

Required Report: Required - Public Distribution

Date: October 14, 2022

Report Number: BR2022-0055

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:

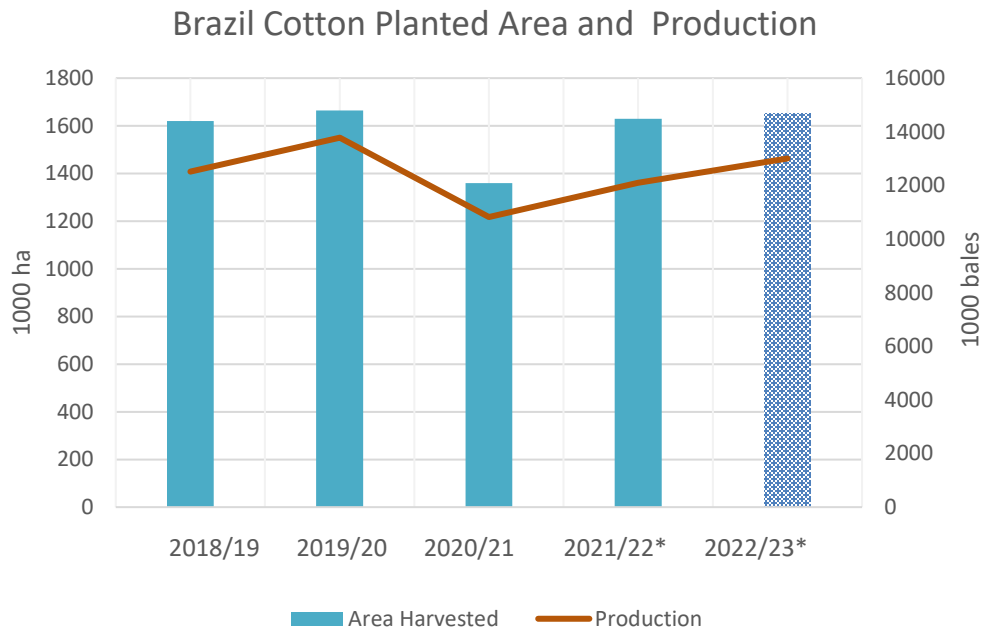
Post forecasts 2022/23 cotton area planted at 1.65 million hectares (ha), an increase of just over one percent from the 1.63 million ha cotton area estimate for 2021/22. Post's forecast is based on expectations that despite challenges, such as rising costs and tightening margins, Brazilian producers are optimistic about the crop's prospects, and eager to continue growing the sector. Production for 2022/23 is forecast at 13 million bales (2.83 million metric tons, MMT), based on improved yields. This would represent a significant increase from the current season production estimate of 12.1 million bales (2.63 MMT), where output was lower than anticipated due to unfavorable weather. Domestic consumption is expected to increase slightly, while exports are forecast to be strong but below the pre-pandemic record. Post forecasts 2022/23 MY exports at 9.2 million bales, up from the current season export estimate of 7.7 million bales. Exports continue to be encouraged by weak domestic currency.

PRODUCTION

Planted area forecast to increase slightly in 2022/23

Post revised its April forecast for 2022/23 cotton area planted to 1.65 million hectares (ha), an increase of just over one percent from the 1.63 million ha cotton area harvested in the current season. Area is expected to continue stabilizing after rapid expansion over the last several years. Less than a decade ago, Brazil planted less than one million ha of cotton. Now, producers are attempting to reach equilibrium through the planted area, as they weigh the benefits of growing cotton with other competitive commodities, as well as tightening profit margins and the increasing cost of production. At the same time, from conversations with the industry, Brazilian producers are optimistic about the crop's prospects and are eager to continue growing the country's status as a top tier cotton producer.

Figure 1



Source: FAS Brazil (* signifies estimate/forecast)

Post anticipates that next season, many growers in Brazil will maintain planted area, and some will increase cotton planting slightly in hopes of recovering from the lower-than expected production in the current season. Producers are investing in the upcoming crop, hoping that yield increases next season would help production rebound from a lower-than expected 2021/22. For 2022/23, Post increased cotton production to 13 million bales (2.83 million metric tons – MMT), which represents more than a 10 percent increase from the 2021/22 estimated production of 12.1 million bales (2.63 MMT). Regarding 2021/22, the estimate was lowered from the previous report due to weather issues that impacted the harvest. Post contacts reported droughts as the reason for a subpar cotton harvest, specifically, lack of

rain in April in Mato Grosso, and then also in Bahia in May. The drought came at a critical time, causing crop losses and negatively impacting the quality of the crop.

For 2022/23, producers are optimistic that the cotton crop will rebound. The yield is forecast at 1,715 kilograms (kg) per hectare, an increase from the 1,616 kg/ ha expected in the current season but still below record. Post yield and production forecasts for 2022/23 are based on expectations of average weather and adequate use of inputs, such as Genetically Engineered (GE) seeds and the use of chemicals and fertilizers. Moreover, Post forecasts that because cotton production continues to be more concentrated among the larger, more capitalized growers, yields are likely to continue improving.

In addition, Post contacts report that despite volatile commodity market prices, overall planting intentions should remain positive. This is because inputs such as fertilizers have already been purchased at a high cost, therefore, producers are going to plant to make use of these supplies. Producers continue to be motivated to plant cotton. Notably, the sector is already set up with the necessary equipment to harvest up to 3 MMT of cotton, as evidenced by the 2019/20 season.

The Post forecast also considers that most large cotton growers in Brazil have profitable alternative crops, and therefore, cotton area is unlikely to see the same degree of expansion as other commodities. In Mato Grosso, Brazil's primary cotton producing state with 70 percent of production, the majority of cotton is grown as a second-season (or *safrinha*) crop. Farmers typically plant early maturing soybean varieties in September-October, with harvest beginning in January. As soybeans are picked from the fields, the cotton goes into the ground for a harvest that will start in April. However, growers may choose to plant second-season corn, instead of cotton. Safrinha corn is similarly planted from January to February, with harvest beginning in June.

In the northeastern state of Bahia, Brazil's second-largest cotton producer, growers typically plant just one crop. In Bahia, farmers choose primarily between cotton and soybeans. While cotton has a greater revenue than soy, Bahian producers must also take into account that cotton has over double the cost of production. Given the continuation of favorable soybean prices, lower costs of production, and expected high profitability for the crop in 2022/23, there is a strong incentive for farmers to favor the soybean crop with regard to expanding planted area. (For more discussion on Brazil's soybean outlook see [Brazil Oilseeds May 2022 Update](#)).

Despite only a small increase in planted area, larger growers will continue to reap the rewards of major on-farm investments that have been made in recent years. Producers report having made a variety of substantial investments in equipment (planters, pickers, and ginning capacity) in order to maximize returns on available planting area. New equipment is expensive and specialized. Cotton pickers can cost around \$1 million, and can only be used to pick cotton, while soy and corn machinery is more versatile. In addition, post-harvest, cotton is processed through HVI (High Volume Instruments), expensive and time-intensive testing machines used to measure and grade fiber properties including length, uniformity, fineness, strength, and color. Consequentially, large, well-capitalized producers are

eager to take advantage of their substantial investments. As such, there may be planted area reduction in some areas, but mostly from medium and smaller producers who tend to lease equipment required for cotton production.

Investments are also being made in research and technology. For example, research conducted in partnership with the Brazilian Enterprise for Agricultural Research (EMBRAPA) and Mato Grosso Cotton Institute (IMAMT) found that the adoption of precision agriculture technologies reduces production costs and increases the productivity of cotton.

Brazil’s 2021/22 Cotton Production Estimate Lowered, with Yields Impacted by Rain, then Drought

Post estimates area harvested at 1.63 million hectares (ha) for the 2021/22 season, a 16.6 percent increase from the 2020/21 of 1.36 million ha. Post estimates 2021/22 production at 12.1 million bales (2.63 MMT), based on a 1,616 kg/ha yield. The yield estimate is based on problems of extreme weather, with both drought and excessive rain impacting the crop. Harvest began in July and was nearly complete by the end of September. By mid-September, 98 percent of the crop was harvested, 55 percent was ginned, 39 percent was HVI tested, and 80 percent was sold by farmers. See below Abrapa chart for more detail on the Brazilian cotton crop calendar.

Figure 2

		Brazilian cotton crop calendar													
BRAZILIAN CROP		2022		2023											
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2022 CROP	Ginning														
	HVI Analysis														
	Export/Domestic Market														
2023 CROP	Planting														
	Harvest														
	Ginning														
	HVI Analysis														
	Export/Domestic Market														

Source: Abrapa

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 was more damaged. In general, quality is uneven with great variation between producers.

Due to weather impacts, Post estimates that Mato Grosso's yield this season will be reduced to around 1.6kg/ha. Assuming conditions hold, Mato Grosso's cotton production will likely reach about 9 million bales (1.97 MMT). 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. Production this season is estimated at 2.7 million bales (588 thousand MT), with yields around 1.63 kg/ha. The harvest began in July and was completed by September 20, as mandated by state law.

Figure 3**Cotton Production by State**

Region	2017/18	2018/19	2019/20	2020/21	2021/22
Center-West	142382	198593	220372	169450	206360
Goias	5508	7075	6208	4779	5080
Mato Grosso do Sul	5569	6721	5789	4107	4169
Mato Grosso	131306	184797	208375	160563	197111
Northeast	55514	67466	68594	58368	66754
Bahia	50723	60819	60721	51562	58812
Maranhão	3554	4181	4673	4527	4816
Piaui	1128	2353	2878	1803	2793
North	1250	2642	2683	2210	2109
Rondonia	0	794	1555	1221	1270
Tocantina	427	721	1128	989	839
Southeast	4922	8561	8362	5581	6127
Minas Gerais	4038	6868	6562	4820	4726
Sao Paulo	883	1693	1799	761	1400
South	0	85	130	98	142
Parana	0	85	130	98	142
Total	204068	277348	300140	235707	281492

Source: Conab data, OAA Brasilia chart (Values represent 10 metric tons. Only states with significant cotton production included)

PRODUCTION COST AND PRICES

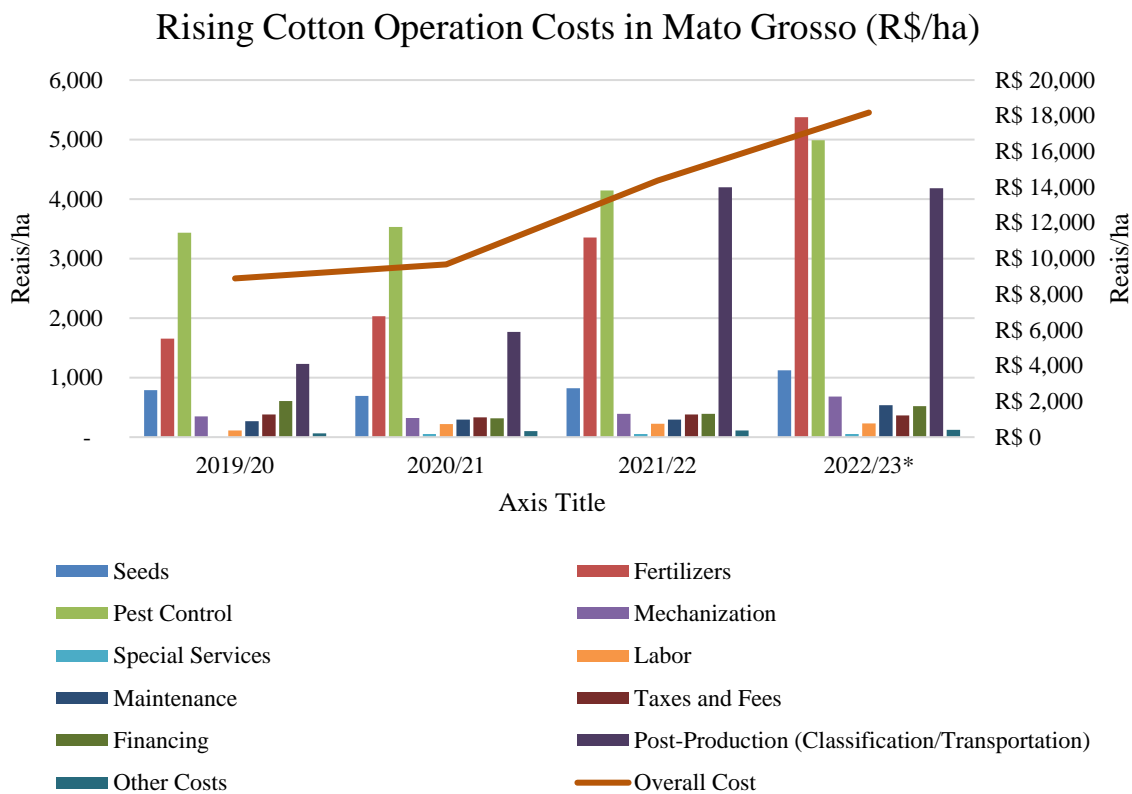
Production costs continue to rise, and farmers search for alternatives to reduce costs Post's industry contacts and official economic data point to a tight-margin crop for cotton farmers this season.

According to the Mato Grosso Institute of Agricultural Economy (IMEA), the overall operating costs for 2021/22 in Mato Grosso increased 48.6 compared to 2020/21.

According to the IMEA, the trend of increasing operating costs will continue into the 2022/23 season, potentially raising another 27.4 percent. The most significant operating costs are expected to be fertilizers, pesticides, and post-harvest operations (classification and transport). IMEA estimates cost increases of 60.4 percent for fertilizers and 20.3 percent for pesticides, due primarily to the devaluation of the Brazilian Real and the continuation of the war in Ukraine, and subsequent supply chain disruptions. In post-harvest operations, a small reduction of 0.4 percent is forecasted for 2022/23, compared to the previous season. It is worth mentioning, however, the post-harvest operation costs increased significantly between the 2020/21 and 2021/22 seasons, rising from R\$1,767 to R\$4,198 / hectare.

Although the initial fear among farmers was reduced availability of fertilizers for the 2022/23 crop, the current concern is elevated prices. Brazil is managing to increase fertilizer imports, despite the war in Ukraine. However, fertilizer prices have been rising. According to data from the Brazilian Ministry of Economy, Foreign Trade Secretariat (Comexstat), fertilizer deliveries to Brazil from January to July 2022 increased 12.2 percent compared to last year. In June 2022, Brazil imported 4.15 million tons and in July, 4.3 million tons. These numbers reflect the precautionary position of Brazilian farmers, including cotton producers, to increase fertilizer imports to avoid risk of possible shortages that may result from the ongoing war in Ukraine.

Figure 4



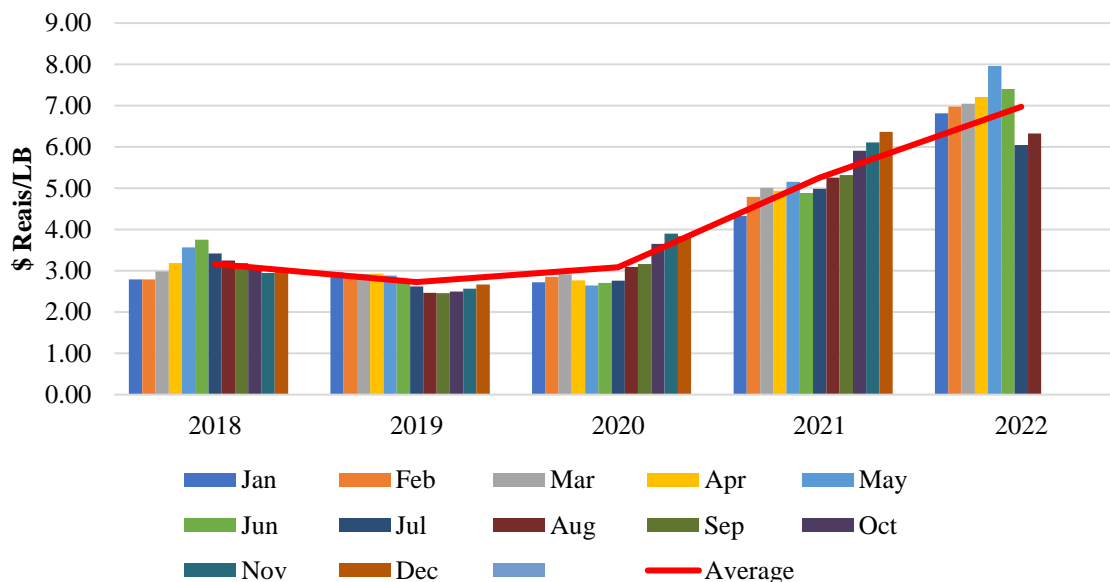
Source: FAS chart, IMEA data

Operating costs in Mato Grosso for the 2022/23 crop are estimated at R\$18,181 / hectare, against R\$14,363 and R\$9,667 in previous seasons, pushing the break-even point to increase as well.

These significant cost increases are accelerating the adoption of agronomic practices, as producers are making efforts to reduce costs. Examples of these kinds of practices includes adoption of biological inputs to improve soil fertility and the concomitant use of pesticides and biopesticides. ABRAPA, the Brazilian Cotton Association, as well as other producers’ association, have put pressure on Brazilian congressmen to regulate the on-farm production of bioinputs. Discussions are currently taking place between Brazilian agricultural producers, industry, and government agencies. ATO Sao Paulo provides more detail on these discussion in a GAIN report that can be accessed via this [link](#).

Figure 5

Cotton Price Monthly/Yearly Averages



According to Post contacts, cotton trading has been slow so far in 2022, and as a result prices have been falling. In fact, of all the main agricultural commodities that Brazil exports, none has depreciated more than cotton in 2022. From January to August, contracts traded on the New York Stock Exchange dropped 13 percent. For many analysts, this sharp decline reflects the market's reading that cotton could be severely impacted if the global economy enters a recession. According to the International Cotton Advisory Council (ICAC), world cotton consumption in 2022/23 is expected to remain about the same as the previous season. According to the Brazilian Association of Cotton Producers (Abrapa), recent price volatility has hampered the commercialization of cotton. The University of Sao Paulo's Center for Advanced Studies in Applied Economics (CEPEA/ESALQ/USP) reports that due to this devaluation, some sellers and trading companies are being more flexible in the negotiation prices. Meanwhile, cotton growers are focused on the delivery of fixed-term contracts over of spot sales.

Figure 6



Source: Trading Economics

As the costs of production continue to rise dramatically, the break-even point for producers is also increasing. Facing narrowing profit margins, producers are optimistic that in the coming year, prices will once again go up and justify the high expense of planting cotton.

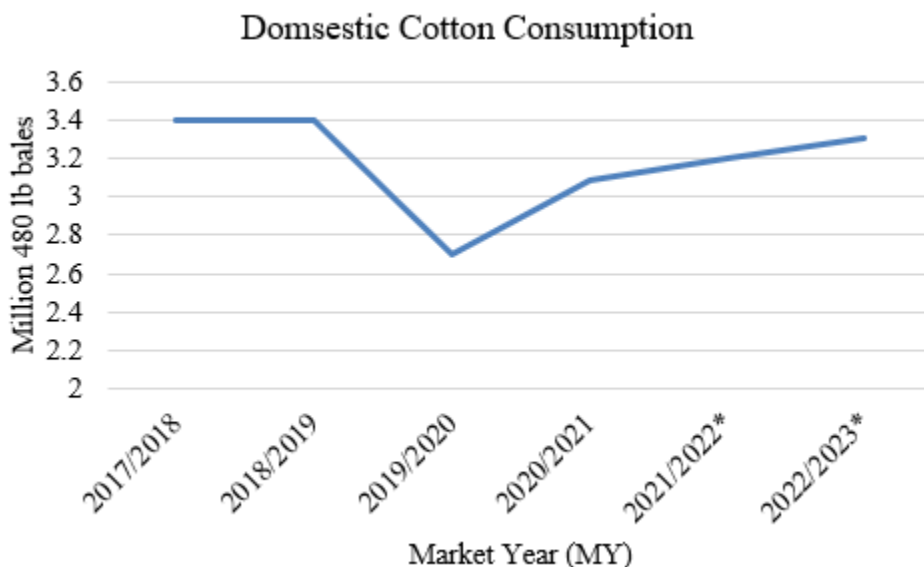
CONSUMPTION

Domestic Consumption to Increase Slightly, but Hampered by Inflation

Post maintains the forecast for Brazil's domestic cotton consumption at 3.3 million bales for 2022/23 (718 thousand MT), as compared to the estimated 3.1 million bales (675 thousand MT) of domestic consumption for the current MY. The Post forecast and estimate are based on trends in domestic consumption, and the economic situation described above. The coming season's slight uptick in consumption will be similar to the last several seasons, when the Brazilian cotton processing industry purchased, on average, about 3.2 million bales (697,000 MT). Domestic cotton consumption is expected to continue recovering from adverse effects from the COVID-19 pandemic but will likely be negatively impacted by inflation. Internal market has been slow for the last five years and worsened during the

pandemic. In addition, Post contacts report that as the local market runs with Real and not dollar, they are more focused on the export market.

Figure 7



Source: USDA

Note: 2021/22* and 2022/23* reflect Post estimate and forecast

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 Fell in 2021/22, but Expected to Rebound in 2022/23

Post forecasts 2022/23 MY (August 2021- July 2022) exports at 9.2 million bales (2 MMT), an increase from the current season export estimate of 7.7 million bales (1.68 MMT). The rise in exports is based on expectations for a significantly better crop in the next growing season. However, a surge in exports will be constrained by slow economic recovery from the coronavirus pandemic and economic challenges caused by the Russia/Ukraine war. 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.

Figure 8



Source: Abrapa

In the primary cotton-producing state, Mato Grosso, the main importers are China with 27 percent, and Bangladesh with 16 percent. For 2022/23, Post interlockers expect Mato Grosso's exports to reach 1.47 million tons, due to the forecast for increased production for this harvest in relation to the current year.

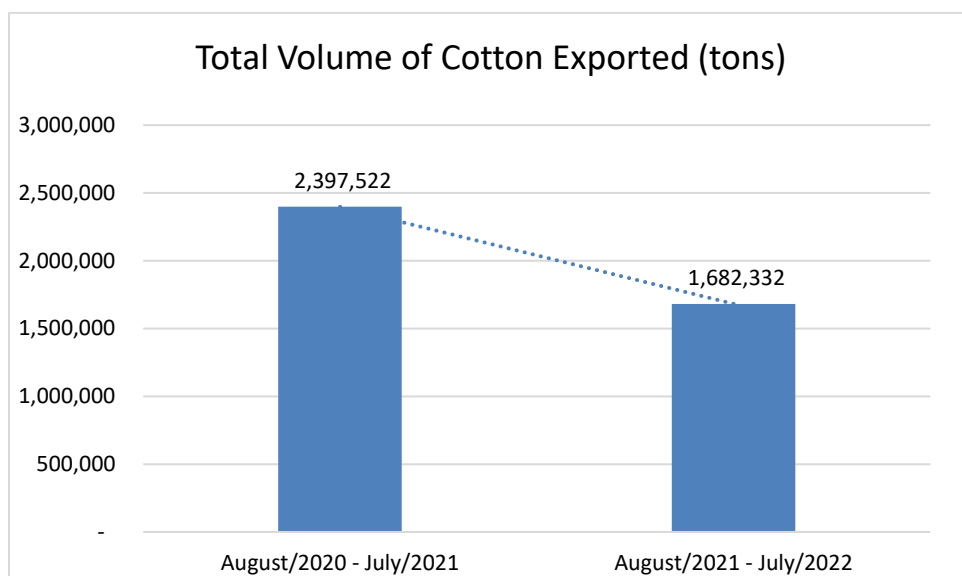
Despite the challenges outlined above, Post contacts report expectations for sales to increase in 2022/23, with China, Vietnam and Turkey as three of the primary buyers. Traders have been selling more cotton than initially anticipated, in fact. As mentioned earlier in the report, much of the 2022/23 crop that has yet to be planted has already been sold.

Brazil Exports Lower than Expected in 2021/22

Post estimates exports at 7.7 million bales (1.68 MMT) 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).

Despite the current season’s low 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\$ 5.19 to the USD at the beginning of October- is expected to boost sales for whatever remains to be contracted.

Figure 9

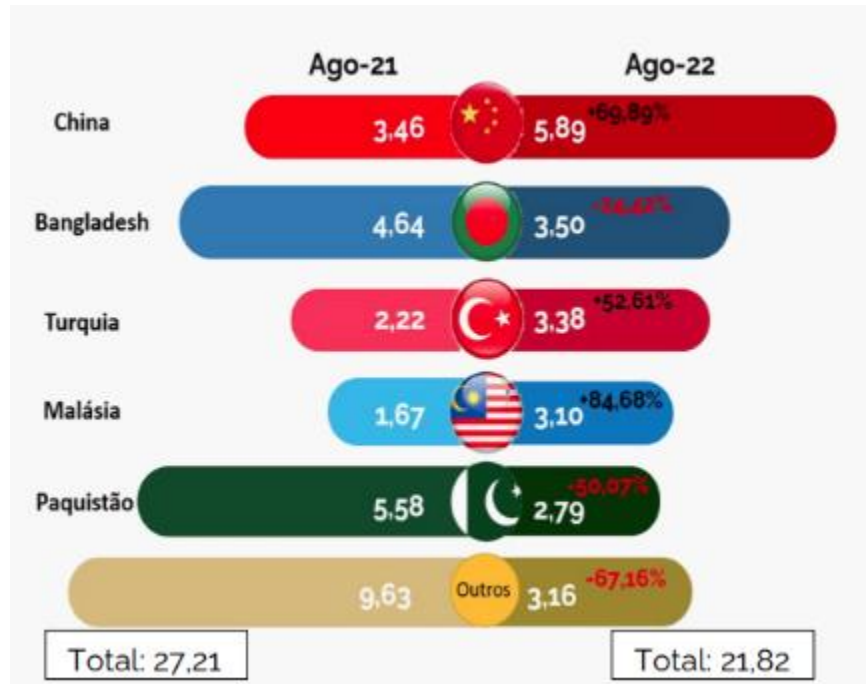


Source: Abrapa data, FAS Brazil chart

In August 2022, the volume of cotton exported by Mato Grosso was 19.8 percent lower compared to the last year. According to Imea (Instituto Mato Grosso De Economia Agropecuária), Mato Grosso shipped 21,820 tons of cotton, representing only 34.75 percent of Brazilian exports.

Figure 10

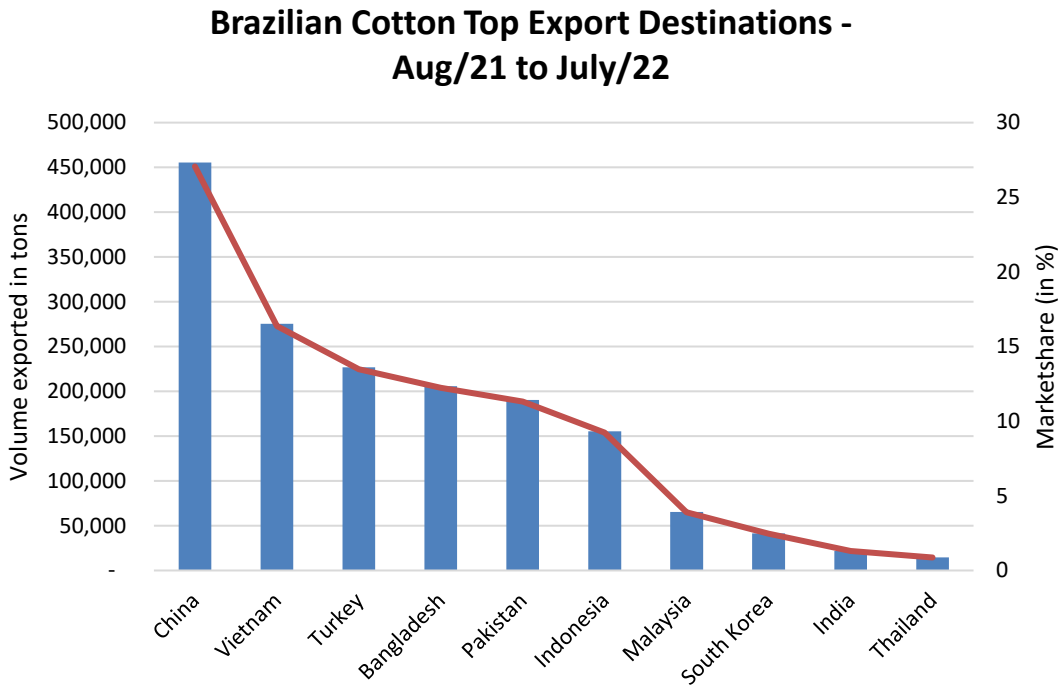
Exports of Cotton from Mato Grosso (in 1000 tons)



Source: Imea

In the last several seasons, China has remained as the main buyer of Brazilian cotton exports, consistently accounting for approximately 30 percent of total sales. This pattern has held despite the market volatility associated with the pandemic and the Russia-Ukraine war. In 2021/22, Brazil exported over 450 thousand MT to the Chinese market. This represents almost double the volume of Brazil's next biggest buyer, Vietnam.

Figure 11



Source: Abrapa data, FAS Brazil chart (bars are volume, line is market share)

STOCKS

Post forecasts 2022/2023 stocks at 12.9 million bales (2.8 million MT), an increase from the estimate of 12.5 million bales (2.72 million MT) for 2021/2022, due to the expected increase in production. Post is aware that Brazilian stock figures seemingly differ greatly from statistics furnished by other agencies, including, for example, Brazil's official data supplied by 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		2021/2022		2022/2023	
Market Year Begins	Aug 2020		Aug 2021		Aug 2022	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	0	0	0	0	0	0
Area Harvested (1000 HA)	1370	1360	1600	1630	1600	1650
Beginning Stocks 1000 480 lb. Bales	14404	14404	11119	11126	11716	12451
Production 1000 480 lb. Bales	10820	10820	11500	12100	13000	13000
Imports 1000 480 lb. Bales	12	5	24	25	15	30
Total Supply 1000 480 lb. Bales	25236	25229	22643	23251	24731	25481
Exports 1000 480 lb. Bales	11014	11023	7727	7700	8600	9200
Domestic Use 1000 480 lb. Bales	3100	3080	3200	3100	3200	3300
Loss 1000 480 lb. Bales	3	0	0	0	0	0
Total Dom. Cons. 1000 480 lb. Bales	3103	3080	3200	3100	3200	3300
Ending Stocks 1000 480 lb. Bales	11119	11126	11716	12451	12931	12981
Total Distribution 1000 480 lb. Bales	25236	25229	22643	23251	24731	25481
Stock to Use % (PERCENT)	78.78	78.89	107.22	115.29	109.58	103.85
Yield (KG/HA)	1720	1732	1565	1616	1769	1715
(1000 HA) ,1000 480 lb. Bales ,(PERCENT) ,(KG/HA)						

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

Cotton	2020/2021		2021/2022		2022/2023	
Market Year Begins	Aug-20		Aug-21		Aug-22	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	0	0	0	0	0	0
Area Harvested (1000 HA)	1370	1360	1600	1630	1600	1650
Beginning Stocks 1000 480 lb. Bales	3136	3136	2421	2422	2551	2711
Production 1000 480 lb. Bales	2356	2356	2504	2634	2830	2830
Imports 1000 480 lb. Bales	3	1	5	5	3	7
Total Supply 1000 480 lb. Bales	5494	5493	4930	5062	5384	5548
Exports 1000 480 lb. Bales	2398	2400	1682	1676	1872	2003
Domestic Use 1000 480 lb. Bales	675	671	697	675	697	718
Loss 1000 480 lb. Bales	1	0	0	0	0	0
Total Dom. Cons. 1000 480 lb. Bales	676	671	697	675	697	718
Ending Stocks 1000 480 lb. Bales	2421	2422	2551	2711	2815	2826
Total Distribution 1000 480 lb. Bales	5494	5493	4930	5062	5384	5548
Stock to Use % (PERCENT)	78.78	78.89	107.22	115.29	109.58	103.85
Yield (KG/HA)	1720	1732	1565	1616	1769	1715
(1000 HA) ,1000 480 lb. Bales ,(PERCENT) ,(KG/HA)						

Attachments:

No Attachments

Attachments:

No Attachments