



**Required Report:** Required - Public Distribution

**Date:** January 04, 2023 Report Number: BR2022-0068

# **Report Name:** Cotton and Products Update

**Country:** Brazil

**Post:** Brasilia

**Report Category:** Cotton and Products

**Prepared By:** Nicole Podesta

Approved By: Joseph Degreenia

## **Report Highlights:**

Post forecasts 2022/23 planted cotton area at 1.66 million hectares (ha), with production at 13.3 million bales (2.89 million metric tons, MMT), about a 13 percent increase from the 2021/22 estimated production of 11.52 million bales (2.5 MMT). Cotton area is forecast to rise because of favorable weather leading to timely first-season soybean planting and improved yields, as well as a favorable outlook for prices and profitability. Post forecasts Brazil's domestic cotton consumption at 3.5 million bales for 2022/23 (762 thousand MT), as compared to the estimated 3.2 million bales (697 thousand MT) for the previous MY. Post increased the 2022/23 marketing year export forecast to 8.7 million bales (1.89 MMT), which represents an increase of 11 percent on the current season export estimate of 7.73 million bales (1.68 million metric tons), primarily due to the improved harvest and increased sales to its main trading partner, China,

## PRODUCTION

Post revised the forecast for 2022/23 planted cotton area upward to 1.66 million hectares (ha), an increase of 1.8 percent from the estimate of 1.63 million ha cotton area planted in the current season. Favorable climate conditions and resulting productivity recovery, especially in Mato Grosso, is the main factor for the expected increase in production. With this increase in production Brazil is set to maintain its status as a top-tier cotton producer, along with India, China, and the United States.

	Area Harves HA)	ted (million		Production (	million 480 lb. ]	Bales)
Country	2021/2022	2022/2023	% change	2021/22	2022/2023	% change
India	12,150	13,000	6.99	24,400	27,500	12.7
China	3,100	3,000	-3.33	26,800	28,000	4.47
United States	4,157	3,187	-23.33	17,523	14,242	-18.72
Brazil	1,630	1,660	1.84	11,520	13,300	15.45
Pakistan	2,000	1,800	-10	6,000	3,700	-38.33

#### **Figure 1: Top Cotton Producers**

Source: USDA PSD. Note that the Post estimate and forecast does not necessarily match exactly official USDA projections.

At the start of November, cotton-producing regions in Brazil were in the midst of the sanitary period, known as the *vazio sanitario*. The sanitary period is an interval that spans several months between when the final harvest is picked and the next crop is sown, in order to mitigate the incidence of disease in the field and on the plants. As of December, the total area planted reached seven percent, compared to 0.13 percent in November of 2021. All of the 2022 crop has been harvested, with 87 percent of it commercialized, 96 percent ginned, 33 percent for domestic consumption, and an estimated 43 percent exported, according to Brazilian cotton association Abrapa.

Post believes the planted area will increase in 2022/23, especially in Mato Grosso, where most of the cotton is produced. There are several factors driving an increase. First, due to moderate weather and adequate rain in the months of September and October across Brazil, farmers were able to begin first-season soybean planting on time, which is critical factor for ensuring best prospects for the next crop. Growers typically begin sowing first-season soybeans in September, with harvest kicking off in December. In Mato Grosso, the majority (about 87 percent) of cotton is second-season, or *safrinha*.

The Mato Grosso Institute of Agricultural Economics (IMEA) reported that by mid-December, farmers had sowed about 95 percent of their soybean crop. Second-season cotton is planted following the soybean harvest, with the ideal cotton planting window being between January 1 and February 15. Producers are eager to sow cotton before February 15, otherwise, they run a higher risk of moisture damage to crop yields and quality. Since soy planting this year took place without delay, the second

cotton crop will also be able to take place within the optimal window. By the end of November, the states of São Paulo, Goiás, Mato Grosso do Sul, Minas Gerais and Bahia had started planting cotton.

By the second week in December, cotton sowing in Mato Grosso reached an average of 1.24 percent, representing an increase of 0.44 percent compared to last year. The most advanced region in Mato Grosso is the northeast with 8.59 percent of the area planted, followed by the southeast with 2.44 percent. Mid-North and West Mato Grosso have approximately 0.91 percent and 0.11 percent of their respective areas planted.

## Figure 2

	Brazilian cotton crop calendar															
	BRAZILIAN CROP	20	22	2023												
	DRAZILIAN CROP	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
ð	Ginning															
2022 CROP	HVI Analysis															
20:	Export/Domestic Mark	et														
	Planting															
ę	Harvest															
2023 CROP	Ginning															
203	HVI Analysis															
	Export/Domestic Mark	et														

Source: Abrapa

While cotton area is forecast to rise, the expansion will continue to be somewhat limited by secondseason corn. In Mato Grosso, growers have an option to plant safrinha corn instead of cotton. While safrinha corn is similarly planted in January, the sowing window is longer by about six weeks. In Mato Grosso, IMEA expects the corn area to expand by over six percent in the coming season, with planting on about 6.2 million ha, which would set a new record for the state. A longer planting window and favorable corn prices are primary factors leading to increased corn area. In addition, Post contacts report increased demand for corn due to the construction of a new corn ethanol processing plant in Mato Grosso. As a result, corn will be more profitable and have better prospects for production. (For more discussion on corn, please see <u>Brazil Grain and Feed September 2022 Update</u>).

In the northeastern state of Bahia, Brazil's second-largest cotton producing state, growers typically plant just one crop. The choice in Bahia is between cotton and soybeans. While planted area in Mato Grosso is expected to rise, according to Post contacts, Bahia planted area is expected to remain constant in the 2022/23 growing season. This is mainly because cotton competes with soybeans, and Brazil continues to expand its soybean area due to record high domestic soybean prices and good profit margins. As a result, a record soybean harvest is anticipated. Meanwhile, cotton prices in the domestic market are more volatile than soy. (For more discussion on Brazil's soybean outlook, see <u>Brazil Oilseed September 2022</u> <u>Update</u>).

	Mato Grosso														
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			
soybean															
safrinha cotton															
safrinha corn															

## Figure 3: First and Second Season Timeframes for Cotton in Mato Grosso and Bahia

	Bahia														
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			
soybean															
cotton															
corn															

Source: Post Brasilia: planting season, harvest season, planting/harvest season

The Post forecast for the overall increased cotton planted area takes into consideration the changing dynamics of production costs and cotton prices. Producers typically plan out cotton area several months in advance of sowing in order to secure inputs for the season. After peaking in May, cotton prices have been on a gradual decline, though they remain well above historical levels. Producers are also face with higher operating costs, mainly due to rising prices of inputs, though these cots have been leveling off in recent months. (See <u>Brazil Cotton August 2022 Update</u> for further price discussion).

The increase in planted area will also be encouraged by the major investments in cotton-growing capacity that large producers made over the last three to five years. Numerous interlocutors have pointed out that producers have made major investments in equipment (planters, pickers, and ginning capacity) in order to maximize returns on the available planting area. Given the expense of acquiring new machinery – cotton pickers run upward of \$1 million – large producers are keen to continue to utilize their substantial investments, especially in an environment of high global prices.

## Production, Yield Forecast to Improve in 2022/23

Post increased the 2022/23 forecast for cotton production to 13.3 million bales (2.89 MMT), about a 13 percent increase from the 2021/22 estimated production. The yield is forecast to increase to 1.744 kilograms (kg) per hectare, well above the 1.539 kg/ ha expected in the current season, and close to Brazil's record in 2018/19. Post yield and production forecasts for the 2022/23 season assume average weather and adequate use of inputs, such as genetically engineered (GE) seeds and the use of chemicals and fertilizers. Given the expense of planting and harvesting cotton, Post does not anticipate that growers will reduce planting despite the higher-than-typical operational cost outlook. While there is concern about the shortage of inputs and fertilizers, the vast majority of cotton producers managed to purchase their supplies earlier this year. Therefore, post contacts have reported that the supply chain issues are not likely to have an impact, though that could change for the 2023/24 season.

## 2021/22 Cotton Production in Brazil Estimated Lower

The 2021/22 harvest was completed across the country in September. Post slightly revised down the estimated area harvested to 1.63 million ha, based on latest industry estimates. At the same time, Post revised down the 2021/22 production estimate to 11.52 million bales (2.5 MMT), based on the lower yield of 1.539 kg per ha. The low yield estimate is based on problems of extreme weather, with both drought and excessive rain impacting the crop. Weather patterns were mixed throughout the growing and harvest season, and the production picture varies by state. While in Mato Grosso, the harvest was more advanced than the previous season, producers report that with excessive rain at planting, along with periods of dryness and cold, hindered the development of cotton plants. According to Post contacts, the crop in western Mato Grosso experienced more damage. In general, quality is uneven with great variation between producers.

In Bahia, cotton and soy are planted at the same time. Therefore, cotton competes with soy for area, but not rain or planting window, and productivity is generally higher. While the Bahia crop was also negatively impacted by the problematic weather conditions, it performed better than Mato Grosso. At this point, with timely planting in Mato Grosso and average weather patterns, the yield is forecast to improve in 2022/23.

## COST OF PRODUCTION AND PRICES

## Cost of Production Expected to Level off, but Remain High

The cost of cotton production is expected to level off in the 2022/23 season, but remain well above historical levels. According to analysis by IMEA, the cost of cotton production in Mato Grosso had been rising continuously since 2021. As of the end of October, the effective operating cost for the 2021/22 crop was estimated at R\$ 10,415.99 (US\$ 1,880) per ha, an increase of 48 percent in relation to the 2020/21 harvest. The main cost increases were for inputs, such as fertilizers, and cotton classification.

#### Figure 4

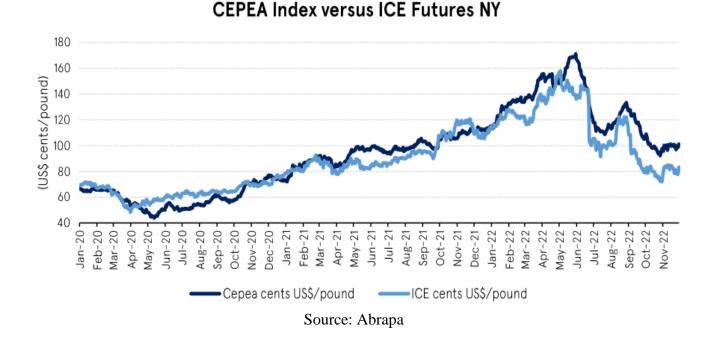
Estimated Production Costs for C	Estimated Production Costs for Cotton in Mato Grosso (BRL per ha)										
	Sep-22	Nov-22	Percent Change								
Variable Costs of Production	12,596.61	11,829.05	-6.09%								
seeds	1181.35	1144.29	-3.14%								
fertilizers	4,822.74	4,164.67	-13.65%								
herbicides, fungicides, insecticides, other defensives	5,575.50	5,518.10	-1.03%								
machinery operation	735.91	721.56	-1.95%								
third party services	52.95	52.55	-0.75%								
labor	228.16	227.88	-0.12%								
maintenance of machineries and installations	539.62	539.55	-0.01%								
insurance, taxes, misc fees	384.51	384.40	-0.03%								
financing	531.33	499.17	-6.05%								
Post Production Costs	3,976.51	3,725.37	-6.32%								
transportation, storage	78.83	78.33	-0.63%								
cotton classification	3897.67	3647.02	-6.43%								
other costs	73.79	74.17	0.51%								
Effective Operating Cost	18301.83	17382.71	-5.02%								
depreciation	350.80	351.34	0.15%								
Total Operating Costs	19667.76	18951.98	-3.64%								

4

Source: IMEA data, OAA Brasilia chart

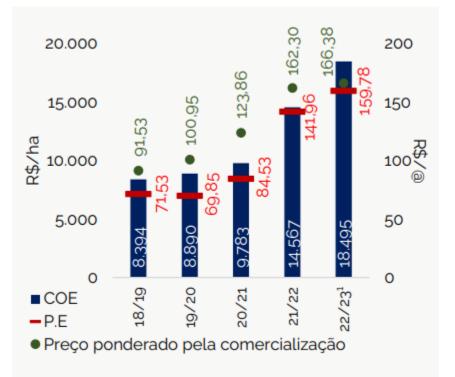
In September and October 2022, after showing constant increases, the effective operating cost (COE) of cotton fell 0.12 percent. According to Post contacts, this is primarily due to a slightly reduced used of macronutrients, in order to reduce costs. Post contacts report that cotton producers in the 2022/23 crop year are reducing their phosphates and potash consumption by up to 15 percent. The average consumption used to be 120kg/ha in phosphates and 180kg/ha of potash. This year, its estimated that the cotton farmers have purchased 48,000 mt less potash, and reduced phosphate purchases by at least 32,000 mt. Nitrogen use is being maintained at 150kg/ha. Cost of inputs have reduced slightly as well, with a 13 percent reduction in costs of fertilizers. However, while costs reduced in the past month, the cost of the 2022/23 crop is still about 27 percent higher than that of the 2021/22 crop. In view of this, along with lowering prices compared to earlier this year, the cost/price break-even point for the 2022/23 cycle increased by 14 percent compared to the 2021/22 season.





Brazil's cotton prices are directly correlated to the futures prices in New York. As a result of the real's continued devaluation, domestic cotton prices in Brazil have been elevated. At the end of November, the University of Sao Paulo's Superior Agricultural School Research Center (CEPEA/ESALQ) indicator was around 100 cents per pound, while New York price was lower, nearly 80 cents per pound. Both represent a drastic increase in prices from April and May of 2020, at the onset of the coronavirus pandemic, when cotton cost about 45 cents per pound. However, this is a significant drop from the high prices in June 2022, which reached 170 and 140 center per pound (CEPEA and ICE, respectively).

In recent months, the price of cotton has been just about four percent higher than the break-even point, and has remained relatively stagnant. The chart below demonstrates the operating cost of cotton (COE, blue bar), the price equilibrium point (PE, red bar), and the commercialized price (green dot), in Reais per ha and arroba.



## Figure 6: Cost, Price, and Equilibrium Point (P.E.) for Brazilian Cotton

With the end of the year approaching and with it, the start of vacations for many mills and textile companies, the demand for new batches of cotton has been slowing down. Cotton growers, in turn, are not interested in making new sales, considering that they are generally well-capitalized and have a good volume of the crop already committed. Throughout November, the pace of spot sales were slow, with agents fulfilling contracts and indicating that a large part of production was already committed. Along with the fluctuation in domestic prices, Brazil experienced logistical difficulties due to stoppages and roadblocks in early November, following the final election results.

Overall, the profitability outlook for cotton producers in Brazil has been improving since 2020, when the novel coronavirus pandemic had a significant, negative impact on global cotton demand and in conjunction on global cotton prices. Prices started recovering steadily in 2021, and have since more than doubled. In December, the Cepea index for cotton rose 3.8 percent, to 101.19 cents (US\$ per pound). Brazilian prices remain above the historical average for this time of the year.

According to analysis from Imea, at these prices, growers in Mato Grosso can be expected to see greater profits from planting cotton, rather than corn. As the chart below shows, if cotton prices average around R\$ 101 per arroba, corn prices would have to rise above R\$ 37 per sack for farmers to see greater profits from planting corn.

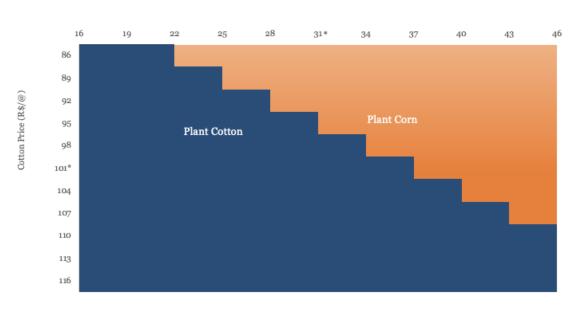


Figure 7: Comparison of Cotton and Corn Profitability in Mato Grosso Corn Price (R\$/Sc)

The commercialization of the 2022/23 cotton crop in Mato Grosso continues at a slow pace. By the end of November, cotton producers had sold about 52 percent of the expected production. This demonstrates some caution on the part of producers compared to last season, when about 58 percent of production was sold, and is also below the average of the last five years, of 61 percent.

Although the price appreciated nearly two percent from October to November, sales advanced only one percent. Cotton prices have not yet recovered from the low levels earlier in the year, which has limited new sales, according to Imea. In November, cotton from Mato Grosso was sold at an average price of R\$ 156.53 arrobas.

The 2021/22 crop has also experienced slower-than-usual sales, reaching 85.41 percent of the estimated production in November, just one percent more than the previous month. Post contacts report that one reason for the lagging sales is an issue of quality. Due to adverse climate during the growing season, the color and condition of the cotton was negatively impacted in a significant portion of the crop, leading to less attractive prices.

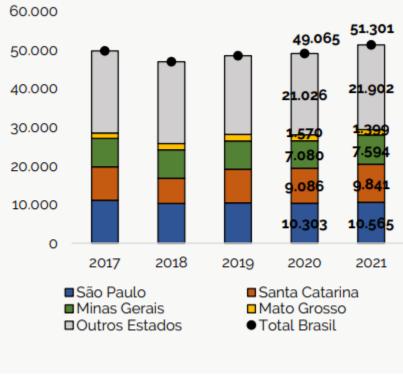
#### **CONSUMPTION**

Post forecasts that Brazil's domestic cotton consumption will come in at 3.5 million bales for 2022/23 season (762 thousand tons), as compared to the estimated 3.2 million bales (697 thousand tons) of domestic consumption for the current MY, a nine percent increase. The 2022/23 MY consumption is

Chart Source: IMEA

expected to be moderately higher compared to the previous season, due to gradual economic recovery since the onset of the coronavirus pandemic, and corresponding increased demand for textile products.

A positive outlook for domestic consumption can also been seen in the job numbers for textile industries in Brazil. According to data from the Ministry of Labor, in 2021 there were 51,300 jobs, up 4.56 percent compared to 2020. The main states that operate in the textile industry are São Paulo, Santa Catarina and Minas Gerais, which were responsible for 54.58 percent of jobs in 2021.



## Figure 8: Number of Jobs in the Textile Sector by State

Source: IMEA

However, growth in domestic cotton consumption faces challenges in the market, as natural fabric continues to compete with synthetic fibers, which tend to be less expensive. Ten years ago, cotton represented 57 percent of the total fibers used by the national textile industry while now, it represents 46 percent. In response, the Brazilian cotton sector has developed public campaigns to promote Brazilian cotton to consumers, such as the Better Cotton Initiative.

## 2022/23 Domestic Industry Outlook is Modest but Positive

The domestic cotton industry is optimistic about their prospects for 2022/23, and is projecting moderate growth in the sector. Issues with national and international logistics have been improving, and governments have taken actions to calm inflation, thus helping purchasing power of consumers. As

cotton is a less elastic good compared to other commodities, it could be greatly impacted if an economic recession in important consuming countries occurs, so it is possible the outlook could change in the coming months.

For 2023, the Brazilian Textile Industry Association (ABIT) forecasts modest domestic processing and manufacturing recovery on the assumption of slight GDP growth, of 2.1 percent. The Brazilian Economic Ministry also decreased its 2022 inflation forecast to 5.85 percent, from the 6.3 previously projected.

## 2021/22: Domestic Consumption Recovering

According to ABIT, 2021/22 was a challenging year for the domestic sector. This was due to various factors, including indications of a world recession, low industry margins, and internal and external inflation eroding consumer purchasing power.

While there have been improvements in the Brazilian textile industry since the steep drop in 2020, the industry now faces supply chain bottlenecks and ripple effects from the global economic slowdown that commenced with the war in Ukraine. Brazil's Textile Association (ABIT) data shows a steady decline in cotton consumption over the last decade, in favor of synthetic fibers. With lower prices, the consumption of synthetic fibers continues to increase and compete with cotton. Current day fabrics are dominated by synthetic fibers, which represent 70 percent of material, and cotton the remaining 30 percent.

Projections also consider slow economic growth, with consumption hampered by persistent inflation and slower job creation. Escalating economic tensions spill over into the textile sector with rising raw material prices, rising production costs and weakening consumption. In addition to compromising the cotton supply chain, the rise in oil prices will likely also affect the prices of polyester and other derived fibers. For more information on the market situation for cotton consumption in Brazil, see the 2022 Brazil Cotton Annual Report in GAIN.

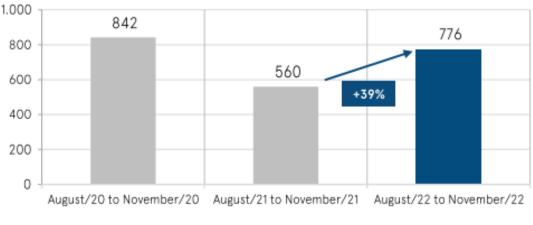
## TRADE

## Exports Projected to Increase in 2022/23

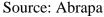
Post revised up the 2022/23 MY (August 2022- July 2023) export forecast to 8.7 million bales (1.89 MMT). Thus, Post forecasts exports to increase by over 11 percent when compared to the current season's export estimate of 7.73 million bales (1.68 MMT). The 2021/22 production became available in late August and early September 2022, with shipments taking place during the 2022/23 (August 2022 – July 2023) marketing year.

Brazil's cotton exports have had a much better start than the last market year, which began slowly due to reduced purchases from China. For the first four months of the 2022/2023 MY, Brazil cotton exports were 776 thousand tons, 39 percent higher than the same time period in 2021/22. China continues to be the main buyer of Brazilian cotton, comprising 39 percent of their exports thus far this MY. The advance of the harvest, compared to the previous season, is likely to contribute to the improved pace of exports.

#### Figure 9



## Total Volume of Cotton Exported (1.000 tons)

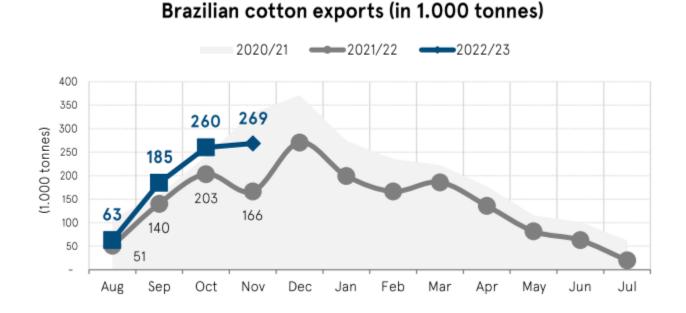


The rise in exports is based on expectations for a significantly better crop in the next growing season. However, a surge in exports may continue to be constrained by slow economic recovery from the coronavirus pandemic, especially in Asia, and global economic challenges caused by the Russia/Ukraine war. With uncertainties about the world economy, along with trade restrictions in China aimed at containing the spread of Covid-19 in the country, USDA estimates reduction in global cotton consumption, which has been negatively affecting prices on the New York Stock Exchange.

In light of these challenges, Brazil has been actively engaged in pursuing markets, conducting foreign trade missions and expanding its footprint in cotton trade. In addition, with the U.S. dollar strong, Brazilian cotton will continue to benefit with export competitiveness from the weak domestic currency.

There have been some recent signs of a further improved situation in 2023. By the third week in December 2022, the world cotton market was moved by positive expectations in view of China 's announcement of easing some Covid-19 controls. Following this announcement, it is hoped that there will be fewer disruptions to work, trade and local productions impacting cotton trade.

#### Figure 10

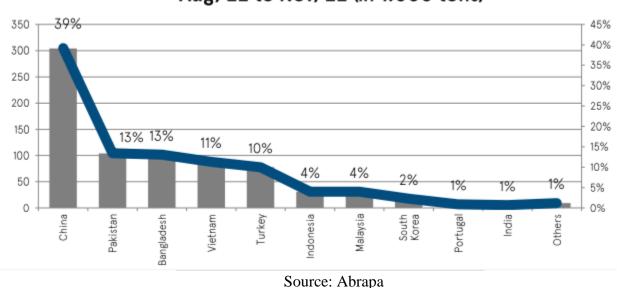


Brazil's production has a strong focus on exports. Brazil is the world's second-largest global cotton exporter and fourth-largest cotton producer. And these increasing productivity gains have been occurring because today most cotton is grown on large rural properties that adopt high levels of technology in their seeds, fertilizers, agrochemicals, and machinery. Most of the production comes from 400 farmers and companies associated with Abrapa, with crop fields spread over 2,200 farms. One of these groups is SLC Agricola, which accounts for 11 percent of all Brazilian cotton production.

## Brazilian Exports Lower than Expected for 2021/22

The expectation for the current market year is more tepid. With Brazil's customs (SECEX) data available through November, Post maintains its export estimate at 7.73 million bales (1.68 million metric tons) for the 2021/2022 marketing year (MY, August 2021-July 2022. This is primarily due to the smaller harvest, which lead to lower available supplies for shipment. In August, decreases in purchases were most evident from Pakistan (50 percent less) and Bangladesh (24.4 percent less).





## Brazilian Cotton Top Export Destinations Aug/22 to Nov/22 (in 1.000 tons)

Despite the current season's lower performance, exports remain well above the levels of the past decade. In 2016/17, for example, Brazil's exports were just above 600 thousand MT, about a third of the current MY volume. In addition, as has been discussed in the price section of this report, the continuation of a strong dollar and weak Real – trading at R\$ 5.3 to the USD in mid-December- is expected to boost sales for whatever remains to be contracted. Compared to the previous MY, the advance of the harvest in the 2022/23 season will contribute to an improved pace of exports.

It is also worth noting the Brazilian cotton supply faces various logistical challenges. Brazil exports more than 95 percent of its cotton out of the port of Santos in Sao Paulo state, with that alone exposing it to potentially huge risks. Although Brazilian ports have operated normally (even above their average pace) during the year so far, future risk of disruptions remains given the continuation of the war in Ukraine and ripple effects for global supply chains.

## Import Volumes Remain Low in 2021/22, 2022/23

Post forecasts cotton imports in 2022/23 to increase slightly to 20,000 bales (4,300 tons), as compared to an estimated 15,000 bales (3,300 tons) imported in 2021/22. The 2022/23 forecast is based on continued trend line imports for Brazil. In 2020/21, imports shrank by about 50 percent from the previous season's imports, due to the coronavirus pandemic which disrupted mill operations in Brazil. In addition, as a result of the devaluation of the Brazilian Real, which reduced by around 40 percent in 2021, cotton imports became significantly more expensive for Brazil.

#### STOCKS

Post is aware that Brazilian stock figures seemingly differ greatly with statistics furnished by other agencies, including, for example, Brazil's official data supplied by the Ministry of Agriculture National Supply Company, CONAB. Please note that all of the USDA official cotton estimates as well as those in this report are based on a standardized August-July MY that applies to all countries worldwide. For example, USDA's MY 2021/22 runs from August 2021 to July 2022. Hence, USDA's beginning/ending stock estimates capture Brazilian stocks mid-harvest on July 31 when they are nearly at their peak. This timing issue accounts for the relatively high stock levels and low volatility in stocks-to-use typically reported by USDA and this report for Brazil. (Please see GAIN report on: Explanation of Brazilian Cotton Stock Estimates for a detailed explanation)

## Production, Supply, and Distribution (PSD) in Bales

Cotton	2020/2021			2021/202	22		2022/202				
Market Begin Year	Aug 2020	ug 2020		Aug 202	C			Aug 2022			
Brazil	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post	USDA Official	Old Post	New Post		
										(Units)	
Area Planted	0	0	0	0	0	0	0	0	0	(1000 HA)	
Area Harvested	1370	136 0	1360	1600	152 0	1630	1600	0	1660	(1000 HA)	
Beginning	14404	125	1440	11119	919	1112	11936	0	1153	1000 480	
Stocks		81	4		4	6			1	lb. Bales	
Production	10820	106	1082	11720	126	1152	13000	0	1330	1000 480	
		80	0		00	0			0	lb. Bales	
Imports	12	10	5	24	12	15	15	0	20	1000 480	
										lb. Bales	
MY Imports	0	0	0	0	0	0	0	0	0	1000 480	
from U.S.										lb. Bales	
Total Supply	25236	232	2522	22863	218	2266	24951	0	2485	1000 480	
	11011	71	9		06	1	0.000	<u>_</u>	1	lb. Bales	
Exports	11014	110	1102	7727	850	7730	8300	0	8700	1000 480	
<b>D</b>	2100	23	3	2200	0	2400	2200	0	2500	lb. Bales	
Domestic Use	3100	305	3080	3200	320	3400	3200	0	3500	1000 480	
т	2	4	0	0	0	0	0	0	0	lb. Bales	
Loss	3	0	0	0	0	0	0	0	0	1000 480	
T ( 1 D	3103	305	2000	2200	320	2400	3200	0	2500	lb. Bales	
Total Dom. Cons.	3103	305 4	3080	3200	320 0	3400	3200	0	3500	1000 480 lb. Bales	
Ending Stocks	11119	4 919	1112	11936	101	1153	13451	0	1265	10. Bales 1000 480	
Ending Stocks	11119	4	6	11930	06	1155	15451	0	1203	1000 480 lb. Bales	
Total	25236	232	2522	22863	218	2266	24951	0	2485	10. Dates	
Distribution	25250	71	9	22005	06	1	24751	U	1	lb. Bales	
Stock to Use	78.78	65.3	78.8	109.23	86.3	103.	116.97	0	103.	(PERCEN	
%		1	9	107.20	8	6			7	T)	
Yield	1720	171 0	1732	1595	180 5	1539	1769	0	1744	(KG/HA)	
TS=TD	0	0	0	0	0	0	0	0	0		

Units: Area: 1000 HA Volume: 1000 480 lb. Bales

Cotton	2020/2021			2021/2022	2		2022/2023			
Market Begin Year	Aug 2020			Aug 2021			Aug 2022			
Brazil	USDA	Old	New	USDA	Old	New	USDA	Old	New	
	Official	Post	Post	Official	Post	Post	Official	Post	Post	
Area Planted	0	0	0	0	0	0	0	0	0	
Area Harvested	1370	1360	1360	1600	1520	1630	1600	0	1660	
Beginning Stocks	3136	2739	3136	2421	2002	2422	2599	0	2511	
Production	2356	2325	2356	2552	2743	2508	2830	0	2896	
Imports	3	2	1	5	3	3	3	0	4	
MY Imports from U.S.	0	0	0	0	0	0	0	0	0	
Total Supply	5494	5067	5493	4978	4748	4934	5432	0	5411	
Exports	2398	2400	2400	1682	1851	1683	1807	0	1894	
Domestic Use	675	665	671	697	697	740	697	0	762	
Loss	1	0	0	0	0	0	0	0	0	
Total Dom. Cons.	676	665	671	697	697	740	697	0	762	
Ending Stocks	2421	2002	2422	2599	2200	2511	2929	0	2754	
Total Distribution	5494	5067	5493	4978	4748	4934	5432	0	5411	
Stock to Use %	78.78	65.3	78.89	109.23	86.3	103.6	116.97	0	103.7	
		1			8					
Yield	1720	1710	377	1595	1805	335	1769	0	380	
TS=TD	0	0	0	0	0	0	0	0	0	

## Production, Supply, and Distribution (PSD) in Metric Tons

Units: Area: 1000 HA Volume: 1000 Metric Tons

#### Attachments:

No Attachments