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Report Highlights:
Australian winter crop production is forecast to decline significantly in 2017/18 due to less favorable seasonal conditions and in response to low world prices. Post forecasts wheat production at 24 million MT in 2017/18, down from a record 35 million MT in 2016/17. Barley production is forecast by Post at 8.5 million MT, declining from a record of 13.4 million MT in the previous year. Exports of wheat have been affected by a range of transport and logistical problems, and exports for 2016/17 have been revised down by Post. Sorghum production is expected by Post to fall to 0.8 million MT in response to an expected switch to alternative crops. Post forecasts rice production at 875,000 MT in 2017/18, due to continued water availability, with exports of 0.4 million MT.

EXECUTIVE SUMMARY

Australian winter crop production is expected to decline significantly in 2017/18 due to less favorable seasonal conditions than the previous year. In addition, very low world prices are expected to lead to a slight decline in the area of harvest in 2017/18 to total 12.8 million hectares. Wheat production is forecast by Post to fall from a record 35 million MT in 2016/17 to 24 million MT in 2017/18. Post forecasts barley production at 8.5 million MT in 2017/18, down from a record of 13.4 million MT in 2016/17. Yields of both wheat and barley are expected to decline in 2017/18 due to lower average rainfall and higher average temperatures across most growing areas.

Post has revised wheat export volumes in 2016/17 down from the official figure. Since mid-2016, exports of wheat have been affected by a range of transport and logistical problems. By contrast, barley exports are expected by Post to increase by slightly more than the official estimate for 2016/17 due to increasing monthly shipments. Stocks of barley are expected to increase in 2016/17, in line with the official estimate. Domestic consumption of feed wheat is expected to increase in 2016/17 due to plentiful supply and stock re-building that is currently taking place. Post expects stocks of wheat to increase in 2016/17 because of shipping delays and the record size of the crop for that year. This revision is 1 million MT above the official estimate for stocks in 2016/17.

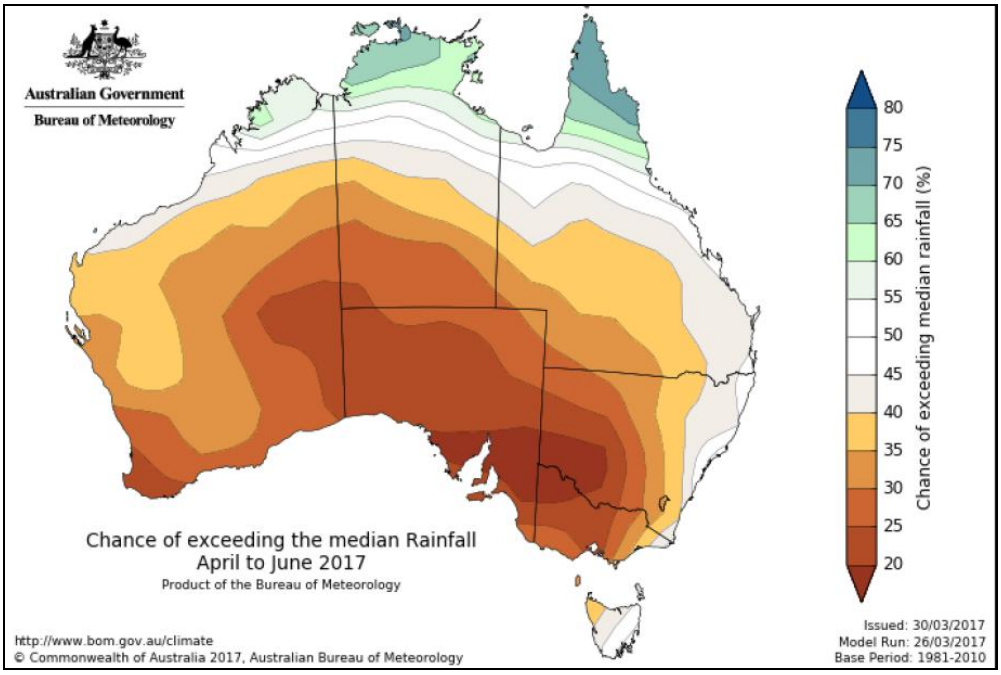
Sorghum production in 2017/18 is forecast by Post to fall sharply to 0.8 million MT in response to a switch to alternative crops such as cotton and pulses and less favorable seasonal conditions. Post forecasts rice production at 875,000 MT in 2017/18, with increased exports of 0.4 million MT. The sustained lift in rice production in 2016/17 is forecast to continue in 2017/18 because of the greater availability of lower cost water in New South Wales (NSW) growing areas.

SEASONAL OUTLOOK

Following very favorable seasonal conditions for the 2016/17 winter crop in Australia, the outlook for 2017/18 appears much less positive. Rainfall forecasts by the Bureau of Meteorology (BOM) for the three months from April to June 2017 are for below average rainfall across most of Australia's winter and summer cropping regions (chart 1). In addition the BOM has forecast above average temperatures for most cropping regions for the three months to June 2017 and the rest of the year (chart 2).

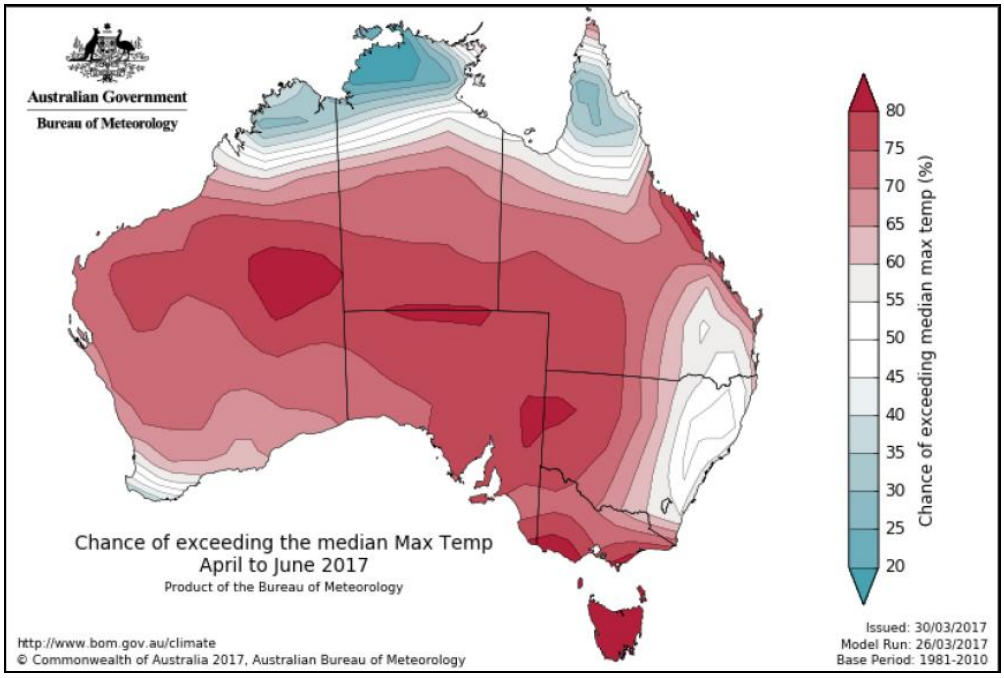
In the last week of March 2017, Queensland received significant rainfall totals, associated with Tropical Cyclone Debbie, especially along the east coast of Queensland between Bowen and Gladstone. This precipitation was positive for soil moisture in these regions and could encourage increased plantings of summer crops. The heavy rainfall associated with the cyclone will increase dam storage levels in this region. The outlook for irrigated crops such as rice in Southeastern Australia is more positive as water storage levels in the Murray–Darling Basin (MDB) were at 68 percent of total capacity in later March 2017 (chart 6).

Chart 1: Chance of exceeding the median rainfall in the three months to June 2017



Source: Bureau of Meteorology (2017).

Chart 2: Chance of exceeding the median temperature in the three months to June 2017



Source: Bureau of Meteorology (2017).

Commodities:

Wheat

Barley

Sorghum

Rice, Milled

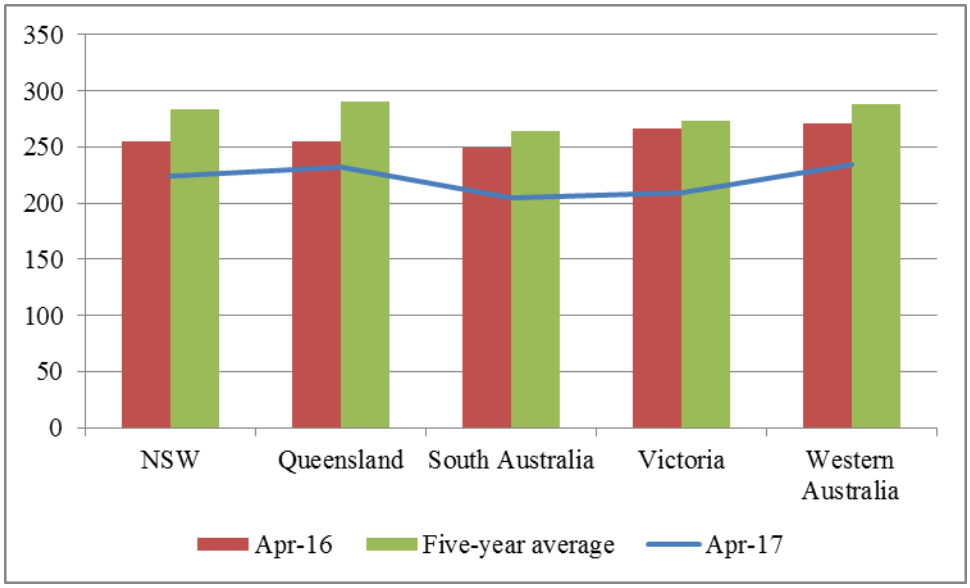
WHEAT

Production

Post forecasts Australian wheat production for 2017/18 to decline to 24 million MT, after reaching a record 35 million MT the previous year. In 2016/17, average wheat yields increased from a 5-year average below 2 MT a hectare to 2.7 MT a hectare, benefitting significantly from favorable seasonal conditions. However, more modest yields of around 1.9 MT a hectare are expected in 2017/18 due to the less favorable seasonal outlook, including projections of lower average rainfall. Farmers have also been influenced by the continuing fall in wheat prices on world markets (chart 3), and alternative crops such as canola are expected to become more popular.

Wheat is the major winter crop in Australia, with sowing starting between April and July. Harvesting starts in central Queensland during August and progresses down the east coast to Victoria, finishing during January. On the west coast, the wheat harvest starts during October and is completed during January. The main producing states are Western Australia, NSW, South Australia, Victoria and Queensland. Western Australia usually accounts for over 40 percent of exports, while a greater proportion of the east coast wheat harvest goes to domestic consumption.

Chart 3: Price per MT for Australian wheat (APW1) delivered to port, 2012-2017



Source: ABARES

Consumption

Post forecasts wheat total domestic consumption at 7.96 million MT in 2017/18, down on a revised estimate of 8.96 million MT for 2016/17. This decline represents an expected return to normal consumption of feed wheat after a record harvest. The consumption figure for 2016/17 has been revised upwards by Post because of the plentiful supply of feed wheat, which is likely to boost demand. Even with relatively low domestic prices, sales to pig, chicken and dairy industries could be expected to increase, especially as international prices remain very low, while port congestion and costs have increased.

Wheat is Australia's major winter crop and is used mainly in the production of breads, noodles and pastas, while lower grades of wheat are used as stockfeed. Major types of wheat include Prime Hard, Hard, Premium White, Standard, Soft and Durum, based on protein, grain size and moisture content. Wheat consumption in Australia has been stable in recent years, and Post expects this trend to continue. Around 70 kg of flour are consumed in Australia per capita, and the domestic market is mature.

Trade

Post forecasts that Australian wheat exports in 2017/18 at 18 million MT, down over 20 percent on the previous record year due to lower production, the continued strong Australian dollar, and possible continued shipping delays. Post estimates that exports in 2016/17 will be 23 million MT in the marketing year from October 2016 and 22 million MT respectively for the trade year from July 2016. These revisions are below the official estimates due to ongoing port and logistical problems, which have continually hampered wheat exports and could continue for the rest of the year. Post notes that significant variations have occurred in the size of monthly shipments.

Table 1: Australian exports of wheat, 2011-2016 ('000 MT)

Country	2011	2012	2013	2014	2015	2016
Indonesia	3,593	4,594	3,665	4,072	4,153	3,469
China	794	2,283	870	1,198	1,378	1,499
Vietnam	2,403	1,994	1,347	1,377	1,306	1,507
Yemen	713	859	816	850	1,057	782
South Korea	1,935	2,072	893	1,062	1,054	1,056
Malaysia	952	934	721	1,051	891	873
Japan	1,263	1,369	951	933	882	839
Philippines	1,281	1,675	355	550	673	1,026
India	1	4	13	22	438	919
Other	6,798	7,792	8,406	7,161	5,241	4,167
World	19,733	23,576	18,037	18,276	17,073	16,137

Note: Calendar years
Source: Global Trade Atlas

The 2016/17 harvest year saw a strong lift in overall Australian wheat production due to favorable seasonal conditions and higher yields. However, given the world oversupply of wheat, Australian exporters have faced lower prices and greater competition, even in traditional markets. In Indonesia, for example, Australian higher grade wheat holds one third of the market due to the noodle industry's preference for Australian standard white wheat and because of reliability of supply. However, Australia's share of the feed wheat market has declined in recent years, as has its overall market share in Indonesia.

In addition, a substantial share of Australian wheat is exported in bulk cargoes, especially from Western Australia, although no official statistics are available. From the second half of 2016, many containers were reportedly diverted for large pulse and oilseed export cargoes. These grain exports have higher unit values and were given priority by shipping companies, which also introduced higher fees during peak periods. As a result, there were considerable logistical and transport problems in exporting the wheat crop from the second half of 2016, particularly for traditional exports of milling wheat into Southeast Asia.

Stocks

In recent years, investment in farm storage facilities has been encouraged by improved tax provisions of grain has increased, and as a result on-farm storage of grain is likely to have increased. Total storage capacity including off-farm commercial silos may exceed 15 million MT. Post notes that new port facilities were built over the past five years have also improved the export and storage capacity for exports, with 4 million MT of capacity added in this period. Due to comparatively low wheat prices, a higher share of lower grade wheat from the 2016/17 harvest is likely to be held as stocks. Post estimates that stocks will increase to 8.8 million MT, above the official estimate of 7.8 million MT.

Table 2: Production, Supply and Demand Estimates: Wheat ('000 HA and '000 MT)

Wheat	2015/2016		2016/2017		2017/2018	
Market Begin Year	Oct 2015		Oct 2016		Oct 2017	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	12,800	12,800	12,900	12,900	0	12,800
Beginning Stocks	4,670	4,670	5,639	5,639	0	8,829
Production	24,168	24,168	35,000	35,000	0	24,000
MY Imports	150	150	150	150	0	150
TY Imports	154	154	150	150	0	150
TY Imp. from U.S.	2	2	0	0	0	0
Total Supply	28,988	28,988	40,789	40,789	0	32,979
MY Exports	16,124	16,124	25,000	23,000	0	18,000
TY Exports	15,782	15,782	23,000	22,000	0	18,000
Feed and Residual	3,800	3,800	4,500	5,500	0	4,500
FSI Consumption	3,425	3,425	3,460	3,460	0	3,460
Total Consumption	7,225	7,225	7,960	8,960	0	7,960
Ending Stocks	5,639	5,639	7,829	8,829	0	7,019
Total Distribution	28,988	28,988	40,789	40,789	0	32,979
Yield	1.89	1.89	2.71	2.71	0	1.88
(1000 HA) ,(1000 MT)						

Note: 'New Post' data reflect author's assessments and are not official data.

BARLEY

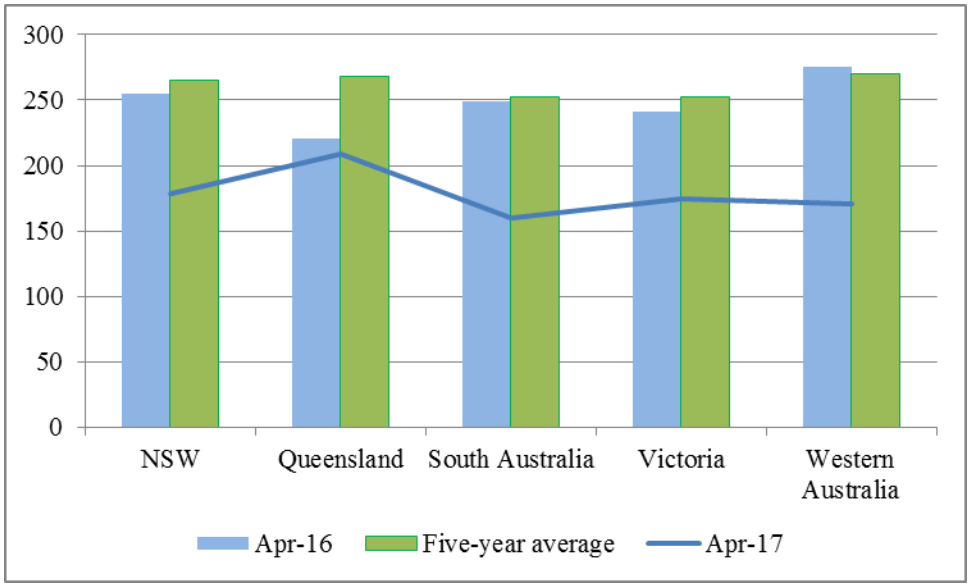
Production

Post forecasts that Australia's barley crop for 2017/18 will decline to 8.5 million MT after record production and yields in the previous year. This level of production is close to the 5-year average and reflects more normal seasonal conditions.

Post has slightly revised barley production in 2016/17 to 13.4 million MT, in line with more recent official estimates. The harvest in 2016/17 received very favorable rainfall and seasonal conditions and average yields reached 3.3 MT a hectare. However, the seasonal outlook for 2017/18 is less favorable and the Bureau of Meteorology has forecast below average rainfall and higher than average temperatures for the year. In addition, low international prices (chart 4) are expected by Post to lead to a decline in the area harvested in 2017/18 to 3.5 million hectares, down from 4 million hectares the previous year. Post expects average yields in 2017/18 to fall to 2.4 MT per hectare.

Barley is usually sown during May and harvested from November. The crop grows through the winter months in Australia, typically in rotation with wheat, canola, oats and pulses. Western Australia is the major barley producing state with over one third of the harvested area and output. NSW, South Australia and Victoria each account for around one fifth of barley production. One third of barley is usually used in Australia for food and beer production, animal feed and seed. The remainder is exported with around half used as feed barley, one third as malting barley, and the rest as malt for the manufacture of beer or spirits.

Chart 4: Price per MT for Australian malt barley (APW1) delivered to port, 2012-2017



Source: ABARES.

The Development of Barley Varieties

The Australian barley industry supports research into a range of grain varieties to improve quality and endurance. The aim is to develop a barley variety which is high yielding, resistant to disease and is able to make malting grade in good seasonal conditions. The Compass variety has reportedly produced yields ten percent higher than the Commander variety and is more suitable for shorter seasons. Varieties such as Bass, Baudin, Flinders,

Granger, La Trobe and Scope have been designed to meet the different needs of overseas markets. The Hindmarsh variety of barley has been the dominant variety in Western Australia and is supplied into the Chinese market for general grade brewing barley and used in Japan in the manufacture of Shochu. However, the Hindmarsh variety could be phased out from the 2017/18 season and replaced with other varieties such as La Trobe.

Consumption

Post forecasts domestic consumption of barley at 3.4 million MT in 2017/18, down 9 percent on the previous record year. This decline reflects lower forecast production of barley in 2017/18 after an expected slight rise in domestic consumption of low cost feed barley during the previous year.

The Australian barley industry produces grain for standard and craft beer and distilled spirits production, as well as feed grain for domestic and overseas livestock industries. Demand for malt barley is increasing while prices for feed barley have weakened due to improved pasture growth across Australia and high winter crop production. Around 30 to 40 percent of barley grown in Australia usually achieves malting grade, with the remainder consumed as food and feed barley. Malting barley is used primarily to produce alcohol (beer and distilled spirits such as Shochu, a Japanese distilled spirit) and food including confectionary, snack foods, breakfast cereals, miso and barley tea.

Trade

Post forecasts barley exports at 5.5 million MT in 2017/18 as a result of lower production to more normal levels. Post estimates that exports in 2016/17 will be 8.5 million MT due to record production and high grain quality. This forecast is slightly above the official estimate because of a recent upsurge in barley exports from Australia. Demand for malting grade barley is expected to be stronger over the year with lower supplies from some other countries. In addition, prices for feed grade barley have fallen significantly over the year because of oversupply in Australia and in the world market, by US$30 a MT year-over-year. Post notes that port and logistical delays have affected shipments of winter crops from Australia, but this problem may be less important for barley exports as monthly shipments have continued to expand.

Table 3: Australian exports of barley, 2011-2016 ('000 MT)

Country	2011	2012	2013	2014	2015	2016
China	1,268	2,102	1,766	4,377	3,586	1,884
Saudi Arabia	1,667	1,153	1,702	471	525	249
Unidentified	0	0	0	0	446	2,384
Japan	962	769	967	605	217	605
UAE	160	350	130	164	118	286
Kuwait	336	185	175	111	44	305
Other	665	552	381	395	252	134
World	5,058	5,111	5,121	6,123	5,188	5,847

Note: Calendar year
Source: Global Trade Atlas

Australian exports of feed-grade barley to Saudi Arabia increased significantly in the first quarter of calendar 2017 and a 1.5 million MT feed barley contract was agreed with Saudi Arabia for around A$180/MT. The competitiveness of Australian feed barley exports into China has increased with implementation of the China-Australia Free Trade Agreement (January 2016) which provided Australia with a competitive advantage due to the removal of the import duty for barley. In the first two months of 2017, China's imports of Australian barley more than tripled compared to the same period the previous year, according to Chinese customs data.

Australia is normally one of the world's largest exporters of barley, accounting for around 30 percent of the malting barley trade and about 20 percent of the global feed barley trade. China has been the largest single market for Australian barley exports in recent years, although demand has fluctuated. Post notes that demand for feed barley from China is difficult to predict as livestock producers in that country are now being encouraged to use domestic corn for feed use. Post expects Chinese demand for malting grade barley to be stable in 2017/18.

Table 4: Production, Supply and Demand Estimates: Barley ('000 HA and '000 MT)

Barley	2015/2016		2016/2017		2017/2018	
Market Begin Year	Nov 2015		Nov 2016		Nov 2017	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	4,105	4,105	4,000	4,000	0	3,500
Beginning Stocks	1,120	1,120	669	669	0	1,883
Production	8,593	8,593	13,000	13,414	0	8,500
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	9,713	9,713	13,669	14,083	0	10,383
MY Exports	5,744	5,744	8,100	8,500	0	5,500
TY Exports	5,401	5,401	8,100	8,500	0	5,500
Feed and Residual	2,000	2,000	2,300	2,300	0	2,000
FSI Consumption	1,300	1,300	1,400	1,400	0	1,400
Total Consumption	3,300	3,300	3,700	3,700	0	3,400
Ending Stocks	669	669	1,869	1,883	0	1,483
Total Distribution	9,713	9,713	13,669	14,083	0	10,383
Yield	2.09	2.09	3.25	3.35	0	2.43
(1000 HA) ,(1000 MT)						

Note: 'New Post' data reflect author's assessments and are not official data.

SORGHUM

Production

Post forecasts Australian sorghum production to decline sharply by one third in 2017/18 to 0.8 million MT. The area harvested for grain sorghum in 2017/18 is forecast by Post to fall by over 30 percent to 300,000 hectares. Key factors in this forecast are the low price of feed grains in Australia and on world markets, while Chinese demand for sorghum appears to be unlikely to reach previous peaks. As a result, sorghum growers in Australia face low demand in both domestic and international markets, while seasonal conditions are also unfavorable while alternative crops offer higher returns.

Many growers in Queensland and northern NSW are shifting to cotton which has higher expected returns, and this trend has been encouraged by low soil moisture levels. Post notes that there has been a significant increase in supply of irrigation water available to cotton growers, while the forecast for a hotter and drier summer is likely to curb sorghum plantings in the latter half of the planting window. Sorghum growers are expected to react to low international demand and higher prices for dryland cotton, chickpeas and corn by reducing sorghum plantings in 2017/18. Smaller growers may continue with sorghum crops because of the high cost of switching to crops such as cotton which require alternative harvesting equipment.

Australia normally produces around two to three percent of global sorghum production and accounts for five percent of global exports, although this share is forecast to decline in 2017/18. Sorghum is a summer crop mainly used for livestock feed. Around seventy percent of the Australian crop is grown in Queensland, and the remainder in northern NSW. Sorghum is typically grown as a rotation crop as it is relatively drought tolerant and can tolerate more acid soils. Planting times for sorghum are from September to January.

Consumption

Post forecasts domestic consumption of sorghum in 2017/18 to fall significantly to 400,000 MT. This revision has been made because of market indications that sorghum is less preferred because of its price relative to alternative crops, while poor soil moisture has discouraged planting. Sorghum has traditionally been used domestically for feed grain for the beef, dairy, pig and poultry industries, and is the main summer grain crop in most regions of Queensland. Sorghum is classified as either grain sorghum or forage sorghum according to the tannin content.

Trade

Post forecasts that sorghum exports will fall to 400,000 MT in 2017/18 due to lower production and declining international demand, particularly from China as livestock producers in that country are switching to domestic corn for feed use. In recent years, China has been the predominant market for sorghum exports from Australia but demand for imported sorghum for feed grain has fallen sharply. By contrast, demand for sorghum imports from the Chinese bajiu spirits industry is expected to be resilient.

Table 5: Australian exports of sorghum, 2011-2016 ('000 MT)

Country	2011	2012	2013	2014	2015	2016
China	0	39	758	349	1,512	752
Japan	39	1	13	0	0	0
South Africa	35	90	0	0	0	0
Taiwan	19	34	13	3	4	19
Other	23	41	13	4	8	23
World	116	205	797	356	1,524	794

Note: Calendar year
Source: Global Trade Atlas

Table 6: Production, Supply and Demand Estimates: Sorghum ('000 HA and '000 MT)

Sorghum	2015/2016		2016/2017		2017/2018	
Market Begin Year	Mar 2016		Mar 2017		Mar 2018	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	681	681	440	440	0	300
Beginning Stocks	252	252	184	184	0	179
Production	2,037	2,037	1,200	1,200	0	800
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	2,289	2,289	1,384	1,384	0	979
MY Exports	1,000	1,000	400	400	0	400
TY Exports	717	717	400	400	0	400
Feed and Residual	1,100	1,100	800	800	0	400
FSI Consumption	5	5	5	5	0	5
Total Consumption	1,105	1,105	805	805	0	405
Ending Stocks	184	184	179	179	0	174
Total Distribution	2,289	2,289	1,384	1,384	0	979
Yield	2.99	2.99	2.73	2.73	0	2.67
(1000 HA) ,(1000 MT)						

Note: 'New Post' data reflect author's assessments and are not official data.

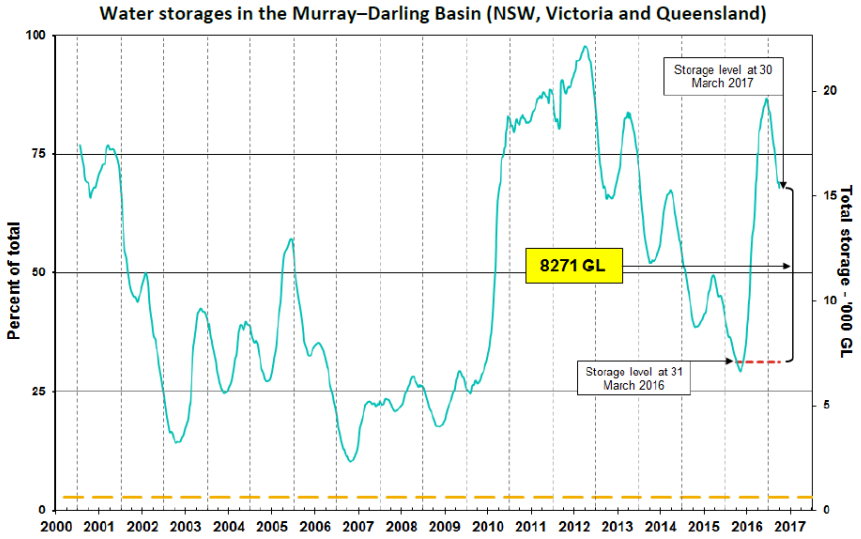
RICE

Production

Post forecasts production of rice in 2017/18 at 875,000 MT, slightly above the previous year. The area harvested is forecast by Post to be 90,000 hectares in 2017/18, the same area as in 2016/17. Since 2015/16, Australian rice growers have benefitted from a significant increase in the supply of irrigation water at a lower cost, and this situation is expected to continue. The industry has the capacity to produce over 1 million MT of rice and this level of production has been approached in recent years due to lower water prices and more reliable rainfall.

Currently, the water supply for the NSW rice crop is abundant as most major supply dams (such as the Hume, Burrinjuck, Blowering, Lake Victoria and Dartmouth dams) are at over 70 percent of full capacity. As a result, general security water allocations in the Murray and Murrumbidgee Valleys are more reliable, while prices on the temporary market have fallen. These changes have made rice more competitive with alternative crops such as nuts and cotton. Further, rice in the Riverina region of NSW can be sown to the end of November, which is not possible for alternative summer crops such as cotton. In addition, some heavy clay soils in the region are better for rice production.

Chart 5: Water storages in the Murray-Darling Basin (NSW, Victoria and Queensland)



Source: MDBA (2017)

The rice industry is mainly based in NSW but hopes to expand into the more water abundant regions in Queensland and northern Australia. Initial rice crops in Queensland have been developed mainly as a summer crop for sugar farmers. The Australian government recently provided A$4 million in funding to support research into the viability of a northern Australian rice industry because of the long-term problems with water availability and cost in southern Australia.

Policy

In late 2016, the sole distributor of Australian rice, SunRice, received an extension of its single desk export marketing arrangements. Under this arrangement, the rice company has vesting powers over the state's export crop. SunRice runs the rice export single desk on behalf of the NSW Rice Marketing Board which has just been granted a continuation of sole and exclusive export licence (SEEL) arrangements. The NSW government approved retention of the monopoly export marketing arrangements until 2022. There is no national arrangement in relation to export marketing of rice.

Trade

Post forecasts that rice exports will expand to 400,000 MT in 2017/18 as stocks fall. Post forecasts imports of rice of 155,000 MT, in line with previous years. Australia is a significant supplier of Japonica rice into the Middle East market, with a one third share of imports. SunRice remains concerned about access to the Papua New Guinea market, which can account for a significant share of Australian rice exports. Post notes that official statistics of rice exports do not have country detail.

Table 7: Australian exports of rice, 2011-2016 ('000 MT)

Country	2011	2012	2013	2014	2015	2016
World	314	452	466	410	325	168

Note: Calendar years, country detail unavailable because of confidentiality provisions.
Source: Global Trade Atlas

Table 8: Australian imports of rice, 2011-2016 ('000 MT)

Country	2011	2012	2013	2014	2015	2016
Thailand	95	68	69	81	73	77
India	16	23	27	30	34	33
Pakistan	21	18	19	18	17	21
United States	11	12	13	11	10	10
Other	17	13	14	16	18	22
World	160	134	142	156	152	163

Note: Calendar year
Source: Global Trade Atlas

Consumption

Post forecasts that consumption of rice in Australia in 2016/17 will increase slightly to 370,000 MT, as demand for both rice meals and products is slowly expanding. Overall, the Australian population is growing slowly while demand for rice products is relatively mature.

Table 9: Production, Supply and Demand Estimates: Rice ('000 HA and '000 MT)

Rice, Milled	2015/2016		2016/2017		2017/2018	
Market Begin Year	Mar 2016		Mar 2017		Mar 2018	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	23	23	90	90	0	90
Beginning Stocks	223	223	73	73	0	190
Milled Production	180	180	627	627	0	630
Rough Production	250	250	871	871	0	875
Milling Rate (.9999)	7200	7200	7200	7200	0	7200
MY Imports	170	170	155	155	0	155
TY Imports	170	170	155	155	0	155
TY Imp. from U.S.	11	11	0	0	0	0
Total Supply	573	573	855	855	0	975
MY Exports	150	150	300	300	0	400
TY Exports	150	150	250	250	0	350
Consumption and Residual	350	350	365	365	0	370
Ending Stocks	73	73	190	190	0	205
Total Distribution	573	573	855	855	0	975
Yield	10.87	10.87	9.68	9.68	0	9.72
(1000 HA) ,(1000 MT)						

Note: 'New Post' data reflect author's assessments and are not official data.