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Report Highlights:

Brazil's sugarcane fields performed exceptionally well in the marketing year (MY) April 2023 to March 2024, producing a record of 705 million metric tons (MMT). The high production was a result of optimal weather conditions, investments in sugarcane field renovation, and yield improvement. However, the harvest in MY 2024/25 is not expected to follow the same upward trend, as unusual dry weather has disfavored sugarcane cultivation in the initial months of plantation. Post forecasts an 8.5 percent decrease in sugarcane production in MY 2024/25 at 645 MMT. Despite the lower production, Post forecasts sustained sugar and ethanol production due to remaining sugarcane that was not crushed in MY2023/24.

Sugarcane Production

Sugar Cane for Centrifugal	2022/2023 Apr 2022		2023/2024	4	2024/2025	
Market Year Begins			Apr 2023		Apr 2024	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	9650	9650	9800	9500	0	9600
Area Harvested (1000 HA)	9200	9200	9330	9300	0	9400
Production (1000 MT)	621000	621000	661360	705200	0	645000
Total Supply (1000 MT)	621000	621000	661360	705200	0	645000
Utilization for Sugar (1000 MT)	280692	280692	316130	345548	0	311100
Utilization for Alcohol (1000 MT)	340308	340308	345230	359652	0	333900
Total Utilization (1000 MT)	621000	621000	661360	705200	0	645000
(1000 HA),(1000 MT)	1	I	1	I	I	I

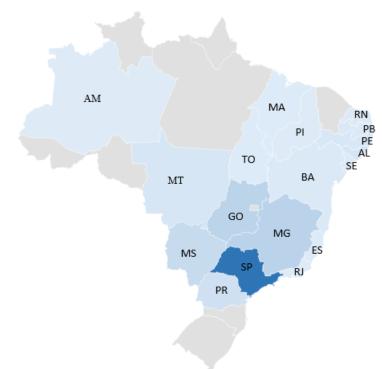
Marketing Year 2023/24 Results

Worldwide, approximately two billion tons of sugarcane are produced every year. Brazil is the top sugarcane producer, accounting for 32.5 percent of the global total. Its sugarcane fields performed extremely well in the marketing year (MY) April 2023 to March 2024 due to good volumes of rainfall, especially between January and February 2023, during the planting period. Despite concerns about the effects of El Niño, there was no excess rain or water deficits during the harvest development phase. Previous investments in new varieties of sugarcane and renovation of the fields resulted in productivity and yield increases. The dry season favored sugarcane harvest and accelerated crushing. The average age of the sugarcane fields in the Center-South region is 18 months, which is considered one of the highest yield phases.

As a result of these favorable conditions, the sugarcane harvest in the MY 2023/24 exceeded market expectations at an impressive record of 705.2 million metric tons (MMT), eight percent higher than the already optimistic initial estimate of 652 million tons. Favorable international sugar prices stimulated producers to prioritize sugar over ethanol production. In the MY 2023/24, Brazil produced 45.5 MMT of sugar, raw value, and 35.3 billion liters of ethanol (anhydrous and hydrous, sugarcane and corn). Total planted and harvested area amounted to 9.5 million hectares (ha) and 9.3 million ha, respectively. MY2023/24 industrial yield average of 140.7 kilos of total reducing sugars (TRS) per metric ton (MT).

The main area of production is the Center-South (CS) region, encompassing Mato Grosso, Mato Grosso do Sul, Goiás, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, and Paraná. In MY 2023/24, CS producers privileged sugarcane cultivation over other grains due to attractive sugar prices, leading to a slight area increase of 0.7 percent (8.4 million ha). The average yield for the CS from April 2023 to March 2024 was 83 MT/ha. For Brazil, the average sugarcane agricultural yield was 81.1 MT/ha.

Figure 1Brazilian Main Sugarcane Producing States – Percentage of Production (MY2023/24)



Sugarcane Producing States (%)

Sugarcane Froducing Sta	(,,,
São Paulo (SP)	54.37%
Minas Gerais (MG)	11.25%
Goiás (GO)	10.85%
Mato Grosso do Sul (MS)	7.26%
Paraná (PR)	5.08%
Alagoas (AL)	2.63%
Mato Grosso (MT)	2.50%
Pernambuco (PE)	1.86%
Paraíba (PB)	0.95%
Bahia (BA)	0.81%
Rio Grande do Norte (RN)	0.50%
Espírito Santo (ES)	0.40%
Sergipe (SE)	0.35%
Tocantins (TO)	0.33%
Maranhão (MA)	0.29%
Piauí (PI)	0.19%
Pará (PA)	0.18%
Rio de Janeiro (RJ)	0.15%
Amazonas (AM)	0.04%

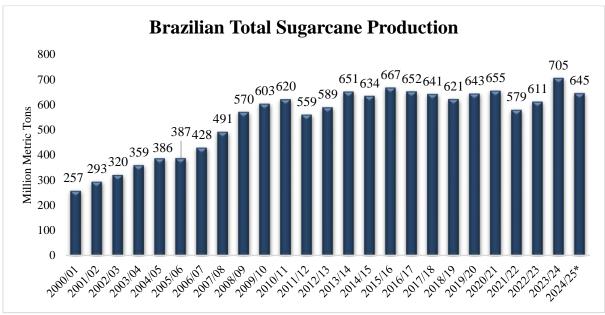
Source: Ministry of Agriculture, Livestock and Supply (MAPA); Chart Post Brasília

From April 2023 to March 2024, the CS region produced 649.3 thousand tons of sugarcane per hectare. The state of São Paulo, the largest producer in Brazil, registered 384.9 MT/ha, 59.2 percent of the total in the CS, and 54.3 percent of the total Brazilian production. For MY 2023/24, the CS region produced 42 MMT of sugar, raw value. Ethanol production in the CS region amounted to 33.1 billion liters, 14.5 percent higher than the previous 2022/23 season of 28.9 billion liters. From the total, 20,1 billion liters were hydrous ethanol, and 13 billion liters were anhydrous. In addition, corn ethanol registered a production of 5.96 billion liters, an increase of 40.9 percent compared to the previous MY 2022/23.

Sugarcane production in the North-Northeastern (NNE) region (Amazonas, Pará, Tocantins, Maranhão, Piauí, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, and Bahia) for MY 2023/24 totaled 55.9 MMT. Alagoas is the largest producer in the region, accounting for 33 percent of the total. Rainfall was within the expected average despite concerns about the effects of El Niño. Optimal weather conditions contributed to the development of sugarcane crops for MY2023/24. The average agriculture yield for the NNE was 66 MT/ha. NNE sugar production amounted to 3.5 MMT, raw value, 16.7 percent higher than the MY 2022/23 production (three MMT). Sugarcane ethanol production in the North-Northeastern states registered 2.23 billion liters, from which 1.18 billion referred to hydrous and 1.05 billion liters of anhydrous, a 0.6 percent reduction compared to MY 2022/23.

As of 2023, Brazil has 350 sugarcane plants in operation. Of these, 225 produce sugar and ethanol, 13 plants produce sugar, and 112 produce ethanol. In addition, 22 plants are dedicated to corn-ethanol production, and nine mills are adapted for both corn and sugarcane ethanol. The CS region has 287 sugar/ethanol plants, and the NNE has 63 mills operating.

Figure 2
Brazilian Sugarcane Production, MY 2000/01 to MY2024/25 (MMT)



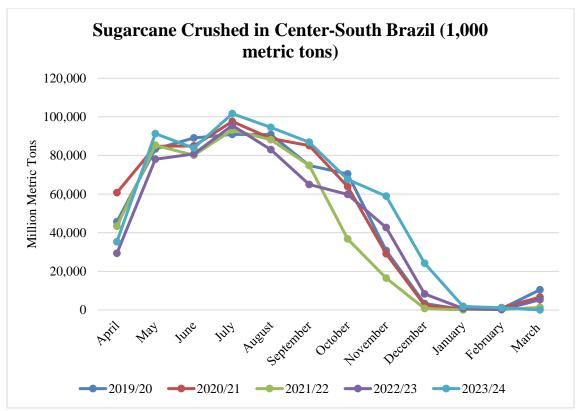
Source: National Supply Agency (CONAB); Chart Post Brasília *Forecast

Marketing Year 2024/25 Forecast

While sugarcane harvesting registered a record in MY 2023/24, the production in MY 2024/25 is not likely to follow the same trajectory. Irregular rainfall in the Center-South (CS) region from December 2023 to March 2024 will likely affect the development of the sugarcane to be harvested at the end of the crop. The offseason (November 2023 to March 2024) registered rainfall below the historical average at 690.4 millimeters (mm), 27.7 percent below normal (954.2 mm), and 36.2 percent below the amount registered between November 2022 and March 2023 (1,082.2 mm).

Post forecasts the Brazilian sugarcane crop for the MY2024/25 (April to March) at 645 MMT, a decrease of 8.5 percent compared to MY2023/24 (705.2 MMT). The CS region is expected to harvest 600 MMT of sugarcane, a reduction of 7.6 percent compared to the last crop (649.3 MT). The NNE production for MY 2024/25 is forecast at 45 MMT, a reduction of 19.5 percent compared to the MY2023/24 (55.9 MMT).

Figure 3Sugarcane Crushing in the Center-South Region (MY2023/24)



Source: Brazilian Sugarcane Industry and Bioenergy Association (UNICA); Chart Post Brasília

Total MY 2024/25 area planted with sugarcane is forecast at 9.6 million ha, only one percent higher than the 2023/24 crop (9.5 million ha). Favorable sugar prices encouraged farmers to expand land use for growing sugarcane and it is estimated that international sugar prices will remain attractive for producers. Sugarcane mills will continue privileging sugar production during the 2024/25 season given foreign demand.

Table 1 *Area Harvested to Sugarcane*

Area Harvested to Sugarcane (1,000 ha)								
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25*
Sao Paulo	4,538	4,453	4,402	4,588	4,491	4,147	4,091	4,170
CS	7,837	7,705	7,552	7,720	7,452	7,369	7,390	7,500
NNE	892	884	890	896	893	923	961	964
Brazil	8,729	8,589	8,442	8,616	8,345	8,292	8,351	8,464
Sources: MA	Sources: MAPA, CONAB, IEA; Chart Post Brasília *Forecast							

The MY 2024/25 Brazilian sugarcane agricultural yield is projected at 82 MT/ha, a 1.2 percent growth via-à-vis the previous crushing season (81 MT/ha). The average yield in the Center-South region is around 24 percent higher than that of the North-Northeast, mainly due to higher use of machinery and advanced inputs. For the MY 2024/25, the CS sugarcane agricultural yield is projected at 81 MT/ha. The MY 2024/25 industrial yield is projected at 143 kg of TRS/MT, assuming normal weather conditions prevailing throughout the crushing period.

Table 2Sugarcane Industrial Yields

Sugarcane Industrial Yields (kg TRS/metric ton)								
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25*
CS	138.06	140.23	138.61	144.62	142.88	140.78	139.44	139.10
NNE	129.52	134.52	135.86	130.97	127.23	125.02	125.42	125.10
Brazil	137.47	139.82	138.38	143.53	141.42	139.18	143.49	143.00
Sources: Datagro; Chart Post Brasília *Forecast								

A few sugarcane mills started the MY 2024/25 crushing season earlier due to the greater availability of sugarcane from the previous season and because of the uncommonly dry weather. Generally, mills execute mandatory maintenance during the off-season. In the CS, the offseason ranges from mid-December to mid-March. In the NNE, the offseason is normally between September and March. The Brazilian Sugarcane Industry and Bioenergy Association (UNICA) estimates that 40 sugarcane mills started crushing earlier in the CS. In the same period of MY2023/24, 23 plants were operating earlier.

Sugarcane Prices

Sugarcane prices received by third-party suppliers for the major producing states are based on a formula that considers prices for sugar and ethanol in both the domestic and international markets. The State of São Paulo's Sugarcane, Sugar and Ethanol Growers Council (CONSECANA) was the first to develop this formula, and it is used for the state of São Paulo, which comprises an average of 69 percent of the Center-South production.

CONSECANA reports that the average sugarcane price cumulative through February 2024 for the state of São Paulo was R\$ 1,2123 per kilogram of TRS, or approximately R\$ 168/MT of sugarcane.

Note: In this report, prices will be maintained in Brazilian Reais to avoid conversion losses. The following table shows the official exchange rate compared to the U.S. dollar.

Table 3 *Exchange Rate*

Exchange Rate ,	Exchange Rate, by month (R\$/US\$1.00 - official rate, last day of period)							
Month	2018	2019	2020	2021	2022	2023	2024	
January	3.16	3.65	4.25	5.48	5.36	5.10	4.94	
February	3.24	3.74	4.5	5.53	5.14	5.21	4.98	
March	3.32	3.9	5.2	5.7	4.74	5.08	4.99	
April	3.48	3.94	5.43	5.4	4.92	5.00	5.06*	
May	3.74	3.94	5.43	5.23	4.73	5.09		
June	3.86	3.83	5.48	5	5.24	4.82		
July	3.75	3.76	5.2	5.12	5.19	4.74		
August	4.14	4.14	5.47	5.14	5.18	4.92		
September	4	4.16	5.64	5.44	5.41	5.00		
October	3.72	4	5.77	5.64	5.26	5.05		
November	3.86	4.22	5.33	5.62	5.29	4.93		
December	3.87	4.03	5.2	5.58	5.78	4.84		

Source: Brazilian Central Bank (BACEN) *As of April 10, 2024.

Research and Development in Sugarcane Production

High costs for renewing plantations and difficulties in adopting new sugarcane varieties present challenges for the sugar and ethanol sector. Four major companies promote sugarcane varieties improvement in Brazil: Sugarcane Technology Center (CTC), Nuseed, Agronomic Institute of Campinas (IAC), and the Interuniversity Network for the Development of the Sugar-energy Sector (Ridesa). Other companies such as Corteva and Syngenta also develop sugarcane improvements, but on a smaller scale.

Nuseed is the seeds division of the Australian group Nufarm, which has been working with sugarcane improvement in Brazil since 2022. In 2023, the company announced US\$15 million in investments to develop a special variety, called "energy-cane" for areas with poorly fertile soils and under water stress. Differently from the conventional sugarcane cultivar, energy-cane has more fibers and produces more ethanol and bagasse, but less sugar. Currently, Nuseed works with the varieties Vertix 3, cultivated in 8,000 hectares by 24 plants, and Vertix 12, cultivated in 11,000 hectares planted by 48 plants. Both varieties are mainly grown in São José do Preto, where soils are poorer and with water problems. The goal is to reach 420,000 hectares by 2033 and launch two new varieties by 2026.

The Sugarcane Technology Center (CTC) is the largest sugarcane improvement private company in Brazil. The main shareholders are Copersucar, Raízen, and Brazil's National Economic and Social Development Bank (BNDES). About 32 percent of sugarcane plantations in Brazil use CTC varieties.

The company invests in traditional improvement (breeding) by crossing the best varieties, and is also advancing with the use of biotechnology, to protect sugarcane cultivars from diseases and plagues.

The company is also working to develop a synthetic sugarcane seed to replace the current planting method of using sugarcane cuttings, which is considered inefficient since approximately 15 tons of sugarcane cuttings are annually used for replanting, instead of being crushed. The synthetic seeds would improve productivity by allowing faster change of varieties. One of the objectives of CTC is doubling sugarcane yields from the current average of 75 MT/ha to 150 MT/ha by 2040. The company also has the largest germplasm bank in the world, with over 5,000 different varieties of sugarcane, located in Bahia.

The Agronomic Institute of Campinas (IAC) is part of the Agriculture and Supply Secretariat of the State of São Paulo. Since 2016, IAC has conducted the Varietal Census to analyze the pace of renovation and the average age of sugarcane crops in the Center-South region. According to the IAC, based on information from the past 30 crops, approximately 17 percent of the sugarcane plantations have been renovated, and new varieties are replacing older cultivars.

The older variety in CS is RB867515 with 37 years of cultivation but it has been replaced by newer specimens since it is not adapted for mechanized harvesting and has low tillering. According to the IAC, the variety RB867515 occupied 21 percent of the CS sugarcane plantation area in MY2019/20. For the MY 2022/23, this variety's presence decreased to 13 percent. In total, 228 sugarcane producing units were censused, totaling 6.3 million hectares between May and September 2023. The chart below enumerates the main cultivars in the CS region and in São Paulo, according to the IAC.

Table 4 *Brazilian Genetically Modified Sugarcane Cultivars*

Main Brazilian	Sugarcane Cultivars – M	1Y2023/24	
Position	Cultivar Variety	Percentage of the total area planted in CS (955,041 ha)	Percentage of the total area planted in São Paulo (565,617 ha)
1 st	RB966928	13	14
2 nd	RB867515	13	9
3 rd	CTC4	14	14
4 th	CTC9001	6	6
5 th	RB975242	5	6
6 th	CV7870	3	4
7 th	RB975201	3	4
8 th	RB855156	3	3
9 th	RB985476	2	3
10 th	CTC9003	*	4
11 th	RB975033	*	*
12 th	IACSP015503	*	*
13 th	CTC9006	*	*
14 th	CTC2994	*	*
15 th	RB005014	*	*

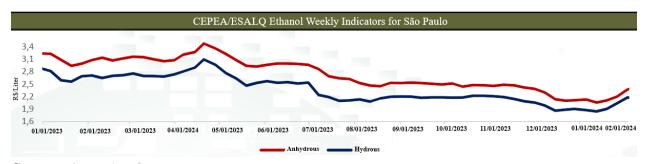
Source: IAC; Chart Post Brasilia * Irrelevant participation on the planted area

Ethanol Production

Producers in CS Brazil faced a challenging 2023/24 market for ethanol sales. Despite the plant's higher sugar mix, the ethanol market faced oversupply, not only due to the greater volume of cane in the region, but especially due to the consumer's slowness in switching to fueling their vehicles with hydrous ethanol given more competitive prices at the pump. As a result, prices reacted slowly throughout the season after falling to their lowest level since the pandemic.

Average prices for hydrous and anhydrous ethanol in the 2023/24 harvest fell compared to previous seasons, in real terms (deflated by the general inflation for March 2024). From April 2023 to March 2024, calculations carried out by the Center for Advanced Studies in Applied Economics (Cepea/Esalq) show that the Cepea/Esalq hydrous index at an average R\$2.2397/liter, down 17.5 percent compared to the previous season (2022/23) and 30 percent in comparison with 2021/22. For anhydrous (spot and contracts), the average was at R\$2.5630/liter, down 17.2 percent and almost 30 percent in the same comparisons.

Figure 4
Cepea/Esalq Ethanol Weekly Indicators for São Paulo – Jan 2023 to Feb 2024



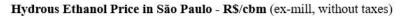
Source: Cepea/Esalq

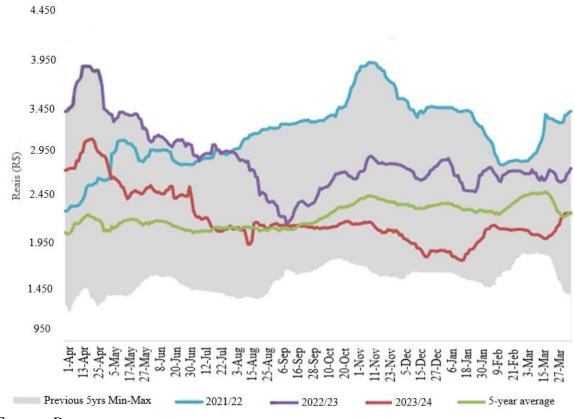
For mills in the state of São Paulo, the sales of hydrous ethanol from April 2023 to March 2024 grew by 24 percent compared to the previous season. The first quarter of 2024 was the strongest period in terms of sales for the 2023/24 harvest, driven by biofuel's competitive advantage at the pumps.

The ethanol price decreased during the 2023/24 season, contrary to expectations as prices were expected to recover from October onwards. In January 2024, the price of hydrous ethanol fell 14.7 percent in relation to the annual average. Low ethanol prices can be attributed to the consumer inertia, higher stocks, and greater supply of corn ethanol in the 2023/24 season.

Higher supplies allowed the price of hydrous ethanol to regain competitiveness at fuel stations in the state of São Paulo starting in July 2023, with the price parity level remaining within the range of 58 – 62 percent since August. The gain in competitiveness was observed not only in Sao Paulo, but also throughout the CS region and in several states in the NNE, such as Pernambuco, Paraíba, Amazonas, and Acre. However, ethanol consumption took time to gain pace in Brazil. Consumption reached 1.877 billion liters by December 2023, an increase of 41.6 percent over the previous year.

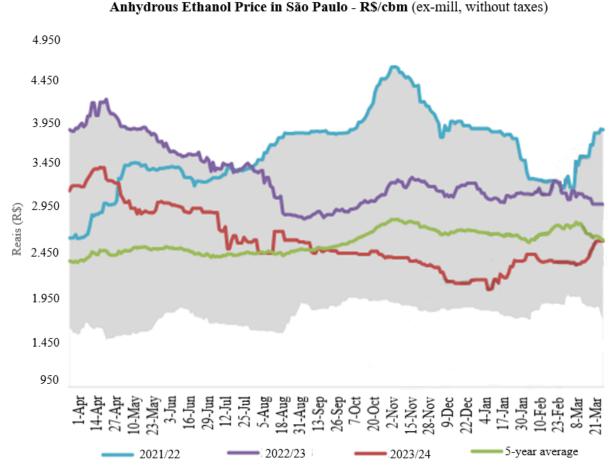
Figure 5 Hydrous Ethanol Prices – MY2021/22 to MY2023/24





Source: Datagro

Figure 6
Anhydrous Ethanol Prices – MY2021/22 to MY2023/24



Source: Datagro

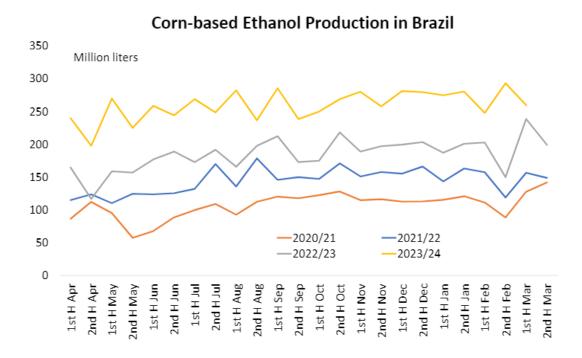
Hydrous ethanol consumption remains below its potential. Due to the slow recovery in ethanol consumption at the domestic market, the sugar-energy sector had to deal with high ethanol stocks, reaching a peak of 10.8 billion liters (anhydrous and hydrous) on November 15th, 2023, 20.4 percent above that observed a year ago or the equivalent of 67 percent of the sector's static ethanol tanking capacity in the CS region.

With high stocks, producers had little bargaining power to boost ethanol prices at the end of the 2023/24 season. The supply of corn ethanol is booming, with MY2023/24 season production reaching six billion liters, an increase of 41 percent compared to MY2022/23. As a result, total ethanol production in CS Brazil grew by 16.5 percent to 35 billion liters in 23/24. For the MY2024/25 crop, however, a better environment is expected for ethanol prices. The perspective of a slight decrease in ethanol production in CS Brazil, as a result of the industry's increased crystallization capacity and lower volume of cane crushing due to bad weather conditions, will likely improve ethanol prices.

In April 2024, 22 corn ethanol plants were operating in Brazil, with a combined installed capacity of 7.22 billion liters/per year, representing a demand of 16.79 MMT of corn, or 14.6 percent of the corn production for the crop season 2023/24. For MY2024/25, Post forecasts corn ethanol production to reach seven billion liters, an increase of one billion liters compared to the previous season.

Corn ethanol has been booming in Brazil given the availability of grains and the relatively low cost of production. There are nine plants under construction with a combined capacity of 2.75 billion liters/year, and 13 plants commissioned. If all projects are concluded, Brazilian corn ethanol production could reach 13.8 billion liters within the next eight years. Corn by-products are also profitable, especially DDGs, which can represent about 20 percent of the crop's revenue.

Figure 7 *Brazilian Corn Ethanol Production – MY 2023/24*



Source: Unica/Datagro

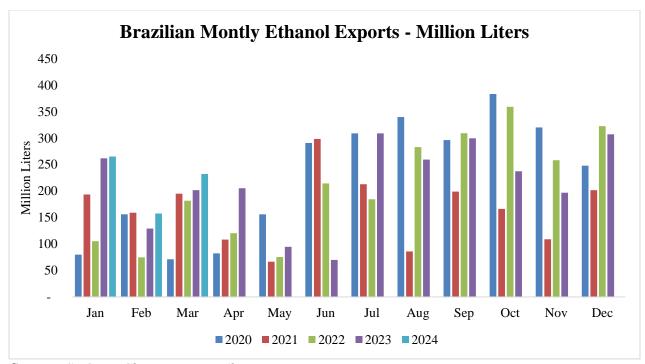
In September 2023, the Brazilian Government submitted to Congress the Fuel of the Future bill, which addresses policies to expand the use of sustainable fuels. On ethanol, the bill foresees the increase of the mandatory blend into the gasoline from the current 27,5 percent to 30 percent in the short term, if technical aspects are met. The three percent increase would demand approximately 1.5 billion liters of anhydrous ethanol, which can be rapidly supplied by the domestic industry.

The Fuel of the Future bill also incentivizes the production and use of sustainable aviation fuel (SAF), establishing a mandate for the progressive reduction of carbon dioxide emissions in the Brazilian civil aviation sector between 2027 and 2033. Brazil has not established a specific route for SAF and is studying the adoption of different feedstock, including Alcohol to Jet (ATJ) and Hydroprocessed Esters and Fatty Acids (HEFA).

Ethanol Exports and Imports

According to Brazil's Secretariat of Foreign Trade (SECEX), from April 2023 to March 2024 Brazil exported 2,694 billion liters of ethanol, a decrease of 0.9 percent compared with the same period of MY2022/23 (2,719 billion liters). The main destinations were South Korea (857 million liters), the United States (458 million liters), and the Netherlands (407 million liters).

Figure 8
Brazilian Ethanol Exports by Month (NCM 2207), in Million Liters

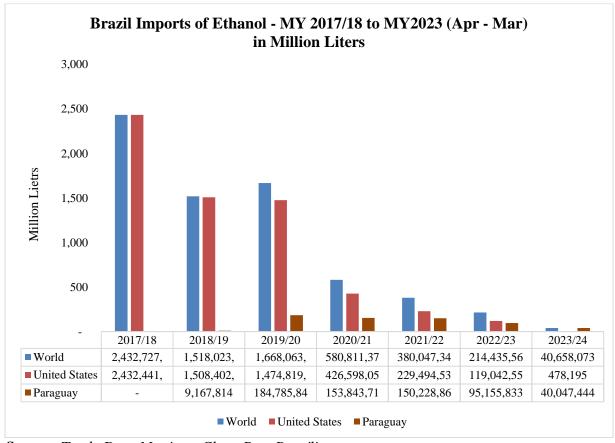


Source: SECEX, Chart Post Brasília

Regarding ethanol imports, the North-Northeastern region is usually the main importer of ethanol due to low seasonal production or higher prices. In February 2023, Brazil reimposed a tariff on imported ethanol of 16 percent in 2023, which rose to 18 percent from January 2024 onwards. Industry is forecasting a possible arbitrage in the second or third quarter of MY2024/25 for ethanol imports from the United States, given low U.S. corn prices and the expected increase in domestic ethanol prices in Brazil.

Given the consistent sugarcane and corn ethanol domestic production since 2020 and relatively stable internal prices (despite the effects of the pandemic), ethanol imports have been decreasing. Between April 2023 and March 2024, Brazil's ethanol imports totaled 41 million, a sharp drop of 81 percent compared to same period in MY 2022/23 (216 million liters). The main ethanol suppliers in this period were Paraguay (40 million liters), followed by the United States (478.2 thousand liters). Until MY2022/23, the United States had been the main ethanol exporter to Brazil, as shown below.

Figure 9Brazilian Imports of Ethanol (Harmonized System (HS) Heading 2207), in Million Liters



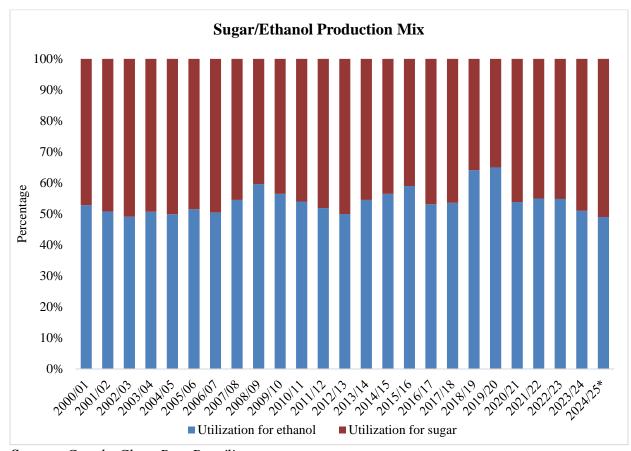
Source: Trade Data Monitor; Chart Post Brasília

Sugar/Ethanol Production Mix

Post forecasts sugarcane mills to continue prefer sugar production in the MY2024/25, given the estimate of a slight deficit in global sugar production in the marketing year 2023/24 (October 2023 to September 2024), of 1.5 million tons, raw value. A surplus of 400,000 MT, raw value, is expected in 2024/25. Sugar plants usually secure export contracts in advance, taking advantage of favorable international prices.

For MY 2024/25, Post forecasts the sugar/ethanol mix in the proportion of 51 percent and 49 percent, respectively. As comparison, the sugar/ethanol mix in the MY2023/24 was 49 percent to sugar and 51 percent to ethanol.

Figure 10 Sugarcane Breakdown: Sugar/Ethanol Production Mix



Source: Conab; Chart Post Brasília

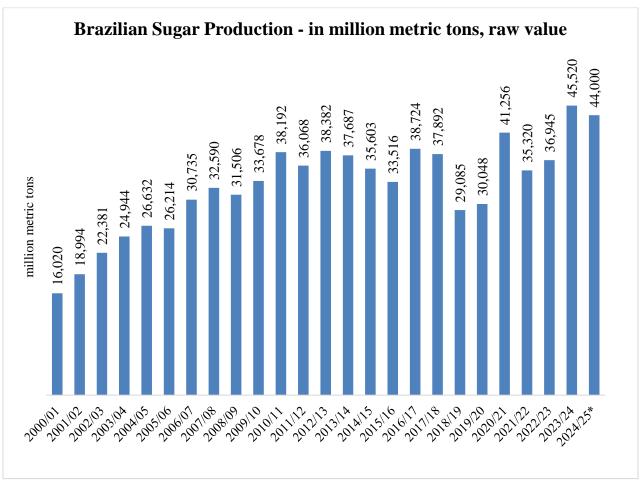
Cane Sugar

Sugar, Centrifugal	2022/202	3	2023/2024		2024/2025	
Market Year Begins	Apr 2022		Apr 2023		Apr 2024	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	340	340	690	690	0	760
Beet Sugar Production (1000 MT)	0	0	0	0	0	0
Cane Sugar Production (1000 MT)	38050	38050	41000	45544	0	44000
Total Sugar Production (1000 MT)	38050	38050	41000	45544	0	44000
Raw Imports (1000 MT)	0	0	0	0	0	0
Refined Imp.(Raw Val) (1000 MT)	0	0	0	0	0	0
Total Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	38390	38390	41690	46234	0	44760
Raw Exports (1000 MT)	22560	22560	27500	30225	0	29000
Refined Exp.(Raw Val) (1000 MT)	5640	5640	5000	5749	0	5500
Total Exports (1000 MT)	28200	28200	32500	35974	0	34500
Human Dom. Consumption (1000 MT)	9500	9500	8800	9500	0	9500
Other Disappearance (1000 MT)	0	0	0	0	0	0
Total Use (1000 MT)	9500	9500	8800	9500	0	9500
Ending Stocks (1000 MT)	690	690	390	760	0	760
Total Distribution (1000 MT)	38390	38390	41690	46234	0	44760
(1000 MT)	1	1	1	1	1	1

Production

Brazil is the top world sugar producer with approximately 23 percent of total global production in MY2023/24 (April – March), amounting to 45.5 MMT, raw value. Post forecasts sugar production for MY 2024/25 at 44 MMT, raw value, a small reduction of 3.4 percent compared to MY 2023/24. Despite the estimate of lower sugarcane crushing in Brazil, international sugar prices and increased global demand are pushing producers to expand sugarcane mill capacity to produce more sugar. Also, investments in sugarcane plants made in the previous season are expected to sustain sugar production in MY 2024/25.

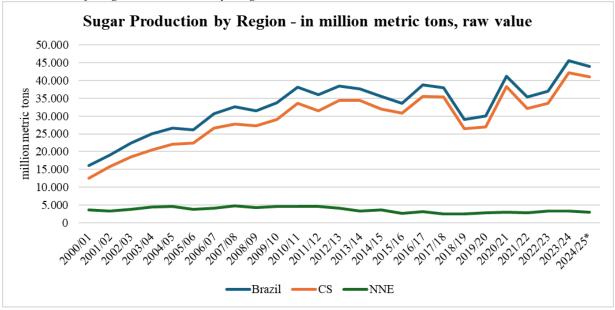
Figure 11Evolution of Sugar Production in Brazil, raw value – MY2000/01 to 2024/25



Source: Mapa; Chart Post Brasília * Estimate

The center-southern (CS) states are expected to account for 41 MMT, raw value, a decrease of one million MMT compared to the 2023/24 season (42 MMT). Post forecast NNE production at three MMT, raw value, a reduction of 500,000 metric tons compared to MY2023/24.

Figure 12
Breakdown of Sugar Production by Region- MY 2000/01 to 2024/25

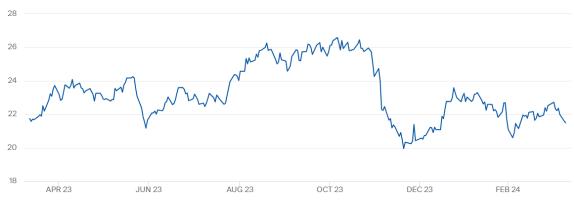


Source: MAPA; Chart Post Brasília * Estimate

Sugar International Prices

Sugar prices remained higher that the average during MY 2023/24 (April 2023 – March 2024) due to the relative global shortage caused by adverse climate conditions in the main sugar producing countries causing export restrictions. From April 2023 to December 2023, prices ranged between US\$ 20 cents/lb and 27 cents/lb, compared to the price range between US\$ 17 cents/lb and US\$ 21 cents/lb registered in the same period of 2022. Sugar prices devalued by almost 30 percent between the end of November and mid-December 2023, when Brazil finished a record harvest and with signs of improvement in the harvests in India and Thailand. However, global stocks are still historically low and demand for spot markets remains strong.

Figure 13
Sugar #11 Future Prices



Source: Intercontinental Exchange (ICE)

In April 2024, sugar contract #11 at the NY Stock Exchange (ICE Futures) was negotiated at US\$ 21 cents/lb for May 2024. In contrast, very high polarity (VHP) sugar exported FOB from the Port of Santos was negotiated at US\$ 516.64/MT and sugar sold on the domestic market was traded at R\$ 147,34/50kg bag (with taxes) and US\$ 24.95 cents/lb (FOB Santos), respectively. The ethanol price equivalence on the domestic market ranges between US\$ 16.56 cents/lb for the São Paulo anhydrous reference market and US\$ 15.67 cents/lb for the São Paulo hydrous reference market.

Sugar Domestic Prices

For most of 2023, foreign sales paid more than domestic sales. The most significant difference occurred in the first week of September, when the equivalent value of exports paid R\$23.52/50kg bag more than spot sales of crystal sugar in São Paulo.

During the MY2023/24 crop, average prices of crystal sugar in São Paulo's spot market surpassed the prices in the previous season (MY 2022/23). In October 2023, the Cepea/Esalq index for the State of São Paulo reached the highest amount of the historical series, of R\$ 159.32 bag/50kg. Despite the record production of sugar in the State of São Paulo, the good performance of sugar exports reduces the offer in the domestic market, maintaining prices up.

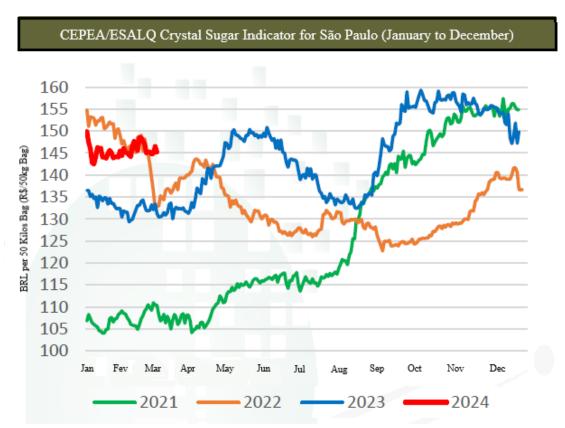
Table 5 *Monthly Crystal Sugar Prices Index, Domestic Market*

Monthly Cr	Monthly Crystal Sugar Price Index - Domestic Market (Brazilian Real (R\$),								
50kg/bag, ii	50kg/bag, including tax).								
Period	2018	2019	2020	2021	2022	2023	2024		
January	60.88	68.83	74.33	106.31	151.45	133.98	145.04		
February	53.23	68.49	78.35	107.70	144.78	132.09	145.99		
March	51.32	67.93	78.45	107.58	137.60	132.00	143.58		
April	54.89	68.46	77.38	108.34	140.68	141.03	146.52*		
May	54.27	69.1	74.79	115.08	131.88	148.84	-		
June	57.80	62.55	76.24	116.36	127.87	144.99	-		
July	55.11	59.70	77.36	116.40	128.86	137.00	-		
August	51.49	60.07	81.44	128.43	128.87	135.27	-		
Septembe	60.69	61.04	86.53	141.73	124.44	151.20	-		
r									
October	64.37	65.04	93.75	147.27	126.99	156.90	-		
November	67.74	65.65	106.19	153.67	131.83	156.19	-		
December	68.57	70.18	108.78	155.06	139.12	152.63	-		

Source: Cepea/Esalq; Chart Post Brasília *As of April 10th, 2024

From April 2023 to December 2023, the average of the Cepea/Esalq index of crystal sugar was R\$ 143.34 /50kg bag, a 15 percent increase compared to the same period of 2022 (R\$124.68 /50kg bag). Average white crystal sugar spot prices in the state of São Paulo remained firm in the last official week of the 2023/24 off-season, at around R\$145 per 50kg/bag. According to Cepea/Esalq researchers, low supply continued to be the main support factor. On the demand side, there was greater interest from packers in cash purchases.

Figure 14Cepea/Esalq Crystal Sugar Index for São Paulo



Source: CEPEA/ESALQ; Chart Post Brasilia

Note: On the spot market, with taxes, nominal values

Prices also remained competitive in the Northeastern region, with contracts surpassing R\$ 170 /50kg bag. The crushing on the MY 2023/24 focused in producing VHP sugar for exports. Despite fluctuations in sugar prices during the harvest, prices remained strong until the end of the MY2023/24 crop and sugar mills continued to prioritize exports, limiting domestic offer.

Trade

Brazil is the largest sugar exporter worldwide with 51 percent of the world's total exports, followed by Thailand and India. Post forecasts Brazil's sugar exports for MY 2024/25 at 34.4 MMT, raw value, a reduction of 1.5 million metric tons, raw value, compared to the MY 2023/24 (35.9 MMT). Revenues in 2023 totaled US\$15.746 billion, up 43 percent compared to the previous year, according to SECEX. Raw sugar exports will likely account for 30.2 MMT during MY 2024/25, raw value, whereas the remainder represents exports of refined sugar.

International sugar demand for MY 2024/25 (April 2024 to March 2025) will remain strong. Despite the recovery of domestic production in Thailand and India, the amount destined for export will not be sufficient in the short term to meet their share of foreign demand. In this sense, Brazil will remain as a global sugar supplier in MY2024/25, taking advantage of the stable domestic production and favorable international prices.

Figure 15
Evolution of Brazilian Sugar Exports – MY2000/01 to 2024/25 (MMT)



Source: SECEX; Chart Post Brasília

From April 2023 to March 31, 2024, Brazilian main sugar buyers for MY 2023/24 were China (3.9 MMT), India (3.3 MMT), and Indonesia (2.4 MMT).

Table 6Brazilian Sugar Exports – million tons

Brazil Suga	Brazil Sugar Exports by Main Countries (HS Subheadings 1701.11, 1701.13 and							
1701.14, in MT, raw value)								
	MY	MY	MY	MY	MY	MY		
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24		
China	891,560	1,374,952	5,045,256	4,356,464	4,004,640	3,904,155		
India	1,672,057	899,953	1,755,821	268,270	581,482	3,320,217		
Indonesia	78,182	145,899	2,156,366	609,047	1,219,746	2,403,238		
Algeria	2,238,608	2,449,477	2,260,842	2,398,145	1,931,685	1,950,963		
Morocco	927,275	861,351	1,452,790	1,230,467	1,739,016	1,745,741		
United								
Arab	1,198,112	708,907	1,174,635	915,826	1,122,964	1,735,058		
Emirates								
Nigeria	1,210,573	1,623,761	1,623,761	1,945,933	1,655,234	1,609,072		
Bangladeh	1,996,197	1,916,043	2,175,904	1,361,057	1,279,179	1,674,003		
Canada	816,800	606,712	1,059,465	1,232,787	1,231,644	1,262,531		
Others	11,576,500	9,973,142	13,422,333	11,663,365	12,974,255	15,620,117		
Total	22,605,864	20,560,197	32,127,173	25,981,361	27,739,845	35,225,095		

Source: Trade Data Monitor; Chart Post Brasília

Since mid-2020, the Brazilian currency has remained relatively devaluated against the U.S. dollar, maintaining Brazilian sugar's high competitiveness in export markets.

Consumption and Stocks

Sugar ending stocks for MY2024/25 are projected at 760,000 tons, raw value, a volume unchanged from the MY2023/24 figure. There is no official source for carry-over stocks of sugar in Brazil. Also, there is no official source for domestic sugar consumption in Brazil. Post forecasts sugar consumption for MY2023/24 at 9.5 MMT, the same amount registered in MY2023/24. Post does not anticipate substantial changes to ending stocks levels in the upcoming years.

Policy

Sugar imports to the United States are governed by tariff-rate quotas (TRQ), which allow a certain quantity of sugar to enter the country at a low tariff. TRQs apply to imported raw cane sugar, refined sugar, sugar syrups, specialty sugars, and sugar-containing products. The sugar import program meets the U.S. commitments under the Uruguay Round Agreement on Agriculture, which resulted in the creation of the World Trade Organization (WTO).

USDA establishes the annual quota volumes for each federal fiscal year (FY October 1 – September 30), and the U.S. Trade Representative (USTR) allocates the TRQs among countries. Sugar and related

products paying a higher, over-quota tariff may enter the country in unlimited quantities. About 40 countries worldwide receive TRQ allocations based on historical trade to the United States. The top three quota-holding countries are the Dominican Republic, Brazil, and the Philippines.

USDA announced on July 5, 2023, the establishment of the FY 2024 (October 1, 2023 – September 30, 2024) TRQ for raw sugar at the WTO minimum amount of 1,117,195 MT raw value (MTRV). USTR allocated the TRQ on July 19, 2023. Brazil, the second-largest recipient of the U.S. sugar tariff-rate quota, received the raw value allocation of 155,993 MT, which is equivalent to approximately 14 percent of the total TRQ.

On March 7, 2024, the USDA announced an additional in-quota quantity of the TRQ for raw cane sugar in the amount of 125,000 MTRV. Brazil was the largest recipient of the additional quantity, amounting to 27,174 MTRV.

Table 7U.S. Tariff-Rate Quota for Brazilian Raw Sugar (metric tons)

US Raw Sugar Tarif-Rate Quota (TRQ) for Brazil (Metric Tons Raw Value)						
Fiscal Year - FY	Original TRQ Allocation	Additional TRQ Allocation	Total			
FY2013	155,634	0	155,634			
FY2014	152,691	15,251	167,942			
FY2015	152,691	37,978	190,669			
FY2016	152,691	33,865	186,556			
FY2017	152,691	30,000	182,691			
FY2018	152,691	0	152,691			
FY2019	152,691	22,464	175,155			
FY2020	152,691	158,203	310,894			
FY2021	152,691	34,577	187,268			
FY2022	152,691	53,502	206,193			
FY2023	155,993	76,580	232,573			
FY2024	155,993	27,174	183,167			
Source: USTR; Char	t Post Brasilia					

