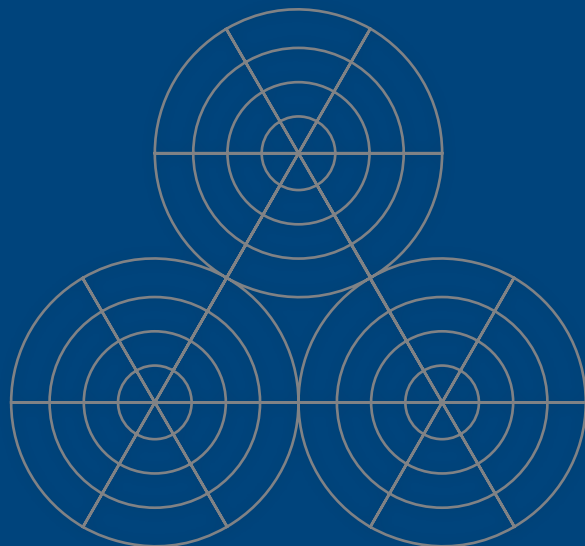
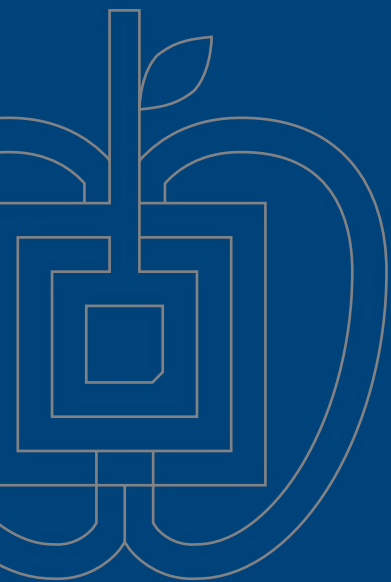


Primary Industries Scorecard

2020-21



**Government
of South Australia**

Department of Primary
Industries and Regions

Primary Industries Scorecard 2020-21
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Primary Industries and Regions SA (PIRSA)
GPO Box 1671, Adelaide SA 5001
T +61 8 8226 0995
E pema.wangchuk@sa.gov.au

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Executive Summary

South Australia's primary industries are vital to the State's economy. In 2020-21, primary industries and agribusiness revenue was up by 9% totalling \$15.4 billion while the sector also employed 74,000 people.

After COVID-19 disrupted the world economy in 2020, the South Australian economy has experienced a strong recovery even though the road back was not smooth with setbacks due to localised COVID-19 outbreaks and uneven recovery across sectors. In 2020-21, China-Australia trade tensions have escalated significantly, with Australian exports of goods having been impacted by an increase in trade policy actions by China.

Improved seasonal conditions in southern Australia throughout 2020, and above-average summer rain in northern Australia during the 2020-21 wet season, resulted in abundance of pasture in all major cattle producing regions. Cattle herd and sheep flock have entered a rebuild phase after falling to their lowest levels due to the prolonged drought. Improved seasonal conditions also resulted in improved grain and winegrape production.

In 2020-21, primary industries and agribusiness revenue totalled \$15.4 billion, up by 9% from the previous year, mainly driven by grain exports. Total value of primary production for 2020-21 was \$8.47 billion, an increase by 8.5%, following increases in the production of grains and winegrapes. The beef sector also contributed to this increase as a result of higher average prices despite a reduction in beef production.

Overseas exports of agriculture, food, wine and forestry products increased by 8% and totalled \$6.05 billion, which accounted for 47% of South Australia's total overseas merchandise exports. Increases in grain exports (up by 60% in terms of value) was a major contributor to this result. Total wine exports fell by 12% to \$1.65 billion as exports to China fell by 41% due to the imposition of the wine tariff. China remains the biggest overseas market, accounting for 17% of total food and agribusiness exports, despite exports falling by around 30% in 2020-21.

In 2020-21, total employment in primary industries and associated processing was estimated to be around 74,000 (up by 6%). Contribution to GSP, in terms of Industry Gross Value Added, from primary production activity (agriculture, forestry and fishing) in 2020-21 was \$6.02 billion, up 24% compared with 2019-20.

Overall, results for the full food and wine industry supply chain were up. Combined gross food and wine revenue increased by 6% to reach \$21.9 billion, with increases in food commodities exports and local consumption as main drivers. Declines were recorded in the export of finished food and wine.

Introduction

To track the performance of South Australian 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 2020-21 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 measures to help describe the economic contribution of the industry to South Australia are also included in the report.

The first of these measures 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 Gross State Product (GSP).

For continuity with previous scorecard reports (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.

Note, 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

Since early 2020 as a result of the COVID-19 pandemic, much of the world has been in some form of lockdown that has negatively impacted the domestic and global economies. Annual global GDP growth in 2020 was -3.4%. However, Australia fared much better (-0.3%) than many advanced economies and its annual GDP decline was much less than the OECD (Organisation for Economic Co-operation and Development) average of -4.59% (World Bank, 2021).

Global economic recovery remains on track and this bodes well for continued strong demand for Australian agricultural products. Global economic growth is assumed by the International Monetary Fund (IMF) in their July 2021 World economic outlook update to be 6% in 2021 and 4.9% in 2022, after falling by 3.2% in 2020. Rapid progress in vaccinating eligible populations and very high levels of fiscal and monetary support from governments has meant that the recession of 2020 was short-lived (ABARES, 2021b).

The South Australian economy has experienced a strong recovery even though the road back was not smooth with setbacks due to localised COVID-19 outbreaks and uneven recovery across sectors (South Australian Centre for Economic Studies, 2021).

Across 2020-21, COVID-19 continued to be the key risk to economic recovery, with the highly infectious Delta variant challenging global health systems. Vaccine deployment was centred on advanced economies where the economic recovery from the COVID-19 caused recession was the strongest. Limited access to vaccines in emerging and developing economies has delayed their economic recovery and constrained growth in that group (ABARES, 2021b).

There were also events that positively impacted the economy. Australia has just come out of a prolonged drought that has had very severe impact on broadacre agriculture leading to low grain production and contraction in sheep and cattle numbers. Improved seasonal conditions in southern Australia throughout 2020, and above-average summer rain in northern Australia during the 2020-21 wet season, have resulted in abundance of pasture in all major cattle producing regions, with exception of parts of Western Australia. Cattle herd and sheep flock have entered a rebuild phase after falling to their lowest levels due to the prolonged drought (MLA, 2021). Improved seasonal conditions have also resulted in improved grain production (PIRSA, 2021) and a record wine-grapes vintage (Wine Australia, 2021).

2020-21 also saw COVID-19 triggered labour shortage mainly because of lack of supply of overseas workers which was initially forecast to result in a drop in fruit production by as much as 17% and vegetable production by around 2% (NFF, 2021). However, the State Government's and the Industry's initiatives such as a push to encourage unemployed locals to take up fruit picking and safely bringing workers from the Pacific Island nations under the Commonwealth Seasonal Worker Programme and Pacific Labour Scheme have been able to provide some respite.

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).

In terms of industry revenue (Primary Industries and Agribusiness Revenue), the largest sectors (Figure 1) are field crops with \$4.5 billion (29%), livestock with \$3.2 billion (21%), wine with \$2.8 billion (18%), horticulture with \$1.9 billion (12%), and forestry with \$1.3 billion (9%).

Total primary industries and agribusiness revenue for 2020-21 was \$15.4 billion (Figure 2), up 9% when compared with 2019-20. The main drivers of this increase were field crops

and wine industries. Overall industry revenue of field crops industry was up by 19% resulting from increased grain production and exports following favourable seasonal conditions. Significant improvement in grain production and overseas exports mainly contributed to the increase in the overall field crops industry revenue. Grain production totaled 9.1 million tonnes in 2020-21, up 41% compared with 2019-20's 6.5 million tonnes and 22% above the previous five-year average of 7.5 million tonnes (PIRSA, 2021). Exports of grains in terms of value increased by 60% to reach \$2.4 billion, which was greater than the pre-drought levels.

The scorecard reports wine industry revenue as the wholesale value of wine produced which in 2020-21 totalled \$2.8 billion, up by 44%. This

includes wholesale value of all wine sales (domestic and exports) and any change in wine stocks. Favourable seasonal conditions favoured winegrape production with the reported crush for South Australian winegrapes in 2021 totalling 941,113 tonnes, the largest crush ever recorded for the state and was 45% above 2020 crush, and 28% above the 10-year average (Wine Australia, 2021). This has also meant increased wine production. However, wine sales have suffered mainly because of the loss of the China market and also in part due to supply chain issues caused by the pandemic. Although wine sales were down mainly as a result of decline in exports, a change in inventory of almost \$1 billion was recorded which pushed the overall value of the industry upwards.

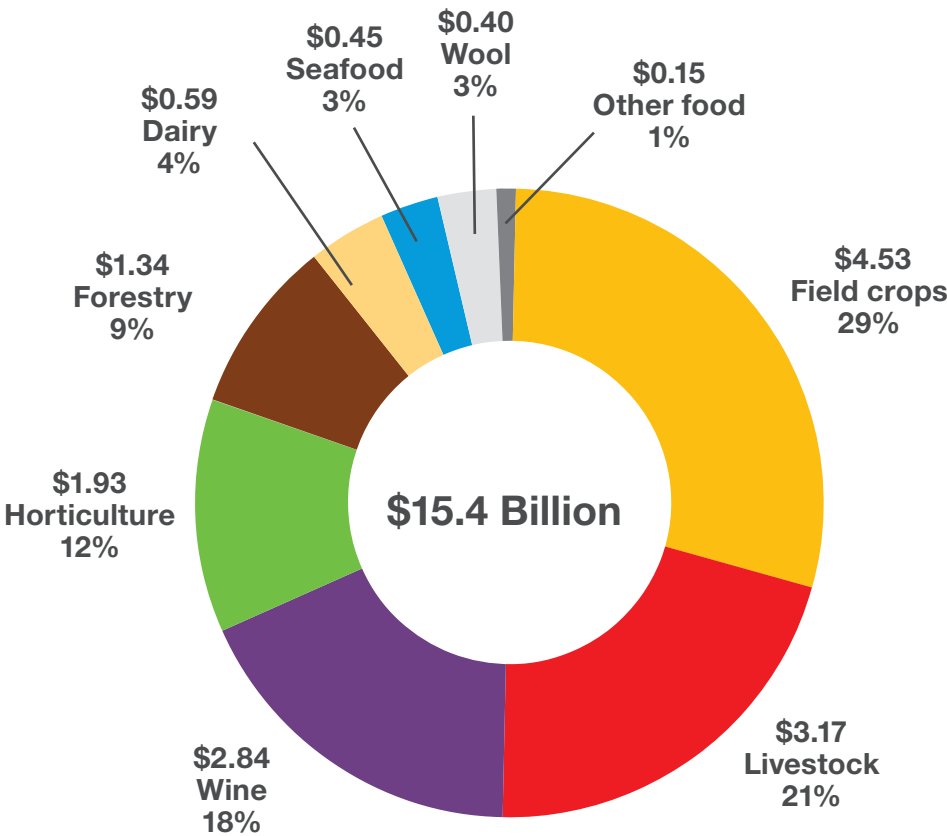


Figure 1. Composition of the 2020-21 primary industries and agribusiness revenue (\$ billion)

Horticulture industry revenue increased by 6% in 2020-21 to reach \$1.9 billion. This increase was largely driven by increases in the wholesale value of tomatoes and mushrooms.

Industries that recorded falls in overall revenue were wool (down 18%), forestry (down 16%) and seafood (down 9%). These industries experienced a downturn in their overall revenues due mainly to the impact on demand from COVID-19 and Australia's current trade tensions with China.

Forestry revenue was lower than the previous year due to declines in volume of logs harvested (down 17%), the average price (down 4%) and log exports (nationally down 36%). One of the hardest hit sectors during the COVID-19 pandemic was the wool

sector which suffered from reduced overseas demand that resulted in a significant decline in wool prices following the high prices of 2018-19. Prices have since improved but the 2020-21 average auction price of \$11.57/kg was 19% lower than 2019-20 and 40% lower than 2018-19. Subsequently, reduced price and exports mostly contributed to lower revenue (down 18%) compared with 2019-20. Seafood industry revenue fell by 9% driven by reduced demand for lobsters (down 37%), mainly from China, and a decline in exports of Southern Bluefin tuna by 15% compared with 2019-20.

Livestock industry revenue remained relatively stable at \$3.2 billion, only recording a slight decline of less than 1% when compared with 2019-20. Drought in the previous years has led

to tightened cattle and sheep supply resulting in decreased slaughter volumes in 2020-21 that ultimately resulted in lower processing value of beef (down 29%) and sheep meats (down 6%) despite record prices, especially for beef. Although small in absolute dollar value, goat processed value declined significantly (down 55%) compared with the previous year. However, much of this decline was offset by increases in the processing values of pig meats and chicken. Dairy industry revenue decreased slightly by 0.2% when compared with 2019-20. Despite increase in milk production (up 2%), revenue decline mainly reflected the decrease in farmgate milk price (down 2%) and drinking milk sales (down 1.5%).

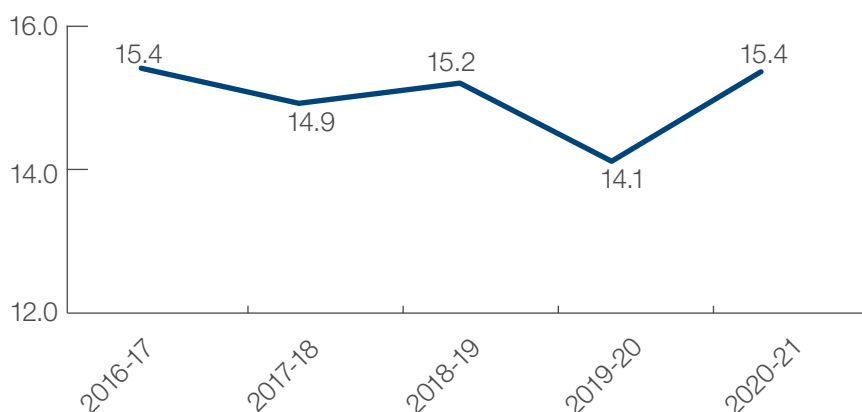


Figure 2. Five-year trend of SA's primary industries and agribusiness revenue (\$ billion) from 2016-17 to 2020-21.

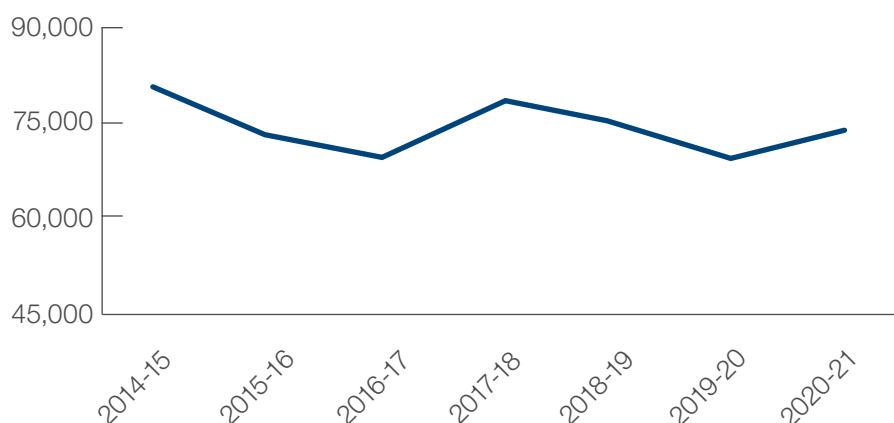


Figure 3. Food and agribusiness employment (FTEs) 2014-15 to 2020-21

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.

In 2020-21, total employment in primary industries and associated processing was estimated to be around 74,000. This was an increase of 6% from 70,000 in 2019-20 (Figure 3) mainly as result of a 17% increase

in primary agriculture, forestry and fishing employment. However, food and beverage manufacturing employment declined by 8% over the year.

Contribution to GSP (Figure 4), in terms of Industry Gross Value Added, from primary production activity (agriculture, forestry and fishing) in 2020-21 was \$6.02 billion, up 24% compared with 2019-20.

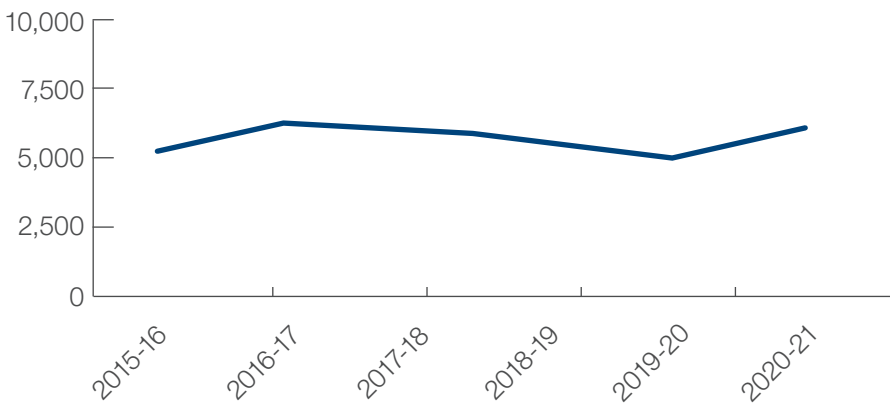


Figure 4. Contribution to GSP (\$ million) from primary production 2015-16 to 2020-21

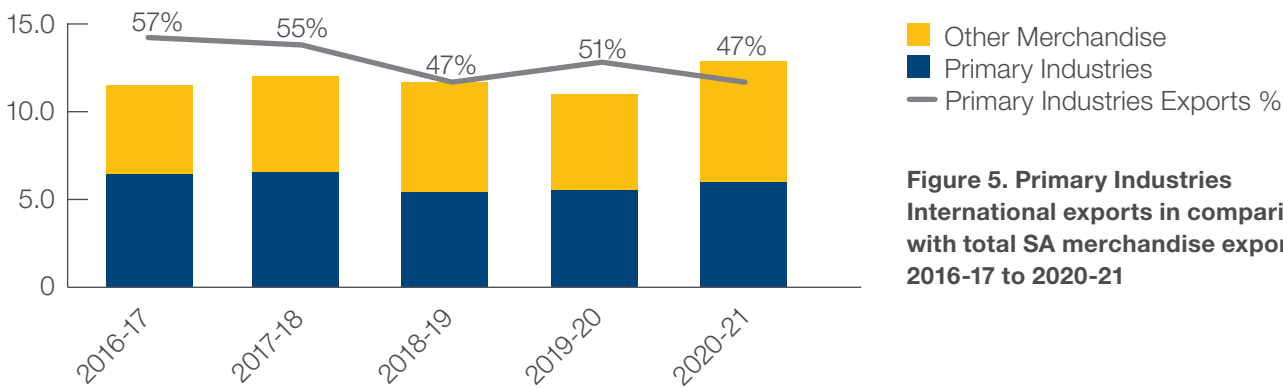


Figure 5. Primary Industries International exports in comparison with total SA merchandise exports, 2016-17 to 2020-21

Exports

Total overseas merchandise exports from South Australia in 2020-21 increased by 15% to reach \$12.8 billion. The value of South Australia's overseas exports of primary industries and associated processing (or food and agribusiness industries) totalled \$6.05 billion in 2020-21, an increase by 8% from the previous year. This relatively smaller growth in primary industries exports compared with the total merchandise exports resulted in the share of primary industries export decreasing from 51% to 47% of the State's total export value (Figure 5).

The main driver of growth of primary industries exports in 2020-21 was grain exports of wheat and barley. Total volume of grains exported almost doubled compared with 2019-20 and was back to pre-drought levels. In terms of value, grain exports increased by 60% to reach \$2.4 billion. Despite losing the China market, total barley exports increased by 209% to over \$500 million resulting from improved performances in other markets such as the Middle East. Barley exports to the Middle East increased significantly, notably to Saudi Arabia where exports that were non-existent in the previous year increased to almost \$200 million in 2020-21. Additionally, exports to Thailand and Japan doubled whilst exports to Vietnam increased significantly. Total wheat exports increased by over 60% to \$1.3 billion largely driven by increases to Indonesia (up 350%), China (up 112%) and Vietnam (up 74%).

Total dairy exports increased by 37% to reach \$99 million mainly driven by increase in exports of milk powder (up 39% to reach \$73 million) that have been increasing since 2018. Exports of livestock and livestock products overall fell by 13% in 2020-21 with exports increasing only for pig meats (up 94% to reach \$13 million) and sheep meats (up 1% to reach \$523 million). Despite the increase in

price, the value of beef exports fell due to reduced supply of beef cattle for slaughtering. Much of the gains in lamb exports were offset by losses in mutton exports resulting in a very modest increase in exports of total sheep meats.

Total direct exports of wool from South Australia fell by 22% to \$104 million. This decrease largely reflected the low price in comparison as direct exports in terms of volume did not change significantly compared with the already reduced level of the previous year. At the national level, the total volume of wool exports increased by 17% when compared with 2019-20 reflecting improvement in overseas demand after the global downturn. However, exports in terms of value decreased by only 3% reflecting a more than 17% fall in average export price meaning that demand still remained soft.

Horticulture exports were down by 10% to reach \$337 million mainly as a result of decline in the value of almond exports. Despite increase in volume of almond exports (up by 17%), value declined by 16% to reach \$151 million reflecting fall in average export price (down by 28% to \$6.67/Kg) of almonds after California, that produces 80% of global almonds, produced a record crop of almost 1.5 million tonnes last season which pushed down global prices (ABC, 2021a).

Australian wine exports in 2020-21 was negatively impacted by China's imposition of tariffs. South Australia's total wine exports decreased by 10% (or 43 million litres) in volume and 12% (or \$222 million) in value. The 41% drop in wine exports to China was partly offset by improved performance in other markets such as the United Kingdom (up 10%), Hong Kong (up 96%) and smaller markets like South Korea (up 101%) and Thailand (up 68%). Forestry exports were down largely because of decline in log exports by around 40% resulting from an import ban

imposed by China on Australian logs. Similarly, downturn in seafood exports (down 13%) can also be attributed to restrictions put on Australian lobsters by China that resulted in a 37% decline in direct exports of Southern Rock Lobsters from South Australia. Southern Bluefin tuna exports to Japan were up in terms of volume (up 16%) but were down by 13% in terms of value largely affected by 25% decline in average export price.

South Australia's top ten export markets for its food and agribusiness commodities in 2020-21 are shown in Figure 6, with recent trend in growth for these markets shown in Figure 7. Despite exports value decreasing by around 30%, China still remained the biggest international market, importing goods worth more than \$1 billion and accounting for 17% of total food and agribusiness exports. This decline in exports to China is largely attributable to the trade bans and tariffs imposed on some Australian products. Exports to the United States have been decreasing since 2014-15 and recorded a decrease of 2% over the year to 2020-21. Exports to Japan have remained relatively stable with slight year to year changes. With improved grain production and grain exports back to pre-drought levels, grain exports to Indonesia also rose thereby increasing total exports by 116%. A notable entry into the top ten markets was Saudi Arabia with an increase of 440% to reach total imports of \$236 million from South Australia, mainly driven by its import of barley that was non-existent in the previous year to over \$200 million in 2020-21. Exports to the United Kingdom, Vietnam, Thailand and Hong Kong have remained relatively stable in the last 10-year period but have increased over the year to 2020-21.

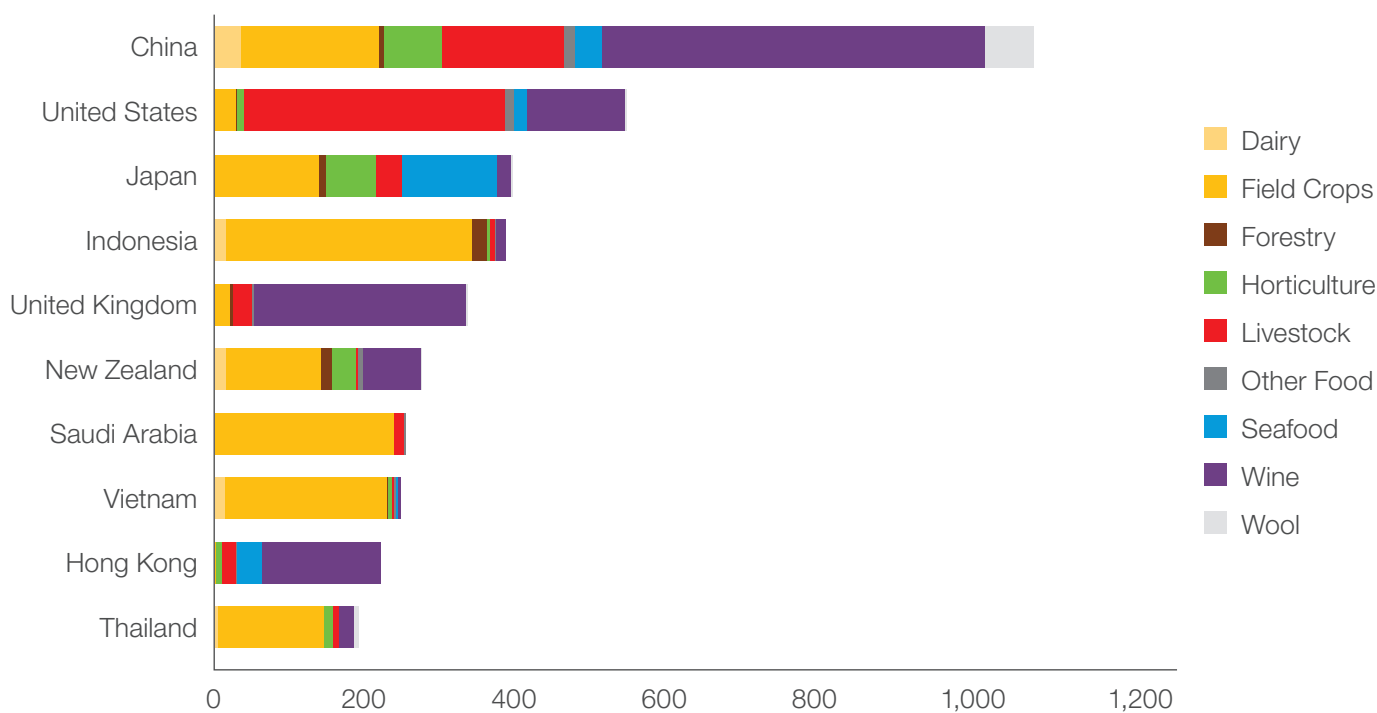


Figure 6. Top 10 export markets for South Australia's food and agribusiness in 2020-21 (values are in \$ million)

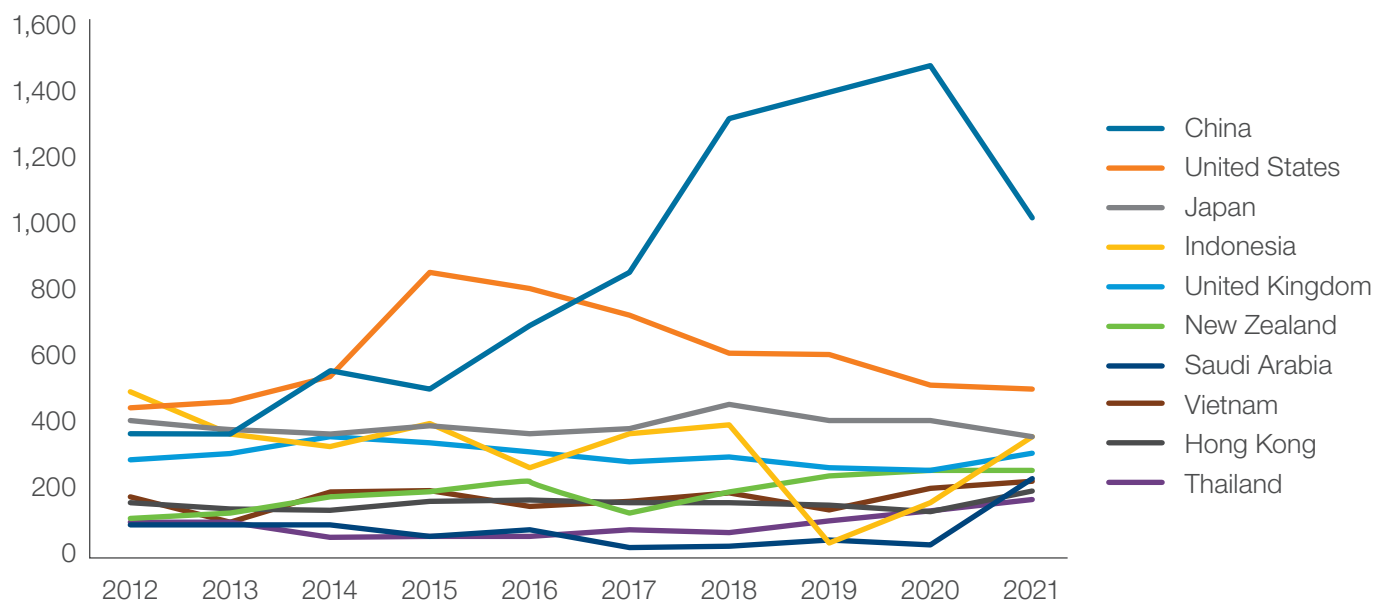


Figure 7. South Australia's major food and agribusiness export markets and their growth in the past 10 years (values are in \$ million)



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 \$9.6 billion to \$11.2 billion

over the year (Figure 8). This increase was mainly due to increase in overseas grain exports as well as increased wine production and increase in wine stocks.

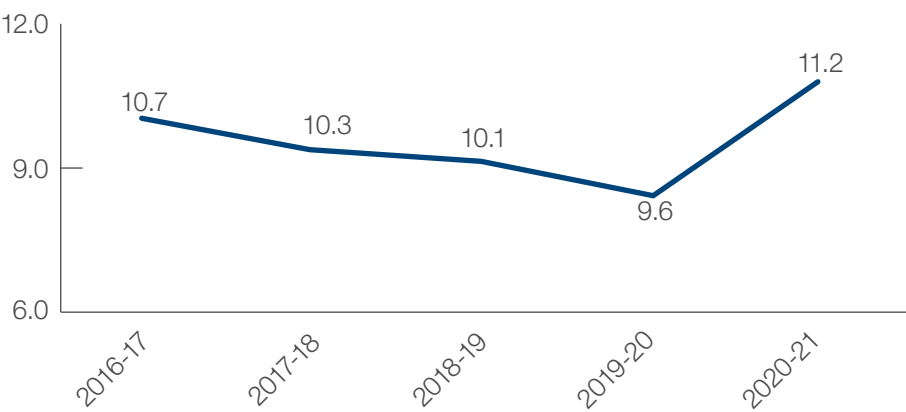
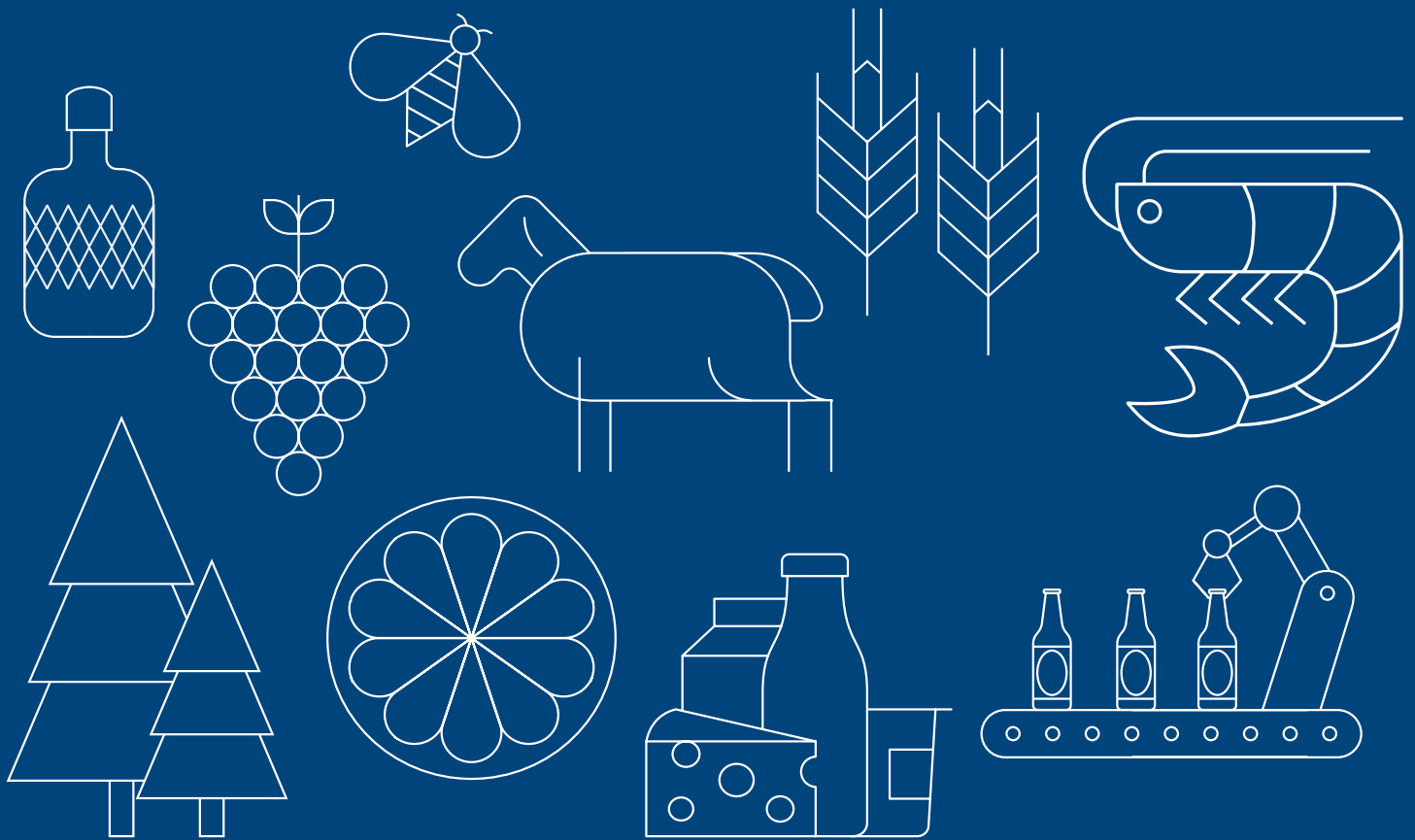


Figure 8. 5-year trend of primary industries’ total international, net interstate trade and change in stocks (\$ billion) 2016-17 to 2020-21



Sector Summaries

The sector performance summaries include the 2020-21 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 as well as change in stocks.

Field Crops

Field crops include wheat, barley, hay, canola, seeds and pulses. Many parts of the State have been impacted by the prolonged drought. However, improved seasonal conditions in 2020-21 resulted in significant improvement in grain production. Grain production in 2020-21 season increased by 41% compared with 2019-20 season to reach 9.1 million tonnes and this was 22% above the 5-year average production of 7.5 million tonnes. This significant increase in production drove the total value in 2020-21 to increase by 21.5% compared to the previous season, to reach \$2.9 billion despite falls in average price across most grains. Production value was also well above (up 29%) the previous 5-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 include wheat (up 34% to \$1.3 billion), barley (up 8% to \$510 million), canola (up 43% to \$275 million) and lentils (up 39% to \$215 million). As shown in Figure 9, a large proportion of grains produced are exported as grain commodities and relatively smaller proportions are sent interstate or processed in the state.

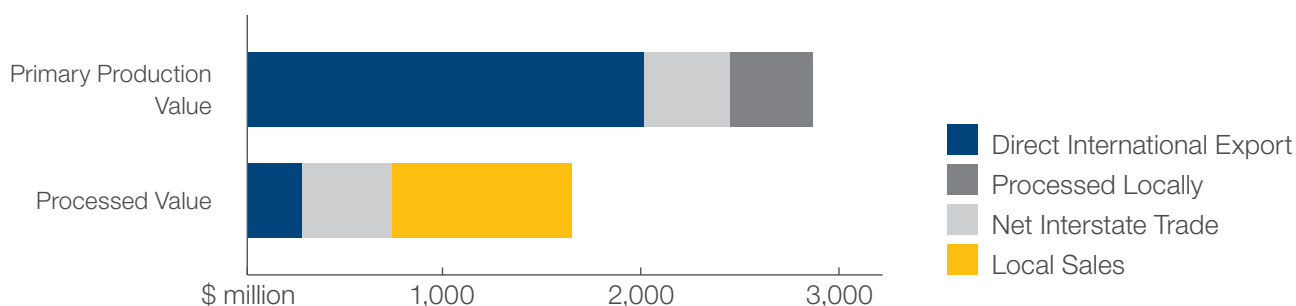


Overseas exports of grains were also back to pre-drought levels and reached \$2.4 billion, an increase by 60% compared with 2019-20. This increase was mainly attributable to increase in value of wheat and barley exports. With wheat production well above average, exports to Indonesia have also increased by 150% to reach \$305 million, back to pre-drought levels after two years of reduced exports. Wheat exports also increased significantly to China (up 85% to \$140 million), Malaysia (up 392% to \$75 million) and the Philippines (up 118% to \$53 million).

Despite losing much of the China market after tariffs were imposed, total barley (malting and feed barley) exports increased by more than 200% to reach \$505 million, driven mostly by more than 400% increase in feed

barley exports totalling \$405 million. Total feed barley exports to the Middle East, where no exports were recorded in the previous year, increased to \$280 million in 2020-21 and Saudi Arabia alone accounted for almost \$200 million of the total.

Processing value of field crops reduced by around 5%, mainly resulting from a decline in the wholesale value of hay due to lower volume of production (down 5%) and average price (down 21%) compared to the previous year. Compared with the previous five average, the reduction of around 12% in the processing value in 2020-21 mainly reflects declining beer processing capacity as a major producer was operating below capacity in recent years and ceased its operations in June 2021.



Field Crops	Total (\$ million)	2019-20	Previous 5 yr average	5-Year Trend
Primary Production Value	2,927	↑ 21.5%	↑ 28.7%	
Processed Value	1,678	↓ -5.2%	↓ -11.6%	

Figure 9. Field crops primary production and processed values (\$ million), 2020-21

Note: the primary production value does not include all commodity exports during the period, with \$338 million of carry-over stocks from previous seasons.

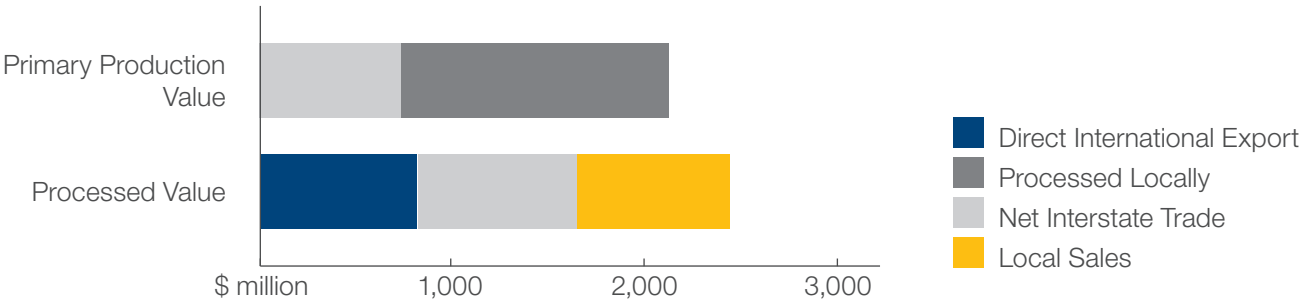
Livestock

The livestock industry includes beef, sheep, pigs and chicken meats, along with smaller sectors such as eggs, kangaroo and goats. Total livestock production value in 2020-21 was recorded at \$2.1 billion, an increase of around 2% compared with the previous year and about 11% more than the previous five-year average. Increases in the production value of beef (up 20% to \$777 million) driven by higher prices was the main contributor to this increase. A reduced beef cattle herd and restocking after the drought culminated in a tightened supply that led to an increase in average cattle price by about 30% in 2020-21 compared to the previous year. However, some of the gains were offset by a lower production value of sheep meats (down 10% to \$668 million) that resulted from decline in lamb and sheep flock by 8% and reduced average price of lamb (down 6%) despite 2% increase in mutton price. Average price of lamb, although down compared to the previous year, was still at historically high levels. As shown in Figure 10, the majority of livestock are processed within the State with some going to interstate abattoirs. Live animal exports out of South Australia have significantly reduced in the past few years.



Livestock processing value totalled \$2.4 billion and was lower by 6% when compared to the previous year mainly reflecting the 65% decrease in the number of sheep (mutton) slaughtered and 21% decrease in the number of beef cattle slaughtered. When compared to the five-year average, livestock processing value in 2020-21 was much lower (down by 14%), mostly reflecting the decreased beef and sheep processing capacity that has continued since early 2018 after the fire at a major processing plant. Since then, the proportion of cattle being sent interstate for processing has increased. Both chicken and pig meat processing values increased as a result of the increase in supply.

Total overseas exports of livestock products were \$819 million in 2020-21, down by 13% compared to the year before. Beef exports were down by 36% to \$196 million largely because of tightening supply and was instrumental in driving down the total value of livestock exports despite increases in exports value of sheep meats (up 2% to \$522 million) and pig meats (up 94% to \$13 million).



Livestock	Total (\$ million)	2019–20	Previous 5 yr average	5-Year Trend
Primary Production Value	2,125	↑ 2.2%	↑ 11.3%	
Processed Value	2,429	↓ -6.2%	↓ -14.4%	

Figure 10. Livestock primary production and processed values (\$ million), 2020-21

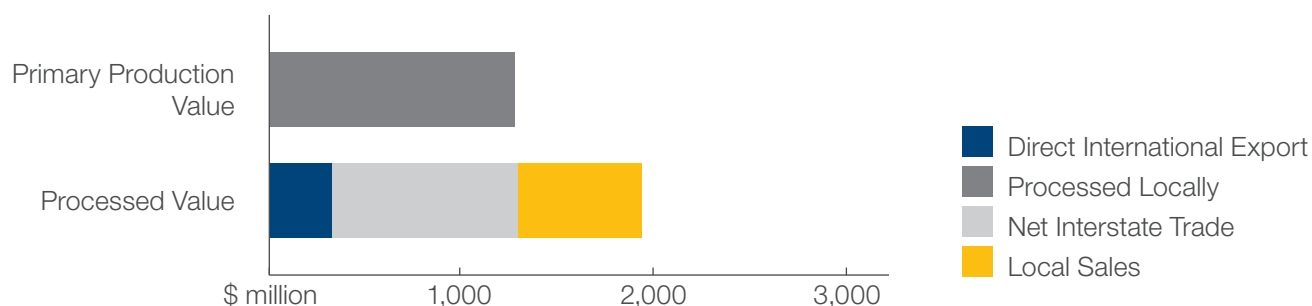
Horticulture

Over 40 horticultural products are measured in the Scorecard, with the largest being potatoes, citrus, almonds and tomatoes. The value of primary horticultural production was almost \$1.3 billion, an increase by 5% on the previous year. Almond production value was down by 32% which offset gains in other sectors resulting in total horticulture production value growing by a small margin in 2020-21. Amongst the bigger crops, increases were seen in potatoes (up 3% to \$208 million), tomatoes (up 21% to \$178 million) followed by cucumbers and capsicums (up 13% to \$175 million). Other crops that also recorded growth include apples and pears (up 17% to \$35 million), cherries (up 34% to \$27 million), mushrooms (up 111% to \$105 million) and heavy vegetables (up 20% to \$68 million).

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 2020-21 was recorded at \$1.9 billion, up by almost 6% on the previous year, resulting mainly from increase in wholesale values of tomatoes, mushrooms capsicum and cucumbers, and heavy vegetables.



Overseas exports of horticulture totalled \$337 million, down by 10% from 2019-20. The export value of most major horticulture produce fell in 2020-21. Almond exports in terms of value fell by 16% to \$151 million. Record harvests in California, the largest global supplier, have put a downward pressure on global almond price resulting in a 28% reduction in export price for South Australian almonds that resulted in lower export value despite a 17% increase in the quantity of almonds exported. Citrus exports also fell by 2%.



Horticulture	Total (\$ million)	2019-20	Previous 5 yr average	5-Year Trend
Primary Production Value	1,269	↑ 5.2%	↑ 23.2%	
Processed Value	1,926	↑ 5.7%	↑ 18.7%	

Figure 11. Horticulture primary production and processed values (\$ million)

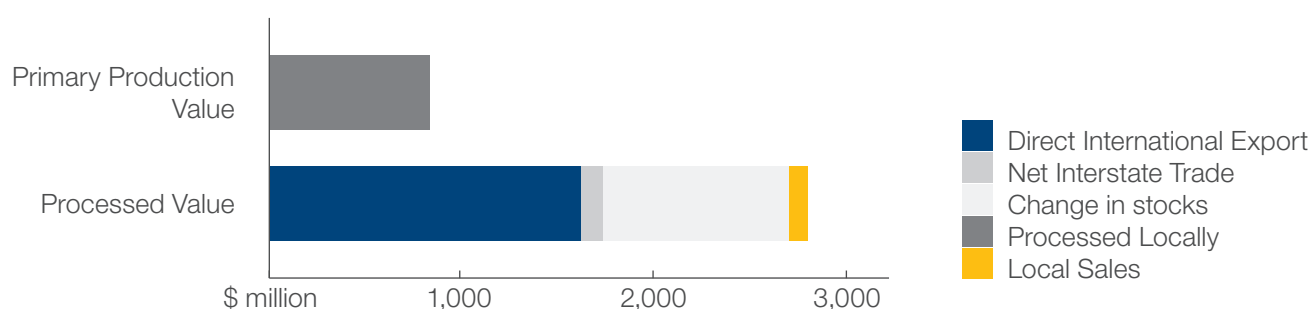


Wine

The State's wine sector recorded increases in value for both primary production (winegrapes production) and processing (wine production). As a result of good seasonal conditions, the State produced a total reported crush of 941,113 tonnes in 2021, the largest crush ever recorded for the state and was 45% above 2020 crush, and also 28% above the 10-year average (Wine Australia, 2021). In terms of production value, there was a 48% increase in 2021 totalling \$827 million. There was no significant movement in the average price paid for grapes, and so the increased value reflects mostly the size of the crush.

Wine processing value was estimated to be up by around 44% to \$2.8 billion which mainly reflects increased volume of wine produced. This comes at a time of tighter wine supply following few years of reduced winegrape crush due to unfavourable seasonal conditions, and increased exports that continued to deplete wine inventory over the past few years. Despite the increase in value of winegrape production and processing, the fall in overseas exports (down 12%) meant that the overall industry sales revenue was reduced (down 9%) and wine stocks increased by almost \$1 billion. The

fall in total wine exports (down by 12% to \$1.65 billion) was mainly due to effectively losing the China market which fell by 41% in 2020-21 after the tariffs were imposed. However, South Australia's wine exports to other markets such as Hong Kong (up 96% to \$147 million), and to other smaller markets such as South Korea (up 101% to \$29 million) and Thailand (up 68% to \$19 million) improved significantly which partly offset some of the losses.



Wine	Total (\$ million)	2019–20	Previous 5 yr average	5-Year Trend
Primary Production Value	827	↑ 49%	↑ 37%	
Processed Value	2,842	↑ 44%	↑ 34%	

Figure 12. Wine primary production and processed values (\$ million), 2020-21



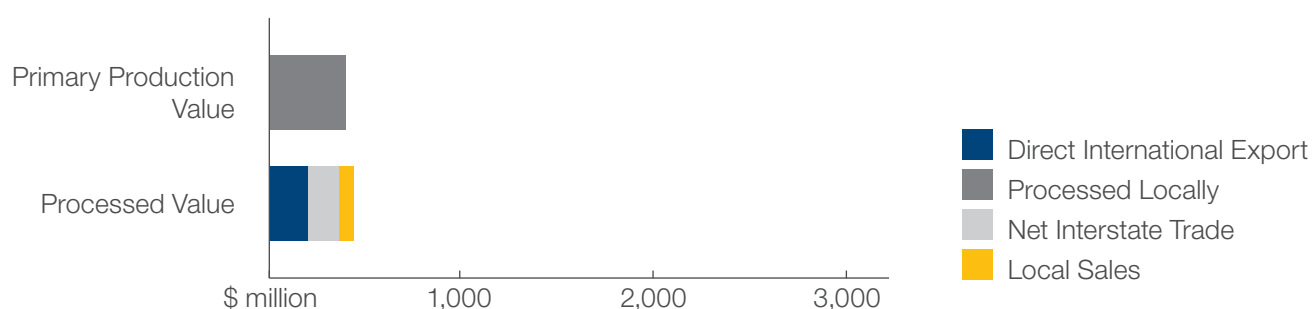
Seafood

The seafood sector includes fisheries and aquaculture production such as Southern Rock Lobster, Southern Bluefin Tuna, oysters, prawns and abalone. In 2020-21, COVID-19 continued to negatively impact on the demand for seafood. In addition, the sector also suffered from a ban on Australian lobster imports imposed by China. As a result of the reduced overseas demand, average farm gate price of Southern Rock Lobster fell by 36% from the previous year and subsequently resulted in reducing the production value of Southern Rock Lobster by 32% to \$83 million in 2020-21, despite a 7%

increase in the production volume during the same period. Production value of wild caught abalone and sardines also declined because of decline in both volume and prices. However, production of Western King prawns increased by 51% to \$39 million from an increase in price (up 45%) and volume (up 4%) which offset some of the losses in total seafood production value.

Seafood exports from South Australia in 2020-21 fell by 13% to \$216 million compared with the previous year. As a result of reduced overseas demand for lobsters, direct exports

of Southern Rock Lobsters from South Australia declined by 37% to \$40 million. Exports of Southern Bluefin Tuna were also down by 15% to reach \$115 million, despite a 14% increase in the quantity exported. Soft demand in Japan, the State's biggest market, as a result of the pandemic has led to 25% decline in the average export price. This decline in exports of Southern Rock Lobster and Southern Bluefin tuna was mainly accountable for the decline in overall seafood exports.



Seafood	Total (\$ million)	2019-20	Previous 5 yr average	5-Year Trend
Primary Production Value	405	↓ -10.4%	↓ -12.1%	
Processed Value	451	↓ -9.1%	↓ -13%	

Figure 13. Seafood primary production and processed values (\$ million), 2020-21

**All aquaculture data (excluding Southern Bluefin Tuna), is based on projections by industry and not actual data*



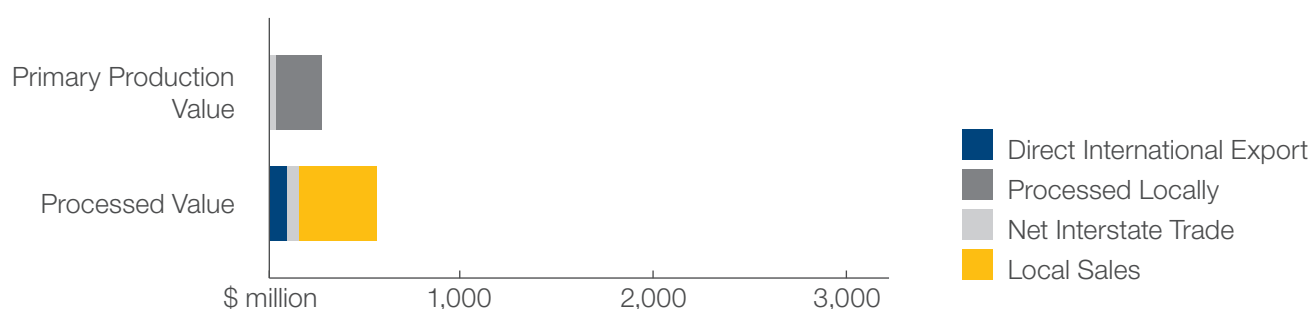
Dairy

In 2020-21, most dairy regions in Australia experienced favourable seasonal conditions which meant improved production of homegrown feed on farm and better access to feed inputs at prices lower than previous years. In South Australia, above average rainfall through spring resulted in extended pasture growth and saw high silage and hay yields (Dairy Australia, 2021).

The value of milk produced in South Australia increased by only 0.4% to \$263 million despite a 2% increase in the volume of milk produced in 2020-21, reflecting 2% decline in the farm gate milk price. However, production

value remains well above the previous five-average (up 17%) which reflects improvement in milk prices paid to producers which was up by 18% when compared to the previous five-year average.

Dairy processing value increased by almost 4% mainly as a result of increases in production of milk powder which is also reflected in the increase in milk powder exports in 2020-21 (up 45% by volume to almost 18,000 tonnes, and up 39% in value to reach \$73 million). This led to an increase in the total dairy exports by 37% to reach \$99 million.



Dairy	Total (\$ million)	2019-20	Previous 5 yr average	5-Year Trend
Primary Production Value	263	↑ 0.4%	↑ 17%	
Processed Value	547	↑ 3.8%	↑ 18.9%	

Figure 14. Dairy primary production and processed values (\$ million), 2020-21



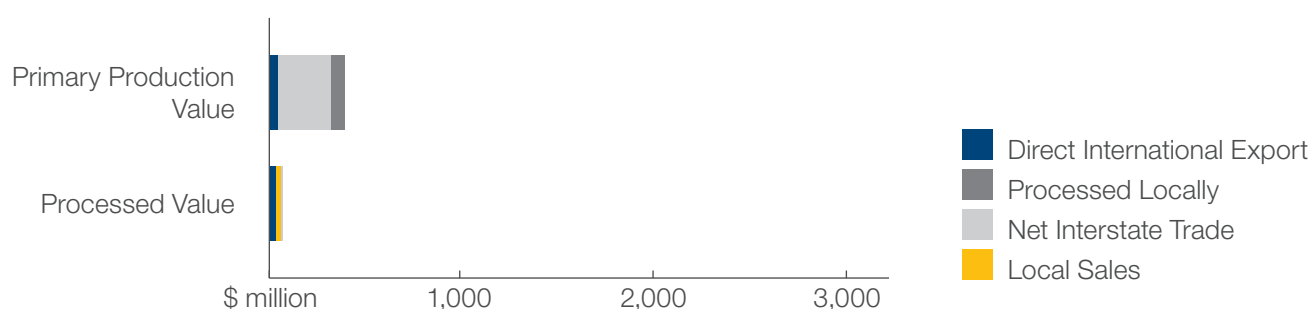
Wool

The wool industry was severely impacted by the COVID-19 pandemic as global demand softened. Reduced global consumer spending on apparels meant lower demand for natural fibres including wool which culminated in significant decline of wool prices from the high levels of 2018-19. Prices have since improved; however, the 2020-21 average auction price of \$11.57 per kilogram was still 19% lower than 2019-20 and 40% lower than 2018-19. Despite a slight increase in wool production (up 3.2% to 51.6 million kilograms), the lower average price resulted in a 24%

drop in production value to reach \$358 million. Similarly processing (carbonized or scoured wool) value was also down significantly due to reduced global demands.

Total direct exports of wool from South Australia fell by 22% to \$104 million. This decrease in exports value largely reflected low prices as volume of wool directly exported from South Australia remained similar to the already low levels of 2019-20. At the national level, volume of wool exports increased by 17% when compared with 2019-20 reflecting improvement in overseas

demand after the global downturn. However, exports in terms of value decreased by 3% reflecting a more than 17% fall in average export price meaning global demand has remained subdued.



Wool	Total (\$ million)	2019–20	Previous 5 yr average	5-Year Trend
Primary Production Value	358	↓ -23.6%	↓ -34.1%	
Processed Value	56	↓ -44.8%	↓ -53.6%	

Figure 15. Wool primary production and processed values (\$ million)

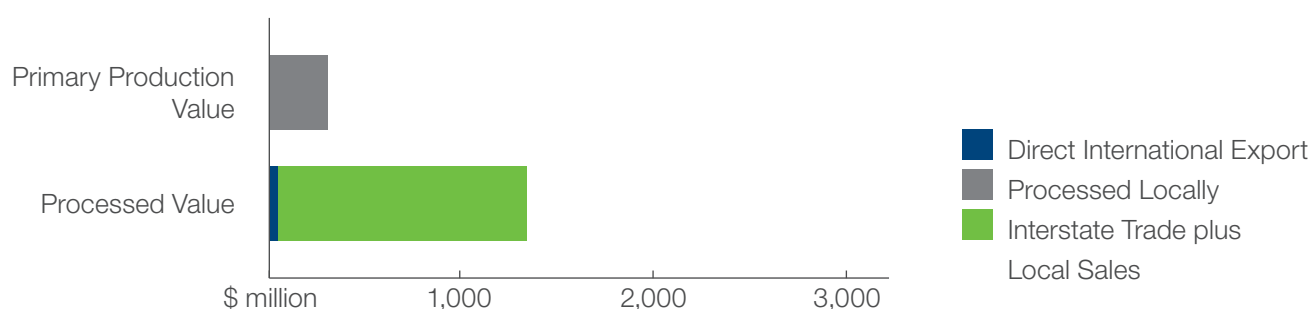


Forestry

Forestry production includes softwood and hardwood logs, with forestry processing including wood and paper products. Forestry production and processing data used in this report are from 2019-20, reflecting the latest data available from Australian Bureau of Agricultural and Resources Economics and Sciences (ABARES), and forestry exports data reported are from 2020-21 financial year and sourced from Australian Bureau of Statistics (ABS).

Forestry primary production value was almost 20% lower than the previous year due to decline in

volume of logs harvested (down 17%) and average price of logs (down 4%). This decline was largely attributable to China's suspension of imports of all timber logs from Australia in late 2020 amid escalating trade tensions (ABC, 2021b). Subsequently, total log export value from Australia declined by around 36%. Similarly, log exports from Portland (where most South Australia's timber logs from the south-east are exported) decreased by 38% in terms of value from the previous year. Processing value decreased by 16% mainly because of decline in sales of paper and paper products.



Forestry	Total (\$ million)	2018-19	Previous 5 yr average	5-Year Trend
Primary Production Value	298	↓ -19.8%	↓ -9.0%	
Processed Value	1,335	↓ -16.4%	↓ -27.5%	

Figure 16. Forestry primary production and processed values (\$ million), 2019-20







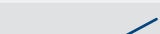

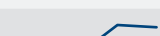
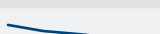
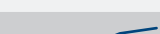
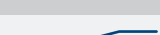

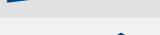


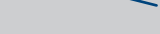

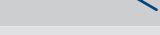

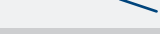




Primary Production Values

Total primary production value was up by 8.5% to \$8.47 billion in 2020-21 compared with 2019-20. Industries that experienced growth in production value were wine (up 48% to \$827 million in production value of winegrapes), field crops (up 21.5% to \$2.93 billion), horticulture (up 5.2% to \$1.27 billion), livestock (up 2.2% to \$2.12 billion), and dairy (up 0.4% to \$263 million). This increase in the total primary production value is largely due to favourable seasonal conditions that significantly increased the production of grains and winegrapes.

Primary production that saw a drop in value were wool (down 23.6% to \$358 million), seafood (down 10.4% to \$405 million) and forestry (down 19.8% to \$298 million). These drops were mainly as a result of the pandemic induced soft demands (as in wool and bluefin tuna) and trade tensions (Rock Lobsters and timber logs) that reduced prices.

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

	Value \$ million			5-Year Trend
	2020–21	Change from 2019–20	Change from previous 5-year average	
Field crops total	2,927	↑ 21.5%	↑ 28.7%	
Wheat	1,251	↑ 33.9%	↑ 30.9%	
Barley	510	↑ 7.6%	↑ 23.6%	
Other	1,165	↑ 16.4%	↑ 28.8%	
Livestock total	2,125	↑ 2.2%	↑ 11.3%	
Sheep	668	↓ -10.2%	↑ 2.7%	
Beef	777	↑ 20.1%	↑ 28.8%	
Chicken	337	↑ 3.8%	↑ 4.7%	
Pig	242	↓ -2.8%	↑ 15.3%	
Other	101	↓ -12.3%	↓ -18.7%	
Horticulture total	1,269	↑ 5.2%	↑ 23.2%	
Potatoes	208	↑ 2.6%	↑ 30.2%	
Citrus	128	↓ -0.6%	↑ 14.6%	
Almonds	150	↓ -31.6%	↑ 5.3%	
Other	783	↑ 19.5%	↑ 27.2%	
Wool	358	↓ -23.6%	↓ -33.3%	
Wine Grapes	827	↑ 48.5%	↑ 37.1%	
Seafood total	405	↓ -10.4%	↓ -12.1%	
Aquaculture*	213	↓ -6.9%	↑ 0.2%	
Wild Catch Fisheries	192	↓ -14.0%	↓ -22.6%	
Forestry**	298	↓ -19.8%	↓ -9.0%	
Dairy total	263	↑ 0.4%	↑ 17.0%	
Total primary production	8,471	↑ 8.5%	↑ 15.4%	

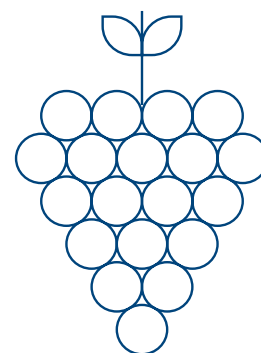
*All data (excluding Southern Bluefin tuna) is based on industry projections and not actual data

**Most recent data available for forestry production is the 2019-20 data from ABARES

Table 2 is a summary of the change in production values compared with 2019-20 and previous five-year average, and the trend in values over the five-years to 2020-21.

- **Field crops:** Seasonal conditions in 2020-21 in many parts of the State were more favourable than previous seasons. Grain production in 2020-21 season increased by 41% compared with 2019-20 season to reach 9.1 million tonnes and was 22% above the moving 5-year average production of 7.5 million tonnes. This significant increase in production volume drove the total value of production in 2020-21 to increase by 21.5% compared with the previous season to reach \$2.9 billion despite falls in average price across most grains. Production values of wheat (up 34% to \$1.3 billion), barley (up 8% to \$510 million), canola (up 43% to \$275 million) and lentils (up 39% to \$215 million) were up significantly and were key in driving the total field crops industry production value up by 21.5%.
- **Livestock:** Total livestock production value in 2020-21 was recorded at \$2.1 billion, an increase of slightly more than 2% compared with the previous year, and about 11% more than the previous five-year average. This growth in production value was largely driven by growth in beef production value (up 20% to \$777 million), despite a tightening supply of beef cattle in 2020-21. Some of the gains were offset by lower production value of sheep meats (down 10% to \$668 million) that resulted from decline in lamb and sheep flock and reduced average price of lamb. Chicken meat production value increased as a greater number of birds were processed, but pig meat value was down mainly because of a 9% decline in average pig prices.
- **Dairy:** Farm gate value of dairy production increased by only 0.4% in 2020-21 to \$263 million. Total milk production volume increased by 2% but farm gate milk price fell by 2% thereby offsetting much of the gains. However, production value remains well above the previous five-average (up 17%) mainly as a result of improved farm gate milk prices, which were up by 18% when compared to the previous five-year average farm gate milk price.
- **Horticulture:** The value of primary horticultural production was almost \$1.3 billion, an increase by 5% on the previous year. Sectors that recorded gains were potatoes (up 3% to \$208 million), tomatoes (up 21% to \$178 million), and cucumbers and capsicums (up 13% to \$175 million). Smaller sectors that also recorded growth include apples and pears (up 17% to \$35 million), cherries (up 34% to \$27 million), mushrooms (up 111% to \$105 million) and heavy vegetables (up 20% to \$68 million). However almond production value was down by 32% that offset gains in other sectors and eventually drove the total horticulture production value to grow only by a small margin in 2020-21.
- **Seafood:** Overall seafood production value declined by around 10% to \$405 million in 2020-21, mainly resulting from a decrease in production value of Southern Rock Lobster (down 32% to \$83 million) after reduced overseas demand led to a 36% fall in the average price. Similarly, reduced overseas demand also pushed the price of Southern Bluefin tuna down by 25% and therefore reducing the farm gate production value. Production values of wild caught abalone and sardines catch fisheries also fell. However, production of Western King prawns increased by 51% to \$39 million as a result of increase in price (up 45%) as well as volume (up 4%) which offset some of the losses in production value.
- **Wool:** The value of wool production decreased by 24% to \$358 million mostly because of decrease in the average wool price. Although the volume of wool produced improved (up 3.2%) in 2020-21, the average price was lower by around 19% when compared with 2019-20, and 40% lower than in 2018-19 when wool prices were at historically high levels. This reflects the flat global demand which was also reflected in the total Australian wool export volumes for 2020-21 which, although improved since 2019-20, still remained 6% below the previous five-year average volume of wool exported. Much of the subdued demand for wool can be attributable to the pandemic.
- **Wine Grapes:** Wine grape production value was up 48.5% to \$827 million in 2020-21 due to a record crush of 651,195 tonnes, up by 45% when compared with 2019-20 and 28% above the previous ten-year average (Wine Australia, 2021). In terms of average price, there was no significant movements, so the increased value reflects mostly increased crush. Favourable seasonal conditions largely contributed to the increase in winegrape production.
- **Forestry:** Forestry production value decreased by almost 20% in 2019-20 compared with 2018-19, reflecting decrease in both the total volume of logs harvested (down 17%) and the average price (down 4%) of logs. Volume of hardwood harvested decreased by 30% whilst the volume of softwood harvested declined by 11%.

Food and Wine Supply Chain



Key highlights for 2020-21 include:

- Gross food and wine revenue increased by 6% (up \$1.3 billion) to reach \$21.9 billion (Table 3). This increase is mainly attributable to increased overseas exports of grains that resulted from increased grain production following good seasonal conditions.
- Gross food revenue increased by around 7.4% (up \$1.3 billion) to \$19.3 billion (Table 4). Food revenue increases were mainly driven by increase in food commodity (grains) exports.
- Value of food commodity overseas exports (Table 3 and Table 4) increased by 35% (up by \$494 million), whereas finished food exports decreased by 10% (down by \$181 million).
- Gross wine industry value decreased by around 1% to reach \$2.6 billion (Table 5), mainly because of decrease in overseas exports of wine (down 12% or \$222 million).
- Retail sales and food service sales of food were up by 4% and 12%, respectively, compared with 2019-20. Because 2020-21 was not marked with extended lockdowns, foodservice sales were back to 2018-19 levels.
- Retail sales of wine only slightly increased whereas foodservice sales were up as businesses like restaurants, cellar doors and bars were subjected to fewer restrictions compared with 2019-20.
- Gross food and wine revenue increased by 6% which was well above the long-term average annual growth rate of 3% recorded since 2001-02 (Figure 17).




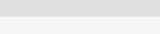
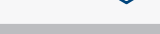
Table 3. South Australia's food and wine revenue (\$ million) summary, 2020-21

Indicator	2020-21 (\$m)	Change from 2019-20 (\$m)	5 Year Trend
Finished food and wine exports	3,281	↓ -403	
Food commodity exports	1,916	↑ 494	
Net Interstate processed food & wine sales	2,475	↑ 258	
Net Interstate food commodity sales	1,178	↑ 239	
Retail trade sales	9,974	↑ 346	
Food service sales	3,053	↑ 369	
Gross food and wine revenue	21,877	↑ 1303	

Table 4. South Australia's food revenue (\$ million) summary, 2020-21

Indicator	2020-21 (\$m)	Change from 2019-20 (\$m)	5 Year Trend
Finished food exports	1,635	↓ -181	
Food commodity exports	1,916	↑ 494	
Net Interstate processed food sales	2,355	↑ 149	
Net Interstate food commodity sales	1,178	↑ 239	
Retail trade sales	9,527	↑ 345	
Food service sales	2,690	↑ 278	
Gross Food Revenue	19,302	↑ 1325	

Table 5. South Australia's wine revenue (\$ million) summary, 2020-21

Indicator	2020-21 (\$m)	Change from 2019-20 (\$m)	5 Year Trend
International exports	1,646	↓ -222	
Net Interstate Trade	119	↑ 109	
Retail trade sales	447	↑ 0	
Food service sales	363	↑ 91	
Gross Wine Revenue	2,576	↓ -22	

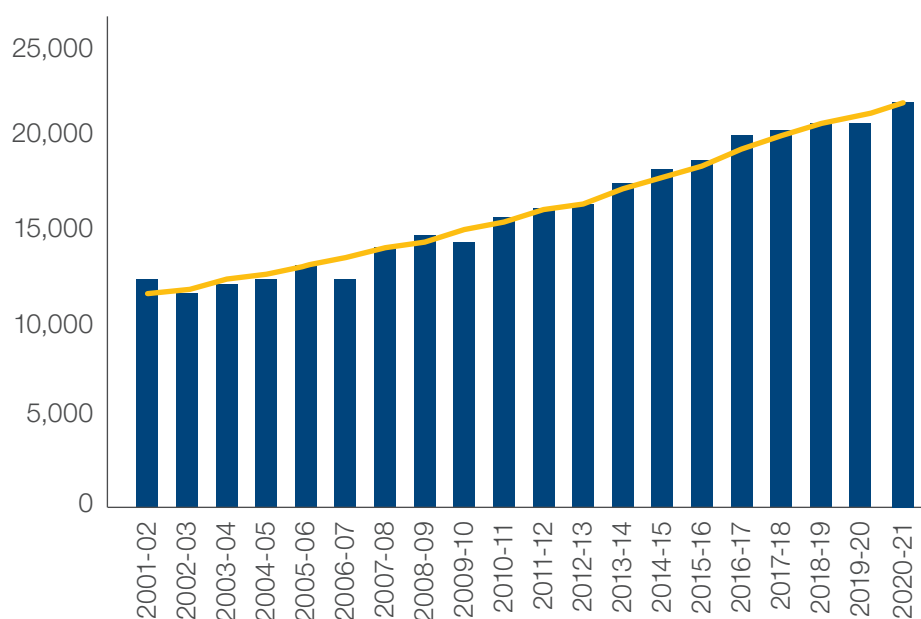


Figure 17. South Australian Gross Food and Wine Revenue (\$ million), 2001-02 to 2020-21

Glossary of Terms

Primary production value

This measures the value of a commodity at the local level of production (alternatively known as farm gate 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 Lobsters 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

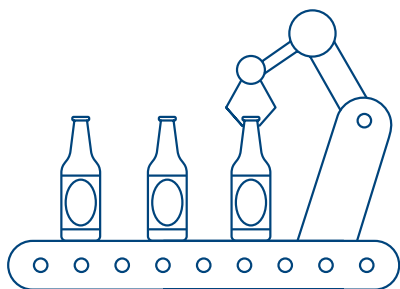
A measure of sales at wholesale value within the State. It includes the wholesale value of processed products minus the values of international exports and net interstate trade.

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.



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.

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 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

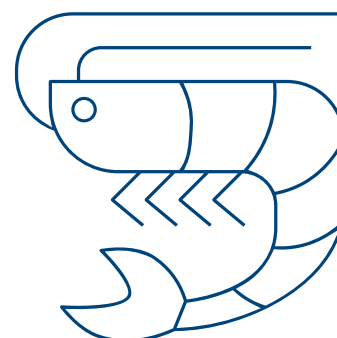
Wool scorecard, although not reported in the PIRSA score cards before 2017–18, historically had not included the value of processing in the State. The scorecard method has been updated in 2019 to better capture the value of wool processed within the State and was applied retrospectively to all years 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.

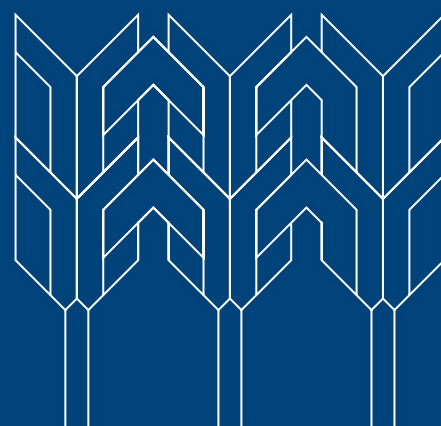
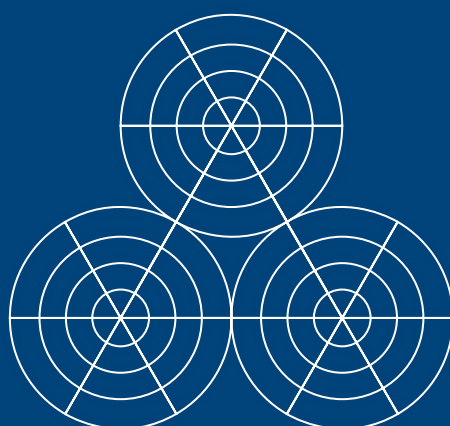
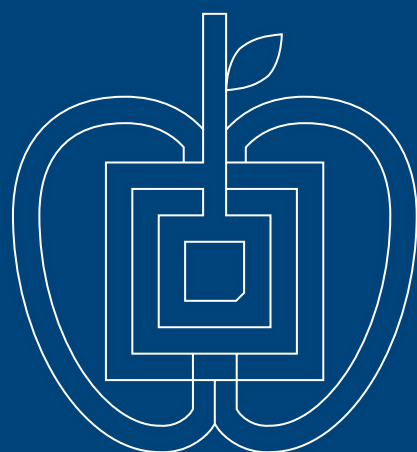
Seafood

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.



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