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Report Highlights:

Post forecasts 2022/2023 corn production at a record 126 million metric tons (MMT) based on the growing demand and price for corn both in domestic and international market. This is up 8.6 percent on the 2021/2022 production estimated at 116 MMT. Post increases the forecast for corn exports for MY 2022/2023 to 47 MMT, up 2.5 MMT on the current season. Post reduces the forecast for rice planted area in MY 2022/2023 to a historical low of 1.58 million hectares (ha), as rice loses space to more profitable crops that require less maintenance, such as soybean or corn. Post forecasts a record wheat production for MY 2022/2023 with production at 9.4 MMT, up 21 percent on the 2021/2022 harvest. This forecast is based on continued interest by Brazilian growers in the strong demand for wheat and rising global commodity prices.

CORN

Production, Supply and Distribution

Table 1. Production, Supply and Distribution - Corn

Corn	2020/2021		2021/2022		2022/2023	
Market Year Begins	Mar 2021		Mar 2022		Mar 2023	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	19900	19900	21800	21700	22700	22500
Beginning Stocks (1000 MT)	5328	5328	4153	3853	4953	4653
Production (1000 MT)	87000	87000	116000	116000	126000	126000
MY Imports (1000 MT)	2848	2848	2300	2300	1300	1400
TY Imports (1000 MT)	2281	2281	3320	3320	1300	1400
TY Imp. from U.S. (1000 MT)	1	1	0	0	0	0
Total Supply (1000 MT)	95176	95176	122453	122153	132253	132053
MY Exports (1000 MT)	21023	21023	44500	44500	47000	47000
TY Exports (1000 MT)	27492	27492	32439	32439	46500	46500
Feed and Residual (1000 MT)	59500	60300	62000	62500	65500	65500
FSI Consumption (1000 MT)	10500	10000	11000	10500	11500	11500
Total Consumption (1000 MT)	70000	70300	73000	73000	77000	77000
Ending Stocks (1000 MT)	4153	3853	4953	4653	8253	8053
Total Distribution (1000 MT)	95176	95176	122453	122153	132253	132053
Yield (MT/HA)	4.3719	4.3719	5.3211	5.3456	5.5507	5.600

MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Corn begins in October. TY 2022/2023 = October 2022 - September 2023
Source: Post Brasilia

Corn Production

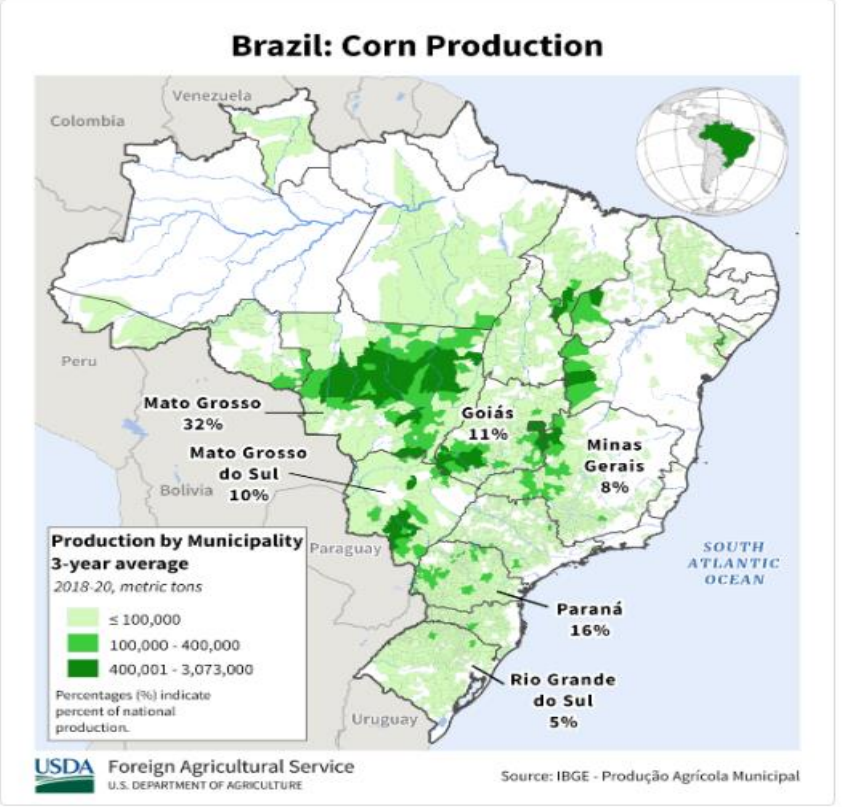
According to the Brazilian Agricultural Research Corporation (EMBRAPA), Brazilian agribusiness feeds 800 million people annually, using only 7 percent of its territory for farming. One of the main crops responsible for this success is corn.

Brazil plants corn during the entire year, divided into three different crops. First-season corn is usually planted between August and December and harvested between January and June depending on the region, starting in the south of Brazil). With the 2021/2022 season now concluded, first-season corn accounted for roughly 22 percent of the production of corn in Brazil and almost 21 percent of corn area, according to data from Brazil's National Supply Company (CONAB). Planted in the optimal season, this corn traditionally produces the highest yield, with an average of 5.39 metric tons per hectare (MT/ha) over the last ten years.

The second-season corn, commonly referred to as ‘safrinha’ corn, is planted from December to March, usually following the soybean harvest, and comprises the biggest area, accounting for most of the production (roughly 76 percent in the 2021/2022 corn season).

Since 2019, Brazil has also planted a third-season corn crop, planted only in some states of the country’s North and Northeast. Due to the region’s climate, this crop cycle resembles that of the United States, with planting occurring around May and harvesting in October. In the 2021/2022 cycle, third-season corn is estimated by CONAB to account for around two percent of production and three percent of the total corn area, with the lowest yield rates (around 3 MT/ha. Many analysts credit the lower productivity to the lesser use of technology in the region as farmers traditionally destine their harvest for livestock feed.

Figure 1.



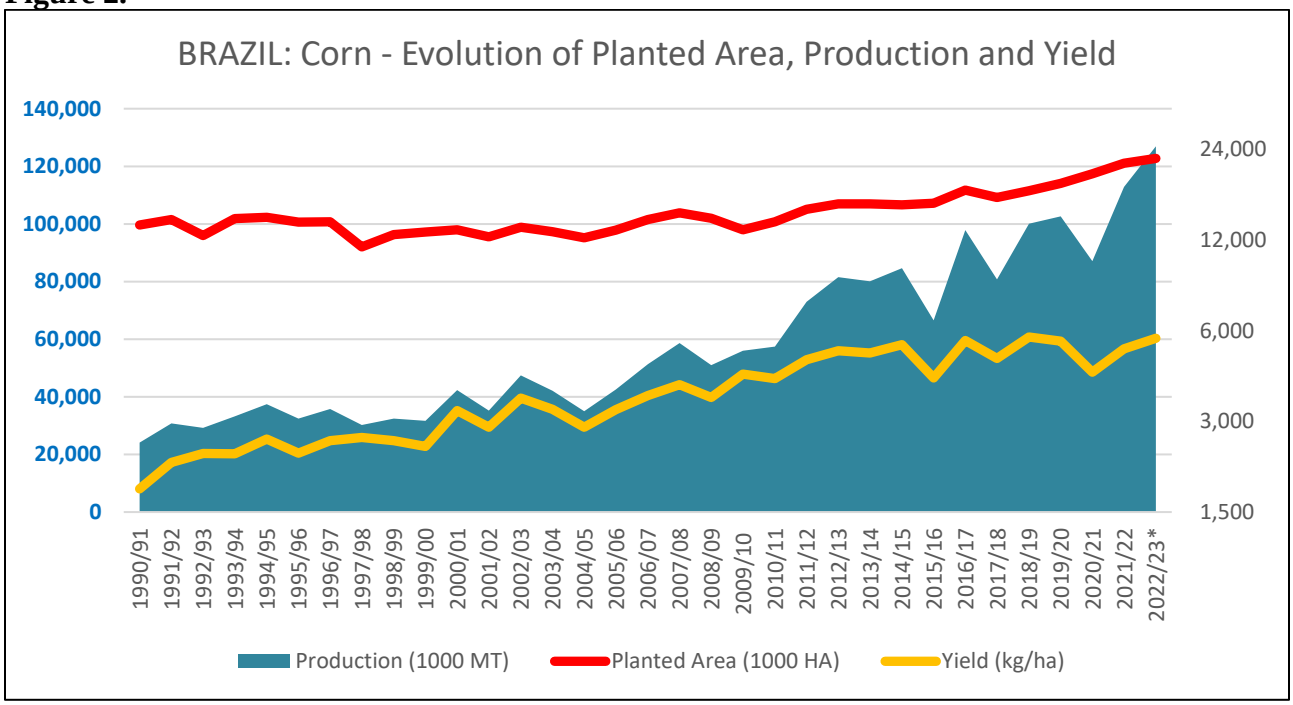
2022/2023 Planted Area, Production, and Yield to Continue on An Upward Trend

For MY 2022/2023 (March 2023 – February 2024) Post maintains the forecast of planted corn area at 22.5 million ha, 3.7 percent higher than the harvested area of this current season. Although the increase in demand for corn both in domestic and international markets and rising prices have encouraged the planting of this grain, ongoing elevations in production costs have led some producers to switch to more profitable crops, such as soybeans, resulting in a more conservative forecast for the coming season.

Corn production is also expected to continue an upward trend, leading Post to increase its production forecast to 126 MMT for MY 2022/2023, representing a 5 percent expansion on the previous forecast. This is based on trendline, with corn production having increased by 38 percent in the past ten years.

Post forecasts yield for MY 2022/2023 of 5.60 MT/ha, an increase of almost five percent compared to last season, considering average weather conditions, adequate timing of corn sowing (especially second-season corn), and optimal use of technological resources. According to CONAB, Brazil registered an average yield of 5.14 MT/ha over the last five years.

Figure 2.



Data Source: CONAB, with 2022/2023 representing estimate; Graph Post Brasilia

2021/2022 Planted Area, Production, and Yield Remain Consistent

Post estimated the corn harvested area for MY 2021/2022 (March 2022 – February 2023) at 21.7 million hectares, a nine percent increase compared to MY 2020/2021. This estimate results from the mounting interest of corn growers during the year, encouraged by high grain prices in domestic and international markets and by the strong demand of the industry. In particular, there has been an increased need for corn by the poultry and livestock sectors and the growing corn ethanol industry, which is expanding in Brazil.

Post maintained its corn production estimate for MY 2021/2022 at 116 MMT from the previous forecast, resulting in a record corn production for Brazil. The 2021/2022 first-season and second-season corn harvests experienced a significant increase in production. As a result, if the third-season corn that finished sowing in July 2022 suffered weather or uncontrolled pest attacks, the final production of the 2021/2022 harvest will remain far higher than the dismal previous season. The 2020/2021 season produced 87 MMT due to adverse climatic issues.

Despite the strong production, productivity was impacted to some extent in the South Region of Brazil, where the first-season harvest experienced a severe water deficit at the end of 2021 and the beginning of 2022. However, this loss was offset by the estimated yield increase in the second-season harvest, leading Post to maintain the estimated yield at 5.35 MT/ha for MY 2021/2022, an increase of 22 percent on the estimation made in the previous season.

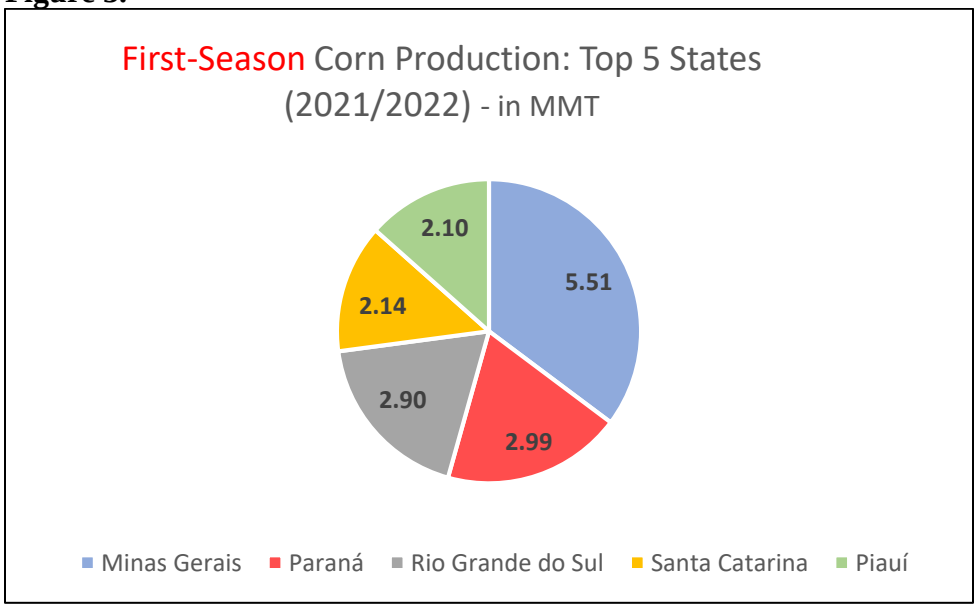
Harvest Outlook

First-Season Corn

Planting of the 2022/2023 first-season crop is progressing faster than in the previous year, with many farmers in the south of Brazil anticipating sowing due to the La Niña. Recent weather forecasts predict the phenomenon to occur from October until December, bringing concerns of another dry season, which can potentially hamper next year's production. The southern states of the country are traditionally the first ones to start sowing first-season corn, and this year they are ahead of schedule compared to last year, with the exception of Paraná. According to the Association of Technical Assistance and Rural Extension Enterprises of Rio Grande do Sul (EMATER/RS), in mid-October, the corn crop in the state was 65 percent planted, 14 percent above the normal average for the state during this time of year.

The 2021/2022 first-season crop harvest has been completed across the country. The South of Brazil was responsible for 35 percent of the planted area, with the state of Rio Grande do Sul accounting for roughly 18 percent of that total. The state of Minas Gerais, in the Southeast, was the largest in planted area in Brazil and was, by far, the largest in production this season. According to CONAB, the average yield for the 2021/2022 first-season crop was 5.5 MT/ha, with the states, Maranhão, Minas Gerais, and Goiás achieving their highest productivity within the historical series.

Figure 3.



Data Source: CONAB; Graph Post Brasilia

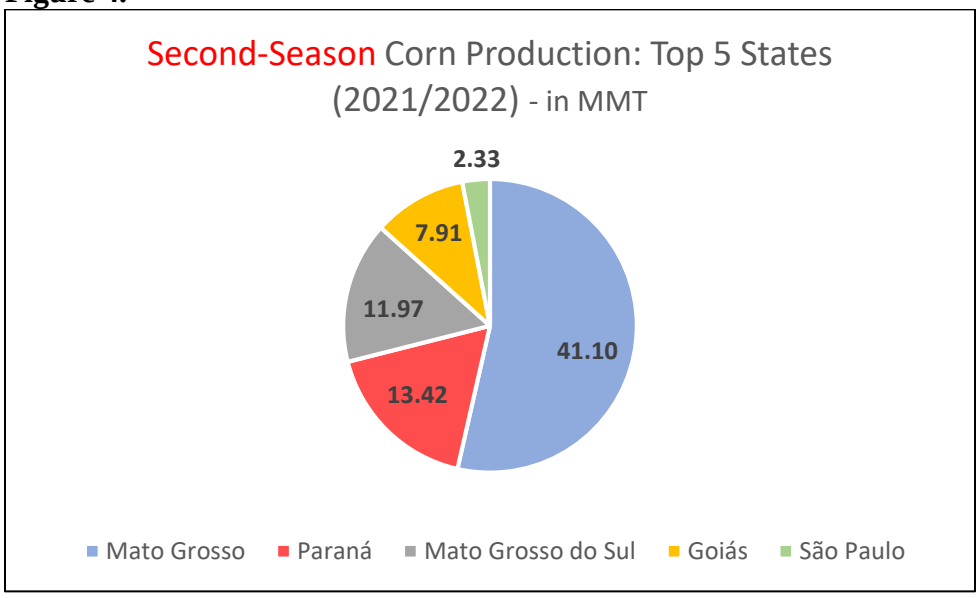
Second-Season Corn

The harvest of the 2021/2022 second-season (*safrinha*) corn crop has just been completed throughout Brazil, with a record planted area. The State of Mato Grosso remained the largest producer, accounting for approximately 48 percent of the *safrinha* corn produced in the season and 40 percent of the harvested area. The second largest producer, the state of Paraná, accounted for roughly 16 percent of second-corn production in 2021/2022, followed by Mato Grosso do Sul, responsible for 14 percent of production. The state of Goiás, also in the Center-West, accounts for 9 percent of production on around 10 percent of the planted area.

According to the Mato Grosso Institute of Agricultural Economics (IMEA), the biggest corn-producing state in the country is expected to produce 7.27 million hectares in the 2022/2023 season, representing a 1.8 percent increase from the current season. The institute forecasts over 45 million tons of corn production, up almost 4 percent compared to the 2021/2022 harvest.

Several states suffered from drought and incidences of leafhoppers that resulted in yield figures similar to the abysmal numbers seen in the 2020/2021 harvest. However, key producing states presented better than expected production and were able to offset the drops in the other regions, resulting in a projected yield of 5.22 MT/ha for 2021/2022. This represents a 6.7 percent increase in yield in comparison to the previous year, according to CONAB.

Figure 4.



Data Source: CONAB; Graph Post Brasilia

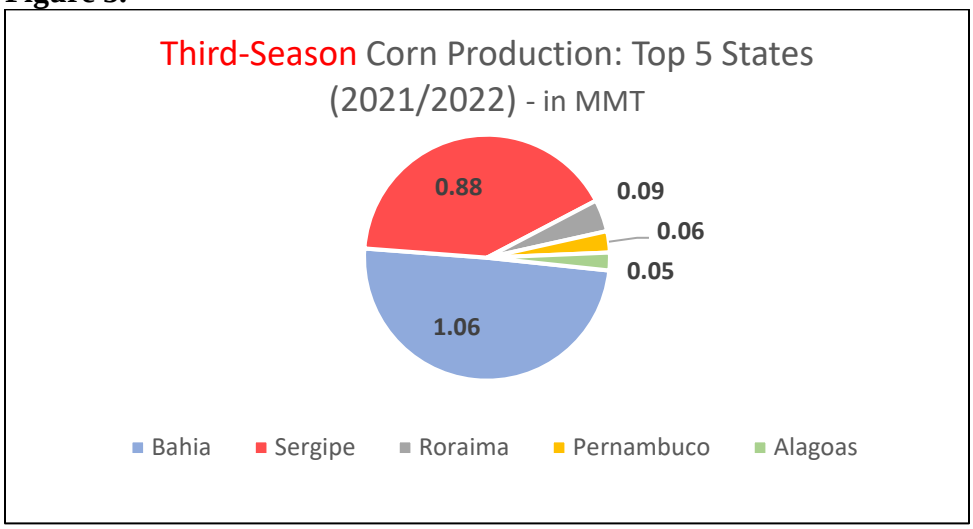
Third-Season Corn

The significant increase in production costs did not discourage traditional third-crop corn growers in the North and Northeast regions of Brazil, as higher than normal prices compensate investments. CONAB estimates production for the region's 2021/2022 third-season corn to reach 2.15 MMT, a 32 percent

increase from the previous season. Most states have been investing in technology to increase productivity and planted areas. In general, corn crops are in good condition, with good productivity. Some areas will be destined for silage due to the low productive potential for grains and because some locations had limitations due to severe attacks by leafhoppers.

According to the International Research Institute for Climate and Society (IRI), the analysis of the El Niño Southern Oscillation (ENSO) forecast model, La Niña conditions are still expected to remain until December. In the Northeast Region of Brazil, there is a forecast of rainfall within or above the climatological average in practically the entire region, which favored the most acute phases of crops in most of the states of Sergipe, Alagoas, and Bahia, known as "Sealba."

Figure 5.



Data Source: CONAB; Graph Post Brasilia

2022/2023 Production Costs Remain a Hurdle

Brazil continues to secure the import of fertilizers. Industry and producers remain confident that there will be no shortage of defensives for the 2022/2023 crop, despite some delays in the delivery of the goods resulting from bureaucracy and lack of personnel working in ports. Market analysts consulted by Post estimate that more than 70 percent of the total fertilizers needed for the 2022/2023 corn harvest have already made their way into Brazil. Many farmers are holding off on the purchase of fertilizers for later crops in the expectation that prices might reduce as the 2022/2023 season progresses.

IMEA projects that the cost of production of the 2022/2023 harvest has gone down in the state of Mato Grosso relative to the projection made in July. However, the calculations show that it still costs 30 percent more to produce corn in the state now than in 2021/2022, and costs have increased by a whopping 87 percent compared to the 2019/2020 harvest.

Table 2.

COST OF CORN PRODUCTION IN MATO GROSSO (R$/ha)						
Harvest	**2019/20**	**2020/21**	**2021/2022**	**2022/2023***	**2022/2023***	**2022/2023***
Year	**2019**	**2020**	**2021**	**2022**	**2022**	**2022**
Month				**March**	**June**	**August**
Seeds	429.88	445.42	554.43	668.63	692.25	687.34
Fertilizers	684.96	735.63	1,168.51	1,808.74	1,956.68	1,815.95
Defensives (Fungicide, Herbicide, Insecticide, etc.)	328.16	398.17	469.15	566.57	646.31	652.08
Mechanized Operations (Planting, Fertilizing, Applications with Machines, harvesting...)	101.03	84.05	109.63	139.65	175.37	168.49
Third Party Services	18.22	2.09	1.73	2.18	2.08	2.94
Labor	98.75	72.99	76.91	79.31	78.94	82.95
Maintenance	109.93	106.13	106.47	107.4	107.15	109.84
Taxes and Fees	104	90.59	108.19	115.59	122.20	120.94
Financing and Insurances	176.54	160.18	214.02	275.77	293.81	282.14
Post- Production (Classification and Processing, Storage, Production Transport)	277.74	286.26	278.6	283.69	283.40	287.95
Other Costs (Technical Assistance, Utilities, Fuel, General Expenses)	58.9	69.46	84.29	94.73	101.97	98.23
Lease	94.72	132.3	210.01	217.19	230.68	203.27
Depreciation (of Equipment, Utilities, and Improvements)	167.17	196.96	198.41	203.49	203.20	202.91
Family Labor	50.66	59.83	60.97	61.62	61.44	61.53
Opportunity Cost (Working Capital, Improvements, etc.)	360.37	538	754.53	916.75	1,032.70	944.50
TOTAL	**3,061.04**	**3,378.06**	**4,395.84**	**5,541.30**	**5,988.18**	**5,721.05**

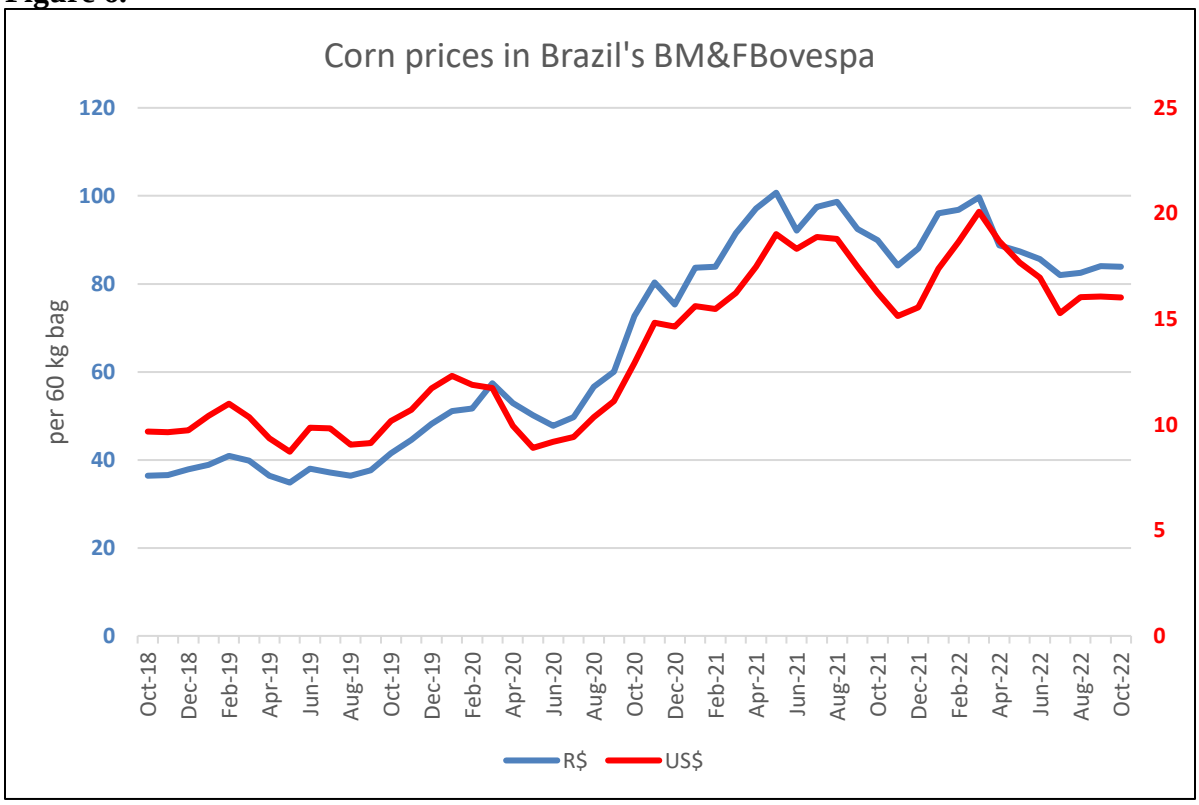
Data Source: IMEA, costs in R$/ha, with 2022/2023 representing estimate; Chart Post Brasilia

Though the prices of fertilizers remain high and a significant issue in the cost of production, the average price of fertilizers decreased in August, resulting in an improvement in the Fertilizer Purchasing Power Index (IPCF), which closed at 1.50, a reduction over July (1.85), June (1.69), May (1.75) and April (1.87), according to data from *Mosaic Fertilizantes*. The company releases the IPCF monthly, consisting of the relation between the price indicators of fertilizers and agricultural commodities. A ratio of less than 1.0 indicates that fertilizers are more affordable than in the same period in 2017. A percentage greater than 1.0 means that fertilizers are less affordable than in the same period. The IPCF calculation considers the main Brazilian crops: soy, corn, sugar, ethanol, and cotton.

Corn production costs are still strongly influenced by volatile internal and external uncertainties. In Brazil, many inputs, such as machinery and seeds, are imported, so their prices will vary with the volatility of the domestic currency (the 'real' - R$). Additionally, Brazil is waiting on the definition of the new government setup of recently elected opposition candidate Luiz Inácio Lula da Silva in the October presidential election, with farmers and the market apprehensive about what approach will be given on the agricultural front under this new administration.

In mid-October, Brazil's Central Bank came out with improved projections for the country's forecast for economic growth in 2022, to 2.7 percent, compared to an estimated 1.7 percent made in June. According to the bank's Focus report, the Brazilian economy should grow close to 3 percent in 2022 and suffer a slowdown in 2023. The projection for inflation this year is at 5.62 percent; for 2023, it was reduced to 4.97 percent, and for 2024 it dropped to 3.43 percent. The Central Bank predicts that the real will be R$ 5.20 to the USD in 2022 and 2023, up 3% and 2%, respectively, from the previous June forecast.

Figure 6.



Data Source: CEPEA/ESALQ; Graph Post Brasilia

In Mato Grosso do Sul, the Brazilian Association of Soy and Corn Growers (APROSOJA) reported that negotiations for the 2021 corn crop began in June 2020 for R$ 36.25/ sack, reaching R$ 69.32/ sack in July this year. However, according to StoneX, 45 percent of the 2021/2022 *safrinha* harvest was yet to be commercialized in Brazil by early October. Negotiations for the 2022 crop began in July 2021 for R$ 78.37/ sack.

Corn prices also rose in the domestic market with increased speculation of a possible start of corn exports from Brazil to China before the end of this year. The two countries have advanced in an agreement to allow the cereal trade, which until then was prohibited for phytosanitary issues. China, which is already the largest importer of soy, meat, and sugar from Brazil, has indicated that it is willing to waiver on these issues to enable the shipment of Brazilian corn from its 2021/2022 harvest, if Brazil is able to apply control measures for pests such as *peronosclerospora sorghi* in the next harvest. Nevertheless, despite leaving the market and farmers in an uproar, there have not been any shipments to the Asian country so far, as Brazil has not been able to finalize the necessary inspections imposed by China. Analysts consulted by Post believe that Brazil will not have corn left from this 2021/2022 harvest to secure Chinese embarkments, should inspections be done in time, which would consequently require a new deal/waiver to be signed between both countries for the 2022/2023 harvest, provided there is continued interest in exporting.

However, the mere speculation of the possibility of opening the Chinese market to Brazilian corn should keep the grain on a high note in 2023. Furthermore, while at the beginning of the year, all eyes were set on concerns over a post-pandemic global recession and the immediate consequences of the Black Sea conflict, more recently, weather factors have brought concern over next year's harvests and their effects on the corn prices, as Brazilian producers are focusing on the results of the crops in Europe and the United States.

Corn Trade

2022/2023 Corn Exports Hit a High Note, While Imports Drop

Post increases its forecast for corn exports for MY 2022/2023 (March 2023 – February 2024) to 47 MMT, up 2.5 MMT on the current season, due to the projected increase of production and continued interest for corn in international markets. With the low performance of crops in important producing countries including the United States and Argentina, it is estimated that corn prices will continue to rise. Additionally, Brazil expects record production, and farmers are hopeful for the commencement of Brazilian corn exports to China, which will likely give producers an extra incentive.

Post decreases its 2022/2023 import forecast to 1.4 MMT from the previous 1.8 MMT forecast, considering the record crop this year, which has once again allowed producers to increase their stocks.

2021/2022 Corn Exports Reach Historical High with Imports Oscillating Monthly

Post maintained its estimate for corn exports for MY 2021/2022 at 44.5 MMT, based on the rise in Brazilian production and the heated international demand. Post increased its corn imports estimate to 2.3

MMT for MY 2021/2022 from the previous 2 MMT estimate, based on Brazil's bulging livestock and poultry industry, especially near the bordering countries that are traditional exporters of corn, which facilitates entry of the product in the country.

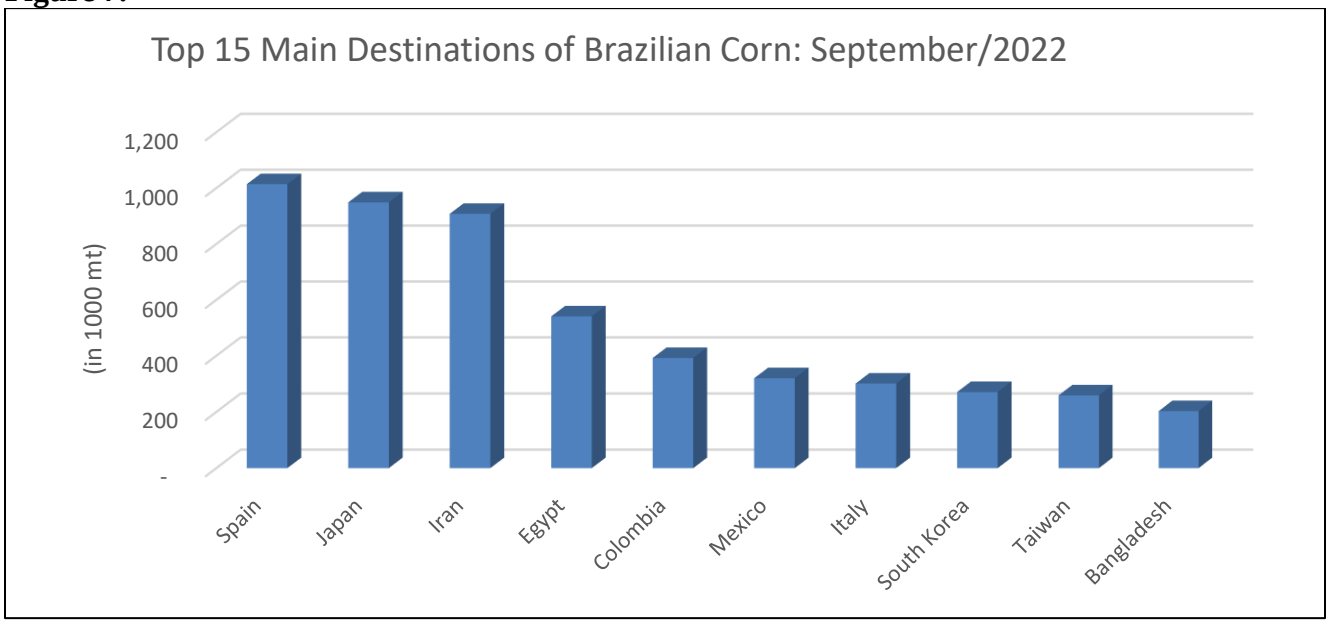
As mentioned in the previous report, in May 2022, the Brazilian Government cut import tariffs for several categories of goods to reduce consumer inflation through the end of this year. Among the commodities affected by the measure is corn (grain), which had an import tax reduction from 7.2 percent to 0 percent (see GAIN report Brazil Lowers Agricultural Tariffs to Fight Inflation | BR2022-0033). However, analysts consulted by post projected that this measure would have little impact on the import figures of Brazil, given that in MY 2021/2022, 99 percent of imported corn that supplied the country came from Paraguay and Argentina, countries which already have zero import tariffs as part of the Mercosur agreement.

The National Association of Grain Exporters (ANEC) projects that Brazil will export 4.2 million tons of corn in October 2022, a 125 percent increase compared to the amount exported by the country in the same month last year (1.87 MMT).

According to data from the Brazilian Secretariat of Foreign Trade (SECEX), the accumulated volume of corn exports in the first nine working days of October already exceeds 80 percent of the total exports for the entire month of October 2021. Brazil exported 3.25 million tons of corn in the first nine working days of October 2022, against 1.79 million tons shipped during October 2021.

Corn exports from Brazil in September 2022 reached 6.78 million tons, more than double the volume of 2.85 million registered in September last year. Mato Grosso was responsible for 42 percent of the corn exported in September, followed by Paraná and São Paulo (23 percent), while the Northern and northeastern states were responsible for 24 percent of the corn exports.

Figure 7.



Data Source: Secretariat of Foreign Trade (SECEX); Graph Post Brasilia

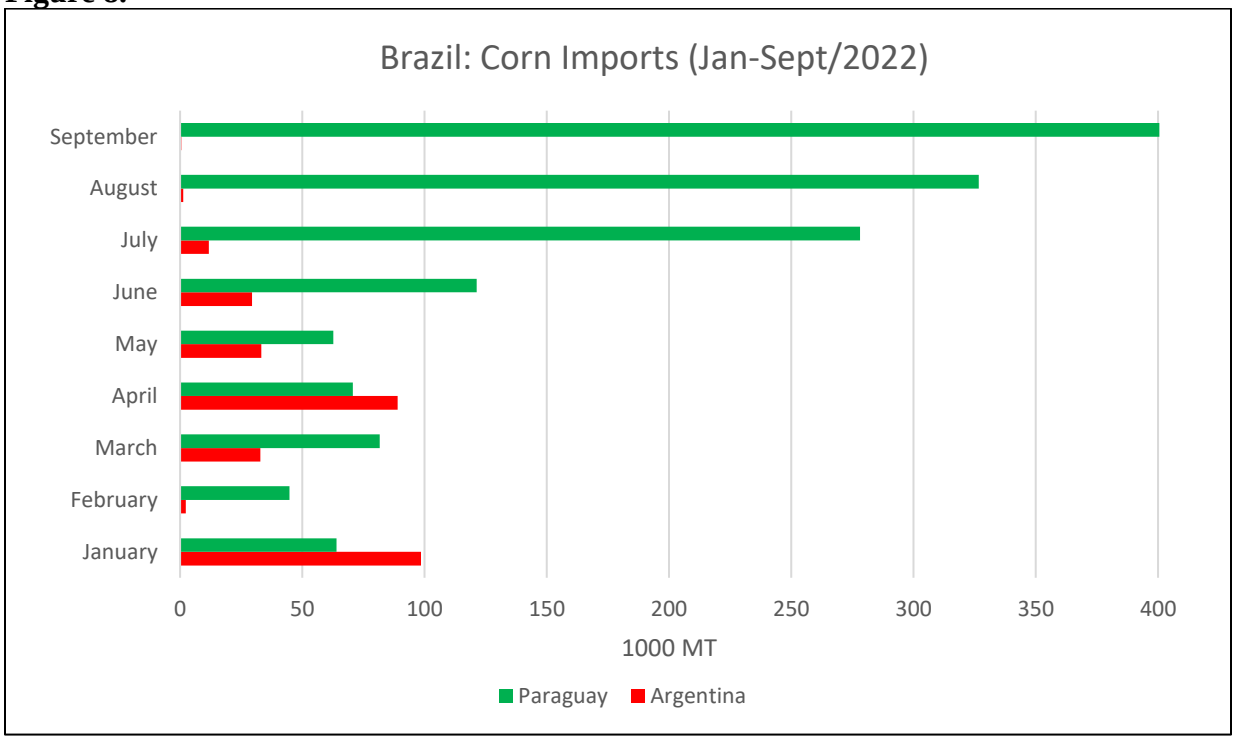
However, despite the number setting a historical record for September, shipments were lower than the 7.55 million tons exported in August. Iran was the biggest buyer of Brazilian corn that month (18%), followed by Spain (17%), Egypt (11%), Japan (9%), and Colombia with 8 percent, closing in the Top 5 importers of Brazilian corn.

In July, Brazil exported a little over 4.12 million tons of corn, according to SECEX. Exports were well below the projections of the National Association of Grain Exporters (ANEC), which estimated 6 million tons of corn exported for that month.

According to data from SECEX, the volume of corn exports from January to the beginning of September generated foreign exchange revenue of US$ 6 billion, which exceeds the values recorded throughout the entire last year. In 2021, Brazil generated a revenue of US$ 4.20 billion with corn exports – which represented a sharp drop since the country had earned US$ 5.85 billion in all of 2020.

On the other hand, Brazil imported 22 percent less corn per day in October this year than it did last year. The country imported 175,677 tons of corn, against 503,000 tons recorded in the first nine days of October 2021. Meanwhile, Brazil imported 290.5 thousand tons of corn during the entire month of July 2022, also according to SECEX data. This means the country received 101 percent more than what was registered in July 2021 (144.3 thousand tons).

Figure 8.



Data Source: Secretariat of Foreign Trade (SECEX); Graph Post Brasilia

Corn Consumption

Post increases the MY 2022/2023 domestic consumption forecast to 77 MMT, up two million tons from the previous estimate, based on the expectation of ongoing expansion of Brazil's livestock and poultry industries and an increase in the use of corn ethanol by the industry.

The National Corn Ethanol Union (UNEM) considers that the expected increase in corn production in the 2022/2023 harvest reinforces the growth prospects for the sector, which should have at least two more ethanol units in operation from 2023 onwards, in addition to the expansion of plants which are already in activity.

According to UNEM, the corn ethanol sector expects to produce 10 billion liters of corn ethanol by the 2030/2031 harvest, more than double what is currently produced. Second-season corn is the primary source of raw material for corn ethanol and animal nutrition products such as dry distillers grain (DDG) and corn oil. UNEM data show that corn bran from the ethanol industry is used as an input for animal feed and should exceed 2.5 million tons in the 2021/2022 harvest.

For MY 2021/2022, Post maintained the corn consumption at 73 MMT, almost four percent higher than the previous marketing year. As previously mentioned, corn consumption in Brazil remained on an upscale trend over the last two decades, boosted primarily by the livestock and poultry industries, which make up for more than 70 percent of the corn consumption in the country.

According to the Brazilian Association of Corn Industries (ABIMILHO), approximately 15 percent of the national production of corn is destined for human consumption, including the indirect composition of other products. The Brazilian Agricultural Research Corporation (EMBRAPA) estimates that only 7 percent of corn is directly used for human consumption in Brazil.

The country has also been increasing its corn consumption for ethanol production. Corn-based ethanol in 2022 is estimated at roughly 10.79 MMT, an increase of approximately 36 percent compared to the corn volume consumed in 2020 (7.90 MMT). (See GAIN Report Biofuels Annual | BR2022-0047)

Additionally, data from Brazil's National Union for the Animal Nutrition Industry (SINDIRAÇÕES) shows that total feed production by the sector - including corn and other ingredients - in the calendar year 2021 grew to 81.2 MMT, an increase of 4.7 percent in comparison to 2020. SINDIRAÇÕES data also indicates that the production of feed rations for broiler chickens grew by 4.1 percent in 2021, feed production for laying hens grew by 1.5 percent, and swine feed production grew by 5.9 percent. SINDIRAÇÕES projects feed production to grow between 4 and 4.5 percent in 2022 under the current trade dynamics and domestic economic scenario.

Brazilian agribusiness consumes about two-thirds of what it currently produces, resulting in a considerable surplus. However, the country suffers from limitations in storage capacity as producers struggle to drain the remaining harvest that is not consumed or exported and still takes up space in silos and ports.

According to a survey carried out by IMEA last year, the state of Mato Grosso, the largest producing region in the country, has a deficit in storage capacity of about 50 percent of the annual production of

corn and soybeans. As a result, many growers end up storing corn out in the open air, subject to weather losses. The situation has progressively worsened with each harvest, as production increases in the state due to the transformation of livestock areas into agricultural planted areas and more significant investments in production technology, increasing yield and production numbers. For the storage capacity to follow the productivity of the state, the Association of Soy and Corn Producers of the State of Mato Grosso (APROSOJA/MT) estimates that the state would have to increase its storage capacity in the order of 23 percent, far behind the 3.7 percent increase observed in recent years.

RICE

Production, Supply and Distribution

Table 3. Production, Supply and Distribution of Rice

Rice, Milled	2020/2021		2021/2022		2022/2023	
Market Year Begins	Apr 2021		Apr 2022		Apr 2023	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1682	1682	1618	1620	1600	1580
Beginning Stocks (1000 MT)	235	235	570	620	357	270
Milled Production (1000 MT)	8001	8006	7337	7300	7300	7100
Rough Production (1000 MT)	11766	11774	10790	10735	10735	10441
Milling Rate (.9999) (1000 MT)	6800	6800	6800	6800	6800	6800
MY Imports (1000 MT)	634	634	850	850	850	850
TY Imports (1000 MT)	685	685	850	850	850	850
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	8870	8875	8757	8770	8507	8220
MY Exports (1000 MT)	950	951	1100	1100	900	900
TY Exports (1000 MT)	782	782	1100	1100	1000	1000
Consumption and Residual (1000 MT)	7350	7304	7300	7400	7250	7200
Ending Stocks (1000 MT)	570	620	357	270	357	120
Total Distribution (1000 MT)	8870	8875	8757	8770	8507	8220
Yield (Rough) (MT/HA)	6.9952	7.0000	6.6687	6.6265	6.7094	6.6082

MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Rice begins in January. TY 2022/2023 = January 2023 - December 2023
Source: Post Brasilia

Rice Production

2022/2023 Planted Area, Production, and Yield to Lose Ground to More Profitable Crops

Post reduces the forecast for rice planted area for MY 2022/2023 (April 2023 – March 2024) to 1.58 million hectares (ha), down 1.3 percent from its previous forecast of 1.6 million hectares (ha). This figure is an all-time low for Brazil, as rice continues to lose space in the country, with farmers switching to more profitable crops that require less maintenance, such as soybean or corn.

More than 90 percent of the rice grown in Brazil is irrigated, which elevates production costs considerably. Nevertheless, rice sowing remains a tradition in the country, especially in the southern states, such as Rio Grande do Sul, which is responsible for more than 70 percent of the country’s

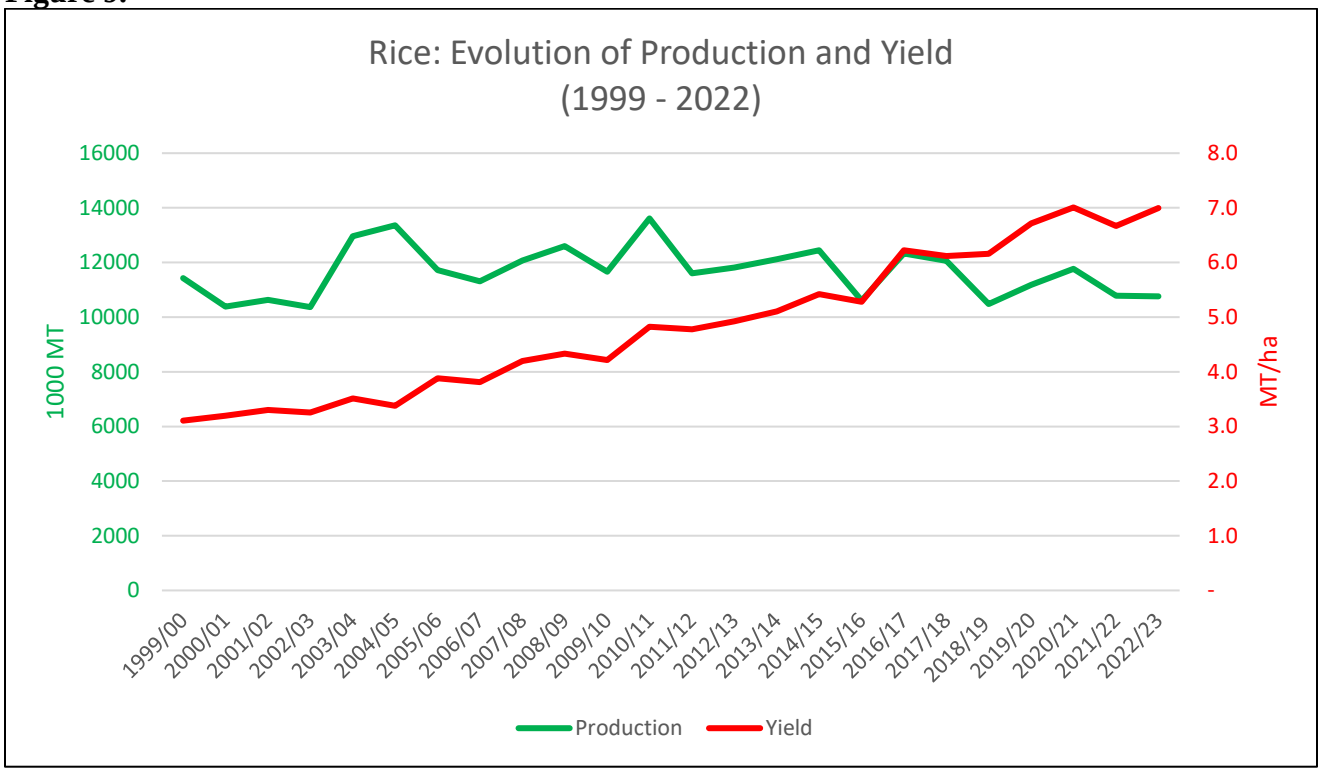
production. In many of these regions, soils present poor drainage, making them suitable for planting irrigated rice. Santa Catarina, the second largest producing state, responsible for roughly 11 percent of production, also has a long history of rice-growing families. Still, the National Supply Company (CONAB) forecasts that Brazil's rice-planted area decreased by around 33 percent from 2011/2012 to 2021/2022.

Post maintains the forecast for milled rice production at 7.1 million metric tons (MMT) of milled rice equivalent (an equivalent of 10.44 MMT of paddy rice) in MY 2022/2023. Despite technological improvements and investments, advancements in production have been costly, leading rice growers to struggle to improve inputs and investments in attempts to achieve better yields. As such, post forecasts MY 2022/2023 rice yield at 6.60 MT/ha, a little over 1 percent higher than the previous forecast.

2021/2022 Planted Area and Production Continue the Downward Trend

Post maintained its estimated rice harvest area at 1.62 million hectares for MY 2021/2022 (April 2022 – March 2023), down 3.7 percent from the previous harvest. Post increased its estimated milled production of paddy rice for MY 2021/2022 to 7.3 MMT, from its previous estimation of 10.58 MMT. This results in better yields than previously estimated, at 6.62 MT/ha at MY 2021/2022. However, these estimates confirm the downward trend in the production of rice in Brazil.

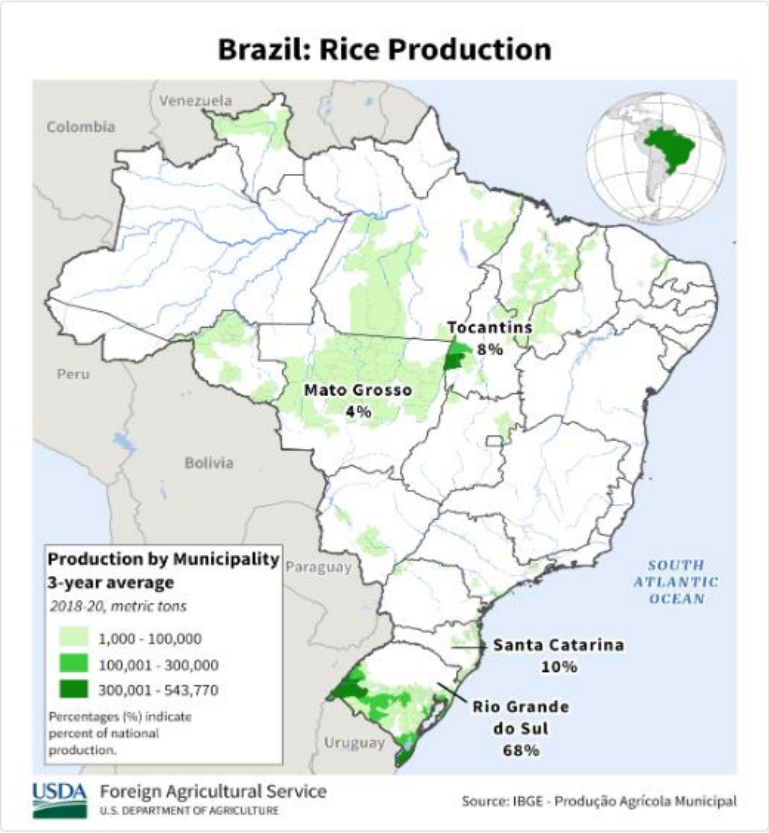
Figure 9.



Data Source: CONAB, with 2022/2023 as estimate; Graph Post Brasilia

Harvest Outlook

Figure 10.



Planting for the 2022/2023 harvest has slowly begun in the most important producing states, with some farmers waiting for optimal weather. The sowing season for rainfed rice is from October to February, while irrigated rice is traditionally planted from August to December.

- Rio Grande do Sul: The Technical Assistance and Rural Extension Company (EMATER/RS) calculates that the state, responsible for almost 60 percent of the forecasted planted area, will plant 862 thousand hectares of rice during the 2022/2023 season, a 10 percent drop in comparison to the 2021/2022 harvest. According to the company, production should also drop almost 8 percent, from 7.7 MT to 7.0 MT.

- Santa Catarina: The 2022/2023 crop cycle began sowing earlier than usual in mid-August. This state is responsible for almost 10 percent of the rice area in Brazil. According to the Agricultural Research and Rural Extension Company (EPAGRI/SC), the initial crop forecast points to an average planted area of around 147 thousand hectares, just below the extension registered in the previous cycle. Production will also see a slight drop, forecasted at 1.2 MT, with a yield of 8.4 MT/ha.

- Tocantins: Responsible for roughly 6 percent of the planted area, the state is yet to start sowing due to adverse weather. This situation, aligned with high production costs, will likely reduce the planted area for the 2022/2023 harvest by 10 percent in rainfed rice.

- Paraná: The state, which accounts for around 1 percent of the country's rice area, will likely foresee a decrease in planted area in 2022/2023 in favor of soybean crops, though the amount of rainfall provided moist and suitable soil for the beginning of planting of irrigated rice.

- Maranhão: Also planting around 6 percent of the total rice area in Brazil (of both rainfed and irrigated rice), the state is suffering climatic adversities in some regions, though it has already started planting in the main parts of the state. Maranhão is the second biggest producing state of rainfed rice, with 23 percent of the production, behind only the state of Mato Grosso, which accounts for 39 percent of the rainfed rice production in Brazil, according to CONAB.

2021/2022 Crops

- Rio Grande do Sul: According to the Rio Grande do Sul Rice Institute (IRGA), the 2021/2022 crop showed losses in irrigated rice and soybean crops in rotation due to the severe drought that occurred in the state because of La Niña. The average yield of irrigated rice was 8.3 MT/ha, and the total sown area was 927 thousand hectares. Production of rice in the state totaled 7.7 MMT, a reduction of 9.6% in relation to the previous harvest.

- Santa Catarina: According to EPAGRI/SC, the 2021/2022 harvest ended with production closing at 1.25 MT in an area of 147 thousand hectares. The average productivity of the state reached 8.45 MT/ha.

Production Costs Remain High, While Producers Try to Fight Back

The Federation of Rice Growers Associations of Rio Grande do Sul (FEDERARROZ) has been meeting with government officials to find alternatives for the structural issue of the rice sector, which has continuously brought in low profitability. Rice producers are requesting government officials to adopt measures to reduce production costs and find means to support opening new markets, citing Panama as an example. FEDERARROZ has also been pressuring the Brazilian government to liaise with the Mexican government towards a more ambitious commercial agreement signed with Brazil. Under the current terms, Brazil has a quota of 75 thousand tons per year of rice which can be exported with tariff exemption.

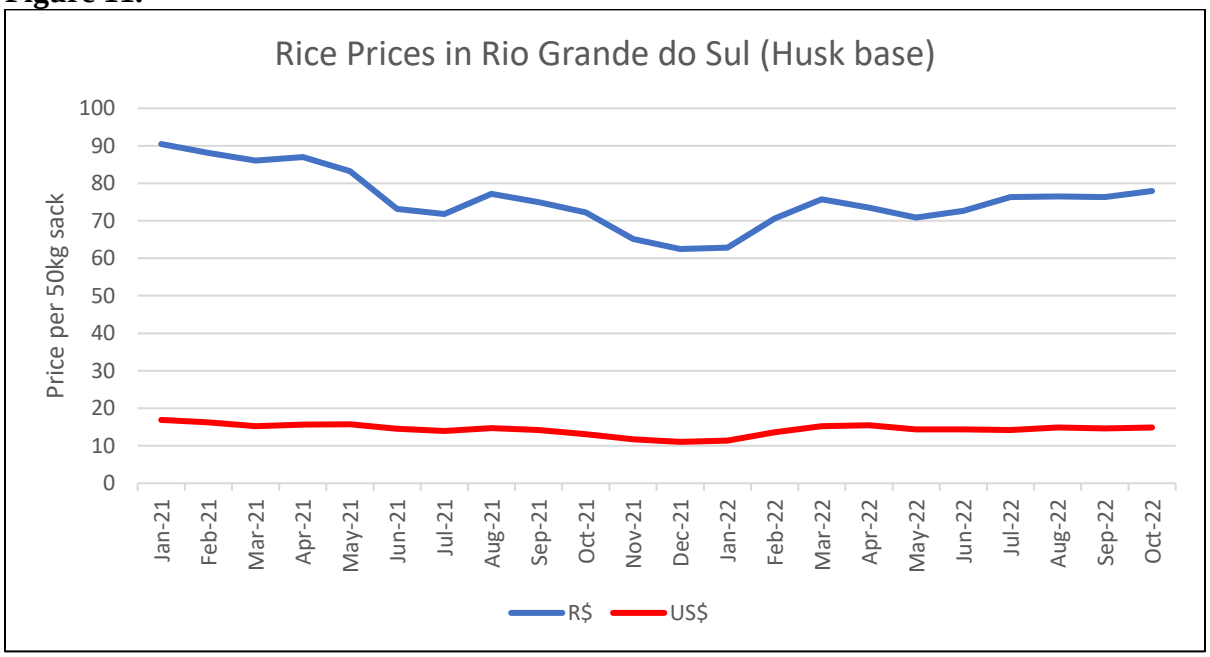
The different tax rates applied in each Brazilian state have also been a source of discontent. The rice production chain in the state of Rio Grande do Sul has been losing ground in the supply of the main rice-consuming markets in Brazil due to the lack of competitiveness and changes in tax policies in big states such as Minas Gerais, Rio de Janeiro, Bahia, and Espírito Santo, that recently adopted individual state tax exemptions for rice. The measure has seen competing markets – some of which are from neighboring countries - supply rice at a more competitive price than the one coming from the southern regions of Brazil.

In addition, the Brazilian government's measure announced at the end of May to adopt a 10 percent reduction in the import tax of various commodities, among which is rice, remains valid until December 2023. However, as stated in the previous report, FEDERARROZ claims this measure is "unnecessary"

because it brings little relief to Brazil's inflation, considering that the value of rice practiced outside Mercosur exceeds that observed today in the domestic market and other countries of the bloc, where most of the rice comes from.

Rice prices have been between R$ 70 to R$ 76 per 50kg sack since February this year, reaching their highest price in October. The average price of the sack in September 2022 was traded at R$ 76, according to the Center for Advanced Studies in Applied Economics (CEPEA). This is almost 2 percent higher than the same month last year but far from the R$ 104.4 that producers averaged for the 50kg sack of rice in September 2020 due to the depreciation of the Brazilian real over the effects of the COVID-19 pandemic.

Figure 11.



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

Rice Trade

2022/2023 Rice Trade Dependent on Internal Production

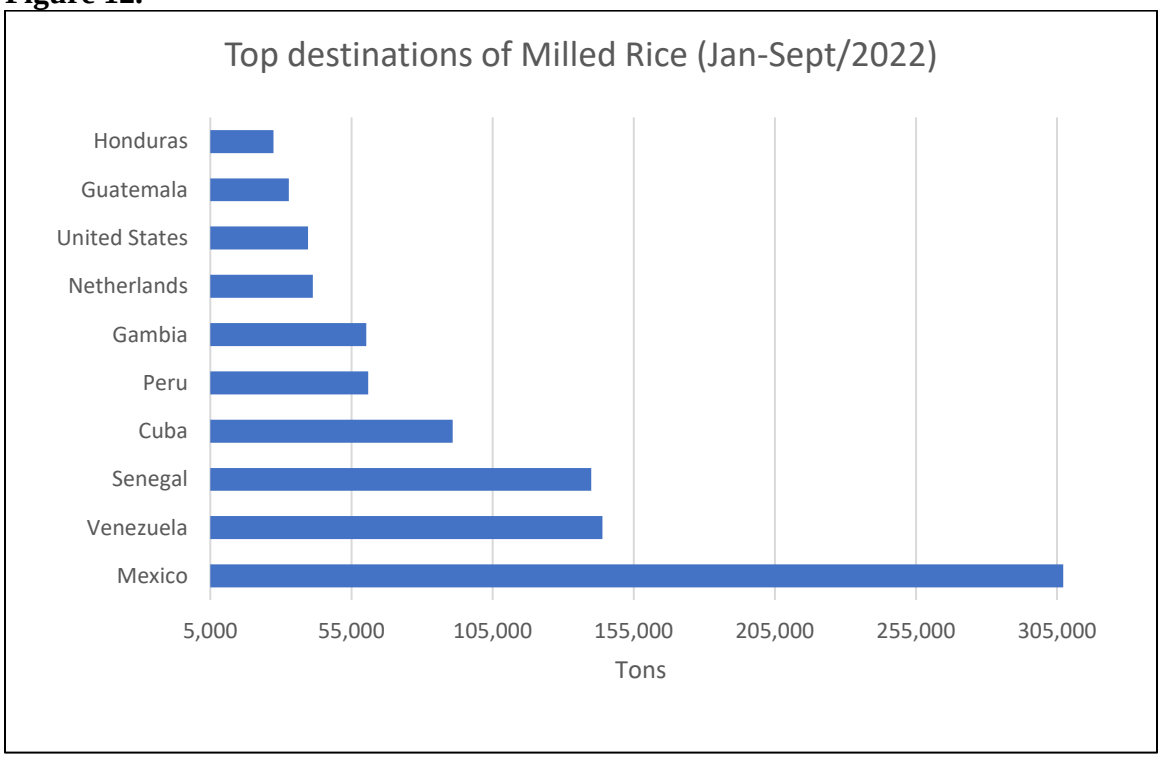
Post increases the MY 2022/2023 (April 2022 – March 2023) rice export forecast to 900,00 MT, from the previous 700,000 MT estimate, based on the growing interest for rice in international markets. Post decreases its forecast for rice import for MY 2022/2023 to 850,000 MT from its previous forecast of 900,000 MT, based on the country's production levels and consumption needs.

At a recent meeting with the World Trade Organization (WTO), the Brazilian Rice Industry Association (ABIARROZ) said that Brazil is prepared to increase its export capacity by 60 percent in the coming years, including by adding the stocks that come from neighboring Mercosur countries.

2021/2022 Exports to Remain Steady, While Imports Continue to be Highly Dependent on Mercosur Countries

For MY 2021/2022 (April 2021 – March 2022), Post increased its estimate for Brazil's rice exports to 1.1 MT, up 29 percent from its previous estimate, and increased its imports from 700,000 MT to 850,000 MT. High demand for rice in the internal market, associated with the failure to increase production, has resulted in the need to increase rice imports. The Brazilian currency and outstanding stocks continue to influence rice trade in the country, as producers traditionally export out of necessity rather than structuring their demands when they can negotiate better deals.

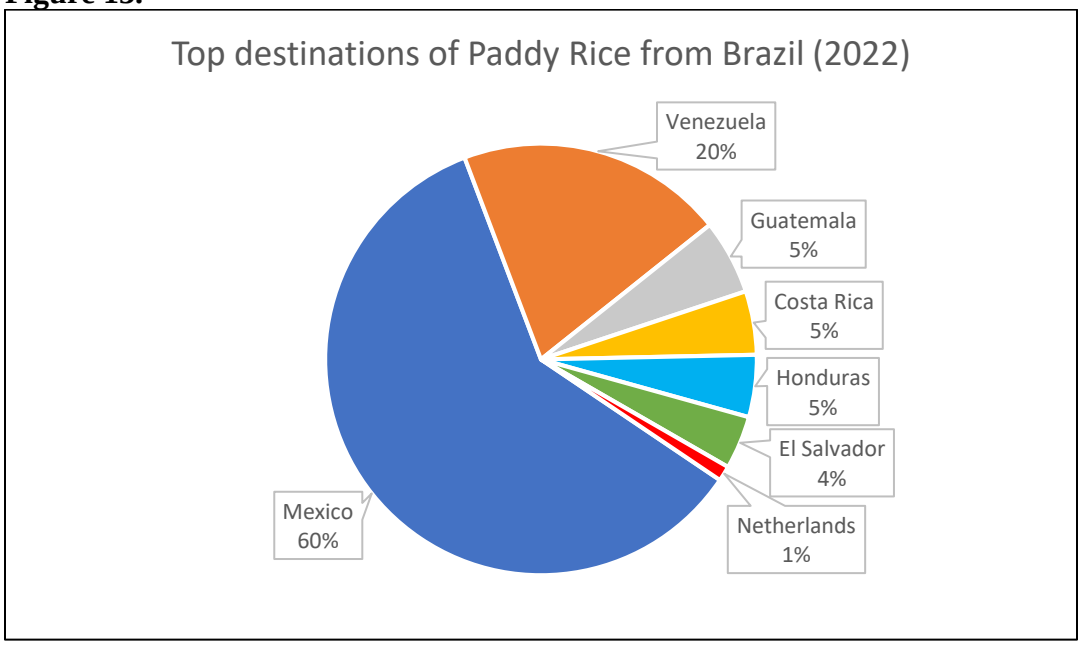
Figure 12.



Data Source: Trade Data Monitor; Graph Post Brasilia

However, Brazilian producers have recently benefited from more competitive paddy rice prices compared to the United States and the prospect of exporting broken rice amid the closing of India's market. Brazil has seen its exports of paddy rice to Mexico grow exponentially, as this destination surpassed Venezuela as the leading export country. The increase in exports to Mexico is due to the temporary tax exemption on imports of paddy rice adopted by that country as a measure to combat inflation. The tariff exemption for quotas of paddy rice from Brazil to Mexico ends in February 2023 but experts consulted by Post have indicated that the Brazilian industry is working with the government to request the exemption until the end of 2023.

Figure 13.

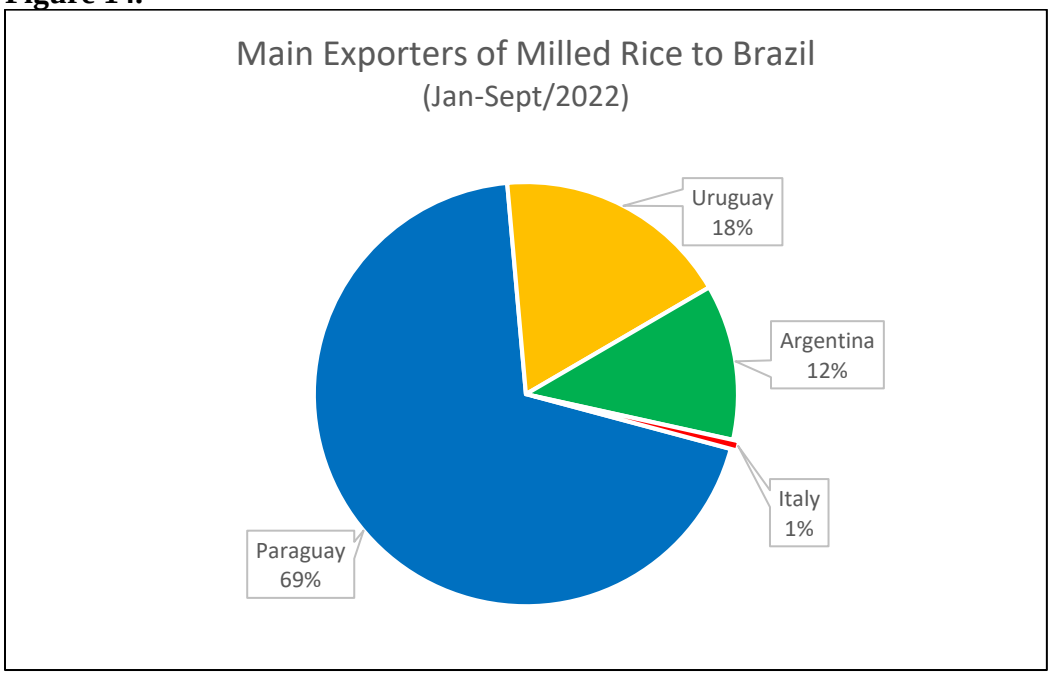


Data Source: Secretariat of Foreign Trade (SECEX); Graph Post Brasilia

Brazil's rice imports remain highly dependent on Mercosur countries. From January to September 2022, Paraguay accounted for 97 percent of all imports of paddy rice to Brazil. In 2021, Paraguay was responsible for 69 percent of paddy rice imports, followed by Guyana, with 14 percent, Uruguay 10 percent, and the United States, which imported around 6 percent of Brazil's paddy rice.

In the last five years, Brazil's Mercosur partners typically accounted for 95 percent or more of their rice import volumes due to their geographic proximity and duty-free access to the Brazilian market. One exception was the 2019/2020 trade year when the Brazilian government instituted a quota for duty-free entry for up to 400,000 MT of paddy and milled rice. The TRQ relaxed the 10 percent import tax on paddy rice and the 12 percent import tariff on milled rice, with the United States, Guyana, India, and Thailand as the primary beneficiaries. In May 2022, Brazil approved a measure that removed the 10 percent Common External Tariff (TEC) levied on imported rice until December 2023 to encourage new markets to export to Brazil. This measure was adopted by Brazil on more than six thousand goods, including meat, beans, and construction material. This aims to reduce the impacts of the pandemic and the conflict in the Black Sea on the cost of living and prices of inputs on the productive sector.

Figure 14.



Data Source: Trade Data Monitor; Graph Post Brasilia

Rice Consumption

Rice is a primary food product for Brazilian families, present in the diet of almost 95 percent of the Brazilian population. More than half consume it at least once a day, making Brazil the biggest consumer of rice outside Asia, according to CONAB. To soften the effects of the COVID-19 pandemic, the government established food stipend programs that guaranteed this grain's consumption, even though higher inflation figures have decreased the purchase of food products in the country. Post reduces its rice consumption forecast for MY 2022/2023 at 7.2 MMT of milled rice equivalent.

For MY 2021/2022, Post maintained its estimate of 7.4 MMT in rice consumption, based on the equilibrium of projected production for the season and the continuous population growth. However, as mentioned, while rice is an essential item in Brazilian's basic food basket, high prices could lead families to seek less expensive alternatives, albeit temporary ones, such as manioc (another highly consumed commodity in the country), potatoes and wheat products.

WHEAT

Production, Supply and Distribution

Table 4. Production, Supply and Distribution of Wheat

Wheat	2020/2021		2021/2022		2022/2023	
Market Year Begins	Oct 2020		Oct 2021		Oct 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	2340	2500	2740	2740	3100	3200
Beginning Stocks (1000 MT)	1991	761	1911	981	1183	443
Production (1000 MT)	6250	6800	7700	7740	9200	9400
MY Imports (1000 MT)	6395	6395	6392	6392	6200	6200
TY Imports (1000 MT)	6359	6359	6582	6582	6200	6200
TY Imp. From U.S. (1000 MT)	508	508	0	0	0	0
Total Supply (1000 MT)	14636	13956	16003	15113	16583	16043
MY Exports (1000 MT)	925	925	3070	3070	3500	3300
TY Exports (1000 MT)	911	911	3105	3105	3500	3300
Feed and Residual (1000 MT)	400	400	450	400	500	600
FSI Consumption (1000 MT)	11400	11650	11300	11200	11400	11400
Total Consumption (1000 MT)	11800	12050	11750	11600	11900	12000
Ending Stocks (1000 MT)	1911	981	1183	443	1183	743
Total Distribution (1000 MT)	14636	13956	16003	15113	16583	16043
Yield (MT/HA)	2.6709	2.72	2.8102	2.8248	2.9677	2.9375
MY = Marketing Year, begins with the month listed at the top of each column TY = Trade Year, which for Wheat begins in July. TY 2022/2023 = July 2022 – June 2023 Source: Post Brasilia						

Wheat Production

Brazil is headed for a record wheat production in season 2022/2023, considering optimal weather conditions, better use of fertilizers, and the high interest level of farmers in investing in this crop. Brazil sows most of its wheat between April and September, depending on the region, and almost 90 percent of the crops are planted in the southern states of Paraná, and Rio Grande do Sul. It should be noted that Brazil´s planting timeline falls outside USDA's market year, which runs from October to September of the following year. However, the wheat crop harvest and export occur within the market year parameters.

Prices will also depend on the decisions taken by recently elected President Luiz Inácio Lula da Silva, who will be sworn into office on January 1st, 2023. 'Lula' is yet to announce who will be his agriculture

minister or what agricultural policies he intends to adopt. Although the impacts of his victory are yet to be measured, two conclusions can already be drawn: the Brazilian real will indeed fluctuate (for better or worse) in stock exchanges, and Brazil´s agricultural sector will continue to thrive as it has become a powerhouse with its independent agenda.

2022/2023 Area, Production, and Yields to be Given a New Boost

For MY 2022/2023 (October 2022 – September 2023), Post maintains its forecast for wheat area at 3.2 million hectares, based on continued interest by Brazilian growers over the strong demand for the grain as a result of the impact of the conflict in the Black Sea and rising global prices of the commodity. As such, Post increases its forecasts in production for 2022/2023 to 9.4 MMT from its previous forecast of 8.7 MMT.

2022 has been a year of uncertainties for the wheat harvest and trade in Brazil and the world. The ongoing war initiated by Russia against Ukraine severely impacted the offer of grain worldwide while attention remained focused on international stocks and prices. At the same time, severe weather conditions have affected harvest in key producing countries, with some regions suffering from extreme droughts and others undergoing heavy rains. This scenario, aligned with an increase in harvested area, has given Brazilian growers a new boost, as production is expected to increase in the upcoming harvest. As a result, the yield forecast for MY 2022/2023 has been increased by Post to 2.9 metric tons per hectare (MT/ha), almost 7 percent higher than the previous estimate for the season.

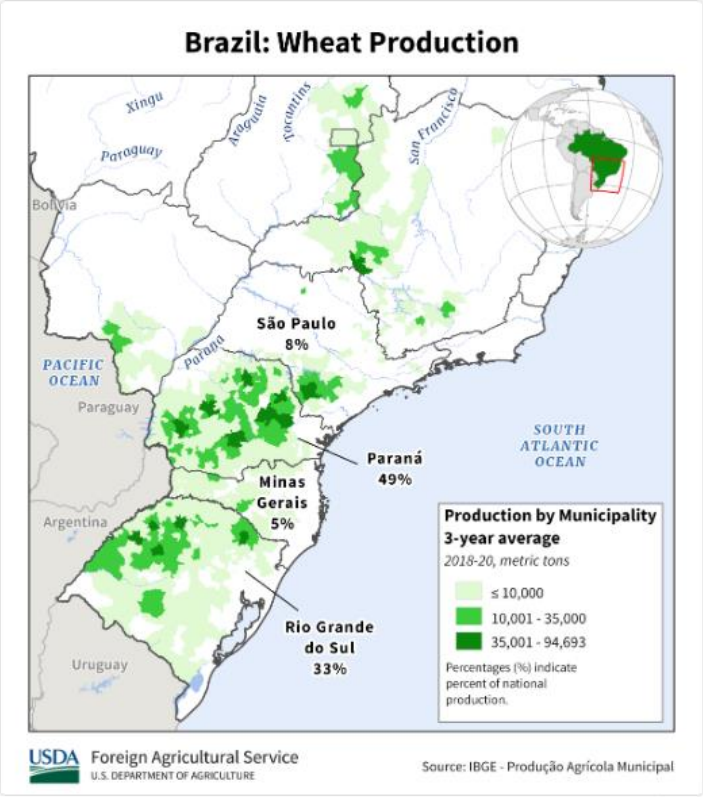
Brazil is also investing in becoming self-sufficient in wheat within the next ten years by increasing its planted area, production, and yield. Current research being conducted by the Brazilian Agricultural Research Corporation (EMBRAPA) is focusing on growing wheat in the Cerrado biome, adapting the plant to tropical climate through investments involving genetic improvement and integrated soil, water, nutrient, and plant varieties that allow weather resistance and have high grain productivity. This includes a production potential for 1 million hectares in an irrigated system and incorporation of another 2.5 million hectares in the rainfed system. This represents about 4 million tons of additional wheat production in the country.

2021/2022 Wheat Area, Production, and Yield Reflect a High Interest in the Grain

For MY 2021/2022 (October 2021 – September 2022), Post estimated its wheat planted area at 2.74 million hectares, an increase of 9.6 percent on the previous season. Post maintained its wheat production estimate at 7.74 MMT, echoing the continued interest of producers for this crop amid high return on investment, significant demand on national and international markets, and good weather conditions. As such, the yield estimate for wheat for MY 2021/2022 remains at 2.8 MT/ha.

Harvest Outlook

Figure 15.



- Rio Grande do Sul: According to data from the Association of Technical and Rural Extension Enterprises of Rio Grande do Sul (EMATER/RS), the estimated planted area in the largest producing state (responsible for around 45 percent of the total production of wheat) for the 2022/2023 crop is approximately 1.4 million hectares, with the yield at about 3.2 MT/ha. EMATER also forecasts that the state will produce 4.6 MMT of wheat in the 2022/2023 harvest, up 32 percent from the previous season. The National Supply Company (CONAB) forecasts that the Rio Grande do Sul will produce 4.2 MMT, a 22 percent increase from the last harvest. Although slightly under the projection made by EMATER/RS, this figure still puts it ahead as the largest producing state, responsible for over 45 percent of the national crop.

- Paraná: According to the Department of Rural Economy (DERAL/PR), the 2022/2023 wheat crop of the second largest wheat-producing state (around 40 percent) expects production of 3.9 MMT, one percent above the 2021 harvest and the forecast made by CONAB, of 3.77 MMT. The harvested area should reach 1.17 million hectares, approximately 3 percent below the area recorded in the previous crop. At the end of August and beginning of September, frosts and rains in some regions of the state caused damage to a small part of the crops, causing delays in reaping and impairing the quality of the grains. Nevertheless, Parana´s yield is expected to be around 3.3 MT/ha, well above last year´s when the state recorded yields close to 2.6 MT/ha.

- Santa Catarina: Far behind, accounting for around 5 percent of the total wheat production in Brazil, the state of Santa Catarina saw optimal weather conditions during the sowing and flowering stages but may suffer productivity losses due to the emergence of foliar diseases in plantations at a more advanced cycle.

- São Paulo: responsible for around 3 percent of production, the state has been suffering from high volumes of rain, causing a delay in harvesting. However, production is expected to increase around 20 percent in 2022 compared to last season, reaching 306 thousand tons.

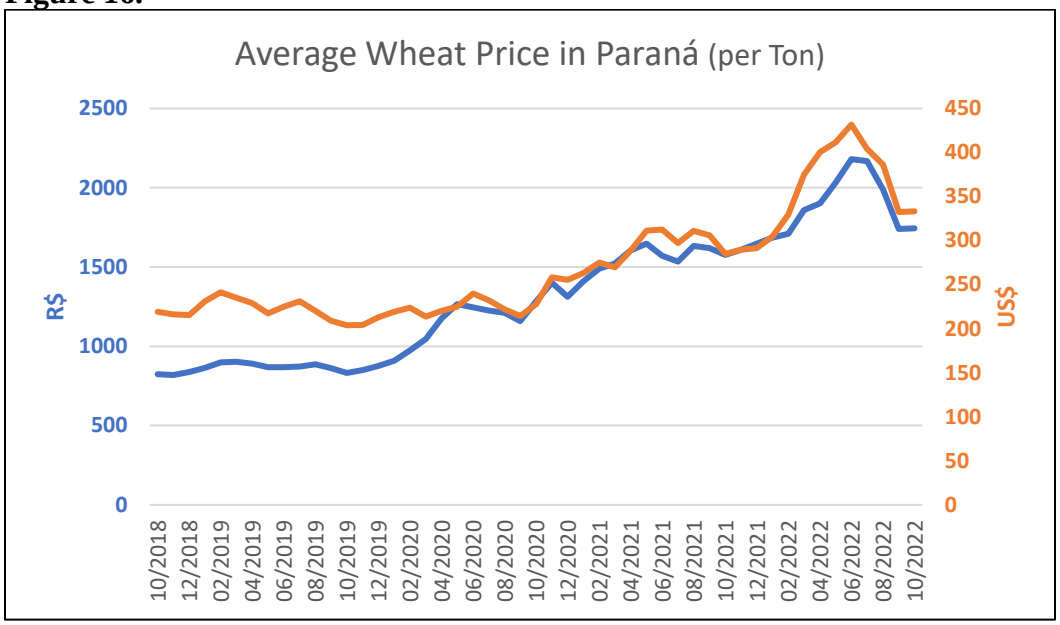
- Minas Gerais: The state, which accounts for around 2 to 3 percent of production, depending on the year, saw an increase of almost 50 percent in its planted area this year. Aligned with more investments in irrigated and rainfed wheat, the final production of the state saw an astonishing increase, jumping from 171 thousand tons to almost 300 thousand tons this 2022 season.

Wheat Prices Encourage Farmers, but Production Costs Remain an Obstacle

With the reduction in wheat supply during the current year, the regional average prices registered slight increases at the end of September. According to data from the Center for Advanced Studies in Applied Economics (CEPEA), the growth is also due to external and exchange rate appreciations. In the foreign market, prices continue to rise, influenced by expectations of low stocks in the United States and the difficulties generated by the ongoing conflict in the Black Sea. According to data from the Department of Rural Economy of Paraná (DERAL/PR), wheat flour was quoted at R$ 95.56 (a 25 kg sack) this September, an increase of 1 percent compared to August and 38 percent above the value priced in the same month last year.

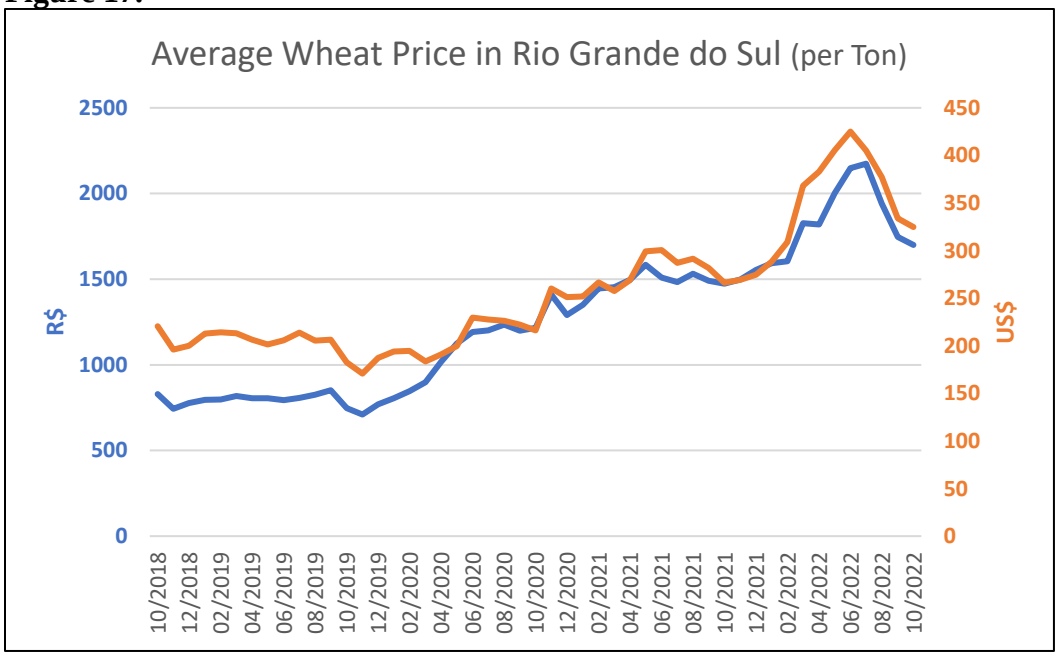
The progressive weakening of the Brazilian real throughout the years has made Brazilian commodities very affordable in the international market, primarily since trade is typically led in US dollars. As seen in the charts below, the high spike in real prices has not been proportionate to the US dollar, based on the devaluation of the Brazilian currency. If traded in dollars, Brazilian wheat remains competitive, given that in the international market, the prices remain high.

Figure 16.



Data Source: Center for Advanced Studies in Applied Economics (CEPEA); Graph Post Brasilia

Figure 17.



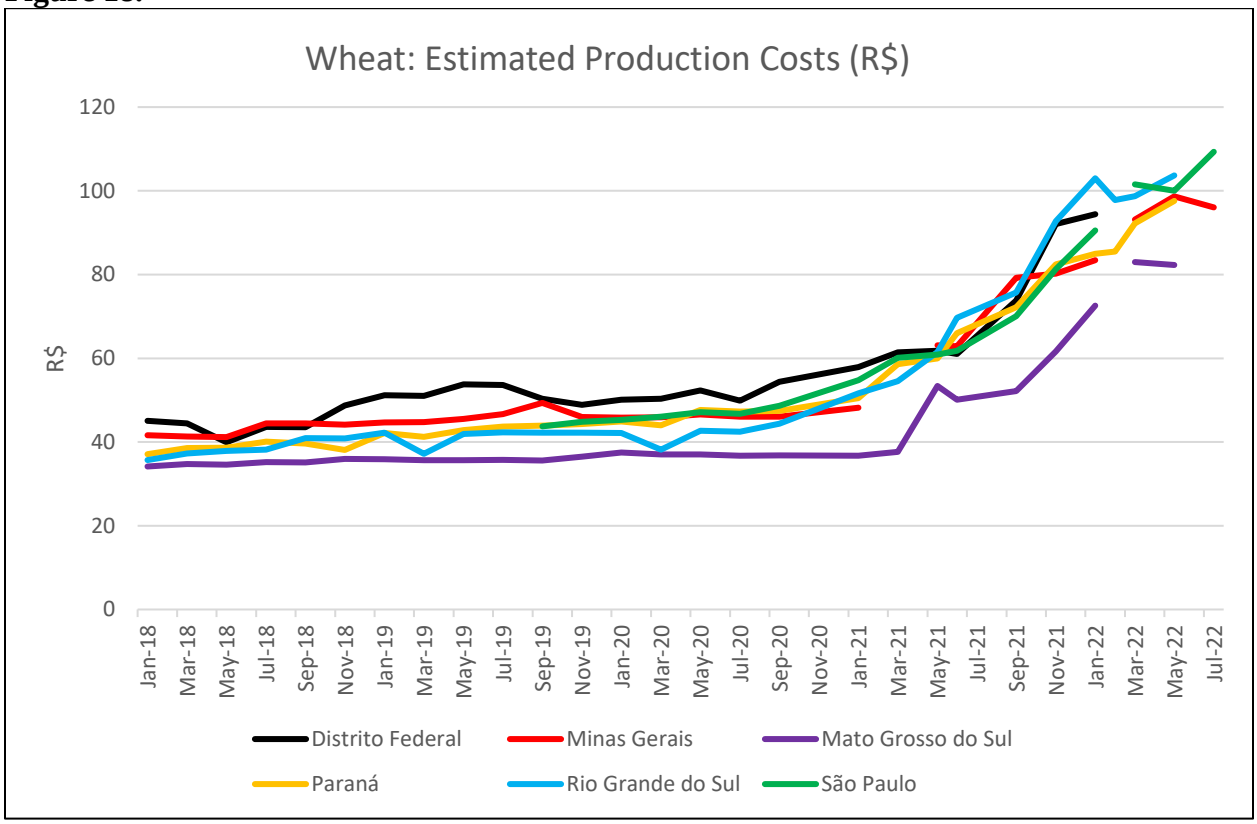
Data Source: Center for Advanced Studies in Applied Economics (CEPEA); Graph Post Brasilia

However, the uptrend in wheat prices has been overshadowed by the continued increase in the cost of production, which has seen substantial rises in the costs of fertilizers and other inputs. With Brazil only producing 15 percent of the fertilizer needed to supply its harvests, imports have suffered immensely with price variations. Despite the difficulties imposed by the Russian war against Ukraine and the ongoing embargo on Belorussia, Brazil continues to secure imports of fertilizers. According to the

National Association for the Diffusion of Fertilizers (ANDA), from January to July 2022, Brazil imported 21.3 million tons of fertilizers, 6 percent more than the amount registered in the same period last year.

Notwithstanding the more significant number of imports has highlighted another issue in Brazil: storage and logistics. With the high volume of fertilizers arriving in ports, companies have been struggling to find solutions to unload and store the product. As a result, the biggest port in the state of Paraná experienced, at the beginning of October, for the first time the phenomenon of "re-exporting" 17 thousand tons of fertilizer that arrived from Egypt and could not be unloaded. To avoid demurrage and other losses, the cargo was subsequently sent to the United States. In addition, another 14.7 thousand tons are waiting at the port to be "re-exported," having arrived from Jordan to be rerouted to Türkiye.

Figure 18.



Data Source: CONAB; Graph Post Brasilia

Wheat Trade

According to data from the Secretariat of Foreign Trade (SECEX), Brazil imported 373.4 thousand tons of wheat (SH4-1001) in September 2022, down 30 percent from the previous month, when 536.7 thousand tons entered the country. The decline in imports is credited to an increase in the price of wheat abroad, given the high costs of freight and the reflections of the Russian war on Ukraine. From January to September 2022, SECEX estimates that Brazil imported 4.8 MMT of wheat, almost 6 percent less than in the same period last year.

2022/2023 Wheat Trade Imports Continue Downward, But Exports Projected to Strengthen

For MY 2022/2023 (October 2022 – September 2023), Post lowers its forecast for wheat import to 6.2 MMT on a wheat grain equivalent basis (WGE), three percent lower than the previous estimate. Note that USDA uses WGE for trade numbers, which in addition to wheat grain, include flour and wheat product volumes adjusted on a wheat grain equivalent basis. The revision is based on the high demand for grains in the international market and an expectation that souring wheat prices may hinder purchases by Brazilian importers.

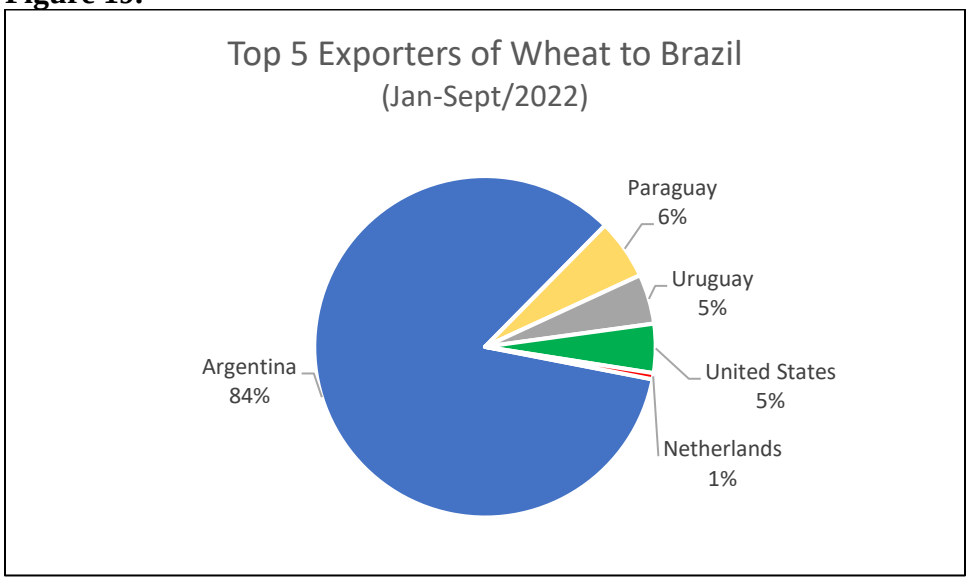
Although Brazil is forecast to produce a record wheat harvest in the 2022/2023 season, production is not enough to meet internal demand, and trade is heavily dependent on neighboring countries, in special Argentina, which has been responsible for more than 80 percent of Brazil´s imports under a tax-free arrangement.

However, with increased production and international markets with high demand for wheat, producers expect more opportunities and better market prices to export and offset high production costs. As such, Post increases its forecast for MY 2022/2023 wheat export by 6 percent from its previous estimate to 3.3 MMT on a wheat grain equivalent basis (WGE).

2021/2022 Exports Continue Strong, While Imports Decrease

Post closed its import estimate for MY 2021/2022 (October 2021 – September 2022) at 6.39 MMT on a wheat grain equivalent basis (WGE), down from its previous estimate of 6.5 MMT, based on the closing estimates of the market year. As in previous years, Argentina remained the leading wheat exporter to Brazil, accounting for over 84 percent of the total wheat that entered the country.

Figure 19.



Data Source: SECEX; Graph Post Brasilia

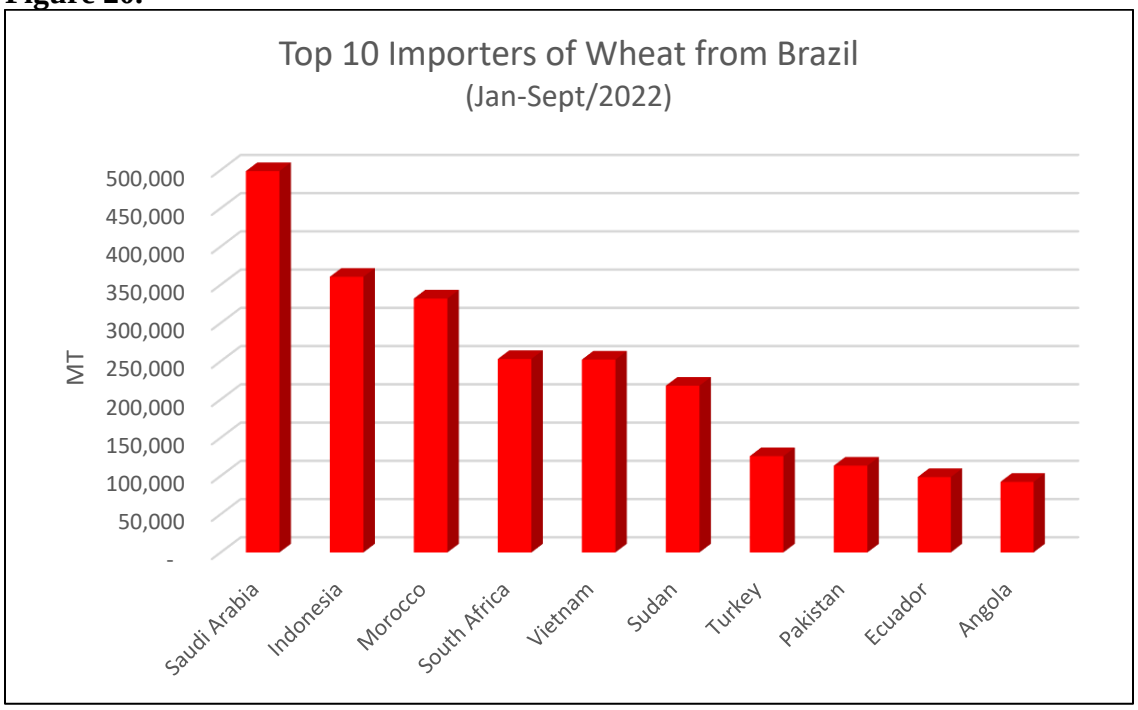
Brazil is the fourth-largest global wheat importer; traditionally, more than 90 percent of its imports are tax-free from its Mercosur neighbors, Argentina, Uruguay, and Paraguay. The country also has a duty-free tariff-rate quota (TRQ) for 750,000 MT of non-Mercosur wheat imports. Though the TRQ typically accounts for around 10 percent of Brazil's total wheat imports, it directly hit wheat exports from the United States to Brazil.

In addition, as of March 2022, the Brazilian government established a new measure that exempts import tax on wheat and various products imported from outside Mercosur. According to the decision, valid until the end of 2022, the wheat-related products included in the so-called List of Exceptions to the Common External Tariff (LETEC) were:

- Bakery and pastry products (from 16.2% to zero).
- Wheat flour (from 10.8% to zero).
- Wheat (from 9% to zero).
- Cookies and crackers (from 16.2% to zero).

Post increased its MY 2021/2022 export estimate to 3.07 on a wheat grain equivalent basis (WGE), from the previous 2.8 MMT estimate, based on the high demand for the grain in international markets and the increase of the dollar in comparison to the Brazilian real. Export destinations remained diversified, especially to the Middle East, where wheat prices have been more attractive to Brazilian millers.

Figure 20.



Data Source: SECEX; Graph Post Brasilia

Wheat Consumption

Post maintains its MY 2022/2023 wheat consumption forecast at 12 MMT, based on the notion that wheat is a staple food category in Brazil and on the growing expectation of economic improvement, albeit at a slower pace, following the damaging impacts of the COVID-19 pandemic to the Brazilian economy. Post also maintains its forecast for MY 2022/2023 in wheat food, seed, and industrial (FSI) consumption at 11.4 MMT.

Post revised downward the estimate for MY 2021/2022 wheat consumption to 11.6 MMT, from its previous estimate of 11.8 MMT. Wheat industry analysts consulted by Post have reported a change in the consumption pattern of Brazilians. Consumers are swapping wheat products which are traditionally more expensive, such as pasta dough made with eggs, for cheaper versions, such as instant noodles. Consumers are also opting for changing brands or buying smaller packaging sizes to save money. This pattern is a reflection not only of higher inflation rates that have affected the purchasing power of consumers but also a result of the increase in the costs of end products, such as industrialized pasta, cookies, bread, and cakes, which had their prices increased by the industry to compensate for higher production costs of wheat flour, fuel, and cooking gas, among others.

For MY 2021/2022, post decreased its wheat food, seed, and industrial (FSI) consumption estimate to 11.2 MMT, down 1 percent from the previous estimation, given the impacts of inflation and cost of production to producers and end consumers. As previously reported, according to the Brazilian Manufacturers Association of Biscuit, Pasta, and Industrialized Bread & Cakes (ABIMAPI), flour makes up 70 percent of the cost of pasta, 60 percent of industrialized bread, and cakes, and 30 percent of cookies, making it an essential commodity in the Brazilian food basket.

Logistical issues have a substantial effect on consumer prices and patterns throughout Brazil. While 90 percent of the production is concentrated in the southern states, wheat must be distributed around the country. However, given Brazil’s territorial extension, many states that border Mercosur countries find it easier to import wheat at zero tariffs than to purchase from Brazilian producers who end up processing the wheat in mills that are often located close to the sea. Those, in turn, facilitate trade with other countries that are willing to buy at a higher price. According to EMBRAPA, 19 percent of wheat consumption is in the South Region of Brazil; 42 percent in the Southeast Region, 5.5 percent in the Center-West states; 22 percent in the Northeast Region; and 10 percent in the North Region.

Attachments:

No Attachments