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Report Highlights:

Post's MY2021/22 corn import forecast is 20 MMT, 6 MMTs below USDA's official forecast with the expectation that demand softens as corn imported during the current marketing year enters commercial channels, stock building moderates, and the expansion of domestic corn area results in greater production. In addition, imported corn's previous price advantage has narrowed as global grain prices and shipping costs are on the rise. Barley imports are increased as feed mills shift to substitute more barely over sorghum. All indications point to a bumper wheat harvest this year. While wheat continues to be substituted for corn in feed rations, there are few reports of imported wheat going into feed, but rather old stocks continue to be auctioned for feed use.

Note: The June 2021 Update provides FAS-China revisions for MY2019/20 and estimates and forecasts for MY2020/21 and MY2021/22. FAS-China projections do not represent official USDA forecasts.¹

Policy

Since the beginning of April 2021, several PRC agencies have introduced measures to address concerns regarding high commodity prices as well as feed and food security. Taken together, Post notes that there remains a concerted effort by PRC officials to manage prices, grain planting and storage levels, and provide support for both industry needs and consumer expectations. Post has noticed an uptick in the official messaging placing particular importance on both grains as a top policy priority and reassurances that stocks are abundant. These recent policy announcements include:

On April 2, China's official news outlet *Global Times*, reported China's grain reserves reached a total of 650 MMT, citing the National Food and Strategic Reserves Administration (NFSRA). The report insists China has the basis, conditions, confidence, and capability to ensure the nation's grain security. The report also reassured the public that rice and wheat reserves are at historic high levels. Grains, along with petroleum are now uplifted to the level of "strategic weapons." The article went on to note that grains are more vital as it relates to life and that staple grains security is considered a matter of "life and death" for the Chinese public.

On April 21, the Ministry of Agriculture and Rural Affairs (MARA) published details of the Corn/Soybean Meal Reduction and Substitution Technology Plan for Hog and Poultry Feed. While many industry members note that most feed mills have been feeding less corn or soy due to price concerns, prices will continue to drive feed mix ratios more so than government policy. Others in the industry claim the plan may reduce corn consumption by 45 MMT per year.

On May 10, the National Development and Reform Commission (NDRC) published "*Management Measures for Central Budget Special Investment on Storage Facilities for Grains and other Key Agricultural Products.*" The notice announced a special investment initiative that focuses on central reserve storage and logistics facilities, including the construction of additional storage facilities and infrastructure support.

On May 19, the PRC government revised the Interim Management Measures regarding Import Tariff Quota on Agricultural Products with the intention of stopping the illegal processing of imported corn into feed for the domestic market. This measure is reportedly targeted at putting an end to the practice of corn imported to duty free zones, minimally processed, and then entering the domestic market duty free and outside the TRQ. Industry contacts estimate as much as 8-10 MMT of corn powder had previously entered the domestic market through this route each year.

On May 25, the NDRC issued the Reform Action Plan to Deepen Price Mechanisms in the 14th Five-Year Period. The plan emphasizes price controls on important livelihood commodities such as grains to support both farmers and consumers.

¹ The global Trade Year (TY) for the follow grains is as follows: Corn, Sorghum, and Barley (October – September), for example, TY 2021/22 represents imports or exports from October 2021 to September 2022; Wheat TY 2021/22 is July 2021 through June 2022; Rice TY 2021/22 is January 2022 through December 2022). Marketing Year (MY) is determined by (1) Country and (2) Commodity.

Feed Grains

Feed

FAS China's total MY2021/22 feed and residual use is forecast to increase by 17.2 MMT, a 6.7 percent increase over MY2020/21. MARA stated that by the end of the first quarter of 2021, the national live hog inventory and sow inventory recovered to 94.2 percent and 96.6 percent of pre-African Swine Fever (ASF) levels seen in 2017. Based on MARA's projections, the live hog inventory will reach 2017 levels in July 2021. However, post believes that overall pork production will remain below the pre-ASF levels. In late 2020 a resurgence of ASF reduced China's population of breeding sows and piglets. These losses continued through the first quarter of 2021 as ASF outbreaks were reported in multiple provinces. For the most recent FAS China analysis on China's swine and feed sector, see the USDA GAIN report [Delayed Expansion in Chinese Swine Herd](#) and [Perspectives on the Feed and Swine Sectors](#).

Table 1. China: Industry Feed Production for January to May 2021

	Swine	Layers	Broiler	Aquaculture	Ruminants	Total
May 2021 Production (in million tons)	11.03	2.67	8.25	2.35	1.19	25.8
Year-over-Year Change (percent) for May	79.7	-6.4	1.5	19	22.8	26.7
Month-over-Month Change (percent) April to May	1.2	-0.3	4.6	51.7	1.6	5.3
Production (in million tons) January-May	52.19	13.15	35.25	6.47	5.79	114.3
Year-over-Year Change (percent) January - May	75.4	-10.5	-5.6	5.8	19.5	21.5
Source: China Feed Industry Association, May 2021						

Corn

Corn **production** for MY2021/22 is forecast at 272.0 MMT, up by 11.3 MMT, or 4.3 percent from last year on higher planting area and the assumption of normal yields. Area planted to corn in Heilongjiang, one of China's most important corn producing provinces, increased by 1.1 million hectares this year, or by 27 percent year-over-year according to the Heilongjiang Agricultural Bureau. Nationwide, area planted to corn is expected to increase by 2.1 million hectares this year, or by 6.2 percent year-over-year. The increased acreage is attributed to a mix of high prices and government policies encouraging or mandating the planting of additional corn acreage.

While the impact of Fall Army Worm (FAW) in 2020 was less than anticipated, the impact this year remains to be seen. The China Academy of Agricultural Sciences (CAAS) predicted that there will be even greater pressure this year to prevent and control the FAW's spread. Mekong Delta weather is projected to favor allowing more FAW to advance into Southwest China.

The forecast for MY2021/22 **feed corn and residual use** is 211 MMT, 15 MMT more than MY2020/21, due to restocking of the swine herd, and feed mills switching back to corn rations. Feed mills report preferring corn to other grains and will switch back once it is economical. Corn is a feed mills' first option for feed as wheat requires an added enzyme and oil to be made comparable. In addition, feed mill's claim sorghum's taste profile is not as desirable for hogs and barley must be first unhusked. MY2020/21 corn feed and residual use is estimated at 196 MMT, only 3 MMT higher than last MY. Industry experts project close to 40 MMT in alternative grains were substituted for corn in feed rations. While at the same time, high mold rates from lodged corn in the northeast increased residual use estimates in MY2020/21.

Post forecasts MY2021/22 corn demand for **industrial use** to remain weak. The starch industry operated at an average of 62.1 percent of capacity in May, down 1.8 percent over April and 10 percent higher than the same period last year (when production was affected by Covid-19). Plants have struggled to be profitable with high corn prices. Corn ethanol plants operated at an average rate of 34.5 percent in May, down 0.4 percent over April and 10 percent lower than May 2020.

Food, seed and industrial (FSI) consumption for corn in MY2021/22 and MY2020/21 are both estimated 4 MMT higher than USDA estimates as most of the high mold and aflatoxin corn is destined for deep processing even though the conversion rate to produce the same amount of product will be lower than previous years.

China's average corn price was \$441 (RMB 2,825) per ton in May, up slightly from April by \$7.6 (RMB 48.8) per ton, and 37.1 percent higher than last year.

There are reports of traders holding onto their stocks in the hope of recouping their costs or benefiting from future price hikes. However, others believe speculation by traders is being used as a scapegoat by the government to hide the real driver of high corn prices- either a true shortage or depleted stocks. June is traditionally off-peak for corn supplies, imported corn has lost its price advantage over domestic corn as prices for July arrival have risen to \$453 (RMB 2,900) per ton.

In June, three special auctions were held offering a total of 66,391 tons of imported Ukrainian corn. The average price of corn sold has dropped from \$441 (RMB 2825) to \$430 (RMB 2,750) per ton. On June 21, the Dalian Commodity Exchange corn contract sunk to a 6-month low of \$401 (RMB 2,568) per ton. Post's MY2021/22 corn **import** forecast is increased to 20 MMT still 6 MMTs below USDA official forecast with the expectation that corn prices will cool down over the next year, stock building moderates, and demand softens as imported corn eventually enters the market. USDA export sales reports 10.7 MMT of Chinese corn commitments for delivery in MY2021/22 as of June 28. Industry also speculates that some purchases were partly driven partly by the appreciation of the Chinese yuan against the U.S. dollar.

Post estimates MY2020/21 corn imports remain at 28 MMT, 2 MMT higher than the USDA official estimate due to continued strong import demand fueled by high domestic prices and restocking efforts.

In May, rising international grain prices and shipping fees narrowed the price advantage of imported corn. Industry estimates a 30 MMT corn supply-demand deficit in MY2020/21 based on temporary reserve levels, production, demand, substitution of other grains, imports, and commercial stocks. In addition, there is market speculation about a “special TRQ” issued for China to import U.S. corn to meet its purchase commitments under the U.S.-China Phase One Economic and Trade Agreement.

MY2021/22 **ending stocks** are forecast at 200.2 MMT, 2.0 MMT higher than the USDA forecast reflecting large carryover stocks and greater production, despite a healthy growth in consumption.

Sorghum

Sorghum **production** in MY2021/22 is reduced 50 thousand MT to 3.55 MMT as some sorghum area is expected to be converted to corn.

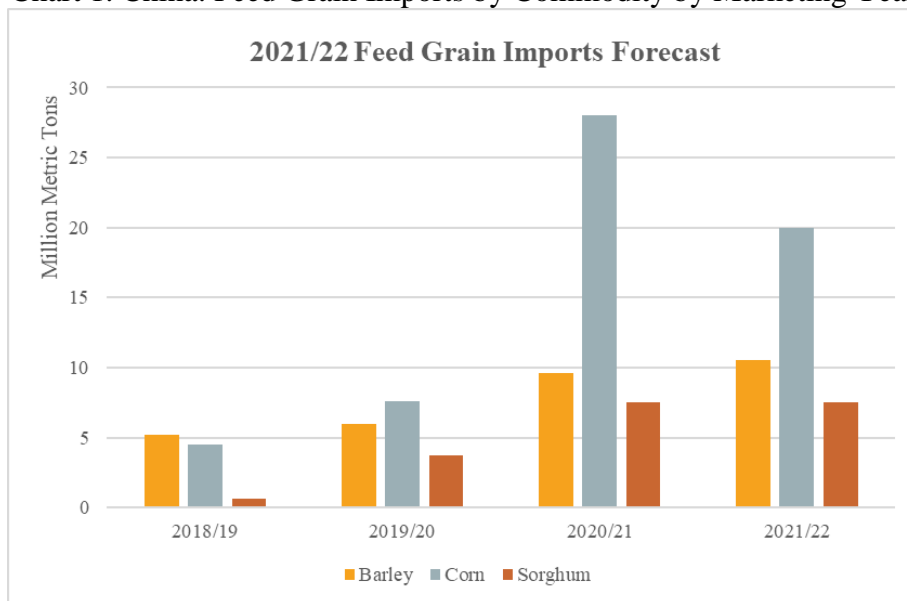
Feed grain sorghum **consumption** for MY2021/22 is forecast at 7.9 MMT, 2.6 MMT lower than the USDA forecast, as cheaper barley is expected to displace it in feed rations. Current sorghum prices at ports are quoted around \$422 (RMB 2,700) per ton, losing its previous price advantage over other corn substitutes. Feed demand for sorghum is currently weak, and liquor producers are entering the summer season when demand normally wanes and facilities sit idle due to increased production costs. Feed mills have become flexible in grain substitution in their feed formulas, making price the key decision factor for future procurement. Inner-Mongolian domestic sorghum was recently priced at roughly \$569 (RMB 3,640) per ton, and high prices are expected to persist with production lower than last year.

Sorghum **imports** for MY2021/22 are forecast at 7.5 MMT, 2.5 MMT lower than the USDA forecast due to availability of other, cheaper substitutes for sorghum. The U.S. sorghum CNF quotes have climbed to \$447 per ton for July delivery compared with around \$380 per ton earlier in the year. Some Chinese traders report U.S. exporters have recently requested contract cancelations in order to take advantage of higher prices. Reportedly, imported sorghum stocks at ports are adequate.

Barley

The **production** forecast for MY2021/22 is lowered by 40,000 tons to 860,000 tons as some barley area has been planted to corn. Barley **imports** are increased to 10.5 MMT. Unlike sorghum, barley is a highly competitive product with many countries exporting to China. Barley prices have remained stable over the last few years at around \$300 per ton in contrast to sorghum, despite China’s strong demand. Barley prices at ports are currently quoted at \$368 (RMB 2,355) per ton. Traders are expressing more interest in Argentine malting barley. Current sorghum prices are expected to drive demand to barley over sorghum, increasing barley imports. Hog producers also report a preference feeding barley to sows claiming lower toxins and higher fiber generate lactation.

Chart 1. China: Feed Grain Imports by Commodity by Marketing Year



Major Food Grains

Wheat

MY2021/22 wheat **production** is estimated at 136 MMT, 120 thousand MT higher than the previous year due to increases in yield and planted area. On April 20, MARA claimed in a press conference that the winter wheat area grew by 200,000 hectares, the first increase in 4 years. Henan province, which produces nearly one third of China's wheat, reported a new record yield of 13.5 tons per hectare this year due to improved seeds. In mid-June over 60 percent of the winter wheat was harvested, and all indications point to a bumper harvest spurred by favorable weather. Prices remained stable at \$391 (RMB 2,500) per ton, \$15.60 (RMB 100) higher than last year.

In addition, in recent conversations with the Chinese Academy of Agricultural Sciences, scientists reported developing an improved wheat variety with a trait originating in crested wheat grass which has shown a 15 percent production increase in current field trials in Henan. If widely adopted, it has the potential to increase yields even further in upcoming seasons.

Wheat **consumption** for feed is forecast at 35 MMT, 5 MMT lower than last year. With higher corn supply and livestock production growth leveling off, feed wheat demand will gradually return to historical norms. Feed mills still rely on reserve auctions for feed wheat. In the first five months of 2021 more than 28 MMT of wheat was auctioned, compared to only 5.1 MMT during the same period the previous year. However, the percentage of wheat sold versus the amount on offer dropped from 99 percent in January to 50 percent in March and less than 10 percent in April and May. As the year progressed, interest in auctioned wheat fell precipitously. Prices fluctuate around \$375 (RMB 2,400) per ton. It will take some time for the market to digest the 28 MMT of wheat already auctioned. Demand for food wheat remains flat with the exception of flour for high-end specialty bakeries which is slowly increasing.

MY2021/22 wheat **imports** are forecast at 8 MMT, still 2 MMT lower than USDA estimates. Although there are rumors that China will issue an additional 10 MMT wheat TRQ to SOEs, industry remains skeptical that the market demand would support these additional imports unless they are intended solely to replenish reserves.

Industry contacts report that local wheat silos are full and believe the jump in imports in MY2020/21 was part of China's commitment to the Phase One Economic and Trade Agreement coupled with local governments, mills, and traders stocking up on fears caused by COVID-19 and disruptions to supply chains. Another potential factor may be that SOEs are replenishing reserves since large quantities of imported wheat were auctioned over the past year. Multiple contacts report that price is the number one factor that drives imports for state reserves.

While imports have increased there are few reports of imported wheat used for feed. A small amount of low-priced, predominately French wheat was sent to feed mills but was originally imported for flour mills but went unused. Multiple contacts confirm that any imported wheat used for feed was either old or only sent to feed mills after it was unsuitable for milling. Both flour and feed mills report that the economics of feeding imported wheat do not make financial sense.

Ending stocks for MY2021/22 are forecast at 140.4 MMT, 2.2 MMT lower than USDA forecasts due to lower imports. Experts report that the record amount of wheat used for feed will support demand for old crop wheat but will have little to no effect on wheat for food use. While temporary policy reserves, normally procured through purchases of MSP wheat, have reduced through auctions, contacts continually report that government reserves (which include the central and local reserves and are treated as a state secret) are adequate overall. In addition, commercial reserves, which vary constantly, are also at adequate levels with significant amounts of auctioned wheat from the temporary reserve now in the hands of commercial reserves. Feed and flour mills continue to keep more stocks than previously the norm to avoid supply chain disruptions.

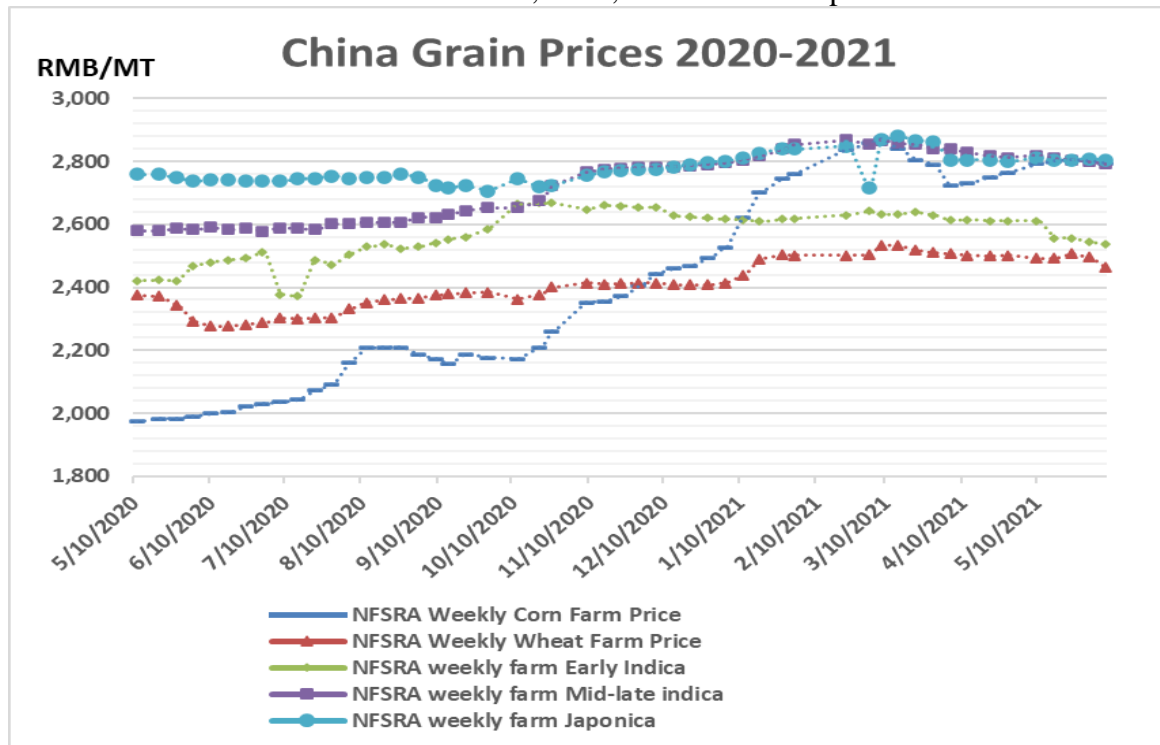
Rice

Milled rice **production** in MY2021/22 is forecast at 150 MMT, slightly higher than USDA estimates mainly due to expansion of early rice planting area. In early June, rice seedling transplanting was nearly complete in the Northeast, while harvest had begun in areas of South China.

The MY2021/22 rice **consumption** is forecast at 158 MMT, 2 MMT higher than the USDA forecast, and is driven by rice's price advantage for feed. According to industry sources, non-public old stock 2014-2016 crop rice auctions targeted specifically for feed mills started last September. The auctions concluded in the South with a total of 6 MMT sold. This included paddy and smashed rice mixed with 15 percent wheat after purchase. The auctions resumed in the North in May 2021 where most Japonica stocks are kept. The starting price was higher at \$203-\$234 (RMB 1,300 to 1,500) per ton with an estimated 20 MMT offered. However, this price is no longer attractive to southern feed mills as the effective price would be more than \$313 (RMB 2,000) per ton once transportation costs are added. In addition, removing the husk increases costs. Industry forecasts that some rice may replace corn for ethanol production this year and next.

General Administration of China Customs (GACC) data shows that Chinese MY2020/21 rice **imports** for July-April are 3.6 MMT, up 80 percent over the same period year-over-year when imports were affected by COVID-19 related export bans by major suppliers. China’s increased rice imports have been driven mostly by imports from Pakistan, Myanmar, and India. While China’s rice **exports** while exports are down 20 percent over this same period, they have increased in recent months and are only down by 6.5 percent in the last four months of most recent data available.

Chart 2. China: Wheat, Corn, Rice Price Comparisons



MY2021/22 **stocks** are estimated at 103.3 MMT, 5.8 MMT lower than USDA estimates on higher feed use. The percentage of rice on offer sold in auctions dropped from 40 percent in January to 6 percent in June this year. The amount sold in auctions is similar to the same period last year, when the effects of the pandemic were their most severe.

Production, Supply, and Distribution

Corn	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Year Begins						
China						
Area Harvested (1000 HA)	41280	41280	41264	41264	42000	42500
Beginning Stocks (1000 MT)	210163	210163	200526	200526	198176	206176
Production (1000 MT)	260779	260779	260670	260670	268000	272000
MY Imports (1000 MT)	7596	7596	26000	28000	26000	20000
TY Imports (1000 MT)	7596	7596	26000	28000	26000	20000
TY Imp. from U.S. (1000 MT)	3020	3020	0	0	0	0
Total Supply (1000 MT)	478538	478538	487196	489196	492176	498176
MY Exports (1000 MT)	12	12	20	20	20	20
TY Exports (1000 MT)	12	12	20	20	20	20
Feed and Residual (1000 MT)	193000	193000	206000	196000	211000	211000
FSI Consumption (1000 MT)	85000	85000	83000	87000	83000	87000
Total Consumption (1000 MT)	278000	278000	289000	283000	294000	298000
Ending Stocks (1000 MT)	200526	200526	198176	206176	198156	200156
Total Distribution (1000 MT)	478538	478538	487196	489196	492176	498176
Yield (MT/HA)	6.3173	6.3173	6.3171	6.3171	6.381	6.4

(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 Corn begins in October for all countries. TY 2021/2022 = October 2021 - September 2022

Sorghum	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Year Begins						
China						
Area Harvested (1000 HA)	750	750	730	730	730	720
Beginning Stocks (1000 MT)	17	17	97	97	297	197
Production (1000 MT)	3600	3600	3550	3550	3600	3550
MY Imports (1000 MT)	3709	3709	7800	7500	10000	7500
TY Imports (1000 MT)	3709	3709	7800	7500	10000	7500
TY Imp. from U.S. (1000 MT)	4127	4127	0	0	0	0
Total Supply (1000 MT)	7326	7326	11447	11147	13897	11247
MY Exports (1000 MT)	29	29	50	50	30	30
TY Exports (1000 MT)	29	29	50	50	30	30
Feed and Residual (1000 MT)	4500	4500	8400	7900	10500	7900
FSI Consumption (1000 MT)	2700	2700	2700	3000	3000	3300
Total Consumption (1000 MT)	7200	7200	11100	10900	13500	11200
Ending Stocks (1000 MT)	97	97	297	197	367	17
Total Distribution (1000 MT)	7326	7326	11447	11147	13897	11247
Yield (MT/HA)	4.8	4.8	4.863	4.863	4.9315	4.9306

(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 2021/2022 = October 2021 - September 2022

Barley Market Year Begins China	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	260	260	260	260	250	240
Beginning Stocks (1000 MT)	45	45	214	214	414	414
Production (1000 MT)	900	900	900	900	900	860
MY Imports (1000 MT)	5969	5969	9600	9600	10600	10500
TY Imports (1000 MT)	5969	5969	9600	9600	10600	10500
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	6914	6914	10714	10714	11914	11774
MY Exports (1000 MT)	0	0	0	0	0	0
TY Exports (1000 MT)	0	0	0	0	0	0
Feed and Residual (1000 MT)	2800	2800	6300	6300	7400	7500
FSI Consumption (1000 MT)	3900	3900	4000	4000	4100	4100
Total Consumption (1000 MT)	6700	6700	10300	10300	11500	11600
Ending Stocks (1000 MT)	214	214	414	414	414	174
Total Distribution (1000 MT)	6914	6914	10714	10714	11914	11774
Yield (MT/HA)	3.4615	3.4615	3.4615	3.4615	3.6	3.5833

(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 2021/2022 = October 2021 - September 2022

Wheat Market Year Begins China	2019/2020		2020/2021		2021/2022	
	Jul 2019		Jul 2020		Jul 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	23730	23730	23380	23380	23000	23500
Beginning Stocks (1000 MT)	139765	139765	151682	151682	145632	145432
Production (1000 MT)	133590	133590	134250	134250	136000	136000
MY Imports (1000 MT)	5376	5376	10500	10500	10000	8000
TY Imports (1000 MT)	5376	5376	10500	10500	10000	8000
TY Imp. from U.S. (1000 MT)	762	762	0	0	0	0
Total Supply (1000 MT)	278731	278731	296432	296432	291632	289432
MY Exports (1000 MT)	1049	1049	800	1000	1000	1000
TY Exports (1000 MT)	1049	1049	800	1000	1000	1000
Feed and Residual (1000 MT)	19000	19000	40000	40000	35000	35000
FSI Consumption (1000 MT)	107000	107000	110000	110000	113000	113000
Total Consumption (1000 MT)	126000	126000	150000	150000	148000	148000
Ending Stocks (1000 MT)	151682	151682	145632	145432	142632	140432
Total Distribution (1000 MT)	278731	278731	296432	296432	291632	289432
Yield (MT/HA)	5.6296	5.6296	5.7421	5.7421	5.913	5.7872

(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 2021/2022 = July 2021 - June 2022

Rice, Milled Market Year Begins China	2019/2020		2020/2021		2021/2022	
	Jul 2019		Jul 2020		Jul 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	29690	29690	30076	30076	30000	30200
Beginning Stocks (1000 MT)	115000	115000	116500	116500	115600	110800
Milled Production (1000 MT)	146730	146730	148300	148300	149000	150000
Rough Production (1000 MT)	209614	209614	211857	211857	212857	214286
Milling Rate (.9999) (1000 MT)	7000	7000	7000	7000	7000	7000
MY Imports (1000 MT)	2600	2600	3400	3400	2900	2900
TY Imports (1000 MT)	3200	3200	3200	3200	2800	2800
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	264330	264330	268200	268200	267500	263700
MY Exports (1000 MT)	2600	2600	2400	2400	2400	2400
TY Exports (1000 MT)	2265	2265	2300	2300	2300	2300
Consumption and Residual (1000 MT)	145230	145230	150200	155000	156000	158000
Ending Stocks (1000 MT)	116500	116500	115600	110800	109100	103300
Total Distribution (1000 MT)	264330	264330	268200	268200	267500	263700
Yield (Rough) (MT/HA)	7.0601	7.0601	7.0441	7.0441	7.0952	7.0956

(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 2021/2022 = January 2022 - December 2022

Attachments:

No Attachments