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Report Highlights:

Post forecasts 2021/22 corn harvest at a record 118 million metric tons (MMT), up nearly 40 percent on the disappointing 2020/21 harvest estimated at 85 MMT. Post forecast yield for next season is 5.67 metric tons per hectare (MT/ha) and is based on adequate investment in technology, average weather patterns, and punctual planting of the safrinha corn. Corn exports will also see a recovery next season, after a dismal performance in the current season. Despite surging prices and ample demand, Post does not anticipate significant U.S. corn imports. Post forecasts rice production to level off to 7.8 MMT in 2021/22, a decrease of 200,000 MT from the record production in the current season. Post forecasts wheat production at 7.8 MMT for the 2021/22 season, an increase of over 1.55 MMT from the current season thanks to forecast expansion in the planted area.

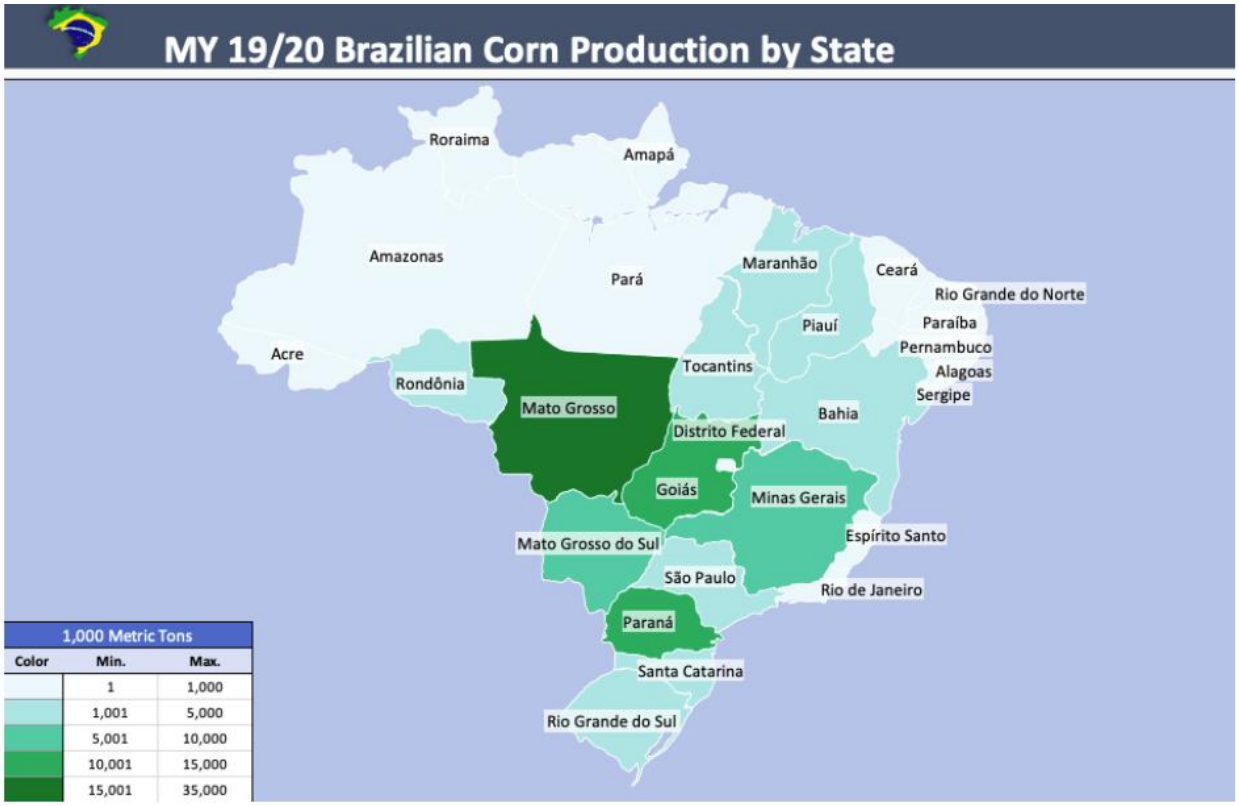
PSD CORN

Corn	2019/2020		2020/2021		2021/2022	
Market Begin Year	Mar 2020		Mar 2021		Mar 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	18500	18500	19825	19900	20800	20800
Beginning Stocks	5311	5311	5230	5307	4730	6807
Production	102000	102000	86000	85000	118000	118000
MY Imports	1648	1648	3500	3500	1700	1750
TY Imports	1338	1338	2300	2300	2700	2700
TY Imp. from U.S.	0	0	0	100	0	0
Total Supply	108959	108959	94730	93807	124430	126557
MY Exports	35229	35152	22000	19000	43000	43000
TY Exports	34137	34137	28000	28000	33000	33000
Feed and Residual	58500	58500	58000	58000	62000	61000
FSI Consumption	10000	10000	10000	10000	11000	10500
Total Consumption	68500	68500	68000	68000	73000	71500
Ending Stocks	5230	5307	4730	6807	8430	12057
Total Distribution	108959	108959	94730	93807	124430	126557
Yield	5.5135	5.5135	4.338	4.2714	5.6731	5.6731
1000 HA, 1000 MT, MT/HA						

CORN PRODUCTION

2021/22 Corn Production to Hit a New Record

Post forecasts corn planted area at 20.8 million hectares (ha) in the 2021/22 season, which represents an expansion of five percent on the current season. Post expects corn prices to remain high into 2022, considering strong internal demand as well as decimated stocks resulting from the disappointing 2020/21 harvest. The government has also introduced several programs to encourage corn planting to make sure that Brazil's growing livestock and poultry sectors have access to ample feed at adequate prices. Corn in Brazil is grown nearly year-round, between three officially defined seasons and across 27 states in Brazil.



Data Source: CONAB; Graphic: Post Brasilia

Factoring in trend yields, Post forecasts 2021/22 season harvest of 118 million metric tons (MMT), easily surpassing the corn production record of 102 MMT set in the market year (MY) 2019/20. This forecast also represents an increase of 40 percent, or 33 MMT, on the current season. Post forecast yield for next season is 5.67 metric tons per ha (MT/ha) and is based on adequate investment in technology, average weather patterns, and punctual planting of the safrinha corn. If the Post yield forecast materializes, it would represent a return to the optimal yields of the 2018/19 and 2019/20 corn harvests, when productivity reached 5.77 MT/ha and 5.51 MT/ha, respectively.

In the last decade, Brazil saw corn yields improve by almost one-third, from 4.16 Mt/ha average yield registered in the 2010/11 harvest to 5.51 MT/ha in the 2019/20 season. Post believes that the key reasons for yield improvement are adoption and investment in inputs, such as Genetically Engineered (GE) seeds and the use of chemicals and fertilizers. Brazil is one of the global leaders in the planting of GE crops, with the GE corn adoption rate by Brazilian farmers at almost 90 percent. That said, investment in technology is not enough to fully mitigate the variability brought by climatic conditions around the country. For example, due to extreme drought, frost, and rainfall outside of the optimal timeframes in 2020 and 2021, Post estimates that yields will average around 4.27 MT/ha this season, almost the same as 10 years ago.

According to projections by the U.S. National Oceanic and Atmospheric Administration (NOAA), there is a 70-80 percent chance of occurrence of the La Nina phenomenon in October-November of this year, with cooling waters in the Pacific and a lower volume of precipitation. The possibility of La Niña is generating concern in the market, particularly because the severe drought and irregular weather patterns over the last year have drained the soil moisture reservoirs. That said, in mid-September, Brazil's Meteorological Service (INMET) projected average rainfall for much of Brazil. INMET anticipates that La Nina will likely be relatively weak and short in duration this year.

First-crop corn accounts for about a quarter of Brazil's total corn production and is mostly planted in Southern and South-Eastern Brazil. Much of first season corn is consumed domestically by the livestock industry, which has its largest operations in these regions. Post forecasts an increase of four percent in planted area for first season corn, about one percent above the rate of expansion in the current season. The increase in the planted area is motivated by the historically high prices and attractive forward contracts offered by the livestock producers. Post forecasts the 2021/21 first-crop corn production at 32 MMT, in line with the forecast put out by the Brazilian Corn Producers Association (Abramilho).

Brazil's first season corn is planted between August and December, with harvest taking place from January to May. According to the consultancy AgRural, as of September 20, the first-crop corn planting was about 22 percent complete, in line with the area sown at this time last season. So far, weather patterns have been stable, and interlocutors have indicated to Post that they anticipate good yields for first season corn, barring inclement climatic events.

Brazil's southernmost state of Rio Grande do Sul is typically the largest producer of first-crop corn, responsible for more than one-fifth of the country's total corn output. According to the Rio Grande do Sul Extension Service (EMATER/RS), producers in the state will increase corn planted area by almost seven percent to 834,000 ha. Field reports indicate that as of the third week of September, more than half of the anticipated corn area has been sown in the state. The corn harvest in the state will begin in January. EMATER/RS expects the state will produce over 6.1 MMT of first crop corn, assuming optimal weather patterns during plant development and harvest.

In the southern state of Parana, the Department of Rural Economics (Deral) estimates the first-season corn planted area at 45 percent sown as of the third week of September, well above the 34 percent of the area registered at this time last year. Planting is most advanced in Parana's southern municipalities, where growers began sowing in August. Similar to Rio Grade do Sul, the harvest in Parana state will begin in January. Deral anticipates the first-season corn harvest at over 4 MMT, an increase of 32 percent on the 2020/21 first-crop corn.

Notably, first-season corn expansion could have been greater if the crop did not compete with first-season soybeans. Post interlocutors in the Southern region of Brazil have noted that despite the historically high prices and a local government campaign to increase corn production, many producers have chosen to continue to sow first-season soybeans. This is in large part because soybeans are easier to export, global demand is less volatile, and remains high. As soybeans are also experiencing historically high prices and profitability, they are considered a sure bet by the Brazilian farmers. Post interlocutors have also noted that some of the preference is cultural – certain producers have planted soybeans for generations and will continue to do so going forward.

Second Season Corn

Most Brazilian corn – about 70 to 75 percent – is produced during the second season or safrinha harvest. The safrinha corn is planted in the fields directly after the first-season soybeans are harvested. Post forecasts 2021/22 safrinha corn planted area to expand around five percent in 2021/22, as long as farmers are able to plant within the ideal planting window of early January until the end of February. Post forecasts second crop corn at 84 MMT, up some 25 MMT on the current season crop.

The state of Mato Grosso is the largest producer of safrinha corn, accounting for anywhere between 45 and 55 percent of the second-season volume depending on the yields. For the 2021/22 safrinha season, the Mato Grosso Institute of Agricultural Economics (IMEA) expects corn area to expand by over six percent in the coming season, with growers planting over 6.2 million ha, which would set a record for the state. For the 2021/22 season, IMEA is forecasting soybean production of 37.41 MMT, while the safrinha corn harvest is projected to hit 39.58 MMT. If this forecast materializes, Mato Grosso would harvest more corn than soybeans - a historical first for

Brazil's agricultural heartland. The forecast is based on normal weather conditions, with punctual planting of first season soybeans, followed by immediate sowing of the safrinha corn before the ideal planting window closes in late February.

Third Season Corn

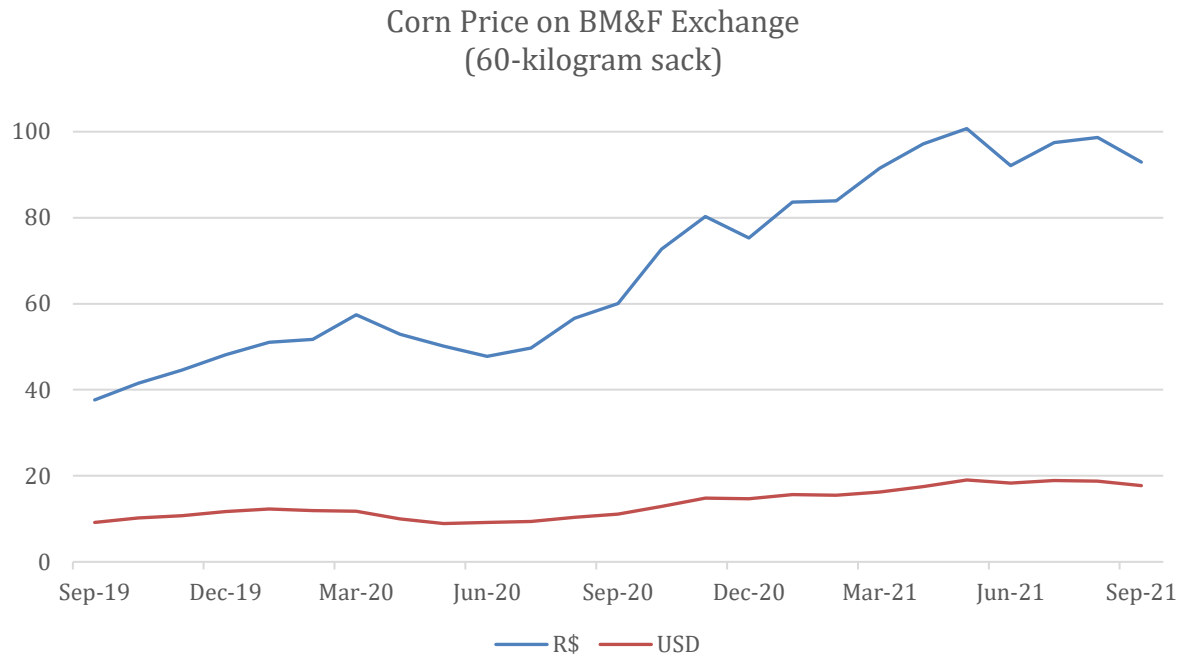
In 2019, Brazil's agricultural statistics agency, the National Food Supply Company (CONAB), defined a third corn crop in the country. This corn is grown in northeastern states of Sergipe, Alagoas, and the northern part of Bahia, collectively known by the acronym "Sealba." Third-crop corn is sown between May-June and harvested in October-November, a harvest cycle that more closely resembles that of the United States. This production is still relatively small and was previously folded in with the safrinha corn. Post forecasts third-crop corn to account for about 1.7 percent of Brazil's total MY 2021/22 production or about 600,000 MT, and around three percent or up to 2 million ha of the total area planted.

Improved yields and high prices have reinforced projections for crop expansion in the Sealba. Sergipe is a key driver for the third crop expansion. According to CONAB, over the last 15 years, the average corn yield in the state rose from 1,300 kilograms (kg) per ha registered for 2004/05 crop to 5,969 kg/ha in the 2019/20 cycle, before falling to 4,180 kg/ha in the current, drought-plagued season. Sergipe has the second-largest planted area in the region, around 165,000 ha, trailing Bahia which planted around 260,000 ha of third-season corn in the 2020/21 season. Market participants believe that Alagoas state has the potential to rise from the current 44,000 ha of corn planted area to 600,000 ha.

Post anticipates that third-season corn production in the Sealba will continue to expand. Corn is used in the Northeast for both animal feed and human consumption — corn-based dishes are part of the traditional diet in this region of Brazil. The Sealba region also has good logistics for export, with crops located close to the Inácio Barbosa Maritime Terminal (TMIB) in Sergipe.

Despite Record Planting Area, 2020/21 Corn Crop Disappoints

Post estimates the MY 2020/21 harvested corn area at 19.9 million ha, an all-time high and an increase of over one million ha compared to MY 2019/20. Strong domestic demand from the poultry and livestock sectors, as well as the growing corn ethanol industry, have greatly expanded corn consumption in recent years, boosting domestic prices. Paired with an abundance of exports and Brazil's devalued domestic currency, the real (BRL), the internal corn prices have seen a meteoric rise in the last two years. As a result of higher prices, the planted area saw an expansion of 7.6 percent season-on-season, above the five-year average rate of expansion of 4.5 percent.



Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA)

Record-setting corn prices motivated producers not only to expand corn area this season but also to take the risk of diminished yields by pushing the growing cycle deeper into the dry season. Subject to less-than-ideal climate conditions, producers saw yields fall for all three corn-growing seasons in 2020/21. The cumulative effect of these climatic events pushed the yield estimate to 4.27 MT/ha for this season, almost one MT below the five-year average of 5.2 MT/ ha. As a result, Post revised downward its estimate of 2020/21 corn production to 85 MMT. Notably, Post contacts indicate that growers will continue to see good revenues this season, as disappointing harvest volumes will be compensated for by the record-setting domestic prices.

Brazil 2020/21 Corn Planted Area and Production						
	First Season		*Second Season*		*Third Season*	
	Planted Area (1,000 ha)	Production (1,000 mt)	Planted Area (1,000 ha)	Production (1,000 mt)	Planted Area (1,000 ha)	Production (1,000 mt)
North	260	850	620	2,500	16	90
North East	1,130	5,000	1,130	1,900	570	1410
Center West	270	2,350	9,650	45,900	…	…
Southeast	1,150	6,850	1,050	2,300	…	…
South	1,550	9,450	2,500	6,400	…	…
Total	4,360	24,500	14,950	59,000	586	1,500

Data Source: Post Brasilia

Post estimates the 2020/21 first-season corn crop at 24.5 MMT. The first-season corn crop was planted late due to drought, and the expansion in the planted area was not enough to compensate for the late sowing and the consequent impact on yields. According to the estimates from CONAB, adverse weather affected growers in nearly all states, but the most significant impact on yields was registered in southern Brazil. The southern region is also the primary producer of first-season corn.

Post estimates the 2020/21 second-season corn crop at just 59 MMT, well below the 75-80 MMT volume projected at the start of the season. The 2020/21 safrinha corn was planted approximately a month later than normal due to a delay in the first-season soybean crop harvest. The crop also encountered a historic drought in many areas of south-central Brazil. The final blow was a series of frosts in July that killed much of the corn before it finished filling grain. CONAB reports that the 2020/21 second-season yields are down in all five corn-growing regions as compared to last season. However, the impact is variable; CONAB estimates that productivity is down just over 12 percent in the Northeast region of Brazil, while yields in the South and Southeast regions are down some 48-55 percent from the previous season.

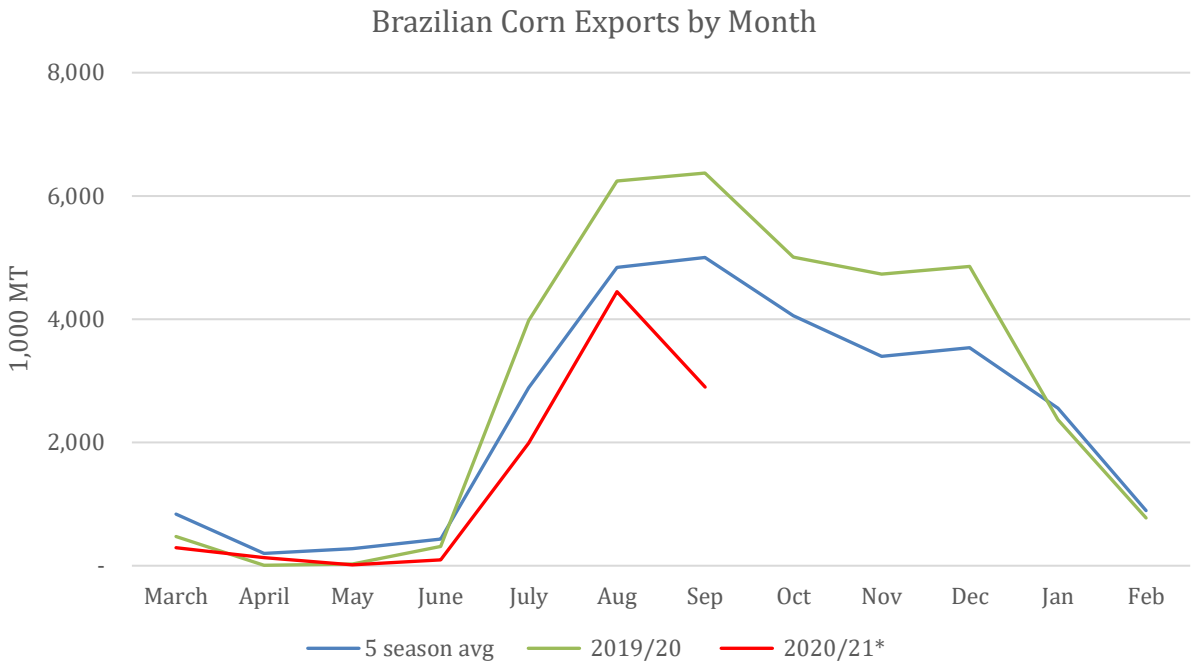
The third season corn crop in the Sealba region and Amapa and Roraima states is estimated at 1.5 MMT. Despite the expansion of the planted area, production is expected to be down from the previous season due to drought at the start of the growing season. Harvesting of the third-season corn has not yet started. As of September, CONAB reports that 25 percent of the corn crop in the region is rated to be in good condition, while the remaining 75 percent is estimated to have average quality.

CORN TRADE

Exports to Recover Next Season, After a Dismal 2020/21

For MY 2021/22, Post increased its corn export forecast to 43 MMT. This is based on an expectation of expanded production, as well as the likelihood that the BRL will remain relatively weak even though the economic recovery began to gain traction this year. According to Brazil's Central Bank Focus Survey, market participants anticipate the exchange rate to average R$ 5.20 to the USD in 2021, rising to R$ 5.24 to the USD in 2022. The rate is considerably higher than R$ 4.5 to the USD registered before the onset of the pandemic in March 2020.

Post reduced its corn export estimate for MY 2020/21 substantially to a total of 19 MMT, which represents just over half of the volume shipped during the 2019/20 season. The weak BRL had been expected to fuel large export volumes, but the sharp decline in projected yields greatly curtailed the volume of corn available for export. Corn exports for the first half of MY 2020/21 (March-August 2021) totaled 6.7 MMT, about 70 percent of the 11 MMT sold at this time last season. In the second half of the season, Post anticipates that the drop-off in volumes shipped will be even steeper as export prices dip below parity compared to the domestic market prices.



Data Source: SECEX data, with 2020/21 September figure an estimate by Post; Chart Source: Post Brasilia

For September, trade contacts indicate that corn volumes shipped would be less than 3 MMT, instead of the average 5 MMT. Post interlocutors have confirmed that due to margins between the domestic prices paid by the feed and ethanol industry and the export contract prices, upwards of 2 MMT previously earmarked by traders for export is likely to be sold on the domestic market. The price difference for a 60-kg bag of corn in June-July 2021 was R$3-4, with the domestic processing industry paying around R$16 per bag, versus R$10-12 per bag that importers were willing to pay for the Brazilian corn.

The sale of corn to domestic buyers is possible because of the so-called washout mechanism clause that is typically included in contracts between trading companies and international buyers. Invoking this clause, the trading company has the option to supply the crop from another country to the importer, or to pay the difference in the settlement of the contract. Due to the substantial margin difference between the export contract price and the Brazilian domestic market price, Post contacts anticipate that the washout trend will continue in the coming months as domestic demand holds firm.

Current Surge in Imports to Level Off

For MY 2021/22, Post maintains its corn import forecast at 1.75 MMT, which is down from 2020/21 but still higher than 2019/20 volumes. This forecast is based on an expectation of increased corn production, albeit the demand from the poultry, pork, and ethanol sectors should remain strong and will support the above-average imports next season.

Post revised its estimate for MY 2020/21 corn imports to 3.5 MMT, up 500,000 MT from its June projection. In effect, corn imports will be more than double the average annual shipments, due to the disappointing safrinha corn harvest this season coupled with strong internal demand from Brazil's poultry and livestock sectors. From January through August of this year, Brazil had already imported 1.2 MMT of corn, which is more than double compared to the same period last year. Brazil's poultry and swine sectors have brought a significant amount of corn into the country, and there is no sign that the pace will let up in the coming months. Press reports indicate that meat producer JBS purchased the equivalent of 30 vessels of corn from Argentina (although these volumes

have not been verified). JBS has confirmed a purchase of three vessels of corn, which equates to more than one MMT of corn. Corn is also coming in via trucks from Paraguay directly to Parana state.

The increased flow of corn imports has been facilitated by a raft of government measures adopted over the last several months. Brazil's livestock and poultry sectors had pressured the government to act in the wake of surging prices, which directly impact the cost of raising animals, as corn is a major source of feed for cattle, poultry, and swine. In April, the Executive Management Committee of the Foreign Trade Chamber (GECEX/CAMEX) zeroed out import tariffs for soybeans and corn for countries outside of Mercosur. The measure is in effect from April 27 to December 31, 2021, and is valid for the HS Codes: 10059010, 12019000, 15071000, and 23040010, without quotas.

Then, in mid-June, the National Technical Commission on Biosecurity (CTNBio) announced the approval of the last individual Genetically Engineered (GE) event for corn produced in the United States, eliminating the asynchronous approvals issue. CTNBio also issued the Normative Instruction 32, simplifying the approval process for stacked biotechnology traits in corn and soybeans designated for human consumption and animal feed. Stacked event varieties intended for cultivation in Brazil will still undergo CTNBio's traditional review and approval process. Nevertheless, these two CTNBio measures effectively guarantee that any imported corn from the United States would qualify under the approved category.

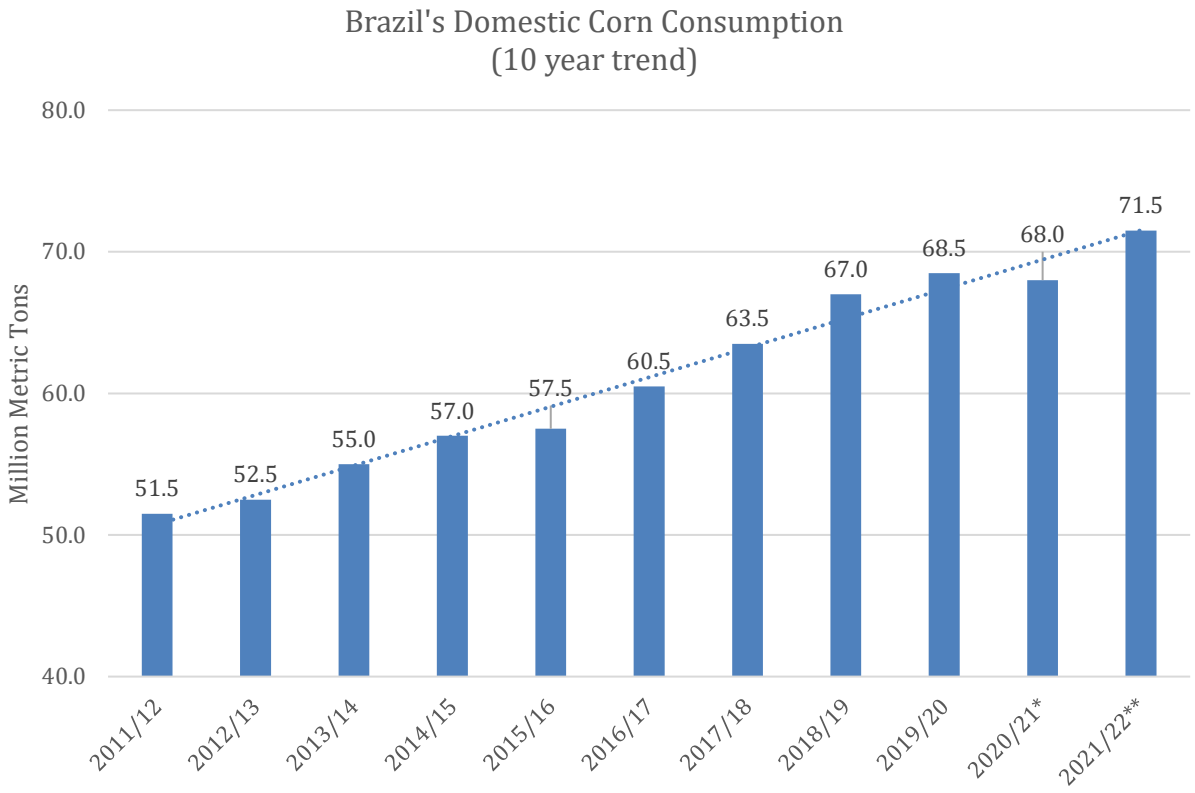
In late September, the government approved a temporary suspension of the PIS/Cofins taxes on the import of corn through December 31, 2021. This suspension applies to all corn imports, including shipments from Mercosur countries that normally pay this tax. According to the government, the suspension of the 9.25 percent PIS/Cofins tax should reduce the price of corn by around R$ 9 per bag, when considering corn price of around R$ 100 per bag. Pending the supply projections for 2022, the measure may be extended via parliamentary amendments. Abramilho has publicly backed the temporary suspension, with a nod to free and fair trade for corn. Abramilho is urging the Brazilian government to implement plans to increase corn acreage and corn yields so producers can meet the increasing internal and external demand for Brazilian corn. The association is also urging poultry and hog producers in southern Brazil to increase their grain storage capacity and their forward contracting for corn to avoid shortages in the future.

In an average year, more than 95 percent of Brazilian corn imports come from Paraguay and Argentina. However, Posts forecasts that given the policy changes outlined above, there will be a rare market opportunity for U.S. corn exports to Brazil in trade year (TY) 2021/22 (October 2021 – September 2022). With Brazilian corn prices likely to remain high throughout 2021, American corn could be particularly competitive in northeastern Brazil. Total sales volumes will depend on the competitiveness of the FOB price of U.S. corn out of the Gulf of Mexico. In the aftermath of hurricane Ida, due to delayed shipments of pre-ordered corn and constrained logistics in the Gulf terminals, it is unlikely that there will be new sales this year. However, depending on the price and supply dynamics in early 2022, a small volume of U.S. corn exports may yet make it to Brazil for TY 2022.

CORN CONSUMPTION

2021/22 Domestic Demand Forges Ahead

Post forecasts MY 2021/22 corn consumption at 71.5 MMT, an expansion of more than five percent on the current season estimate of 68 MMT. Post anticipates that next season, feed and residual, along with food, seed, and industrial (FSI) consumption will grow in line with the economic recovery. In September 2021, Brazil's Central Bank projected the county's GDP to grow 5.04 percent this year, and close to 1.7 percent in 2022. Post forecast also accounts for the fact that Brazil's domestic corn consumption has nearly doubled in the last decade, thanks to robust demand from the country's burgeoning corn ethanol and poultry and livestock sectors.



Data Source: USDA PSD, 2020/21* and 2021/22* Post estimate and forecast; Chart Source: Post Brasilia

Post forecasts corn feed and residual use in Brazil to expand by five percent in MY 2021/22 to 61 MMT, up from an estimated 58 MMT in 2020/21 MY. Brazil's animal protein industry consumes at least half the corn crop each year, as the grain makes up about 60 percent of feed rations. Post forecasts poultry production will expand by about three percent in the calendar year 2022, with production topping 14.7 MMT. At the same time, Post forecasts that Brazil's pork meat production will grow by 3.5 percent in 2021, driven by record pork exports as well as growth in domestic demand. The Brazilian pork industry consumes about half as much feed rations as the poultry sector, but the rapid growth is still significant.

Post forecasts Brazil's MY 2021/22 food, seed, and industrial (FSI) consumption will grow to 10.5 MMT, up from the estimated 10 MMT used in MY 2020/21. The majority of the FSI is consumed by Brazil's corn ethanol industry, which has grown rapidly in recent years. Even during the pandemic, the sector continued to add capacity, attracting new investments to construct corn ethanol plants that will come online in the coming years. According to CONAB's August assessment, corn-based ethanol production will grow by over 11 percent annually in 2021/22. Brazil is expected to produce 3.36 billion liters of ethanol from corn, which represents over 11 percent of all the ethanol produced in Brazil.

2020/21 Domestic Demand Outpaces Supply

Post estimates MY 2020/21 corn consumption at 68 MMT, which represents a small dip on the MY 2019/20 domestic consumption of 68.5 MMT. The decrease in consumption estimate is based on lower than initially anticipated feed and residual this season. Although Post expects the Brazilian livestock and poultry industries to grow in 2021- thanks to strong demand from China and other exports markets, the consumption of feed is projected to decrease slightly as compared to last season. Post contacts have indicated that livestock and poultry producers may ration feed, as well as look for other protein sources aside from corn in an effort to control the

surging cost of production. In the case of cattle, producers are also decreasing the use of semi-confinement, in favor of pasture grazing.

Post estimates Brazil's MY 2020/21 FSI consumption to remain flat season-on-season at 10 MMT. The Brazilian Corn Ethanol Union (UNEM) estimates that the sector produced about 2.5 billion liters of corn-based ethanol in 2020, consuming close to 6 MMT of corn in the process. Brazil's corn ethanol industry exploded in just a few years, with the first corn-based ethanol plant launching production in July of 2017 in the city of Lucas do Rio Verde in the state of Mato Grosso. However, the growth potential for corn ethanol production in Brazil is still limited by regional fuel demand and the logistical challenges and profitability of transporting excess fuel to other parts of the country.

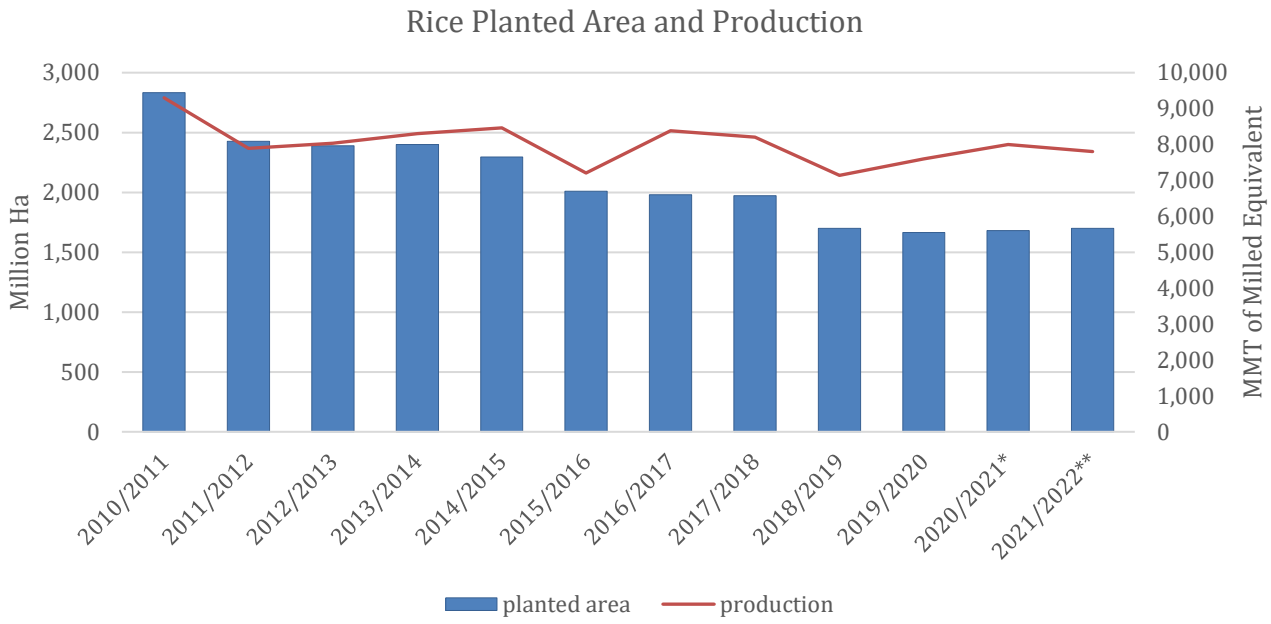
RICE PSD

Rice, Milled	2019/2020		2020/2021		2021/2022	
Market Begin Year	Apr 2020		Apr 2021		Apr 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1665	1665	1682	1680	1700	1700
Beginning Stocks	248	248	205	203	606	553
Milled Production	7602	7602	8001	8000	8024	7800
Rough Production	11179	11179	11766	11765	11800	11471
Milling Rate (.9999)	6800	6800	6800	6800	6800	6800
MY Imports	874	874	700	700	650	700
TY Imports	853	853	730	730	650	670
TY Imp. from U.S.	82	82	0	0	0	0
Total Supply	8724	8724	8906	8903	9280	9053
MY Exports	1219	1221	850	900	1050	1000
TY Exports	1240	1240	800	850	1050	1000
Consumption and Residual	7300	7300	7450	7450	7450	7450
Ending Stocks	205	203	606	553	780	603
Total Distribution	8724	8724	8906	8903	9280	9053
Yield (Rough)	6.7141	6.7141	6.9952	7.003	6.9412	6.7476
1000 HA, 1000 MT, MT/HA						

RICE PRODUCTION

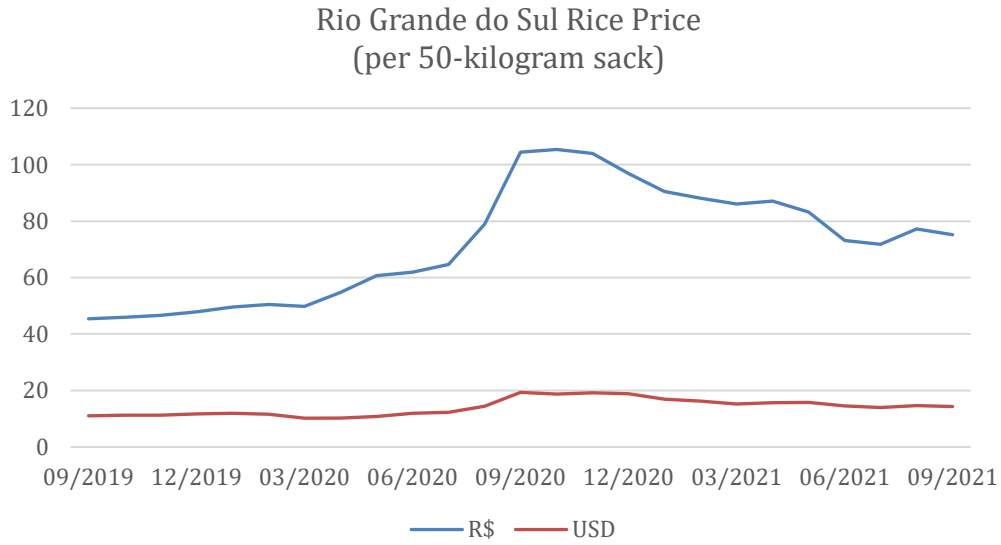
2021/22 Rice Production to Contract

For MY 2021/22 (April 2022 – March 2023), Post forecasts rice area at 1.7 million ha, about one percent expansion on the estimated area for the current crop. Post forecast assumes that rice planted area has stabilized around 1.7 million ha in the last three seasons. Overall, according to Brazil's agricultural statistics agency, the National Food Supply Company (CONAB), the rice planted area decreased over 39 percent in the last decade across the country. The decrease is driven by relatively smaller margins for the crop when compared with other commodities, such as soybeans, or even with cattle.



Source: USDA PSD, with 2020/21* and 2021/22** representing Post estimate and forecast respectively

Notably, the rice planted area remained relatively flat in 2019/20, and 2020/21 despite the record-setting domestic prices. With the onset of the COVID-19 pandemic, rice demand surged in Brazil and the rest of the world, propelling crop prices higher. According to data from the University of Sao Paulo's Center for Advanced Studies in Applied Economics (CEPEA), domestic rice prices doubled from around R$50 per 50-kg sack in April 2020, to over R$100 per sack by September of that year. Brazil's domestic prices reached an all-time high of R$105.38 per sack in October 2020. The average price in August 2021 was R$77 per sack (around $14.5), which is about the same level as in the same month in 2020, but over 70 percent higher than the level registered in August two years ago. CONAB anticipates that domestic prices will remain at around R$70-75 per sack level in 2022, a level that will prevent rice planted area from contracting next season.



Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA)

Planting for the MY 2021/22 crop should be getting underway soon in southern Brazil, where farmers are working to prepare their fields. Assuming average weather and trend yields, Post forecasts milled rice production at 7.8 MMT next season, a decrease of 200,000 MT from the current season production that saw record yields on the account of optimal weather conditions.

Rice is produced across 25 states, though Brazil's southernmost state of Rio Grande do Sul accounts for about 70 percent of the total volume produced. According to the September forecast issued by the Rio Grande do Sul Extension Service (EMATER/RS), planted area in Rio Grande do Sul will contract by about 0.5 percent, in response to the trade-off margins between soybeans and rice. Over the years, growers in the state have slowly converted more and more rice areas to soybean fields. Yields in Rio Grande do Sul are forecasted to level off with a return to average growing conditions translating to an eight percent decrease in production, to 5.1 MMT of milled rice equivalent, according to EMATER/RS. Post concurs with these projections.

2020/21 Rice Crop Revised on the Upside

Brazil's MY 2020/21 rice harvest wrapped up in mid-May. Post revised down its estimated rice planted area by 4,000 ha to 1.680 million ha. As already mentioned, despite the record-high domestic prices, Brazil's rice area expansion was less than one percent, due to competition from other crops like corn and soybeans, which have also seen soaring prices. Nevertheless, thanks to ideal weather and technology, this rice crop saw a record yield of 7 MT/ ha. As a result, Post increased its estimate of MY 2020/21 (April 2021 – March 2022) rice production to 8 MMT, which represents an increase of over five percent on last season's production.

In MY 2020/21, about two-thirds of Brazil's rice area was concentrated in the two southern states of Rio Grande do Sul and Santa Catarina, where virtually all fields are irrigated. Santa Catarina and Rio Grande do Sul also accounted for almost four-fifths of national rice production in MY 2020/21, according to CONAB. The country's southernmost state, Rio Grande do Sul, saw production expand by 5.2 percent compared to MY 2019/20, while the state of Santa Catarina, which is just north of Rio Grande do Sul, reported a 3.6 percent production increase year-over-year.

Rio Grande do Sul alone accounted for more than half of Brazil's total rice area, and over 70 percent of total rice production. According to the Rio Grande do Sul Rice Institute (IRGA), for the 2020/21 harvest, the state saw the highest yields ever recorded, topping 9 MT/ ha on average, with some parts of the state harvesting more than 9.7 MT/ ha. The record-setting yields resulted in Rio Grande do Sul's fourth large rice harvest ever, with more than 8.5 MMT of rough rice produced in the state. Despite initial problems with drought at the time of sowing, the state saw near-ideal weather during the growing season with clear skies, higher daytime temperatures, and temperate nights. In addition, growers have perfected soil preparation techniques, crop rotation with soybeans, and the use of technology when it comes to widespread adoption of higher-yielding cultivars, including several developed by IRGA.

In the North region of the country, seven states grow rice, with several using irrigation techniques to optimize yields. This is the second-largest rice-producing region in Brazil, with 2020/21 harvest topping one million metric tons. The 2020/21 production in the north represents an annual increase of almost five percent, despite planted area remaining flat season-on-season. The state of Tocantins is the largest grower in the region, with production approaching 700,000 MT this season, with the majority coming from irrigated fields. The Midwest region ranks third in rice production. The state of Mato Grosso is the main rice producer in this region, with over 400,000 MT of rice farmed.

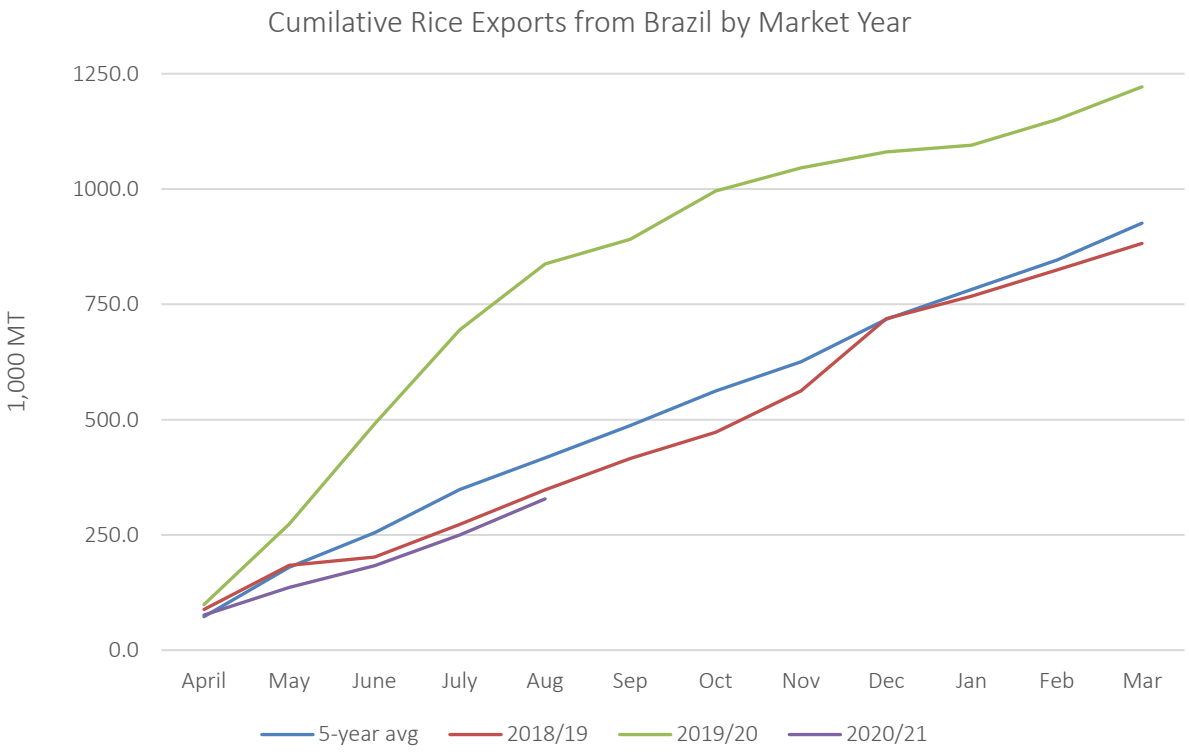
Factoring in the fact that yields for rainfed fields across Brazil are usually only a third of that for irrigated rice, Post's estimate for Brazil's average MY 2020/21 rice yield is 7.003 MT/ ha, which is four percent higher than the previous season.

RICE TRADE

Exports to Expand on Improved Freight Costs

Post forecasts MY 2021/22 rice exports at 1 MMT, an increase of 100,000 MT from the estimated exports in the current season. The forecast is based on available supplies, favorable exchange rate, and the expectation that maritime freight costs will come down from the current peak pricing that has stymied shipments in 2021.

For MY 2020/21 Post estimates rice exports at 900,000 MT. Brazilian rice exports in the five months of the current season have lagged far behind the record levels seen in MY 2019/20, and even below the five-year average. At this point, the export pace is tracking closely with 2018/19 MY, when the country export 882,000 MT of milled rice equivalent.



Data Source: Brazilian Foreign Trade Secretariat (SECEX) Chart: Post Brasilia

In the current season, Post initially expected that export sales would be supported by the relatively cheap domestic currency. Since the onset of the pandemic, the BRL lost more than 30 percent of its value, and despite the economic recovery, has failed to regain ground against the USD. This has made Brazilian commodities more attractive on the global market across the board, given that international sales are generally dollar denominated. However, the devaluation of the real has not been enough to offset the surging rice prices in Brazil. As a result, Brazilian rice prices surpassed those of its main competitors, such as the United States.

Exports have also been hard hit by the shortage and expense of shipping containers. According to the Brazilian Association of Rice Industry (Abiarroz), maritime freight rates have increased by 170 percent this year. Post's trade contacts have confirmed that costs for containers have tripled, and in some cases, even quadrupled since the onset of the COVID-19 pandemic. Much of the container shortage is associated with rapidly changing expectations and dynamics of trade in the wake of the pandemic and is not linked to any one specific commodity.

That said, goods that require container storage, such as rice, have been much more affected than commodities that can be shipped in open vessels, such as soybeans and corn.

In the first five months of the current MY, rice exports are down nearly 70 percent as compared to the first five months of the record-setting 2019/20 export season. Brazil has completely lost markets in Mexico and Cuba, while exports to Senegal are down almost 90 percent. Several markets are up, including the United States which increased purchases from Brazil by almost 50 percent so far this MY, as compared to this time last season. Venezuela remains the top destination for Brazilian rice exports with purchases of both paddy rice and white rice. As Venezuela descended deep into political and economic turmoil over the last few years, Brazil's abundant production and relative geographic proximity made it a convenient rice supplier. However, rice exports to Venezuela in the first five months of the current MY (April-August) have totaled just over 44,300 MT, almost 100,000 MT less than in the same period of 2019/20 MY. Much of this decrease is driven by the fact that Venezuela's bulk rice imports from Brazil are acquired by the state to be used in the subsidized food program. Given the constrained cash flow, those purchases have trailed off significantly.

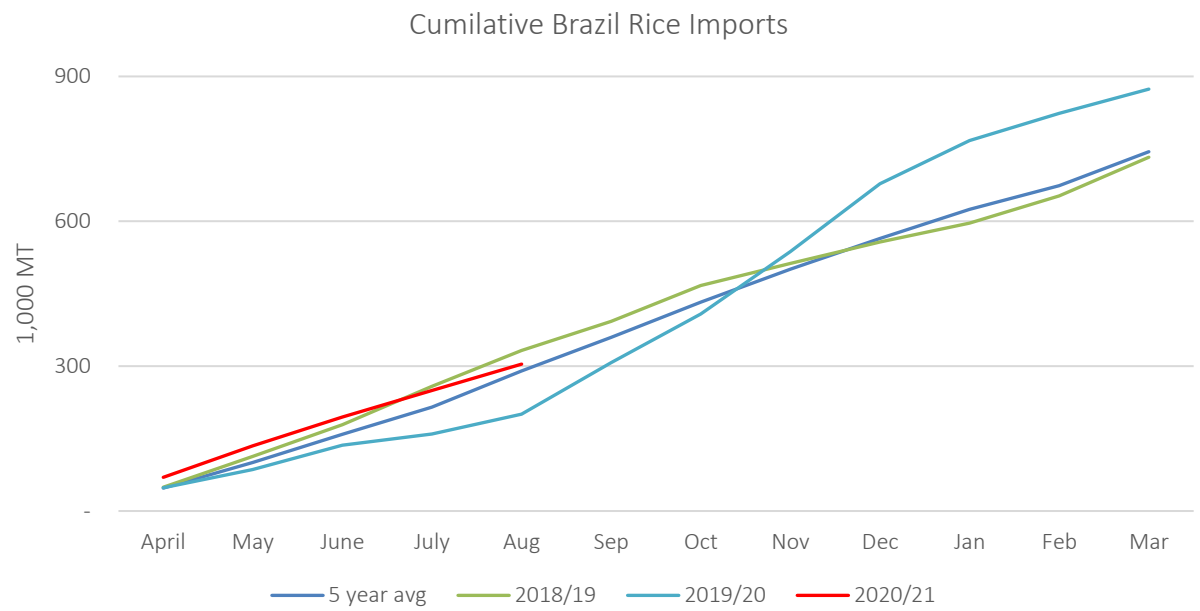
Brazil Top Rice Export Destinations					
		2019/20	5m 2019/20	5m 2020/21	Δ 2019/20 to 2020/21
1	Venezuela	194,574	140,930	44,309	-69%
2	Senegal	167,291	85,705	9,500	-89%
3	Peru	125,552	59,661	41,319	-31%
4	Gambia	100,119	40,619	42,012	3%
5	Sierra Leone	75,200	54,200	15,024	-72%
6	Mexico	72,459	70,203	-	-100%
7	Costa Rica	63,999	63,999	37,933	-41%
8	United States	61,148	22,950	33,634	47%
9	Cuba	60,569	60,425	-	-100%
10	Netherlands	52,415	19,327	41,295	114%
Total		1,221,585	837,743	328,119	-61%

Source: Brazilian Foreign Trade Secretariat (SECEX)

Imports to Subside After a Substantial Pandemic Bump

Post forecasts Brazil's 2021/22 rice imports at 700,00 MT of milled rice equivalent, remaining flat on the 2020/21 import estimate. The forecast is based on an expectation of return to trend for rice trade. In the first five months of the current MY, imports have tracked closely with the trendline of last season, as well as the five-year average. In a typical season, Brazilian rice imports do not vary by more than 25,000 MT of milled rice equivalent in any given month. Last season was highly volatile, with imports starting the season by leveling off more than usual

due to the devaluation of the BRL, and then surging in the second half of the MY due to lack of supply on the domestic market and record-high prices that rice fetched in the stores.



Data Source: Brazilian Foreign Trade Secretariat (SECEX) Chart: Post Brasilia

Most of Brazil's rice imports have typically come duty-free from its Mercosur trade bloc neighbors: Paraguay, Uruguay, and Argentina. Paraguay alone accounted for 46 percent of imports in MY 2019/20, with Uruguay supplying another 21 percent of imports, and Argentina responsible for approximately 10 percent, for a total of 77 percent. The United States was the third-largest supplier of rice to the Brazilian market in 2019/20, gaining a 10 percent share after the Brazilian government established a temporary duty-free TRQ for non-Mercosur members. The TRQ eliminated the 10 percent tariff on paddy rice and the 12 percent duty on white rice and was designed to relieve constrained domestic supply and record prices.

With the TRQ expiring at the end of 2020, Brazilian buyers are expected to return to sourcing almost exclusively from Mercosur trade partners. In the first five months of the current season, imports from Paraguay accounted for 75 percent of the total volume, while imports from Uruguay and Argentina made up 10 and 11 percent respectively. Volumes from the United States are minimal, less than one percent of the total.

Rice Consumption to Remain Flat

Post forecasts rice consumption for MY 2021/22 at 7.45 MMT, remaining flat on the current season estimate. Last season saw an all-time low domestic consumption of 7.3 MMT, as soaring export levels and high retail prices have prompted consumers to scale back their purchases of rice. However, with lower rice prices since the beginning of the year, consumer demand for rice is expected to rise this season and to remain at this level into 2022. Post anticipates that rice purchases will also get a boost as prices for other staple goods such as meat, dairy, and eggs have continued to grow on the account of higher costs of production.

WHEAT PSD

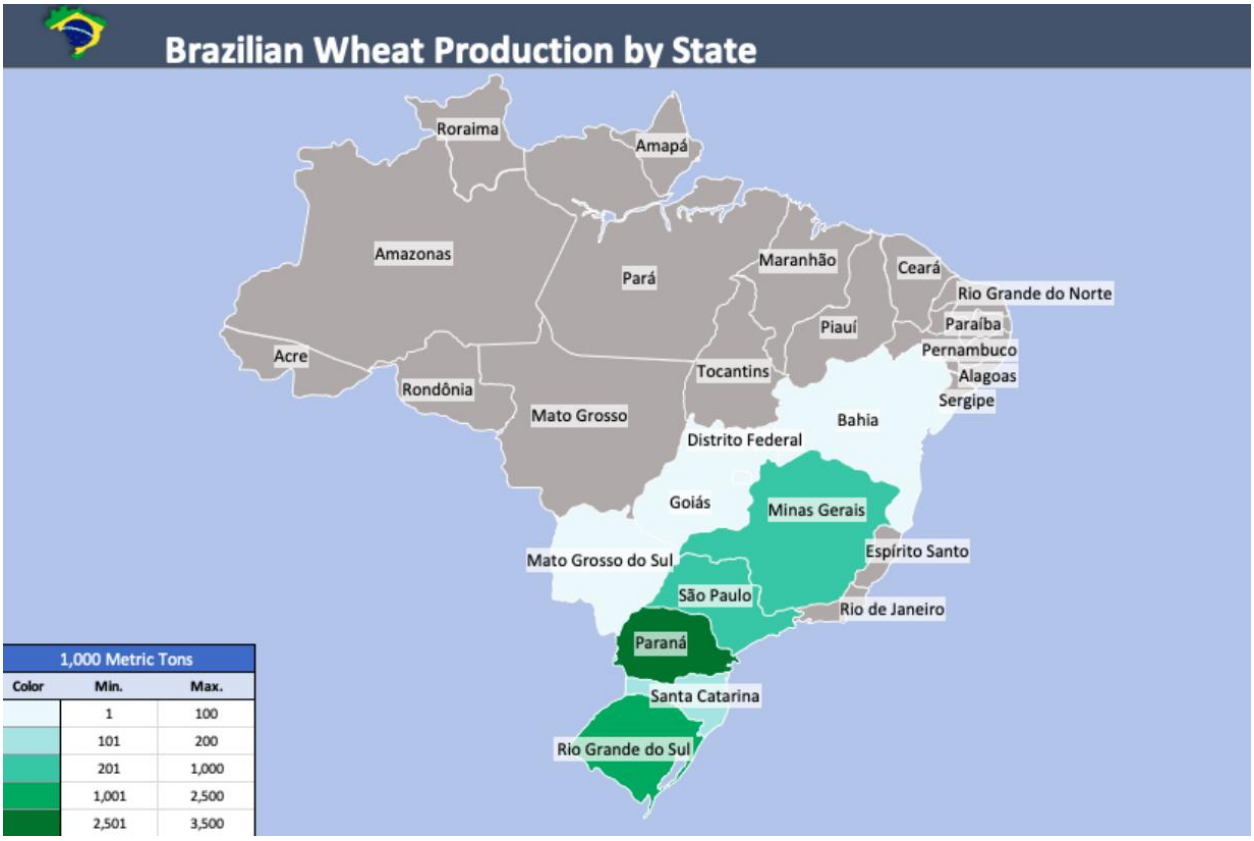
Wheat	2019/2020		2020/2021		2021/2022	
Market Begin Year	Oct 2019		Oct 2020		Oct 2021	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	2040	2040	2340	2340	2700	2700
Beginning Stocks	1057	1057	761	761	511	336
Production	5200	5200	6250	6250	7700	7800
MY Imports	7029	7029	6500	6400	6500	6500
TY Imports	7063	7063	6279	6279	6500	6500
TY Imp. from U.S.	625	625	0	0	0	0
Total Supply	13286	13286	13511	13411	14711	14636
MY Exports	425	425	950	925	1300	1300
TY Exports	408	408	911	911	1300	1300
Feed and Residual	500	500	400	500	800	600
FSI Consumption	11600	11600	11650	11650	11800	11800
Total Consumption	12100	12100	12050	12150	12600	12400
Ending Stocks	761	761	511	336	811	936
Total Distribution	13286	13286	13511	13411	14711	14636
Yield	2.549	2.549	2.6709	2.6709	2.8519	2.8889
1000 HA, 1000 MT, MT/HA						

WHEAT PRODUCTION

Next Season Wheat Crop to Set a Record

For MY 2021/22, Post forecasts wheat area at 2.7 million ha, an annual expansion of 15 percent driven by the record prices. Post forecasts MY 2021/22 Brazilian wheat production at 7.8 MMT, which would set a record for the crop. The production forecast is based on a yield of 2.90 MT/ha, which, if it materializes, would be the second-highest yield on record.

Brazilian farmers grow wheat as a first-season crop in nine states, though most of the production is concentrated in the south of the country. In particular, the states of Parana and Rio Grande do Sul account for roughly 85 percent of total Brazilian wheat planted area and production. Growers typically plant wheat between April and September, with most planting occurring in May in Parana, and in June in Rio Grande do Sul. Note that Brazil's sowing timeline for wheat falls outside of 2021/22 MY, which runs from October 2021 to September 2022. However, the harvest and export of the wheat crop take place within the MY parameters. Harvest will be complete across all Brazil by the end of December.



Data Source: CONAB; Graphic: Post Brasilia

According to the September bulletin from Brazil's National Supply Company (CONAB), apart from the state of Minas Gerais, the wheat planted area will increase in all other growing states. In Parana, growers increased their wheat planting by almost seven percent year-over-year, sowing over 1.1 million ha. Harvest has already begun in a few areas of Parana state, with yields being slightly below average due to frost damage from June and July cold spells. However, farmers expect productivity to improve as more of the crop is collected. According to Parana's Department of Rural Economy (Deral), 58 percent of the crops in the state are in good condition, 31 percent in average condition, and 11 percent in bad condition. Deral expects the state to harvest 3.5 MMT of wheat.

Farmers in Rio Grande do Sul's sowed over one million ha of wheat for the first time in history, which equates to an astounding 23 percent expansion. Historically, Parana has been the largest wheat producer in Brazil; however, Rio Grande do Sul may take over as the lead producer next season, pending weather conditions for the remainder of the growing season. Forecasts for the final production in the state range from 2.9 to 3.8 MMT. Rio Grande do Sul Extension Service (EMATER/RS) reports that the development of the wheat crop is below the level seen at this time last year. As of September, it is too early to refine the yield estimate for the state. Notably, historically about half of Brazil's wheat crops have experienced weather-related challenges that have hampered final yields.

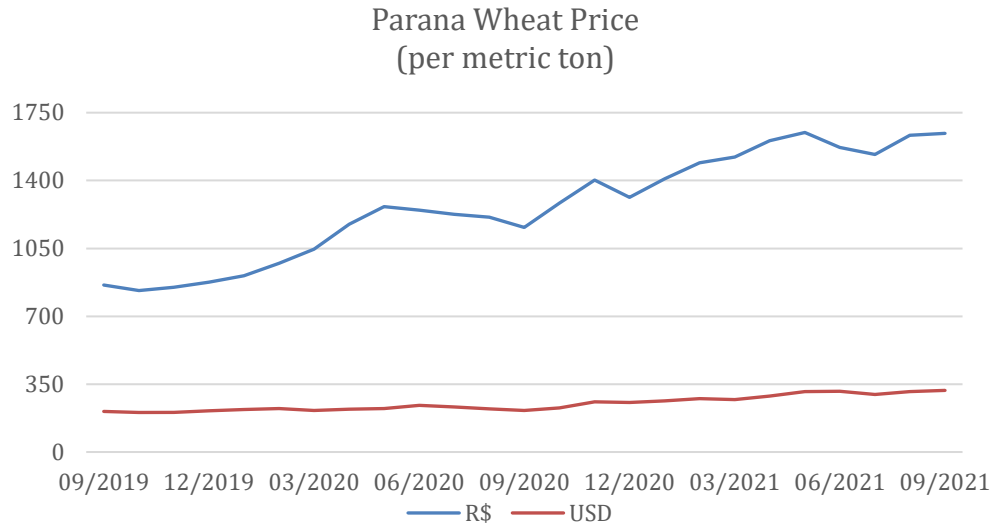
The largest wheat planted area expansion in percentage terms is forecast in the Center West and the Northeast regions. Farmers in the states of Goias and Bahia more than doubled their planting areas to a total of 55,000 ha and 6,000 ha respectively. While yields in Goias are expected to be middling due to the low soil moisture levels, Bahia is expected to post by far the highest yields in the country at over 5.7 MT/ha. In Bahia, wheat is planted in an irrigated system with a pivot, in rotation with soybeans, corn, and cotton. In the coming seasons, market analysts believe that farmers in Bahia could potentially plant up to 20,000 ha of wheat in the state. Brazil's agricultural research service Embrapa has been working since the 1980s to finetune tropical-climate wheat

varieties suitable for cultivation outside of the temperate Southern region of Brazil. Most producers in Bahia plant Embrapa's BRS 264 wheat cultivar.

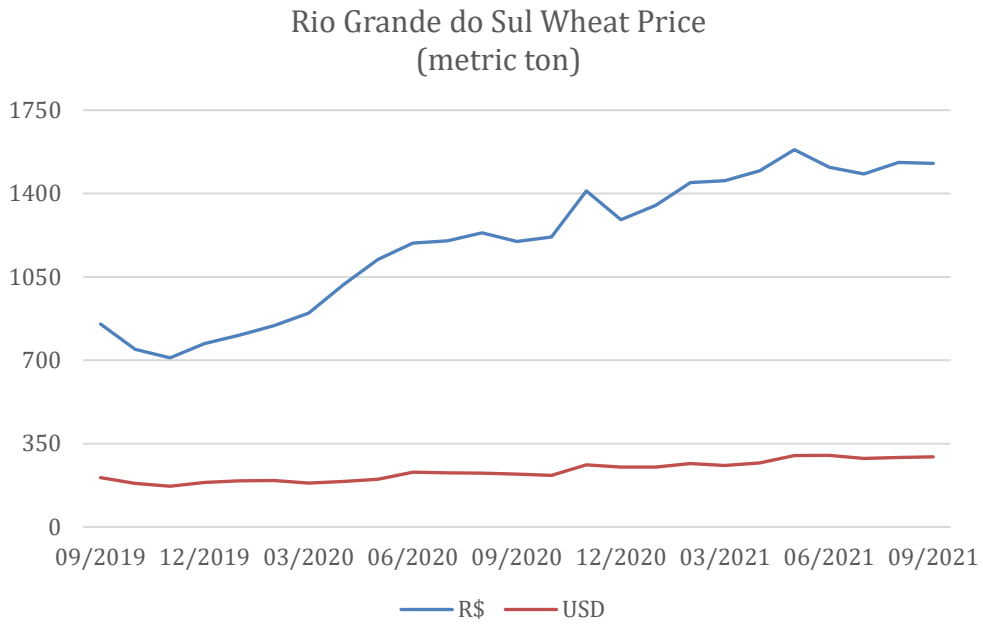
Going forward, Post anticipates that expansion of wheat production in the so-called MATOPIBA region (formed by the bordering states of Maranhão, Tocantins, Piauí, and Bahia) will depend on the region's milling capacity. Currently, the closest mills to Luís Eduardo Magalhães, Bahia's main wheat-producing municipality, are in the capital Federal District, which is 550 km away, and in the coastal city of Salvador, 960 km away. The substantial distance translates into higher freight costs, reducing the competitiveness of the wheat grown in this region. Post contacts have indicated that there is a mill under construction in Luís Eduardo Magalhães, which, when completed, may spur other mills to explore the region for their operations.

Brazilian mills are typically situated near ports, as they depend on imports for roughly half of their supplies. Due to the recent 30 percent devaluation of the Brazilian currency, the BRL importing wheat has become less profitable. In addition, Brazilian wheat prices are intrinsically linked to global wheat prices, which have been climbing on the expectations of lower than initially anticipated production in the United States and Russia this year. If prices continue on their upward trajectory, and/or plateau at the elevated level, producers will be motivated to plant more, while mills may also consider investments closer to domestic production centers, rather than near ports.

According to a data series maintained by the University of Sao Paulo's Center for Advanced Studies in Applied Economics (CEPEA), in the last two years, wheat prices have been setting a record every month. As of September, the price of wheat in Parana hit R$1,644 (US$318) per metric ton, up over 40 percent on the same month last year, and double from September 2019. Wheat prices in Rio Grande do Sul are following the same pattern, with prices averaging R$1,526 (US$295) per metric ton this month, nearly 30 percent higher than at this time last year, and almost double the price level two years ago.



Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA)



Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA)

Current Season Estimate Maintained

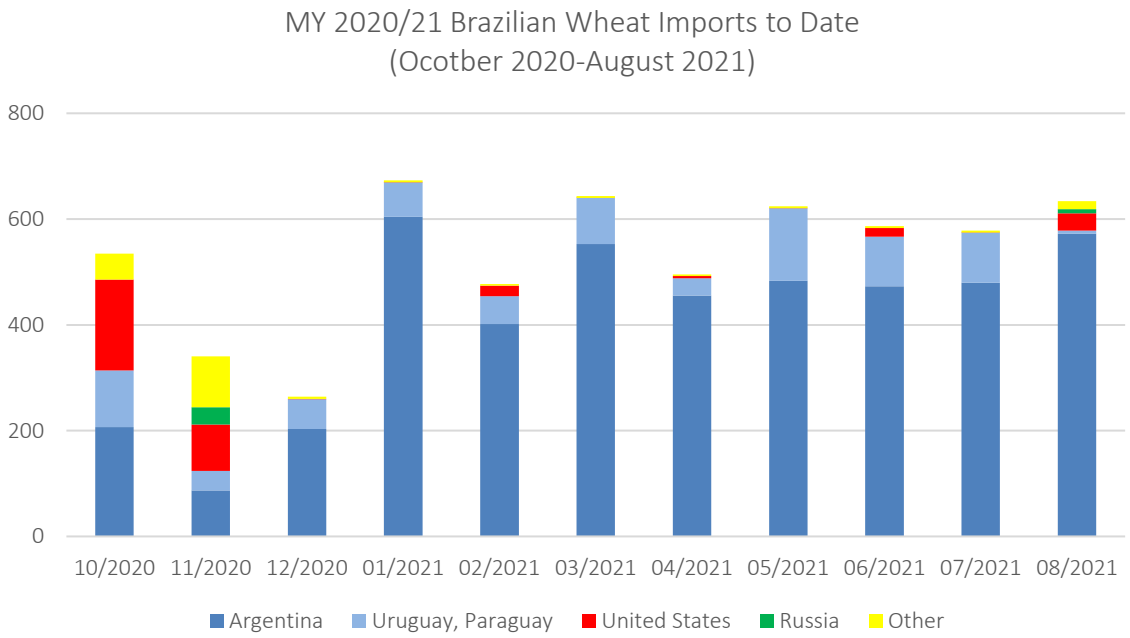
Post estimates MY 2020/21 (October 2020 – September 2021) wheat planted area at 2.34 million hectares, and production at 6.25 MMT. This represents a 15 percent expansion in planted area, and a 20 percent increase in production from last season. Rising demand and prices have incentivized expanded planting in the major production regions. In addition to the expanded planted area, the current season's crop benefitted from a rebound in yields as the 2019/20 wheat crop was adversely affected by inclement weather.

WHEAT TRADE

Imports Dip on Higher Production

For MY 2021/22, Post forecasts imports at 6.5 MMT on a wheat grain equivalent basis (WGE). Note that USDA uses WGE for trade numbers, which in addition to wheat grain, include flour and wheat product volumes adjusted on a wheat grain equivalent basis. For MY 2020/21, Post estimates wheat imports at 6.4 MMT, about 600,000 MT less than the five-year average. Imported wheat typically accounts for more than half of Brazil's domestic consumption, placing Brazil among the top five largest global wheat importers. However, in these two seasons, Post anticipates Brazil's imports to be lower due to higher domestic production, and on the account of the devalued domestic currency, the real, which makes imports more expensive. Nevertheless, Post forecasts that next season imports will also supply over 52 percent of Brazil's total consumption.

Most of Brazil's imports are duty-free purchases from Mercosur-neighbor Argentina, which supplied over 77 percent of Brazil's wheat imports in the first 11 months of this MY (October 2020-September 2021). Uruguay and Paraguay were responsible for seven and six percent of Brazil's imports respectively, while the United States accounted for 5.7 percent of Brazil's imports.



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

U.S. market opportunities in Brazil have increased in recent years due to the implementation in November 2019 of an annual duty-free tariff-rate quota (TRQ) for 750,000 MT of non-Mercosur wheat imports. On December 1, 2020, the Brazilian President issued decree No. 10,577 to make the TRQ permanent, meaning that it will no longer have to be renewed on an annual basis by Brazil's Foreign Trade Chamber (CAMEX). Due to the supply crunch caused by the pandemic, Brazil issued an additional TRQ for 750,000 MT of non-Mercosur wheat imports from November 18, 2020, through November 17, 2021. However, with the devalued BRL, Post anticipates that the Brazilian wheat imports will remain below average this season and next.

Post does not anticipate that the forthcoming decision from the National Biosafety Technical Commission (CTNBio) on the commercial release of genetically modified (GM) wheat will have an impact on the Brazilian wheat imports this season, or next. CTNBio is supposed to take up the vote on GM wheat authorization in October 2021, based on the request from Tropical Melhoramento & Genetica (TMG) company, which stated that the modified seeds show "increased productivity in situations and environments of low water availability" and are also resistant to the herbicide glufosinate. In the event of approval, the product would be imported from Argentina. Notably, Brazilian mills have raised concerns about allowing modified wheat on the market due to potential consumer reactions. The Brazilian wheat industry is prepared to contest a possible CTNBio approval. As a result, Post anticipates that commercialization, and therefore trade, of GM wheat, is unlikely in 2021, or 2022.

Exports Supported by the Higher Supply and a Weak Real

For MY 2021/22, Post increased its wheat export forecast to 1.3 MMT, on the expectation of expanded production. Post also expects the BRL to remain relatively weak against the USD (compared to historic levels), which would continue to fuel foreign sales in the next market year, even with elevated domestic prices. According to Brazil's Central Bank Focus survey, market participants anticipate the exchange rate to average R$ 5.20 to the USD in 2021, rising to R$ 5.24 to the USD in 2022. The rate is considerably higher than R$ 4.5 to the USD registered before the onset of the pandemic in March 2020. Typically, Brazil exports about 10 percent of its

wheat production, though that proportion rose to 15 percent in response to the current market dynamics. Exports are entirely dependent on economic conditions, and Brazil's typical markets look for bargain wheat purchases.

Post estimates MY 2020/21 exports at 925,000 MT based on the pace of trade. The estimate is more than double the 2019/20 export volume of 425,000 MT. The top export markets for Brazilian wheat in the first 11 months of MY 2020/21 are Vietnam, Saudi Arabia, Indonesia, Venezuela, and Pakistan. So far, Vietnam has been the largest importer of Brazilian wheat, while Venezuela has been the largest buyer of Brazilian wheat flour.

WHEAT CONSUMPTION

Post forecasts MY 2021/22 consumption at 12.4 MMT, up from the estimated 12.15 MMT for the MY 2020/21. The two percent consumption increase is driven by the increased demand from the livestock sector as well as an expectation of higher consumer demand.

Post forecasts feed and residual use to increase by 100,000 MT in the next market year. According to the Brazilian Animal Protein Association, the spike in domestic corn prices caused meatpackers to look for other feed sources, including winter crops like wheat. Post contacts indicate that some larger meatpacking companies are signing forward contracts with producers of wheat, as well as of barley and triticale to use as livestock and poultry feed. On a nutritional basis, ABPA says that wheat can fully replace corn as a feedstock. Post anticipates that while the use of wheat as a feed component is likely to increase incrementally, the grain will not be a major part of the feed rations given its high prices on the domestic market.

Post anticipates that next season, feed and residual, along with food, seed, and industrial (FSI) consumption will increase by 150,000 MT to 11.8 MMT, mirroring the domestic economic recovery. In September 2021, Brazil's Central Bank projected the county's GDP to grow 5.04 percent this year, and close to 1.7 percent in 2022, which should drive increased demand for products such as cookies and cakes.

Per-capita consumption of wheat in Brazil has slumped in recent years but has been offset by population growth, leaving the overall wheat consumption level static. As is the case with other staple foods, wheat saw a bump in consumption from the pandemic over the last year and a half. The effects of the pandemic have lingered, and many Brazilians continue to work from home or are staying at home while they look for work to replace jobs lost due to the pandemic. In both cases, these consumers continue to eat more meals at home than prior to the onset of the pandemic.

Attachments:

No Attachments