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## **Report Highlights:**

Post maintains its corn production forecast for MY 2020/21 (March 2021–February 2022) at 105 million metric tons (MMT), based on the smaller-than-expected first crop of corn paired with widespread delayed planting of second-crop "safrinha" corn. For MY 2021/22 (March 2022–February 2023), Post sets its initial corn production forecast at 114 MMT. Post raises its estimate for MY 2020/21 milled rice production to 7.48 million metric tons MMT, consistent with the expansion of area paired with a return to trend yields. Post projects that milled rice production will grow to 7.82 MMT in MY 2020/21 (April 2021–March 2022). Post sets its initial forecast for MY 2021/22 (October 2021–September 2022) wheat area at 2.6 million hectares. Factoring in trend yields, Post projects MY 2021/22 wheat production will hit 7.05 MMT, which would set a new record for the crop.

# Corn

Corn	2019/2020 Mar 2020		2020/2021		2021/2022	
Market Year Begins			Mar	2021	Mar 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	18500	18500	19700	19500	0	20000
Beginning Stocks (1000 MT)	5292	5292	4792	5211	0	4211
Production (1000 MT)	102000	102500	109000	105000	0	114000
MY Imports (1000 MT)	1500	1648	1500	2000	0	1750
TY Imports (1000 MT)	1346	1303	2000	2000	0	1750
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	108792	109440	115292	112211	0	119961
MY Exports (1000 MT)	35500	35229	39000	37000	0	40000
TY Exports (1000 MT)	34187	34138	40500	36000	0	38000
Feed and Residual (1000 MT)	58500	58500	60000	60000	0	60500
FSI Consumption (1000 MT)	10000	10500	10000	11000	0	11500
Total Consumption (1000 MT)	68500	69000	70000	71000	0	72000
Ending Stocks (1000 MT)	4792	5211	6292	4211	0	7961
Total Distribution (1000 MT)	108792	109440	115292	112211	0	119961
Yield (MT/HA)	5.5135	5.5405	5.533	5.3846	0	5.7

(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

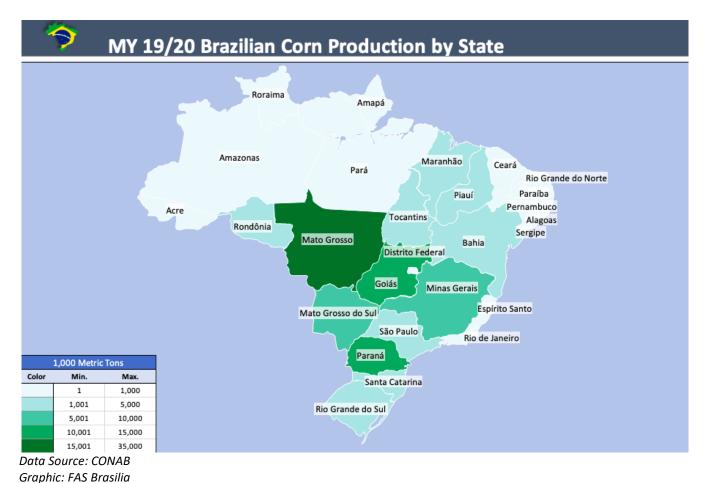
2021 - September 2022

# **Corn Production**

Post maintains its corn production forecast for market year (MY) 2020/21 (March 2021 – February 2022) at 105 million metric tons (MMT), based on the smaller-than-expected first crop of corn paired with widespread delayed planting of second-crop "safrinha" corn, which is threatening to depress average yields for the crop as a whole. The forecast, if realized, would still represent a 2.4 percent increase over Post's estimate for the MY 2019/20 season, as well as a new corn production record for Brazil. Post still expects Brazil's harvested corn area in MY 2020/21 to expand by 1 million hectares (MHa), reaching 19.5 MHa, an all-time high. Despite concerns about yields for late-planted safrinha corn, producers have been be motivated by record-setting corn prices to expand corn acreage even as

they are taking a risk on productivity by pushing the growing cycle deeper into the dry season. Strong domestic demand from the poultry and livestock sectors, as well as the growing corn ethanol industry are greatly expanding corn consumption in Brazil and boosting domestic prices as a result. Paired with an abundance of exports, the internal corn price in Brazil hit record highs in recent months and is expected to remain firm throughout 2021.

For MY 2021/22 (March 2022 – February 2023), Post sets its initial corn production forecast at 114 MMT, which would represent an 8.6 percent increase over Post's forecast for the current market year. Post also forecasts that corn area will expand by 500,000 hectares, to a total of 20 MHa. Post expects corn prices in Brazil to remain high through at least the end of 2021, considering strong internal and external demand. As has been the case this year, Brazilian producers should be incentivized in MY 2021/22 to expand corn planting, especially in the Center-West. Factoring in trend yields, Brazil could easily smash its corn production record. However, the outcome of next season will depend on punctual planting of safrinha corn, as well as normal weather patterns.

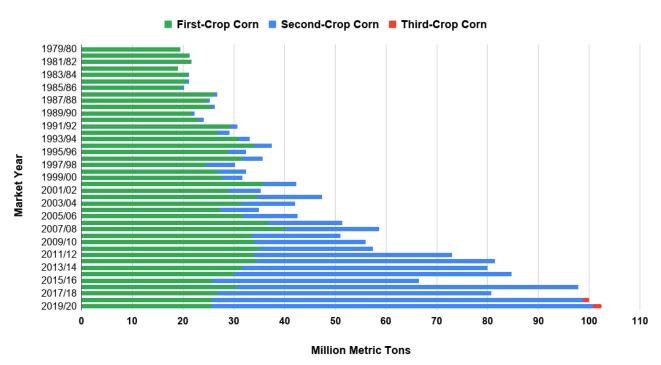


Corn is grown in every state of Brazil, and given the large size of the country and its geographic diversity, corn is also planted and harvested during several different periods. Traditionally, corn was a staple crop in southern Brazil, cultivated to support the livestock and poultry sector concentrated in that region. The corn crop in southern Brazil is typically planted between September and December

and then harvested between January and May. This crop is now considered the first of three annual corn crops, as it is the first to be harvested during the market year. It is also known as "full season" or summer corn, given that it is normally the only crop planted in a particular field during the year and also is largely cultivated during the Southern Hemisphere's summer season. Today, first-crop corn accounts for only a quarter of Brazil's total production.

As agricultural production expanded into the Center-West region starting in the 1970s and 1980s, Brazilian farmers began planting two crops per year on the same land, as the warm growing climate and length of the rainy season would usually support cultivation of soybeans during the summer followed by corn on the same area in the Southern Hemisphere autumn and winter. This corn crop is known as second-crop or winter corn, but is also referred to as the "safrinha," the Portuguese term meaning "little harvest," because it was originally the smaller of Brazil's two corn crops. However, as soy cultivation expanded in response to strong demand from China and given the crop's high profitability, safrinha corn has become the most popular second crop to plant in the same fields after the soy harvest. Today, safrinha corn makes up almost three-fourths of total corn production in Brazil. This share has continued to grow as producers in southern Brazil, many of whom can only plant one crop per year, have opted to sow soybeans in place of summer corn. Safrinha corn is typically sown between January and March, and harvested between June and September.

# **Brazilian Corn Production**



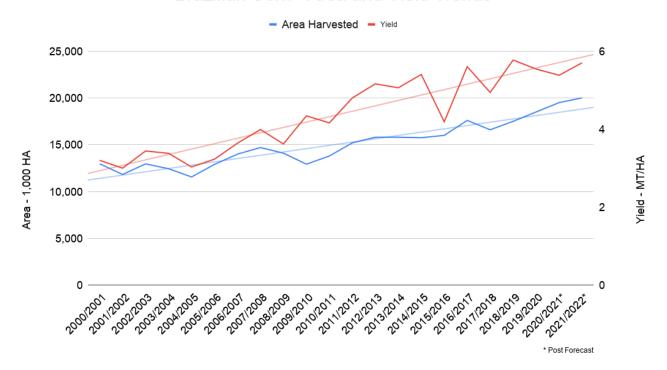
Data Source: CONAB Chart: FAS Brasilia

In late 2019, Brazil's agricultural statistics agency, the National Food Supply Company (CONAB), also defined a third corn crop in the country. This corn is primarily planted in the northeastern states of

Sergipe, Alagoas, and the northern part of Bahia, an area collectively known by the acronym Sealba, as well as small amounts of production in the northern Brazilian states of Roraima and Amapa. This crop is planted the latest of the three, following a season that more closely resembles that of the United States, with sowing in May and June and a harvest that takes place in October and November. This production was previously folded in with the second-crop safrinha corn, but due to the difference in planting and harvesting periods, CONAB decided to separate it out. Third-crop corn only accounts for about 1 percent of Brazil's total production, and around 2 percent of area. Yields and production in Northeastern Brazil can vary widely, as they are dependent on unpredictable precipitation.

For the MY 2020/21 first-crop corn cycle, extreme dryness caused by a La Nina weather phenomenon left much of southern Brazil with drought conditions from August to November 2020. Farmers in southern Brazil who planted their first-crop corn on the early side were met with very low soil moisture levels paired with a delayed start to the rainy season. The dry conditions inhibited germination and development of the corn crop for many producers. Though the effects were not universal, farmers in some regions of the southern states of Rio Grande do Sul and Santa Catarina saw huge losses in yields for first-crop corn. Some producers chose to reseed corn fields that were severely harmed by the drought, while others opted to replace the crop altogether, planting soybeans instead. Producers who planted later in the season were not as affected by the drought, as southern Brazil saw average to above-average precipitation levels from December to February.

# Brazilian Corn - Area and Yield Trends



Data Source: USDA/FAS PSD Online

Chart: FAS Brasilia

Nationwide, the first-crop corn harvest is about 45 percent complete as of late March. The five largest states producing first-crop corn are all seeing year-over-year reductions in yields, according to data from CONAB. The southeastern state of Minas Gerais, whose harvest is about half complete, became the largest first-crop corn producer in terms of production volume, even as the state has seen a 2.6 percent reduction in average productivity. Meanwhile, the southern state of Rio Grande do Sul (67 percent of area harvested) had the largest planted area for first-crop corn, but a 10.5 percent year-over-year drop in yields has left the state with about 400,000 fewer tons of first-crop corn, according to CONAB data. The southern state of Parana (76 percent of area harvested) and Santa Catarina (84 percent of area harvested) have also had significant yield reductions of -13.4 percent and 29.4 percent, respectively. In total, CONAB data indicate that Brazil's first-crop corn total may have shrunk by more than 2 MMT year-over-year, which is a large blow for the country's growing poultry and pork industries that rely heavily on first-crop corn for animal feed. When the harvest is complete, Post estimates first-crop corn production will total approximately 23 MMT for MY 2020/21.

Shrinking first-crop corn production continues to worry Brazil's poultry and pork sectors, especially in the southern state of Santa Catarina, which is home to some of the country's largest chicken and swine operations, which are located in the western part of the state. Santa Catarina only produces about half as much corn as the industry requires for feed. Thus, the poultry and livestock sector frequently imports corn from nearby Paraguay, as it is much less expensive to move corn overland from Paraguay than it is to transport corn domestically from high-production areas in central Brazil, like Mato Grosso.

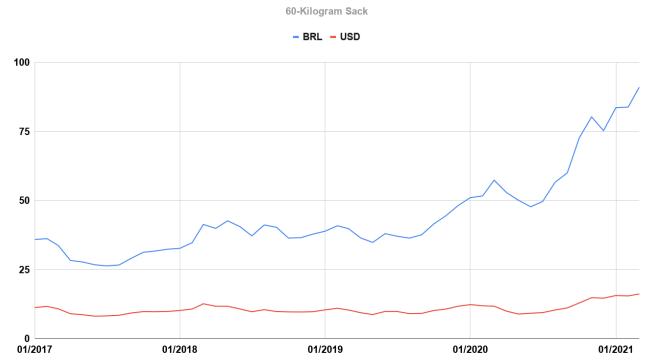


Source: FAS Brasilia

The economy of the state of Santa Catarina is heavily dependent on agribusiness (30 percent of GDP and 70 percent of exports), so the state government recently pledged R\$24 million (US\$4.1 million) to encourage cultivation of corn and other grains. The program would help distribute 200,000 bags of high-yielding corn seed varieties to farmers in Santa Catarina, as well as make investments to increase electric and transportation infrastructure in the state. The move comes in a year when the state will need to purchase around 5 MMT of corn from other states or countries at very high prices to meet feed demand. Poultry producers in the state are worried that chicken weights are dropping due to constraints on the availability of animal feed at affordable prices. According to industry sources, corn accounts for roughly 40 percent of the cost of poultry production in Santa Catarina, so the high prices have tightly squeezed margins.

Brazil's safrinha corn crop is expected to be affected by the above-mentioned dry conditions, as the delay in sowing much of Brazil's soybean crop in the South and Center-West regions led to a weekslong delay of the soybean harvest. The knock-on effect has been a significant delay in planting the safrinha corn crop, which could have grave repercussions for yields. According to industry sources, the planting pace for safrinha corn was the slowest in at least a decade.

# Corn Price on BM&F Exchange



Date Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA) Chart: FAS Brasilia

The success of Brazil's safrinha corn crop is usually dependent on the pace of the soy harvest each year. Farmers rush to get the safrinha crop in the ground to avoid additional weather-related risks caused by late sowing. As of late March, almost all of Brazil's safrinha crop has been planted, though

much of it was sown after the close of the ideal planting windows for various regions. The earliest window closes around the third week of February in southern Mato Grosso do Sul and southern Parana, due to the potential for freezing temperatures in June and July. For Mato Grosso and Goias, the ideal window closes in late February, to ensure that the crop has sufficient moisture to develop before rains trail off at the start of the dry season in early May. Corn planted after these dates faces considerably higher risks and may not be eligible for crop loss payments under government-guaranteed insurance programs.

For the MY 2020/21, several producer groups requested an extension to the planting deadlines established by Brazil's agricultural research agency, Embrapa, under its Agricultural Zoning of Climate Risk framework (known by the Portuguese acronym ZARC). However, the extension request was denied by the Brazilian Ministry of Agriculture, Livestock, and Food Supply (MAPA), which noted that the deadlines set in the ZARC are not prohibitive. Producers are not barred from planting after this window, but due to the enhanced level of weather-related risk, they are not likely to be eligible for insurance payouts under the government-backed Agricultural Activity Guarantee Program (known as Proagro) and the Subsidy Program for the Rural Insurance Premium (known as PSR).

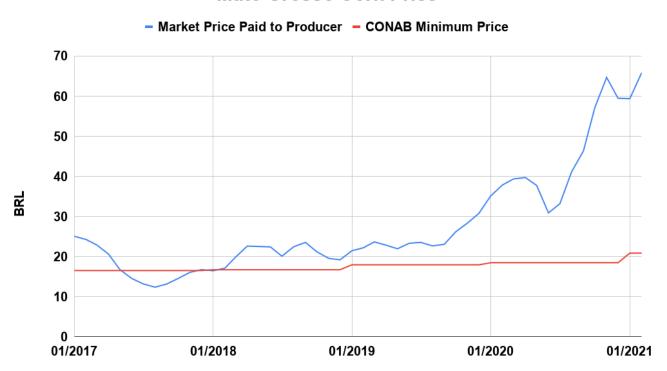
In a "clarification note" issued on March 12, MAPA noted that it had no legal mechanism to make changes to the ZARC after it is published each year. However, MAPA has asked Embrapa to study ways to make changes to the ZARC to increase crop insurance coverage options for the MY 2021/22 crop and to encourage additional corn planting in future seasons. Embrapa has been asked to make a "methodological change" to its ZARC deadlines for safrinha corn to create another risk category for later-planted fields that would allow for 50 percent coverage from insurance programs starting in 2022. Embrapa is also exploring creating three different risk categories to account for different levels of technology, as well as planting date and environmental factors. The changes will need to be submitted for approval by Brazil's Central Bank (which guarantees government crop insurance programs), as well as private insurance companies that issue government-backed policies. However, MAPA is hopeful that these changes will help expand the planting window for future safrinha corn crops and encourage additional corn planting overall to meet growing domestic feed demand.

Despite the significant delay in planting and the greater associated risk with crop loss, most farmers decided to expand safrinha corn area in MY 2021/22, as Brazil's internal corn price continues to hover near record highs. Corn is currently trading at an all-time high on the Brazilian Mercantile & Futures Exchange (BM&F), the country's primary commodity exchange market. The average price in March has been R\$91.13 per 60-kilogram bag of corn (US\$6.87/bushel). That is 59 percent higher than the average price in March 2020, and 129 percent higher than the average in March 2019. Many producers made the calculation that the risk of lower yields from a late-planted safrinha crop will be worth it if they can capitalize on record high corn prices. Post expects domestic corn prices will remain firm throughout 2021, supported by strong domestic demand for animal feed, as well as bountiful exports driven by the devalued Brazilian real (BRL).

The Center-West state of Mato Grosso is Brazil's largest corn producer overall, responsible for roughly one-third of total production. Virtually all of Mato Grosso's crop is safrinha corn planted after the soybean harvest. About half of the state's soybean area this season has been planted with safrinha

corn after the soy harvest. While some farmers have opted in recent years to switch to cotton as a second crop, many do not have the specialized equipment or capital for pricy inputs needed to produce cotton. The high profitability of corn, relative ease of commercialization, lower input investment compared to cotton, and the fact that farmers can largely use the same equipment used for soybeans to plant and harvest corn, mean that corn will remain the dominant second crop in Mato Grosso for the foreseeable future.

## **Mato Grosso Corn Price**



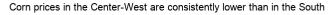
Date Source: CONAB Chart: FAS Brasilia

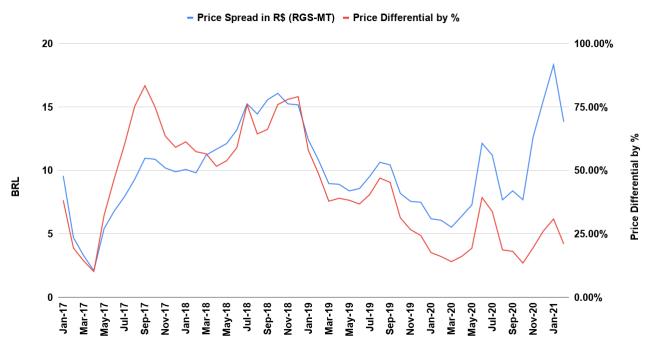
Mato Grosso's soybean sowing was severely delayed in MY 2020/21 as the La Nina weather effect left much of the state parched at a time when the summer rains would have normally arrived to replenish soil moisture levels. As a result, soybean planting did not ramp up until the second half of October, well behind the five-year average, according to data from the Mato Grosso Institute for Agricultural Economics (IMEA). As a result, the soybean harvest also lagged well behind the five-year average pace, which in turn stalled safrinha corn planting.

Sowing of Mato Grosso's safrinha corn area is now virtually complete, but industry sources indicate that nearly half of the crop was planted after the close of the ideal planting window, sparking widespread concern that yields could be seriously hampered unless the state sees greater-than-normal rainfall totals in April and May, as well as some showers in June. Yields suffered tremendously when a substantial portion of the safrinha corn crop was planted outside the ideal window in previous seasons.

Nevertheless, Mato Grosso producers were driven by high prices to expand the state's safrinha corn area by about 5 percent over last season, sowing more than 5.5 MHa in MY 2020/21, a new record for the state. According to a commodity price database maintained by CONAB, the average February corn price in Mato Grosso reached an all-time high of R\$65.84 per 60-kg bag (US\$4.83/bushel). It should be noted that Mato Grosso's corn supplies are usually the cheapest in Brazil, since grain must be transported great distances by truck or rail from the landlocked state to reach export terminals. As such, the grain is generally discounted to cover the cost of transportation logistics. The chart above demonstrates the price spread for corn in Mato Grosso versus Rio Grande do Sul, a coastal state with port facilities and relatively better transportation infrastructure.

## Corn Price Spread Between Rio Grande do Sul and Mato Grosso



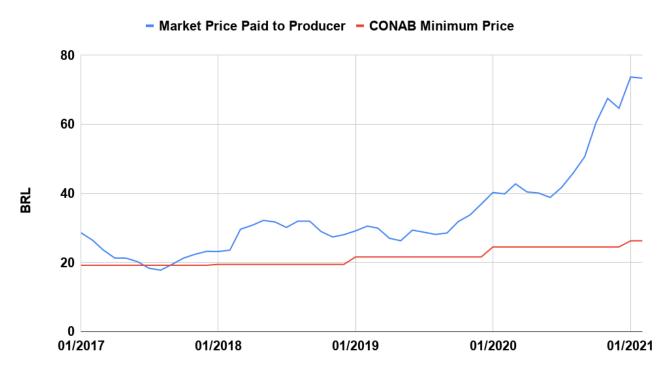


Date Source: CONAB Chart: FAS Brasilia

Parana is Brazil's second largest corn producing state, typically accounting for about 15-20 percent of the national harvest. Roughly 75-80 percent of the southern state's corn comes from the safrinha crop, since a majority of producers prefer to plant soybeans first. According to the Parana Department of Rural Economy (DERAL), the state's safrinha corn area is about 90 percent planted as of late March. That pace is closing in on the five-year pace of planting, though the bulk of the crop has been planted later than normal. Despite concerns about dryness affecting second-crop corn development in the state, producers are expected to expand area by about 3 percent year-over-year in response to high prices. According to CONAB's price database, the average price for a 60-kilgram bag of corn in Parana set a record in January, reaching R\$73.36 (US\$5.39/bushel).

The price dynamics for Brazilian corn over the last year have defied the normal price pattern following record production seasons. This is largely because the value of the BRL against the U.S. dollar (USD) fell precipitously in 2020 as an economic crisis brought on as the pandemic spread throughout Brazil and the country's unemployment rate rose rapidly. As of late March, the BRL was trading at R\$5.77 to the USD, which is about 30 percent weaker than the same point last year. However, in past years, commodities prices have tended to fall after a bumper harvest hits the market. That was the case in MY 2016/17 when a then-record corn crop flooded the market. Domestic prices dropped so much that they dipped below the government-established minimum price point. That triggered government intervention in the form of domestic support programs, including the Premium for Product Outflow Program (PEP) and the Equalization Premium Paid to the Producer (PEPRO). Under these programs, the Brazilian government guarantees a minimum price to producers by paying the difference between the prevailing market price and the government-established minimum guaranteed price, either to the commercial buyer (under PEP) or directly to the producer (under PEPRO). There is no provision under PEP or PEPRO that restricts the auctioned commodity from being exported, and there is evidence that these programs have subsidized increased exports of certain commodities in the past. There is little chance that these programs will be used in MY 2020/21, as market prices are well above the CONABestablished minimum. However, this mechanism remains at the disposal of the Brazilian government for use in the future.

## **Parana Corn Price**



Date Source: CONAB Chart: FAS Brasilia

The price scenarios in both Mato Grosso and Parana, as well as surging internal and international demand (discussed below), make Post confident to forecast that Brazil's corn area will set new records

in MY 2020/21 and MY 2021/22. Most producers have chosen to take advantage of exceptional profitability, even as weather conditions could deal a blow to yields and overall production volumes. Post still expects Brazil's MY 2020/21 corn crop will be record-setting, but all eyes will remain on the Brazilian skies in the coming weeks. Ultimately, the volume of precipitation and the length of Brazil's 2021 rainy season will determine the fate of the MY 2020/21 corn harvest.

# USD to BRL Exchange Rate

January 1, 2020 - March 29, 2021



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

Chart: FAS Brasilia

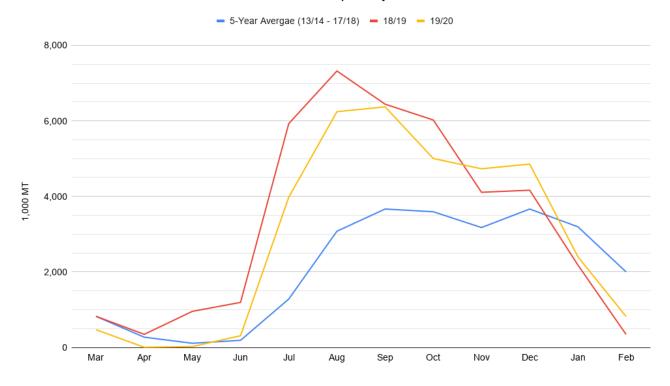
#### **Corn Trade**

# **Exports**

Post maintains its corn export forecast for MY 2020/21 at 37 MMT, which would represent a 5 percent decrease year-over-year. The weak BRL is expected to fuel large export volumes, but Post projects that increased domestic demand will limit the upside potential of foreign sales.

For MY 2021/22, Post sets its initial corn export forecast at 40 MMT. This is based on an expectation of expanded production, as well as the likelihood that the BRL will remain weak as Brazil's GDP growth sputters in the wake of the coronavirus pandemic. However, dwindling stocks and increasing internal demand by the poultry, livestock, and ethanol sectors are likely to boost domestic consumption and constrain the volume of corn available for export.

#### Brazilian Corn Exports by Month



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

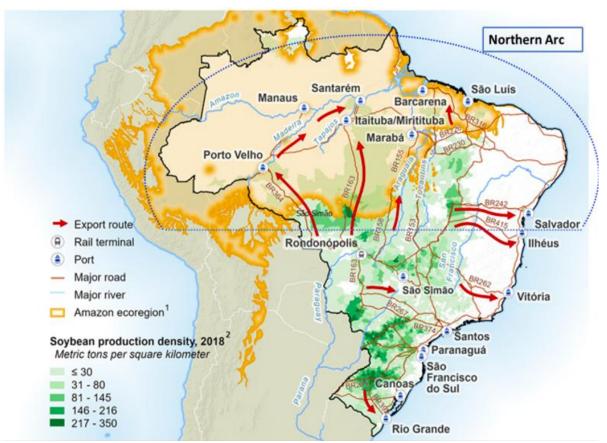
Chart: FAS Brasilia

As noted above, the BRL rapidly devaluated against the USD last year as the COVID-19 pandemic spread across Brazil. The devalued currency has made Brazilian agricultural exports extremely attractive in foreign markets, boosting internal prices to record levels for several commodities, including corn, wheat, and rice. As a result, producers rushed to contract their MY 2020/21 corn crop.

Typically, the great majority of Mato Grosso's corn crop is destined for export markets. According to data from IMEA, more about 70 percent of the MY 2020/21 corn crop in Mato Grosso has already been commercialized as of mid-March, well ahead of the five-year average of 57 percent at the same point in the season. Mato Grosso's MY 2021/22 crop, most of which will not be planted for almost a year, is also selling quickly, with 13 percent of production already commercialized. That is well ahead of the five-year average of just 3 percent at the same point in the season.

One major factor affecting corn export prospects in Mato Grosso has been the completion of the paving of BR-163, the so-called "soybean highway." The road runs north through Mato Grosso into the state of Para for more than 1,000 kilometers, ending at the river terminals of Miritituba, where most major grain trading companies have barging facilities located on the banks of the Tapajos River. In late November 2019, the Brazilian government completed paving for the last few kilometers of the road, a feat that took more than 40 years from the time the road was first created. Prior to being fully paved, truck drivers faced the peril of becoming stuck in a muddy mess throughout the rainy season. At times,

the Brazilian military would have to air drop supplies to hundreds of stranded truckers who would have no choice but to wait days for the unpaved portion of the road to dry. Even in good weather, the trip could take several days to a week. Now the journey from Sinop, Mato Grosso, to Miritituba, Para, can be completed in a matter of hours.



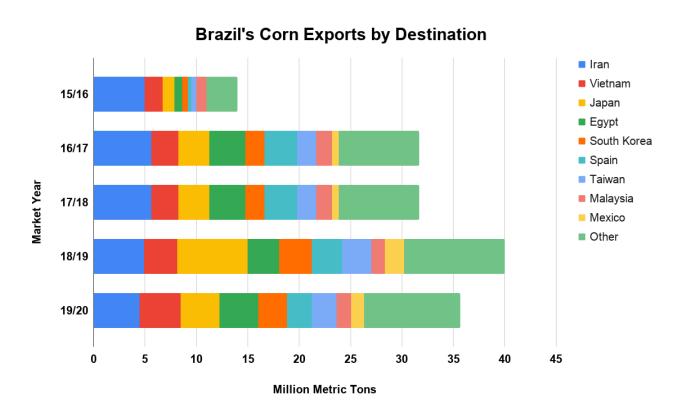
Source: USDA/Agricultural Marketing Service (AMS)

However, after turning off of BR-163, trucks must still traverse a 30-kilometer stretch of the BR-230 highway (also known as the Trans-Amazonian Highway), before reaching Miritituba. In early February, that stretch of road became temporarily unpassable due to heavy rains and the resulting mud. The incident left a line of more than 10,000 trucks stranded en route to the river ports and exposed how vulnerable parts of Brazil's road infrastructure remain.

Nevertheless, the paving of BR-163 has reduced freight costs and made Brazilian corn and soybeans even more competitive on the global market. From July 2019 to July 2020, truck freight rates from Sorriso, Mato Grosso, to Miritituba, Para, fell by about 13 percent to an average of R\$205.18 (US\$38.69) per ton in July 2020, compared to an average of R\$236.35 in July 2019, according to research by the University of Sao Paulo's Luiz de Queiroz College of Agriculture. The price decrease occurred because truck drivers can now make more trips every month, using significantly less diesel, and vehicles require less maintenance due to the paving of BR-163. As a result, Brazil's National Department of Transportation Infrastructure (DNIT) estimates that truck volumes on the route grew by

almost a third in 2020. As such, corn exports from Mato Grosso through Brazil's Northern Arc have increased significantly.

Of the 35 MMT of corn that Brazil exported to 75 different foreign markets in MY 2019/20, more than two-thirds (24 MMT) went to just seven countries. The top importers of Brazilian corn included Iran (4.5 MMT), Vietnam (4 MMT), Japan (3.8 MMT), Egypt (3.7 MMT), South Korea (2.8 MMT), Spain (2.4 MMT), and Taiwan (2.4 MMT).



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

## **Imports**

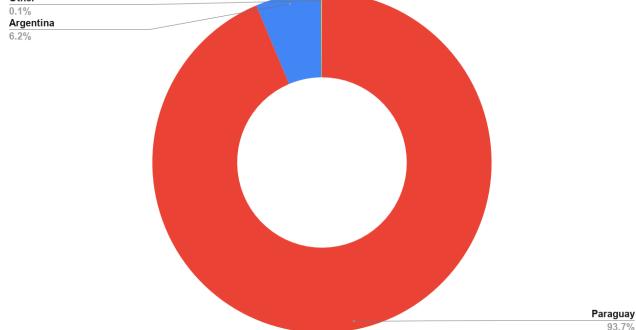
Post maintains its forecast for MY 2020/21 corn imports at 2 MMT. The projection is based on strong internal demand from Brazil's poultry and livestock sectors, along with mounting worries about dwindling stocks due to the rapid pace of exports.

For MY 2021/22, Post sets its initial corn import forecast at 1.75 MMT, based on the expectation of growing demand by the poultry, pork, and ethanol sectors. The forecast volume is lower than that for MY 2020/21, as Post projects that production will grow in the current market year, and a greater share of the crop will be consumed internally.

Brazilian imports of corn surged in the second half of MY 2019/20, totaling close to 1.4 MMT between October and February, as poultry and livestock producers struggled to procure feed rations for their animals. In response, the Brazilian government announced on October 16, 2020, the suspension of import tariffs for corn and soybeans from countries outside the Mercosur trade bloc. The 8 percent tariff on corn was eliminated for all imports through March 31, 2021, with no quota limiting the dutyfree volume. Several weeks later, on November 3, 2020, MAPA issued new regulations intended to facilitate the import of genetically engineered (GE) corn and soybeans by changing the information that must be included on import licenses. However, the bureaucratic maneuver did not change the approval process for biotechnology events, which is handled by an independent agency known as the National Technical Biosafety Commission (CTNBio).

Brazil's MY 2019/20 Corn Imports

# Other



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Contrary to news reports at the time, the MAPA regulation did not establish equivalence for GE events approved in other countries (including the United States), nor did it alter the CTNBio approval process for unapproved events. As such, the importation of corn from outside of the Mercosur trade bloc, including from the United States, was stymied by an asynchrony of approvals for GE corn varieties in Brazil, even as the Brazilian poultry and livestock sectors pleaded with MAPA to help them access other sources for corn imports. There are at least nine commercially available biotech varieties approved for cultivation in the United States that contain events that are not currently approved for import to Brazil, according to the database maintained by the International Service for the Acquisition of Agri-Biotech Applications (ISAAA). Since Brazil-approved varieties are not reliably segregated in the United States, any potential Brazilian importer would have needed to submit a special approval request to CTNBio

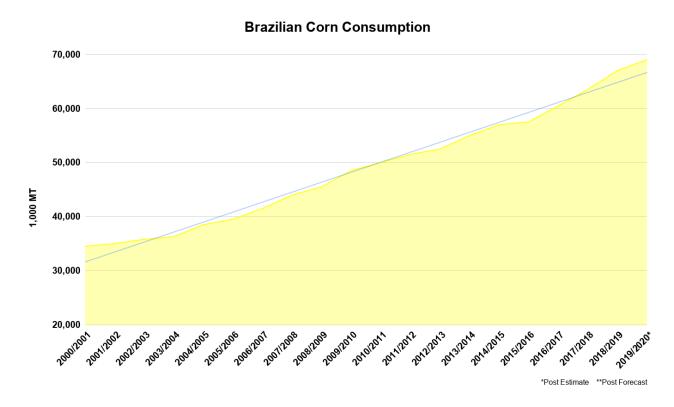
prior to obtaining an import license. These requests are considered on a case-by-case basis, and the approval process can be lengthy, a fact which complicated and discouraged U.S. corn exports to Brazil.

Despite the Brazilian government's efforts to promote imports from outside of the Mercosur trade bloc, 99.9 percent of Brazilian corn imports in MY 2019/20 came from either Paraguay or Argentina. The United States was the source of a mere 754 MT of Brazil's MY 2019/20 corn imports.

# **Corn Consumption**

Post maintains its MY 2020/21 forecast for corn consumption at 71 MMT, which is 3 percent higher than MY 2019/20. The increase is based on the expectation of continued expansion of the Brazilian livestock and poultry industries in reaction to strong demand from China and other exports markets, as well as increased production of corn ethanol in Brazil's Center-West region.

For MY 2021/22, Post sets its initial corn consumption forecast at 72 MMT. The projection is based on an expectation of continued growth of the poultry and livestock sector, as well as further expansion of corn ethanol production in Brazil.



Data Source: USDA/FAS PSD Online

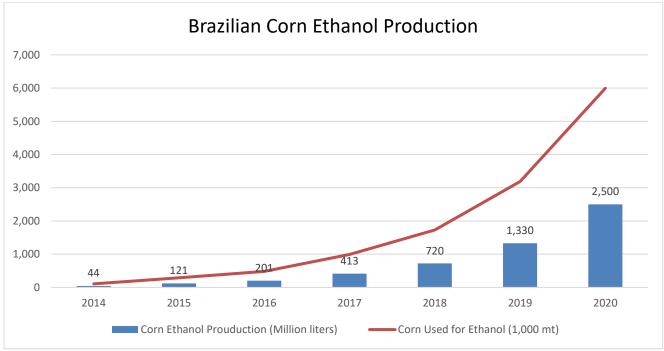
Chart: FAS Brasilia

Corn consumption in Brazil has nearly doubled over the last two decades as the country became the world's largest chicken meat exporter and fourth largest pork exporter. Brazil's large poultry and pork sectors consume the vast majority of the corn crop each year, as the grain makes up about 60 percent

of feed rations. Calendar year 2020 showed steady growth of Brazil's poultry and pork production. Post forecasts poultry production will expand by 1.7 percent in calendar year 2021, with production topping 14.15 MMT. At the same time, Post forecasts that Brazil's pork meat production will grow by 3.3 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.

According to Brazil's National Union for the Animal Nutrition Industry (known in Portuguese as Sindiracoes), total production by the sector (including corn and other ingredients) in calendar year 2020 grew to 81.1 MMT, an increase of 4.7 percent. According to Sindiracoes data, the production of feed rations for broiler chickens grew by 3.5 percent in 2020, while feed production for laying hens grew by 5.5 percent, and swine feed production grew by 5 percent. The sector's rapid growth is forecast to continue in 2021, assuming producers can secure reasonably priced feed ingredients including corn.

Post forecasts Brazil's MY 2020/21 food, seed, and industrial (FSI) consumption will grow to grow to 11 MMT, with further expansion to 11.5 MMT in MY 2021/22. The country's relatively small, but expanding, corn ethanol industry has grown rapidly in recent years. Even though strict social distancing measures at the start of the pandemic dampened fuel consumption in Brazil, forcing ethanol prices downward, the sector started to recover in the third quarter of 2020 as Brazilians began to slowly return to some version of their normal lives. Brazil's corn ethanol industry continued to add capacity last year, attracting new investments to construct corn ethanol plants that will come online in the coming years.



Data Sources: UNEM and UNICA

Chart: FAS Brazil

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. That figure is roughly 90 percent larger than the 2019 volumes. There are an estimated 16 corn ethanol plants in Brazil, mainly located in the Center-West states of Mato Grosso, Goias, and Mato Grosso do Sul. At least four of those units are corn-only plants, while the rest are flex plants that produce ethanol from both sugarcane and corn. Industry sources report at least seven other corn-based ethanol plants in the planning, development, or construction stages that could come into production in the next two years. If all the ongoing projects are built as planned, Brazil's corn ethanol production could top 5.5 billion liters per year, consuming more than 13 million metric tons of corn annually. According to UNEM projections, the sector could grow to produce 8 billion liters by 2028, accounting for as much as one-fifth of total ethanol production in Brazil and consuming 20 MMT of corn in the process.

The growth potential for of 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. Although concentrated in the Center-West region, the sector already sells corn-based ethanol to at least 10 states in Brazil's northern and northeastern regions and continues to eye expansion of distribution capabilities to the population centers along Brazil's northeastern coast. The industry also completed the first foreign sale of corn-based ethanol last year, with the export of fuel ethanol to the EU and shipments of industrial ethanol to Peru and Chile. Soaring corn prices in Brazil have undoubtedly harmed the corn ethanol sector's margins. However, the sector has focused on expanding markets for co-products such as dried distillers grains with solubles (DDGS) and corn oil, which can be used to produce biodiesel.

# Rice

Rice, Milled	2019/2020 Apr 2020		2020/2021 Apr 2021		2021/2022	
Market Year Begins					Apr 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1665	1665	1720	1710	0	1750
Beginning Stocks (1000 MT)	248	248	270	250	0	430
Milled Production (1000 MT)	7602	7602	7480	7480	0	7820
Rough Production (1000 MT)	11179	11179	11000	11000	0	11500
Milling Rate (.9999) (1000 MT)	6800	6800	6800	6800	0	6800
MY Imports (1000 MT)	950	900	850	850	0	800
TY Imports (1000 MT)	876	853	850	850	0	800
<b>TY Imp. from U.S.</b> (1000 MT)	82	82	0	4	0	0
Total Supply (1000 MT)	8800	8750	8600	8580	0	9050
MY Exports (1000 MT)	1130	1200	800	800	0	900
TY Exports (1000 MT)	1240	1244	800	900	0	900
Consumption and Residual (1000 MT)	7400	7300	7350	7350	0	7400
Ending Stocks (1000 MT)	270	250	450	430	0	750
Total Distribution (1000 MT)	8800	8750	8600	8580	0	9050
Yield (Rough) (MT/HA)	6.7141	6.7141	6.3953	6.4327	0	6.5714

(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

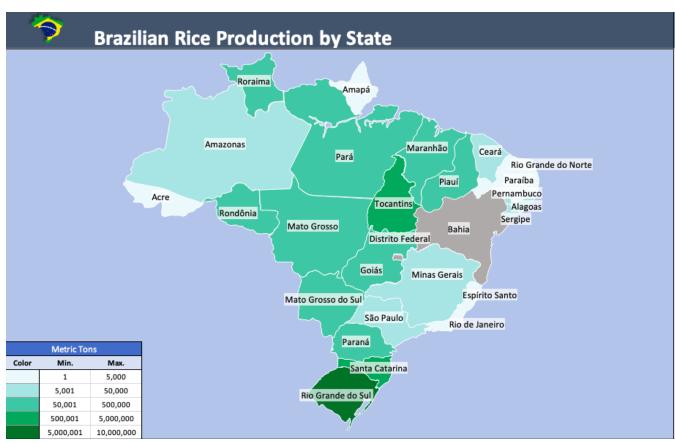
# **Rice Production**

Post slightly raises its estimate of market year (MY) 2020/21 (April 2021 – March 2022) rice area by 5,000 hectares, to 1.71 million hectares (MHa), which is 2.7 percent larger than the previous market year. Although record-high domestic prices supported expansion of Brazil's rice area, growth was limited by competition from other crops like corn and soybeans, which have also seen soaring prices. Post raises its estimate for MY 2020/21 milled rice production by 68,000 metric tons (MT) to 7.48 million metric tons (MMT), consistent with the expansion of area over MY 2019/2020 paired with a return to trend yields.

For MY 2021/22 (April 2022 – March 2023), Post sets its initial forecast for rice area at 1.75 MHa, about 2 percent larger than the current crop. As a result, Post projects that milled rice production will grow to 7.82 MMT next season. This forecast is based on the expectation that domestic rice prices in Brazil

will remain relatively high in the coming months. The Brazilian economy is struggling to deal with the effects of the coronavirus pandemic, which is expected to keep the Brazilian real weak compared the U.S. dollar. The high exchange rate is likely to motivate larger-than-average export volumes, which will prop up the domestic rice price for the foreseeable future. In response, Post expects Brazilian producers will strive to expand rice area for the MY 2021/22 crop to take advantage of the opportunity for large returns.

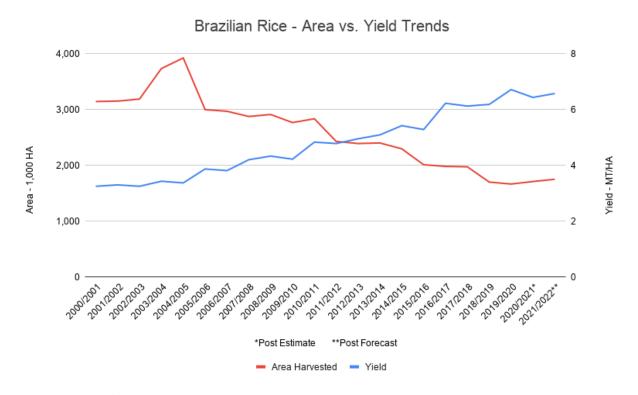
Once widely spread throughout Brazil, rice production has become increasingly concentrated in the south of the country. Today, the vast majority of Brazil's rice area is located in two southern states, and close to 80 percent of rice fields are irrigated. According to the National Food Supply Company (CONAB), Brazil's agricultural statistics agency, the country's southernmost state, Rio Grande do Sul, is responsible for approximately 57 percent of Brazil's total rice area and 70 percent of total production, all of which is irrigated. The state of Santa Catarina, just north of Rio Grande do Sul, accounts for another 11 percent of Brazilian rice production and about 9 percent of total rice area in the country.



Data Source: CONAB Graphic: FAS Brasilia

Brazil's rice area has decreased by about 45 percent over the last 20 years, even as production volumes have stayed relatively stable thanks to improving yields. The long, steady shrinking of Brazil's rice area is largely due to a reduction in rainfed rice area throughout the country. Irrigated rice area in Rio Grande do Sul has remained more or less steady over the last 25 years, according to industry data.

However, in response to the high profitability of soybeans, both Rio Grande do Sul and Santa Catarina have experienced incremental growth in soybean area in recent years, which some farmers rotate with rice every two years to maintain soil quality and control pests, weeds, and volunteer rice. Unlike the Center-West region, most farmers in southern Brazil only plant one crop per year.



Data Source: USDA/FAS PSD Online

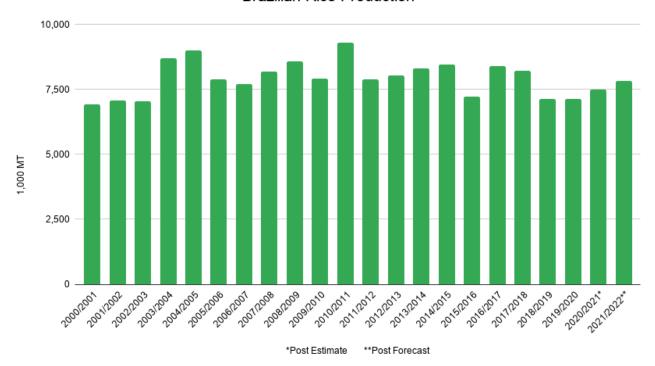
Chart: FAS Brasilia

Although Brazilian rice area has been cut nearly in half over the last two decades, many analysts believe that it is unlikely to shrink much more without interfering with the crop rotation pattern most beneficial to the soil in southern Brazil. Moreover, industry sources indicate that some rice areas are simply unfit for other crops due to poor drainage, so rice is likely to remain the dominant crop for some terrain. Rice farming has also been a multi-generational practice for some families in southern Brazil. Due to this longstanding tradition, contacts indicate that certain farmers are unlikely to switch over completely to other crops, even despite the challenges faced by some rice producers. Others will continue to rotate cultivation of rice with soy every couple of years. According to the Federation of Rice Producers of Rio Grande do Sul (Federarroz), such a cycle of rotation can reduce production costs by as much as 15 percent and increase rice yields by 10-20 percent, depending on the condition of the land.

While Brazil's rice area has seen a long trend of contraction, production totals have not shrunk quite as much due to improved yields. The overall trend for Brazilian rice production over the last 20 years has been smaller area offset by improving yields, a tendency that has led to little change in production volumes over the last two decades. This has allowed Brazil to remain the world's largest rice producer outside of Asia.

Nevertheless, Brazilian rice producers have long complained that they face steep hurdles in cultivating the crop, including, rising electricity costs to run irrigation systems, high debt levels and interest rates, high taxation rates, Mercosur competition, and cabotage regulations. However, record yields in MY 2019/20 provided relief for some farmers. According to Federarroz, the MY 2019/20 crop provided improved profitability for many growers, and profits were estimated to have exceeded costs for the first time in four years. Nevertheless, most rice producers sold their crop before prices rose dramatically. Federarroz reports that the average farmgate price received by rice producers in southern Brazil was approximately R\$45 per 50-kg sack. That is less than half of the record paddy rice price of R\$105.38 reported in October in the price database maintained by the University of Sao Paulo's Center for the Advanced Study of Applied Economics (CEPEA).

#### Brazilian Rice Production



Data Source: USDA/FAS PSD Online

Chart: FAS Brasilia

While government officials have made advances in lowering some hurdles for rice farmers, such as loosening cabotage regulations, the greater problem is that not all Brazilian rice producers have access to the same advantages in the market. Those with greater capital flows can make huge profits, even better than planting soybeans in years when rice yields are high. Generally, these producers have invested in drying and storage facilities that allow them to keep their harvested crop until rice prices rise later in the year (usually around August or September, when rice stocks are dwindling). They also have the capital to purchase inputs when the prices are lower and foreign exchange rates are more favorable. Rice producers with less capital are more likely to rent the land on which they produce, a factor that drives up the cost of production. To pay the bills, they are often forced to sell their crop

right after harvest, when prices are depressed due to the flood of supply on the market. Rice millers, however, generally take advantage of this situation, building up stocks when prices are lower. Many producers also make financing agreements directly with mills, which provide the capital needed to pay for inputs and production costs.

Brazilian rice producers gained one more financing option this year with the creation of the country's first tradeable futures contract for rice. The Brazilian Agribusiness Exchange (BBM), one of the largest commodity exchange markets in the country, earlier this year recorded its first tradeable rice futures contract, which was registered by brokerage firm Expoente for rice to be produced in Rio Grande do Sul. The broker is one of more than 140 members of BBM and is expected to register more such contracts in the future. According to Expoente, the tradeable futures contract locks in prices and allows producers to better plan the planting of the next crop, more assertively decide on the size of the area to be planted, and schedule the purchase of inputs. Rice futures are not yet traded on Brazil's main commodity market, the Brazilian Mercantile & Futures Exchange (BM&F). Smaller rice producers often presell their harvest to a particular rice mill in order to finance inputs for the season, but the contracts are not usually transferrable and have never been registered or traded on a commodity exchange in Brazil.

Federarroz argues that irrigated rice production is still very expensive in Brazil, and the recent rise in prices was really a market correction. According to Federarroz, if you factor in inflation, the current rice price for consumers is similar to the level seen in Brazil 25 years ago. Throughout MY 2019/20, the weakened Brazilian real (BRL) fueled an export boom that drove up rice prices but also made inputs for the MY 2020/21 crop much more expensive, especially for smaller and less capitalized rice producers. This segment of rice producers has long-struggled with the profitability of the crop, and one year of good returns is not likely to be enough to offset years of losses. Moreover, as mentioned above, many producers sold their MY 2019/20 immediately after harvest in March and April 2020, thus missing the steep rise in prices that came later in the year as the COVID-19 pandemic fueled increased consumption due to government payments to the poor and a rush to stock home shelves. Prices began to level off in October and November, after hitting record highs in both BRL and U.S. dollar (USD) terms. However, current prices, especially in BRL terms, remain high compared to historical averages. According to CEPEA data, the average price in March has hovered about 70 percent above that seen one year ago.

In past years, commodities prices have tended to fall after the rice harvest hits the market. That was the case in MY 2017/18 when a large rice crop flooded the Brazilian market. Domestic prices dropped so much that they dipped below the government-established minimum price point. That triggered government intervention in December 2017 in the form of domestic support programs, including the Premium for Product Outflow Program (PEP) and the Equalization Premium Paid to the Producer (PEPRO). Under these programs, the Brazilian government guarantees a minimum price to producers by paying the difference between the prevailing market price and the government-established minimum guaranteed price, either to the commercial buyer (under PEP) or directly to the producer (under PEPRO). The Ministry of Agriculture held seven rounds of auctions under these programs, supporting the sale of nearly 500,000 MT of rice, about 4 percent of the MY2017/18 harvest. In total, the Brazilian government spent over 31 million reals (\$8 million USD). There is no provision under PEP

or PEPRO that restricts the auctioned commodity from being exported, and there is evidence that these programs have subsidized increased exports of certain commodities in the past. Given the large uptick in rice exports during MY 2017/2018, Post believes some if not most of the rice auctioned under the PEP and PEPRO programs was exported. There is little chance that these programs will be used in MY 2020/21, as market prices are well above the CONAB-established minimum. However, this mechanism remains at the disposal of the Brazilian government for use in the future.

#### Rio Grande do Sul Rice Price





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

Chart: FAS Brasilia

For the MY 2020/21 crop, Brazil's largest rice-producing state, Rio Grande do Sul, saw rice area expand by about 2 percent, according to CONAB. However, production fell by 3 percent year-over-year, totaling 7.6 MMT, as yields returned to trend levels. The state's MY 2019/20 rice crop boasted record yields, according to the Rio Grande do Sul Rice Institute (IRGA), which has been keeping data for the state's rice production since 1921. Santa Catarina saw a similar trend in MY 2020/21, as stagnant area paired with a 2.6 percent decrease in yields led to a 2.6 percent smaller crop, totaling an estimated 1.2 MMT.

Planting for the MY 2020/21 crop in southern Brazil largely wrapped up in November, and the harvest kicked off in mid-February. As of mid-March, approximately 43 percent of the crop had been harvested in Rio Grande do Sul, according to IRGA. In Santa Catarina, the harvest is already more than 90 percent complete, according to CONAB.

Due to a La Nina weather phenomenon that began in 2020, much of southern and central Brazil saw below-normal rainfall totals in recent months, but this had a limited effect on rice production in the region, since virtually all farmers have irrigation systems that draw water from a variety of reservoirs. However, according to industry contacts, some water sources were severely depleted by late 2020, with reservoirs reduced by as much as 70 percent. That meant that a small number of farmers have had to resort to intermittent irrigation, a practice which can cause increased incidence of weeds and certain pests, both of which can hamper yields and crop quality. Industry sources indicate that these producers could see reduced yields of as much as 10 percent, though the true damage remains to be seen as the harvest continues. Overall productivity in the state is not expected to be greatly hampered.

Heavy rains in December and early January replenished some water sources, but below-average precipitation in February again affected irrigation for some producers, mainly those that planted toward the end of the sowing period. However, higher solar radiation levels in February have left those producers hopeful that they will achieve decent yields.

Other Brazilian states, especially in central and northeastern Brazil, saw modest expansion of planted area in MY 2020/21. However, rice production in these regions is mostly rainfed, with yields that are roughly only a third of those for an irrigated crop. One state to watch is Tocantins, located in Brazil's North Region. According to CONAB, the state was Brazil's third-largest rice producer last season, with a harvest of approximately 660,000 MT from an area of 122,700 hectares, 90 percent of which was irrigated. Tocantins accounted for 6 percent of national production in MY 2019/20. For MY 2020/21, the state saw a small 3.2 percent increase in area, which is estimated to have boosted production to 670,000 MT. With domestic prices expected to remain relatively high in the coming months, Post expects to see additional expansion of MY 2021/22 area in Tocantins, along with growth in the overall harvest volume.

## **Rice Trade**

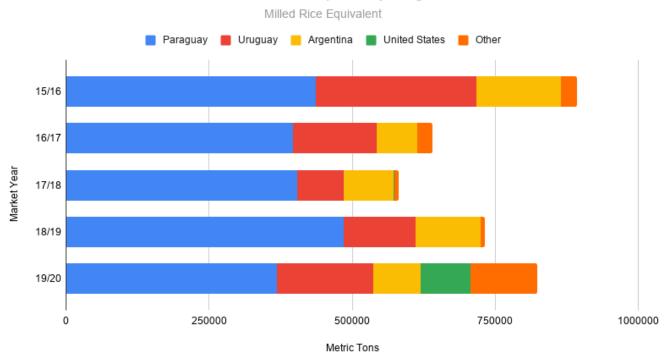
## **Imports**

Post slightly lowers its estimate for MY 2019/20 imports to 900,000 MT, based on the pace of trade. The severely weakened BRL caused imports to lag behind the five-year average in the first few months of MY 2019/20, as Brazilian rice millers limited their foreign purchases and relied instead on domestic stocks. However, as stocks dwindled, the domestic price for paddy rice in BRL terms skyrocketed, forcing Brazilian buyers to look overseas to procure supplies of this staple food. In response to high prices, the Government of Brazil in early September 2020 implemented a duty-free tariff-rate quota (TRQ) for up to 400,000 MT of imports from outside of the Mercosur trade bloc through December 2020. This move boosted imports from less traditional suppliers to Brazil, including the United States, India, Thailand, Guyana, and Suriname.

Post maintains its MY 2020/21 import forecast at 850,000 MT, as an export boom in recent months has led to unmet domestic demand. Depleted stocks at the close of MY 2019/20 are likely to lead to

larger-than-average rice purchases from abroad in MY 2020/21. It should be noted, however, that Brazil has never imported more than 900,000 MT (milled equivalent) of rice in a market year, and market conditions in the current season have shown that millers are willing to let stocks dip extremely low, only purchasing supplies from abroad when absolutely necessary to meet demand.

# Brazil's Rice Imports by Origin



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 – February 2021

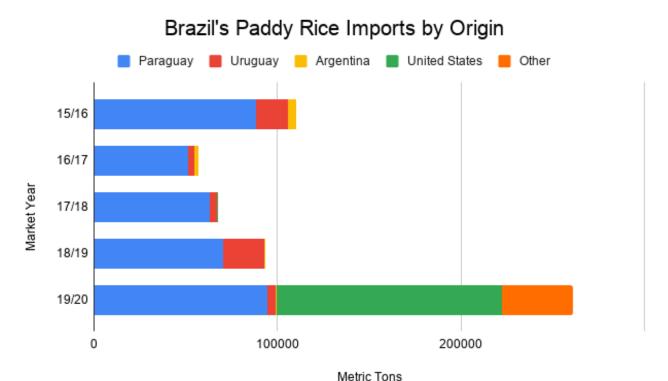
For MY 2021/22, Post sets its initial import forecast at 800,000 MT, based on an expectation of increased production that will help better meet domestic consumption demand.

Roughly 95 percent of Brazil's rice imports have typically come duty-free from its Mercosur trade bloc neighbors: Paraguay, Uruguay, and Argentina. Paraguay alone accounted for 56 percent of imports in MY 2018/19, with Uruguay supplying another 27 percent of imports, and Argentina responsible for approximately 11 percent.

However, skyrocketing domestic prices on the back of huge export volumes and strong domestic consumption at the start of the pandemic worried the Brazilian



government. Industry groups like the Brazilian Supermarket Association reported surging consumer rice prices. In response, Brazil's Foreign Trade Chamber (CAMEX) voted on September 9 to open a quota for duty-free access for up to 400,000 MT of paddy and milled rice through December 31, 2020. The TRQ temporarily eliminated the 10 percent tariff on paddy rice (tariff code 100601092) and the 12 percent duty on white rice (tariff code 10063021). The move benefitted less traditional suppliers to the Brazilian market, and a flurry of imports in December resulted in the country's third-largest monthly import volume on record (150,000 MT). In total, 220,000 MT of the 400,000 MT TRQ was utilized prior to the quota's expiration on December 31, 2020. While domestic prices remain high, there is no plan to renew the rice TRQ at this time.



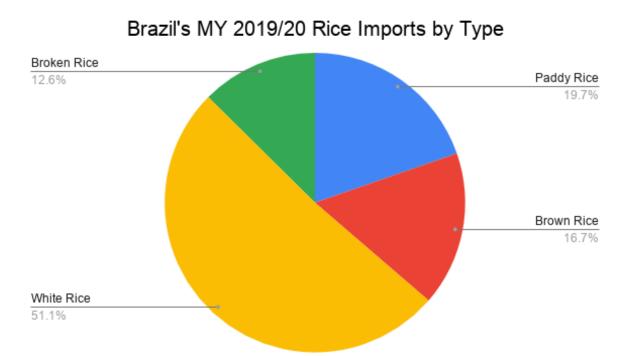
Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 - February 2021

Over the last decade, U.S. exports to Brazil had averaged less than 1,000 MT annually, largely due to Brazil's import tariffs, as well as a slew of internal value-added and transportation-related taxes. However, within days of the quota's implementation last September, U.S. producers had already sold 30,000 MT to Brazil, the largest single sale since 2010. As of February 2021 (the most recent month for which trade data are available), Brazil had imported more than 123,000 MT of U.S. paddy rice, representing nearly half of total rough rice purchases for MY 2019/20. Considering all types of rice imports in milled equivalent terms, Brazil has imported 86,872 MT of American rice, equal to more than 10 percent of the total import volume for the market year. That is a greater market share than that of Brazil's Mercosur neighbor, Argentina, which has been responsible for about 82,000 MT of Brazilian rice imports this market year.

Brazil has also imported more than 38,000 MT of paddy rice from Guyana, on top of nearly 18,000 MT of white rice from that country. India supplied more than 38,000 MT of white rice to Brazil in MY 2019/20, although Mercosur neighbors Paraguay and Uruguay have remained the largest suppliers overall, accounting for 45 percent and 21 percent, respectively, of total imports.



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 – February 2021

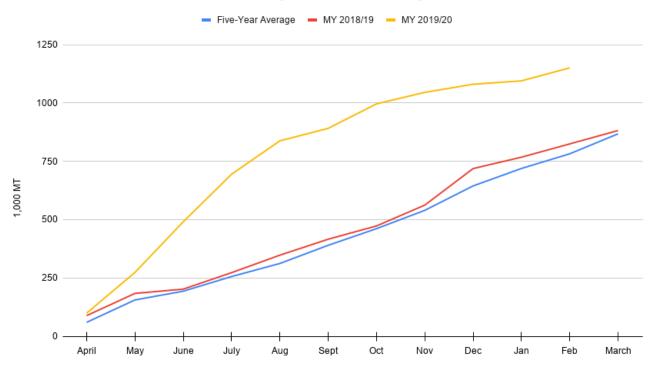
## **Exports**

Post maintains its MY 2019/20 export estimate at 1.2 MT, based the pace of trade. The weak BRL has continued to make Brazilian rice more attractive on the international market. As a result, Post raises its MY 2020/21 export forecast to 800,000 MT. For MY 2021/22, Post sets its initial export forecast at 900,000 MT, based on the expectation that the high BRL to USD exchange rate will continue to make Brazilian rice very competitive on the international market.

As noted above, the weak BRL has improved profitability for rice producers, as well as making exports more attractive, given that international sales are generally dollar-denominated. Brazil exported above-average volumes of rice from April 2020, when the bulk of the MY 2019/20 crop hit the market, through to August 2020, when stocks began to dwindle. In fact, Brazil had exported more than 1.15 MMT of rice (milled equivalent) as of February 2021, the most recent month for which trade data are

available. That is approximately 150 percent larger than the five-year average for the same period. In fact, even with one month remaining in MY 2019/20, Brazil has already seen its largest export volume in more than a decade. The country is on track to record its second largest export volume ever, behind only MY 2010/11, when Brazil exported 1.48 MMT of rice (milled equivalent).

## Cumulative Rice Exports from Brazil by Market Year



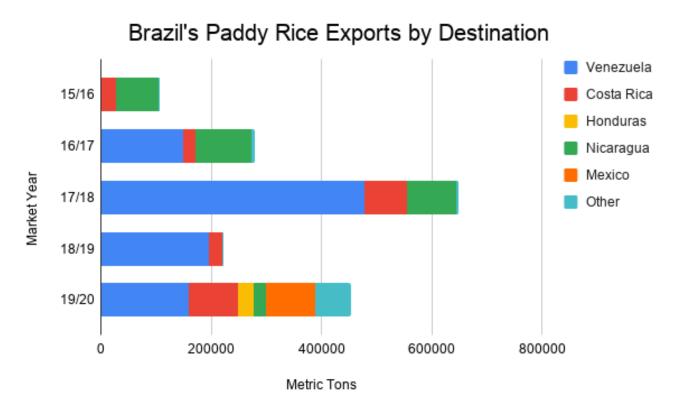
Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Venezuela has been one of the largest markets for Brazilian rice exports in recent years, and that trend continued in MY 2019/20, with large purchases of both paddy rice and white rice. As Venezuela fell deep into political and economic turmoil several years ago, Brazil's abundant production and relative geographic proximity made it a convenient rice supplier. Because the BRL has remained weak against the dollar throughout MY 2019/20, Brazilian commodities have continued to be relatively cheap on the international market. As a result, Venezuela has repeatedly turned to its South American neighbor to purchase staple foods like rice. In fact, Venezuela is set to remain the largest foreign market for Brazilian paddy rice for the fourth year in a row, as well as the second largest market for Brazilian white rice for the third straight year. With one month left in the market year, Brazil has already exported to Venezuela more than 158,000 MT of paddy rice and more than 80,000 MT of white rice, accounting for nearly one-fifth of total MY 2019/20 exports to date.

So far in MY 2019/20, Brazil has also sold more than 90,000 MT of paddy rice to Costa Rica, along with another 89,000 MT to Mexico (between May and July). Brazil sold at least 20,000 MT of paddy rice to several non-traditional markets, including Guatemala, Honduras, Turkey, and Nicaragua. Many of

these sales were likely a direct consequence of the devalued BRL making Brazilian exports very attractive to foreign buyers looking for a bargain.

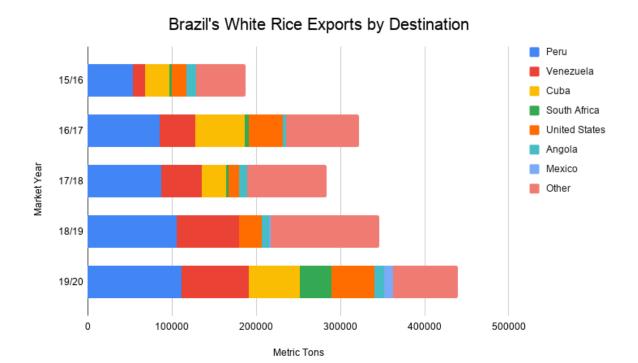


Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 – February 2021

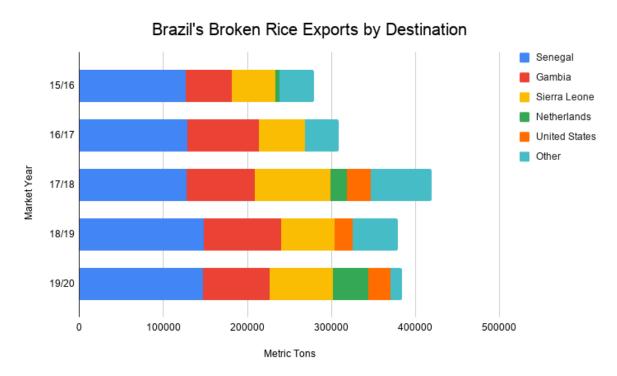
Brazil has also exported more than 439,000 MT of white rice as of February 2021, including 111,000 MT to Peru, 60,000 MT to Cuba, 51,000 MT to the United States, and 37,000 MT to South Africa. Broken rice typically makes up one of the largest shares of Brazilian exports, and MY 2019/20 is no different, with broken rice accounting for about a third of all MY 2019/20 exports as of February. The largest share of these exports was destined for countries in Africa, including 147,000 MT of broken rice to Senegal, 80,000 MT to Gambia, and 75,000 MT to Sierra Leon. The Netherlands also purchased more than 42,000 MT of broken rice from Brazil, while the United States has been Brazil's fifth largest market for the product, accounting for more than 26,000 MT of broken rice exports.



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 – February 2021



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

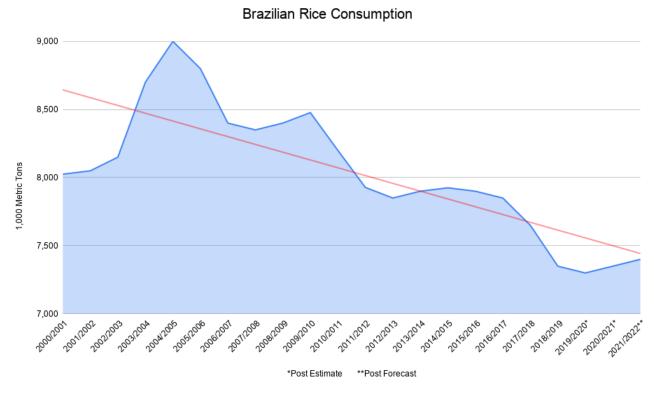
Chart: FAS Brasilia

Note: MY 19/20 includes trade data from April 2020 - February 2021

# **Rice Consumption**

Post reduces its rice consumption forecast for MY 2020/21 to 7.35 MMT, which is 50,000 MT lower than the previous forecast, based on soaring export levels and high retail prices discouraging domestic consumption. For MY 2021/22, Post sets its initial consumption forecast at 7.4 MMT, an incremental increase year-over-year based on population growth.

Rice is a staple food in Brazil, with many Brazilians consuming it with beans one or two times every day. According to CONAB data, nearly 95 percent of Brazilians consume rice on a regular basis, with more than half doing so at least once every day. However, the annual consumption volume (gross and per capita) has trended downward over the last two decades, as Brazilians have been replacing some of their rice consumption with other starchy staples, such as bread, potatoes, and manioc.



Data Source: USDA/FAS PSD Online

Chart: FAS Brasilia

Consumption was spurred early in the COVID-19 pandemic, with grocery store sales of rice rising as consumers started cooking more meals at home amid widespread social distancing and work-from-home measures. Strong demand and diminished stocks caused food price inflation in Brazil throughout 2020, even as other sectors did not see the same trend. As noted above, the Brazilian Supermarket Association warned government officials that strong consumer demand and limited supplies had caused a surge in prices for staple foods, including rice. As of January 2021, the price of food had risen by almost 15 percent year-over-year, according to data collected by the Brazilian

Institute for Geography and Statistics (IBGE) for the country's Extended Consumer Price Index (abbreviated as the IPCA in Portuguese). Moreover, the retail price of rice had risen by more than 74 percent over the same point in 2020. The dramatic rise in prices worried the Brazilian government last September when the retail price of a 5-kilogram bag of rice had risen to R\$40, which was almost 80 percent more expensive than the pre-pandemic price in January 2020. In response, Brazil eliminated the tariff for rice imports from outside the Mercosur trade bloc through December 2020. Declaring that the high prices would soon fall with the onset of the domestic rice harvest period, the Brazilian government let the tariff exemption expire at the end of 2020. Indeed, prices have fallen in recent months, with the average price in March almost 20 percent lower than the peak in October 2020. However, prices remain more than 70 percent higher year-over-year, even as the new harvest has started to flood the market.

Brazil has struggled in recent years to emerge from the deep recession the country experienced in 2015-2016, and the onset of the COVID-19 pandemic further harmed the Brazilian economy, pushing up the jobless rate and depressing incomes. Many economists expect Brazil's pandemic-induced recession to last years. As the pandemic has worn on, many consumers have once again tightened the grip on their wallets, cutting back on a variety of expenses. Even with staples foods like rice, consumers have returned to recessionary practices by cutting back on food waste. Many families save leftover cooked rice to be consumed at the next meal rather than throwing it out and cooking a fresh pot, which limits the potential upside of rising consumption while consumers stay at home.

Additionally, the high retail price of rice has spurred some consumers to consider replacing the staple food with another starchy alternative such as pasta, the price of which has not increased nearly as much as rice. After a meeting with the Brazilian president, the head of the Brazilian Supermarket Association noted that grocery stores might promote replacement of rice with pasta to consumers who are not happy with rising rice prices. There have also been anecdotal reports of recipes circulating on social media to teach consumers how to replace rice dishes with potato-based ones.

In response to high unemployment rates and rising poverty levels for Brazil's poorest families, the Brazilian government last year started issuing direct payments of up to R\$600 to an estimated 67.2 million families, about one third of the Brazilian population. The emergency payments are credited with blunting some of the economic effects of the pandemic for the poorest Brazilians, who analysts say largely spent the money on basic food staples like rice. The emergency aid program ended in December, but the Brazilian Congress recently approved (and the Brazilian President signed into law) a new assistance program that will give between R\$150 and R\$375 to families in need for the next four months. The funds are likely to prop up consumption levels for rice and other food staples, though not to the same extent seen with the larger payments earlier in the pandemic.

# Wheat

2019/2020 Oct 2019		2020/	<b>2021</b>	2021/2022 Oct 2021	
		Oct 2	2020		
USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
2040	2040	2340	2340	0	2600
1057	1057	937	711	0	311
5200	5200	6250	6250	0	7050
7200	7029	6700	6500	0	6700
7179	7063	6700	6300	0	6700
625	527	0	750	0	750
13457	13286	13887	13461	0	14061
420	425	900	950	0	1000
408	408	900	950	0	1000
500	500	500	500	0	500
11600	11650	11700	11700	0	11750
12100	12150	12200	12200	0	12250
937	711	787	311	0	811
13457	13286	13887	13461	0	14061
2.549	2.549	2.6709	2.6709	0	2.7115
	Oct 2 USDA Official 2040 1057 5200 7200 7179 625 13457 420 408 500 11600 12100 937 13457	Oct 2019           USDA Official         New Post           2040         2040           1057         1057           5200         5200           7200         7029           7179         7063           625         527           13457         13286           420         425           408         408           500         500           11600         11650           12100         12150           937         711           13457         13286	Oct 2019         Oct 2019           USDA Official         New Post Official         USDA Official           2040         2040         2340           1057         1057         937           5200         5200         6250           7200         7029         6700           7179         7063         6700           625         527         0           13457         13286         13887           420         425         900           408         408         900           500         500         500           11600         11650         11700           12100         12150         12200           937         711         787           13457         13286         13887	Oct 2019         Oct 2020           USDA Official         New Post Official         New Post Official           2040         2040         2340         2340           1057         1057         937         711           5200         5200         6250         6250           7200         7029         6700         6500           7179         7063         6700         6300           625         527         0         750           13457         13286         13887         13461           420         425         900         950           408         408         900         950           500         500         500         500           11600         11650         11700         11700           12100         12150         12200         12200           937         711         787         311           13457         13286         13887         13461	Oct 2019         Oct 2020         Oct 2020           USDA Official         New Post Official         USDA Official           2040         2040         2340         2340         0           1057         1057         937         711         0           5200         5200         6250         6250         0           7200         7029         6700         6500         0           7179         7063         6700         6300         0           625         527         0         750         0           13457         13286         13887         13461         0           420         425         900         950         0           500         500         500         500         0           11600         11650         11700         11700         0           12100         12150         12200         12200         0           937         711         787         311         0           13457         13286         13887         13461         0

(1000 HA), (1000 MT), (MT/HA)

MY = Marketing Year, begins with the month listed at the top of each column

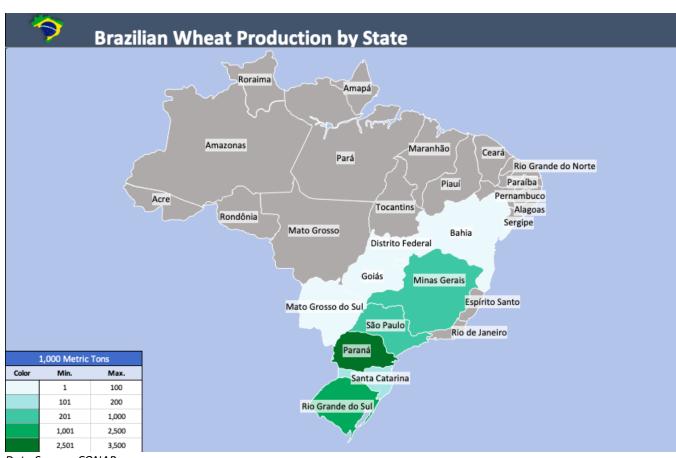
TY = Trade Year, which for Wheat begins in July for all countries. TY 2021/2022 = July 2021 - June 2022

# **Wheat Production**

Post maintains its estimate for MY 2020/21 (October 2020 – September 2021) wheat area at 2.34 million hectares (MHa), as well as Post's estimate of production at 6.25 million metric tons (MMT). High internal prices incentivized expanded planting in the major production regions, supporting Post's estimate for a year-over-year increase of 15 percent for area. The MY 2020/21 crop was more than 20 percent larger than the previous season, as yields rebounded from the damage caused by adverse weather in MY 2019/20.

For MY 2021/22 (October 2021 – September 2022), Post sets its initial forecast for wheat area at 2.6 MHa. Factoring in trend yields, Post projects MY 2021/22 Brazilian wheat production will hit 7.05 MMT, which would set a new record for the crop. According to historic data series maintained by the U.S. Department of Agriculture (USDA) and Brazil's National Food Supply Company (CONAB), Brazil has never produced 7 MMT in a season. However, Post projects that this possibility is very real for the MY 2021/22 crop, which will begin being planted in April. Historically high domestic wheat prices are pushing farmers to dramatically expand wheat cultivation. According to the USDA data series, Brazil's record for wheat production was set in MY 2016/17 when the country produced more than 6.7 MMT of wheat on an area of 2.1 MHa. However, Post expects this volume could be easily surpassed if weather conditions are favorable during the growing season (April-August).

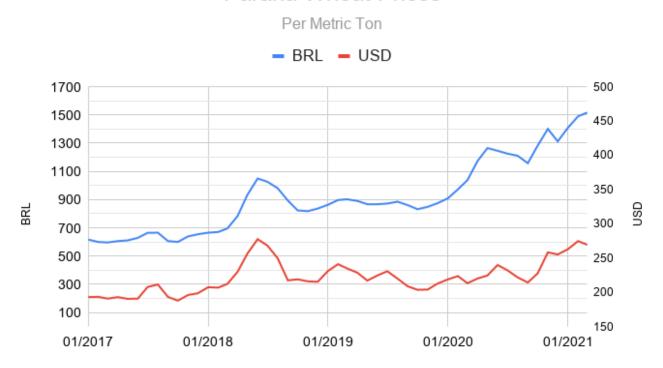
Brazilian wheat production is concentrated in the south of the country, especially in the states of Parana and Rio Grande do Sul. Together, those two states account for roughly 85 percent of total Brazilian production. Both Parana and Rio Grande do Sul expanded wheat area in MY 2020/21, and Post expects the trend to continue for the next crop. According to industry contacts, wheat area in Rio Grande do Sul could top 1 MHa for the first time, though expansion may be limited by the availability of wheat seed.



Data Source: CONAB Graphic: FAS Brasilia Wheat area in southern Brazil competes with other crops, mainly safrinha corn in Parana and soybeans in Rio Grande do Sul. Both of those crops have also seen very high prices in recent months, but the delayed planting of second-crop corn in Parana (the ideal planting window has already closed) could push more producers to sow wheat instead. Nevertheless, according to industry sources, historically about half of Brazil's wheat crops have experienced weather-related challenges that have hampered potential yields. This includes frosts in southern Brazil, which can be seen in June and July most years, as well as untimely rainfall around the harvest period, which can cause crop losses and damage wheat quality. If similar adverse weather effects are seen during the growing season for the MY 2021/22 crop, record production could be stymied.

Several factors incentivized producers to greatly expand MY 2020/21 wheat area in southern Brazil, and Post expects these factors will provide an even greater incentive for expansion in MY 2021/22. Domestic prices remained near record levels for much of 2020, bolstered by firm internal demand, depleted stocks, and limited supplies from Argentina. Due to the COVID-19 pandemic, the Brazilian economy worsened significantly in 2020, and the Brazilian real (BRL) remains about 30 percent weaker than before the onset of the pandemic, when it was already very weak. The weak BRL made Brazilian commodities very affordable in the international market, especially since trade is typically dollar-denominated. At the same time, domestic commodity prices, including for wheat, soared to record levels in BRL terms.

## Parana Wheat Prices



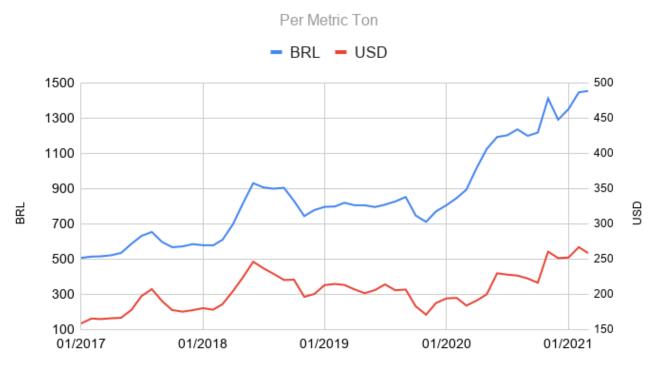
Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA)

Chart: FAS Brasilia

According to a data series maintained by the University of Sao Paulo's Center for Advanced Studies in Applied Economics (CEPEA), wheat prices in Parana are currently at their highest ever peak in nominal terms, averaging about R\$1,517 (US\$270) per metric ton, which is 46 percent higher than the same point in 2020. Meanwhile, prices in Rio Grande do Sul have also hit record levels, averaging R\$1,453 (US\$258) per metric ton, which is 63 percent higher year-over-year, providing ample incentive for producers to expand area.

While the cost of production has also gone up with the rising price for imported inputs and machinery, returns have risen even more, providing greater overall profitability for wheat producers. According to the Federation of Agricultural Cooperatives of the State of Rio Grande do Sul (FecoAgro), the cost of production for wheat has increased by about 22 percent compared to last year. The average cost is now an estimated R\$4,000 per hectare, taking into account the higher prices that producers are paying for seeds, fertilizer, agricultural chemicals, machinery maintenance, and fuel. However, the jump in the cost of production is not expected to deter many wheat producers, as prices have risen even more quickly.

# Rio Grande do Sul Wheat Prices

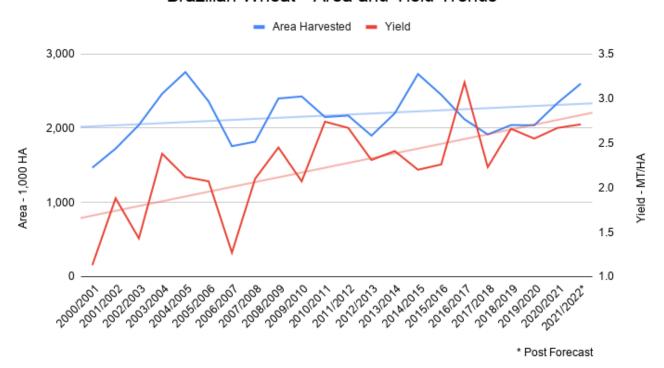


Data Source: University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA) Chart: FAS Brasilia

Unlike soybeans and corn, very little wheat is forward contracted, leaving producers to hope high price levels are maintained at the time of harvest, which was the case in MY 2020/21. Even after the harvest was complete, prices remained firm and have continued to climb through early 2021. Post expects domestic wheat prices will remain high at least through the end of the year.

Record domestic wheat prices and brisk export demand will encourage wheat producers across Brazil to expand planted area for the crop in MY 2021/22. Assuming favorable weather, that could mean at least a 10 percent increase year-over-year for wheat production in the states of Parana, Rio Grande do Sul, Sao Paulo, Santa Catarina, Mato Grosso do Sul, Goias, and the Federal District. However, even with a bumper crop in MY 2021/22, Brazil will remain one of the world's largest importers of wheat. The crop is one of the few commodities for which the country is not self-sufficient. The Brazilian Wheat Millers' Association (Abitrigo) is continuing to push the Brazilian government to adopt the group's "National Wheat Policy," which, among other things, aims to dramatically increase wheat cultivation in Brazil. Abitrgio argues that the country should dedicate resources to ramp up wheat production in non-traditional regions, including the savannah-like Center-West, and the hot and humid Northeast. The group is encouraging an approach similar to what Brazil did for corn production. Once a net corn importer, the crop is now cultivated in every state, and Brazil has become one of the largest exporters of the grain. According to Abitrigo, failing to achieve self-sufficiency in wheat production leaves Brazil vulnerable to the whims of exporting countries that could place limitations on foreign sales of wheat, as has been the case with Russia this year. There are also persistent rumors that Brazil's largest wheat supplier, Argentina, could do something similar, which could jeopardize sales channels for Brazilian millers.

## Brazilian Wheat - Area and Yield Trends



Data Source: USDA/FAS PSD Online

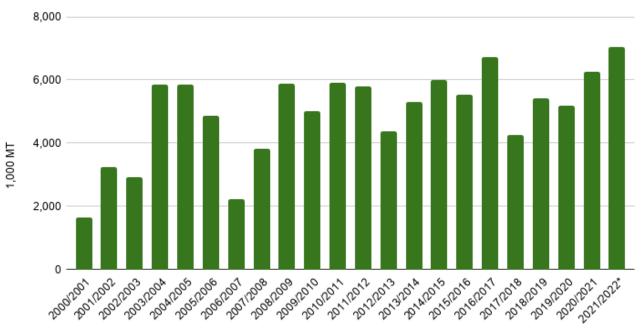
Chart: FAS Brasilia

Brazil has been working for the last decade to expand wheat area and decrease the country's heavy dependence on imports to meet domestic demand. In February, Abitrigo sent a letter to the Brazilian

Ministry of Agriculture, Livestock, and Food Supply (MAPA), strongly encouraging the commitment of funding and resources to expand wheat production research in non-traditional areas. Brazil's agricultural research service, Embrapa, reportedly requested R\$2 million from MAPA last year to ramp up research trials in the Center-West region, but MAPA did not include the money in Embrapa's approved budget for the year. Given the timing of the planting season for wheat, the trials will have to wait until at least 2022.

Another region drawing attention for potential wheat expansion has been Matopiba, an area in northeastern Brazil where the borders converge for the states of Maranhao, Tocantins, Piaui, and Bahia. According to the Brazilian agricultural research agency, Embrapa, the region's biome is considered to be "cerrado," the same type of savannah-like environment found throughout Brazil's Center-West region, which has become a powerhouse producer of soybeans and corn. Matopiba has seen rapid expansion in recent years for soybeans, cotton, and corn but has generally been considered too hot and humid to cultivate a traditionally cold-weather crop like wheat. According to CONAB data, Matopiba only planted about 3,000 Ha of commercial wheat production in MY 2020/21, all in the state of Bahia. That is insignificant compared to the more than 2 MHa of wheat area in southern Brazil.

#### Brazilian Wheat Production



\* Post Forecast

Data Source: USDA/FAS PSD Online

Chart: FAS Brasilia

Embrapa has worked to develop new irrigated wheat varieties to tolerate the hotter climate of the cerrado, as well as resist fungal diseases during periods of high humidity. However, the region is also prone to long periods of dryness, meaning that most of the wheat grown in the cerrado must be

irrigated, which raises production costs. While some farmers have invested in pivot irrigation systems, the technology is still relatively rare in the Center-West and Matopiba. In total, post estimates that the Center-West and Matopiba regions account for just 2.6 percent of Brazil's total wheat area and 3.3 percent of total production in MY 2020/21. However, it should be noted that the yields for irrigated wheat are far greater than for rainfed wheat in the south. According to CONAB, the average wheat yield in the cerrado state of Goias was 4 MT/Ha in MY 2020/21, while the state of Bahia's average wheat productivity reached 5.7 MT/Ha, which is about double that of the traditional growing region in southern Brazil.

Yet another area being explored by Embrapa for wheat production is Sealba, a region comprising the northeastern states of Sergipe and Alaogas, and the northern part of the state of Bahia. Specifically, Embrapa has been conducting wheat trials in the state of Alagoas since 2019. Enbrapa is evaluating the productivity and quality of the research agency's tropical wheat varieties that are already in commercial production in the Center-West state of Goias and the Federal District (home to the capital city of Brasilia), as well as the southeastern state of Minas Gerais. The initiative is part of a project called "Genetic Improvement for Wheat in Brazil, 2017-2021." Researchers have found that the tropical cultivars, which are irrigated, required a growing cycle of 76-93 days (the growing cycle in southern Brazil can be as long as 180 days) and produced yields as high as 4.7 MT/Ha. Further data is needed to determine the optimal planting window in the region, as well as techniques to maintain proper soil management and control for pests and diseases. However, Embrapa is optimistic about the prospects because these varieties have shorter growing cycles and the ability to adapt to tropical climate conditions with scarce rainfall.

Northeastern Brazil is home to some of the country's largest wheat mills, which rely heavily on imports. This has spurred private investors to begin their own trials for wheat cultivation in the region, which has a decidedly tropical climate. One large producer of melons and watermelons in the sunny and dry state of Ceara has reportedly started to experiment with wheat cultivation in the off-season. Working with the owner of a large wheat mill, they are planning to plant their third wheat trial this year, evaluating the productivity of several varieties. The mill owner was reportedly inspired by a trip to China where he observed wheat growing in low-lying regions with a dry climate. The irrigated wheat trials have largely been successful in Ceara, with a short growing cycle (as little as 75 days) producing yields higher than that seen in southern Brazil. The melon farmer also reports that rotating wheat in the off-season for melons has shown benefits for the soil, although, the cost of irrigated wheat production is relatively high. The investors are planning to expand their trials on additional land for MY 2021/22 and will test some rainfed areas.

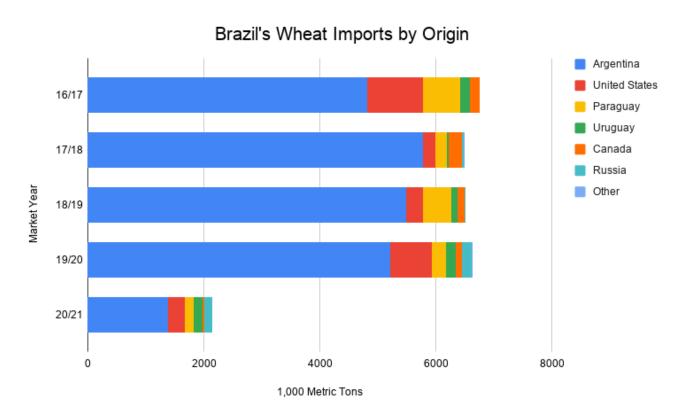
#### Wheat Trade

#### **Imports**

Post maintains its import forecast for MY 2020/21 at 6.5 MMT, based on the pace of trade. The devalued BRL has made dollar-dominated imports more expensive and reduced mills' willingness to make large purchase unless absolutely necessary to meet demand. According to industry contacts,

there has been little movement in the market in recent months, and not much trading is expected before the end of April. Moreover, depending on the price scenario, Abitrigo has indicated that it might approach the Brazilian government for an additional duty-free quota for non-Mercosur wheat, though such a move is not expected to come before May or June at the earliest.

For MY 2021/22, Post sets its initial import forecast at 6.7 MMT, as dwindling stocks at the end of the current market year will likely spur imports to meet domestic demand, as consumption is expected to tick up slightly.



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Note: MY 20/21 includes trade data from October 2020 – February 2021

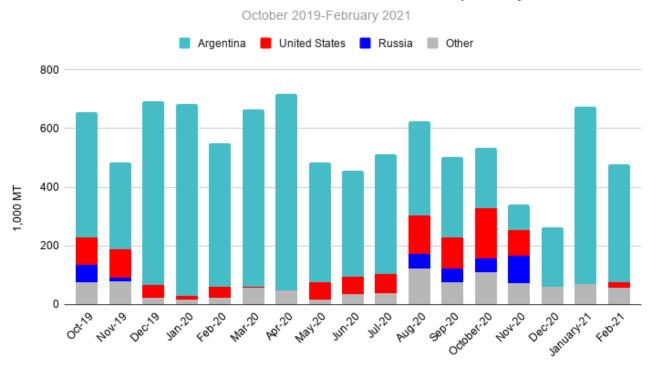
Imported wheat typically accounts for more than half of Brazil's domestic consumption, making Brazil the fourth largest global wheat importer in MY 2019/20. Post estimates that imports accounted for 60 percent of Brazil's consumption in MY 2019/20, although that ratio is expected to shrink slightly in the current market year due to the larger Brazilian wheat harvest.

Most of Brazil's imports are duty-free purchases from Mercosur trade bloc neighbor Argentina, which supplied roughly 79 percent of Brazil's wheat imports in MY 2019/20. In the same period, Paraguay was responsible for about 4 percent of Brazil's imports, while Uruguay contributed another 2.5 percent. Russia accounted for 2.4 percent of market share in MY 2019/20, while the United States was

the second-largest overall supplier with 10 percent of market share (707,837 MT), more than double the U.S. market share seen in MY 2018/19.

Argentine wheat is the dominant import source for roughly the first half of the calendar year, given the timing of the harvest there. Meanwhile, American wheat exports to Brazil gain competitiveness later in the year, with the largest volumes normally arriving between July and November, according to Brazilian customs data. In MY 2020/21, Post expects this trend to hold, with Argentina supplying the vast majority of Brazilian wheat imports, despite limitations to supply in that country.

# Sources of Brazilian Wheat & Wheat Product Imports by Month



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

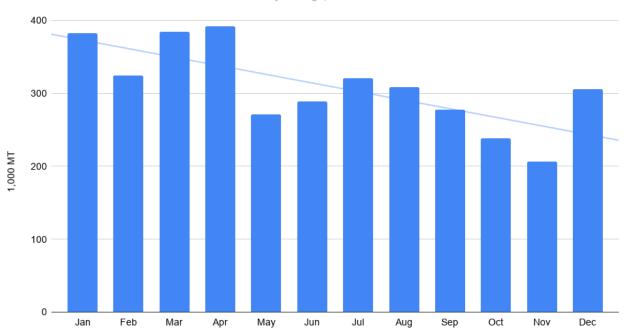
Chart: FAS Brasilia

In the first five months of MY 2020/21 (October 2020 – February 2021), the United States has gained a slightly larger market share, accounting for more than 12 percent of Brazil's imports, while Russia has also made several large sales to Brazil, snagging 6 percent of market share. Those gains have come at the expense of Argentina, which has only claimed 66 percent of market share so far in MY 2020/21. Unusually dry and cold conditions resulted in the Argentine crop being smaller than expected, shrinking by nearly 10 percent year-over-year, according to FAS Buenos Aires. The scarce supplies from Argentina in December also helped prop up Brazil's domestic wheat prices, which remain at near-record highs. Industry contacts indicate that most of the Brazilian wheat harvest has already been sold, and there is little liquidity in the domestic market at the moment.

Additionally, a strike by Argentine port workers in December 2020 greatly slowed the pace of Brazil's wheat imports at the end of the year. According to media reports, more than 140 ships were delayed at Argentine ports as a result of the strike. The knock-on effect for Brazilian imports was that the December volume of wheat purchases was just 315,000 MT, less than half of the total recorded in December 2019 and the smallest December wheat import volume for Brazil in a decade. The situation affected wheat supplies to some Brazilian mills in the South and Center-South regions. However, the pace of trade in January quickened, returning to typical levels.

### Seasonality of Brazilian Imports of Argentine Wheat

Monthly Average, 2016-2020



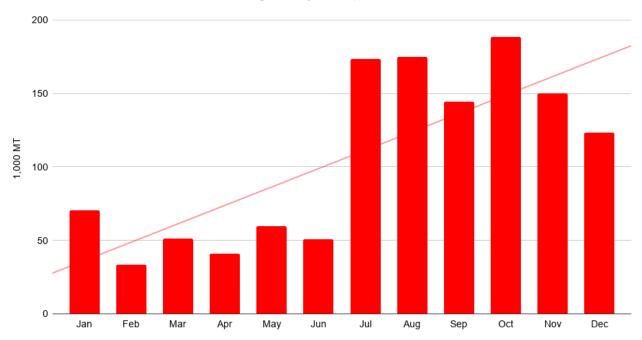
Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Other factors affecting Brazilian wheat imports and domestic prices include the still weak BRL against the dollar, as well as a new export tax imposed by the Russian government on wheat exports. In mid-February, Russia, the world's largest wheat exporter and a minor supplier to Brazil, implemented an export tax on wheat in an effort to control domestic food price inflation. The new policy imposes a tax of 50 euros per ton of exported wheat from March 1-June 30, 2021. According to the president of Abitrigo, the move could make purchases from Russia unfeasible, as the transportation costs alone had already made Russian wheat less competitive compared to other supplies in the Americas. Moreover, few millers are familiar with the properties of Russian wheat, only choosing to make purchases from the country based on the economics of the deal.

#### Seasonality of Brazilian Imports of U.S. Wheat

Average Monthly Volume, 2016-2020



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Post contacts report that Brazilian millers have been increasingly interested in U.S. wheat purchases in MY 2020/21, given the lower supplies from Argentina and the export tax on Russian shipments. Moreover, rumors persist that Argentina could impose its own export tax or some type of export quota system, which would further limit supplies from Brazil's neighbor. As a result, the United States may be well positioned to increase wheat exports to Brazil in the second half of the market year, but the strength of the BRL against the USD may be the deciding factor for many traders. The United States has already exported 582,782 MT of wheat to Brazil in trade year 2020/21 (July 2020 – June 2021).

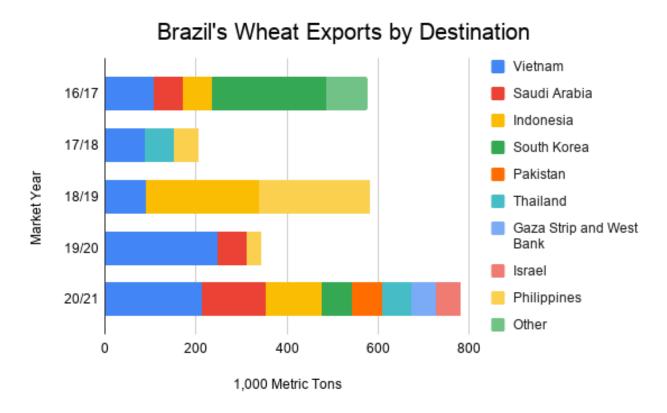
The increase in U.S. market opportunities in Brazil has come at least in part due to Brazil's implementation in November 2019 of an annual duty-free tariff-rate quota (TRQ) for 750,000 MT of non-Mercosur wheat imports. Amid pressure from Abitrigo to increase the duty-free quota due to the effects of the COVID-19 pandemic (including the weakening of the BRL), Brazil announced on June 17, 2020, that it would allow an additional 450,000 MT of duty-free wheat imports from non-Mercosur countries, bringing the TRQ total to 1.2 MMT through November 17, 2020. Brazilian government data show that at the end of the quota period, Brazil had issued licenses for close to 1.1 MMT of the quota, but only about 866,000 MT of wheat actually entered Brazil duty-free before the TRQ expired. Outside of the TRQ, Brazil applied the 10 percent Mercosur common external tariff (TEC, in Portuguese) for all wheat imports coming from countries not in the trade bloc. Mercosur countries (Argentina, Paraguay, and Uruguay) continue to enjoy unlimited duty-free access for wheat exports to Brazil.

The Brazilian government renewed the TRQ for an additional 750,000 MT of non-Mercosur wheat imports from November 18, 2020, through November 17, 2021. Then, 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. The move finally fulfills Brazil's 1994 Uruguay Round commitment. Post's GAIN report from December 2019 includes more information on the TRQ's regulations and allocation rules: <a href="New Opportunities for American">New Opportunities for American</a> Wheat Exports as Brazil Implements Duty-Free Quota.

### **Exports**

Post raises its MY 2020/21 export forecast by 200,000 MT to a total of 950,000 MT based on the rapid pace of trade and export commitments. The change comes on the back of the rebound in harvest volume year-over-year, as well as the weakened BRL making Brazilian exports particularly popular on the international market.

For MY 2021/22, Post sets its initial wheat export forecast at 1 MMT, on the expectation of expanded production. Post also expects the BRL to remain weak against the USD, further motivating foreign sales for Brazilian producers.



Data Source: Brazilian Foreign Trade Secretariat (SECEX)

Chart: FAS Brasilia

Brazil generally exports only a small share of its wheat production, usually around 10 percent, though that proportion has changed in response to the current market dynamics. Exports are entirely dependent on economic conditions, and Brazil's typical markets look for bargain wheat purchases, which have been abundant lately due to the devalued BRL against the dollar. In response, Post expects Brazil's MY 2020/21 wheat exports to more than double year-over-year. The top export markets for Brazilian wheat in MY 2019/20 were Vietnam (72 percent of Brazilian exports), Saudi Arabia (18 percent), and Philippines (9 percent). At the same time, Venezuela was the largest foreign buyer of Brazilian wheat flour in MY 2019/20, accounting for 95 percent of flour exports. In the first five months of MY 2020/21 (October 2020 – February 2021), Brazil has seen large purchases of wheat from Vietnam, Saudi Arabia, Indonesia, South Korea, Pakistan, Thailand, Israel, and the Gaza Strip and West Bank, as well as several large sales of wheat flour to Venezuela. Several of these non-traditional markets undoubtedly made purchases of Brazilian wheat because the devalued BRL made it a bargain on the global market.

## **Wheat Consumption**

Post maintains its forecast for Brazil's wheat consumption in MY 2020/21 at 12.2 MMT and sets its initial MY 2021/22 consumption forecast at 12.25 MMT.

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 relatively static. As with other staple products early on in the COVID-19 pandemic, Brazilians stocked up on wheat flour and other wheat-based products like pasta and industrially produced bread, as social distancing orders went into effect in March and April 2020. As a result, the Brazilian Manufacturers Association of Biscuits, Pasta, and Industrialized Bread & Cakes (ABIMAPI) reported the industry's sales grew by 15 percent year-over-year in the first few months of 2020. That was largely a result of consumers stocking up on staple ingredients as restaurants and other businesses shut down across Brazil to stem the spread of the COVID-19 pandemic. Consumers chose easy-to-prepare ingredients to make more meals at home.

The effects of the pandemic have lingered longer than most consumers expected, and a second wave of infections has spread across the country, triggering lockdowns and curfews in many regions. As a result, many Brazilians are again working from home, while others 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. Brazil saw rapid inflation of food prices in 2020, even as other sectors did not see the same trend. As of January 2021, the price of food had risen by almost 15 percent year-over-year, according to data collected by the Brazilian Institute for Geography and Statistics (IBGE) for the country's Extended Consumer Price Index (abbreviated as the IPCA in Portuguese).

As mentioned in the rice section of this report, the Brazilian government implemented an emergency support and stimulus program last year with an aim to counter the effects of high unemployment rates and rising poverty levels for Brazil's poorest families. The government issued direct payments of up to R\$600 to an estimated 67.2 million families, about one third of the Brazilian population. The

emergency payments are credited with blunting some of the economic effects of the pandemic for the poorest Brazilians, who analysts say largely spent the money on basic food staples. The emergency aid program ended in December, and according to ABIMAPI, sales of wheat-based products slumped in January and February. However, wheat mills applauded the recent approval of a new assistance program that will give between R\$150 and R\$375 to families in need for the next four months. The funds are likely to prop up consumption levels for wheat products and other food staples, though not to the same extent seen with the larger payments earlier in the pandemic.

# Brazilian Wheat Consumption



Data Source: USDA/FAS PSD Online

Chart: FAS Brasilia

Additionally, while consumer prices for wheat-based products have increased, the rise has not been quite as steep as for other staple foods like rice, the retail price for which has increased by more than 70 percent year-over-year. This was due in part to the fact that wheat mills have resisted passing along the increased costs to consumers, knowing that such a move could endanger demand and maybe even food security. As such, some consumers have looked for ways to substitute wheat products like pasta in place of rice, at least on some occasions. Food manufacturers have reportedly refocused production lines to produce more pasta and other wheat-based products. With the new emergency stimulus program in place, ABIMAPI forecasts 3-5 percent growth in sales of wheat-based products this year. Post concurs with this projection.

# **Related GAIN Reports**

<u>New Opportunities for American Wheat Exports as Brazil Implements Duty-Free Quota – December 2019</u>

Brazil Grain and Feed Update - September 2020

Corn Ethanol Production Booms in Brazil – October 2020

Brazil Eliminates Soybean and Corn Import Duties – October 2020

<u>Ministry of Agriculture Changes Import License Requirement to Facilitate Corn and Soybean Imports – November 2020</u>

Brazil Oilseeds and Products Update – December 2020

Argentina Grain and Feed Update – January 2021

Brazil Poultry and Products Semi-Annual – February 2021

Brazil Livestock and Products Semi-Annual – March 2021

#### **Attachments:**

No Attachments