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Australia

Grain and Feed Annual

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Report Highlights:
Australian wheat production is forecast at 20 million metric tons (MMT) for 2019/20 while barley production is forecast at 8 MMT, with some growers likely to switch to other crops, such as wheat. Prospects for barley plantings are likely to be affected by China's ongoing anti-dumping case. Sorghum production is revised downwards to 1 MMT in 2019/20 while rice production is forecast to increase to 220,000 metric tons in 2019/20 as beneficial rains and lower water prices are expected to return.

EXECUTIVE SUMMARY

The outlook for the Australian winter crop for 2019/20 depends on sufficient and timely rainfall. Most cropping areas in New South Wales (NSW) and southern Queensland remain in a drought, with rainfall required during the planting window between April and June. Rainfall in South Australia has been sparse and soil moisture remains low while the forecast for Western Australia (WA) is optimistic due to recent rainfall in the cropping regions.

Australian wheat production is forecast at 20 million metric tons (MMT) for 2019/20 assuming improved rainfall and average seasonal conditions. China's decision on imposing anti-dumping duties on Australia barley is likely to affect planting decisions. Barley and sorghum production is also expected to decline while rice production is expected to rebound as a result of favorable weather conditions and water availability.

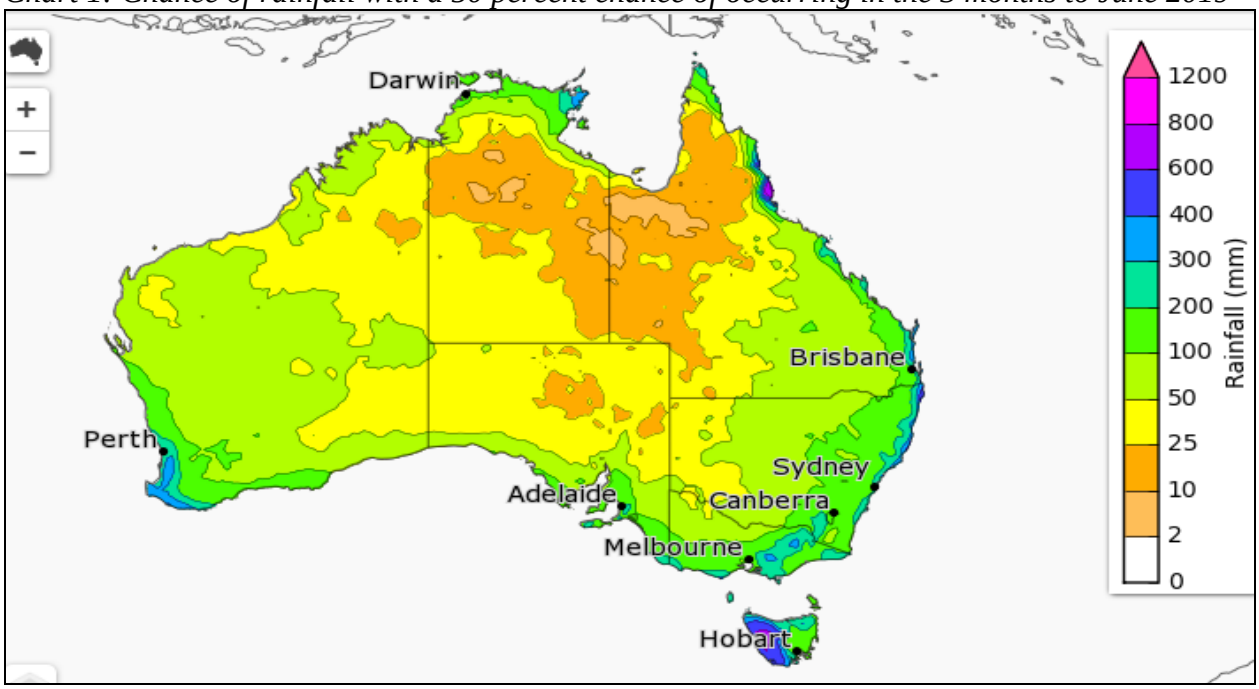
On Australia's east coast, grain prices remain high due to the drought. The poor season in 2018/19 also reduced available stocks, thus, feed grain shortages are likely to continue in northern NSW and southern Queensland. Over the last 6 months, up to 2-3 MMT of grains have been transported from WA for livestock feed. High domestic feed prices in eastern Australia will limit wheat and barley exports from this region. Further, dry conditions have reduced the sorghum harvest. Western Australia is likely to remain the major exporter of winter grains.

SEASONAL OUTLOOK

Australia's variable seasonal conditions have a significant impact on the size of harvested crop areas and overall production. In 2018, many cropping regions in eastern Australia experienced low rainfall and above average temperatures. Drought conditions in Queensland and NSW persisted during the start of the year. South Australia received insufficient rain before the planting window while southern regions in Western Australia fared a little better. Central and northern cropping areas in WA are also relatively dry. In addition, water levels in NSW reservoirs that supply rice growers continue to decline.

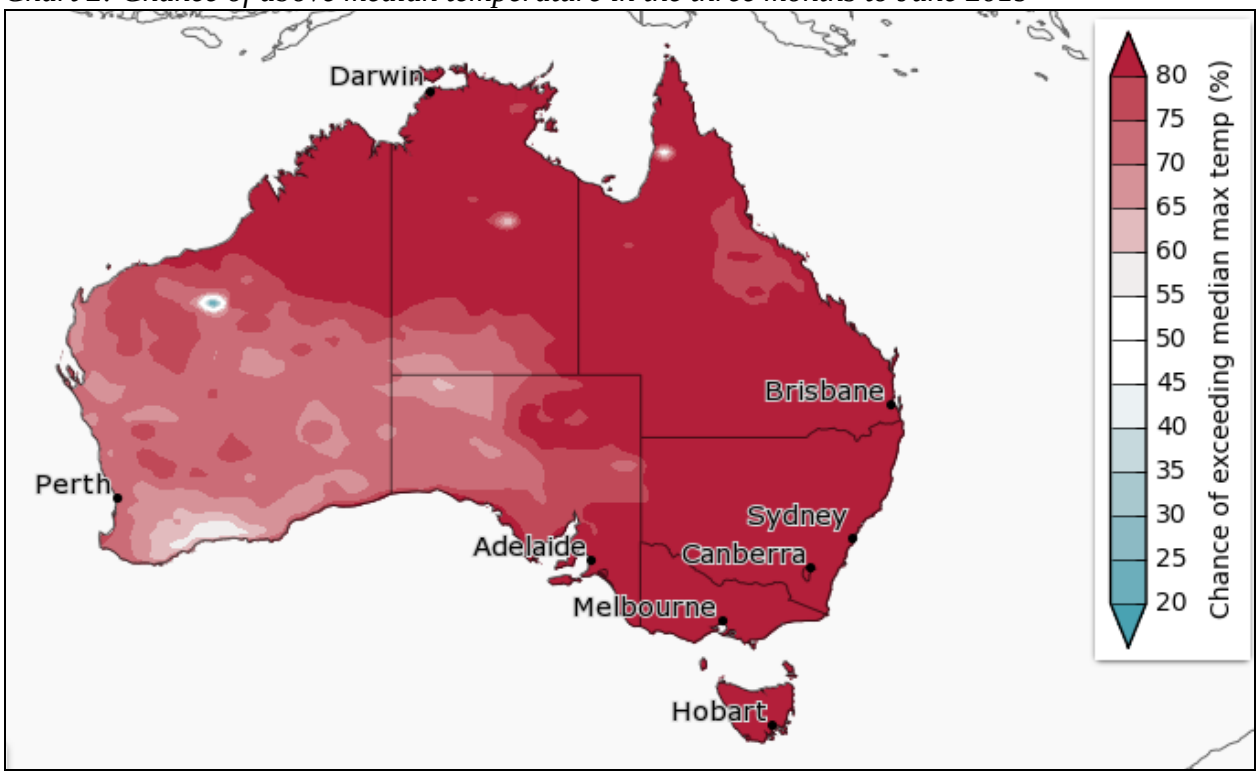
The Bureau of Meteorology (BOM) is forecasting average rainfall for most wheat and barley growing areas for the three months to June 2019, but low soil moisture remains a significant problem in eastern Australia. While reasonable rainfall occurred in a number of cropping regions in March, the drought has not yet broken in NSW and Queensland. In addition, temperatures are forecast to be warmer than average for most of the growing regions across Australia during this period (Chart 1 and 2 below).

Chart 1: Chance of rainfall with a 50 percent chance of occurring in the 3 months to June 2019



Source: Bureau of Meteorology (2019)

Chart 2: Chance of above median temperature in the three months to June 2019



Source: Bureau of Meteorology (2019)

Commodities:
Wheat, Barley, Sorghum, Rice

WHEAT

Production

Australian wheat production is forecast to rebound to 20 MMT in 2019/20 with the expectation of average rainfall and seasonal conditions across major wheat growing areas. The harvest area is expected to expand to 12 million hectares, partly due to some growers switching from barley to wheat. WA received adequate rainfall during the start of this year, thus, wheat production in this region is expected to remain above 10 MMT, accounting for half the national harvest and exports.

Consumption

Wheat consumption is forecast at 9.5 MMT for 2019/20, mainly due to high prices for domestic feed grain and hay in eastern Australia. Human consumption of wheat is expected to remain stable at 3.5 MMT. In eastern Australia, around 6 MMT will be used as livestock feed because of continued poor pasture growth. The feed and residual component is expected to increase to 6 MMT. Demand for feed grains is expected to remain the same because of the poor outlook in 2019/20 for summer feed crops, such as sorghum. Higher domestic feed prices in eastern Australia will likely encourage intra-state trade in wheat and reduce export supplies.

Trade

Australian wheat exports are forecast at 12 MMT in 2019/2020 in anticipation of higher production. Wheat exports from WA are likely to account for over 50 percent of total exports.
Typically, 70 percent of Australian wheat production is exported, but it's expected to face stronger competition from Black Sea wheat exporters, particularly for feed wheat. Details of Australian wheat exports are shown in Table 1.

Indonesia is currently Australia's biggest wheat export market, buying an estimated 4.2 MMT of Australian wheat each year. Australian premium hard wheat exporters compete in Southeast Asia against traders from the United States and Canada.

WA is the world's major supplier of wheat for Japanese white salted Udon noodles and is supported by a long-term collaboration between the Australian industry and Japanese flour millers.

Australia and Indonesia-Australia signed the Indonesia-Australia Comprehensive Economic Partnership Agreement (I-A CEPA) on March 4, 2019 and this agreement launches a new chapter in economic relations between Australia and Indonesia. Under the partnership, Australia could gain access to the Indonesia feed grain market.

Table 1: Australian exports of wheat by selected country, 2011-2018 ('000 MT and US$/MT)

Country	2011	2012	2013	2014	2015	2016	2017	2018
Indonesia								
('000 MT)	3,593	4,594	3,665	4,072	4,153	3,469	5,170	2,073
(US$/MT)	325	299	317	280	250	210	202	235
China								
('000 MT)	794	2,283	870	1,198	1,378	1,499	1,712	469
(US$/MT)	279	259	314	296	258	219	192	238
Vietnam								
('000 MT)	2,403	1,994	1,347	1,377	1,306	1,507	1,913	893
(US$/MT)	298	284	326	292	254	220	217	244
Philippines								
('000 MT)	1,281	1,675	355	550	673	1,026	1,941	1,442
(US$/MT)	259	267	330	286	254	214	191	229
World								
('000 MT)	19,733	23,576	18,037	18,276	17,073	16,137	22,005	11,420
(US$/MT)	320	288	331	294	259	224	211	248

Note: (a) Calendar years. *Source*: Global Trade Atlas.

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

Wheat	**2017/2018**		**2018/2019**		**2019/2020**	
Market Begin Year	October 2017		October 2018		October 2019	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	12,250	12,250	10,200	10,200	0	12,000
Beginning Stocks	5,732	5,732	5,868	5,868	0	4,118
Production	21,300	21,300	17,300	17,300	0	20,000
MY Imports	159	159	150	150	0	150
TY Imports	163	163	150	150	0	150
TY Imp. from U.S.	2	2	0	0	0	0
Total Supply	27,191	27,191	23,318	23,318	0	24,268
MY Exports	13,848	13,848	10,000	10,000	0	12,000
TY Exports	15,512	15,512	10,000	10,000	0	12,000
Feed and Residual	4,000	4,000	5,700	5,700	0	6,000
FSI Consumption	3,475	3,475	3,500	3,500	0	3,500
Total Consumption	7,475	7,475	9,200	9,200	0	9,500
Ending Stocks	5,868	5,868	4,118	4,118	0	2,768
Total Distribution	27,191	27,191	23,318	23,318	0	24,268
Yield	1.74	1.74	1.70	1.70	0	1.67
(1000 HA), (1000 MT), (MT/HA)						

Note: 'New Post' data reflects FAS/Canberra's assessment and is not official data.

BARLEY

Production

Barley production in 2019/20 is forecast at eight MMT assuming timely and sufficient rainfall during the planning window from April 2019. Western Australia is again likely to account for 50 percent of the barley harvest due to continuing dry conditions in eastern Australia. Planted area is forecast to remain the same at 4 million hectares for 2019/20.

Barley is a shorter season crop that is better suited to dry conditions. Assuming improved seasonal conditions, barley plantings and production could exceed current forecasts. Barley is usually sown in May and harvested in November. The crop grows through Australia's winter months, 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 generally used in Australia for animal feed, seed cultivation, food and beer production. The remainder is exported with around 50 percent used as feed barley, one third as malting barley, and the rest for the manufacture of beer or spirits.

China's continuing anti-dumping investigation against Australian barley exports could affect planting intentions for the 2019/20 season.

Consumption

Domestic consumption of barley is forecast to be stable at 3.7 MMT in 2019/20. Over one third of Australia' barley production is usually consumed domestically for food and beer production, animal feed, and seed cultivation. Currently, producers and traders are obtaining higher prices for feed barley in the domestic market compared to exports.

Feedlots in Australia's northern regions appear to be switching to 100-percent barley rations, reflecting current pricing and availability of feed grains as further concerns emerge from the low sorghum production.

Trade

Barley exports are forecast at 4.5 MMT in 2019/20. China has been the leading export destination for barley followed by Japan and Saudi Arabia. Higher domestic prices for barley have made Australian exports less competitive in world markets. In 2018, there was a significant decline in Australian exports to Saudi Arabia, which switched to lower prices imports from other sources. Barley exports are shown in Table 3, while Chart 3 shows monthly exports.

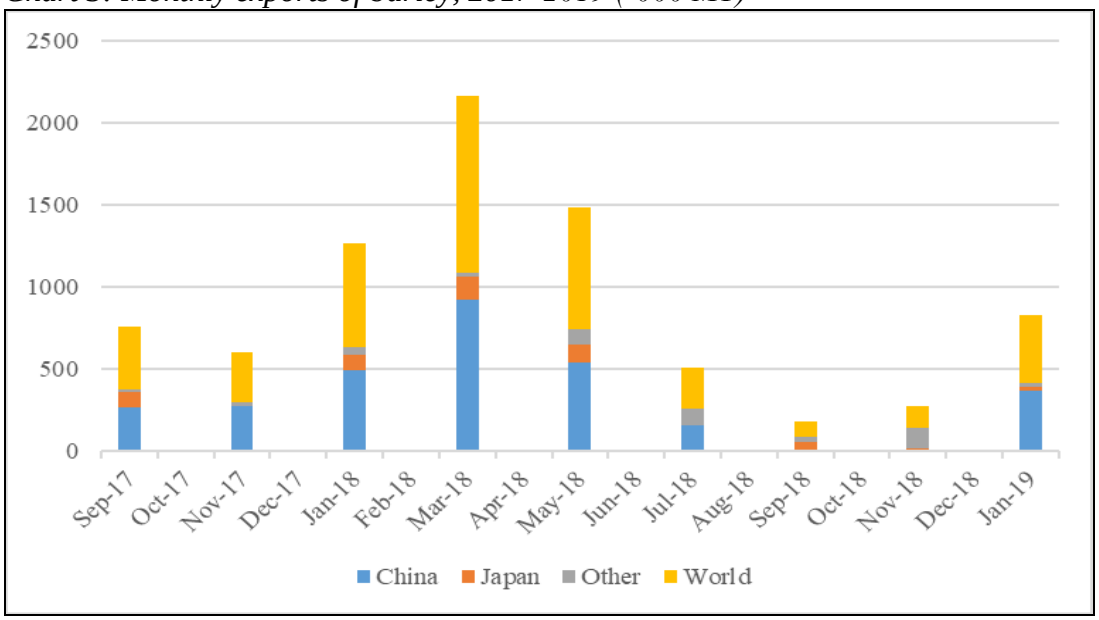
Table 3: Australian exports of barley, 2011-2018 ('000 MT and US$/MT)

Country	2011	2012	2013	2014	2015	2016	2017	2018
China	1,268	2,102	1,766	4,377	3,586	3,516	5,603	4,709
(US$/MT)	301	273	297	259	255	193	180	227
Saudi Arabia	1,667	1,153	1,702	471	525	304	739	66
(US$/MT)	272	259	275	253	182	181	161	257
Japan	962	769	967	605	217	1,058	876	849
(US$/MT)	292	265	293	262	273	194	188	238
World	5,058	5,111	5,121	6,123	5,188	5,857	8,859	6,123
	282	267	289	259	255	193	182	230

Note: (a) Calendar years. *Source*: Global Trade Atlas.

Chinese officials are currently investigating claims that Australian barley imports between October 2017 and September 2018 were sold below the cost of production. Possible outcomes could include the imposition of provisional import measures such as securities or cash deposits on Australian barley exports. If these measures are imposed, they could lead to a reduction in Australian barley exports to China.

Chart 3: Monthly exports of barley, 2017-2019 ('000 MT)



Source: Global Trade Atlas.

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

Barley	2017/2018		2018/2019		2019/2020	
Market Begin Year	November 2017		November 2018		November 2019	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	3,900	3,900	4,000	4,000	0	4,000
Beginning Stocks	1,884	1,884	1,459	1,459	0	1,559
Production	8,900	8,900	8,300	8,300	0	8,000
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	10,784	10,784	9,759	9,759	0	9,559
MY Exports	5,725	5,725	4,500	4,500	0	4,500
TY Exports	6,088	6,088	4,500	4,500	0	4,500
Feed and Residual	2,300	2,300	2,200	2,200	0	2,200
FSI Consumption	1,300	1,300	1,500	1,500	0	1,500
Total Consumption	3,600	3,600	3,700	3,700	0	3,700
Ending Stocks	1,459	1,459	1,559	1,559	0	1,359
Total Distribution	10,784	10,784	9,759	9759	0	9559
Yield	2.2821	2.2821	2.075	2.075	0	2.0
(1000 HA), (1000 MT), (MT/HA)						

Note: 'New Post' data reflects FAS/Canberra's assessment and is not official data.

SORGHUM

Production

Sorghum production in 2019/20 is forecast at one MMT, a 23 percent decline on the official forecast due to insufficient rainfall over the season. Area planted to grain sorghum is forecast to rise marginally in 2019/20 to 550,000 hectares. However, if unfavorable condition continue in most summer cropping regions, average yields and production are expected to remain the same as 2018/19.

While increased rainfall across southern Queensland and northern NSW in late 2018 induced sorghum planting, only the crop sown in September reached full maturity, while crops planted in October suffered disproportionately from hot and dry conditions. The shortage of pasture, hay, and grain in drought-affected regions has incentivized farmers to plant sorghum because of higher animal feed prices. However, hot and dry conditions over the season are expected to reduce both yields and overall production for 2018/19.

Consumption

Australian domestic sorghum consumption in 2019/20 is forecast to be stable at 0.8 MMT. Sorghum has traditionally been used domestically for feed grain in the beef, dairy, swine, and poultry industries. While the Queensland State government has developed new programs to incentivize biofuels production utilizing sorghum and sugarcane as feed stocks, its impact may be minimal as other renewable energy initiatives such as electric cars and solar power garner more attention politically.

Trade

Post forecasts sorghum exports to remain the same in 2019/20. China accounts for more than 90 percent of all Australian sorghum exports. The Australia-China free trade agreement (ChAFTA) removed all tariffs on Australian sorghum exports.

Table 5: Production, Supply and Demand Estimates: Sorghum ('000 HA and '000 MT)

Sorghum	2017/2018		2018/2019		2019/2020	
Market Begin Year	March 2018		March 2019		March 2020	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	531	531	540	540	0	550
Beginning Stocks	272	272	261	261	0	261
Production	1,439	1,439	1,300	1,000	0	1,000
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	1,711	1,711	1,561	1,261	0	1,261
MY Exports	500	500	500	200	0	200
TY Exports	449	449	600	200	0	200
Feed and Residual	750	750	600	600	0	600
FSI Consumption	200	200	200	200	0	200
Total Consumption	950	950	800	800	0	800
Ending Stocks	261	261	261	261	0	261
Total Distribution	1,711	1,711	1,561	1,261	0	1,261
Yield	2.71	2.71	2.4074	1.8519	0	1.8182
(1000 HA), (1000 MT), (MT/HA)						

Note: 'New Post' data reflects FAS/Canberra's assessment and is not official data.

RICE

Production

Rice production in 2018/19 declined to 75,000 MT due to high water prices and low water allocations while rice harvested area decreased to 10,000 hectares. Higher water prices led many farmers to sell their water licenses instead of planting rice. Temporary water prices have increased sharply to almost A$500 a mega liter (ML) compared to less than A$150/ML two years ago.

Australia's rice production in 2019/20 is forecast to increase to 220,000 MT due to favorable weather, better prices, and increase in water availability. Harvested area is also expected to increase to 29,000 hectares.

In Australia, rice is grown from October until March and in rotation with other crops such as wheat, barley, and maize, which utilize the existing soil moisture from the harvested rice crops. Rice growers are dependent upon adequate water supply during the planting window, below a certain price threshold. Each year the NSW state government assesses water levels in dams and determines allocations for different users. Most rice is grown by general security irrigators who receive their water as a comparatively low priority in this allocation system and have allocations reduced in times of water shortages.

Consumption

Rice consumption in 2018/19 decreased due to lower production. Post forecasts rice consumption in 2019/20 to remain stable at 370,000 MT as Australian consumer demand steadies and population growth slows. A larger number of discerning consumers are diversifying their palates, thus, driving demand for more specialized rice varieties such as Jasmine and Basmati.

Trade

Rice exports are expected to drop significantly in 2018/19 primarily due to lower production. As a result of the continued drought conditions and smaller production, Australia is expected to be a net rice importer. The tightening market has pushed Australian rice producers to seek import alternatives in order to maintain export markets as well as supply domestic demand.

In 2019/20, rice exports are forecast to rebound in response to anticipated better production, favorable weather, and sufficient water supplies. Australia exports rice to a host of international destinations including the Middle East, the Pacific, North America and Asia.

Various free trade agreements are likely to benefit Australian rice exporters with new market access opportunities. For instance, under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Australia receives rice access quotas into Japan totaling 6,000 MT in 2018 and is

expected to increase to 8,400 MT in 2030. In addition, when the Australia-Peru free trade agreement (PAFTA) enters into force, Australian exporters will receive a rice duty-free quota of 9,000MT and this is expected to climb to 14,000MT after 5 years. These agreements could all gradually lead to increased Australian rice exports.

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

Rice, Milled	**2017/2018**		**2018/2019**		**2019/2020**	
Market Begin Year	March 2018		March 2019		March 2020	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	60	60	10	10	0	29
Beginning Stocks	208	208	217	217	0	80
Milled Production	454	454	75	75	0	220
Rough Production	631	631	104	104	0	306
Milling Rate (.9999)	7200	7200	7200	7200	0	7200
MY Imports	170	170	200	248	0	240
TY Imports	167	167	200	248	0	240
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	832	832	492	540	0	540
MY Exports	225	225	50	90	0	100
TY Exports	262	262	50	90	0	100
Consumption and Residual	390	390	390	370	0	370
Ending Stocks	217	217	52	80	0	70
Total Distribution	832	832	492	540	0	540
Yield (Rough)	10.5	10.5	10.4	10.4	0	10.5517
(1000 HA), (1000 MT), (MT/HA)						

Note: 'New Post' data reflects FAS/Canberra's assessment and is not official data.