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## **Report Name:** Grain and Feed Update

**Country:** Australia

**Post:** Canberra

**Report Category:** Grain and Feed

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### **Report Highlights:**

FAS/Canberra forecasts Australian wheat production of 31 (million metric tons) MMT in MY 2020/21, the second highest on record, and more than double the previous year's drought-affected estimate of 15.2 MMT. Exports are supported by strong international prices and are forecast at 21 MMT, which if achieved would be the third highest result ever. Barley production is forecast at 11.5 MMT, which would also be the second highest on record. Not all parts of eastern Australia recovered from drought during 2020, and continued dryness in parts of Queensland is limiting the FAS/Canberra forecast for sorghum production to 1.2 MMT, around 78 percent of the previous 10-year average. For rice, water catchments are yet to fully recover from the drought which is limiting the expected production recovery. Rice production is forecast at 400,000 MT in 2020/21, still over ten times last year's level, but 90 percent of the last 10-year average.

## Executive Summary

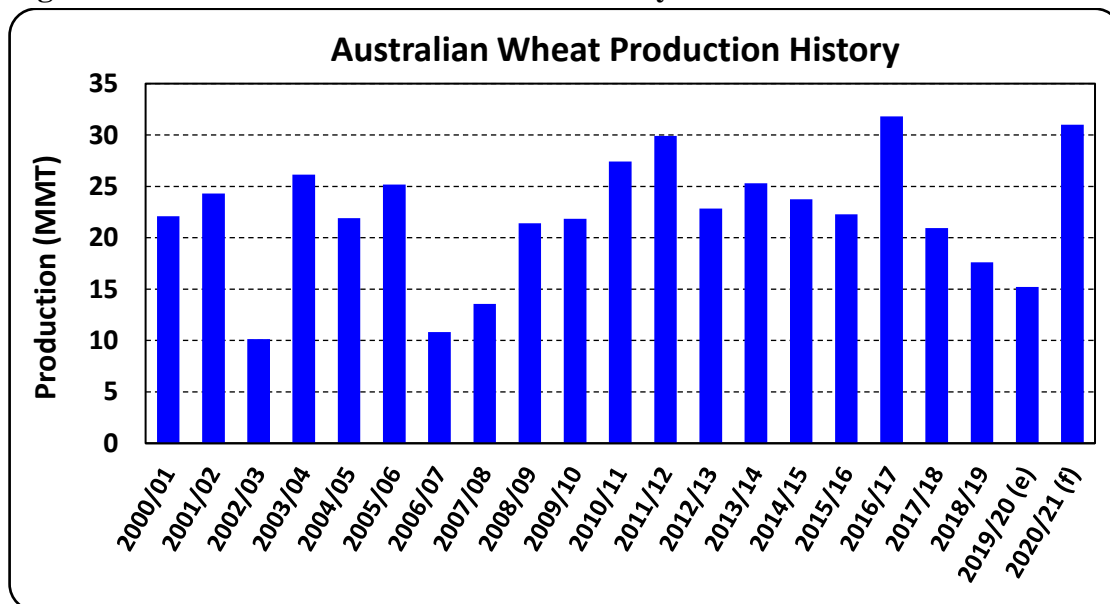
FAS/Canberra forecasts Australian wheat production of 31 (million metric tons) MMT in MY 2020/21, the second highest on record, and more than double the previous year's drought-affected estimate of 15.2 MMT. Exports are supported by strong international prices and are forecast at 21 MMT, which if achieved would be the third highest result ever. Barley production is forecast at 11.5 MMT, which would also be the second highest on record. Not all parts of eastern Australia recovered from drought during 2020, and continued dryness in parts of Queensland is limiting the FAS/Canberra forecast for sorghum production to 1.2 MMT, around 78 percent of the previous 10-year average. For rice, water catchments are yet to fully recover from the drought which is limiting the expected production recovery. Rice production is forecast at 400,000 MT in 2020/21, still over ten times last year's level, but 90 percent of the last 10-year average. With this production, Australia is set to revert back to being a net exporter of rice.

## WHEAT

### Production

FAS/Canberra forecasts Australia's MY 2020/21 wheat production at 31 million metric tons (MMT), a 1 MMT increase over the official USDA forecast. This would be the second largest crop in history for Australia (see figure 1). FAS/Canberra's increased forecast is primarily a result of the Western Australian crop being larger than expected despite a challenging growing season. New South Wales also contributed to the improved forecast with favorable conditions allowing the crop to reach its potential. Western Australia over the last 10 years has averaged over one-third of the national wheat crop while New South Wales has averaged over one-quarter. With such large contributions these two states have a strong bearing on the outcome of the national wheat crop.

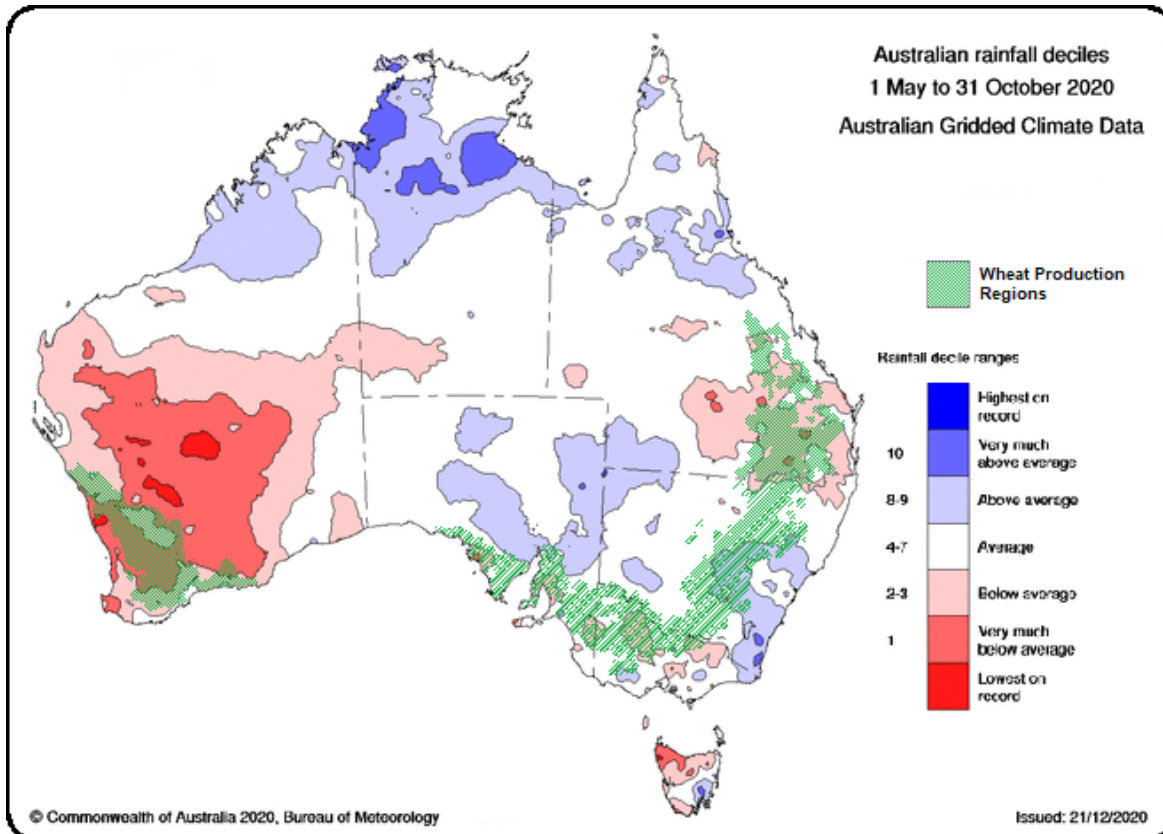
Figure 1 – Australian Wheat Production History



Source: FAS/Canberra

In Western Australia, during the period from May to October 2020 wheat growing areas endured below-average to well-below-average rainfalls (see figure 2). As a result, with limited soil moisture reserves (see figure 4) there was a higher degree of risk for the crop not reaching its potential, which tempered earlier forecasts.

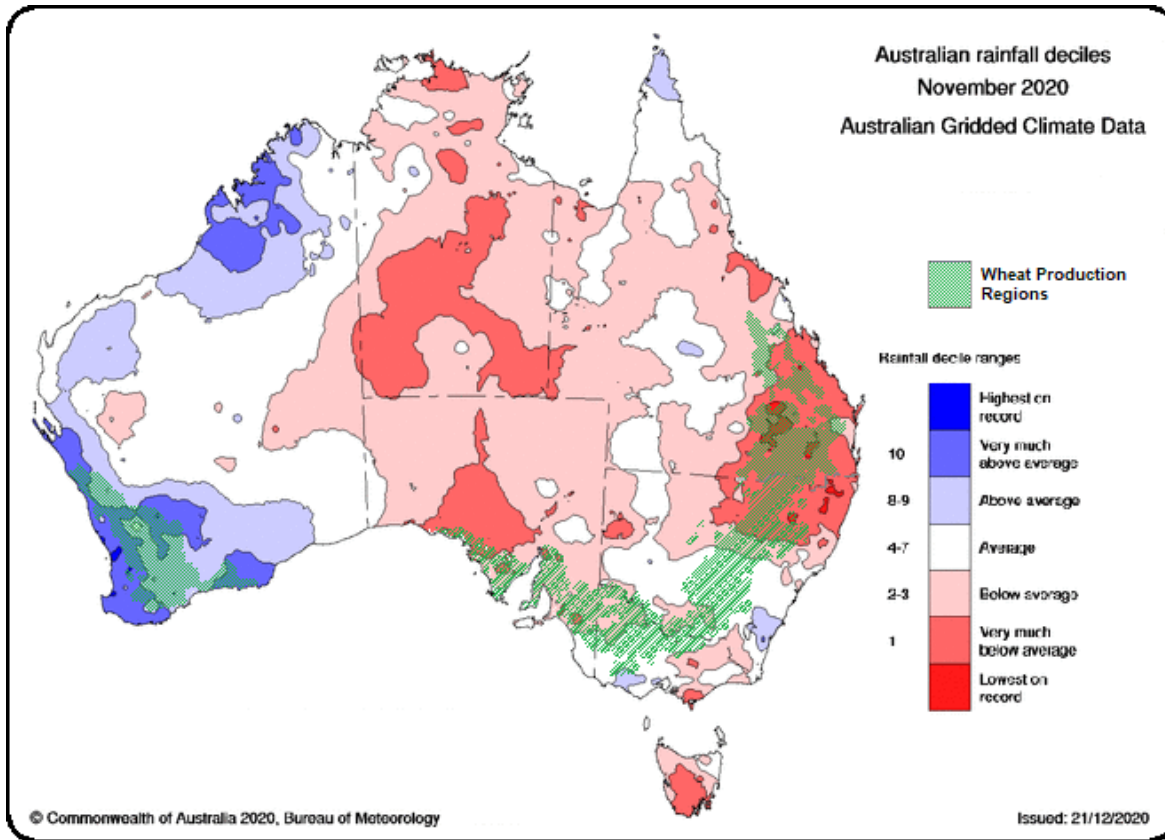
**Figure 2 - Australia Rainfall Decile Map – May-Oct 2020**



Source: Australian Bureau of Meteorology / FAS/Canberra

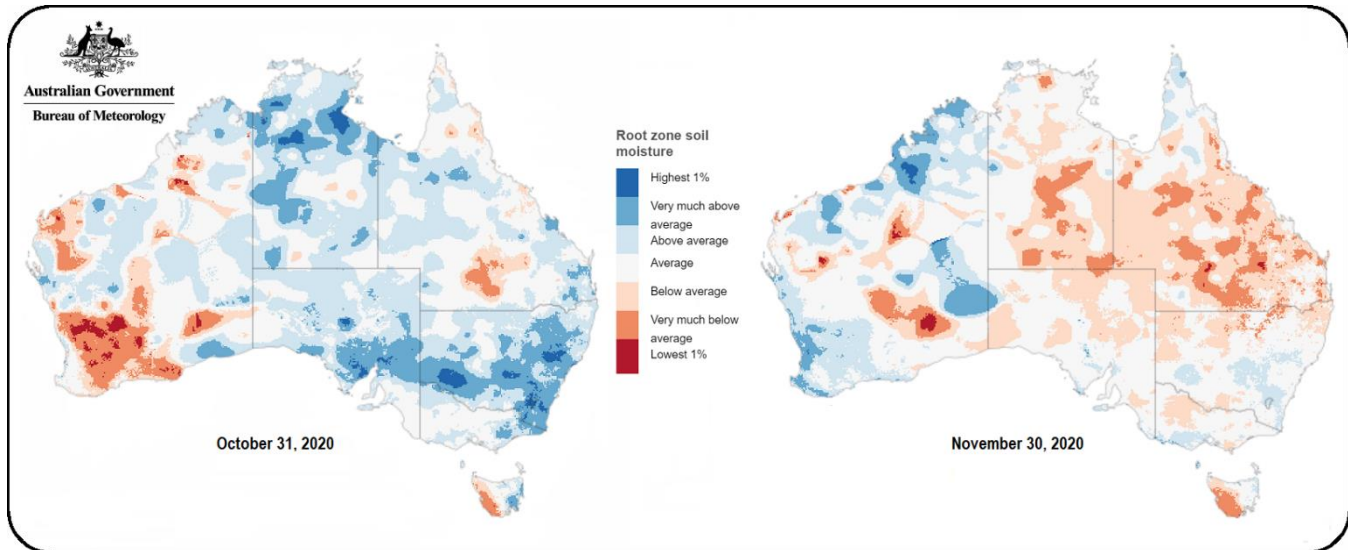
Despite this poor start to the season the wheat crop performed better than would be expected as a result of mild conditions and well-timed rainfalls. Western Australian wheat growing regions were fortunate to receive timely rainfalls in November 2020 during the tail end of the grain fill period (see figure 3). As a result, the Western Australia wheat crop went from tracking at below-average yields to in the end achieving average yields.

**Figure 3 - Australia Rainfall Decile Map – Nov 2020**



Source: Australian Bureau of Meteorology / FAS/Canberra

**Figure 4 - Australia Root Zone Soil Moisture Map – Oct and Nov 2020**



Source: Australian Bureau of Meteorology

The Grains Industry Association of Western Australia (GIWA) in its crop report in mid-October 2020 estimated wheat production in Western Australia of 7.4 MMT and in their mid-December report this had risen to 8.9 MMT, highlighting the better than expected crop development.

This increased wheat production estimate is strongly supported by data on CBH Group grain receipts. CBH Group is the major grain handler in Western Australia, handling the vast majority of the state's wheat production. By mid-December 2020 (MY 2020/21) CBH received 14.2 MMT of grains (of which wheat is the largest part, but also includes barley, oats, canola, field peas and lupins) whereas in mid-December 2019 (MY 2019/20) they reported receipt of 9.5 MMT.

New South Wales had near ideal growing conditions, allowing the wheat crop there to be around 10 MMT above last year. New South Wales had average to above average rainfall throughout the period from May to October 2020 (see figure 2) but importantly had well timed rains with mild conditions setting the crop up for high potential yields. The months prior to and around planting also had well-above average rainfall throughout the New South Wales crop growing regions. This established a very good soil moisture profile which was maintained throughout the crop growing period (see figure 4), even in spite of drier November weather.

In New South Wales the major grain handler is GrainCorp, which has seen a huge change in grain receipts this season after severe drought conditions in 2019. GrainCorp's grain receipts as of mid-January 2021 in New South Wales are reported at 8.4 MMT, whereas in mid-January 2020 (nearing the end of the harvest season) were merely 500,000 MT. This is a monumental turnaround which has strongly supported Australia's forecast wheat production of 31 MMT.

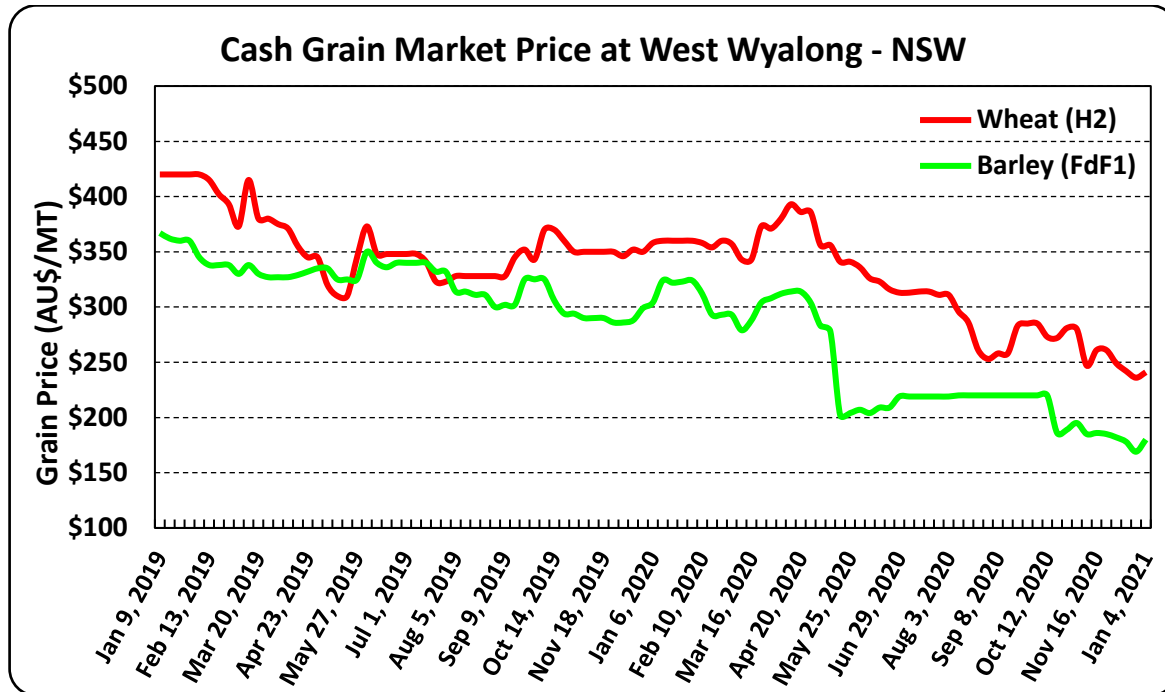
## **Consumption**

FAS/Canberra's forecast for Australian wheat consumption in MY 2020/21 is 7.5 MMT, 500,000 MT lower than official USDA forecast of 8 MMT due to lower feed use. This feed forecast is considerably below the MY 2019/20 estimate of 5 MMT because of two major factors. First, drought-breaking rains in eastern Australia in 2020 have boosted pasture growth and reduced the need for on-farm feeding of grain to livestock. This is further exacerbated by a reduction in overall livestock numbers as a result of the drought, and with this feedlot numbers of cattle have also declined. The second key impact is that the high Chinese tariffs on Australian barley has resulted in rising use of barley in domestic feed rations compared to wheat.

During the drought the feed market had significant challenges sourcing grains for livestock. For the period from April to August 2019 feed barley prices had risen to be around the same as wheat (see figure 5). With a low-price differential, livestock feeders prefer to use wheat over barley. As the MY 2020/21 crop production expectations began to firm, from September the price differential between wheat and barley began to spread and in May 2020 peaked at around AU\$120 per MT. This sparked a switch towards the use of barley for livestock feeding. During harvest in late 2020 the price differential

between wheat and barley has settled at around AU\$50 per MT which will see the livestock feed industries continuing to prefer barley. With a large harvest of both wheat and barley in MY 2020/21, the market differential between the two grains is expected to remain relatively stable.

**Figure 5 – Wheat and Barely Cash Market Price Trend**



Source: *The Land newspaper*

### Exports

FAS/Canberra’s forecast for wheat exports is 21 MMT, 1 MT above the official USDA forecast as a result of the higher production forecast. This is more than double the estimate for MY 2019/20. During the past two years, nearly all exports were from Western Australia and South Australia, however, because of the anticipated bumper crop in New South Wales this year, it is expected to return as a major origin of exported grain.

Wheat exports of 21 MMT would be the third time exports have surpassed 20 MMT, with the last time being MY 2016/17 when 22.6 MMT was exported.

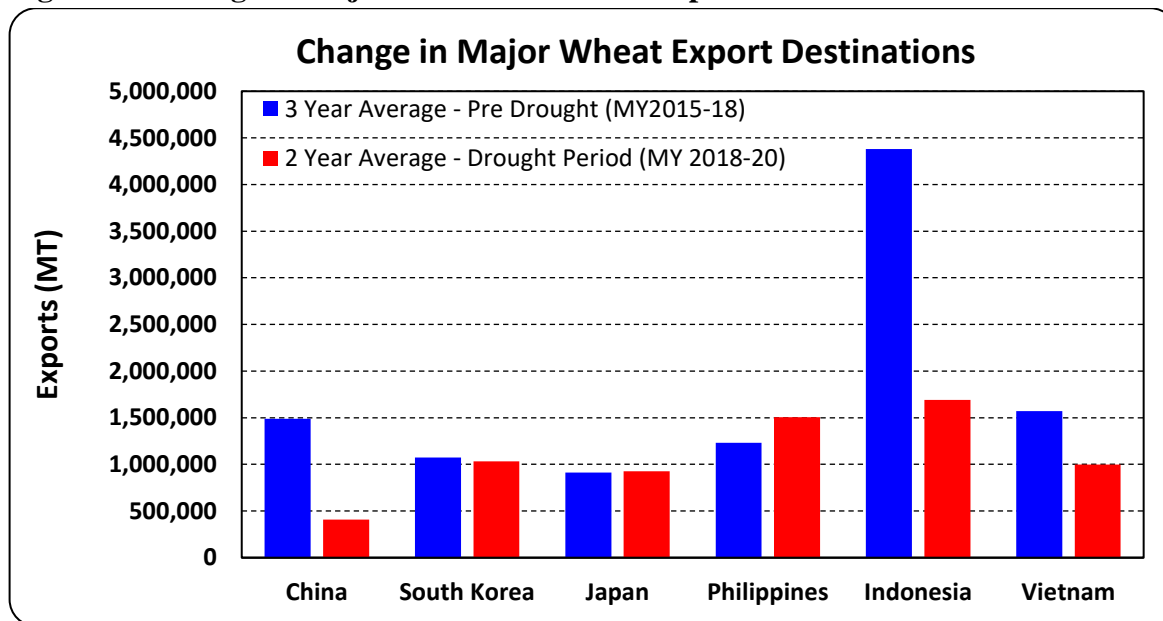
Although Australian wheat is beginning to price into markets as far away as Africa and the Middle East, even with the huge export volumes that are expected in MY 2020/21 the strong majority is expected to remain in nearby Asian markets. During the previous year of similar-sized exports in MY 2016/17, over 80 percent of Australia’s exports still went to East, Southeast, and South Asian countries.

Australian wheat is especially expected to rebound to markets in Southeast Asia. During the drought, the largest fall in exports was to Indonesia, which had a pre-drought peak of 5.1 MMT but dropped to

0.7 MMT in MY 2019/20. There was also a significant fall in Australian exports to Vietnam during the drought period (see figure 6).

Philippines, South Korea and Japan, however, remained stable export destinations for Australian wheat during the low production drought years (MY 2018/19 and MY 2019/20) compared with the three-year average prior to the drought.

**Figure 6 – Change in Major Australian Wheat Export Destinations**



Source: Australia Bureau of Statistics

MY 2019/20 exports reached 9.1 MMT, 100,000 MT above the previous year even though overall production was lower. Exports were supported by a drawdown of stocks and less domestic consumption of wheat.

### Imports

FAS/Canberra forecasts wheat imports in MY 2020/21 at 200,000 MT. This is 300,000 MT lower than the official USDA forecast. Significant shipments of wheat grain to Australia during the drought were from Canada for processing. The last of these shipments arrived in September 2020, preceding the new wheat harvest in Australia. No additional wheat grain is expected to be imported, and the 200,000 MT forecast is wheat products such as pasta.

MY 2019/20 wheat imports were 894,431 MT, which was a record level and almost five-fold higher than the previous 10-year average.

## Stocks

Australia's ending stocks of wheat in MY 2020/21 are expected to grow from the low levels of the previous year as a result of the higher production. MY 2019/20 ending stocks are estimated to have been the lowest in over a decade because of the small harvest and continued exports.

During the multi-year drought, the major bulk handlers in Australia voluntarily reported on their grain stock levels, providing the industry scope to plan for grain demand during tight supply. In the lead up to the large wheat production harvest in MY 2020/21 however, the major bulk handlers have ceased public reporting on grain stocks.

Wheat Market Year Begins Australia	2018/2019		2019/2020		2020/2021	
	Oct 2018		Oct 2019		Oct 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	10402	10402	10200	10200	13000	13000
Beginning Stocks (1000 MT)	4549	4549	4440	4440	2898	2898
Production (1000 MT)	17598	17598	15200	15200	30000	31000
MY Imports (1000 MT)	499	499	894	894	500	200
TY Imports (1000 MT)	313	313	820	820	500	200
TY Imp. from U.S. (1000 MT)	3	3	3	3	0	0
Total Supply (1000 MT)	22646	22646	20534	20534	33398	34098
MY Exports (1000 MT)	9006	9006	9136	9136	20000	21000
TY Exports (1000 MT)	9835	9835	10121	10185	18000	19000
Feed and Residual (1000 MT)	5700	5700	5000	5000	4500	4000
FSI Consumption (1000 MT)	3500	3500	3500	3500	3500	3500
Total Consumption (1000 MT)	9200	9200	8500	8500	8000	7500
Ending Stocks (1000 MT)	4440	4440	2898	2898	5398	5598
Total Distribution (1000 MT)	22646	22646	20534	20534	33398	34098
Yield (MT/HA)	1.6918	1.6918	1.4902	1.4902	2.3077	2.3846
(1000 HA) ,(1000 MT) ,(MT/HA)						
MY = Marketing Year, begins with the month listed at the top of each column						
TY = Trade Year, which for Wheat begins in July for all countries. TY 2020/2021 = July 2020 - June 2021						

## BARLEY

### Production

FAS/Canberra forecasts Australia's MY 2020/21 barley production at 11.5 MMT, 500,000 MT above the official USDA forecast. As with wheat, this is primarily a result of the improved conditions at the tail end of the growing season in Western Australia, which is by far the largest barley producing state and typically accounts for about 40 percent of production. Also, similarly to wheat, a strong production season in the eastern states of Australia has contributed to the overall forecast result. Barley production in Australia is forecast to increase by 28 percent from MY 2019/20.

### Consumption

The forecast for MY 2020/21 barley consumption is unchanged from the official USDA forecast at 5.9 MMT. Overall grain feeding of livestock in Australia is forecast to be down in MY 2020/21, but barley is expected to take a significantly larger share of domestic feed rations at the expense of wheat. As mentioned earlier, with ample domestic supplies of barley and wheat after a big production season, the



price spread between wheat and barley is settling back to typical levels of around AU\$50 per MT. This is expected to support increased feed barley consumption.

## Exports

Australia's barley exports for MY 2020/21 are forecast at 4.7 MMT, down 300,000 MT from the official USDA forecast. Exports are still expected to be up 1.4 MMT from MY 2019/20 but there is likely to remain a challenging environment for exporters. The major factor constraining any further increase in exports is that China generally accounts for around two-thirds of Australia's barley exports and China's commerce ministry imposed an 80.5 percent tariff on Australian barley in May 2020.

It is expected that Australian barley shipments in MY 2020/21 will increase to other Asian markets and to the Middle East, and this trend already has been seen in recent months with higher exports to Thailand, Vietnam and Qatar.

MY 2019/20 exports were 3.3 MMT, with the top markets being China, Thailand, Japan, Vietnam and Qatar - representing 94 percent of overall exports. China was by far the largest market at 46 percent, but also had the largest decline in volume from 2.4 MMT in MY 2018/19 down to 1.5 MMT.

## Stocks

Australia's ending stocks of barley are expected to continue to rise in MY 2020/21 as a result of a large barley production season and the Chinese tariffs limiting even greater increases in exports.

Barley Market Year Begins Australia	2018/2019		2019/2020		2020/2021	
	Nov 2018		Nov 2019		Nov 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	4437	4437	4050	4050	4400	4400
Beginning Stocks (1000 MT)	1776	1776	1908	1908	2083	2084
Production (1000 MT)	8819	8819	9000	9000	11000	11500
MY Imports (1000 MT)	0	0	0	0	0	0
TY Imports (1000 MT)	0	0	0	0	0	0
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	10595	10595	10908	10908	13083	13584
MY Exports (1000 MT)	3687	3687	3325	3324	5000	4700
TY Exports (1000 MT)	3666	3666	3231	3228	5000	4700
Feed and Residual (1000 MT)	3500	3500	4000	4000	4400	4400
FSI Consumption (1000 MT)	1500	1500	1500	1500	1500	1500
Total Consumption (1000 MT)	5000	5000	5500	5500	5900	5900
Ending Stocks (1000 MT)	1908	1908	2083	2084	2183	2984
Total Distribution (1000 MT)	10595	10595	10908	10908	13083	13584
Yield (MT/HA)	1.9876	1.9876	2.2222	2.2222	2.5	2.6136
(1000 HA) ,(1000 MT) ,(MT/HA)						
MY = Marketing Year, begins with the month listed at the top of each column						
TY = Trade Year, which for Barley begins in October for all countries.TY 2020/2021 = October 2020 - September 2021						

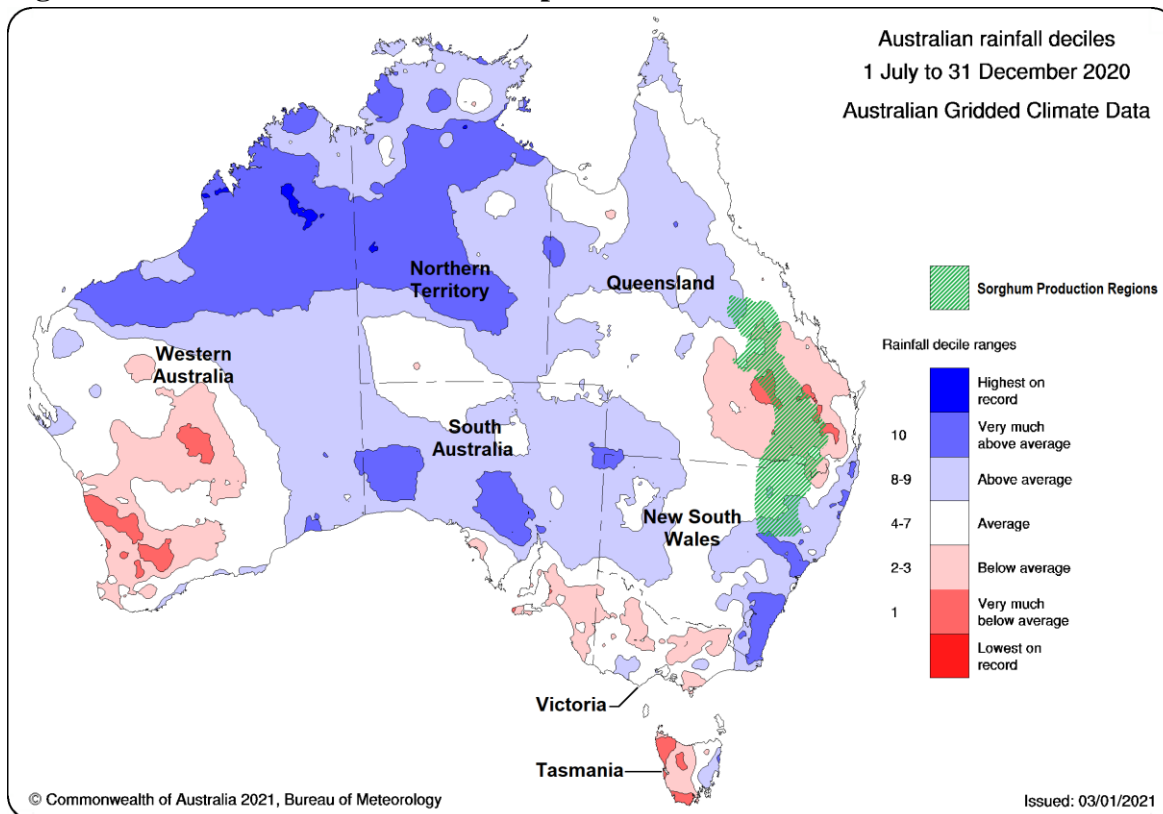
## SORGHUM

### Production

The FAS/Canberra sorghum production forecast for MY 2020/21 has been revised downwards to 1.2 MMT, from the official UDSA forecast of 1.7 MMT. If realized this would be 78 percent of the previous 10-year average. Queensland typically produces over two-thirds of Australia's overall sorghum production, and this downward revision is due to the prevailing low rainfalls during the main planting period from October to December 2020 for much of Queensland. While other key grain producing areas in the eastern states of Australia saw drought-breaking rains in 2020 and have produced bumper winter crops, the main sorghum producing regions remained dry.

Southern Queensland is the major sorghum area in Australia. Planting in this area typically takes place between September and January, with harvest generally between March and June. In the period preceding planting and during the planting period from, July to December 2020, the sorghum producing areas in southern Queensland have had low rainfalls (see figure 7). This is on the back of the preceding two years of drought, and as a result sub surface soil moisture reserves have not had an opportunity to recover. This as a result had led to the failure of some of the early planted sorghum crops. However, there are reports from industry sources that after good rainfalls in late December further plantings will occur until the end of January.

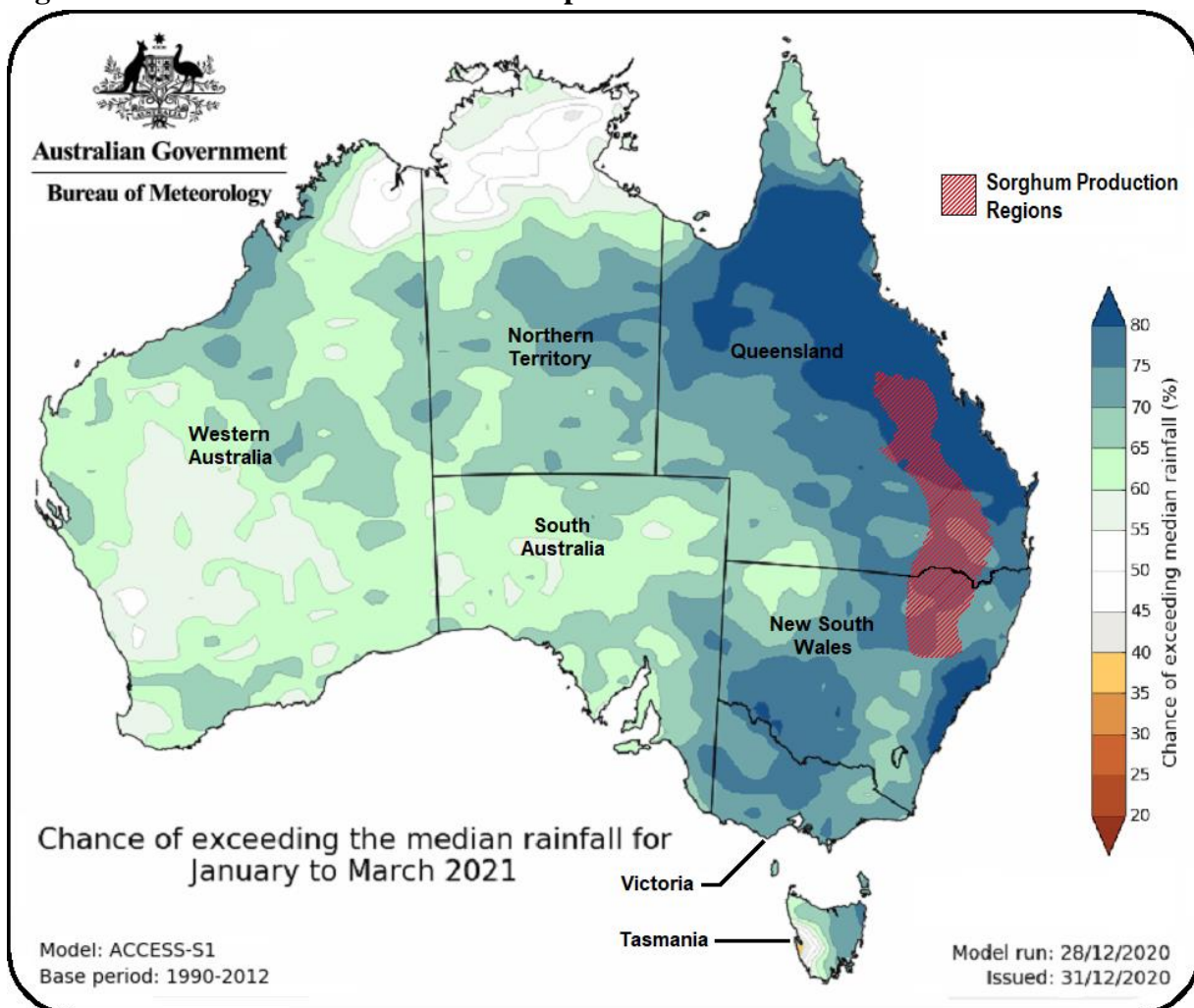
**Figure 7 - Australia Rainfall Decile Map – Jul-Dec 2020**



Source: Australian Bureau of Meteorology / FAS/Canberra

The northern parts of the sorghum growing regions of central Queensland in the period from July to December 2020 had a more mixed outcome in terms of rainfalls. Similar to southern Queensland parts of it also had below-average rainfall during this period (see figure 7). However, the northern most part of central Queensland had better rainfall. Industry sources report good plantings particularly in the northern parts of central Queensland in late November and early December. The planting window in this region is wider than southern Queensland, with planting as far out as late February. The Bureau of Meteorology forecast of a high chance of above-average rainfall in central Queensland (see figure 8) is likely to result in substantial further planting of sorghum and will also support the growth of the earlier planted sorghum.

**Figure 8 - Australia Rainfall Forecast Map – Jan-Mar 2021**

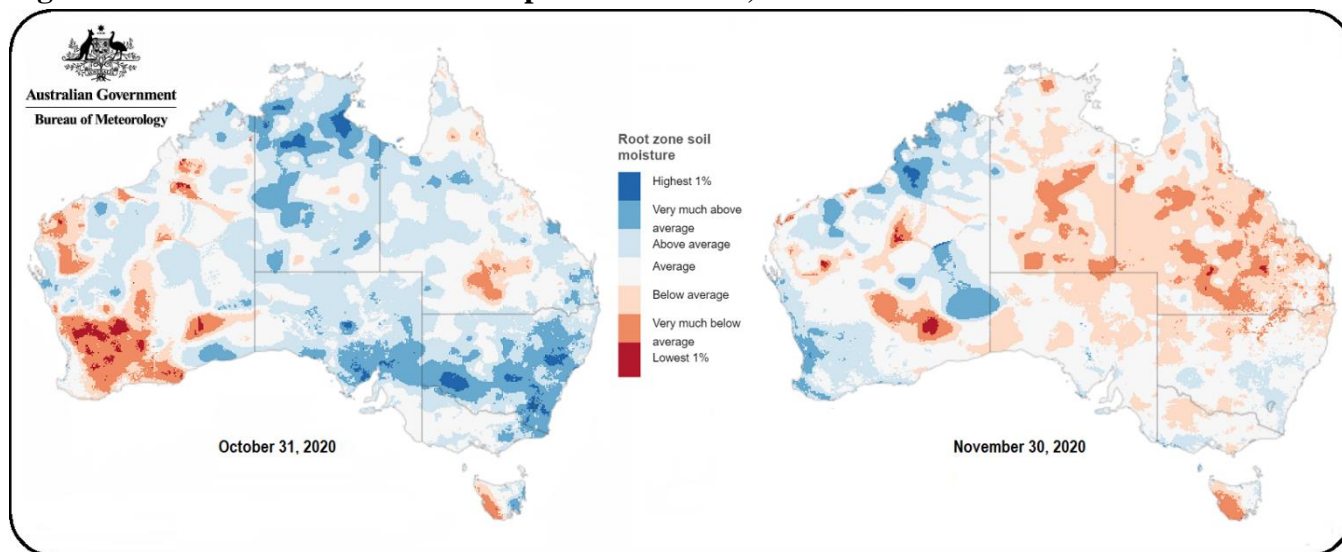


Source: Australian Bureau of Meteorology

The northern New South Wales sorghum growing regions, which typically produce less than one-third of Australia’s sorghum, have had average to above average rainfall from July to December 2020 (see

figure 6). This has encouraged a good level of sorghum planting and reports are that the crops are generally progressing well. With forecasts of a good chance of exceeding median rainfall from January to March 2021 (see figure 8), the crop is set to achieve good yields.

**Figure 9 - Australia Soil Moisture Map – Oct and Nov, 2020**



*Source: Australian Bureau of Meteorology*

Strong drought conditions throughout all sorghum growing regions resulted in a very small MY 2019/20 sorghum crop of only 300,000 MT. This is the lowest production since MY 1968/69 and 18 percent of the previous 10-year average.

### **Consumption**

FAS/Canberra forecasts sorghum consumption in MY 2020/21 at 630,000 MT, which is substantially lower than the official USDA forecast of 1 MMT. This is primarily a result of the decrease in forecast production from 1.7 MMT to 1.2 MMT.

FAS/Canberra forecasts sorghum feed grain consumption in MY 2020/21 at 550,000 MT, a 250,000 MT reduction from the official USDA forecast. FAS/Canberra forecasts industrial consumption of sorghum at 80,000 MT in MY 2020/21, 120,000 MT lower than the official USDA forecast.

Overall feed grain consumption in Australia is expected to decline in MY 2020/21 primarily due to the reduced demand from livestock feed industries. As previously mentioned, this is largely caused by the improvement in rainfall and subsequent increased pasture production for the grazing livestock industries. The degree of sorghum feed consumption is influenced by the availability of sorghum relative to barley and wheat along with the relative prices of the three grains. As mentioned earlier, the wheat and barley harvest in Australia is almost completed by mid-January 2021 and this season has seen

near record production of both. Conversely, the previous sorghum harvest was very low, and the current sorghum forecast is downgraded to 78 percent of the previous ten-year average.

The disparity in production fortunes of wheat and barley compared to sorghum has had an impact on the market prices of these grains. At the start of January 2021 sorghum was priced at around AU\$233 per MT compared to feed wheat at AU\$220 per MT and feed barley at AU\$180 per MT. Of the three grains, sorghum is generally considered to have a lower nutritional value than barely and in particular wheat. Based on current feed grain prices, beef feed lot producers and other feed grain users are favoring barley in their feed rations.

The FAS/Canberra forecast for FSI consumption of sorghum in MY 2020/21 is 80,000 MT which is almost entirely related to fuel ethanol production from one plant in Australia. Due to the low forecast production of sorghum, high prices and current low crude oil prices, the plant is anticipated to operate at far below annual capacity.

### **Exports**

The FAS/Canberra sorghum export forecast for MY 2020/21 is 500,000 MT and in line with the official USDA forecast. Domestic consumption is forecast to remain low as a result of curtailed ethanol production and reductions in overall grain feeding in Australia. As a consequence, a larger portion of increased production is forecast to be exported. If realized, these exports would still be considerably below a recent peak of 1.6 MMT in MY 2014/15. Australian sorghum exports are very reliant on shipments to China.

The MY 2019/20 sorghum export estimate has been revised down by FAS/Canberra to 165,000 MT from the official USDA estimate of 200,000 MT. Exports for the March to November 2020 period are at 159,766 MT and exports in the December to February period in the past have typically been very low.

China in past years has typically accounted for nearly all of Australia's exports, for use as livestock feed and for making traditional liquor. However, in September 2020 (MY 2019/20) there was a one off shipment of 22,000 MT to Kenya as part of a food aid program which accounted for 14 percent of overall exports, reducing China's overall year to date share to 74 percent. The Philippines has also become a significant destination accounting for 10 percent of overall exports year to date in MY 2019/20.

Sorghum Market Year Begins Australia	2018/2019		2019/2020		2020/2021	
	Mar 2019		Mar 2020		Mar 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	550	550	150	150	600	450
Beginning Stocks (1000 MT)	273	273	287	287	37	62
Production (1000 MT)	1160	1160	300	300	1700	1200
MY Imports (1000 MT)	0	0	0	0	0	0
TY Imports (1000 MT)	0	0	0	0	0	0
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	1433	1433	587	587	1737	1262
MY Exports (1000 MT)	96	96	200	165	500	500
TY Exports (1000 MT)	91	91	107	102	500	500
Feed and Residual (1000 MT)	900	900	250	330	800	550
FSI Consumption (1000 MT)	150	150	100	30	200	80
Total Consumption (1000 MT)	1050	1050	350	360	1000	630
Ending Stocks (1000 MT)	287	287	37	62	237	132
Total Distribution (1000 MT)	1433	1433	587	587	1737	1262
Yield (MT/HA)	2.1091	2.1091	2	2	2.8333	2.6667
(1000 HA) ,(1000 MT) ,(MT/HA)						
MY = Marketing Year, begins with the month listed at the top of each column						
TY = Trade Year, which for Sorghum begins in October for all countries.TY 2020/2021 = October 2020 - September 2021						

## RICE

### Production

FAS/Canberra forecasts milled rice production at 400,000 MT in MY 2020/21, substantially lower than the official USDA forecast of 605,000 MT. This is up sharply, however, from production of only 38,000 MT in MY 2019/20. The forecast increase is primarily as a result of a partial replenishment in irrigation water stores and above-average prices for rice offered to farmers for the current season. The forecast production, if realized, would be at about 90 percent of the previous 10-year average.

The four key factors influencing the significantly improved forecast MY 2020/21 production are:

- 1) Increased irrigation water allocation levels and lower traded irrigation water prices
- 2) Favorable economics for rice relative to other irrigated summer crops
- 3) Mild temperatures during panicle initiation period
- 4) Forecasts for above-average minimum and maximum temperatures

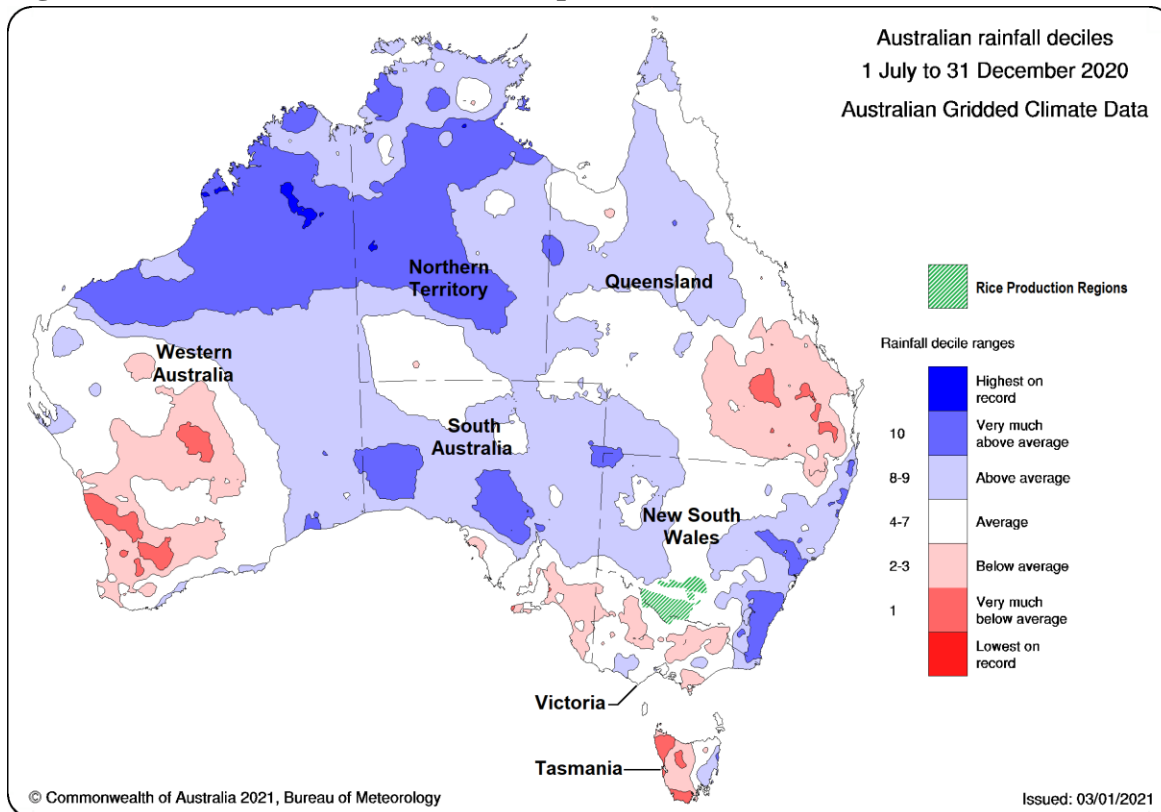
#### 1) Increased irrigation water allocation levels and lower traded irrigation water prices

The production of rice in Australia is almost entirely in southern New South Wales in regions with subsoils of high clay content and with relatively reliable irrigation water availability. The industries dependence on irrigation water availability and cost makes it a crop with significant variability in production from year to year.

Rice is generally planted in October and most growers will make planting area decisions based on water availability and prices prior to planting. Water availability, for the majority of rice growers, is primarily

influenced by rainfall over the catchment areas supplying the Murrumbidgee and New South Wales Murray Irrigation systems. The majority of the rainfalls influencing water catchment levels occur in the winter and spring months and any summer rainfalls reduce the demand for water from the catchments. Over the July to December 2020 period the rainfalls in the Murrumbidgee and NSW Murray catchments have been at average to above-average levels (see figure 10).

**Figure 10 - Australia Rainfall Decile Map – Jul-Dec 2020**



Source: Australian Bureau of Meteorology

The rainfalls over the catchments in recent months has resulted in much improved water allocations in the two major irrigation systems in which the majority of rice growers are located. The Murrumbidgee Irrigation system as at mid-December 2020 had a 77 percent general security water allocation whereas the NSW Murray system had a 43 percent allocation (see Table 2). In the previous two irrigation seasons, at the same time of year these two irrigation systems had near zero and zero water allocation. Four years earlier in mid-December 2016, prior to the influence of the multi-year drought, these two irrigation systems had a full 100 percent of general security water allocation available to water license holders. Although water allocations relating to MY 2020/21 rice production are much improved, water catchments are yet to fully replenish to pre-drought levels limiting the expansion of the rice production area.

**Table 2 – Irrigation water Allocation Trends**

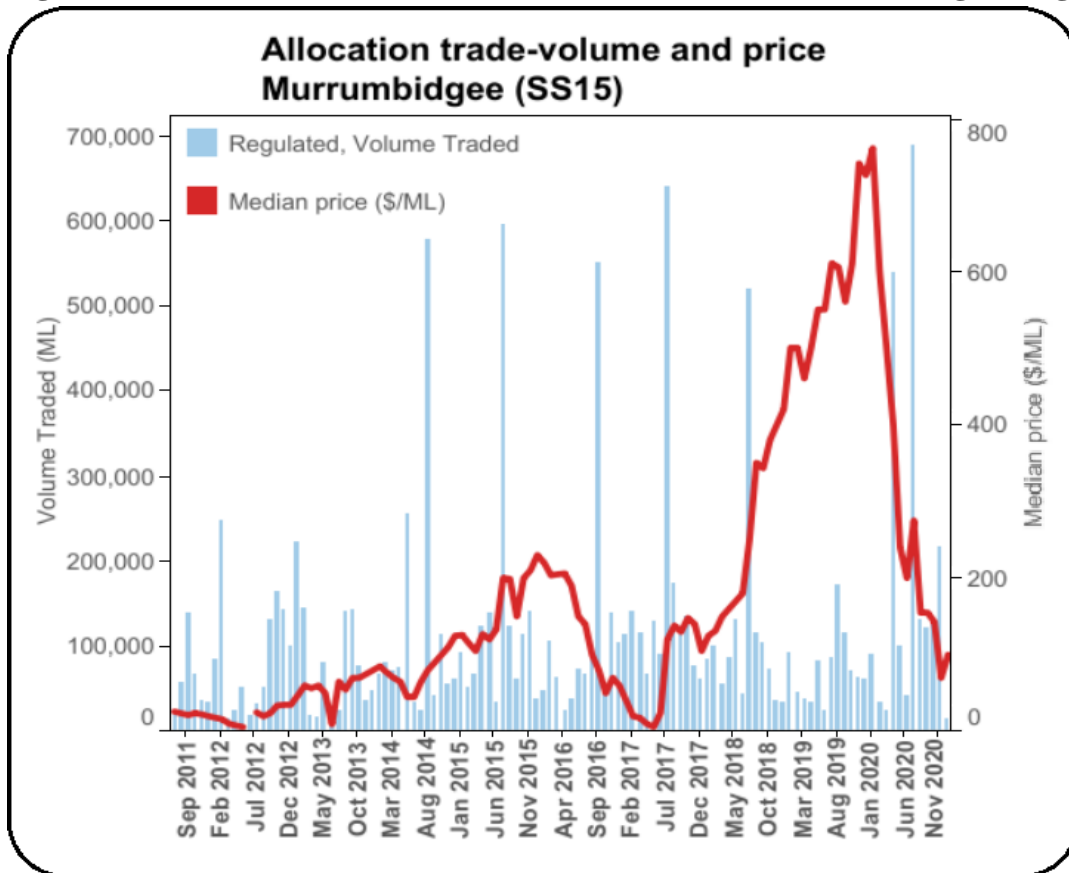
Irrigation System	General Security Water Allocation				
	15/12/2020	16/12/2019	17/12/2018	15/12/2017	15/12/2016
Murrumbidgee	77%	6%	7%	33%	100%
NSW Murray	43%	0%	0%	46%	100%

Source: NSW Department of Planning, Industry and Environment

With an improvement in water availability there has also been a decline in water traded prices which has also had a positive influence on the area of rice planted for MY 2020/21. The monthly water trade volumes and median prices have declined considerably over recent months after the impacts of the multi-year drought. Irrigation water prices are still somewhat higher than typical pre-drought prices due to water storages and water availability yet to reach normal pre drought levels.

During the peak of the drought in 2019, irrigation water prices reached almost AU\$800 (US\$615) per million liters (ML) but have since declined to well below AU\$150 (US\$115) per ML at the start of the irrigation season in August 2020, and have declined further to below AU\$100 (US\$77) at the end of December 2020 (see figure 11). Both of the irrigation schemes have been similarly impacted.

**Figure 11 – Historical Water Trade Volume and Price in Murrumbidgee Irrigation System**



Source: Bureau of Meteorology



If the current La Niña event persists through to the end of March 2021, as forecasted by the Bureau of Meteorology, the water catchment levels may further replenish during the irrigation season and will likely provide further relief in irrigation water prices. This would provide growers with greater confidence to increase rice production further in the following MY 2021/22 season.

#### 2) Favorable economics for rice relative to other irrigated summer crops

Rice growers tend to be mixed farmers, and in the main rice growing area of the Riverina region, cotton production is an option for many growers. For the upcoming MY 2020/21 season rice prices offered are high while cotton prices are subdued. This has resulted in farmers favoring rice production over cotton as their summer crop.

Prices offered to rice growers prior to planting for medium grain rice (rough production) were around AU\$380 to AU\$420 (US\$293 to US\$323) per MT. Earlier in July 2020 the price offered was as high as AU\$475 (US\$366) per MT. These are strong prices offered by Australia's largest rice processor to encourage mixed farmers to produce rice rather than other alternate summer crops.

Prior to the start of cotton planting in October 2020 prices were firm but a little subdued, at around AU\$550 (US\$424) per bale, due to concerns over potential market disruptions associated with trade tensions between China and Australia. This may have influenced some mixed farmers, in the rice production regions, towards planting more rice and less cotton. At the time of rice and cotton planting, world cotton markets firmed which may have somewhat reduced the rice planting area.

#### 3) Mild temperatures during panicle initiation period

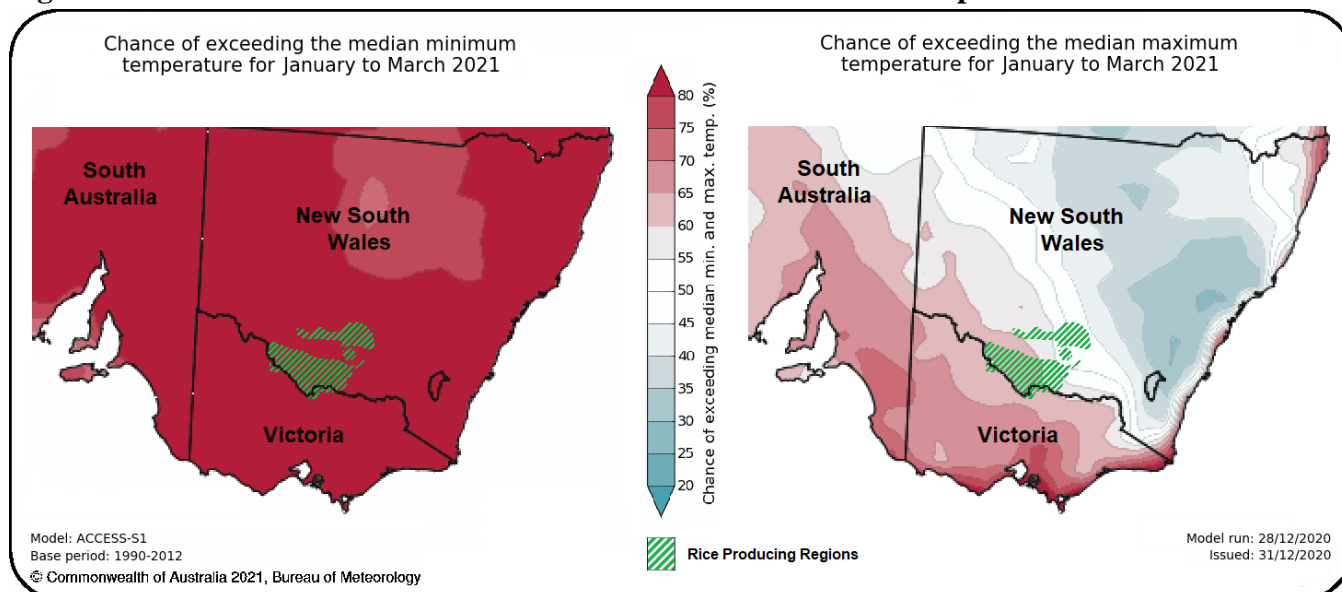
Early season conditions have been favorable towards setting the rice crops up for high yields further influencing the MY 2020/21 production forecast.

The panicle initiation phase of rice crop development is a crucial period in setting the potential crop yield. Although this phase is protected by a water blanket over the crop, mild temperature conditions are preferable during this period to optimize crop yield potential. Temperatures in the rice growing regions in December 2020, during which most crops are in the panicle initiation stage, were mild supporting increased yield potential.

#### 4) Forecasts for above-average minimum and maximum temperatures

For rice, after the critical panicle initiation stage of crop development, the crop benefits from higher temperatures, promoting crop growth and further optimizing crop yield potential. The Bureau of Meteorology forecast over the January to March 2021 period is for well above median minimum and above median maximum temperatures in the rice producing regions (see figure 12). If this BOM forecast comes to fruition, this will contribute to the FAS/Canberra forecast rice production for MY 2020/21 being achieved.

**Figure 12 - Australia Forecast Median Minimum and Maximum Temperatures – Jan-Mar 2021**



Source: Bureau of Meteorology

## Consumption

Forecast rice consumption by FAS/Canberra in MY 2020/21 is 330,000 MT and is 20,000 MT lower than the official USDA forecast. The forecast consumption is a moderate increase from the MY 2019/20 estimate of 310,000 MT. Due to very low rice production in MY 2019/20, domestic consumption had fallen moderately. Generally, rice consumption per capita in Australia is relatively stable and consumption demands are met by changes in trade.

## Trade

### Imports

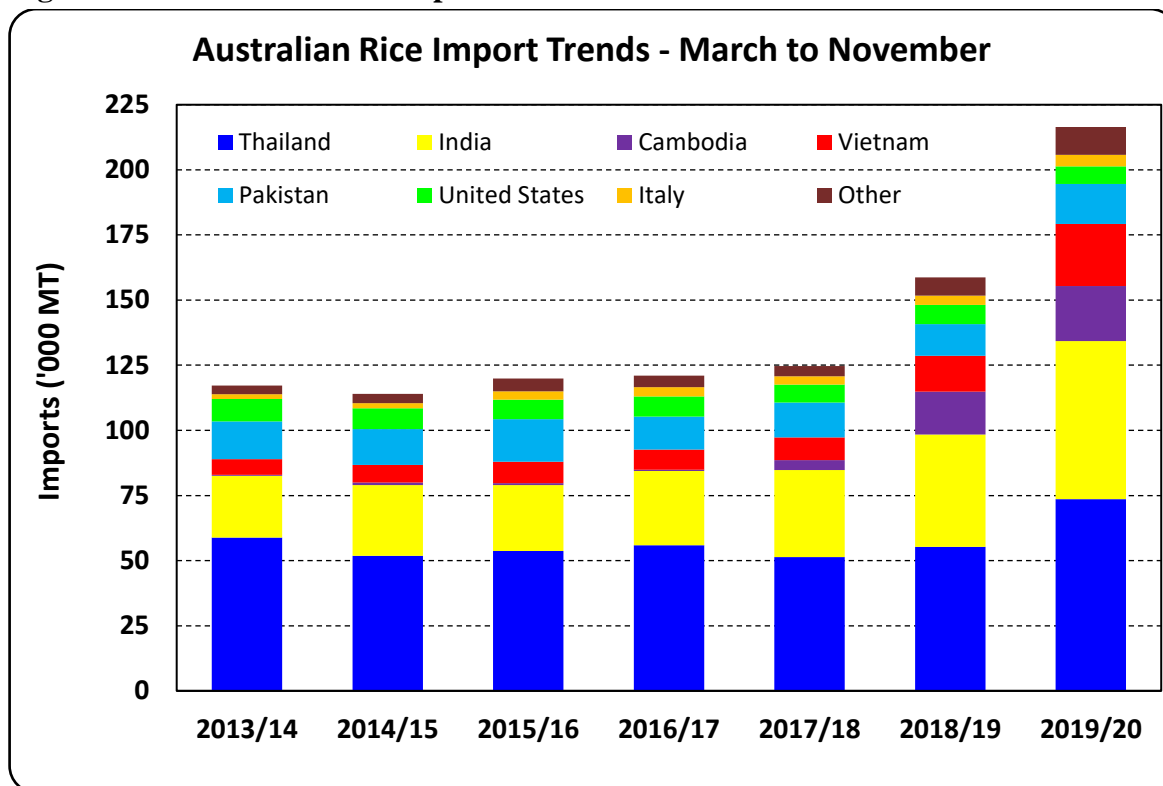
FAS/Canberra forecast imports of 170,000 MT in MY 2020/21 and is in line with the official USDA forecast. The forecast domestic production increase reduces the import requirements to meet consumption demands.

Imports for the March to November 2020 period are at 216,415 MT and imports are expected to remain at a high rate until the commencement of the current crop harvest in around March 2021. At this rate total imports for MY 2019/20 are estimated to be 280,000 MT, a downward revision of 20,000 MT from the official USDA estimate.

The increase in imports of rice by Australia over the last two years has been driven by the multi-year drought (see figure 13). Thailand and India are the two largest rice suppliers to Australia consistently at around two-thirds of total imports over the last five years. The increase in imports over the last two

years has been met by the top five trading partners, Thailand, India, Cambodia, Vietnam and Pakistan. Imports from the United States and Italy, however, have not increased over the last two years.

**Figure 13 – Australian Rice Import Trends**



Source: Australian Bureau of Statistics

### Exports

FAS/Canberra forecast exports for MY 2020/21 at 200,000 MT and is in line with the official USDA forecast. The forecast increase in production is the main driver of the forecast improvement in rice exports, and Australia is expected to return as a net exporter. Some major importers of Australian rice have been Japan, Saudi Arabia, New Zealand, Taiwan, South Korea and Jordan. Australia will likely seek to re-establish rice trade to these major rice importers in MY 2020/21.

Rice exports for the March to November 2020 period are 31,641 MT and are in line to achieve the MY 2019/20 estimate of 35,000 MT, the same as the official USDA estimate. Exports for the December 2020 to February 2021 period are expected to remain small due to low stocks until the current crop harvest commences in March 2021.

### Stocks

Rice stocks are forecast to recover somewhat in MY 2020/21 on the back of a much-improved forecast rice crop production nearing long term average.

Rice, Milled Market Year Begins Australia	2018/2019		2019/2020		2020/2021	
	Mar 2019		Mar 2020		Mar 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	8	8	6	5	80	55
Beginning Stocks (1000 MT)	232	232	52	52	25	25
Milled Production (1000 MT)	48	48	38	38	605	400
Rough Production (1000 MT)	67	67	53	53	840	556
Milling Rate (.9999) (1000 MT)	7200	7200	7200	7200	7200	7200
MY Imports (1000 MT)	219	219	300	280	170	170
TY Imports (1000 MT)	212	212	300	280	170	170
TY Imp. from U.S. (1000 MT)	10	10	0	0	0	0
Total Supply (1000 MT)	499	499	390	370	800	595
MY Exports (1000 MT)	107	107	35	35	200	200
TY Exports (1000 MT)	134	134	40	42	150	150
Consumption and Residual (1000 MT)	340	340	330	310	350	330
Ending Stocks (1000 MT)	52	52	25	25	250	65
Total Distribution (1000 MT)	499	499	390	370	800	595
Yield (Rough) (MT/HA)	8.375	8.375	8.8333	10.6	10.5	10.1091

(1000 HA) ,(1000 MT) ,(MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

TY = Trade Year, which for Rice, Milled begins in January for all countries.TY 2020/2021 = January 2021 - December 2021

## Attachments:

No Attachments