Agricultural forecasts and outlook
June quarter 2021

Agricultural Commodities Report, Vol 11.2
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Value of production in 2020–21

Record production for 2020–21 confirmed
The gross value of agricultural production is expected to reach a record of over $66 billion in 2020–21. This is an upward revision of $400 million from the March edition of Agricultural commodities, driven by livestock prices remaining at high levels, and is an 8% increase from the drought-affected 2019–20 level. Faster than expected grain exports following a near-record winter crop have also seen an upward revision in agricultural exports of $400 million. Exports are still forecast to fall by 3% to just under $47 billion in 2020–21. This is mostly due to falling livestock export volumes as a result of herd and flock rebuilding reducing meat production to historically low levels. World beef and lamb prices have also fallen slightly from the peaks of 2019–20.

Value of production down and exports up in 2021–22
In 2021–22 the gross value of agricultural production is forecast to fall to $65 billion. This is an upward revision of $1.7 billion from the March edition of Agricultural commodities, driven by upward revisions to crop and livestock production. Seasonal conditions in the autumn of 2021 have remained favourable, supporting crop prospects and pasture production. Prices are generally forecast to fall, although livestock prices will remain at historically high levels. Despite rising input costs, total sector wide farm net cash income is forecast to remain historically high in 2021–22 at $21 billion (down from $23.8 billion in 2020–21).

Gross value of agricultural production and exports, 2010–11 to 2021–22

Australia’s agricultural exports are forecast to grow by 6% to $49.7 billion, driven by increases in beef, wool and dairy exports, as well as a sharp recovery in cotton exports. The recovery of Australia's agricultural sector from the lingering effects of drought will see the first year-on-year increase in exports since 2017–18.

Mouse plagues damage grain and hay stocks
Areas of New South Wales and Southern Queensland are currently experiencing a mouse plague. There has been localised damage to summer crops and initial winter planting. However, the impacts have varied paddock-by-paddock with reports that the most significant
Agricultural overview

The impact of the mouse plague has been the contamination of grain and hay stored on farms in New South Wales. Contamination of summer crops such as grain sorghum harvested during the plague has reduced returns to some farmers due to quality downgrades and extra costs involved in cleaning grain. Farm management has so far minimised damage to winter crop plantings in affected regions, although some risk remains if warmer weather in spring results in a resurgence of mice.

Risks mostly on the upside

Global demand for Australia’s agricultural commodities continues to be strong and the market outlook is mostly positive.

Initial disruptions to exports and food demand during the onset of the COVID-19 pandemic, such as the shift away from food service-based consumption, were managed and resulted in relatively minor impacts on the sector. The largest impacts on commodity prices during 2020–21 were unrelated to the pandemic and occurred as a result of reduced market access to China and the continuation of the effects of African swine fever on Chinese pork production. Exceptions included a fall in demand for textiles and travel which reduced demand for wool, cotton and vegetable oils. As the global economic outlook continues to improve, markets for wool, cotton and vegetable oils are forecast to continue recovering.

Labour supply continues to be a vulnerability for the sector as the COVID-19 pandemic extends through 2021. Initial effects from social distancing requirements and lockdowns were seen in labour-intensive industries such as shearing, meat processing and fruit picking. Later, additional vulnerabilities emerged as measures to contain the spread of COVID-19 interrupted the flow of labour across state and international borders. Many of the more significant potential consequences, including sharp increases in fruit and vegetable prices, have been avoided because favourable seasonal conditions increased production and changes to farm management made more efficient use of labour.

The pace of recovery from African swine fever in China and other pork-exporting countries continues to create uncertainty for global meat markets. The balance of evidence suggests that recovery in China’s pig herd is well underway. The rate of recovery has been subject to recurring outbreaks and complicated by an accelerated transition from small-scale to industrial pig production in China.

Australia’s agricultural industries have responded to disruptions of exports to China by diversifying markets. No additional change to China’s tariffs on Australian barley and wine are expected during 2021–22, and supply chains are expected to continue to adapt to alternative markets. This transition has been faster and lower cost for barley exports than for wine, because wine takes time and investment to tailor to the tastes of new consumers.

Australia’s highly variable climate also presents risks to production in 2021–22. The livestock sector is currently in a rebuilding phase and record prices have been paid for animals to rebuild herds and flocks. If a rapid deterioration in seasonal conditions were to eventuate, the contribution of livestock to the 2021–22 gross value forecast would most likely fall. The same risk applies to forecasts of above average crop production, especially in regions with sandy soils including parts of Victoria, South Australia and most of Western Australia’s cropping regions. However, livestock numbers are recovering from historic lows, global demand for livestock products remains strong and prices are set to remain historically high.
### Movements in selected crop and livestock prices, 2021–22

<table>
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<tr>
<th>COMMODITY</th>
<th>2012–13 to 2021–22</th>
<th>CROP PRICES</th>
<th>LIVESTOCK PRICES</th>
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<tr>
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<td>↑14% to $161 S/head in 2021–22</td>
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Notes: The data is sourced from various Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) reports and various other sources. Prices are in Australian dollars unless stated otherwise. Prices are weighted average Australian export or producer prices. Prices are derived from weighted average seasonal and non-seasonal price indices. Prices are seasonally adjusted where appropriate.
Economic overview

Matthew Howden

- Global economic growth assumptions have been revised upwards for 2021 and 2022.
- Revisions have been driven by better-than-expected progress in containing COVID-19, allowing some economies to reopen sooner.
- The Australian dollar is assumed to appreciate to US78 cents in 2021–22, driven by high prices for bulk commodities.

Growth outlook continues to improve

The outlook for the global economy has improved since the March edition of Agricultural commodities, improving the demand prospects for Australia’s agricultural exports. Global growth has been revised upwards by 0.7% in 2021 and 0.3% in 2022. In 2021 global economic growth is expected to recover strongly to be 6%, following a contraction of 3.3% in 2020. In 2022 growth is forecast to remain strong at 4.4%. The key downside risk remains the spread of the COVID-19 virus. Severe outbreaks, such as the one currently underway in India, are likely to slow but not reverse global economic recovery.

The outlook for growth has improved in most countries, with some notable exceptions such as India. Successful containment measures and progress in vaccine rollouts are assumed to support growth in advanced economies. Very large fiscal stimulus packages, such as those announced by the United States, are also assumed to accelerate economic recovery. Stronger growth in advanced economies will strengthen demand for exports from emerging and developing economies, stimulating growth in export-oriented economies.

The reopening of economies over 2021 and 2022 is assumed to support demand for Australia’s agricultural exports. A resumption of activity in the food services sector will support demand for Australian beef, lamb, seafood and wine. Demand for apparel will also increase due to more people returning to their workplaces following the removal of social distancing and other health measures.

Recovery will be uneven

Despite improvements to the outlook since March, the recovery is still predicted to be uneven across economic regions and sectors. Access to vaccines and capacity to provide fiscal support varies across economies. Vaccination programs are underway in most advanced economies, but other economies have limited access to vaccines. Emerging and developing economies driven by manufacturing and exports, such as China and Vietnam, are recovering faster than those reliant on services, such as Thailand. Economic activity in emerging and developing economies reliant on travel is likely to remain subdued until widespread vaccination allows travel to recommence.

Incomes in most of Australia’s agricultural export markets are estimated to recover to above pre-COVID-19 levels over the short term to 2022, but they will remain lower than pre-pandemic projections. Lower incomes have so far not resulted in marked reductions in demand for most of Australia’s agricultural exports.
Economic overview

Income per person, major trading partners, 2019 to 2022

Commodity prices rising as growth prospects improve

Commodity prices increased strongly during the second half of 2020 and into 2021. Prices for bulk commodities – including iron ore – increased, reflecting higher demand as economies exited lockdowns. China’s elevated demand for iron ore and reduced supply from Brazil has driven prices to record highs.

Lifting of lockdown measures and increases in travel have contributed to increased aggregate demand, driving energy prices higher during the second half of 2020 and into 2021. Oil supply has also been reduced by agreements between the Organisation of Petroleum Exporting Countries. Energy prices are assumed to remain around current levels for the remainder of 2021 and into 2022.

Agricultural commodity prices have also increased, mainly reflecting unfavourable seasonal conditions in the northern hemisphere and recovering demand for livestock feed in China.

Significant risks to economic outlook remain

There are upside and downside risks to the global economic outlook. On the upside, fiscal stimulus packages, such as those announced by the United States, may cause growth to accelerate faster than assumed. The sheer size of these stimulus packages is enough to drive stronger global growth. Further improvements to the prospects for economic growth could trigger increased optimism in markets, leading to increased consumption. Economic growth could also be supported by an acceleration in household consumption resulting from households drawing down on precautionary savings accumulated during the lockdown phase of the pandemic.

Ongoing and renewed COVID-19 containment measures are a major downside risk. Favourable growth prospects among major export markets, such as in emerging Asia, are tempered by the risk of recurring COVID-19 outbreaks. Progress has been made in vaccine rollouts in some countries, but concerns regarding the safety of vaccines have slowed efforts elsewhere. Recent outbreaks in India, and to a lesser extent Indonesia, the Philippines and Thailand, pose significant risks to recovery in South-East Asia.

As a major vaccine manufacturer, India intended to distribute some of its supply globally as part of the COVAX program. However, the crisis in India means vaccines are likely to be redirected away from other emerging and developing countries for use in India, delaying vaccine...
rollouts in other economies. These other countries currently have limited vaccine access so outbreaks will delay their economic recovery, reducing demand for some of Australia’s agricultural products.

**Australian economy to expand in 2021–22**

In 2020–21 the Australian economy is assumed to have grown by 1.3% after contracting by 0.2% in 2019–20. In 2021–22 the economy is assumed to recover strongly to grow by 4.3%.

Australia’s economic recovery in 2021–22 is assumed to be driven by increased household consumption as COVID-19 containment measures continue to be removed and business and consumer confidence grows. During 2020–21 households increased precautionary saving in response to uncertainty surrounding COVID-19 lockdowns. This created a significant pool of savings that will be partially drawn on to fund higher consumption as confidence returns. Growth will also be driven by increased public and private investment.

**Australian exchange rate to appreciate in 2021–22**

The value of the Australian dollar is assumed to appreciate in 2021–22 to average US78 cents over the year. This is an upward revision of US3 cents on the exchange rate assumption from the March edition of *Agricultural commodities*. This has primarily been driven by sustained higher iron ore prices than previously assumed.

The appreciation of the Australian dollar has coincided with a weakening of the US dollar relative to other currencies. The US trade weighted index has fallen in line with declining global uncertainty. This has encouraged investors to move away from safe-haven investments in the United States and seek out higher returns elsewhere, including in Australia. The additional impetus from iron ore prices means that the Australian dollar has appreciated relative to the currencies of key trading partners, reducing the competitiveness of Australia’s exports in these markets.

**Determinants of Australian dollar and US dollar, January 2019 to April 2021**


Sources: ABARES; Economic Policy Index; Reserve Bank of Australia; St Louis Federal Reserve

Risks to the outlook for the exchange rate are tilted to the upside and contingent on the trajectory of iron ore prices. It is currently assumed that iron ore prices will fall over 2021–22 but will remain higher than previously expected. Prices will gradually fall as supply is restored following weather-related disruptions in Brazil and as Chinese demand moderates. Continued high prices for iron ore from either sustained high demand from China or further disruptions to Brazilian supply are likely to result in the Australian dollar appreciating further. A higher exchange rate would further reduce the competitiveness of Australian agricultural exports in international markets.
Seasonal climate conditions

Matthew Miller

- Global crop and pasture production conditions continue to be generally favourable for agriculture despite mixed climatic conditions in some countries.
- Global climate outlooks indicate that average to above average rainfall is likely between June and August 2021 for most of the world’s major grain- and oilseed-producing regions.
- The El Niño–Southern Oscillation (ENSO) was neutral during April and the influence of the recent La Niña event on Australia’s climate has diminished. However, parts of South America and the United States continue to experience dryness as a lingering impact of La Niña.
- In Australia, autumn climatic conditions have benefited the production prospects of dryland crops in 2021–22 across much of western and eastern Australia. However, a drier than normal autumn was experienced across much of southern New South Wales, Victoria and South Australia.

Global production conditions have been favourable despite some dryness

Global production conditions and rainfall over the 3 months to 30 April 2021 have been in line with those expected back in February, with no major departures in terms of their influence on global grain supplies and world prices.

In the southern hemisphere, rainfall over the 3 months to 30 April 2021 affected development and yield prospects of summer crops, and the soil moisture available for winter crops. February to April 2021 rainfall was generally below average across much of Brazil and parts of southern Australia. Persistent dryness has limited the yield potential of second-crop corn in southern Brazil, but conditions were favourable in production areas further north. In Argentina, an uneven distribution of rainfall throughout the growing season has limited the yield potential of corn and soybeans in key eastern growing regions.

In Australia, average to above average rainfall during March in eastern cropping regions and during April in the west resulted in a boost to soil moisture levels. This allowed for timely planting of wheat, barley and canola. However, a drier than normal March and April across parts of southern Australia saw many crops sown dry in Victoria and South Australia.

In the northern hemisphere, February to April 2021 rainfall affected the development and yield prospects of winter crops, especially wheat. It also influenced farmers’ planting intentions and soil moisture available for spring wheat and canola crops, as well as summer crops such as corn, cotton, rice, sunflowers and grain sorghum.

Rainfall over the 3 months to 30 April 2021 was generally below average for parts of the European Union and Turkey, and in parts of the south-western and northern United States. In contrast, rainfall was above average across parts of the central United States, the western Russian Federation, India and East Asia. Dryness and below normal temperatures during April delayed the planting of summer crops in
key growing areas surrounding the Black Sea, and across the European Union and the United Kingdom.

For commodity-by-commodity assessments of global crop production conditions, see ABARES Weekly Australian climate, water and agricultural update for 20 May 2021.

World precipitation anomalies, April to May 2021

Notes: World 3-month seasonal precipitation anomalies are in units of mm/season, based on precipitation estimates from the NOAA Climate Prediction Center’s Climate Anomaly Monitoring System Outgoing Precipitation Index dataset. Precipitation estimates for April to May 2021 are compared with rainfall recorded for that period during the 1979 to 2000 base period.
Source: International Research Institute for Climate and Society

Crop conditions, Agricultural Market Information System countries, 28 April 2021

Notes: Average refers to the average conditions over the past 5 years. Exceptional conditions are much better than average at the time of reporting. Favourable conditions range from slightly lower to slightly better than average at reporting time. Poor crop conditions are well below average. Crop yields are likely to be more than 5% below average.
Source: Agricultural Market Information System

Global climate outlook mixed for the remainder of 2020–21
The global climate outlook indicates that average to above average rainfall is more likely between June and August 2021 for most of the
world’s major grain-producing and oilseed-producing regions. If realised, this is likely to benefit spring wheat and canola, cotton, rice, corn, grain sorghum, soybeans, sunflower and millet production in the northern hemisphere, and winter wheat and canola production in most southern hemisphere growing regions.

However, below average rainfall is more likely across most of Argentina and southern Brazil. This may adversely affect the planting and development of wheat crops. Below average rainfall between June and August 2021 is also more likely for parts of south-western and eastern Europe, parts of south-western Canada and parts of the north-west United States. This may adversely affect the development of winter and spring wheat, canola, corn, cotton, soybeans, sorghum and sunflower.

For country-by-country assessments of the climate outlook and potential impact on production conditions, see ABARES Weekly Australian climate, water and agricultural update for 20 May 2021.

**Early autumn break delivers timely rainfall across much of eastern Australia**

In southern Australia, the timing of the autumn break is important for a successful pasture and crop production season. The autumn break is the first significant rainfall of the winter growing season and provides enough moisture to initiate crop and pasture germination and support early plant growth. The break generally applies to southern pasture and cropping areas mainly in New South Wales, Victoria, South Australia, Western Australia and Tasmania, as well as southern Queensland.

ABARES analysis of daily rainfall data sourced from the Bureau of Meteorology indicates that an early autumn break (during March 2021) had been achieved across much of New South Wales, Western Australia and parts of southern Queensland, central Victoria and Tasmania. Notably, an early autumn break was not achieved across cropping regions in South Australia and much of western Victoria.

Rainfall during April 2021 was below average for much of Australia. April rainfall was severely deficient to below average for most of the cropping regions in central and southern New South Wales, Victoria and South Australia. Rainfall was above average to extremely high for parts of the cropping regions in Western Australia and generally average across remaining cropping regions in New South Wales, Queensland and Western Australia.

The early autumn break recorded for large areas of New South Wales and Victoria during March was not consolidated during April. This dry period following the early autumn break increased the risk of plants experiencing moisture stress after germination, rendering them unable to grow roots down into lower moisture in lower soil layers. Much of southern Australia will rely on significant May rainfall to support winter crop establishment and pasture development.

**More stored irrigation water boosts crop prospects**

The seasonal drawdown from reservoir storages in the Murray–Darling Basin ceased during March 2021 and the seasonal recharge of storages has commenced. A major rain event in the second half of March 2021 affected large areas of the northern Basin. Extensive heavy rainfall and localised flooding provided a significant boost to soil moisture and on farm water storage levels. At 19 May 2021 the
total volume of water held in storage across the Basin was around 14,300 GL, or around 57% of total capacity. This was 4,600 GL or 48% more than at the same time last year. Increased on-farm dam and reservoir storages offer favourable irrigated planting prospects in New South Wales and southern Queensland (see Outlook for crops). See ABARES Water Market Outlook for a summary of water market conditions and forecasts of allocation prices in the southern Murray-Darling Basin.

Rainfall, wheat–sheep zone, 1 January 2020 to 30 April 2021

Average or better rainfall likely across much of Australia

According to the Bureau of Meteorology’s climate outlook for June to August 2021 (published on 27 May 2021), there is a greater than 60% chance of above average rainfall across much of New South Wales, Victoria, Queensland, South Australia, Tasmania and the Northern Territory, as well as parts of northern Western Australia. There is a less than 40% chance of exceeding median rainfall across parts of south-west Western Australia, although on sandier soils the timing of rainfall, rather than the total amount received, is often more important for yield prospects.

A combination of expected rainfall and stored soil moisture is likely to be sufficient to support above average crop and pasture production across most of Australia’s cropping regions. There is a 75% chance of receiving between 50 and 200 mm between June and August in New South Wales, southern Queensland, Victoria, South Australia and Western Australia. Rainfall of less than 50 mm during June and August is expected in some northern Queensland cropping regions.

Some cropping regions in parts of western Victoria and South Australia have not yet recorded an autumn break. Forecasts indicate a 50% chance of these regions receiving between 25 and 50 mm of rainfall in June 2021, which should provide sufficient moisture to germinate dry-sown crop and facilitate the finalisation of winter crop planting programs.
Rainfall with a 75% chance of occurring, Australia, June to August 2021

Source: Bureau of Meteorology
Outlook for crops

Amelia Brown, Mikayla Bruce, Peter Collins and Emily Dahl

Near-record value of crop production for 2020–21

The gross value of crop production is estimated to have reached a near-record $35.5 billion in 2020–21, boosted by Australia’s second-biggest winter crop on record and relatively high world grain and oilseed prices. Grains, oilseeds and pulses accounted for 50% of the value of crop production and horticulture for 34%. The gross value of wheat production is estimated at a record $9.7 billion, reflecting record production combined with relatively high prices. Barley and canola also recorded significant increases in value year-on-year.

Gross value of crop production, 2000–01 to 2021–22

The total value of crop exports is forecast to increase by 17% in 2020–21 to $25 billion. Grain, oilseed and pulse exports have all rebounded significantly since the drought in 2019–20. The value of wheat exports is predicted to increase by 60% to $6.2 billion, the value of barley exports by 63% to $2.4 billion and the value of oilseeds exports by 54% to $1.8 billion.

Value of crop exports, 2000–01 to 2021–22

Grain prices surged late in 2020–21

Surging Chinese import demand for grains and oilseeds in the second half of 2020–21, combined with global production concerns, resulted in sharp increases in crop prices. Indicator prices for wheat, barley and canola have been revised up since the March forecast. Corn spot prices moved above both barley and wheat prices in late April, which is unusual given barley and wheat generally have greater value for feed, milling and industrial uses.

Sources: ABARES; Australian Bureau of Statistics
In 2021–22 the gross value of crop production is forecast to fall to around $33 billion from the record high in 2020–21. Cropping regions will benefit from residual soil moisture and replenished water storages, but production – while forecast to be above average – is unlikely to match that of 2020–21. Prices for all grains are forecast to fall. A large rebound in cotton production, combined with an increase in cotton prices, will provide a partial offset. For detailed state-level crop production forecasts for broadacre crops, see the Australian crop report.

In 2021–22 the value of horticultural production is forecast to fall slightly, driven by small price falls. Seasonal conditions are expected to be favourable and irrigation water prices are forecast to be lower in 2021–22 in the southern Murray–Darling Basin. Challenges in securing harvest labour have not resulted in significant price increases at the sector level in 2020–21, and while labour shortages are expected to persist, a similar impact on prices is assumed for 2021–22.

The value of Australia's crop exports is forecast to increase slightly in 2021–22 to $25.6 billion. A significant increase in cotton export earnings (up $1.5 billion) will be almost entirely offset by lower cereal, pulse and wine exports. Lower grain exports are due to production falling from record levels, while lower wine exports are largely attributable to the fall in prices following China's imposition of prohibitive tariffs on Australian wine.

**Prices to fall for most grain exports**

Prices are forecast to fall for most of Australia's major export grains. The world wheat price is forecast to fall in 2021–22, which reflects increased supply and lower demand for feed wheat as corn supply is forecast to increase. Higher production for Argentina, the European Union, the United Kingdom, Morocco, Ukraine and the United States is expected to more than offset reductions for Australia and Canada. Production in the Russian Federation is forecast to be similar to last year's record, reflecting higher area planted. Corn and barley prices are expected to remain high but fall from current 2020–21 levels. The world price of corn is expected to decrease in 2021–22 and world coarse grain production is forecast to increase to a new record. However, relatively tight coarse grain supplies and strong demand are expected to continue to support prices at historically high levels.
Oilseed prices are forecast to remain historically high in 2021–22 due to strong global demand and tight inventories. The world canola price is forecast to increase as consumption outstrips production.

The European Union is a significant importer of Canadian canola. Australian canola attracted a premium over Canadian canola from July 2018 to December 2020. This premium was tied to the value of Australian canola as non-GM meal in Europe’s dairy industry. Low canola production in Australia, large crops in Canada and a trade dispute between Canada and China also contributed to the price premium.

As of December 2020, Australian canola was no longer trading at a premium over Canadian canola. Tighter supplies in Canada and strong demand are supporting a sharp increase in the Canadian canola price. The current higher price for Canadian canola could improve the likelihood of Australian canola regaining market share in the European Union.
Outlook for crops

The most significant agricultural impact of the mouse plague has been on grain and hay stored on farms in New South Wales. Increased on-farm storage because of the large winter crop harvest of 2020–21 and some congestion in the export supply chain means that stored grain may have been exposed to contamination, depending on the storage method.

The high mouse numbers in southern Queensland and northern New South Wales have caused some damage to maturing summer crops. The extent of this damage varies from paddock to paddock. Winter crop sowing in affected regions is progressing well and active management has enabled growers to maintain planting intentions. Damage to winter crop emergence does not appear to have been widespread to date, however risks of a population rebound exist if the onset of warmer weather occurs earlier than usual.

Cotton prices and production forecast higher

Improvements in the economic outlook for major economies for 2021–22 and a recovery in the price of synthetic substitutes will likely result in increased demand for cotton and wool. Greater disposable incomes, combined with the relaxing of COVID-19 containment measures in major economies, are expected to result in increased spending on textiles and apparel. The continued recovery in oil prices in 2021–22 will push up the price of oil-based synthetic fibres, making natural fibres a more attractive substitute. China's increased import demand will mainly be met by US cotton under phase 1 of the US–China trade deal but is expected to put upward pressure on global cotton prices throughout 2021.

Increased availability of irrigation water in Australian cotton growing regions has led to the price of water falling from the highs reached during the drought. Due to an increased supply of water and high international cotton prices, near-record plantings for irrigated cotton are expected, along with high yields in 2021–22.

The rainfall to support dryland plantings is less certain this far out from planting in September and October, but plantings are expected to rise slightly from 2020–21. If a negative Indian Ocean Dipole develops
over the coming months, a greater increase in dryland cotton plantings would be likely in 2021–22. The largest plantings and resulting production of cotton in Australia have historically occurred following coincidental La Niña and negative Indian Ocean Dipole events, boosting water availability. Australian cotton production for 2021–22 is forecast to be 946,000 tonnes.

**Labour shortages not leading to higher fruit and vegetable consumer prices**

Consumer prices for fruit and vegetables have not recorded large price increases, despite labour shortages due to border restrictions on seasonal workers. March Consumer Price Index data indicates that average fruit and vegetable prices over the first 3 quarters of 2020–21 have not changed dramatically from prices during 2019–20. Fruit prices fell 1.6% in the March quarter while vegetable prices rose 0.3%. Wholesale market prices for fruit and vegetables in Melbourne (see weekly wholesale prices) have not recorded price movements significantly different from seasonal patterns seen in past years.

Fruit and vegetable prices normally react quickly to supply-side shocks. In the March edition of *Agricultural commodities*, ABARES forecast selected fruit and vegetable prices could rise by between 7% and 29% in 2020–21, with the most pronounced rises expected for fruit. These price increases were expected to result from lower production, stemming from a reduced supply of overseas workers available to harvest fruit and vegetables.

### Australian consumer prices for fruit and vegetables, 8 capital city average, September 2014 to March 2021

These forecasts did not anticipate the success many horticultural businesses had in implementing adaptations to increase the volume of produce harvested per labourer. Examples of these changes include:

- longer hours per worker and longer durations of employment
- less downtime between employers
- changes to harvesting processes to increase speed, such as more fruit collection points in orchards
- delaying maintenance work to free up additional picking labour
- diverting staff from other parts of businesses to pick produce.

In addition, more favourable seasonal conditions increased yields. This meant pickers could pick fruit quickly for longer, before decreasing...
fruit density led to diminishing returns to additional hours of labour. At the margin, reductions in exports of fruit (down 7% in the 12 months to February 2020) and vegetables (down 6%) have also provided more volume for domestic consumption. However, export volumes are small relative to domestic consumption.

ABARES has revised estimates of impacts on horticultural markets. Fruit prices are now forecast to rise by around 4% in 2020–21 and fruit production is expected to fall by around 4% (a 17% fall was forecast in March). Vegetable prices and production are expected to remain relatively unchanged year-on-year.

**China market loss reduces grape prices and wine exports**

The loss of China as an export market continues to have a significant impact on the Australian wine industry. The average price of Australian wine grapes is forecast to fall from $704 per tonne in 2019–20 to $540 per tonne in 2020–21. Prices are expected to remain depressed in 2021–22 to average $556 per tonne.

After 2 years of drought-affected production, wine grape and wine production are estimated to have recovered to longer-term averages in 2020–21 at around 1.5 million tonnes of wine grapes and around 1.2 billion litres of wine. The recovery is a result of more favourable seasonal conditions. Negligible exports to China, resulting in lower prices, are forecast to keep wine grape and wine production in Australia at around these levels in 2021–22. This is 14% below the 1.4 billion litre peak of wine production reached in 2016–17.

The value of wine exports is forecast to fall to $2.6 billion in 2020–21, well below the peak of just under $3 billion in 2018–19. The Australian wine industry is expected to continue to export around 60% of production, but to lower value markets than China. The volume of wine exports is expected to be around 700 million litres in 2020–21 and remain around that level in 2021–22. This export volume forecast for 2020–21 is down from 744 million litres in 2019–20 and is well below the peak of 867 million litres in 2017–18. The value of wine exports is forecast to be around 10% lower in 2020–21 than it was in 2019–20 due to a fall in average export unit values.
Outlook for livestock

Jonathan Wong, Harry Coë, Damien Thomson and Cameron Van-Lane

Livestock production and export value remains high in 2020–21

Gross value of livestock production is forecast to have reached $30.8 billion in 2020–21, 6% lower than in 2019–20. This was the fifth highest value of livestock production in real terms since 2000–01. Low production volumes more than offset historically high prices. The value of mutton production is forecast to fall by 18% and the value of live sheep exports by 46%. The value of live cattle exports is forecast to fall by 24% and the value of wool production by 19%.

Gross value of livestock production, 2000–01 to 2021–22

Livestock sector exports are forecast at just under $22 billion in 2020–21, down 19% from the record of 2019–20 but still at historically high levels. Improved seasonal conditions following prolonged drought have led to flock and herd rebuilding and reduced the supply of livestock available for export. At the same time, a recovery of China’s pork production following outbreaks of African swine fever is easing import demand and world meat prices. Beef and veal are forecast to account for 37% of exports in 2020–21 and dairy products 17%. Wool and lamb are both forecast to contribute around 11%.

Value of livestock exports, 2000–01 to 2021–22

Production and exports to recover in 2021–22

In 2021–22 the value of livestock production is forecast to increase by 4% to $32.2 billion. This is driven by increases in cattle (up $640 million), wool (up $390 million), and dairy products (up $166 million). Wool prices are forecast to rise due to a recovering global economy. Wool prices are forecast to increase by 10% and
Outlook for livestock

production by 5% following increasing demand and an increase in both the number of sheep shorn and fleece weights due to improved seasonal conditions.

The value of livestock exports is forecast to increase by 11% to just over $24 billion in 2021–22. Beef and veal exports are forecast to increase by 14% to $9.2 billion, due to a 16% increase in export volumes. Beef export prices are not forecast to fall as much as saleyard prices, because they are far less affected by domestic restocking demand. The value of wool exports is forecast to increase by 21% to $3.1 billion, driven by both higher volumes and prices. Exports of most other livestock products – including dairy products – are forecast to increase slightly in 2021–22, but the value of live exports is expected to remain unchanged.

Livestock prices to remain historically high
Export prices for beef and lamb are forecast to remain historically high in 2021–22, continuing a gradual fall from peaks reached in 2019–20. The global outlook for livestock exports remains positive. For some time, the most significant risk to strong export demand has been a faster-than-predicted recovery in China’s pork production and a potential fall in import demand for lamb and beef. However, the recovery has been gradual and is occurring alongside continued rising meat demand in China and globally as incomes recover from the COVID-19 pandemic. Although the COVID-19 pandemic did not significantly reduce world demand for Australia’s livestock products, a general improvement in global incomes reduces demand uncertainty for 2021–22 and beyond. Trade tensions with China remains a risk to livestock product exports.

On the upside, global and Australian beef prices could spike in the last 2 months of 2020–21. Argentina has imposed a temporary ban on beef exports in an effort to reduce domestic prices, which could result in China and other importing nations seeking alternatives. Exports from Brazil are likely to remain low, even if an end to COVID-19 welfare supplements causes consumption in Brazil to fall. This is because the Brazilian beef herd has been reduced in response to high domestic and export prices. Exports from the United States are also unlikely to increase significantly in 2021–22. The US Department of Agriculture has forecast US beef production to increase slowly throughout 2021 and be slightly lower in 2022.

Global wool prices are forecast to rise as demand recovers in response to the global economic recovery. Dairy export prices are tracking steadily upwards, on trend with recovery in global economic growth.

Australian livestock export unit values, 2010–11 to 2021–22

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Saleyard prices revised up and risks balanced
Saleyard prices for 2021–22 have been revised up since the March 2021 edition of Agricultural commodities, although they are still expected to fall year-on-year. Saleyard prices for 2021–22 have been revised up by 5% for cattle to 570 cents/kg, and 4% for lamb and sheep to 766 cents/kg and 581 cents/kg, respectively.

The pace and duration of restocking is a key uncertainty in the outlook. The current pace of restocking is driven by expectations of future income from larger herds and flocks, which are based on expectations of continued favourable seasonal conditions and high prices. If seasonal conditions were to rapidly deteriorate, domestic saleyard prices would likely fall and the contribution of beef and lamb slaughter to 2021–22 gross value forecasts would fall.

Seasonal conditions for restocking were exceptional across most of Australia in the late summer and early autumn of 2021. This reflects above average rainfall in the northern wet season and across most of the wheat–sheep zone except parts of western Victoria and South Australia. The outlook for late autumn and early winter was even more favourable in Western Australia, but closer to average conditions are forecast to return to large areas of south-eastern Australia.

Historically low sheep and cattle numbers may reduce the risk associated with the possible return of unfavourable seasonal conditions. Low livestock numbers reduce the risk of placing pressure on pastures or incurring high feed costs if seasonal conditions turn less favourable. At an estimated 21.6 million in 2020–21, Australia’s beef cattle herd is the smallest since 1992–93, and Australia last had fewer than 66 million sheep in the early 1900s.
The pace of rebuilding is currently a major driver of high saleyard prices. Price rises have been highest in young and lighter cattle categories most attractive to restocking graziers (for example, trade steers), although prices for heavier cattle have also increased. Export unit prices have been lower or steady over the same period. This means that saleyard prices are likely to fall when herds and flocks are rebuilt and production recovers.

Restocking demand is expected to continue to weaken later in 2021–22. Strong global demand means that export prices are unlikely to fall sharply unless affected by factors such as trade disputes. The high saleyard prices that have been eroding export margins are likely to ease as a result of higher turn-off due to increasing livestock numbers and the normal variability of Australia’s climate.

Steer prices versus beef export unit value, July 2017 to March 2021

Source: ABARES; MLA

Global economic recovery increases demand for wool

Forecasts for global income growth means that the Eastern Market Indicator for wool prices is expected to increase by 10% to 1,300 cents per kilogram in 2021–22. Wool prices are sensitive to changes in economic growth because demand for wool is income sensitive.

A spike in wool auction pass-in rates and market uncertainty throughout 2020 has resulted in a build-up of Australian wool stocks. The size of these stocks is uncertain but they potentially add significant supply on top of forecast increases in wool production. This supply could keep wool prices lower than they would otherwise be over the coming months or years. One compensating factor is the wool accumulated over the past year is likely to be skewed towards coarser and lower value grades, and so may not exert much influence over prices for finer micron grades.
Dairy prices and production set to rise
Global demand outpacing supply is expected to result in higher milk prices in 2021–22. The Australian farmgate milk price is forecast to increase by 2.4% to 50.7 cents per litre. Seasonal conditions for dairy producers are also generally favourable with good pasture growth, and low grain, hay and water prices. Milk powder prices are forecast to rise strongly, while butter and cheese prices are forecast to record small gains from 2020–21 due to more favourable conditions in New Zealand.

Global dairy supply is forecast to remain steady, so increasing demand is likely to have a greater impact on prices. The continued economic recovery out of the COVID-19 pandemic is driving strong demand in key export markets across Asia, especially in China. Import demand from China is likely to be boosted by high feed prices limiting domestic milk production. Australian butter exports between July 2020 and March 2021 increased 100% year-on-year, led by a 438% increase in exports to China. Export volumes of skim milk powder between July and March increased by 19% due to a 77% increase in exports to China.

Live exports to remain subdued
The value of live animal exports is expected to remain unchanged in 2021–22, because a 7% increase in numbers will offset a 7% fall in price. High domestic cattle prices are expected to continue diverting young cattle to domestic markets in 2021. However, falling young cattle prices from late 2021 into 2022 will see feeder/slaughter exports slowly increase. A similar trend is expected for live sheep exports, with restored market access to Saudi Arabia expected to boost demand.

Live exports of dairy heifers in 2020–21 and 2021–22 are expected to be lower than the elevated levels of the previous 2 years. The return of...
favourable seasonal conditions in 2020–21 allowed producers to keep heifers in the herd for breeding. Around 90,000 heifers were exported annually when feeding costs escalated during the dry years of 2018–19 and 2019–20. Dairy heifer exports are expected to increase from 2022–23 to fill Chinese import demand as New Zealand’s ban on live exports by sea is progressively implemented from 2021 to 2023.
Abbreviations

All values and prices are in nominal terms unless stated otherwise.

Small discrepancies in totals are generally caused by rounding. Zero is used to denote nil or a negligible amount.

$m$  million dollars (Australian)

€   euro

£   pound sterling

¥   yen

A$  dollar (Australian)

ABARE Australian Bureau of Agricultural and Resource Economics

ABARES Australian Bureau of Agricultural and Resource Economics and Sciences

ABS Australian Bureau of Statistics

ACT Australian Capital Territory

AFMA Australian Fisheries Management Authority

ANZSIC Australian and New Zealand Standard Industrial Classification

ASMC Australian Sugar Milling Council

AWEX Australian Wool Exchange

b   billion (Australian)

BAE Bureau of Agricultural Economics (now ABARES)

BRS Bureau of Rural Sciences (now ABARES)

c   cent (Australian)

CBA Commonwealth Bank of Australia

CIS Commonwealth of Independent States

cif  cost, insurance and freight

CL   Chemical Lean

CME Chicago Mercantile Exchange - Chicago Board of Trade

cw   carcase weight

DA   Dairy Australia

DAWR Department of Agriculture and Water Resources (now Department of Agriculture, Water and the Environment)

DFAT Department of Foreign Affairs and Trade
do i  digital object identifier

DM   deutschmark

ECU European currency unit

EMI Eastern Market Indicator

EU  European Union

EVAO estimated value of agricultural operations

FAO Food and Agriculture Organization of the United Nations

fas  free alongside ship

fob  free on board

fot  free on truck

GDP  Gross Domestic Product

GL   gigalitres (1,000,000,000 litres)

GST  Goods and Services Tax

ha   hectare (2.471 acres)