Required Report: Required - Public Distribution **Date:** November 02, 2023

Report Number: AS2023-0021

Report Name: Grain and Feed Update

Country: Australia

Post: Canberra

Report Category: Grain and Feed

Prepared By: Zeljko Biki

Approved By: Gerald Smith

Report Highlights:

Wheat and barley crops have had a great start to the season, with high soil moisture reserves and good rains in the fall. But rainfall has been well below average from July to September 2023. An El Niño weather pattern is ongoing, and the Australian Bureau of Meteorology forecasts a continuation of dry conditions in the coming months. Despite this, wheat production is forecast at 26.5 million metric tons (MMT) and exports at 18.9 MMT, both similar to the previous 10-year average. Barley production is forecast at 10.0 MMT, and exports of 5.5 MMT for MY 2023/24. Sorghum production is forecast at 1.3 MMT, among the lowest level in the last two decades, and exports are forecast at 1.1 MMT, due to strong export demand. Ample irrigation water and drier and warmer conditions rice growing will likely result in a big rice crop of 522,000 metric tons (MT), with imports falling to 200,000 MT and exports rising to 280,000 MT for MY 2023/24.

EXECUTIVE SUMMARY

Australia is expecting an average wheat crop and a below average barely crop (more so due to lower planted area rather than low yield) for MY 2023/24. This results from good rains in the fall during planting and having the benefits of high soil moisture reserves after a very wet spring in 2022, particularly in the major production areas of the eastern states. However, after this great start to the season, rainfall has been well below average from July to September 2023. An El Niño weather pattern has set in. The Australian Bureau of Meteorology forecasts a continuation of dry conditions in the coming months. Despite the lack of in-crop rainfalls, the winter crops have performed very well, mostly due to the soil moisture reserves at planting. Some early October 2023 rainfalls have been timely and will support the grain fill phase and prop up the forecast production.

The current El Niño conditions will significantly impact the dryland sorghum summer crop for MY 2023/24. With little soil moisture reserves and below-average rainfall forecast for the coming months, a substantial fall in planted area and production is expected for the forecast year. However, spring and summer storm rains, not unusual in the main producing regions, may offer some opportunistic planting of sorghum. Conversely, for rice, ample irrigation water is available, and the dry conditions will enable a big planting program, which typically starts in October which is now well underway. An El Niño also typically brings warmer than usual temperatures, which will benefit the rice crop.

Wheat production is forecast at 26.5 million metric tons (MMT), similar to the previous 10-year average but down from the record-breaking MY 2022/23 crop of 39.7 MMT. Barley production is forecast at 10.0 MMT, around 11 percent below the previous 10-year average but also well down from the previous years near-record production of 14.1 MMT. Wheat exports in MY 2023/24 are forecast to reach 18.5 MMT, also near the previous 10-year average of 18.9 MMT. Barley exports are forecast at 5.5 MMT for MY 2023/24, and increased competition for barley is expected, after China recently removed the tariffs on Australian barley that were imposed in May 2020.

Sorghum production in MY 2023/24 is forecast to decline significantly due to the impacts of the current El Niño weather event. Growers will be cautious with their sorghum planting program due to the lack of soil moisture at planting and the forecast of below-average rainfall in the coming months. Sorghum production is forecast at 1.3 MMT, among the lowest levels over the last two decades. Sorghum exports are forecast at 1.1 MMT for MY 2023/24 due to strong export demand and low domestic consumption.

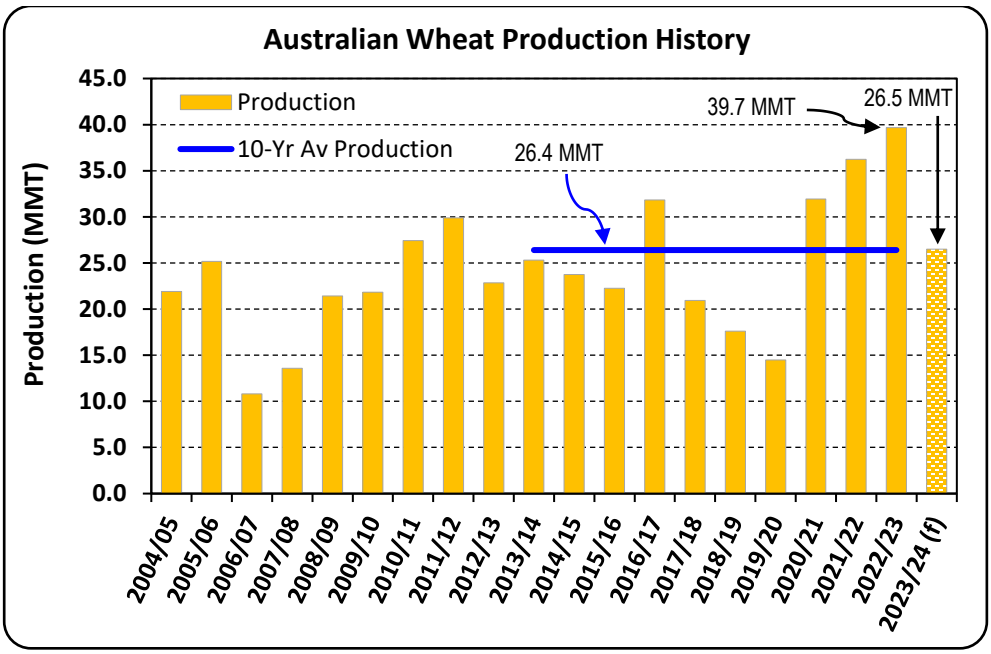
Plenty of irrigation water and a drier and warmer than usual forecast for the rice growing period, is a recipe that has built grower confidence for a big rice crop for MY 2023/24. With these conditions, rice growers expect to increase their planted area and drive growth in production to 522,000 metric tons (MT) in MY 2023/24 from an estimated 374,000 MT in the prior year. Imports of rice are forecast to decline to 200,000 MT, at around the typical pre-drought levels, and exports are forecast to increase to 280,000 MT, the highest since MY 2014/15.

WHEAT

Production

FAS/Canberra forecasts Australia's MY 2023/24 wheat production at 26.5 MMT, supported by good rains in the fall at planting and high soil moisture reserves. This great start has carried the crop well into the production season. However, rainfalls have been far below average from July to September 2023 period, which has broadly resulted in industry forecast for wheat softening somewhat over recent months. This FAS/Canberra forecast is in line with the previous 10-year average (26.4 MMT) but is slightly above the official USDA forecast of 26.0 MMT. This revision is after a timely boost from very good early October 2023 rainfalls across a large part of the wheat production areas in Australia. If the wheat production forecast is realized, this would be 13.2 MMT (33 percent) lower than the prior year record-breaking wheat crop of 39.7 MMT (see Figure 1).

Figure 1 – Australian Wheat Production History

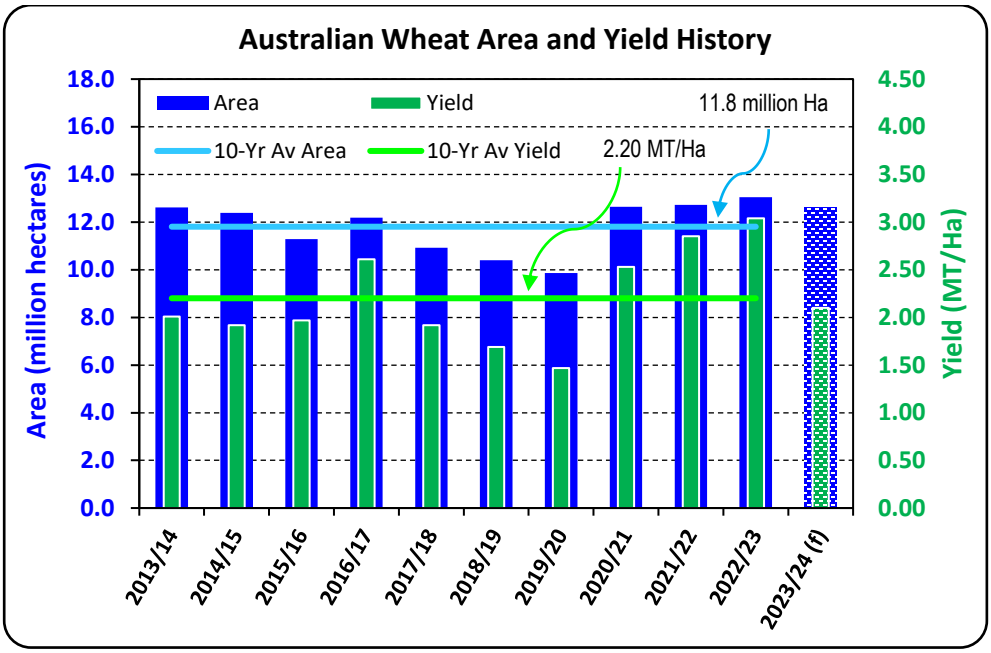


Source: *PSD Online / FAS/Canberra*

Note: *(f) = forecast*

The national average wheat yield is forecast to be five percent below the previous 10-year average, compensated by the seven percent above average planted area (see Figure 2). The harvested area is forecast at 12.6 million hectares for MY 2023/24, compared to 13.0 million hectares for last year's record-breaking production. The large area planted for MY 2023/24, although three percent smaller than for the previous record crop, was encouraged by a good start to the planting season. Despite falling world wheat prices, they remained firm, particularly compared to the much steeper fall in canola prices, an important alternate winter crop.

Figure 2 – Australian Wheat Area and Yield History

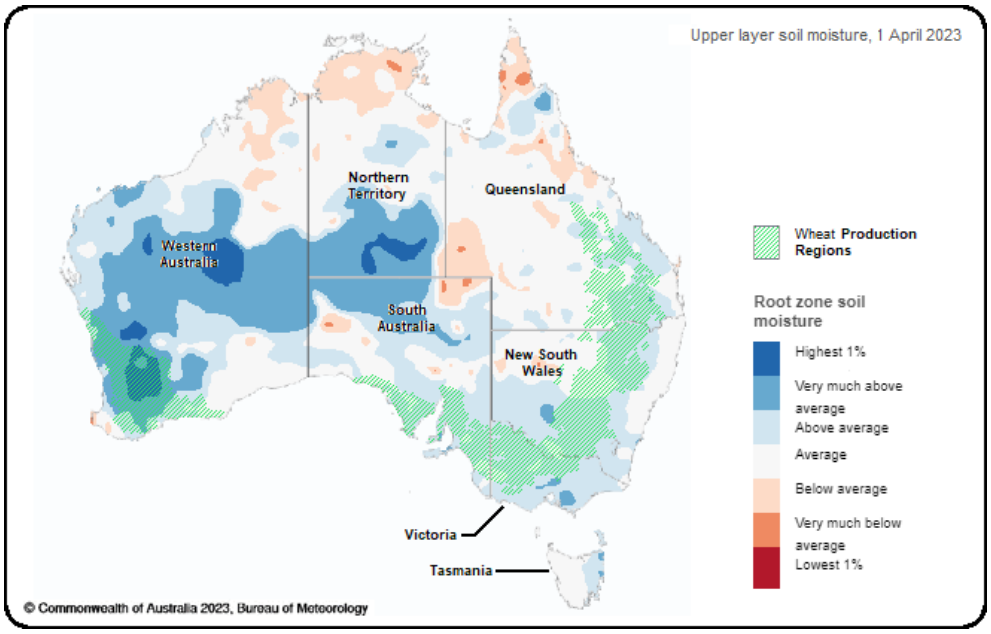


Source: *PSD Online / FAS/Canberra*
Note: *(f) = forecast*

At the start of the MY 2023/24 season, farmers were buoyed by the stored soil moisture from the previous well-above-average rainfalls in the previous spring period. During the early part of the planting period, at the start of April 2023, all the wheat-producing regions in Australia had above-average to well above-average upper-layer soil moisture (see Figure 3). With broadly good rainfalls in April and June 2023, other than northern parts of Western Australia's production areas, for northern New South Wales and southern Queensland, the national crop was in a position to achieve a well above average production result.

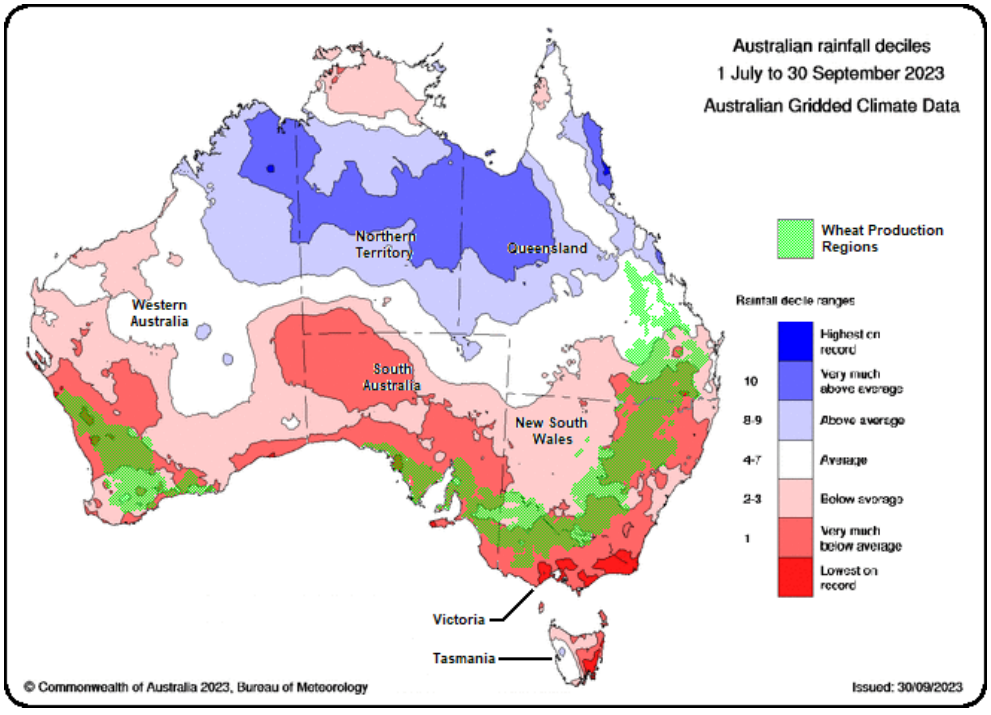
After a positive start for the national wheat crop, weather conditions promptly turned against the crop. Rainfall for the July to September 2023 period was far below average (see Figure 4). The previously mentioned northern regions, that did not receive the broader rainfalls in April and June 2023 have begun to suffer and will produce below-average, and in some cases, poor wheat yields. However, the majority of the wheat crop has been able to draw on soil moisture reserves, and at the end of September 2023, those crops are performing well, with estimates of average to above-average yielding crops.

Figure 3 – Australia Soil Moisture Map – April 1, 2023



Source: *Australian Bureau of Meteorology / FAS/Canberra*

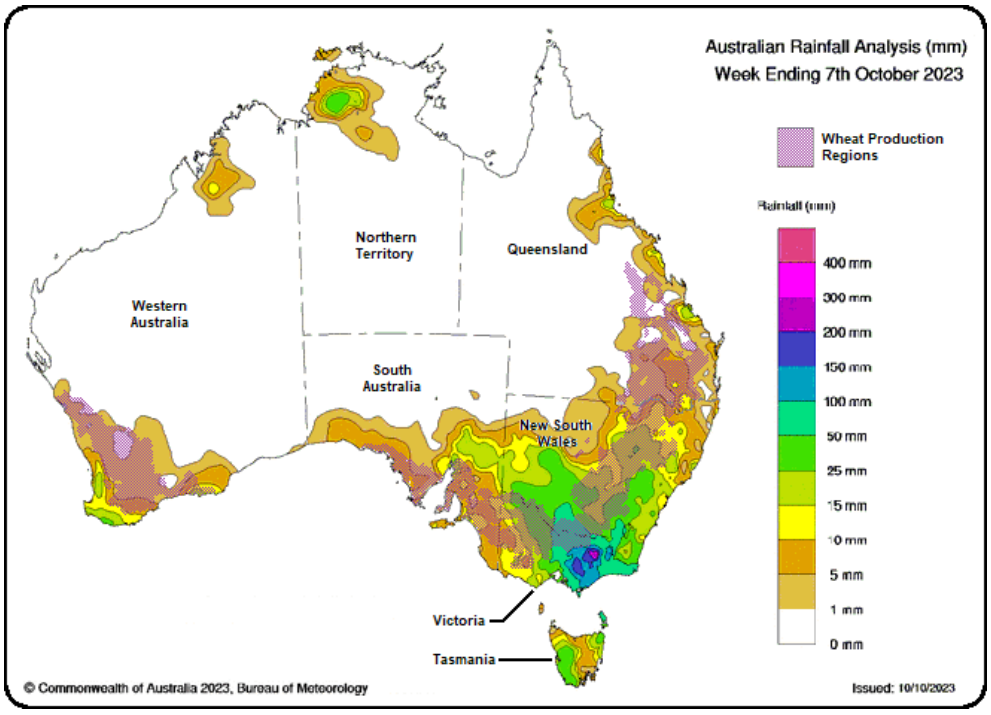
Figure 4 – Australia Rainfall Deciles – July to September, 2023



Source: *Australian Bureau of Meteorology / FAS/Canberra*

In early October 2023, there was some good rainfalls, but yet again, the more northern areas received little rain (see Figure 5). Central and southern New South Wales, Victoria, and southern Western Australian regions received good, timely rainfall to support the grain fill phase and boost their yield prospects.

Figure 5 – Australia Rainfall Deciles – Week 1, October, 2023



Source: Australian Bureau of Meteorology / FAS/Canberra

The wheat production estimate for MY 2022/23 is 39.7 MMT, in line with the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimate, now around nine months after the completion of harvest.

Consumption

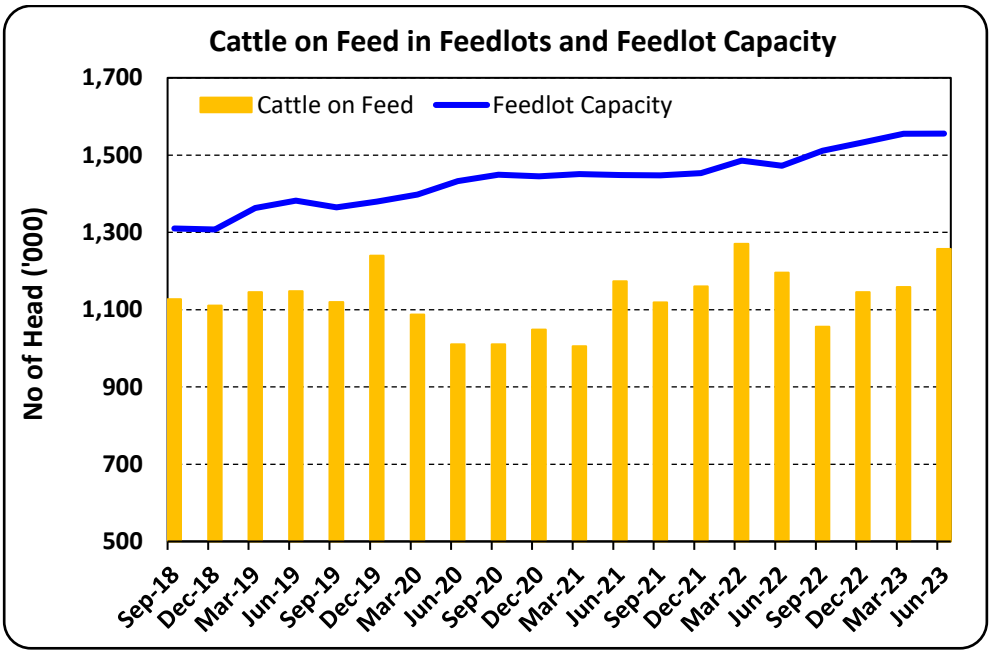
FAS/Canberra forecasts domestic consumption of wheat at 9.0 MMT in MY 2023/24, 1.8 MMT higher than the official USDA forecast. The dry conditions in southern Queensland and northern New South Wales have increased demand for feed grains. The FAS/Canberra forecast is for a six percent increase in the estimated wheat consumption for MY 2022/23, reflecting the lower grass feed available, driving an increase in demand for feed wheat.

A large part of the wheat demand by the livestock industry is for beef cattle feedlots and, to a lesser degree, the dairy industry, along with swine and poultry industries. The change in feed wheat consumption from year to year is mainly driven by beef cattle feedlots. Weather conditions for pasture production have generally been very positive over recent years which continued into the 2023 fall period. With good conditions over recent years, pasture production and fodder reserves are high -

particularly for the largest-cattle producing state of Queensland, which relies on tropical wet season rainfalls from December to April each year - which will carry through to the start of the MY 2023/24 year. However, the Australian Bureau of Meteorology announced an El Niño weather event in September 2023 for Australia, bringing warmer and drier than usual conditions. As mentioned earlier, rainfall has been well below average from July 2023 for most of the eastern states of Australia, and for northern New South Wales and southern Queensland areas, the dry conditions began months earlier.

Typically, in drought conditions, the beef cattle industry responds by reducing stocking rates on their grazing properties, which also usually ramps up the volume of cattle in feedlots. With these factors at play, there was a spike in the number of cattle on feed in feedlots in the June 2023 quarter (see Figure 6), driven by the more prolonged dry conditions in northern New South Wales and southern Queensland. With the announcement of El Niño and continued dry conditions, further growth of cattle on feed in feedlots is anticipated for the September 2023 quarter. These higher cattle numbers in feedlots are anticipated to continue well into MY 2023/24, prompting higher feed grain demand.

Figure 6 – Cattle on Feed in Feedlots and Feedlot Capacity



Source: Meat & Livestock Australia / Australian Bureau of Statistics

A further but less important contributor to the forecast growth in wheat feed demand, is the current El Niño conditions, which will likely result in much smaller planting of sorghum (mostly planted from October to December). This situation will result in even less contribution of sorghum towards livestock feed grain demands for MY 2023/24 from already low levels.

Domestic consumption for flour milling is expected to remain unchanged from recent past years at 3.5 MMT in MY 2023/24. However, with a rapid population growth across 2023 and 2024 forecast by the federal government, there is scope for some growth in wheat consumption for milling in the near term.

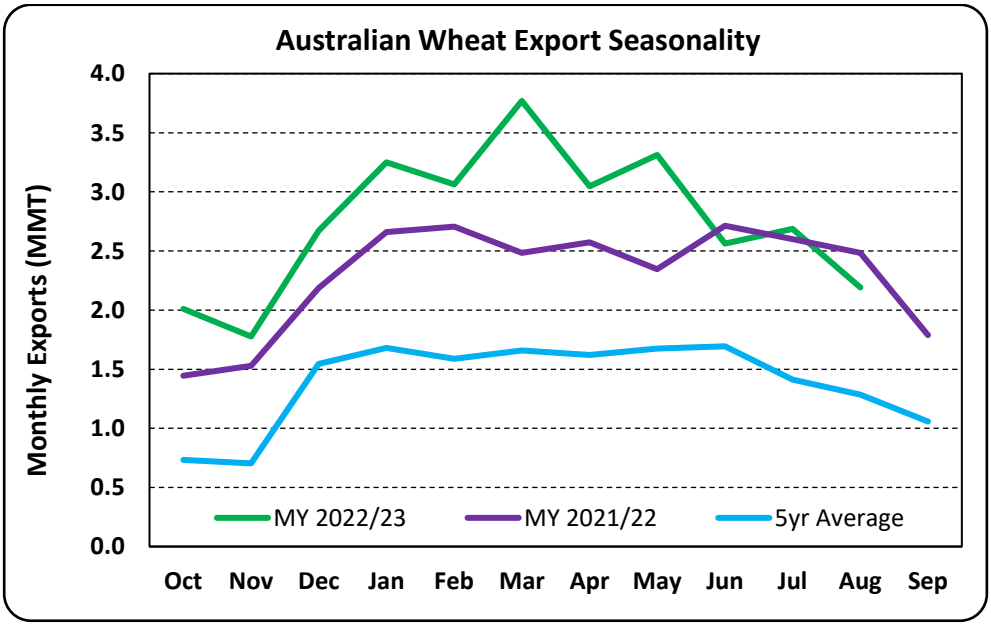
FAS/Canberra's wheat consumption estimate for MY 2022/23 remains unchanged at 8.5 MMT and is 0.5 MMT above the official USDA estimate. The higher FAS/Canberra estimate relates to the growth of cattle on feedlots. Furthermore, the growth started in the June 2023 quarter through the September 2023 quarter.

Exports

FAS/Canberra forecasts a far softer year of wheat exports in MY 2023/24 at 18.5 MMT, down 13.5 MMT from the prior year record export estimate. However, the forecast is still near the previous 10-year average of 18.9 MMT. The FAS/Canberra forecast is 0.5 MMT lower than the official USDA forecast for MY 2023/24 due to the anticipated larger domestic consumption demand for feed wheat. This forecast 13.5 MMT fall in wheat exports is directly related to the 13.2 MMT decline in production.

FAS/Canberra's MY 2022/23 wheat export estimate has been upward revised to 32 MMT from the previous estimate, but it is 0.5 MMT lower than the official USDA estimate. If realized, this would exceed the prior record of 27.5 MMT from the previous year by 16 percent. With only the September 2023 result yet to be determined for MY 2023/24, exports are at 30.3 MMT. Wheat exports typically tail off in the July to September period (see Figure 7), leading to the start of the new harvest. Recent months for MY 2023/24 have been tracking similarly to the prior year, and a continuation of this trend would result in and the final result being below the official USDA estimate.

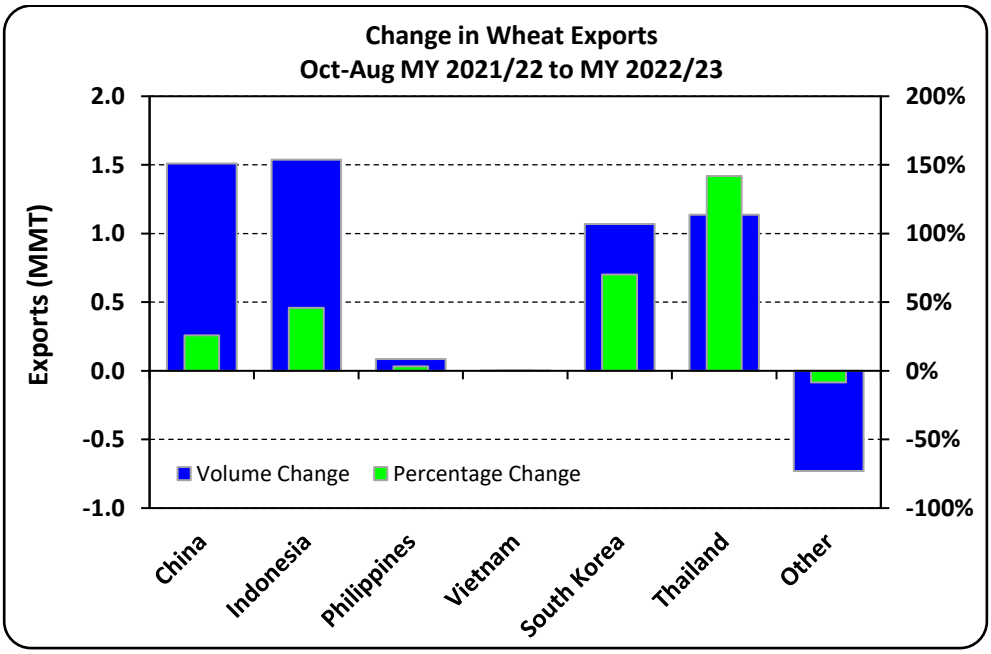
Figure 7 – Australian Wheat Export Seasonality



Source: Australian Bureau of Statistics

Australia has for many years had over 50 wheat export destinations. Of these, six core customers (China, Indonesia, Philippines, Vietnam, South Korea, and Thailand) have been increasing their share of Australia's wheat exports over the last five years. They have grown from a little over half to three-quarters of overall exports. Even in MY 2022/23, when exports have increased an estimated 16 percent from the previous year's record, exports to four of these six nations have each grown by over 1 MMT at the expense of other nations (see Figure 8).

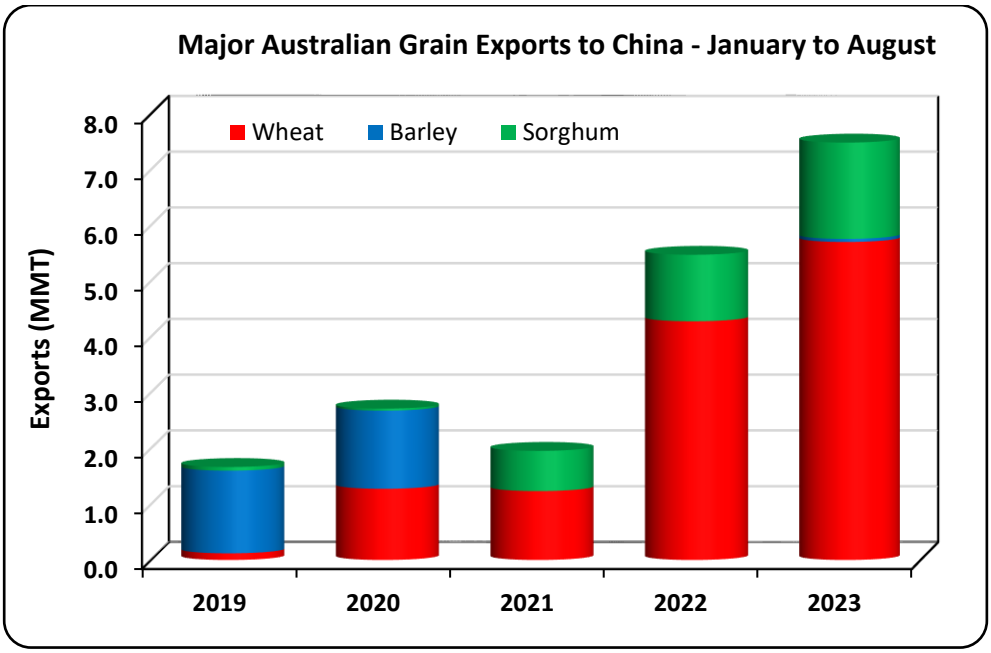
Figure 8 – Change in Wheat Exports – October to Aug 2021/22 to 2022/23



Source: Australian Bureau of Statistics

Exports of wheat to China for MY 2022/23 have grown to over 7 MMT and a quarter of Australia's overall wheat exports. There has been a substantial shift in the type and volume of grain exported from Australia to China over recent years. Exports of barley to China have ceased after China imposed a prohibitive duty on importing Australian barley. Still the volume of sorghum, and in particular wheat exports to China has grown considerably. Overall exports of these major grains for 2022 and 2023 (January to August) are two to four times higher compared to the same period in the three prior years (see Figure 9). In August 2023, China announced it was removing its import tariffs on Australian barley. In September 2023, there was a report that the first shipment of barley had left a Western Australian port for China. With the barley trade now recommenced, major grain exports from Australia to China may rise further.

Figure 9 – Major Australian Grain Exports to China – January to August



Source: Australian Bureau of Statistics

Imports

FAS/Canberra forecast imports of wheat in MY 2023/24 at 200,000 MT, in line with the estimate for MY 2022/23. Imports primarily consist of wheat products and pasta, and volumes for this purpose have been relatively stable in Australia.

Stocks

Australia's ending stocks of wheat in MY 2023/24 are expected to decline slightly after a forecast 33 percent fall in production from the record-breaking MY 2022/23 season and an anticipated increase in demand for livestock feed.

FAS/Canberra's estimate of the MY 2022/23 ending wheat stock is 2.8 MMT, in line with the official USDA estimate.

Table 1 - Production, Supply, and Distribution of Wheat

Wheat	2021/2022		2022/2023		2023/2024	
Market Year Begins	Oct 2021		Oct 2022		Oct 2023	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	12728	12728	13045	13045	12600	12600
Beginning Stocks (1000 MT)	3018	3018	3454	3454	2839	2839
Production (1000 MT)	36237	36237	39685	39685	26000	26500
MY Imports (1000 MT)	210	210	200	200	200	200
TY Imports (1000 MT)	196	196	205	205	200	200
Total Supply (1000 MT)	39465	39465	43339	43339	29039	29539
MY Exports (1000 MT)	27511	27511	32500	32000	19000	18500
TY Exports (1000 MT)	25958	25958	32341	32341	22500	21000
Feed and Residual (1000 MT)	5000	5000	4500	5000	3700	5500
FSI Consumption (1000 MT)	3500	3500	3500	3500	3500	3500
Total Consumption (1000 MT)	8500	8500	8000	8500	7200	9000
Ending Stocks (1000 MT)	3454	3454	2839	2839	2839	2039
Total Distribution (1000 MT)	39465	39465	43339	43339	29039	29539
Yield (MT/HA)	2.847	2.847	3.0422	3.0422	2.0635	2.1032

(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 2023/2024 = July 2023 - June 2024

BARLEY

Production

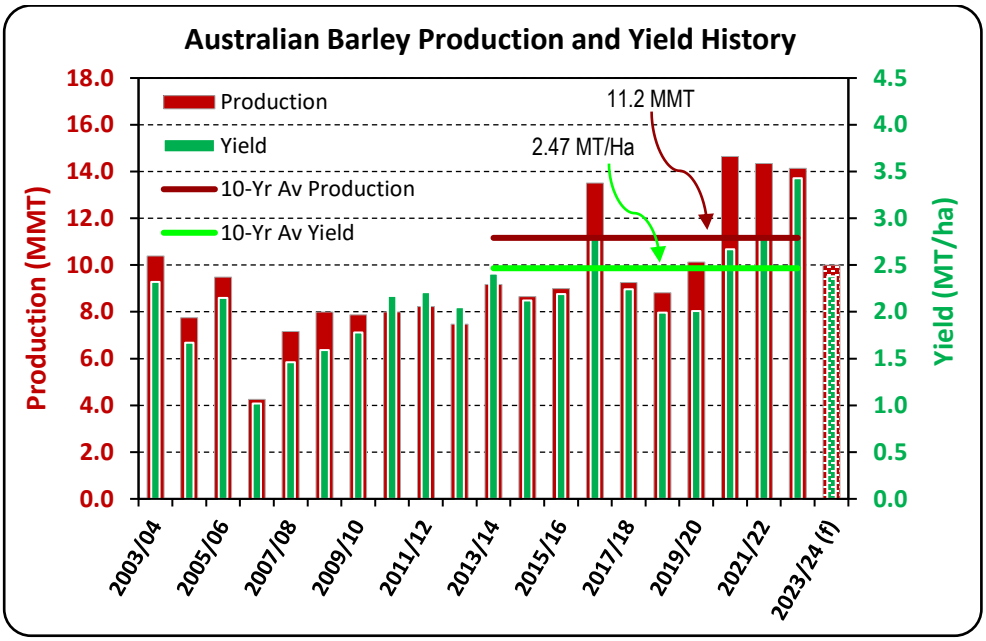
FAS/Canberra forecasts Australia's MY 2023/24 barley production unchanged at 10.0 MMT, 4.1 MMT below the MY 2022/23 estimate, but unchanged from the USDA official forecast. The forecast production would remain a relatively large crop but remain 11 percent below the previous 10-year average after the previous three seasons produced the three biggest crops on record (see Figure 10). The lower production is mainly related to the 16-percent lower forecast planted area relative to the previous 10-year average. Unlike wheat, the forecast production for barley remains unchanged despite the El Niño conditions currently impacting winter crop areas in the lead-up to harvest. Despite these conditions, yields are forecast at near the previous 10-year average (see Figure 10).

FAS/Canberra's MY 2023/24 yield forecast of 2.38 MT per hectare is slightly below the previous 10-year average of 2.47 MT per hectare but far below the prior year record of 3.43 MT per hectare.

In the eastern states, more barley tends to be grown in the more southern areas compared to wheat. This season, these more southern areas had had better in crop rainfall and benefited from the rainfall in early October 2023. These circumstances likely result in an average to above average yielding barley crop in the eastern states.

Somewhat similar circumstances for Western Australia, which typically produces around 40 percent of the national barley crop, whereby the northern parts of the winter crop-producing areas have had low rainfalls this season, but there have been better outcomes further south. Overall expectations are for barley yields in Western Australia to be at around the previous 10-year average for MY 2023/24.

Figure 10 – Australian Barley Production and Yield History



Source: *PSD Online / FAS/Canberra*

FAS/Canberra's barley production estimate for MY 2022/23 is 14.1 MMT and is in line with the official USDA estimate. Now, around nine months after the completion of harvest, the estimate is in accord with the ABARES estimate.

Consumption

FAS/Canberra forecast's MY 2023/24 barley consumption at 6.5 MMT, 0.5 MMT higher than the MY 2022/23 estimate, and 0.4 MMT higher than the official USDA forecast. Domestic consumption for malting purposes is relatively stable with livestock feed consumption being the primary variant from year to year.

Like feed wheat, the beef cattle feedlot industry and the dairy industry are major feed barley grain consumer. As mentioned for wheat, the dry conditions in northern New South Wales and southern Queensland, which have prevailed for months prior to the official El Niño announcement, has resulted in a growth in beef cattle on feed in feedlots for the June 2023 quarter. The current El Niño is expected to continue into 2024, and with this the demand for grain feed to support increased numbers of cattle on feed in feedlots in 2024 is anticipated.

A smaller component of domestic barley consumption of around 1.5 MMT is mainly for malting. This volume of consumption has remained relatively stable over the recent years.

FAS/Canberra's consumption estimate for MY 2022/23 is 6.0 MMT, 0.5 MMT lower than the official USDA estimate. With poultry and swine feed demand relatively stable from year to year, and beef cattle numbers on feed for MY 2022/23 tracking similar to MY 2021/22, FAS/Canberra estimates that barley consumption for the estimate year will remain the same as for the prior MY 2021/22 at 6.0 MMT.

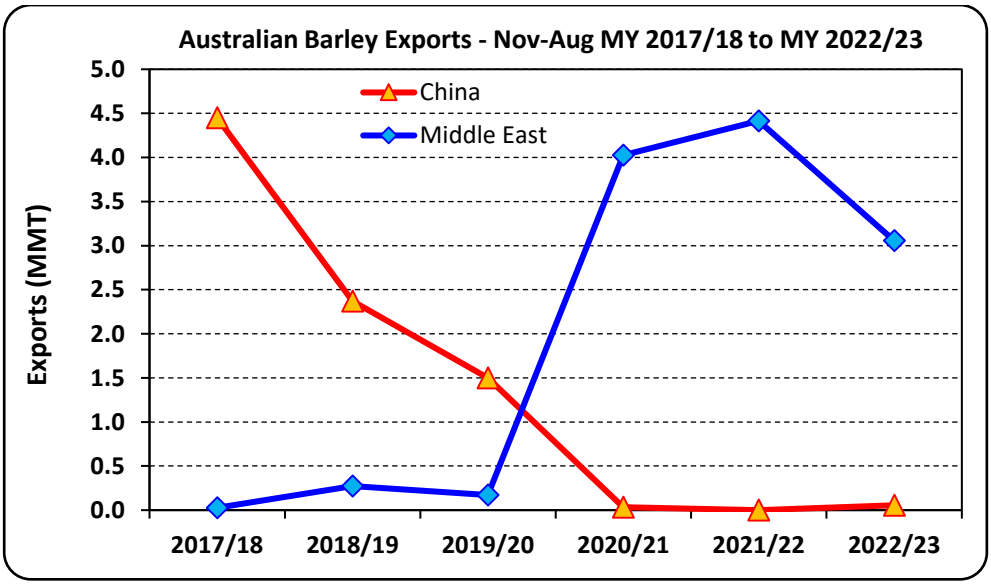
Exports

Australia's barley exports for MY 2023/24 are forecast at 5.5 MMT, which is in line with the official USDA forecast. This forecast is 1.5 MMT below the FAS/Canberra downward revised MY 2022/23 estimate of 7.0 MMT. This 1.5 MMT decline in exports for MY 2023/24 is driven by a 4.1 MMT-forecast reduction in barley production from the MY 2022/23 estimate. After the last three biggest years of barley production on record, ending stocks are forecast to decline significantly to support the forecast barley exports for MY 2023/24.

In past years, China has been a major importer of barley from Australia, dominating the trade at 60 to 80 percent of overall exports. After China imposed prohibitive duties on Australian barley imports in May 2020 (which diminished the MY 2019/20 outcome), there were concerns about Australia's capacity to find alternate markets. The Middle East, particularly Saudi Arabia, became a major importer of Australian barley from MY 2020/21 to MY 2022/23 (see Figure 11).

In August 2023, after the Chinese Ministry of Commerce reviewed its anti-dumping and anti-subsidy claims against imported Australian barley, it removed the 80 percent tariff that it had imposed. It was reported that the first shipment of barley from Australia to China since the removal of the tariff occurred in September 2023. The increased competition from China for Australian barley, particularly for new season grain for MY 2023/24 is expected to shift the current trade dynamics.

Figure 11 – Australian Barley Exports – Nov to Aug 2017/18 to 2022/23



Source: Australian Bureau of Statistics

FAS/Canberra's barley export estimate of 7.0 MMT for MY 2022/23 is 0.5 MMT below the official USDA estimate. Barley exports for the first ten months of MY 2022/23 (November 2022 to August 2023) have been strong, reaching 6.2 MMT. After accounting for typical trade seasonality for the final two months, the estimate is on track to reach 6.8 MMT. However, there is anticipated to be a small increase from the usual trend associated with the recommencement of trade to China, pushing the estimate for MY 2022/23 a little higher to 7.0 MMT.

Stocks

Australia's ending stocks of barley are forecast to decline substantially by 2.0 MMT for MY 2023/24. This is after carrying in higher than usual stock on the back of three successive big years of production. However, also contributing is the lower forecast production and as mentioned the increased competition for Australian barley from China.

Table 2 - Production, Supply, and Distribution of Barley

Barley	2021/2022		2022/2023		2023/2024	
Market Year Begins	Nov 2021		Nov 2022		Nov 2023	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	5095	5095	4127	4127	4200	4200
Beginning Stocks (1000 MT)	2518	2518	2848	2848	2985	3985
Production (1000 MT)	14337	14337	14137	14137	10000	10000
MY Imports (1000 MT)	0	0	0	0	0	0
TY Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	16855	16855	16985	16985	12985	13985
MY Exports (1000 MT)	8007	8007	7500	7000	5500	5500
TY Exports (1000 MT)	8233	8233	7500	7000	5500	5500
Feed and Residual (1000 MT)	4500	4500	5000	4500	4600	5000
FSI Consumption (1000 MT)	1500	1500	1500	1500	1500	1500
Total Consumption (1000 MT)	6000	6000	6500	6000	6100	6500
Ending Stocks (1000 MT)	2848	2848	2985	3985	1385	1985
Total Distribution (1000 MT)	16855	16855	16985	16985	12985	13985
Yield (MT/HA)	2.8139	2.8139	3.4255	3.4255	2.381	2.3810

(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 2023/2024 = October 2023 - September 2024

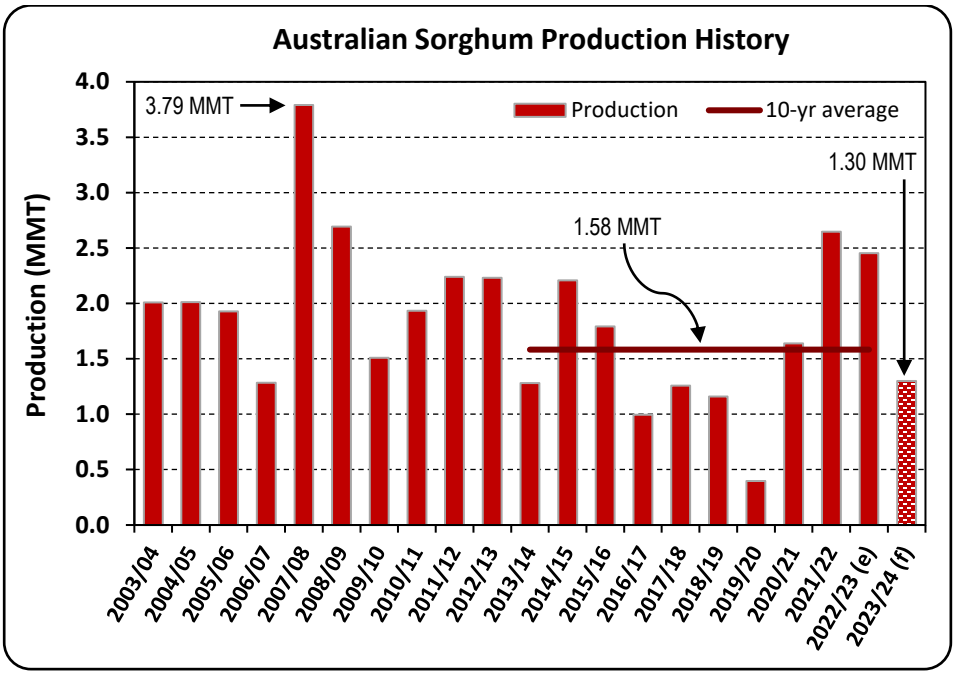
SORGHUM

Production

The FAS/Canberra sorghum production forecast for MY 2023/24 is heavily downward revised to 1.3 MMT from the official USDA forecast of 1.8 MMT and vastly down on the MY 2022/23 estimate of 2.5 MMT. This 28 percent downward revision of the forecast highlights the impacts of an El Niño, which has brought very dry conditions, particularly for the major sorghum-producing regions of southern Queensland and northern New South Wales. If realized, it would be among the lowest sorghum production over the last two decades and 18 percent below the previous 10-year average (see Figure 12).

The lower production is mainly due to a downward revised planted area to 500,000 hectares from the official USDA forecast of 600,000 hectares. This has been driven by the lack of soil moisture caused by the dry conditions over the recent winter and spring months.

Figure 12 – Australian Sorghum Production History

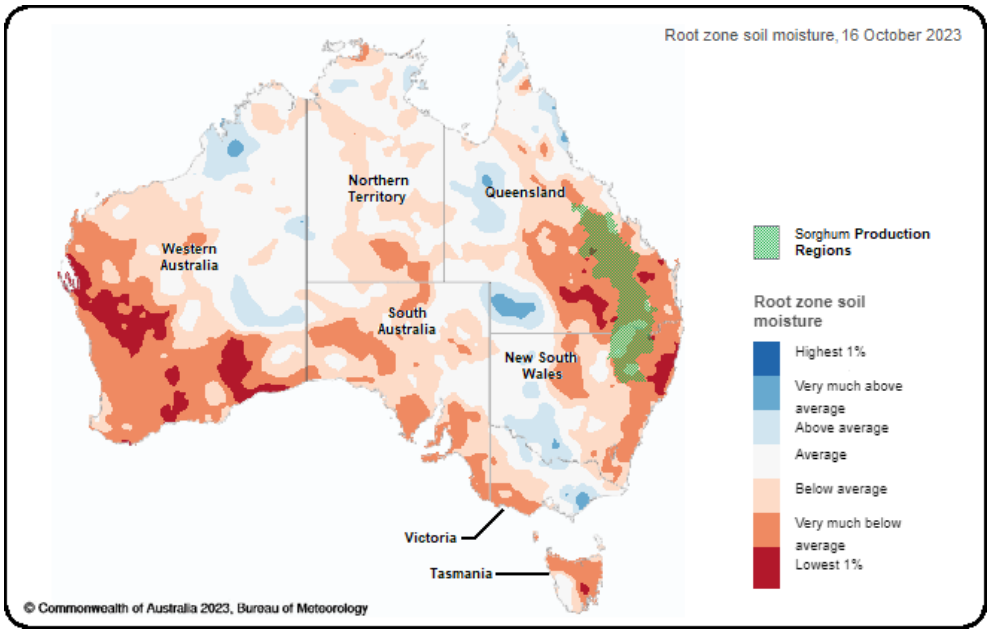


Source: *PSD Online / FAS/Canberra*

Queensland typically produces over two-thirds of Australia's overall sorghum production, much of which is in southern Queensland. Around one-third of the national sorghum crop is produced in northern New South Wales. In the main producing regions of southern Queensland and northern New South Wales, the main planting period is from October to December, with harvest generally between March and June. The northern parts of the sorghum growing regions of central Queensland have a warmer climate, which allows a greater planting window, typically from September to as late as February, which gives this region a greater capacity to be more opportunistic with their planting program and improving their chances of a successful crop outcome. Sorghum is typically harvested from March to June in the major production regions, but for late-planted crops in central Queensland, harvest can be later.

Sorghum-producing regions have generally had well-below-average rainfalls over the six months leading up to the start of planting in October 2023. Consequently, soil moisture levels in the middle of the main planting month of October are very low (see Figure 13). This creates a very disrupted planting with many producers opting to wait for a good rainfall before planting a reduced crop area. The main sorghum cropping areas have, in the past, been planted as late as December, but the later planting has a negative impact on yield potential.

Figure 13 – Root Zone Soil Moisture – as at October 16, 2023

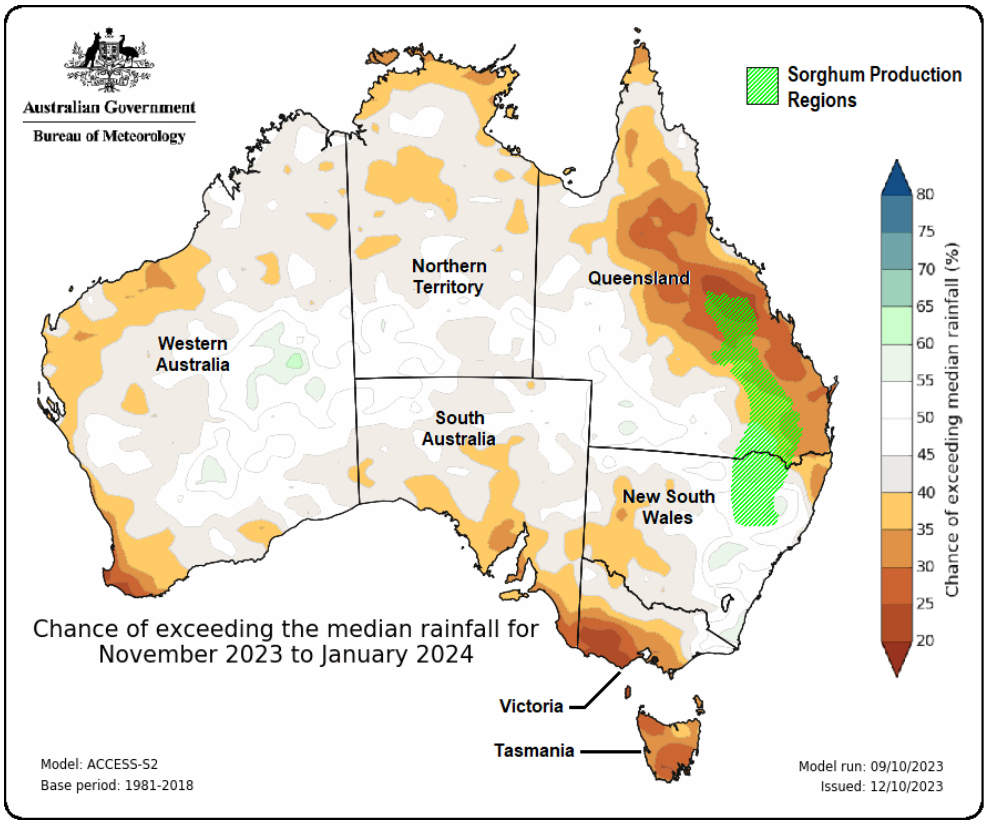


Source: Australian Bureau of Meteorology / FAS/Canberra

A further negative for sorghum growers is that in the next three months, there is little prospect of better than average rainfalls that could otherwise give confidence for a larger area of late planted sorghum. Nor will this rainfall forecast support the earlier planted sorghum with already little soil moisture. For the more northern growers, the Australian Bureau of Meteorology forecast is for a well-below-average chance of median rainfall over the next three months (see Figure 14). Still, growers can plant as late as February. With the current circumstances, sorghum yields are likely to be below average for MY 2023/24.

Cotton is the only other major summer crop competitor in the sorghum-producing areas. However, cotton is mainly grown under irrigation, whereas sorghum is typically a dryland summer crop. Cotton is a more profitable crop so it is unlikely that cotton producers would forego any of their available water to support sorghum production.

Figure 14 – Rainfall Forecast – November 2023 to January 2024



Source: Australian Bureau of Meteorology / FAS/Canberra

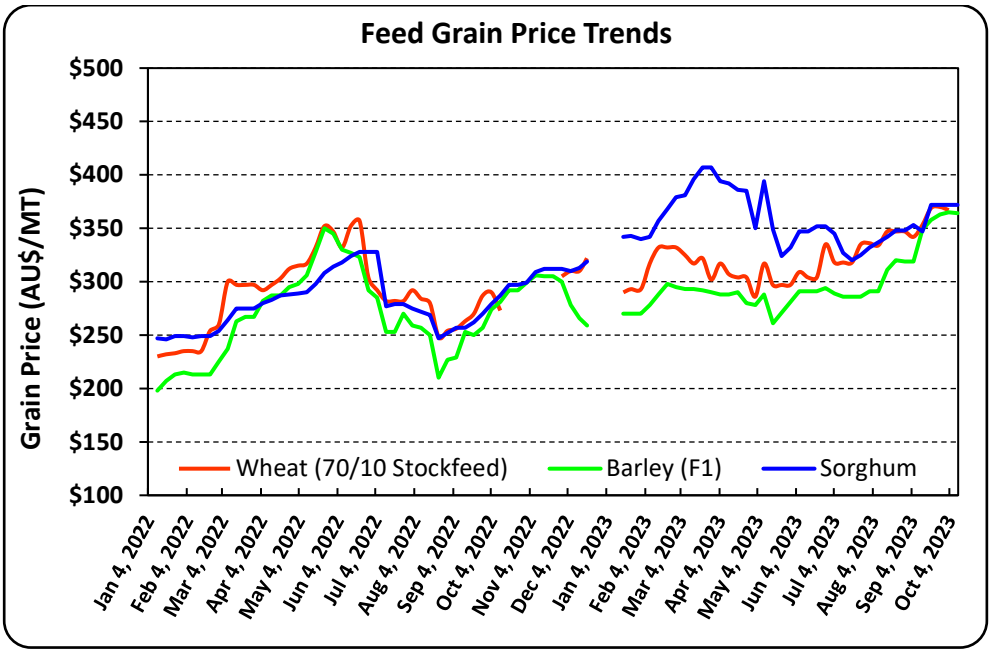
Consumption

FAS/Canberra forecasts sorghum consumption in MY 2023/24 at 160,000 MT and 100,000 MT lower than the official USDA forecast. This is also well down on the MY 2022/23 estimate of 310,000 MT. The lower forecast directly relates to the downward revised production forecast for MY 2023/24.

The beef feedlot industry in Australia is the main consumer of feed sorghum. The number of cattle on feedlots is expected to increase for the forecast year, increasing the demand for feed grains. On the other hand, consumption of sorghum is forecast to decrease. Production of the preferred feed grains, wheat, and barley, in the forecast year, is anticipated to be near long-term average levels. These white grains are produced in much higher volumes in Australia compared to sorghum and will be more available for domestic consumption.

Further contributing to the lower forecast sorghum consumption is that the price of sorghum compared to wheat and barley feed grains has been as high, and at times earlier in 2023, much higher (see Figure 15). Sorghum is considered to be of lower nutritional value than the white grains, so its consumption has diminished over many years. But sorghum has a place for the more northern beef feedlots where production and availability of the white grains are lower than for sorghum.

Figure 15 – Feed Grain Price Trends



Source: The Land newspaper

FAS/Canberra's sorghum consumption estimate for MY 2022/23 is 310,000 MT, and in line with the official USDA estimate. Domestic consumption of sorghum is low at under 15 percent of production which is driven by ample alternate feed grains produced in Australia, and strong export demand for sorghum.

Exports

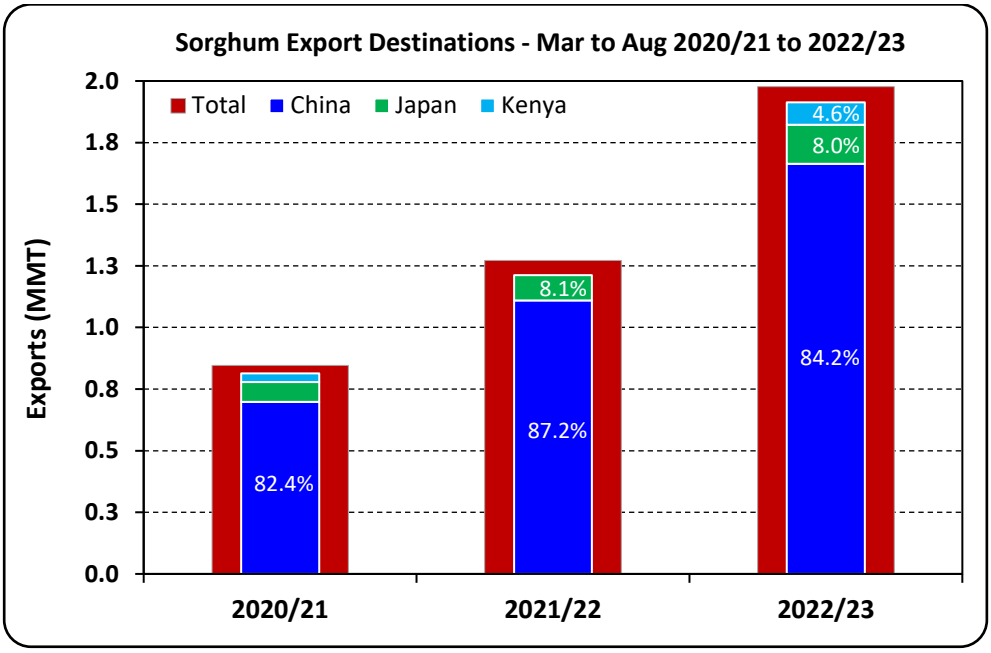
The FAS/Canberra sorghum export forecast for MY 2022/23 is 1.1 MMT, 27 percent below the official USDA forecast of 1.5 MMT. The lowering of the forecast is entirely related to the FAS/Canberra downward revision of the production forecast.

The rate of exports in the first six months of MY 2022/23 has been very strong, with almost 2.0 MMT exported. FAS/Canberra's sorghum export estimate is 2.3 MMT, which is in line with the official USDA estimate for MY 2022/23. The pace of exports is expected to rapidly diminish during the remaining six months of MY 2022/23 as sorghum stocks dwindle.

China is traditionally the major export destination of Australian sorghum. For the first six months of MY 2022/23, China has continued this trend with 84 percent of overall exports. Japan also accounts for eight percent of exports over this period, and there has been substantial growth in exports to Kenya at almost five percent of overall exports. These three nations accounted for 97 percent of exports for the MY 2022/23, whereas in the past, China and Japan typically accounted for around 95 percent of overall exports (see Figure 16).

Sorghum is an important feed grain for China, but it is also widely used to produce ‘Baijiu’, a whiskey like white liquor. Baijiu has been produced in China for over 1,000 years and is the most widely consumed spirit in the world.

Figure 16 – Sorghum Exports Destinations – March to August 2020/21 to 2022/23



Source: *Australian Bureau of Statistics*

Stocks

Socks are forecast to remain stable in MY 2023/24 but at a relatively low level mainly due to strong export demand.

Table 3 - Production, Supply, and Distribution of Sorghum

Sorghum	2021/2022		2022/2023		2023/2024	
Market Year Begins	Mar 2022		Mar 2023		Mar 2024	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	622	622	672	672	600	500
Beginning Stocks (1000 MT)	20	20	331	331	176	176
Production (1000 MT)	2648	2648	2455	2455	1800	1300
MY Imports (1000 MT)	0	0	0	0	0	0
TY Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	2668	2668	2786	2786	1976	1476
MY Exports (1000 MT)	2177	2177	2300	2300	1500	1100
TY Exports (1000 MT)	2267	2267	2300	2300	1700	1000
Feed and Residual (1000 MT)	150	150	300	300	250	150
FSI Consumption (1000 MT)	10	10	10	10	10	10
Total Consumption (1000 MT)	160	160	310	310	260	160
Ending Stocks (1000 MT)	331	331	176	176	216	216
Total Distribution (1000 MT)	2668	2668	2786	2786	1976	1476
Yield (MT/HA)	4.2572	4.2572	3.6533	3.6533	3	2.60

(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 2023/2024 = October 2023 - September 2024

RICE

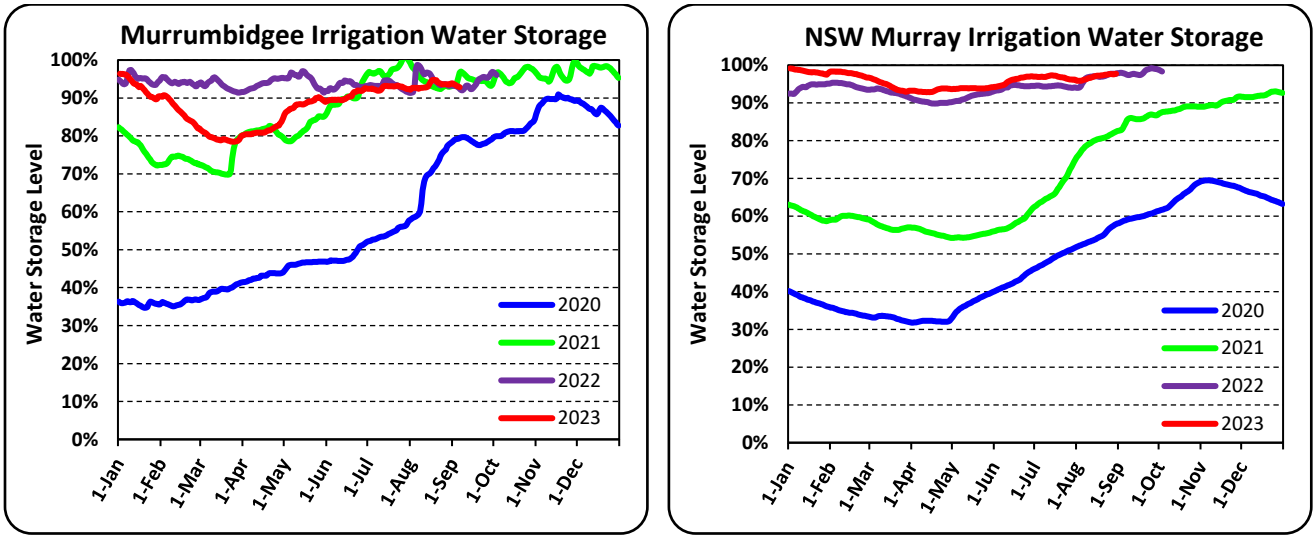
Production

FAS/Canberra forecasts milled rice production at 522,000 MT in MY 2023/24, a 40-percent increase over the MY 2022/23 estimate and, if realized, would be 46 percent above the previous 10-year average. The big increase in forecast production is primarily due to high irrigation water storage levels and ample irrigation water availability for the MY 2023/24 rice crop, along with favorable conditions at planting, mainly in October 2023. There was also ample irrigation water availability for the MY 2022/23 crop, but the unseasonable wet spring for that crop severely disrupted planting, resulting in less rice area and more than usual late planted rice which impacted yield.

The big increase in forecast production for MY 2023/24 is mainly due to an anticipated expansion in crop harvested area forecast to 70,000 hectares from the MY 2022/23 estimate of 50,000 hectares. This forecast increase in area has little to do with the usual major impediment, being irrigation water availability. Although the east coast of Australia is currently experiencing dry conditions associated with an El Niño weather event, irrigation water storage levels are very high due to the previous three years of well above-average rainfalls. The dams for the two key irrigation systems, Murrumbidgee and NSW Murray, are essentially full, even after the start of the MY 2023/24 rice crop irrigation season (see Figure 17).

Compared to the excessive rainfalls last spring that severely impacted the planting of the MY 2022/23 rice crop, the current El Niño driven dry conditions are enabling rice producers to sow their planned area of rice on time for the MY 2023/24 season.

Figure 17 – Irrigation Water Storage Levels



Source: *WaterNSW / FAS/Canberra*

Notes: *Murrumbidgee Irrigation Water Storage chart is the combination of Burrinjuck and Blowering Dams*
NSW Murray Irrigation is the combination of Hume Dam and Dartmouth Dam storage levels

FAS/Canberra's milled rice production estimate for MY 2022/23 of 374,000 MT has been revised up slightly from the previous estimate of 360,000 MT. The revised estimate, now well after harvest, is aligned with the official USDA estimate and the ABARES estimate for MY 2022/23.

Consumption

FAS/Canberra's forecast rice consumption for MY 2022/23 is 400,000 MT, 20,000 MT higher than the MY 2022/23 estimate, but 10,000 MT below the official USDA forecast. With a further increase in rice production to well above average production, providing ample domestic supply, along with population growth driven by a strong immigration program, it is anticipated that consumption will be well in excess of past average levels of around 365,000 MT.

FAS/Canberra's rice consumption estimate for MY 2022/23 is upward revised from 375,000 MT to 380,000 MT, which is in line with the official USDA estimate.

Trade

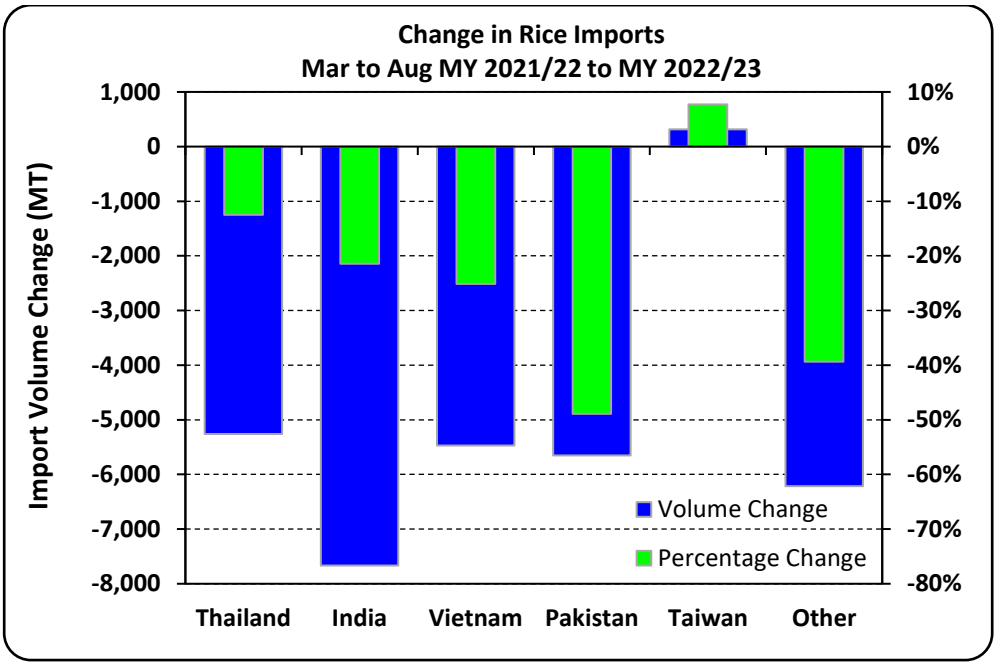
Imports

FAS/Canberra forecasts import of 200,000 MT in MY 2023/24, in line with the official USDA forecast and the MY 2022/23 estimate. If realized, this (along with the prior year estimate) would be the lowest level of imports since MY 2017/18 (six years). With ample domestic supply over recent years, Australia's current imports focus on rice types not produced domestically and lower-cost products to compete with domestic rice.

Imports for the March to August 2023 period are at 101,074 MT, and over the last five years the first six months of trade has equated to 51 percent of overall imports for the full marketing year. With no domestic rice supply concerns there is no disruption to past trends anticipated.

Thailand, India, and Vietnam are by far the largest rice suppliers to Australia, consistently at around 75 to 80 percent of total imports over recent years. Pakistan and Taiwan typically contribute a further 10 percent towards Australia's overall rice imports. With Australia's improving rice production, after drought impacts from 2017 to 2019, its reliance on imports for MY 2022/23 has diminished from the prior year. Imports of rice from all suppliers, other than Taiwan, which remained essentially unchanged, have decreased by substantial quantities for the first half of MY 2022/23 (see Figure 18). This trend is not anticipated to change for the remainder of the marketing year.

Figure 18 – Change in Rice Imports – Mar to Aug MY 2021/22 to 2022/23



Source: Australian Bureau of Statistics

Exports

FAS/Canberra's forecast for exports in MY 2023/24 of 280,000 MT is in line with the official UDSA forecast and is 30,000 MT higher than the downward revised MY 2022/23 estimate of 250,000 MT. The forecast increase in rice exports from the prior year (MY 2022/23) are largely driven by a rise in production. But there is also an expectation that the major rice mill will take the opportunity to carry-in an increased level of stock into the forecast year in preparation for future production shocks that may occur.

FAS/Canberra's estimate of exports of Australian rice for MY 2022/23 has been revised downwards to 250,000 MT from the official UDSA estimate of 275,000 MT. This is due to the pace of exports in the first six months being below expectations. Australian rice exports over the first six months of MY 2022/23 were at 116,640 MT. The rice harvest occurred during the early part of this period, so this volume was largely from rice produced in the previous MY 2021/22 larger harvest. With smaller rice production at the start of MY 2022/23 which will influence exports for the second half of the marketing year, FAS/Canberra anticipates pace of Australia rice exports will remain relatively stable for the remaining six months of the marketing year.

Stocks

Rice stocks are forecast to recover in MY 2023/24 towards more typical past levels on the back of a much-improved forecast rice crop production.

Table 4 - Production, Supply, and Distribution of Milled Rice

Rice, Milled	2021/2022		2022/2023		2023/2024	
Market Year Begins	Mar 2022		Mar 2023		Mar 2024	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	63	63	52	50	70	70
Beginning Stocks (1000 MT)	86	86	240	240	184	184
Milled Production (1000 MT)	498	498	374	374	522	522
Rough Production (1000 MT)	692	692	519	519	725	725
Milling Rate (.9999) (1000 MT)	7200	7200	7200	7200	7200	7200
MY Imports (1000 MT)	244	244	225	200	200	200
TY Imports (1000 MT)	249	249	225	200	200	200
Total Supply (1000 MT)	828	828	839	814	906	906
MY Exports (1000 MT)	218	218	275	250	280	280
TY Exports (1000 MT)	207	207	275	250	280	280
Consumption and Residual (1000 MT)	370	370	380	380	410	400
Ending Stocks (1000 MT)	240	240	184	184	216	226
Total Distribution (1000 MT)	828	828	839	814	906	906
Yield (Rough) (MT/HA)	10.9841	10.9841	9.9808	10.38	10.3571	10.3571

(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 2023/2024 = January 2024 - December 2024

Attachments:

No Attachments