2021 crush of 942,254 tonnes (Wine Australia, 2022). Decreased wine production and average price saw an expected fall in wine industry revenue. The sector continued to suffer from the loss of the China market with exports to China falling by more than 95%, resulting in total wine exports declining by 16% to reach \$1.4 billion. The decline in wine sales has resulted in an inventory worth around \$800 million added to the existing supply from the 2022 vintage which presents an oversupply issue for the industry.

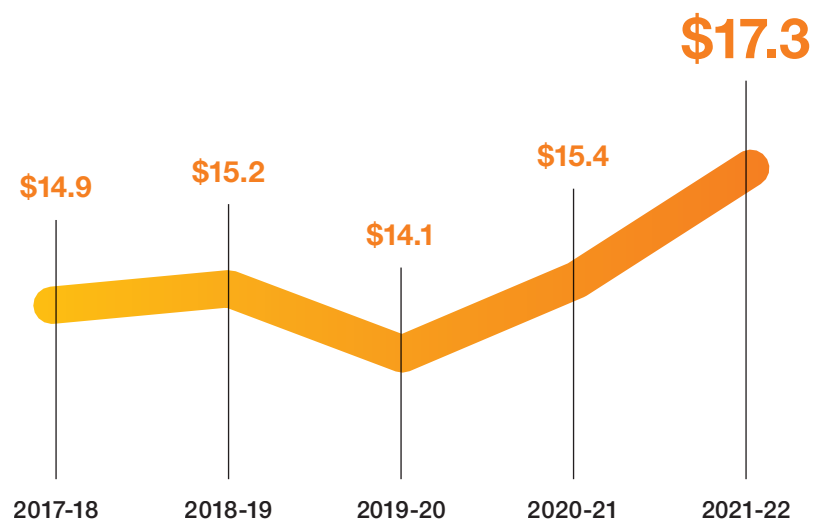
\$17.3 billion

Figure 1. Composition of the 2021-22 primary industries and agribusiness revenue (\$ billion)



Revenue \$ billion

Figure 2. Five-year trend of SA's primary industries and agribusiness revenue (\$ billion) from 2017-18 to 2021-22



Economic contribution and employment

To enable consistent measurement of economic contribution (contribution to Gross State Product or GSP) and employment (Full Time Equivalents or FTE), a common methodology has been adopted for reporting these measures. For further information regarding changes in method, refer to the Updates and changes in methods section.

Employment

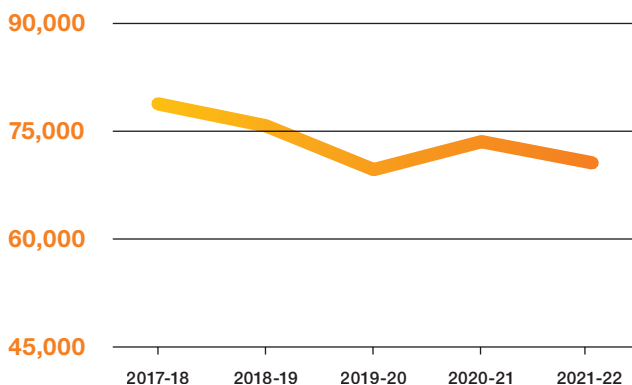


Figure 3. Food and agribusiness employment (FTEs) 2017-18 to 2021-22

In 2021-22, total employment in primary industries and associated processing (also referred to as food and agribusiness) was estimated to be around 71,000. This was a decline of around 4% from 74,000 in 2020-21 (Figure 3). However, strong demand for additional workers across many agricultural and processing sectors remains, with overall unemployment relatively low and the number of international workers yet to reach pre-pandemic levels. Attracting and training the workforce required for the future continues to be an important focus across the sector.

Contribution to GSP

\$ million

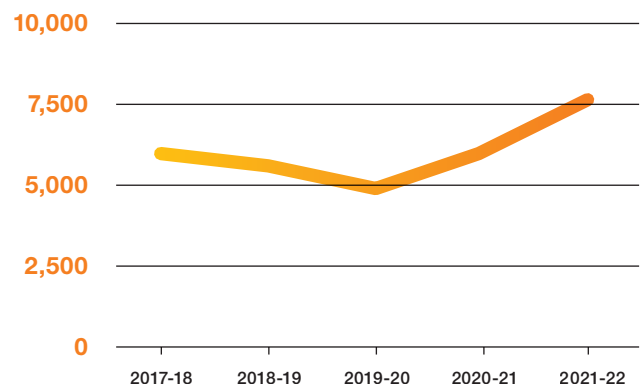


Figure 4. Contribution to GSP (\$ million) 2017-18 to 2021-22

Contribution to GSP (Figure 4), in terms of Industry Gross Value Added, from primary production activity (agriculture, forestry and fishing) in 2021-22 was \$7.6 billion, up 26% compared with 2020-21.

Exports

Total overseas merchandise exports from South Australia in 2021-22 increased by 15% to reach \$14.7 billion.

The value of South Australia's overseas exports of primary industries and associated processing (or food and agribusiness industries) totalled \$7.5 billion in 2021-22, an increase of 24% from the previous year. This relatively higher growth in primary industries exports compared with the total merchandise exports resulted in the share of primary industries exports increasing from 47% to 51% of the state's total export value (Figure 5).

Grain exports drove most of the growth of primary industries exports in 2021-22, increasing in value by 59% totalling \$3.8 billion. Increases in the export of wheat (up by 35%), canola (up by 212%) and lentils (up by 121%) mostly contributed to overall increase in grain exports. Total quantity of grains exported in 2021-22 increased by about 10%. Therefore, this increase in grain exports can be attributed to a rise in grain prices, which increased by an average of 46% across all types of grains. The average wheat export price increased by 27%, barley by 43%, canola by 57%, lentils by 58%, while durum prices doubled. Low supplies due to drought in some major growing regions in the northern hemisphere have already pushed up prices coming into 2022 (Singh, 2021) and the invasion of Ukraine by Russia in early 2022 caused food and fuel prices to soar and have kept grain prices elevated (Rennison, 2022).

Total livestock sector exports in 2021-22 increased by 18% to reach \$979 million. Growth in exports of sheepmeat and beef, in terms of value, were mainly responsible for the increase. Sheepmeat exports increased by 16% to \$606 million and beef exports increased by 15% to reach \$226 million. However, the quantity of sheepmeat and beef has decreased compared with the previous year because of low supply due to the rebuild phase of flock and herd (Bignell, 2022). The decline in quantity of meat exported (down 6% for both beef and sheepmeat) was more than offset by increases in the export price of both beef (up 23%) and sheepmeat (up 24%).

Wool exports are recovering after the pandemic reduced demand for wool because apparel demand declined. Favourable seasonal conditions, a growing flock and increased demand for wool apparels increased demand for finer wool, which led to both the volume and value of wool exports rebounding strongly in 2021-22 (Rural Bank, 2022).

Direct exports of wool, both greasy and cleaned wool, from South Australia increased by 40% to reach \$146 million, which still remains below the pre-pandemic levels.

Horticultural exports increased by 9% in 2021-22 to reach \$369 million. Almond exports accounted for almost half of total horticultural exports and were also primarily accountable for the increase. The export price of almonds increased by 10% in 2021-22 which, combined with a 9% increase in export volume, resulted in exports increasing by 20% to reach \$182 million.

South Australian wine export volume and value declined further in 2021-22 on the back of falling Chinese demand resulting from the ongoing tariffs imposed by China. Wine exports value declined by 16% to \$1.38 billion. Total volume of SA wine exported declined by just 1.5%, led by red wine that fell 8% in volume exported, whereas white wine export volume increased by 27%. The average export price of SA wine fell in 2021-22 for a second consecutive year. The decline was primarily driven by a 16% drop in the average export price of red wine, which fell from \$6.02/litre to \$5.08/litre. The collapse of Chinese demand for Australian wine drove this downwards shift as growing Chinese demand was the pillar of years of sustained growth of red wine prior to 2020-21 (Rural Bank, 2022). Wine exports to markets other than China, however, increased by 17% in value (\$1.36 billion) and 9% by volume (365 million litres).

Exports comparison

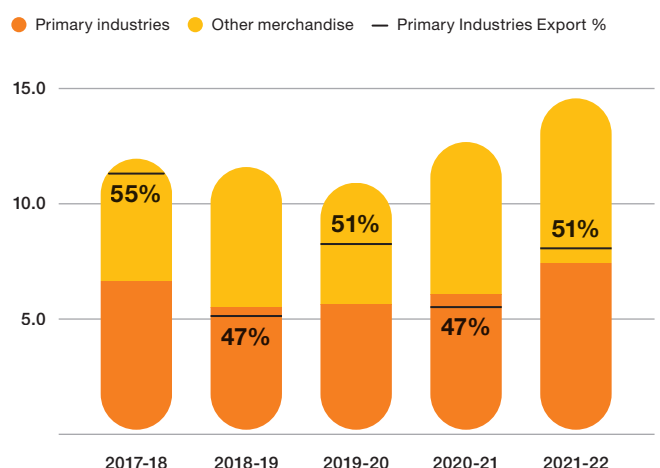


Figure 5. Primary industries international exports in comparison to the total value (\$ billion) of SA merchandise exports, 2017-18 to 2021-22

Overview

Total dairy exports increased by 25% to reach \$124 million, driven by an increase in exports of milk powder (up 9% to \$80 million) and cheese (up 95% to \$31 million). Forestry sector exports fell because of a decline in exports of timber logs that fell from around \$3.5 million to \$150,000 in 2021-22, which was lightly offset by increases in processed products such as wood and paper products. Seafood exports declined slightly by around 1% to \$214 million. Increases in exports of abalone (up 18%) were offset by losses in exports of Southern Bluefin Tuna (down 4%) and rock lobsters (down 3%) that resulted in total seafood export remaining relatively unchanged.

South Australia's top 10 export markets for food and agribusiness commodities in 2021-22 are shown in Figure 6, with the recent trend in growth for these markets shown in Figure 7. Despite export value decreasing by around 35% in 2021-22, China remained the biggest international market for the state's primary industries and agribusinesses, importing goods worth more than \$600 million and accounting for around 9% (was 25-30% before the wine tariffs) of total agriculture, food, wine and forestry exports. This decline in exports to China is largely attributable to the trade bans and tariffs imposed on some Australian products. Primary industries exports to the United States have increased by 18% to almost \$600 million in 2021-22 after trending downwards since 2014-15. Exports to all top 10 destinations, except the United Kingdom, increased in 2021-22 compared with 2020-21, primarily because of increases in the value of grains exports – wheat exports to Indonesia and South Korea, canola to Japan and Belgium, barley to Saudi Arabia, beans and lentils to Egypt and lentils to Bangladesh. A notable development is the increase in canola exports to Japan from 4,000 tonnes (\$3 million) in 2020-21 to over 121,000 tonnes (\$116 million). For two consecutive years, Saudi Arabia has been the largest importer of South Australian barley with total barley exports in 2021-22 above pre-China trade ban levels.

Export Markets

\$ million

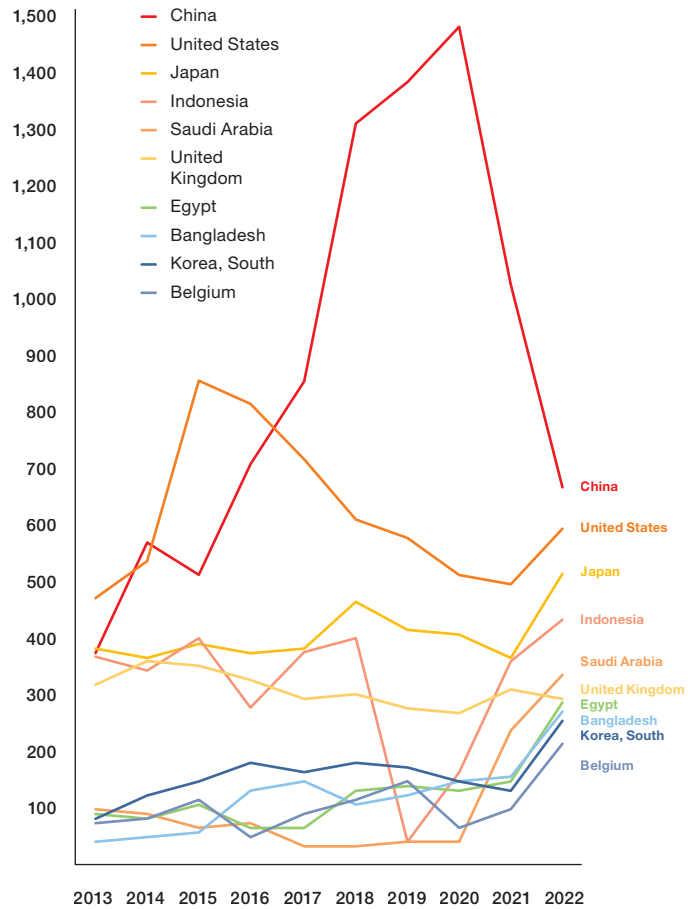


Figure 7. South Australia's major food and agribusiness export markets and their growth in the past 10 years (values are in \$ million)

Top 10 Export Markets

\$ million

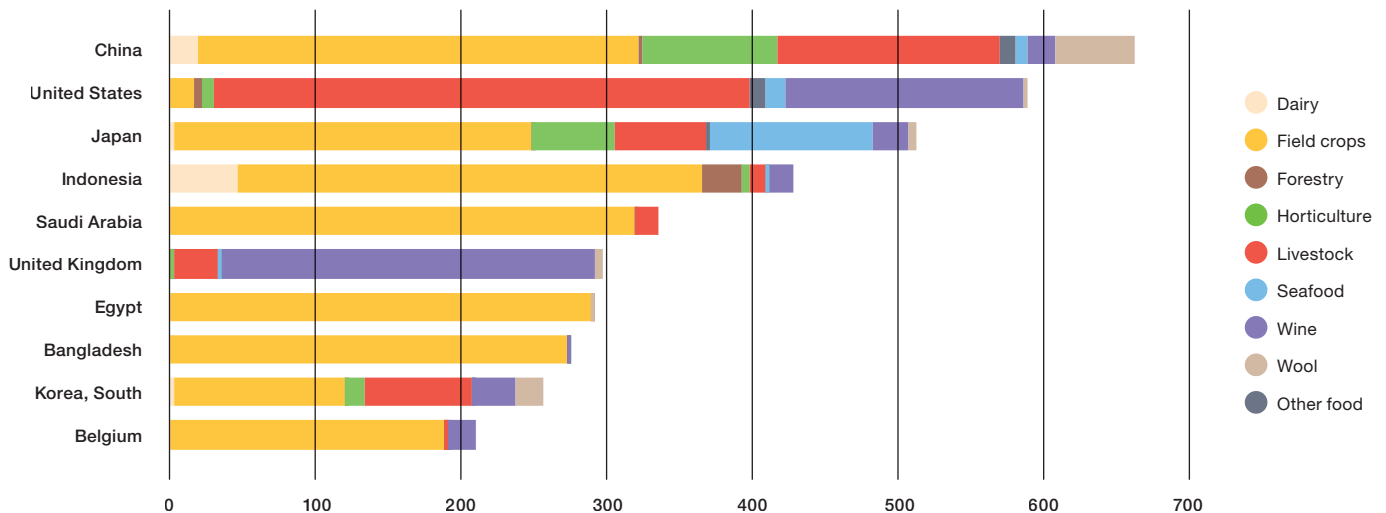


Figure 6. Top 10 export markets for South Australia's food and agribusiness in 2021-22 (values are in \$ million)

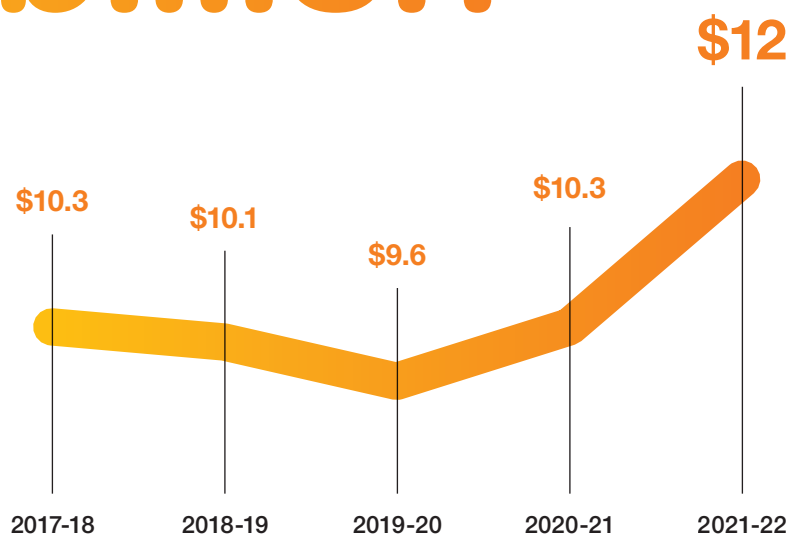
Total international exports, interstate trade and change in stocks

South Australia's total value of direct international exports, net interstate trade and change in stocks increased by 17% from \$10.3 billion to \$12 billion over the year mainly due to improved grain production, overseas grain exports and strong livestock prices.

\$12 billion

Trade \$ billion

Figure 8. Five-year trend of primary industries' total international and net interstate trade (\$ billion) 2017-18 to 2021-22







Sector summaries

The sector performance summaries include the 2021-22 value of the major industries at the primary production and processing level. Comparisons with the previous year and over the past five years are also provided.


Primary production value is shaded to indicate how much of local production is processed in the state, exported interstate, or sent unprocessed overseas.

The processed value indicates the wholesale value of processed products. The totals are shaded to reflect the proportion that is exported internationally, interstate or sold in the South Australian market.



Field crops

Primary production value

Total (\$ million)	3,630
2020-21	+24.0%
Previous 5 yr avg.	+48.0%
5-year trend	

Processed value

Total (\$ million)	1,613
2020-21	-3.9%
Previous 5 yr avg.	-11.9%
5-year trend	

Field crops

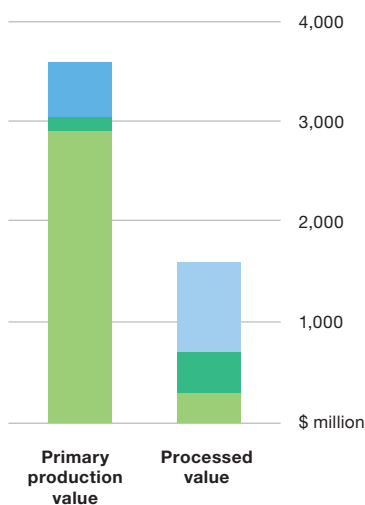


Figure 9. Field crops primary production and processed values (\$ million), 2021-22

Note: the primary production value does not include all commodity exports during the period, with \$900 million of carry-over stocks from previous seasons.

Field crops include wheat, barley, hay, canola, seeds and pulses. A La Niña event between late September 2020 and March 2021, followed by a second from November 2021 to June 2022, resulted in above-average rainfall which commensurately recorded above-average grain production in the 2021-22 season of 8.4 million tonnes, 7% above the previous five-year average but 8% below 2020-21 production of 9.1 million tonnes. Despite this decline in grain production compared with 2020-21, field crops production value increased by 24% to reach \$3.6 billion because of elevated grain prices caused by factors such as drought in major grain growing regions and the war in Ukraine. Production value was also well above (up 48%) the previous five-year average.

Crop types that substantially increased their production compared with the previous year and were main contributors to the increase in total field crops production value included wheat (up 27% to \$1.7 billion), barley (up 26% to \$644 million), canola (up 54% to \$423 million) and lentils (up 26% to \$288 million). Figure 9 shows the majority of grains produced are exported as grain commodities and relatively smaller proportions are sent interstate or processed in the state.

Overseas exports of grains reached \$3.8 billion, an increase of 59% compared with 2020-21. With grain production well above average and high global demand, exports of grains increased substantially, especially in terms of value. This increase was mainly attributable to the increase in value of wheat, canola and lentil exports. Wheat export value increased by 35% to reach \$1.7 billion primarily because of wheat prices that were on average 27% higher and durum prices that more than doubled. The top three importers of wheat were Indonesia (\$316 million), China (\$272 million) and Sudan (from zero in the previous year to \$131 million). Exports of wheat increased substantially to China (up 93%), Philippines (up 94% to \$104 million), Kenya (up 378% to \$103 million) and Yemen (up 311% to \$74 million).

Exports of canola increased by 212% to reach \$636 million in 2021-22. Due to severe drought, Canada, the world's largest producer and exporter of canola, has produced less than 13 million tonnes compared to around 20 million tonnes on average, which saw a drop in its exports. Buyers securing canola stock have increased demand (Maxwell, 2021) with both quantity (up 99% to 582,500 tonnes) and price (up 57%) of the state's canola exports increasing. Top importers of South Australian canola in 2021-22 were Belgium (\$188 million), France (\$154 million), Netherlands (\$120 million) and Japan (\$116 million).

Lentil exports increased by 121% to reach \$577 million in 2021-22 driven by both an increase in quantity and price of exports. The quantity of lentil exports was up by 40% to 548,673 tonnes and prices increased by 58% when compared with the previous year. The top three lentil markets in 2021-22 were Bangladesh (\$235 million), India (\$135 million) and Egypt (\$101 million).

Despite losing much of the China market after tariffs were imposed, total barley (including malting and feed barley) exports increased for two consecutive years, with exports in 2021-22 increasing by 24% to \$624 million, driven mostly by a more than 40% increase in average barley export price. Saudi Arabia remains the main destination (up 47% to \$290 million), but exports to smaller destinations like Jordan (\$75 million), Philippines (\$57 million), Iran (\$45 million) and Qatar (\$25 million) also increased in 2021-22 compared with 2020-21.

Processing value of field crops reduced by around 4% compared with 2020-21 and around 12% compared with the previous five-year average, mainly resulting from a decline in the wholesale value of hay (down 34% compared to 2020-21) and barley (beer) processing (down 26% compared with 2020-21) with the closing of a major beer manufacturing facility in the state in June 2021. The reduced beer manufacturing capacity has been partially offset by the continued increase in scale of the craft brewing sector.

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Livestock

Primary production value

Total (\$ million)	2,957
2020-21	+39.2%
Previous 5 yr avg.	+48.4%
5-year trend	

Processed value

Total (\$ million)	2,743
2020-21	+12.9%
Previous 5 yr avg.	+1.7%
5-year trend	

Livestock

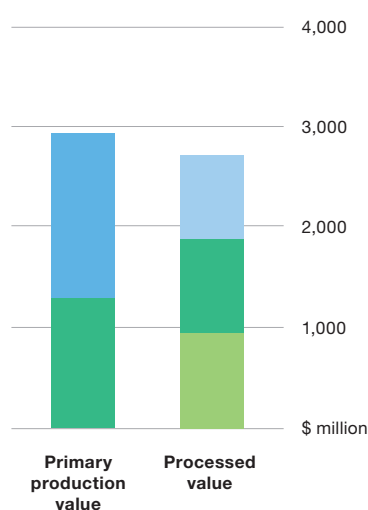


Figure 10. Livestock primary production and processed values (\$ million), 2021-22

The livestock industry includes beef, sheep, pigs and chicken meats, along with smaller sectors including eggs, kangaroo and goats. Total livestock production value in 2021-22 was recorded at \$2.96 billion, an increase of 39% compared with the previous year and about 48% more than the previous five-year average. Increases in the production value of beef (up 74%) driven by higher prices, and higher meat production per head compared with the previous year was the main contributor to this increase. Australia's cattle herd is well and truly in a rebuild phase according to Meat and Livestock Australia (Bignell, 2022) with the sector continuing to recover. Sheepmeat production value increased by 28% to \$858 million. This was also mainly driven by increased prices as demand rebounded strongly in 2021-22 as COVID-related issues loosened their grip (Rural Bank, 2022).

The livestock processing value of \$2.7 billion was 13% more than the previous year, mainly reflecting increases in the number of head of mutton (up 60%) and pigs processed (up 18%), and increases in prices for beef (up 23%), lamb (up 26%) as well as mutton (up 20%). When compared to the five-year average, the livestock processing value in 2021-22 was only slightly higher (up 2%), mostly reflecting the state's higher processing capacity before the 2018 fire at a major processing plant. Since then, the proportion of cattle being sent interstate for processing has been increasing.

Total overseas export of livestock products was \$972 million in 2021-22, up by 19% compared to the year before, mainly driven by increases in export value of beef and sheepmeat. Beef exports were up 15% to \$226 million. Top markets for beef were the United States (\$50 million), Japan (\$46 million), China (\$43 million) and South Korea (\$39 million). Sheepmeat exports increased by 16% to reach \$606 million in 2021-22. The United States was by far the largest importer with \$284 million worth of sheepmeat, followed by China at \$83 million and Malaysia at \$44 million.

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Horticulture

Primary production value

Total (\$ million)	1,449
2020-21	+14.2%
Previous 5 yr avg.	+31.8%
5-year trend	

Processed value

Total (\$ million)	2,036
2020-21	+5.7%
Previous 5 yr avg.	+18.6%
5-year trend	

Horticulture

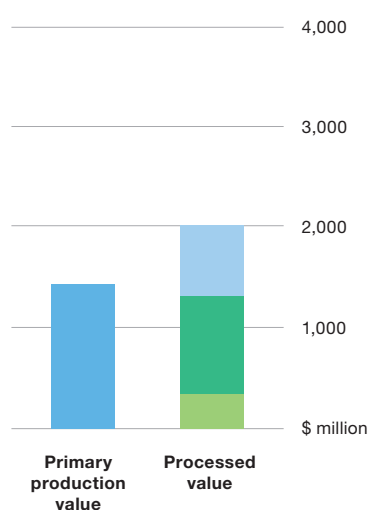


Figure 11. Horticulture primary production and processed values (\$ million), 2021-22

Over 40 horticultural products are measured in the scorecard, with the largest being potatoes, tomatoes, almonds and citrus. In 2021-22, the value of primary horticultural production was almost \$1.45 billion, an increase of 14% on the previous year. The main drivers were an increase in production values of potatoes, almonds, tomatoes and mushrooms. Almond production value increased by 31% to reach \$196 million. This was mainly because of an increase in volume harvested as new plantings reached commercial production. Potato production also recorded an increase of 31% and reached \$273 million as a result of average farmgate price increasing by 30% from \$400 per tonne to \$520 per tonne. Tomatoes, despite decreasing in production volume, recorded a growth of 27% in terms of production value as the average farmgate price was up by 58%. Inflation and supply issues that marked 2021-22 meant prices of many horticultural products were substantially higher than the previous year. Farmgate prices of lettuce (up 82%), pumpkins (up 66%), table grapes (up 50%), and cabbages (up 233%) were significantly higher than the previous year.

Figure 11 shows that all horticultural produce is processed within the state. The scorecard considers even simple processes like washing and packing as processing. The processed value in 2021-22 was recorded at \$2 billion, up by almost 6% on the year prior, resulting mainly from an increase in wholesale values of almonds, potatoes and mushrooms.

Total horticulture overseas export was \$369 million, up by 9% from 2021-22. The export value of most horticulture products was higher in 2021-22 than 2020-21, except for citrus. Almond exports increased by 20% to reach \$182 million after falling to \$151 million in the previous year due to a global price crash after record harvests in California, the largest global supplier. The value of citrus sector exports fell by 7% as result of a decline in exports of citrus fruits, which in-turn resulted from a 3% reduction in volume of fruit exports (74,000 tonnes in 2021-22 compared with 76,000 tonnes in 2020-21) and a 6% decline in average export price (\$1.62 per kilogram in 2021-22 compared to \$1.72 per kilogram in 2020-21). However, this reduction in exports was more than offset by increases in exports of almonds and many other smaller exports including potatoes (up 11%).

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Wine

Primary production value

Total (\$ million)	622
2020-21	-24.8%
Previous 5 yr avg.	-4.7%
5-year trend	

Processed value

Total (\$ million)	2,359
2020-21	-17.0%
Previous 5 yr avg.	+2.2%
5-year trend	

Wine

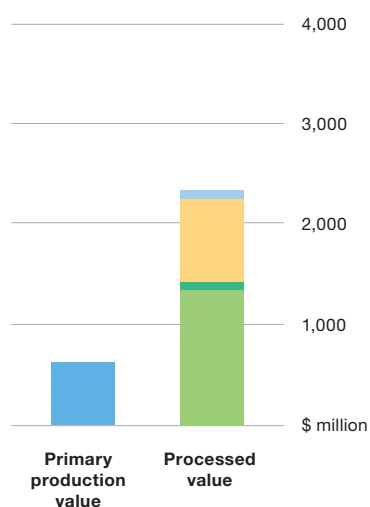


Figure 12. Wine primary production and processed values (\$ million), 2021-22

The wine sector recorded decreases in value for both primary production (winegrapes production) and processing (wine production). Seasonal conditions in 2021-22 were favourable and the state recorded a total winegrape crush of 805,851 tonnes, which was 6% above the 10-year average crush but 14% below the record 2021 crush of 942,254 tonnes (Wine Australia, 2022). Production value totalled \$622 million, which was a fall of around 25% from the previous year reflecting volume and average value which decreased by 10% from \$792 per tonne to \$711 per tonne (Wine Australia, 2022). However, when separated by varieties, weighted average price generally decreased for red grapes or increased for white grapes (Wine Australia, 2022).

Wine production value was estimated to be \$2.36 billion, down by around 17%, mainly reflecting decreased volume of wine produced. This comes at a time of wine over-supply following the loss of the China market. Above average winegrape production and wine processing combined with reduced overseas exports (down 16%) saw the 2022 vintage adding to existing wine inventories of around \$800 million.

South Australian wine export volume and value declined further in 2021-22 on the back of falling demand resulting from the ongoing tariffs imposed by China. Wine export value fell by 16% to \$1.38 billion, largely driven by the 95% reduction in wine exports to China. Total volume of South Australian wine exported declined by just 1.5%, with red wine falling by 8% in volume exported, while white wine export volume increased by 27%. The average export price of SA wine fell in 2021-22 for a second consecutive year. The decline was primarily driven by a 16% drop in the average export price of red wine which dropped from \$6.02/litre to \$5.08/litre. The collapse of Chinese demand for Australian wine drove this downwards shift, as growing Chinese demand was the pillar of years of sustained growth of red wine prior to 2020-21 (Rural Bank, 2022). Wine exports to markets other than China, however, increased by 17% in value (\$1.36 billion) and 9% by volume (365 million litres).

● Direct international export ● Processed locally ● Net interstate trade ● Local sales ● Change in stocks



Seafood

Primary production value

Total (\$ million)	406
2020-21	+3.6%
Previous 5 yr avg.	-9.5%
5-year trend	

Processed value

Total (\$ million)	457
2020-21	+4.5%
Previous 5 yr avg.	-7.9%
5-year trend	

Seafood

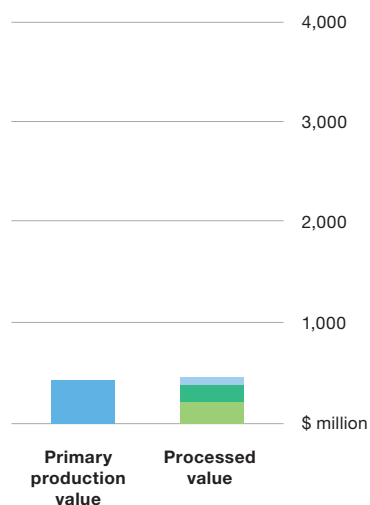


Figure 13. Seafood primary production and processed values (\$ million), 2021-22

The seafood sector includes fisheries and aquaculture production such as Southern Rock Lobster, Southern Bluefin Tuna, oysters, prawns and abalone. The sector had been negatively impacted by the COVID-19 pandemic and bans, such as the ban on Rock Lobster, imposed by China. Production value of seafood increased by almost 4% to reach \$406 million, which is still below the pre-pandemic level as it is almost 10% below the previous five-year average. As a result of the reduced overseas demand, the average farmgate price of Southern Rock Lobster fell by 10% in 2021-22 from the previous year, subsequently reducing the production value of Southern Rock Lobster by 4% to \$79 million in 2021-22. This was despite a 6% increase in the production volume during the same period. Average farmgate price of Southern Rock Lobster has fallen by around half since the ban was imposed. Production value of Southern Bluefin Tuna increased by 15%, driven by a 10% increase in production and 5% increase in average price compared with the previous year. Sardines also saw an increase in production value by 21% with production volume up by 23%. Some of these gains were offset by a decline in the production value of King prawns which were down by 13% to \$34 million.

Seafood exports from South Australia in 2021-22 fell slightly (1%) to \$214 million compared with the previous year. As a result of reduced overseas demand for lobster, direct exports of Southern Rock Lobster from South Australia declined by a further 3% in 2021-22, after it decreased by 37% in 2020-21, to reach \$39 million. Exports of Southern Bluefin Tuna were also down by 4% to reach \$110 million, as quantities exported fell by 11% despite an 8% increase in average export price. Due to falling demand in Japan when hit by the pandemic (AFP, 2022), average export price in 2021-22 was around 20% lower than pre-pandemic prices. This decline in exports of Southern Rock Lobster and Southern Bluefin Tuna were mainly responsible for the decline in overall seafood exports, although partly offset by increases in exports of abalone and other seafoods.

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Dairy

Primary production value

Total (\$ million)	263
2020-21	+0.3%
Previous 5 yr avg.	+12.4%
5-year trend	

Processed value

Total (\$ million)	678
2020-21	+23.9%
Previous 5 yr avg.	+36.2%
5-year trend	

Dairy

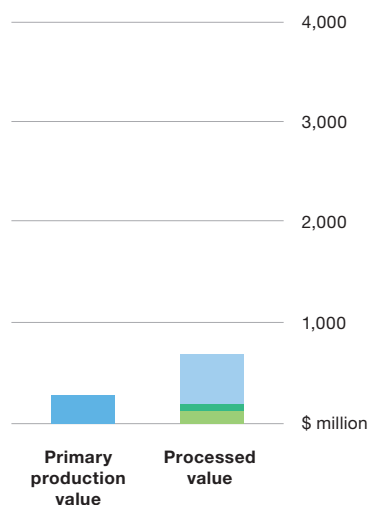


Figure 14. Dairy primary production and processed values (\$ million), 2021-22

In 2021-22, some dairy regions in Australia experienced favourable seasonal conditions, however above average rainfall caused waterlogging and repeated flooding in others. Additionally, the quality of homegrown and stored feed was impacted in these regions. In South Australia, most farms received below average rainfall for the season. In spring, however, the La Niña event saw increased rainfall over many areas and late autumn breaks in some areas reduced pasture growth leading to increased supplementary feeding. Higher input costs also had a noticeable impact on fertiliser rates and likely reduced production of homegrown feed (Dairy Australia, 2022).

Dairy primary production value (the value of milk produced) increased by 0.3% to \$263 million despite a 2% increase in the farmgate milk price in 2021-22 compared with 2020-21, reflecting a 2% decline in the volume of milk produced. However, it remains well above the previous five-year average (up 12%) which reflects improvement in farmgate milk price, which was up by 15% when compared with the previous five-year average farmgate milk price.

Dairy processing value increased by almost 24% due to greater production of milk powder and cheese, which is also reflected in the increase in cheese exports (up 95% to reach \$31 million) and milk powder exports (up 9% to \$80 million) in 2021-22. This led to an increase in total dairy exports by 25% to reach \$124 million.

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Wool

Primary production value

Total (\$ million)	441
2020-21	+23.1%
Previous 5 yr avg.	-17.5%
5-year trend	

Processed value

Total (\$ million)	90
2020-21	+59.9%
Previous 5 yr avg.	-19.2%
5-year trend	

Wool

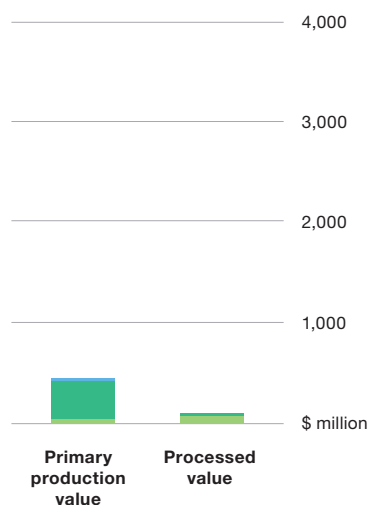


Figure 15. Wool primary production and processed values (\$ million), 2021-22

The wool industry was severely impacted by the COVID-19 pandemic as global demand softened. In 2021-22, favourable seasonal conditions, a growing flock and increased demand for finer wools saw increases in exports and average wool prices. Prices have improved (up 15%), however, the 2021-22 average annual auction price of \$13.27 per kilogram was still 31% lower than the high of 2018-19. In 2021-22, an increase in wool production (up 9% to 56 million kilograms) and average farmgate price increased production value by 23% to reach \$441 million. Similarly, processing (carbonised or scoured wool) value also increased significantly (60%) due to improved global demand. This is also reflected in the export of processed wool which increased by 64% to reach \$82 million. Direct export of greasy wool from the state increased by 18% to \$64 million. Total direct exports, including greasy and processed wool, increased by 40% in 2021-22 to \$146 million.

At the national level, the volume of wool exports increased by 13% when compared with 2020-21 showing improvement in overseas demand after the global downturn, which is also reflected in the 18% increase in export prices of wool nationally.

● Direct international export ● Processed locally ● Net interstate trade ● Local sales



Forestry

Primary production value

Total (\$ million)	248
2019-20	-16.7%
Previous 5 yr avg.	-26.8%
5-year trend	

Processed value

Total (\$ million)	1,397
2019-20	+4.6%
Previous 5 yr avg.	-21.1%
5-year trend	

Forestry

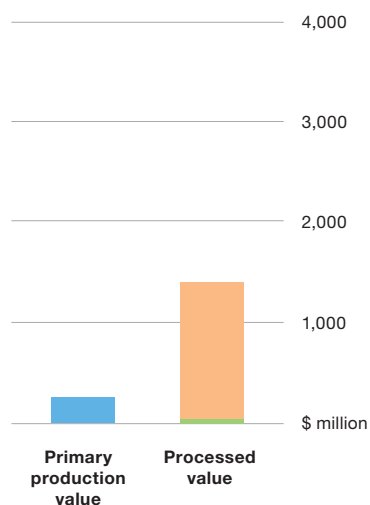


Figure 16. Forestry primary production and processed values (\$ million), 2020-21

Forestry production includes softwood and hardwood logs, with forestry processing including wood and paper products. Forestry production and processing data reported here is from 2020-21, which is the latest data available from the Australian Bureau of Agricultural and Resources Economics and Sciences (ABARES). However, forestry export data reported is from the 2021-22 financial year and sourced from the Australian Bureau of Statistics (ABS).

Note, interstate trade includes products destined for international export.

Forestry primary production value was almost 17% lower than the previous year due to a decline in volume of logs harvested (down 19%). This decline was largely attributable to China's suspension of imports of all timber logs from Australia in late 2020 amid escalating trade tensions. Subsequently, total log exports value from Australia declined by around 66%. Similarly, log exports from Portland, where most of South Australia's timber logs are exported, decreased by 25% in terms of value from the previous year. Processing value increased by around 5% mainly because of a 3% increase in sales of paper and paper products and an increase in wood products sales of 5%.

● Direct international export ● Processed locally ● Interstate and local

Primary production values

\$10 billion

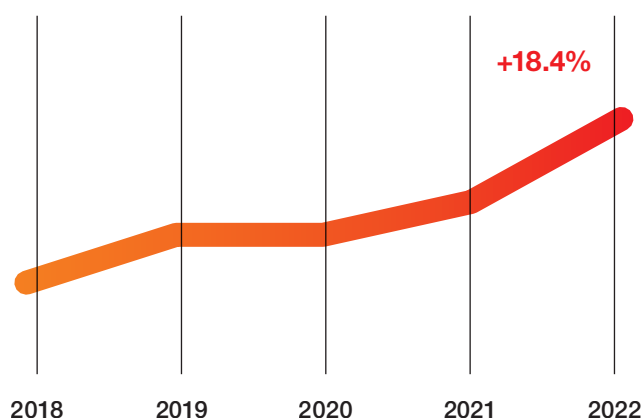


Figure 17. Total primary production value increased by 18.4% in 2021-22
























Total primary production value was up by more than 18% to \$10 billion in 2021-22 compared with 2020-21. All industries other than winegrapes and forestry experienced growth in production value with the increase largely due to favourable seasonal conditions and increases in the price of grains, meats, wool and fruits and vegetables.

Primary production that recorded a fall in value were winegrapes (down 25% to \$622 million) and forestry (down 17% to \$248 million). This was mainly due to trade tensions and pandemic-induced soft demands that reduced prices.

Table 2 (on the following page) is a summary of the change in production values compared to 2020-21 and previous five-year average, and the trend in values over the five years.

Primary production values

Table 2. South Australia's primary industries' production (farmgate value) by sector

	2021-22 total (\$ million)	Change from 2020-21	Change from previous 5-year average	5-year trend
Field crops	3,630	+24.0%	+48.0%	
Wheat	1,712	+27.4%	+53.7%	
Barley	644	+26.2%	+44.6%	
Other	1,273	+18.7%	+42.7%	
Livestock	2,957	+39.2%	+48.4%	
Sheep	858	+28.4%	+25.0%	
Beef	1,355	+74.4%	+110.4%	
Chicken	335	-0.5%	+1.3%	
Pig	285	+17.7%	+33.2%	
Other	124	+23.0%	+6.3%	
Horticulture	1,449	+14.2%	+31.8%	
Potatoes	273	+31.3%	+54.2%	
Citrus	130	+1.3%	+7.1%	
Almonds	196	+30.7%	+32.3%	
Other	850	+8.6%	+30.2%	
Wool	441	+23.1%	-17.5%	
Winegrapes	622	-24.8%	-4.7%	
Seafood	406	+3.6%	-9.5%	
Aquaculture	219	+9.2%	+3.2%	
Wild Catch Fisheries	188	-2.3%	-20.8%	
Forestry*	248	-16.7%	-26.8%	
Dairy	263	+0.3%	+12.4%	
Total	10,016	+18.4%	+29.7%	

*Most recent data available for forestry production is the 2020-21 data from ABARES

Field crops

Grain production in the 2021-22 season was 8.4 million tonnes, 7% above the previous five-year average but 8% below 2020-21 production. In terms of value, production increased by 24% to reach \$3.6 billion because of elevated grain prices. Production value was also well above (up 48%) the previous five-year average. Production value of wheat (up 27% to \$1.7 billion), barley (up 26% to \$644 million), canola (up 54% to \$402 million) and lentils (up 33% to \$271 million) were up significantly and were key in driving up the total field crops industry production value.

Livestock

Total livestock production value in 2021-22 was recorded at \$2.96 billion, an increase of 39% compared with the previous year, and about 48% more than the previous five-year average. This growth in production value was largely driven by beef (up 74% to \$1.36 billion) and sheepmeat (up 28% to \$858 million). Chicken meat production value decreased slightly as fewer birds were processed, but pig meats value was up mainly because of an 18% increase in number of pigs slaughtered.

Horticulture

The value of primary horticultural production was \$1.45 billion, an increase of 14% on the previous year. Sectors that recorded gains were potatoes (up 31% to \$273 million), almonds (up 31% to \$196 million), tomatoes (up 27% to \$225 million), mushrooms (up 19% to \$125 million) and citrus (up 1% to \$130 million). Other sectors that also recorded growth included brassicas (up 36% to \$3 million), cucumbers and capsicums (up 5% to \$184 million) and other vegetables (up 34% to \$10 million).

Wool

The value of wool production increased by 23% to \$441 million in 2021-22 as average auction prices increased by 15% and wool production increased by 9% to 56 million kilograms. Favourable seasonal conditions, a growing flock and increased demand for finer wools saw increases in exports and average wool prices. Average auction price, although 15% higher than 2020-21, remains 31% lower than the 2018-19 average when wool prices were historically very high.

Winegrapes

Winegrape production value decreased by 25% to \$622 million in 2021-22 due to a 14% reduction in winegrape crush (805,851 tonnes) compared with 2020-21's record crush (942,254 tonnes) and a 10% decrease in overall average price of winegrapes. After losing the China market, wine sales have significantly decreased, creating a wine oversupply issue in South Australia.

Seafood

Overall seafood production value increased by around 4% to reach \$406 million in 2021-22, mainly driven by a 15% increase in the value of Southern Bluefin Tuna production, caused by an increase in production volume (up 10%) and average price (up 5%). Sardines also saw an increase in production value by 21%. Some of these gains were offset by a decline in production of King prawns and Southern Rock Lobster. Demand and average price of Southern Rock Lobster remains low and hence total value of production was down by 4% in 2021-22. King prawns were down by 13% to 34 million.

Forestry

Forestry production value decreased by almost 17% in 2020-21 compared with 2019-20, reflecting a decrease in the total volume of logs harvested (down 19%). However, the softwood logs harvest decreased only slightly while the harvest of hardwood logs decreased by 76% (ABARES, 2022).

Dairy

Farmgate value of dairy production increased by only 0.3% in 2021-22 to \$263 million. Total milk production volume decreased by 2% but farmgate milk price was up by 2%, thereby offsetting the loss due to reduced milk production. However, production value remains well above the previous five-year average (up 12%) mainly due to the improved farmgate milk price, which was up by 15% when compared to the previous five-year average farmgate milk price.

Food and wine supply chain

Key highlights for 2021-22 include:

↑ 9.8%

Gross food and wine revenue

increased by 9.8% (up \$2.15 billion) to reach \$24 billion (Table 3). This increase is mainly attributable to the increased value of overseas exports of grains that resulted from increased average grains price.

↑ 12.8%

Gross food revenue

(excludes wine) increased by around 12.8% (up \$2.48 billion) to \$21.8 billion (Table 4). Food revenue increases were mainly driven by an increase in value of food commodity (grains) exports.

↑ 69%

Value of overseas exports

(Table 3 and Table 4) of food commodity (excludes feed grains) increased by 69% (up by \$1.33 billion), and finished food exports (Table 4) increased by 14% (up by \$224 million).

↓ 13%

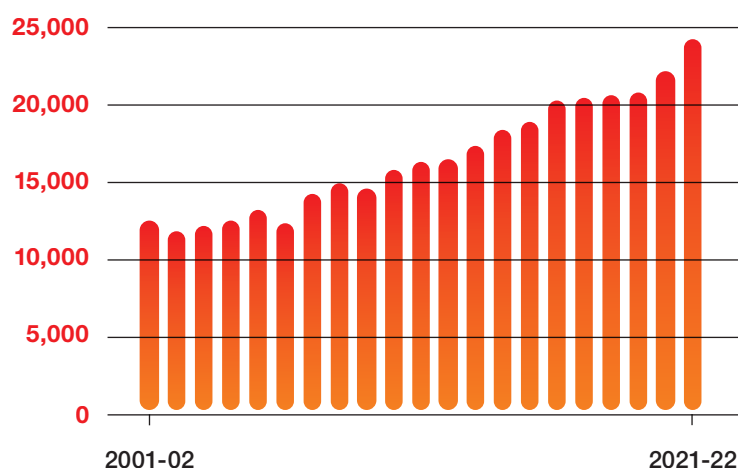
Gross wine revenue

decreased by around 13% to reach \$2.25 billion (Table 5), mainly because of a decrease in overseas exports of wine (down 16% or \$264 million).

\$24 billion








Gross food and wine revenue increased by 9.8%, which is well above the long-term average annual growth rate of 3.5% recorded since 2001-02 (Figure 17).

Figure 17. South Australian gross food and wine revenue (\$ million), 2001-02 to 2021-22










Food and wine revenue

Table 3. South Australia's food and wine revenue (\$ million) summary, 2021-22

	2021-22 total (\$ million)	Change from 2020-21 (\$ million)	5-year trend
Gross food and wine revenue	24,037	+2,148	
Finished food and wine exports	3,241	-41	
Food commodity exports	3,242	+1,326	
Net interstate processed food and wine sales	2,521	+35	
Net interstate food commodity sales	1,383	+205	
Retail trade sales	10,302	+328	
Food service sales	3,348	+294	






Food revenue

Table 4. South Australia's food revenue (\$ million) summary, 2021-22

	2021-22 total (\$ million)	Change from 2020-21 (\$ million)	5-year trend
Gross food revenue	21,791	+2,478	
Finished food exports	1,859	+224	
Food commodity exports	3,242	+1,326	
Net interstate processed food sales	2,459	+92	
Net interstate food commodity sales	1,383	+205	
Retail trade sales	9,860	+333	
Food service sales	2,988	+299	

Wine revenue

Table 5. South Australia's wine revenue (\$ million) summary, 2021-22

	2021-22 total (\$ million)	Change from 2020-21 (\$ million)	5-year trend
Gross wine revenue	2,246	-330	
International exports	1,382	-264	
Net interstate trade	63	-57	
Retail trade sales	442	-5	
Food service sales	359	-4	

Glossary of terms

Primary production value

This measures the value of a commodity at the local level of production (alternatively known as farmgate value). This represents the value of production to the primary producer.

Processed

Products that have been minimally or highly processed. The value is represented by the product's wholesale price into the local or export market (alternatively known as 'finished' for food and wine products). It also includes unprocessed food products that are ready to eat, such as fruit or seafood.

Commodity exports

Commodity exports are products that have a minimal change from their natural form and require further processing before consumption – for example, bulk grain, unprocessed wool or live animals.

International exports

The value of international exports of products reported by the Australian Bureau of Statistics (ABS) as being of South Australian origin, noting some South Australian products including forestry, wool and Rock Lobster are often consolidated for international export through interstate ports and are not reported as being of South Australian origin. In these instances, these products are included in the scorecard's interstate trade totals.

Local sales

A measure of sales at wholesale value within the state. It includes the wholesale value of processed products minus the values of international exports and net interstate trade.

Net interstate trade and change in stocks

This represents the difference in the value of goods exported interstate from those that are imported from interstate, and any change in stocks. This includes products that are consolidated interstate for international export but not reported in ABS statistics as South Australian international exports. For products that can be stored across years (mostly grain and wine), it also includes any change in stocks.

Primary industries and agribusiness revenue

This measures the revenue of primary production and associated processing. This includes the final sales of commodity primary industry products (mostly international and interstate exports of unprocessed grain, wool and live animals) plus the value of locally processed products (such as fresh and processed food, wine and wood products) at wholesale value.

References

ABARES. (2022). *Agriculture commodities: September quarter 2022*. Canberra: Australian Bureau of Agricultural and Resource Economics and Sciences.

ABARES. (2022). *Economic Overview: September quarter 2022*. Canberra: Australian Bureau of Agricultural and Resource Economics and Sciences.

AFP. (2022, January 01). *Japan tuna goes for \$145,000 as pandemic dampens New Year auction*. Retrieved from France24: <https://www.france24.com/en/live-news/20220105-japan-tuna-goes-for-145-000-as-pandemic-dampens-new-year-auction>

Bignell, S. (2022, June 30). *The 2021-22 financial year in review*. Retrieved from Meat and Livestock Australia: <https://www.mla.com.au/news-and-events/industry-news/the-2021-22-financial-year-in-review>

Department of Treasury and Finance. (2022, June). *GDP/State Final Demand June quarter 2022*. Adelaide, South Australia, Australia: Government of South Australia.

Maxwell, J. (2021, December 14). *How high can(ola) prices get?* Retrieved from Rural Bank: <https://www.ruralbank.com.au/blog/knowledge-and-insights/how-high-canola-prices-get>

National Farmers' Federation. (2019). *2030 Roadmap Australian Agriculture's Plan for a \$100 Billion Industry*. Canberra: National Farmers' Federation.

Rabobank. (2022). *Agribusiness Outlook 2022 - Australia*. Sydney: Rabobank.

Rennison, J. (2022, August 01). *War, Climate Change, Energy Costs: How the Wheat Market Has been Upended*. Retrieved from The New York Times: <https://www.nytimes.com/2022/08/01/business/wheat-ukraine-war-market.html>

Rural Bank. (2022). *Australian Agriculture Trade 2021/22*. Rural Bank.

Singh, S. N. (2021, November 30). *Global wheat prices to remain high until northern hemisphere harvest*. Retrieved from SP Global: <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/agriculture/113021-global-wheat-prices-to-remain-high-until-northern-hemisphere-harvest>

South Australian Centre for Economic Studies. (2022). *Economic Briefing Report*. Adelaide: The University of Adelaide.

Wine Australia. (2022). *The SA Winegrape Crush Survey 2022*. Adelaide: Wine Australia.

Updates and changes in methods

Economic contribution

In the 2017-18 and 2018-19 scorecards, contribution to GSP and employment was estimated by measuring the direct contribution of primary industries and processing, and the economic contribution of supply chain inputs to these sectors using the REMPLAN Input Output Model.

From the 2019-20 scorecard onwards, contribution to GSP and employment measures were aligned with estimates which are based on the Australian Bureau of Statistics' Australian National Accounts and Labour Force survey data. Industries included in the estimates are Agriculture, Forestry and Fishing, Food Product Manufacturing, Beverage Manufacturing, Wood Product Manufacturing, and Pulp, Paper and Paperboard Manufacturing.

Wool

Wool scorecard, although not reported in the PIRSA scorecards before 2017-18, historically had not included the value of processing in the state. The scorecard method was updated in 2019 to better capture the value of wool processed within the state and was applied retrospectively to all years prior in order to capture processing.

Dairy

Milk powder processing had never been reported in the scorecard as the sector had remained relatively small. However, in the recent years, especially since mid-2017, milk powder processing in the state has been growing which is reflected in the remarkable growth in exports since in 2017-18. Therefore, milk powder processing has been included in since 2018-19.

Seafood

Seafood production data used is the best estimates available at the time of writing based on projections by industry, and some species are subject to revision as improved production data becomes available.

Food and wine specific measures

Food retail sales

The value of food sales made through all retail stores including supermarkets and grocery stores, takeaway food, meat, fish, poultry, fruit and vegetable retailing, liquor retailing, bread and cake, and specialist food retailing.

Food service sales

The value of sales of food and beverages through restaurants, hotels, and tourism operations within South Australia. The calculation estimates the percentage of total sales that occur through these outlets. Prices used in this calculation are usually higher than those used at the retail level.

Food and wine gross revenue

An aggregate measure of revenue that includes international and interstate food and beverage exports and the value of food and beverage retail and service sales.



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Department of Primary Industries
and Regions