

Required Report: Required - Public Distribution

Date: October 15,2020

Report Number: AS2020-0030

Report Name: Grain and Feed Update

Country: Australia

Post: Canberra

Report Category: Grain and Feed

Prepared By: Levin Flake and Zeljko Biki

Approved By: Levin Flake

Report Highlights:

Drought-breaking rains and an excellent growing season in eastern Australia is expected to result in a sharp rebound in grain production, with Australian wheat production in MY 2020/21 forecast to be up over 80 percent compared to MY 2019/20. Barley, sorghum, and rice production are also forecast to be higher. While wheat production in eastern Australian states such as New South Wales are expected to be at near record levels, continued dryness in Western Australia (typically the largest wheat and barley producing state) is impacting production there. Wheat exports are forecast to nearly double in MY 2020/21, with more Australian wheat expected to flow to key Southeast Asian markets.

Executive Summary

Drought-breaking rains and an excellent growing season in eastern Australia is expected to result in a sharp rebound in grain production, with Australian wheat production in MY 2020/21 forecast to be up over 80 percent compared to MY 2019/20. Barley, sorghum, and rice production are also forecast to be higher. While wheat production in eastern Australian states such as New South Wales are expected to be at near record levels, continued dryness in Western Australia (typically the largest wheat and barley producing state) is impacting production there. Wheat exports are forecast to nearly double in MY 2020/21, with more Australian wheat expected to flow to key Southeast Asian markets.

WHEAT

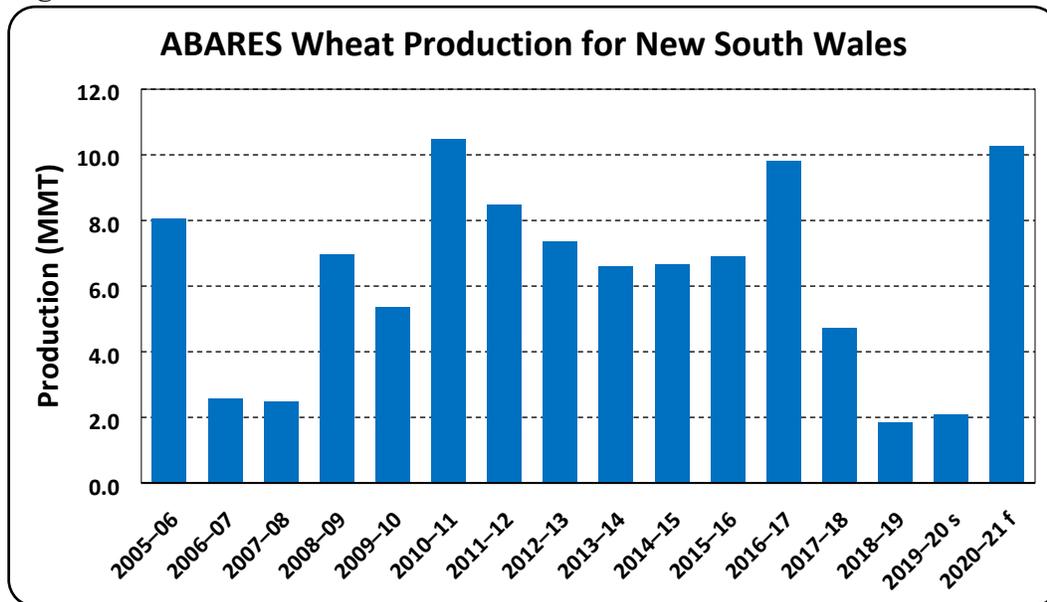
Production

FAS/Canberra forecasts Australia's MY 2020/21 wheat production at 28 million metric tons (MMT), 500,000 metric tons below the official USDA forecast, as a result of continued dryness in Western Australia. If realized, this crop would still be over 80 percent larger than the drought-impacted 2019/20 crop.

New South Wales was the state most affected by the drought and has also seen the most dramatic turnaround in weather conditions this year. Improved planting conditions resulted in a huge boost in sown area in this State, and this has been followed by good rainfall and growing conditions throughout most of the crop season. As a result, expectations are for the largest wheat harvest in New South Wales in over a decade, with the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) in their September crop report forecasting a crop of 10.3 MMT (see figure 1), compared to 2.1 MMT and 1.9 MMT the previous two seasons. Since September, soil moisture and precipitation in New South Wales has continued to be beneficial to crop expectations. For the first time in five years New South Wales is expected to surpass Western Australia as the top wheat-producing state in Australia.

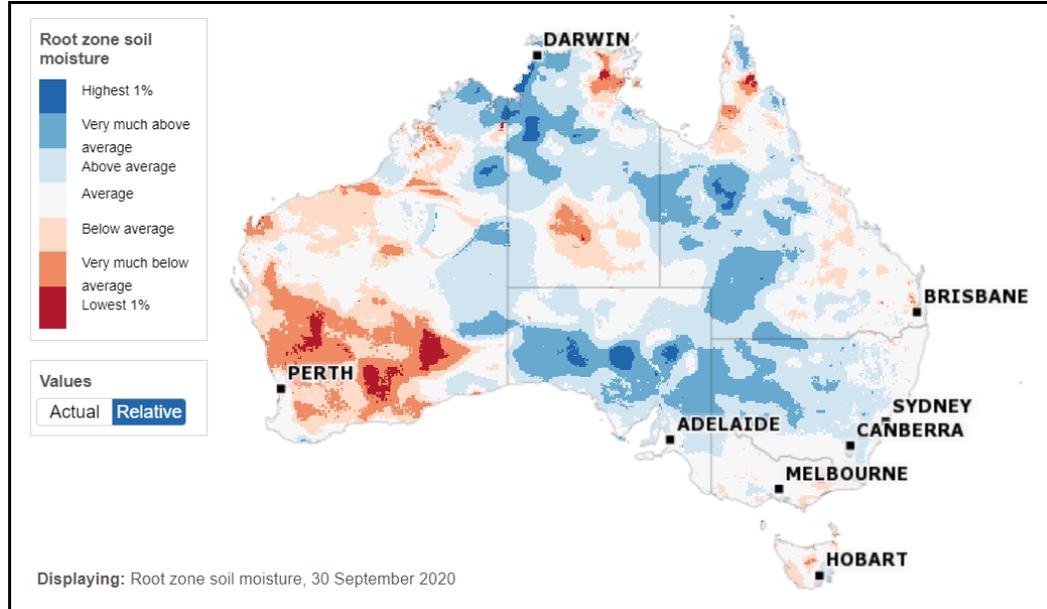
Conditions in Western Australia, however, have continued to deteriorate as a result of continued dryness. Soil moisture through September was low, and dry conditions have continued into October (see figures 2 and 3). The sharp difference between vegetative health in Western Australia and New South Wales can be seen in the normalized difference vegetation index (NDVI) map in figure 4.

Figure 1 - Production forecasts for New South Wales



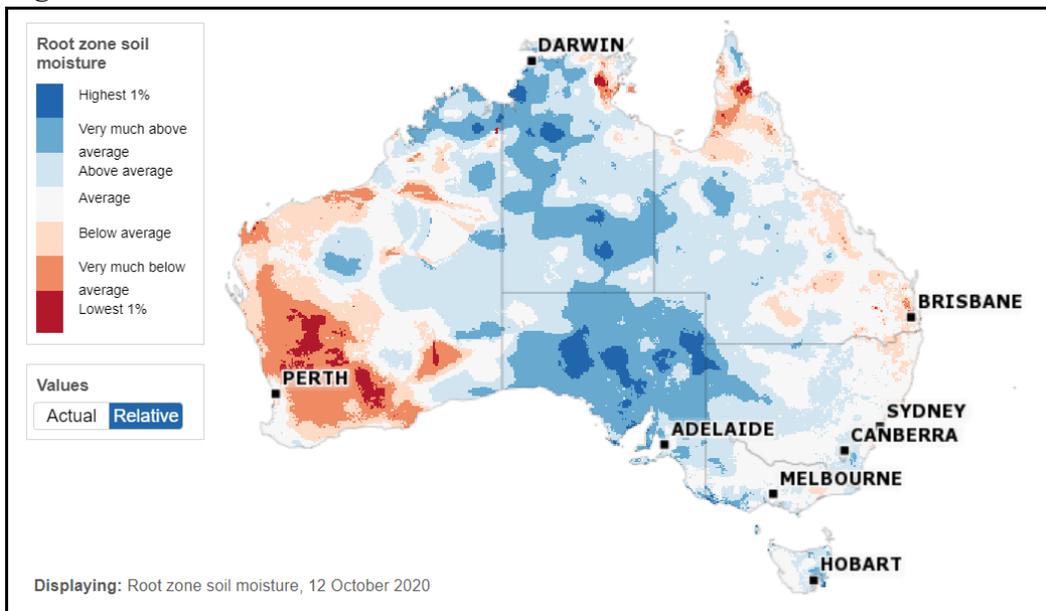
Source: Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) September Crop Report

Figure 2 - Relative Soil Moisture Levels in September 2020



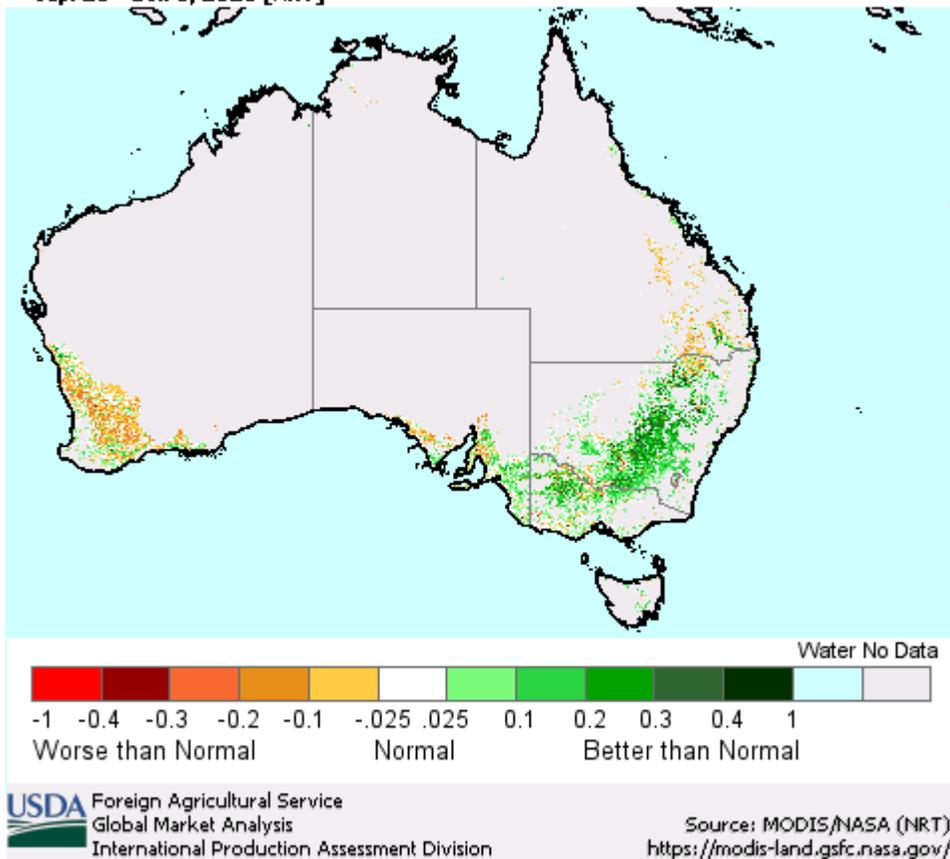
Source: Australian Bureau of Meteorology

Figure 3 - Relative Soil Moisture Levels as of mid-October



Source: Australian Bureau of Meteorology

Figure 4 - NDVI as of early October
NDVI Crop-masked Departure from Average (MODIS-Terra)
Sep. 29 - Oct. 6, 2020 [NRT]



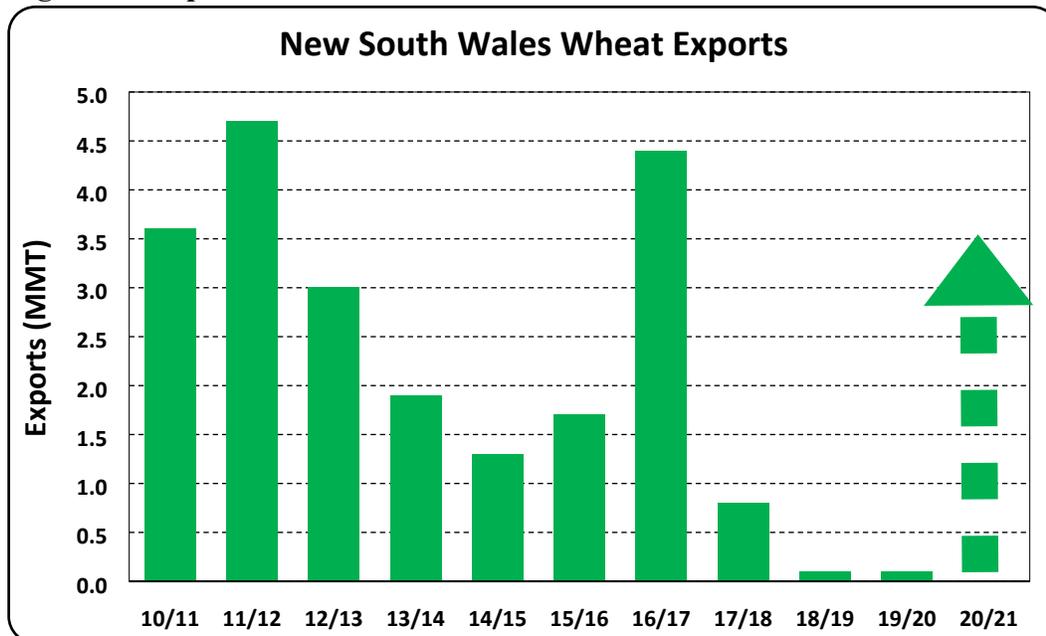
Consumption

FAS/Canberra's forecast for Australian wheat consumption in MY 2020/21 is unchanged from the official USDA forecast at 7.5 MMT, of which 4 MMT is for feed. This feed estimate is considerably below MY 2019/20 because of two major factors. First, drought-breaking rains in eastern Australia have boosted pasture growth and reduced the need for on-farm feeding of grain to livestock. In addition, the drought resulted in a reduction in overall livestock numbers, and feedlot numbers of cattle have also declined. Second, high Chinese tariffs on Australian barley is resulting in rising use of barley in domestic feed rations compared to wheat.

Exports

FAS/Canberra's forecast for wheat exports is 18.5 MMT in MY 2020/21, 500,000 metric tons below the official USDA forecast as a result of the lower production expectation. This is still nearly double the estimate for MY 2019/20. While during the past two years almost all exports were from Western Australia and South Australia, because of the anticipated bumper crop in New South Wales this year, it is expected to return as a major origin of exported grain. During the past two years, only 1 percent of exports came from this state (see figure 5).

Figure 5 - Exports from New South Wales

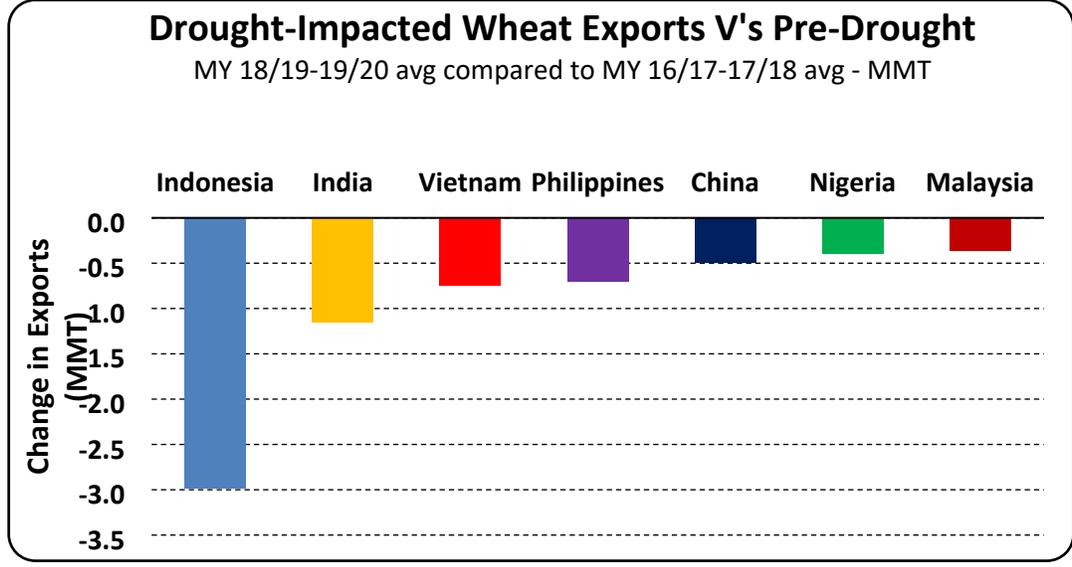


Source: Australia Bureau of Statistics

Australia's export recovery is expected to boost global competition, especially in Asia as Australian wheat flows are likely to recover to many nearby Southeast Asian markets. Indonesia has seen the most dramatic fall in Australian wheat purchases during the past two seasons, and other markets such as Vietnam, Philippines, and Malaysia have also seen decreases (see figure 6).

MY 2019/20 exports are on track to reach 9.5 MMT, nearly half a million tons above the previous year in spite of lower overall production. Exports have been supported by a drawdown of stocks as well as lower domestic consumption of wheat. China has seen the largest increase in Australian wheat export, with shipments up over 1.2 MMT from the previous marketing year.

Figure 6 – Change in Australian Wheat Exports by Destination



Source: Australia Bureau of Statistics

Stocks

Australia’s ending stocks are expected to grow from the low levels of last 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 crops and relatively strong exports.

Wheat Market Year Begins	2018/2019		2019/2020		2020/2021	
	Oct 2018		Oct 2019		Oct 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Australia						
Area Harvested (1000 HA)	10402	10402	10200	10200	13000	13000
Beginning Stocks (1000 MT)	5549	5549	5440	5440	3490	3490
Production (1000 MT)	17598	17598	15200	15200	28500	28000
MY Imports (1000 MT)	499	499	750	750	200	200
TY Imports (1000 MT)	313	313	820	820	200	200
TY Imp. from U.S. (1000 MT)	3	3	3	3	0	0
Total Supply (1000 MT)	23646	23646	21390	21390	32190	31690
MY Exports (1000 MT)	9006	9006	9500	9500	19000	18500
TY Exports (1000 MT)	9835	9835	10121	10121	18000	17500
Feed and Residual (1000 MT)	5700	5700	4900	4900	4000	4000
FSI Consumption (1000 MT)	3500	3500	3500	3500	3500	3500
Total Consumption (1000 MT)	9200	9200	8400	8400	7500	7500
Ending Stocks (1000 MT)	5440	5440	3490	3490	5690	5690
Total Distribution (1000 MT)	23646	23646	21390	21390	32190	31690
Yield (MT/HA)	1.6918	1.6918	1.4902	1.4902	2.1923	2.1538

(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 10.3 MMT, 200,000 metric tons (MT) below the official USDA forecast. As with wheat, this is primarily a result of the dry conditions in Western Australia, which is by far the largest barley producing state and typically accounts for about 40 percent of production. Overall, barley production is still forecast to rise 14 percent from MY 2019/20 as a result of much larger crops in eastern Australia.

Consumption

The forecast for MY 2020/21 barley consumption is unchanged from the official USDA forecast at 5.7 MMT. Overall grain feeding in Australia is down as a result of reduced livestock numbers and greater on-farm feed/pasture. However, because of lower barley prices and ample supplies available domestically (primarily due to the Chinese tariffs), barley is taking a significantly larger portion of domestic feed rations compared to wheat.

Exports

Australia's barley exports for MY 2020/21 are forecast at 4.2 MMT, 200,000 MT below the official USDA forecast as a result of a downward revision in production. Exports are still expected to be up 1 MMT from MY 2019/20. The major factor constraining any further increase in exports is the 80.5-percent tariff on Australian barley imposed by China's commerce ministry in May 2020. China typically accounts for about two-thirds of Australia's barley exports. In addition, in early September the Chinese government also restricted barley imports from Australia's largest exporter based on claims of pests being found in shipments. It is expected that Australian barley shipments will shift increasingly to other Asian markets and markets in the Middle East.

Stocks

Australia's ending stocks of barley are expected to continue to rise in MY 2020/21 as a result of larger production and the Chinese tariffs curtailing 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	2208	2208
Production (1000 MT)	8819	8819	9000	9000	10500	10300
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	12708	12508
MY Exports (1000 MT)	3687	3687	3200	3200	4400	4200
TY Exports (1000 MT)	3666	3666	3200	3200	4400	4200
Feed and Residual (1000 MT)	3500	3500	4000	4000	4200	4200
FSI Consumption (1000 MT)	1500	1500	1500	1500	1500	1500
Total Consumption (1000 MT)	5000	5000	5500	5500	5700	5700
Ending Stocks (1000 MT)	1908	1908	2208	2208	2608	2608
Total Distribution (1000 MT)	10595	10595	10908	10908	12708	12508
Yield (MT/HA)	1.9876	1.9876	2.2222	2.2222	2.3864	2.3409

(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 remains in line with the official USDA forecast of 1.7 MMT. This is a large increase from the MY 2019/20 estimate of 300,000 MT. The key sorghum areas of northern New South Wales and southern Queensland were impacted by a multi-year drought resulting in the low MY 2019/20 production. Rainfall throughout 2020 in the sorghum growing regions has generally been average to well-above-average. In conjunction with the ‘La Niña’ forecast by the Australian Bureau of Meteorology, it sets up a likelihood of high soil moisture in the lead up to planting, encouraging a sharply increased sorghum planting area and production.

Sorghum planting typically takes place between September and January, with harvest typically between March and June. Rainfall over the July to September period in northern New South Wales has been average to above-average. In southern Queensland and central Queensland rainfall has been average to below-average. However, growers will be buoyed by the forecast La Niña event. This is the culmination of measures leading to a strong likelihood of above-average rainfall in the tropical Pacific which has a strong influence on rainfall in Australia. The current La Niña conditions are forecast to continue to at least January 2021. The forecast in the sorghum growing window, for the November 2020 to January 2021, is broadly for an above-average chance of well-above-average rainfall.

Consumption

FAS/Canberra forecasts sorghum consumption in MY 2020/21 at 925,000 MT, which is lower than the official USDA forecast of 1 MMT. This is a result of a lower forecast for food, seed, and industrial (FSI) consumption. This FSI consumption is almost entirely related to fuel ethanol production from one

plant in Australia. Although there are expectations of some rise in sorghum use for ethanol, weak fuel ethanol mandates and low world crude oil prices are expected to constrain any further increase.

Overall grain feed consumption in Australia is expected to decline in MY 2020/21 primarily due to the reduced demand from the livestock feed industries. This is largely caused by the improvement in rainfall and subsequent increased pasture production for the grazing livestock industries. However, despite an overall decline in grain feeding, sorghum feed use is still expected to rise due to the combination of a larger sorghum crop, coupled with sorghum growing areas being near key livestock production areas and feedlots. The degree of the sorghum feed consumption increase will be dictated by the price differential to feed barley and feed wheat given the increased production of barley and wheat expected in New South Wales. The majority of feedlots are located in New South Wales and southern Queensland and well placed to take advantage of the anticipated large supply of grains expected in New South Wales. The MY 2020/21 feed grain consumption forecast remains unchanged at 800,000 MT.

The FAS/Canberra total consumption estimate for MY 2019/20 is 470,000 MT, 30,000 MT below the official USDA estimate. This is due to reduced consumption for ethanol production caused by firm sorghum prices and low crude oil prices. With weak fuel ethanol mandates in Australia fuel ethanol production is strongly influenced by market forces of input costs and competition from gasoline fuel prices.

Exports

The FAS/Canberra sorghum export forecast for MY 2020/21 is 600,000 MT, which is a 100,000 MT increase over the official USDA forecast. Because of limitations to even higher increases to domestic consumption as a result of curtailed ethanol demand and reductions in overall grain feeding in Australia, a larger portion of the higher 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.

The MY 2019/20 sorghum export estimate has been revised up by FAS/Canberra from 40,000 MT to 70,000 MT. Exports had almost entirely stopped from January to April 2020 as the previous season's stocks had been depleted. Although still relatively small, exports started to increase in May and continued to increase through to August 2020 with a total of 48,115 MT exports in this period, around two-thirds of the amount during the same period in the previous year. Exports are expected to remain subdued for the remainder of MY 2019/20.

In past years China has typically accounted for nearly all of Australia's exports, for use as livestock feed and for making traditional liquor.

Sorghum Market Year Begins Australia	2018/2019		2019/2020		2020/2021	
	Mar 2019		Mar 2020		Mar 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	550	550	150	150	600	600
Beginning Stocks (1000 MT)	273	273	287	287	47	47
Production (1000 MT)	1160	1160	300	300	1700	1700
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	1747	1747
MY Exports (1000 MT)	96	96	40	70	500	600
TY Exports (1000 MT)	91	91	40	70	500	600
Feed and Residual (1000 MT)	900	900	400	400	800	800
FSI Consumption (1000 MT)	150	150	100	70	200	125
Total Consumption (1000 MT)	1050	1050	500	470	1000	925
Ending Stocks (1000 MT)	287	287	47	47	247	222
Total Distribution (1000 MT)	1433	1433	587	587	1747	1747
Yield (MT/HA)	2.11	2.11	2.00	2.00	2.83	2.83

(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

Milled rice production is forecast at 300,000 MT in MY 2020/21, unchanged from the official USDA forecast. This is up from an estimated production of only 39,000 MT in MY 2019/20. The forecast increase is a result of a partial replenishment in irrigation water stores and well-above-average prices for rice offered to farmers for the upcoming season. The forecast production, if realized, would still be at about 70 percent of the 10-year average. Further improvements in water storage levels would be required for production to bounce back further.

Rice production varies greatly from year to year, primarily associated with changes in irrigation water availability and prices in the major rice production region in southern New South Wales. Production is also influenced by the differential in price between rice and alternate summer crops, particularly cotton. 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 is expected to result in farmers favoring rice production over cotton as their summer crop.

Rice production in Australia is very dependent upon irrigation water availability and price, along with returns available from alternate commodities. Water availability, for the majority of rice growers in Australia located in southern New South Wales, is primarily influenced by rainfall over the catchment areas supplying the Murrumbidgee and New South Wales Murray Irrigation systems.

There have been good rains in 2020 to date and as a result water storage levels have improved considerably from the same time the previous year. However, due to two consecutive years of drought, storage levels at the end of the previous irrigation season were very low and despite plentiful rains are yet to recover to pre drought levels (see table below).

Irrigation Catchment	Capacity (GL)	Storage Levels		Pre-Drought
		Oct 1, 2020	Oct 2019	Oct 2017
Murrumbidgee	2,654	81%	48%	97%
NSW Murray	6,861	64%	57%	86%

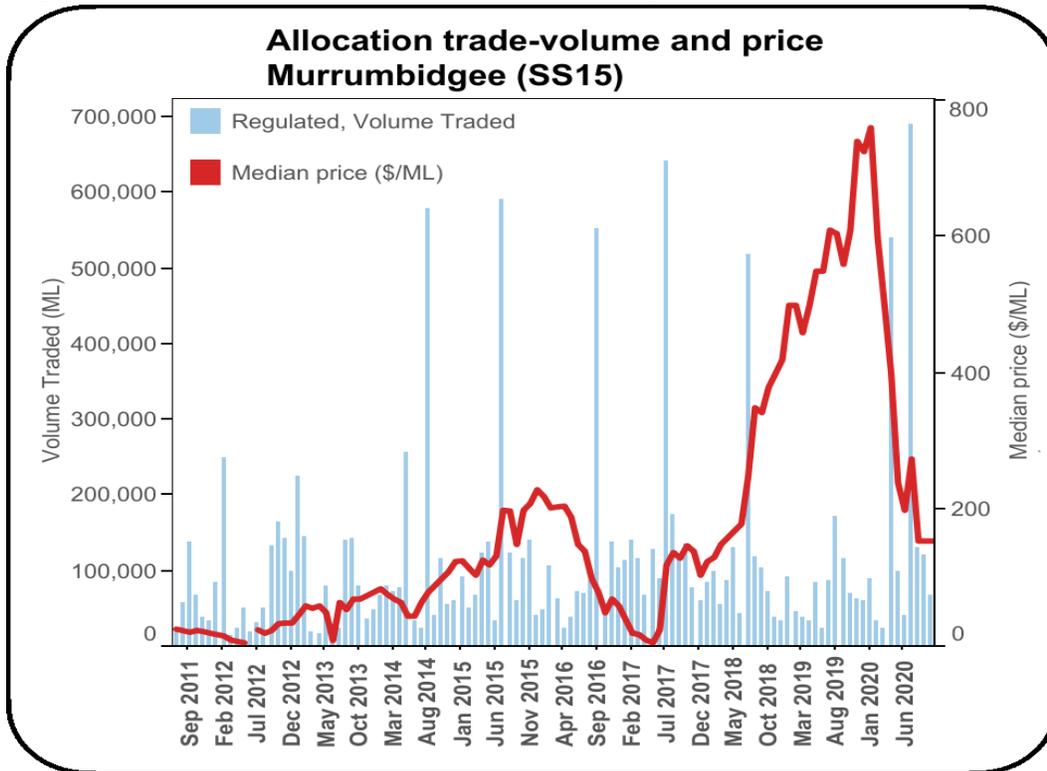
Source: WaterNSW, Goulburn Murray Irrigation

Rice is generally planted in October and most growers will make planting area decisions based on water availability and prices prior to planting along with taking into account alternate summer crop prices. Further improvements to water catchment levels and prices during the growing season will have little impact on rice planted area for the 2020/21 season.

The low irrigation water availability in MY 2018/19 and MY 2019/20 due to drought conditions had a major impact on rice production. Irrigation water prices were extremely high on the water exchange markets during the drought period.

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. Over the last 10 years there has been extreme variability in water prices impacting rice growers in both the Murrumbidgee Irrigation and New South Wales Murray Irrigation systems, particularly highlighted by the very high prices over the last two years (see figure 7). Water prices reached over AU\$700 per megaliter in November/December 2019 and have now reduced to around AU\$150 per megaliter (ML), but are still above the less than AU\$100 per ML in periods of ample water supply.

Figure 7 – Historical Water Trade volume and price in the Murrumbidgee Irrigation System



Source: Bureau of Meteorology

If the forecast for a La Niña is realized in the coming months the water catchment levels may further replenish during the irrigation season and 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.

Consumption

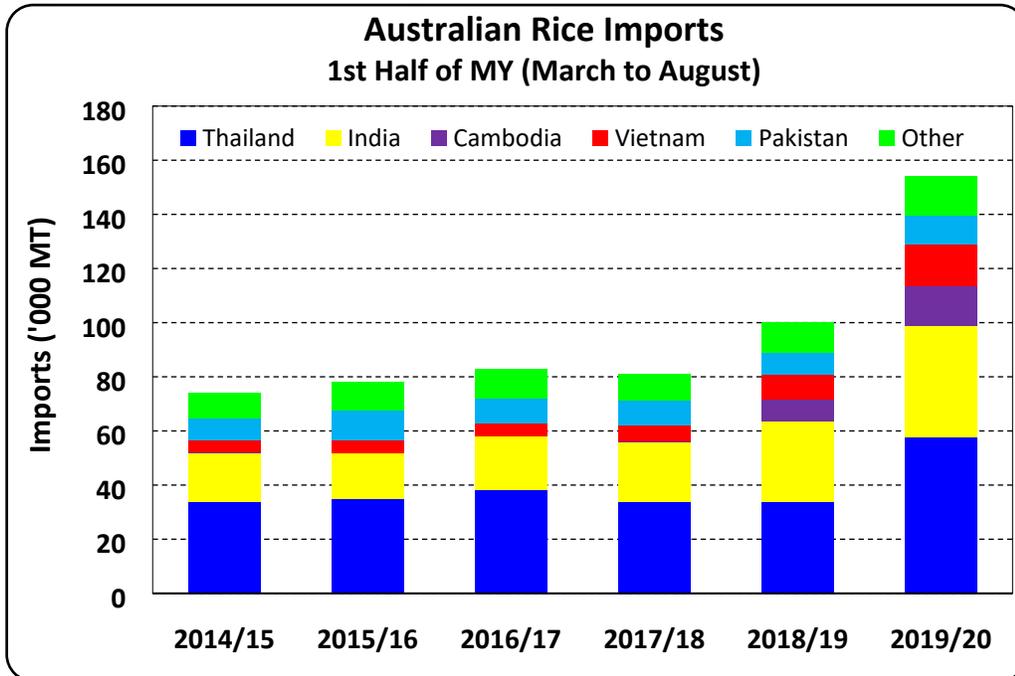
Forecast rice consumption by FAS/Canberra in MY 2020/21 is 330,000 MT and in line with the official USDA forecast. The forecast consumption is a moderate increase from the MY 2019/20 estimate of 320,000 MT. Domestic consumption had fallen moderately due to reduced domestic supply in MY 2019/20. However, in general rice consumption per capita in Australia is relatively stable and consumption demands are met by changes in trade.

Trade

Forecast imports remain unchanged and are expected to decline in MY 2020/21 to 200,000 MT from an estimated 300,000 in MY 2019/20. The forecast domestic production increase reduces the import requirements to meet consumption demands. 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 due to the multi-year drought has primarily been met by increases from India, Vietnam and

Pakistan. Imports during the first half of the marketing year (March to August 2020) have followed a similar trend and are up 54 percent.

Figure 8 – Australian Rice Import Trends



Source: Australian Bureau of Statistics

Forecast exports for MY 2020/21 remain at 150,000 MT, from an unchanged estimated low of only 45,000 MT in MY 2019/20. The increase in forecast exports is due to the increase in MY 2020/21 production. Exports for the March to August 2020 period has been merely 25,938 MT and on pact to achieve the MY 2019/20 estimate.

Stocks

After a multi-year drought rice stocks are forecast to recover somewhat in MY 2020/21 on the back of 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 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	8	8	5	5	40	40
Beginning Stocks (1000 MT)	232	232	52	52	26	26
Milled Production (1000 MT)	48	48	39	39	300	300
Rough Production (1000 MT)	67	67	54	54	417	417
Milling Rate (.9999) (1000 MT)	7200	7200	7200	7200	7200	7200
MY Imports (1000 MT)	219	219	300	300	200	200
TY Imports (1000 MT)	212	212	300	300	220	220
TY Imp. from U.S. (1000 MT)	10	10	0	0	0	0
Total Supply (1000 MT)	499	499	391	391	526	526
MY Exports (1000 MT)	107	107	45	45	150	150
TY Exports (1000 MT)	134	134	60	60	120	120
Consumption and Residual (1000 MT)	340	340	320	320	330	330
Ending Stocks (1000 MT)	52	52	26	26	46	46
Total Distribution (1000 MT)	499	499	391	391	526	526
Yield (Rough) (MT/HA)	8.375	8.375	10.8	10.8	10.425	10.425
(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