

Required Report: Required - Public Distribution

Date: January 31, 2023

Report Number: BR2023-0001

Report Name: Grain and Feed Update

Country: Brazil

Post: Brasilia

Report Category: Grain and Feed

Prepared By: Marcela Formiga

Approved By: Joseph Degreenia

Report Highlights:

Brazil is set for another record-breaking grain harvest. Post maintains its corn planted area forecast at 22.5 million hectares for MY 2022/2023 and corn production is forecast at 125.5 MMT for MY 2022/2023, up 8 percent from the estimated 116 MMT for MY 2021/2022. Post maintains its forecast for corn exports for MY 2022/2023 at 47 MMT, based on the continued interest in international markets. Post reduces the forecast for rice planted area for MY 2022/2023 to 1.53 million hectares, based on continued loss of profitability of rice crops in Brazil and high maintenance costs. For MY 2022/2023, milled rice production is forecast at 7.2 MMT of milled rice equivalent (MRE), a 1.4 percent drop from 2021/2022. Brazil is expected to reach record wheat production. Post forecasts wheat production for MY 2022/2023 at 9.6 MMT and raises its forecast for wheat export in MY 2022/2023 to 3.5 MMT on a wheat grain equivalent basis (WGE), up 6 percent from its previous estimate.

CORN

Production, Supply and Distribution

Table 1. Production, Supply and Distribution of 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	3953	3653
Production (1000 MT)	87000	87000	116000	116000	125000	125500
MY Imports (1000 MT)	2848	2848	2300	2300	1300	1300
TY Imports (1000 MT)	2281	2281	3320	3320	1300	1300
TY Imp. from U.S. (1000 MT)	1	1	1	0	0	0
Total Supply (1000 MT)	95176	95176	122453	122153	130253	130453
MY Exports (1000 MT)	21023	21023	46500	46500	47000	47000
TY Exports (1000 MT)	27492	27492	32439	32439	48500	48500
Feed and Residual (1000 MT)	59500	60300	61000	61000	64500	64500
FSI Consumption (1000 MT)	10500	10000	11000	11000	11500	11500
Total Consumption (1000 MT)	70000	70300	72000	72000	76000	76000
Ending Stocks (1000 MT)	4153	3853	3953	3653	7253	7453
Total Distribution (1000 MT)	95176	95176	122453	122153	130253	130453
Yield (MT/HA)	4.3719	4.3719	5.3211	5.3456	5.5066	5.5778

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

Brazilian agricultural production is expected to continue growing in 2023, maintaining the trend of producing another record-breaking grain harvest. The beginning of the year brings the sowing of second and third season crops and beginning in April, the planting of winter crops in Brazil. Currently, farmers are focused on the weather behaviors and how they may affect the productivity of the summer crops, whose sowing was mostly completed in December and now await maturity.

Planted Area, Production, and Yield Continue Positive Year-on-Year

Post maintains its corn planted area forecast at 22.5 million hectares (ha) for MY 2022/2023 (March 2023 – February 2024), 3.7 percent higher than the harvested area estimated for MY 2021/2022 (March 2022 – February 2023), maintained at 21.7 million ha. High demand for corn in domestic and international markets has continued to increase sowing, especially in the North and Southeast regions, where Post contacts have indicated that farmers are seeking to plant second-season corn with the expectation of having high financial returns.

Post slightly adjusts its production forecast down for MY 2022/2023 to 125.5 MMT from its previous 126 MMT based on adverse weather conditions that may affect the sowing of second-season corn crops in the south of Brazil, with regions in the south of the country experiencing droughts, while others in the southeast, up to Mato Grosso suffered with excess water. Post maintained its corn production estimate for MY 2021/2022 at 116 MMT from the previous forecast, in line with the expected record growth experienced by the country in recent years. Post forecasts yield for MY 2022/2023 of 5.57 MT/ha, a 4.3 percent increase compared to MY 2021/2022, which Post maintains an estimated yield of 5.34 MT/ha. This is based on trendline, with yield having increased more than 10 percent in the past ten years, according to Brazil's National Supply Agency (CONAB).

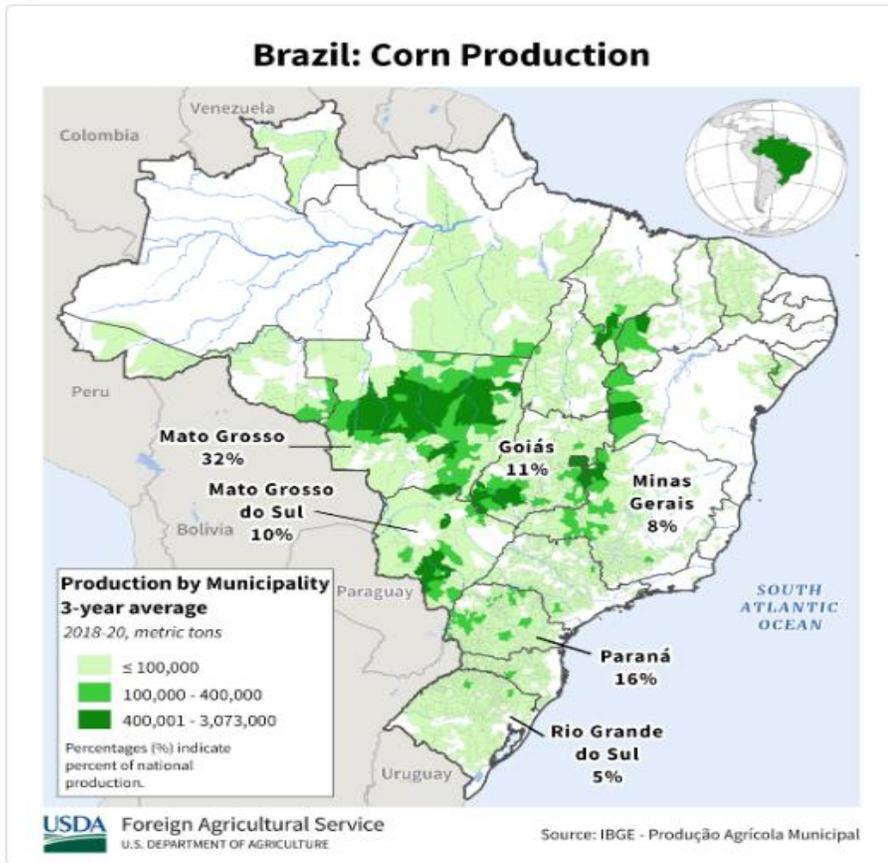
Harvest Outlook

Corn is planted in Brazil year-round. First-season corn, also referred to as “summer corn,” is traditionally cultivated in the south of Brazil, with some areas being sown in the south and northeast states. It is usually planted between August and December and harvested between January and June and currently accounts for roughly 21 percent of all corn production in the country.

Second-season corn, commonly referred to as ‘safrinha’ corn, is planted from December to March, usually following the soybean harvest, and comprises the most extensive area, accounting for most of the production (roughly 77 percent in the 2022/2023 harvest estimate).

Lastly, Brazil also established 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. This corn cycle accounts for approximately 2 percent of corn production and presents lower yield rates, averaging 3.5 MT/ha, while first-season corn is estimated to average 6.0 MT/ha. Many analysts credit the lower productivity of third-season corn to the lesser use of technology in the region as farmers traditionally destine their harvest for livestock feed.

Figure 1.



- **Minas Gerais:** the largest producer of first-season corn, with approximately 19 percent of production, has crops in good phytosanitary conditions and developing well. In some irrigated areas of the state, the harvest has already started. Only a few specific regions should present a slight reduction in productivity and production due to prolonged droughts and hail, which should reduce the final number of first-season corn for the state, estimated by CONAB at 4.9 MT.
- **Rio Grande do Sul:** expected to overtake Paraná as the second biggest producer of first-season corn in the country, accounting for 18 percent of production in the 2022/2023 harvest, Rio Grande do Sul has sown around 90 percent of its corn, with plantations suffering a widespread of consequences throughout the state: some regions are undergoing severe drought and occurrences of pests and fungi, while others are seeing periods of heavy rain, which have been compromising up to 90 percent of the harvest's yield.
- **Paraná:** forecast to produce 12 percent of first-season corn, farms are suffering the effects of low temperatures and excess rains that may compromise the development of the plants, causing delays in the plant cycle, which may affect the sowing of second-season corn. According to the Department of Rural Economy (DERAL/PR), the state's first-season corn crop is expected to reach 3.7 MMT, an increase of 25 percent in relation to last year, despite an expected decrease of 10 percent in planted area. In the previous harvest, the state also experienced a reduction in production

due to the attacks of leafhoppers (*Dalbulus maidis*). For this season's safrinha corn, DERAL expects the state to produce 15.4 MMT.

- **Santa Catarina:** the state has been trying to recover from the lack of rain during the sowing season in 2022, which will likely compromise the production of first-season corn (roughly 9.5 percent of Brazil's total).
- **Bahia:** the state, responsible for around 9 percent of production, has sown most of its first-season corn, expanding production and planted area by almost 14 percent and 12 percent, respectively, according to estimates by CONAB.
- **Piauí:** The harvest of corn in the state, which represents around 8 percent of production, is divided between family and business agriculture. Family farming areas have low productivity because they are cultivated in regions that traditionally have water restrictions, whereas business agriculture lands present high productivity because they are located in areas with more favorable climatic conditions and use high technology.
- **Mato Grosso:** The state's Institute of Agricultural Economics (IMEA) has reported a slight delay in soybean harvest in January due to prolonged rainfall in the region. If this scenario stands, it can impact the planting of second-season corn since the safrinha is typically planted immediately after the soybean harvest. If corn is not sown within the ideal window, it could severely impact its yield. However, several Post contacts have indicated that there is still sufficient time for the current summer crops to recover, leaving enough time for second-season corn to be planted within the ideal window. IMEA projects a total production of 46.6 MT of corn for the 2022/23 harvest in the state, 4 percent higher than the forecast made by CONAB.

2022/2023 Production Costs Continue to Ease

The Mato Grosso Institute of Agricultural Economics (IMEA) continues to project a slight decrease in the cost of corn production of the 2022/2023 harvest in the state, which accounts for roughly 35 percent of the total production of corn in the country. Nevertheless, prices remain extremely high in comparison to past seasons. While fertilizer costs continue taking the main share of expenses, Post contacts informed that farmers generally have already secured imports of fertilizers for the 2022/2023 harvest. In addition, corn production costs are also strongly influenced by volatile internal and external uncertainties since many inputs, such as machinery and seeds, are imported, so their prices will vary with the volatility of the domestic currency (the 'real' - R\$).

Table 2.

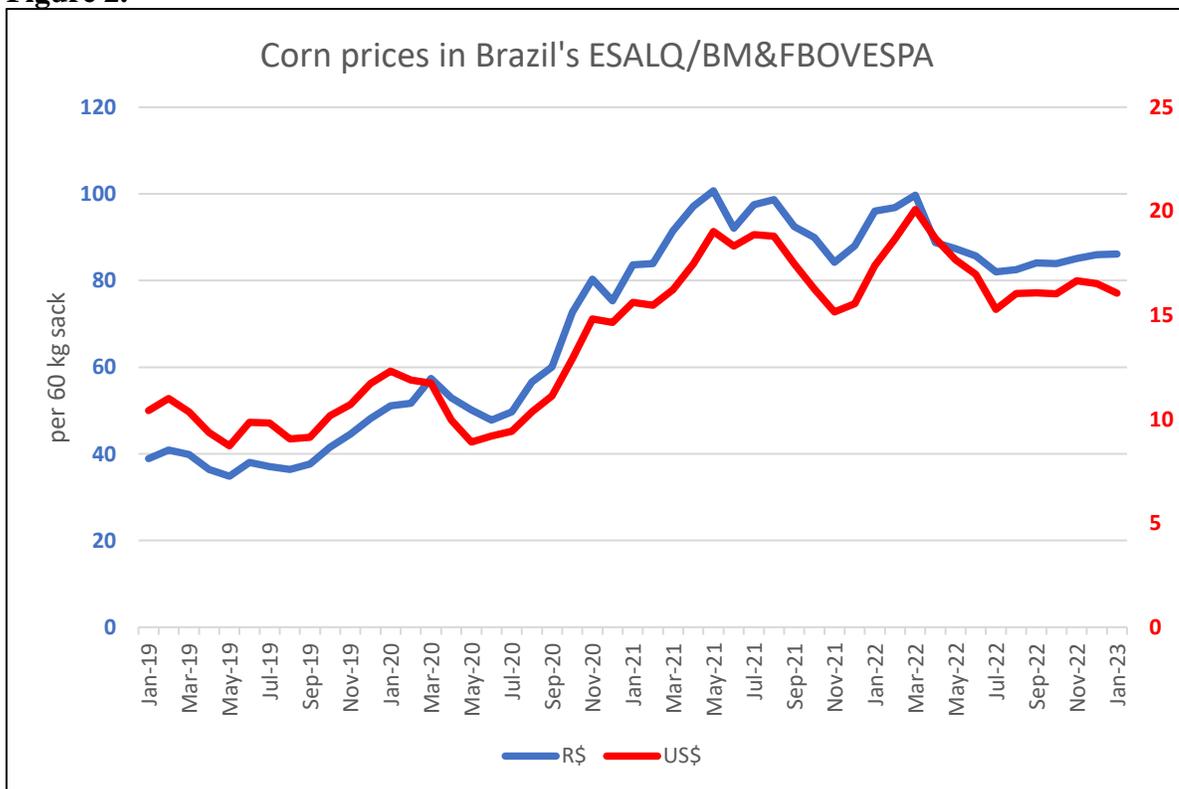
COST OF CORN PRODUCTION IN MATO GROSSO (R\$/ha)					
Harvest	2020/21	2021/22	2022/23*	2022/23*	2022/23*
Year	2020	2021	2022	2022	2022
Month			March	August	December
Seeds	445.42	554.43	668.63	687.34	642.13
Fertilizers	735.63	1,168.51	1,808.74	1,815.95	1,494.37
DEFENSIVES (Fungicide, Herbicide, Insecticide, etc.)	398.17	469.15	566.57	652.08	660.60
MECHANIZED OPERATIONS (Planting, Fertilizing, Applications with Machines, Harvesting...)	84.05	109.63	139.65	168.49	162.30
Third Party Services	2.09	1.73	2.18	2.94	3.00
Labor	72.99	76.91	79.31	82.95	83.05
Maintenance	106.13	106.47	107.4	109.84	109.97
Taxes and Fees	90.59	108.19	115.59	120.94	120.88
Financing and Insurances	160.18	214.02	275.77	282.14	253.12
POST-PRODUCTION (Classification and Processing, Storage, Production Transport)	286.26	278.6	283.69	287.95	288.55
Other Costs (Technical Assistance, Utilities Fuel, General Expenses)	69.46	84.29	94.73	98.23	95.46
Lease	132.3	210.01	217.19	203.27	195.90
DEPRECIATION (of Equipment, Utilities, and Improvements)	196.96	198.41	203.49	202.91	199.39
Family Labor	59.83	60.97	61.62	61.53	61.64
OPPORTUNITY COST (Working Capital, Improvements, etc.)	538	754.53	916.75	944.50	904.06
TOTAL	3,378.06	4,395.84	5,541.30	5,721.05	5,274.42

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

According to Brazil's Central Bank, the basic interest rate closed in 2022 at 13.75 percent and should end in 2023 at 12.5. In addition, the country's inflation was estimated at the beginning of January 2023 at 5.39 percent, above the government's expectations. For 2024, the Central Bank forecasts Brazil's inflation to hit 3.70 percent. Meanwhile, the GDP growth outlook for 2023 stood at 0.77. If these forecasts hold, 2023 will be the third year that Brazilian inflation will end above the target. The economic cycle of high inflation produces a rise in interest rates, which slows down the country's economic growth.

Corn prices have remained relatively stable in the past weeks. According to the University of Sao Paulo Center for Advanced Studies in Applied Economics (CEPEA), corn closed on January 20th at R\$ 85.33 (US\$ 16.4) per 60 kg/sack, a short variation from the price in the last workday of 2022, when the grain was quoted at R\$ 86.07 (US\$ 16.3) per 60 kg/sack. The steady prices are justified by analysts as a lack of new demands in the market. While Brazil has seen a high volume of exports in recent months, these are considered old contracts, which have little impact on trade prices. For this reason, exports should continue to guide corn prices in the country, and new shipments, lined-up from February, are expected to move the market.

Figure 2.



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

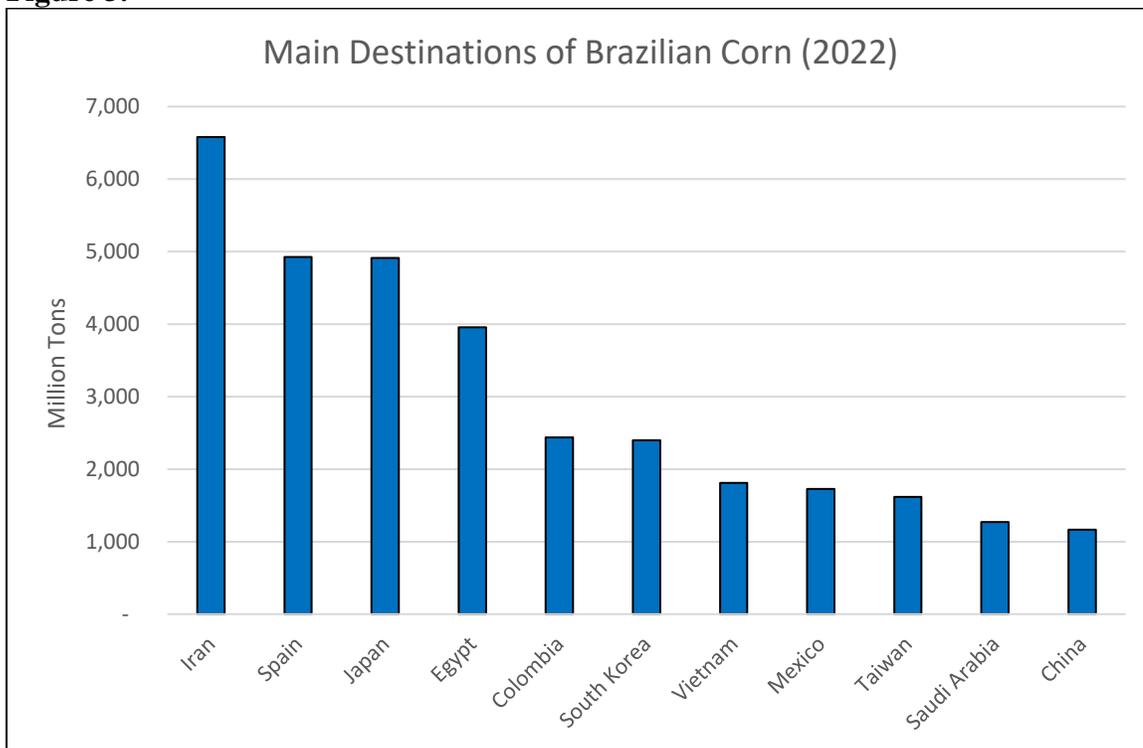
Corn Trade

Corn Exports Continue Soaring

Post maintains its forecast for corn exports for MY 2022/2023 (March 2023 – February 2024) to 47 MMT, based on the continued interest in corn in international markets. Post increased its estimate for corn exports for MY 2021/2022 from 44.5 MMT to 46.5 MMT, based on the rise in Brazilian production and the heated international demand, which has seen exports of Brazilian corn to different markets, including China. After signing an export protocol in the middle of 2022, the Asian country started importing Brazilian corn only in November, but at a sufficient rate to make it the eleventh importer. Some analysts believe that China can reach 18 million tons of corn imported from Brazil in 2023, which would severely impact trade with the United States.

According to the National Association of Grain Exporters (ANEC), Brazil exported a record 44.7 MT of corn in 2022, against 20.6 MT in 2021. Furthermore, the Brazilian National Foreign Trade Secretariat (SECEX) forecasts that the country has lined-up 5.4 million tons of exports for January 2023. This represents a 143 percent increase from the previous year.

Figure 3.



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

Corn Imports Drop, Despite Incentives

Post forecasts imports for MY 2022/2023 at 1.3 MMT, a sharp decline from the corn imports estimate for MY 2021/2022, which Post maintained at 2.3 MMT. High imports in 2022 were justified by Brazil's bulging livestock and poultry industry and increase in ethanol usage. However, with a forecast of record production in MY 2022/2023 and reports of expected losses in crucial importing countries such as Argentina, Brazil is expected to import less corn in the coming season.

Table 3.

Main Import Origin of Corn to Brazil				
Jan - Dez 2022 (in Tons)				
	January	February	March	April
Paraguay	63,994,850.00	44,734,820.00	81,594,080.00	70,600,610.00
Argentina	98,593,759.00	2,349,980.00	32,896,467.00	88,958,500.00
United States	100.00	--	--	25,760.00
South Africa	--		25,000.00	--
	May	June	July	August
Paraguay	62,714,590.00	121,164,470.00	278,133,750.00	325,527,390.00
Argentina	33,255,084.00	29,441,720.00	11,902,602.00	1,288,900.00
United States	1.00	860.00	840.00	--
South Africa	--	--	--	25,000.00
	September	October	November	December
Paraguay	397,093,720.00	346,890,160.00	302,294,050.00	239,519,110.00
Argentina	446,000.00	769,837.00	1,510,295.00	873,500.00
United States	--	308,448.00	158,087.00	36,288.00
South Africa	--	50,000.00	--	50,000.00

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

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.

Corn Consumption

Post decreases the MY 2022/2023 domestic consumption forecast to 76 MMT, from its previous estimate of 77 MMT, based on a slight readjustment of Feed and Residual pattern. However, this forecast represents a 5.6 percent increase over MY 2021/2022, which post also slightly reduces to 72 MMT from the previous 73 MMT. According to estimates of the Paraná Department of Rural Economy (DERAL/PR), there has been a sharp increase in the cost of feed for broiler chickens, composed chiefly of corn, leading growers to opt for cheaper alternatives. Broiler chicken feed represents roughly 72 percent of the cost of production, and in December 2022 cost R\$ 4.01/kg, slightly higher than the value registered the previous month (R\$ 3.97/kg).

RICE

Production, Supply and Distribution

Table 4. Production, Supply and Distribution of Rice

Rice, Milled Market Year Begins	2020/2021		2021/2022		2022/2023	
	Apr 2021		Apr 2022		Apr 2023	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	1,682	1682	1,618	1620	1,520	1530
Beginning Stocks (1000 MT)	835	835	1,170	1170	857	770
Milled Production (1000 MT)	8,001	8001	7,337	7300	7,235	7222
Rough Production (1000 MT)	11766	11766	10790	10735	10640	10621
Milling Rate (.9999) (1000 MT)	6,800	6800	6,800	6800	6,800	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)	9470	9470	9357	9320	8942	8842
MY Exports (1000 MT)	950	950	1,300	1300	1,100	1100
TY Exports (1000 MT)	782	782	1,375	1375	1,100	1100
Consumption and Residual (1000 MT)	7,350	7350	7,200	7250	7,200	7200
Ending Stocks (1000 MT)	1,170	1170	857	770	642	542
Total Distribution (1000 MT)	9470	9470	9357	9320	8942	8842
Yield (Rough) (MT/HA)	7	6.9952	6.67	6.6265	7	6.9418

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

Planted Area on a Continued Downward Trend

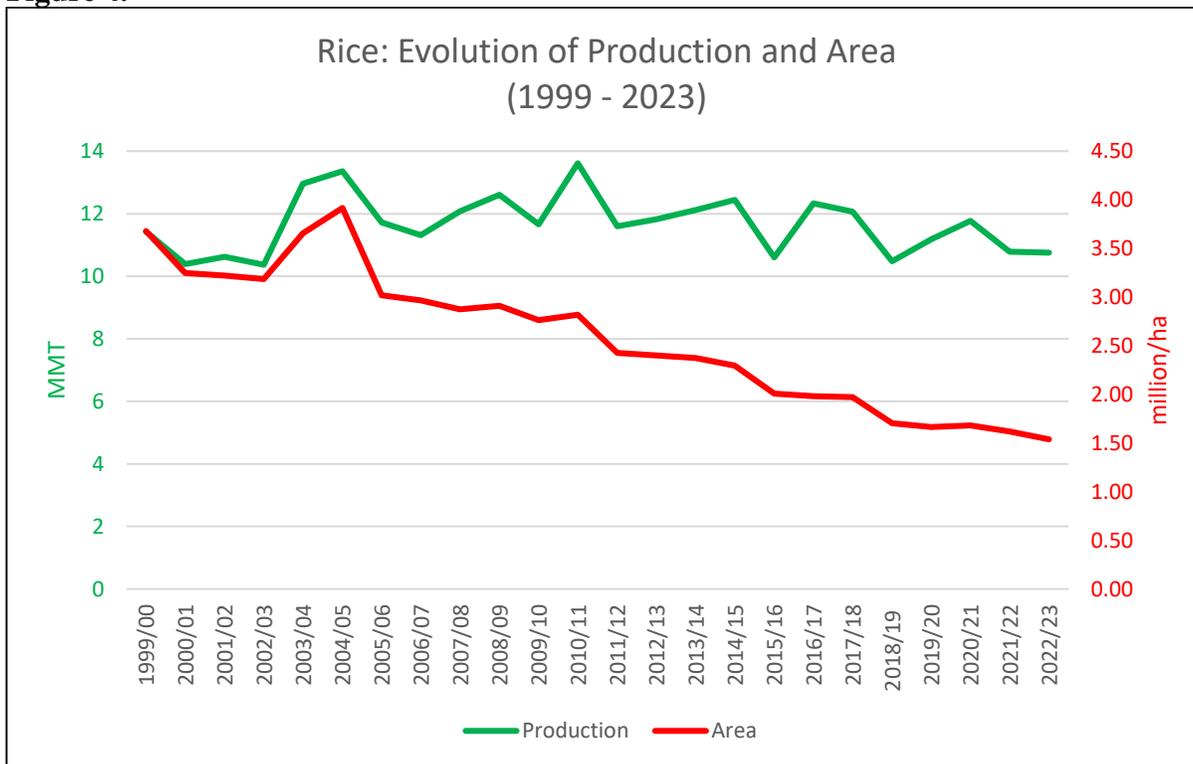
Post reduces the forecast for rice planted area for MY 2022/2023 (April 2023 – March 2024) to 1.53 million hectares (ha) from its previous forecast of 1.58 million hectares (ha). This adjustment is based on the continued loss of profitability of rice crops in Brazil and high maintenance costs, especially for irrigated fields, which make up more than 90 percent of the estimated rice grown in Brazil, according to the National Supply Company (CONAB). For MY 2021/2022 (April 2022 – March 2023), Post maintained its estimated rice planted area at 1.62 million hectares, a decrease of 3.8 percent from the previous season, confirming the downtrend.

Higher Yields are Not Enough to Sustain Production

For MY 2022/2023, Post increases the forecast for milled rice production to 7.2 million metric tons (MMT) of milled rice equivalent (MRE) (an equivalent of 10.62 MMT of paddy rice) from its previous forecast of 7.1 MMT milled rice. Despite the readjustment, this represents a 1.4 percent drop from the 2021/2022 production. Post forecasts MY 2022/2023 rice yield at 6.94 MT/ha, more than 4.8 percent higher than the previous forecast. Irrespective of the continued decrease in harvested area, rice remains a staple food product in Brazil, and a traditional grain, especially for long-lasting rice-planting families in the state of Rio Grande do Sul, where it is mainly grown.

Post maintains its estimated rough production of paddy rice for MY 2021/2022 at 10.73 MMT (equivalent to 7.3 MMT milled rice), based on continued technological, resulting on yields at 6.62 MT/ha for that marketing year.

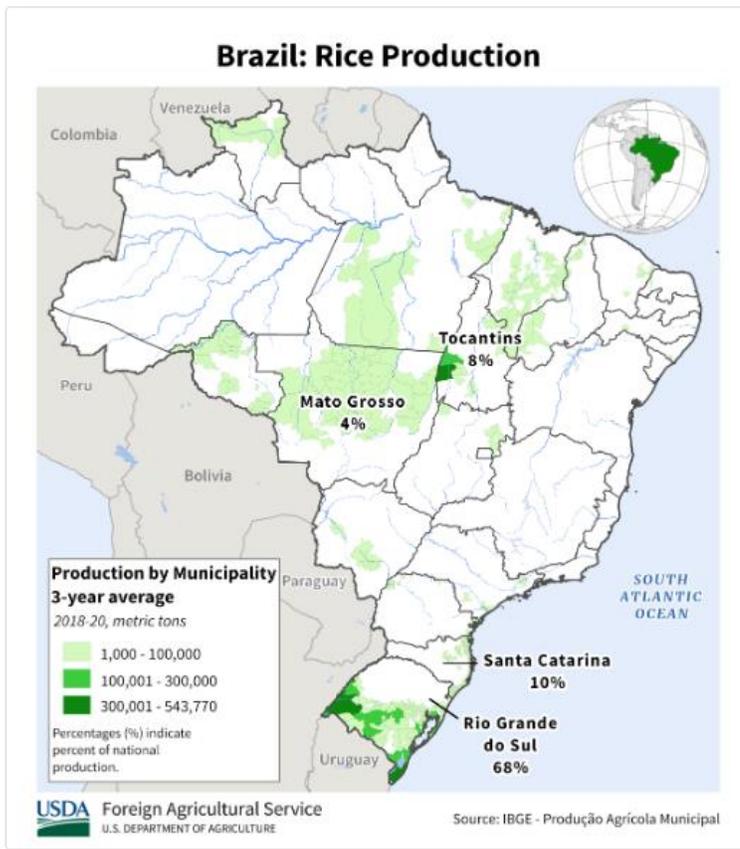
Figure 4.



Data Source: National Supply Company (CONAB), with 2022/2023 as estimate; Graph Post Brasilia

Harvest Outlook

Figure 5.



- **Rio Grande do Sul**: Brazil's largest rice-producing state, currently responsible for almost 72 percent of national production – according to estimates made by CONAB – is struggling with droughts and low reservoir levels in essential regions. Most crops are in the vegetative and reproductive development stages, but some crops no longer have water for irrigation, which may lead to significant losses. Post contacts indicate that some farmers are already abandoning crops to avoid more significant financial losses. Of the harvests not affected by lack of water, crops show good health.
- **Santa Catarina**: Second largest producer with 11 percent; the state has good crop conditions, with some producers experiencing occasional losses due to flooding.
- **Goiás**: The state had to delay sowing of irrigated rice due to excessive rainfall in the north region.
- **Maranhão**: Rainfed rice planting advanced slowly in the state, responsible for roughly 2 percent of rice production in the country. Irrigated rice has seen its planted area in the region decrease by an estimated 41.5 percent in relation to the 2021/2022 harvest, according to CONAB, mainly due to a readjustment of planting area in the region and fewer investments by producers.

- **Mato Grosso and Tocantins:** Lack of investments by producers, discouraged by the low price for the sale of grains, is also forecast to reduce the planted area in these states, with Mato Grosso being responsible for almost 2 percent of the rice production and Tocantins accounting for 4.6 percent of the estimated production.

Table 5.

Brazil: Rice Sowing Progress				
	2021	2022	2023	
State	Week of Jan 8	Week of Jan 15	Week of Jan 8	Week of Jan 15
Tocantins	87%	100%	95%	100%
Maranhão	66%	70%	28%	45%
Mato Grosso	92.5%	100%	31%	62.3%
Goiás	60%	60%	73%	73%
Santa Catarina	100%	100%	100%	100%
Rio Grande do Sul	100%	100%	100%	100%
Total	95.5%	97.3%	89.4%	93%

Data Source: CONAB; Graph Post Brasilia

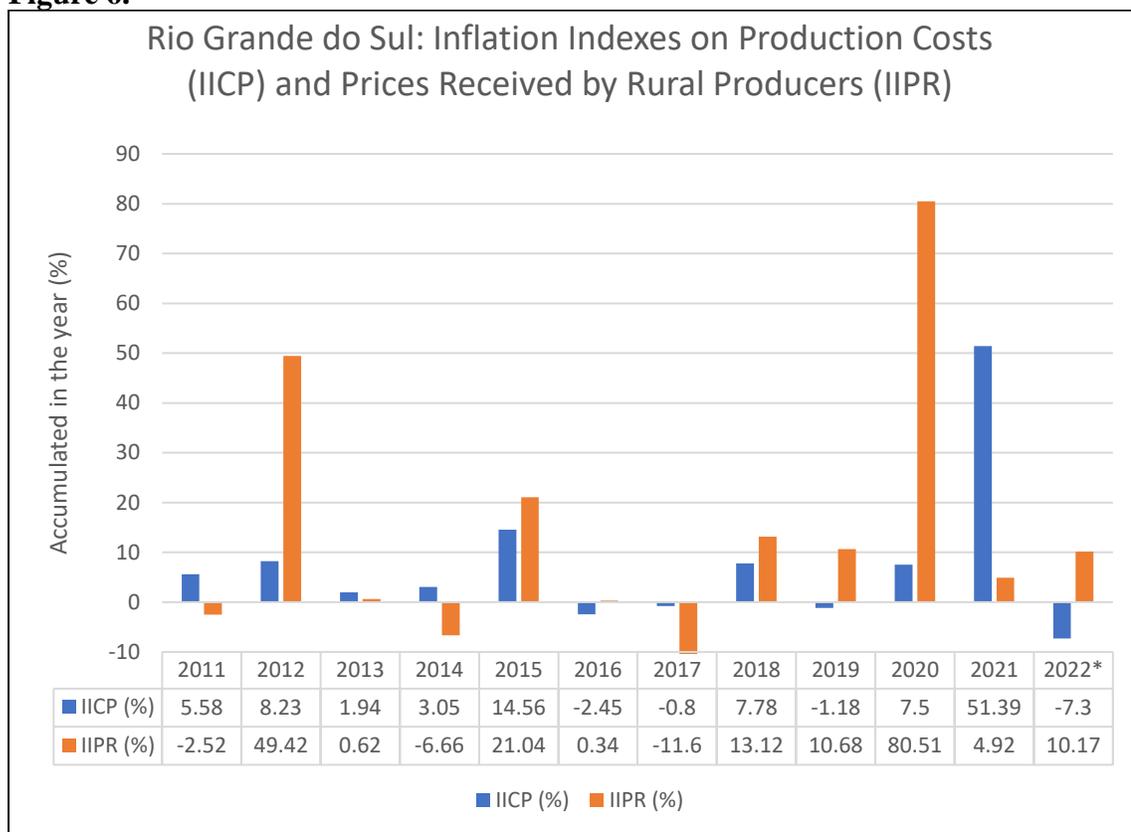
Production Costs Decreased, But Economic Measures Generate a New Concern

The Federation of Agriculture of the State of Rio Grande do Sul (FARSUL) released a study on the production cost and the prices received by the rural producers in the state, measured for the major commodities through the so-called Production Costs Inflation Index (IICP) and the Index on Inflation of Prices Received by Rural Producers (IIPR). The first determines the variation in the cost of production, and the latter defines the variations in prices received by producers.

According to the Federation, in November 2022, the IICP fell for the sixth consecutive month, with a retraction of 2.24 percent in relation to October, driven mainly by the decrease in the cost of fertilizers. As a result, the IICP showed an accumulated drop of 7.30 percent in production costs in Rio Grande do Sul in the year. Nevertheless, this decrease is offset by the sharp upsurge in production costs displayed in 2021, when the state had an increase of more than 51 percent, causing producers to continue operating under a regime of high expenses.

Concerning the Index on Inflation of Prices Received by Rural Producers (IIPR), agricultural producers in the state saw a rise of 1.53 percent in November compared to the previous month, especially in rice. In the past 12 months, the IIPR increased by 11.5 percent.

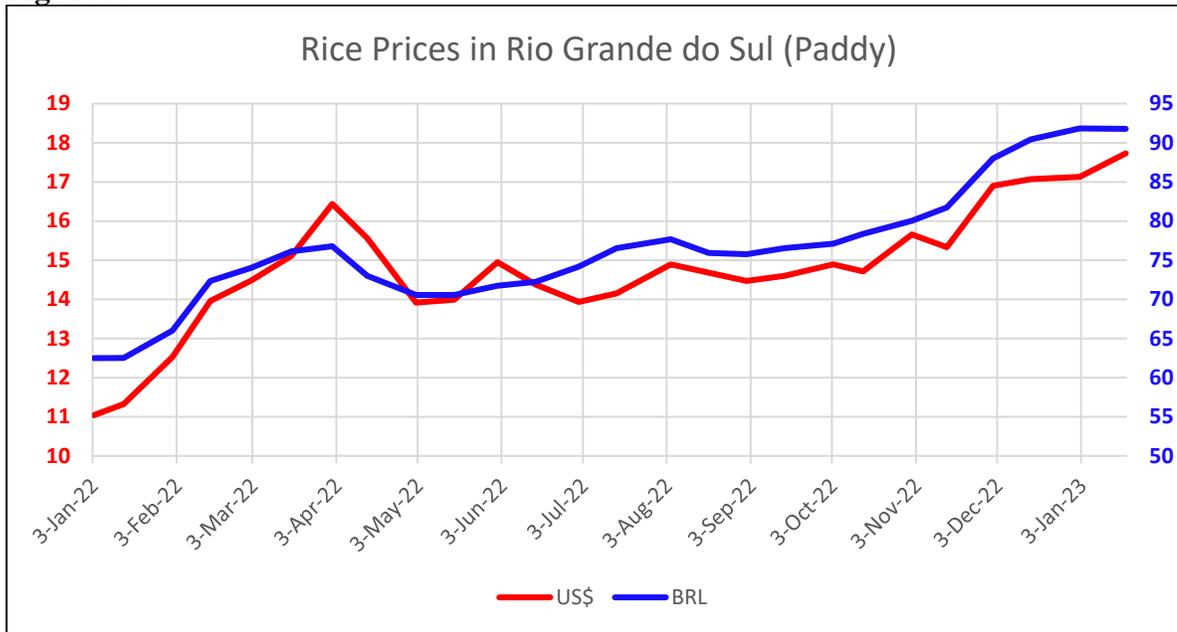
Figure 6.



Data Source: Federation of Agriculture of the State of Rio Grande do Sul (FARSUL); Graph Post Brasilia

With the price of rice stable, the year began with limited rice negotiations, in the expectation of higher values, due to the appreciation of the dollar against the Brazilian real (BRL) and attention to the need for purchases by mills. According to the University of Sao Paulo’s Center for Advanced Studies in Applied Economics (CEPEA), the price of paddy rice in Rio Grande do Sul ended 2022 at BRL 91.82/50 kg bag on December 29, against BRL 62.50/bag on the last working day of 2021. On January 20, 2023, paddy rice was priced at BRL 91.77/bag.

Figure 7.



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

Although there is no clarity yet on what agricultural policies the new government of recently sworn-in President Luiz Inácio Lula da Silva will adopt, the expectation is for a decrease, albeit discreet, in food prices, given the recent devaluation of various inputs, including fertilizers. This may favor an improvement in the purchasing power of Brazilians, which has been harshly affected by the COVID-19 pandemic.

Nevertheless, various economic initiatives by individual states may severely offset this slight relief on the cost of agricultural production, which may once again negatively impact the prices to end consumers. States like Tocantins, Goiás, Piauí, and Paraná are studying, or have recently adopted, new taxes on agricultural products or services.

In December, the state of Tocantins approved a bill that raises from 0.2 to 1.2 percent the rate of the Tax on the Circulation of Goods and Services (ICMS) on products of plant, mineral, or animal origin, aimed at taxpayers carrying out interstate operations or those intended for export, as well as in export-like operations. Furthermore, in November, parliamentarians in Goiás approved the creation of the Infrastructure Fund (FUNDEINFRA), which will tax agribusiness in the state by up to 1.65 percent.

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 them rice, remains valid until December 2023. However, as stated in the previous report, the Federation of Rice Growers Associations of Rio Grande do Sul (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 Trade

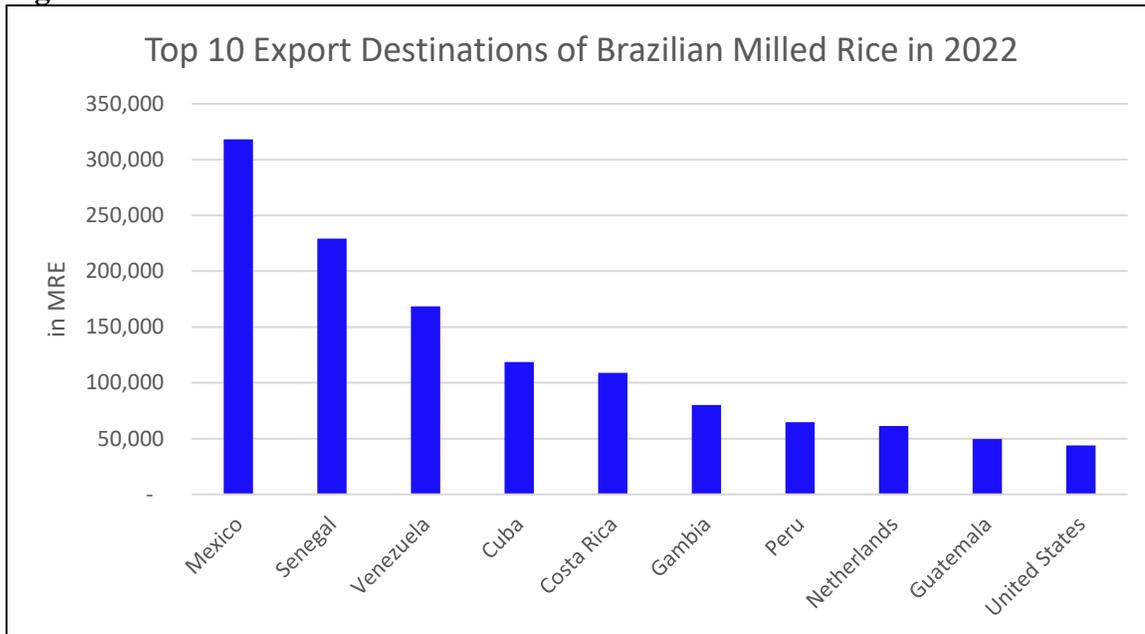
2022/2023 Rice Trade Dependent on Internal Production

Post increases the MY 2022/2023 (April 2022 – March 2023) rice export forecast to 1.1 MT, from the previous estimate of 900,000 MT, based on the continued interest for rice in international markets and the favorable prices of the grain over the exchange rate. Post maintains its forecast for rice import for MY 2022/2023 at 850,000 MT, based on the steady supply and trade with Brazil's Mercosur neighboring countries.

Brazilian rice exporters benefited from the favorable exchange rate and the tax exemption adopted by Mexico, which opened a market of almost 500 thousand tons of Brazilian rice to that country throughout 2022, taking away a large percentage traditionally exported from the United States to its neighbor.

According to the Brazilian Trade and Investment Promotion Agency (ApexBrasil), in partnership with the Brazilian Rice Industry Association (ABIARROZ), milled rice exports accounted for roughly 52 percent of the total rice exports in 2022, a decrease of 34 percent in comparison to the previous year. In this same period, paddy rice exports increased by 75 percent in volume compared to the past five years, while imports were 13 percent higher during the same period.

Figure 8.



Data Source: Trade Data Monitor, LLC; Graph Post Brasilia

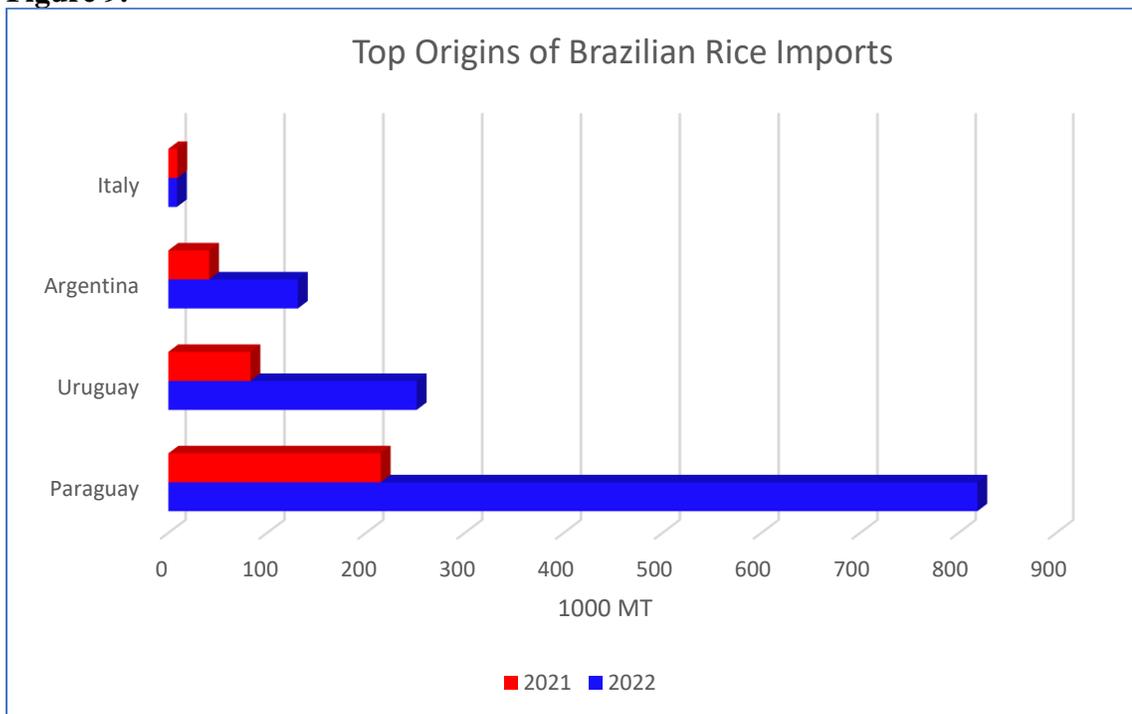
2021/2022 Exports Given a Boost, While Imports Remain Steady

For MY 2021/2022 (April 2021 – March 2022), Post increased its estimate for Brazil’s rice exports from 1.1 MT to 1.3 MT and maintained its imports at 850,000 MT. High demand for rice in the international market, aligned with the devaluation of the Brazilian currency, continued to influence sales abroad, benefitting from more competitive paddy rice prices compared to the United States. Additionally, Brazilians profited from exporting broken rice amid the closing of India’s market due to concerns of lowering stocks and increasing domestic prices, and saw a boost in exports of paddy rice to Mexico following the opening of the market at zero tariffs. However, the tariff exemption for quotas of paddy rice from Brazil to Mexico ends in February 2023. Still, experts consulted by Post have indicated that the Brazilian industry is working with the government to request the exemption until the end of 2023. However, with the new government in Brazil still being organized, it is unclear if there will be enough time to negotiate new terms by the deadline.

Brazil’s rice imports continue to depend solely on its neighboring Mercosur countries, which enjoy a tax-free export/import regime. Paraguay remains responsible for roughly 61 percent of all paddy rice imports in 2022, followed by Uruguay, with almost 24 percent of all exports to Brazil, and Argentina, with nearly 12 percent of all imports of paddy rice made by Brazil.

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.

Figure 9.



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

Rice Consumption

Rice continues to be a staple for Brazilians, present in the diet of almost 95 percent of the population. This makes Brazil the biggest consumer of rice outside Asia. However, Post contacts have indicated that consumption patterns have started to change along the years, showing that younger generations are opting for diets that adopt less carbohydrates. In addition, the costs of bags of rice for end consumers have been increasing exponentially, leading families to seek less expensive alternatives, switching rice for products such as potatoes or manioc.

As a result, rice consumption has been decreasing along the years in Brazil. For MY 2021/2022, Post reduced its estimate of rice consumption from the previous 7.4 MMT to 7.25 MMT. Meanwhile, Post maintains its rice consumption forecast for MY 2022/2023 at 7.20 MMT of milled rice equivalent.

WHEAT

Production, Supply and Distribution

Table 6. 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	3100
Beginning Stocks (1000 MT)	1991	761	1911	1231	1183	693
Production (1000 MT)	6250	6800	7700	7740	9500	9660
MY Imports (1000 MT)	6395	6395	6392	6392	5600	5600
TY Imports (1000 MT)	6359	6359	6582	6582	5600	5600
TY Imp. From U.S. (1000 MT)	508	508	0	0	0	0
Total Supply (1000 MT)	14636	13956	16003	15363	16283	15953
MY Exports (1000 MT)	925	925	3070	3070	3500	3500
TY Exports (1000 MT)	911	911	3105	3105	3500	3500
Feed and Residual (1000 MT)	400	400	450	400	400	400
FSI Consumption (1000 MT)	11400	11400	11300	11200	11300	11300
Total Consumption (1000 MT)	11800	11800	11750	11600	11700	11700
Ending Stocks (1000 MT)	1911	1231	1183	693	1083	753
Total Distribution (1000 MT)	14636	13956	16003	15363	16283	15953
Yield (MT/HA)	2.6709	2.72	2.8102	2.8248	3.0645	3.1161

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 expected to reach record wheat production in season 2022/2023, surpassing 9 MMT, which shows a drastic increase in comparison to the production in 1977, the first year of the historical series registered by the Brazilian National Supply Company (CONAB), when wheat production was of 2.06 MMT. If weather conditions remain favorable and sowing concludes within the expected parameters, Brazil's 2022/2023 harvest will reach an all-time high.

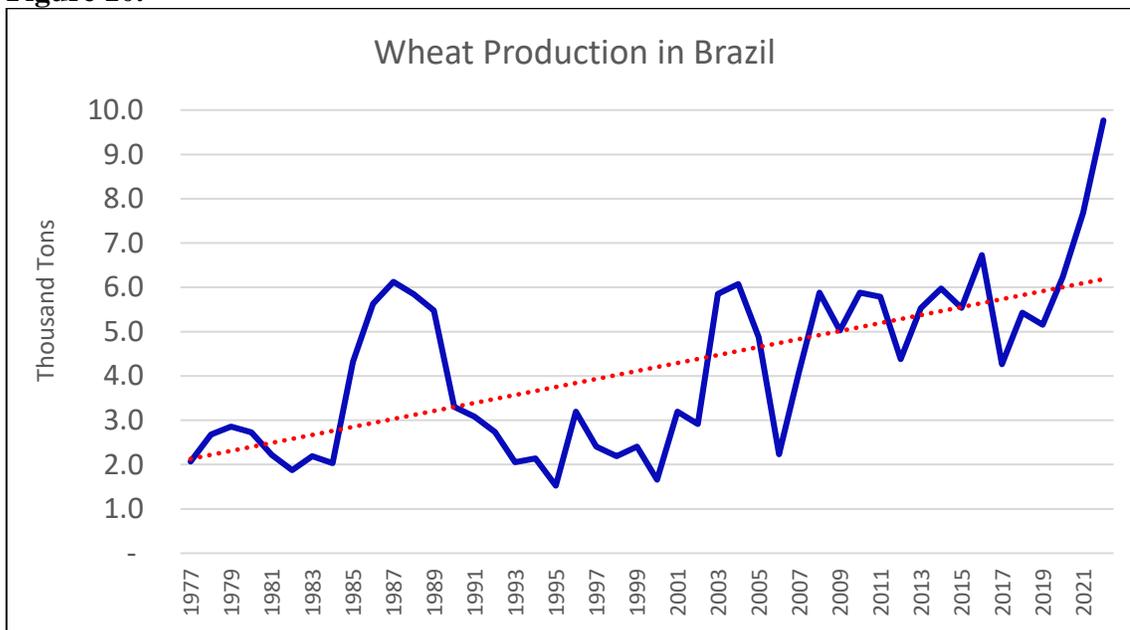
This increase in production is justified by the improvement of existing agricultural production systems, with wheat in crop rotation, better use of areas that were traditionally idle in winter, and investment in technologies, including new resistant cultivars adapted to different climates and diseases. According to projections by the Brazilian Agricultural Research Corporation (EMBRAPA), if wheat production continues to grow 10 percent yearly, Brazil could reach 20 million tons of wheat by 2030. With

domestic consumption estimated at 12 to 14 million tons, Brazil would shift from an importer to an exporter of wheat to the world.

2022/2023: Wheat Planted Area, Production and Yield Continue to Expand

For MY 2022/2023 (October 2022 – September 2023), Post forecasts wheat planted area at 3.1 million hectares, 13 percent higher than the previous season. This is based on the continued interest by Brazilian growers who have been investing in better use of land and optimal application of fertilizers, following a period of uncertainties over the possible shortage of goods. As a result, the yield forecast for MY 2022/2023 has been increased by Post to 3.11 metric tons per hectare (MT/ha), up 6 percent from the previous estimate for the season. Post also increases its forecasts in production for 2022/2023 to 9.6 MMT from its previous forecast of 9.4 MMT.

Figure 10.

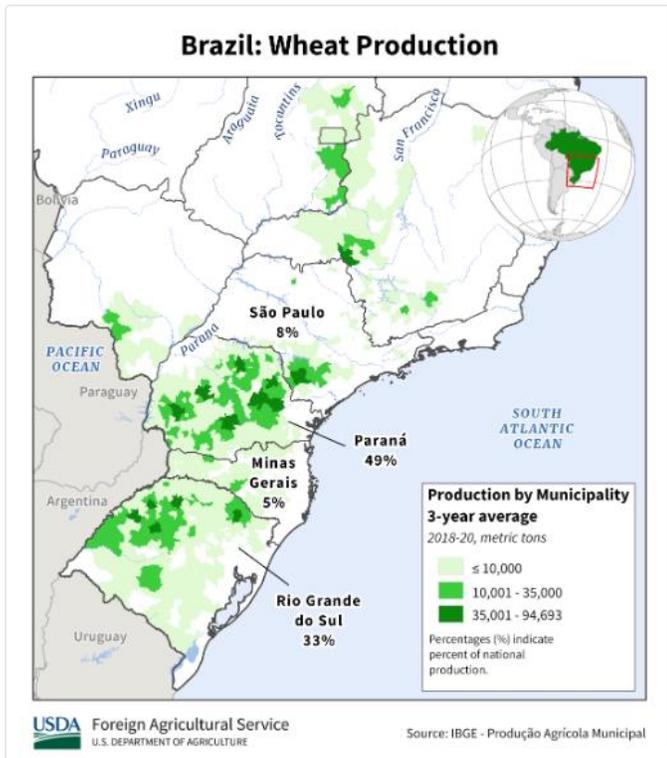


Data Source: National Supply Company (CONAB), with 2022 as estimate; Graph Post Brasilia

Harvest Outlook

Almost 90 percent of the Brazilian wheat crops are planted in the southern states of Paraná, and Rio Grande do Sul. The country sows most of its wheat between April and September, depending on the region. Still, the 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.

Figure 11.



The Association of Technical and Rural Extension Enterprises of Rio Grande do Sul (EMATER/RS) estimated that the state, responsible for 50 percent of the country's wheat production, had a planted area of 1.4 million hectares in the 2022/2023 harvest, with a production of 5.1 MMT and yield of 3.5 MT/ha. In Paraná, the second largest national producer, responsible for almost 36 percent of production, the current estimate of the Department of Rural Economy (DERAL/PR) is that approximately 1.2 million hectares have been cultivated in the state, with an estimated production of 3.45 MMT, with average productivity of 2.8 MT/ha. It should be noted that Brazil considers the 2022/23 harvest as the period that started in August 2022 and will end in July 2023.

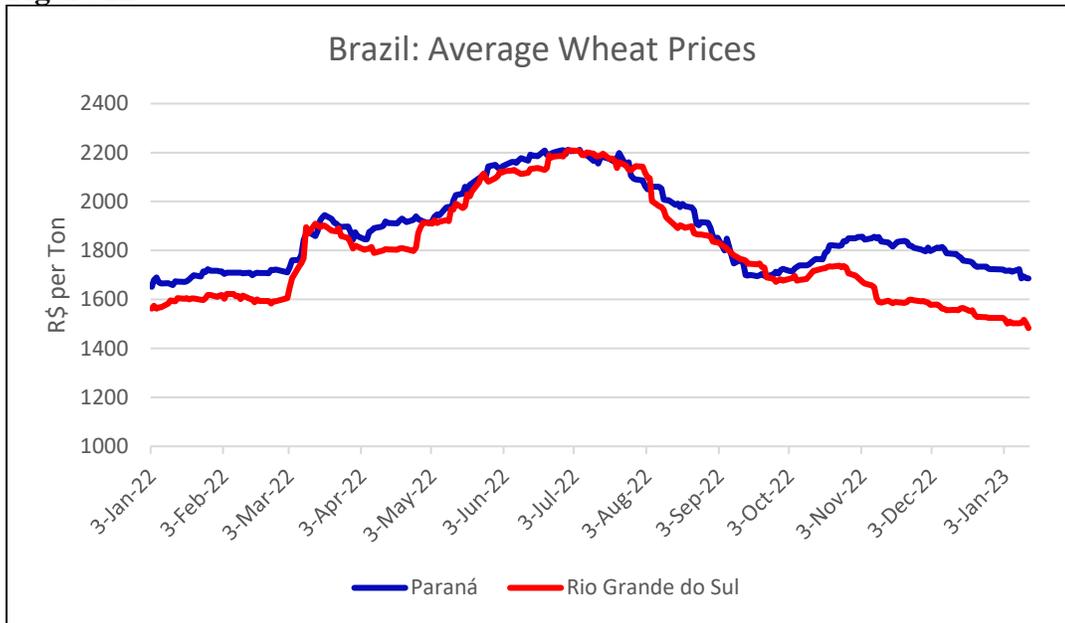
As previously mentioned, Brazil is looking into further increasing its planted area, production, and yield within the next ten years to become

self-sufficient in wheat. EMBRAPA is adapting wheat cultivars to the Cerrado region, a Savannah-like biome in the center of the country, through investments involving genetic improvement and integrated soil, water, and nutrients, resulting in plant varieties that allow weather resistance and have high grain productivity. For EMBRAPA, this may lead to a production potential of an added 1 million hectares in an irrigated system and the incorporation of another 2.5 million hectares in the rainfed system, representing about 4 million tons of additional wheat production in the country.

Wheat Prices Remain High, as Does Production Costs

By December 2022, harvest in the South Region of the country was in the final stages, with low levels of trade due to the proximity of end-of-the-year festivities. Despite the registered drop in wheat production in Paraná, the market still felt pressured by the large harvest in Rio Grande do Sul. According to the University of Sao Paulo's Center for Advanced Studies in Applied Economics (CEPEA), on the last business day of December, wheat was traded in Rio Grande do Sul at R\$ 1,525.08 (US\$ 288,84) per ton, while the grain was sold in Paraná at R\$ 1,723.31 (US\$ 326.38) per ton. Regarding the exchange rate, Brazil's Central Bank economists expect it to be at 5.28 Brazilian real to the U.S. dollar in 2023 and 5.3 real to the U.S. dollar at the end of 2024.

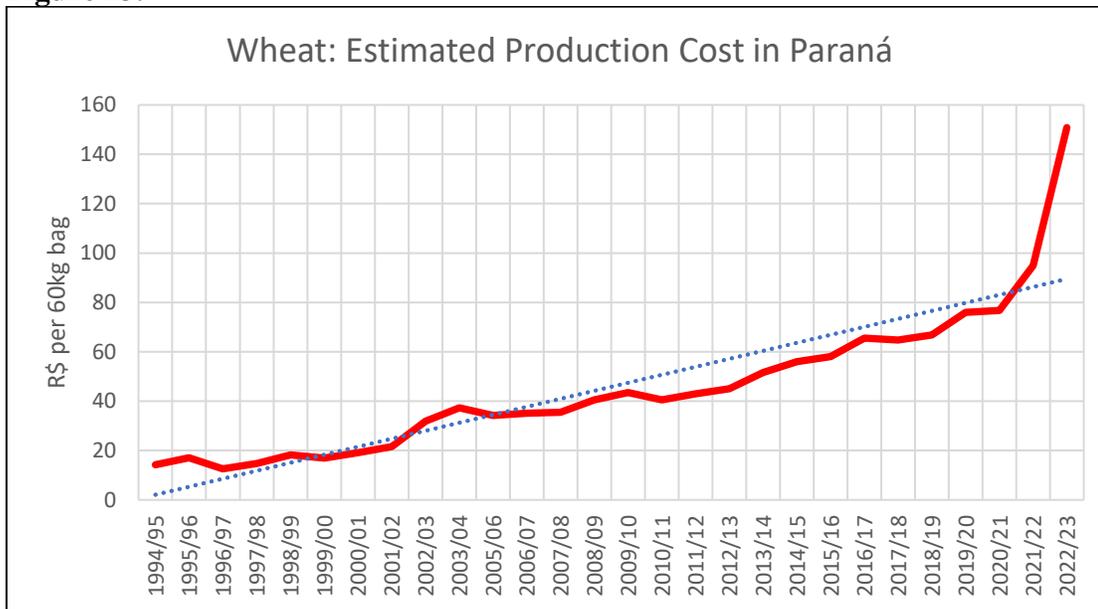
Figure 12.



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

Influenced by lower crop productions in key producing countries, such as the United States and Argentina, and with Brazil having just produced a record harvest, Post contacts have highlighted the optimism of wheat farmers and traders for next season. Brazilian stakeholders expect a good financial return, despite the continued increase in production costs, reflecting the consequences of the conflict in the Black Sea and the effects of the water crisis that has affected key producing states, such as Paraná.

Figure 13.



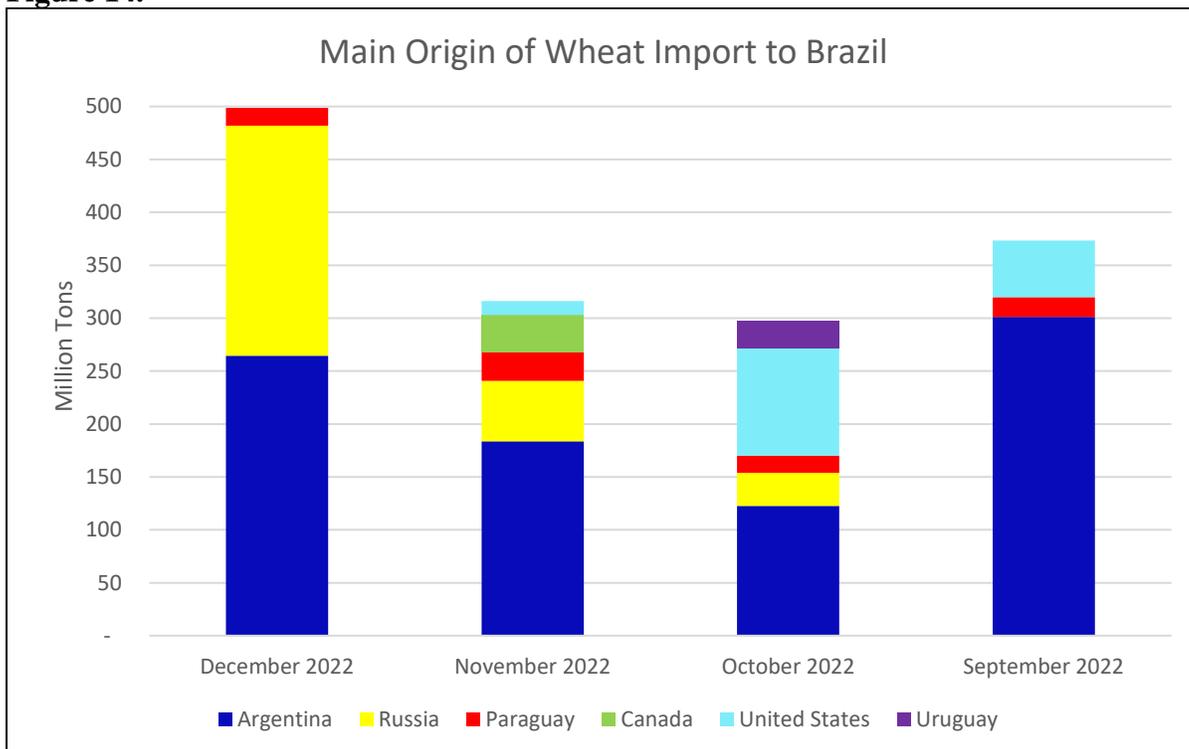
Data Source: Department of Rural Economy (DERAL/PR); Graph Post Brasilia

Wheat Trade

Argentina is the biggest supplier of wheat to Brazil, but the severe drought, followed by several episodes of frost, should reduce the Argentine wheat harvest. Post contacts estimate that Brazil has been turning to suppliers such as Russia, the United States, or the European Union due to the drop in the Argentine crop to fulfill its demand. In fact, Russia has been back on the list of top exporters to Brazil in the last couple of months. The Brazilian Association of the Wheat Industry (ABITRIGO) estimates that Russia's revenues could reach a new record of 240,000 tons by the end of the 2022/2023 crop year since Russian wheat costs around US\$ 20 less per ton for Brazil than the Argentinean grain. However, Russian wheat faces two main problems in reaching Brazil: one is the constant delays in shipments, which has allegedly been putting off some agreements between Brazilian traders, and the other is the fact that by the Mercosur rules, Brazil can import a maximum of 750,000 tons/ year of tax-free wheat from outside of Mercosur countries.

According to data from the Secretariat of Foreign Trade (SECEX), Brazil imported 498.5 thousand tons of wheat (SH4-1001) in December 2022 alone, up 57.6 percent from the previous month. This increase in imports can be credited to the imports of wheat from Russia in December (217,404,782 tons), which accounted for 43 percent, against 18 percent in the previous month.

Figure 14.



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

Brazil is the tenth-largest global wheat importer, and 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:

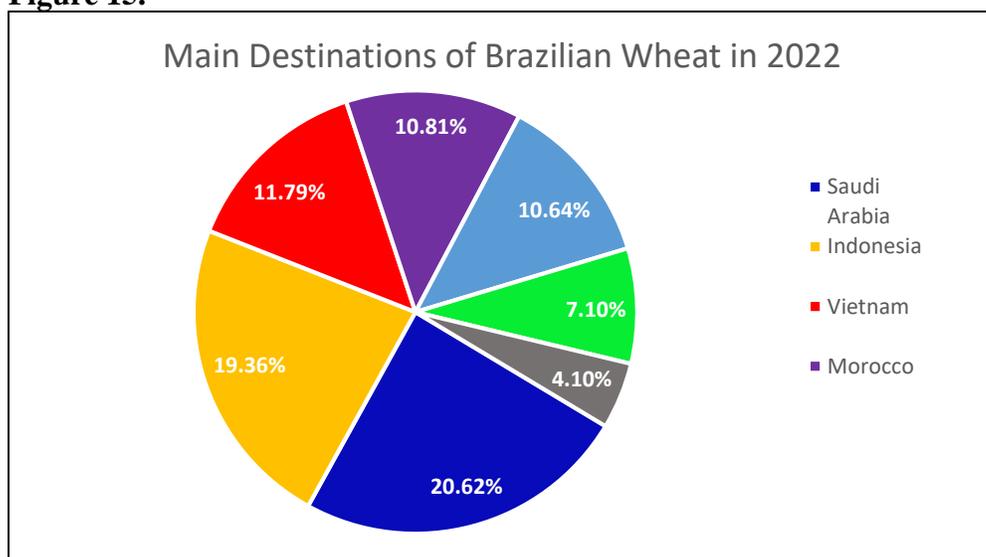
- Bakery and pastry products (from 16.2% to zero).
- Wheat flour (from 10.8% to zero).
- Wheat (from 9% to zero).
- Cookies and crackers (from 16.2% to zero).

2022/2023 Wheat Trade Imports Down Amid Smaller Production of Partner Countries, While Exports Projected to Increase

For MY 2022/2023 (October 2022 – September 2023), Post lowers its forecast for wheat import to 5.6 MMT on a wheat grain equivalent basis (WGE) from its previous estimate of 6.2 MMT. 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 decrease is based on Brazil's high reliance on Argentinean exports and competing countries, given the increased demand for grains in the international market.

With a projected record harvest, added to favorable prices in international markets, Brazil is expected to increase its exports. As such, Post raises its forecast for wheat export in MY 2022/2023 to 3.5 MMT on a wheat grain equivalent basis (WGE), up 6 percent from its previous estimate.

Figure 15.



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

Wheat Consumption

Post revised downwards its MY 2022/2023 wheat consumption forecast to 11.7 MMT, from its previous estimate of 12 MMT, based on ongoing economic struggles faced by the Brazilian population and high inflation rates as a result of the impacts of the COVID-19 pandemic. Brazilian end consumers continue to swap wheat products which are traditionally more expensive, such as pasta dough made with eggs, for cheaper versions, such as instant noodles. According to Brazil's Central Bank, the basic interest rate closed in 2022 at 13.75 percent and should end in 2023 at 12.5. In addition, the country's inflation was estimated at the beginning of January 2023 at 5.39 percent, above the government's expectations. For 2024, the Central Bank forecasts Brazil's inflation to hit 3.70 percent.

Meanwhile, the GDP growth outlook for 2023 stood at 0.77. If these forecasts hold, 2023 will be the third year that Brazilian inflation will end above the target. The economic cycle of high inflation produces a rise in interest rates, which slows down the country's economic growth.

Post also reduces its forecast for MY 2022/2023 in wheat food, seed, and industrial (FSI) consumption from 11.4 MMT to 11.3 MMT. Given the estimated record production in corn for the 2022/2023 harvest, wheat will likely be replaced as a feed component in rations, given its high prices on the domestic market.

Attachments:

No Attachments