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Report Highlights:

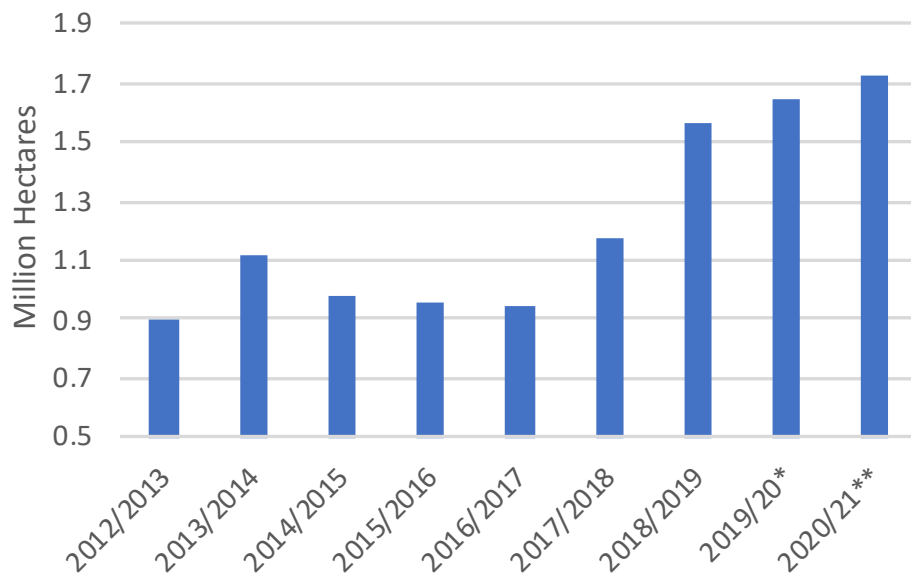
Post forecasts cotton planted area at 1.7 million hectares in the 2020/21 marketing year (MY), up from 1.68 million hectares in 2019/20 MY. Production is forecast to increase to 13.5 million bales, from 13 million bales in the current season. The forecast for marginal expansion breaks sharply with explosive growth recorded by the sector in the last five years; in 2015/16 season farmers produced under 6 million bales on less than 1 million hectares of planted area. Exports are forecast to contract to 8.5 million bales in 2020/21, from 8.9 million bales in 2019/20. The contraction is forecast on falling global demand due to global economic deceleration on the back of the unfolding coronavirus pandemic currently circling the globe. Domestic consumption is also forecast to decrease for the same reason, to 3.2 million bales in 2020/21, from 3.3 million bales in the current season.

PRODUCTION

Outlook 2020/21: Growth in Area Harvested Subsides

Post forecasts 2020/21 cotton area harvested to increase only marginally next season to 1.7 million hectares. The forecast 1.5 percent expansion breaks sharply with the explosive growth trend that emerged over the last five seasons, when planted area expanded by more than 71 percent – from 975 thousand hectares in 2014/15 to an estimated 1.68 million hectares in 2019/20.

Cotton Planted Area in Brazil



Source: FAS PSD, 2019/20* and 2020/21** Post estimate and forecast

Post believes that in the last several seasons planted area growth was driven by availability of ample arable land in key growing states, equipment capacity, and rising global cotton consumption, which, in turn spurred global prices. Looking forward to the 2020/ 21 season, Post expects that producers will be hesitant to expand planted cotton area in a substantial way for the reasons below:

Maxed out Equipment to Land Ratio: Based on conversations with producers, Post believes that farmers are close to a point of maximizing economies of scale with existing equipment and arable land that is easily available. Numerous interlocutors have pointed out that rapid expansion seen in the last five years was fueled by costly investment in equipment. Now, planted area to equipment ratio has reached an optimal balance. Given the expense of acquiring new machinery – cotton pickers run upward of \$1 million – producers would have to expect substantial expansion in consumption demand as well as strong commodity prices in order to make the decision to invest.

Bleak Market Outlook: The market anticipates that global cotton demand will be lower in the next season on account of the novel coronavirus pandemic that has since spread around the world. Due to the

pandemic-associated global economic deceleration, as well as large scale expected supply chain disruptions over shuttering of factories and impaired port operations around the globe, demand for cotton is expected to dip not only in China, but across all markets in Asia. Traditional importing countries, such as Vietnam, which exports spun yarn and textiles to China, as well as other countries affected by the virus - Taiwan, South Korea, and Japan – are expected to scale back purchases. Global consumer demand for garments and apparel and mills’ demand for textiles across developed and developing markets is also expected to dip. Although at this point the scale of the pandemic impact is difficult to forecast, industry interlocutors indicate that they are growing increasingly concerned about the potential negative impact on cotton demand.

In addition to the overall dampened expectation for commodity consumption, Brazil will also have to contend with the impact from the U.S.-China Phase One trade deal that was signed in January 2020. China pledged to purchase from the United States at least \$36.5 billion worth of agricultural goods in 2020, and at least \$43.5 billion in 2021, though the publicly released text of the agreement did not disclose specific purchase commitments for any one commodity. In addition, Vice Premier Liu He noted that China would buy U.S. agricultural goods based on “market conditions.” Given the currently volatile market conditions, it remains far from certain just how much cotton China will end up sourcing from the United States this year and next. However, the uncertainty for Brazilian producers that Beijing may increasingly look to the United States to fulfill its cotton orders, is looming large.

Profitability: For the last several seasons, producers had to contend with the rising cost of production. However, according to the Mato Grosso Institute of Agricultural Economics (IMEA), variable production costs in 2020/21 are expected to actually decrease by about six percent for growers in the state. There are a number of factors that are at play. In money spent, the largest decrease in costs is forecast in herbicides, fungicides and insecticides – outlays are expected to decrease by more than R\$ 780 per ha next season. IMEA notes that this is due to the increasing efficiency of inputs, which allows for fewer applications. In addition, global prices for inputs have fallen. Producers can expect transportation costs to drop by more than two thirds, due to several factors including finalization of the paving of BR-163, the main highway in North and Central Mato Grosso used by truckers to bring in inputs and to transport commodities to ports. Another bright spot for producers is a decrease in interest rates by more than 60 percent, on the back of progressive cuts to the SELIC benchmark interest rate, which currently stands at an all-time low of 4.25 percent. At the same time, other costs saw large upward revisions, for example labor costs are forecast to more than double, driven by both higher commodity prices and a weaker Real.

Estimated Production Costs for Cotton in Mato Grosso (Reals per ha)

	2019/20	2020/21	% Change
Variable Cost of Production	8896.08	8344.08	-6.2%
<i>Variable Costs of Production (on Farm)</i>			
fertilizers	1655.64	1980.16	19.6%
herbicides, fungicides, insecticides	3154.64	2374.49	-24.7%
seeds	791.92	610.73	-22.9%
machinery operation	346.74	358.51	3.4%
labor	104.28	252.21	141.9%

Other variable expenses	279.35	486.5	74.2%
<i>Variable Costs of Production (ex Farm)</i>			
Transport	212.82	65.1	-69.4%
Classification, Processing	1015.71	1240.37	22.1%
Taxes and Tariffs	381.02	278.44	-26.9%
Maintenance of machineries and installations	265.29	322.85	21.7%
Admin Costs	94.95	144.33	52.0%
Interest Rates	593.73	230.35	-61.2%
Fixed Costs of Production	192.16	658.78	242.8%
Depreciation	165.25	357.84	116.5%
Other fixed costs	26.91	300.94	1018.3%
Total Operating Costs	9,088.24	9,002.86	-0.9%
Expected returns on Capital	136.76	410.6	200.2%
Land	420.23	419.38	-0.2%
Income Factors	556.99	829.98	49.0%
Total Cost (Operating Cost and Income Factors)	9,645.23	9,832.84	1.9%
*all costs cited in Brazilian Real for the month of March 2020 and projected March 2021. The exchange rate used is R\$4.13 to USD			

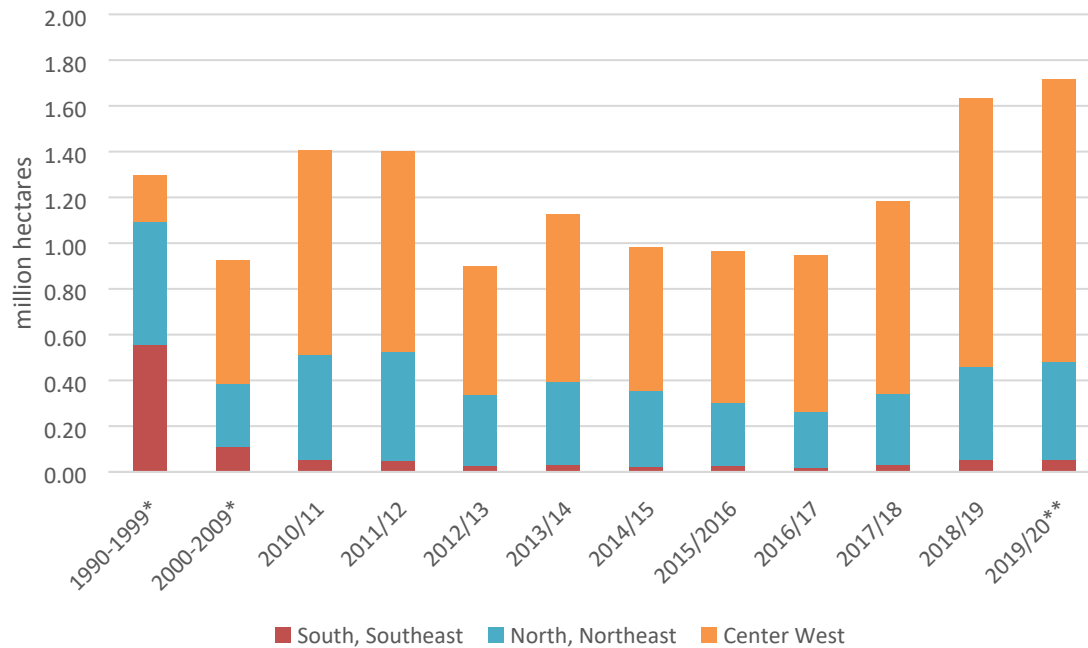
Source: IMEA

At the end of the day, Post expects that the lower cost of production will likely be offset by lower global cotton prices, which have recently tumbled on the pandemic fears. In addition, with petroleum prices also plummeting, prices for manmade, synthetic fibers are expected to decrease and thereby further depress global cotton demand and prices (see price section for more in-depth discussion).

Production Area to Remain Concentrated: Finally, it is worth mentioning that Post does not forecast any major shifts in the main cotton producing regions. Brazil's Center-West state of Mato Grosso and the northeast state of Bahia account for close to 90 percent of all cotton grown in Brazil. The majority of production in Mato Grosso is rain-fed second season (or safrinha) crop, sown in January-March after the harvest of first-season soybeans. In Bahia, producers plant mostly rain-fed, first season cotton during the same time frame.

The remaining 10 percent of meaningful production is split between the northeast region of MATOPI (adjoining states of Maranhao, Piaui, and Tocantins), the Center-West states of Mato Grosso do Sul and Goias, as well as southeast state of Minas Gerais. Interlocutors have indicated to Post that in order for production to move beyond Mato Grosso and Bahia in any meaningful way, the sector and/or the government would have to invest in irrigation, in order to alleviate the crop risk from unpredictable rain patterns. Given the global market uncertainty and dampened expectations for cotton demand, in the foreseeable future this costly investment is unlikely.

Brazil Cotton Production by Region (1990-2020)



Source: CONAB, OAA Brasilia 1990-1999* and 2000-2009* represent 10-year average. 2019/20** represents CONAB area forecast

Outlook 2020/21: Production to Set a New Record

The Post forecast for 2020/21 cotton production is 13.5 million bales, an almost four percent increase from 2019/20 estimated production. The yield is forecast to rise in line with the 10-year average of two percent to 1729 kilograms (kg) per hectare as compared to the previous season.

Post yield and production forecasts for 2020/21 are based on steady yield improvement due to adoption and investment in inputs, such as Genetically Engineered (GE) seeds and use of chemicals and fertilizers.

Technology: Brazil is one of the global leaders in planting of GE crops. Cotton has the highest adoption rate at 95 percent. As of December 2019, Brazil's National Technical Commission of Biosafety (CTNBio) had approved a total of 107 GE events for commercial cultivation, of which 23 are for cotton. Post has spoken with several sources in Mato Grosso and Bahia that indicate that the new GE drought- and pest-resistant seed varieties have significantly improved yields, particularly in problematic seasons with less than favorable weather.

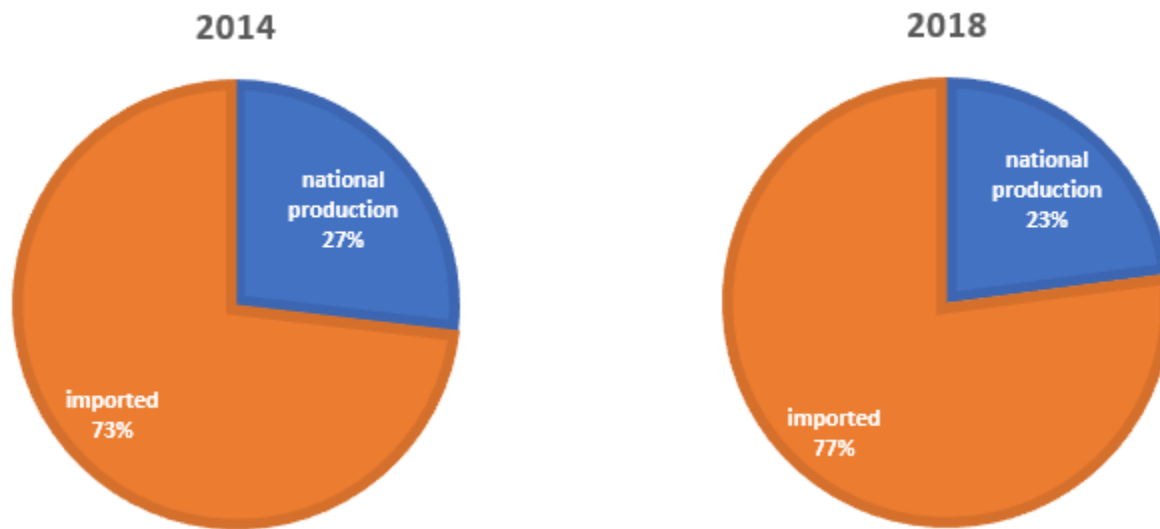
Fertilizer Use: Post forecasts that Brazil's fertilizer demand will grow by about three percent in 2020/2021, in line with trends in recent years. The latest available data from the National Fertilizer Association (ANDA) shows that for the first six months of 2019, the total fertilizer volume supplied to the Brazilian market increased by over seven percent. Post conversations with contacts reveal that

farmers are continuing to increase spending on fertilizers as it becomes more difficult to expand planted area.

Post expects that Brazil will remain heavily dependent on fertilizer imports. Brazil’s fertilizer imports reached over 77 percent of total domestic use in 2018. According to ANDA, fertilizer imports were up 4 percent year-on-year in 2018, in line with the historic five-year average. National fertilizer production for the first half of 2018 was down almost nine percent from the previous year.

Graph 3.

Fertilizer Use in Brazil



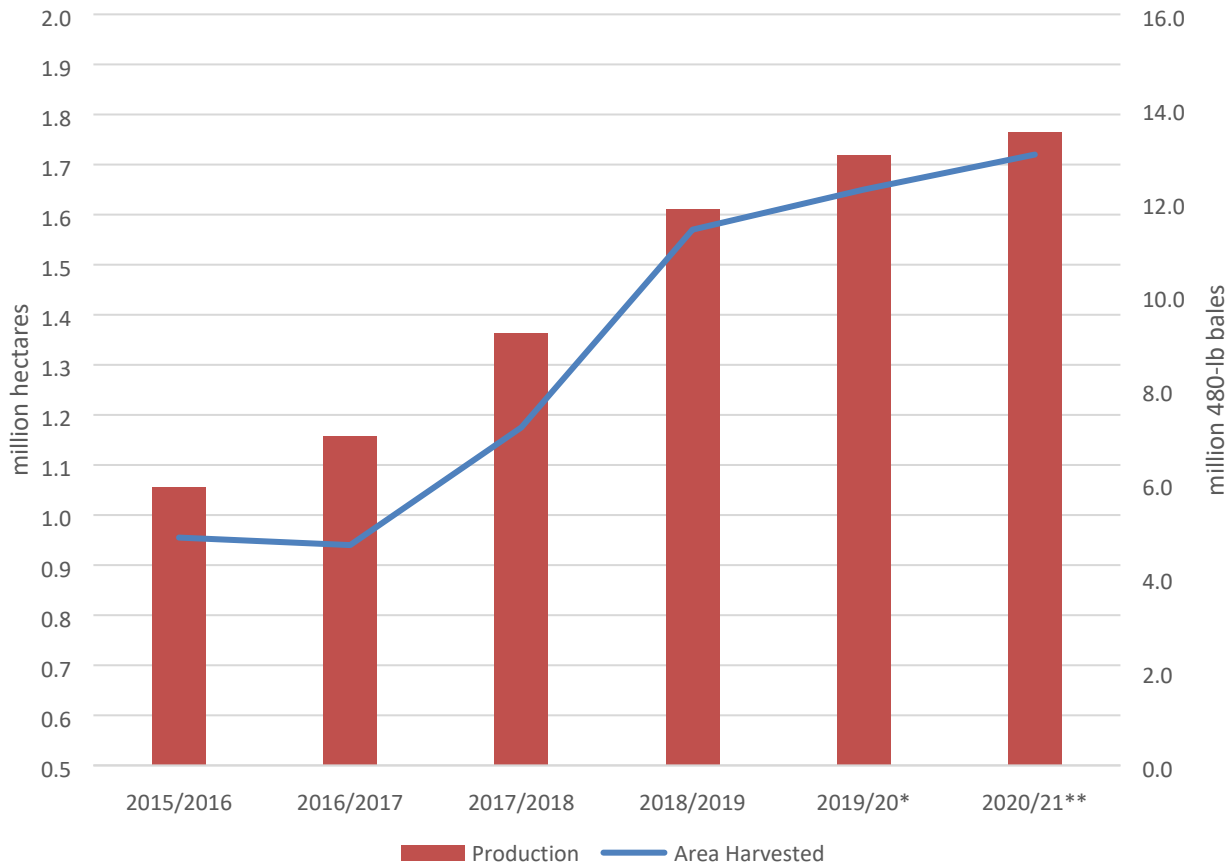
Source: ANDA

Brazil’s 2019/20 Cotton Production Caps Impressive Growth Streak

Post estimates area harvested at 1.675 million hectares (ha) for the 2019/20 season, which is just two percent above last season’s area of 1.64 million ha. Post estimates 2019/20 production at 13.04 million bales (2.84 million metric tons), based on a 1.695 kg/ha yield. The yield estimate is based on the expectation of favorable weather patterns and assumes continuous improvement in technology that maximizes productivity.

Although continued investments in technology and fertilizers has improved yields, the substantial area expansion over the last five years has been the key factor that propelled the substantial increase in production volumes – from just under six million bales in the 2015/16 season to more than 13 million bales estimated for the current 2019/20 MY.

Planted Area and Production Gains



Source: FAS, PSD. Note that numbers for 2019/20* and 2020/21** are Post estimates and forecasts.

Looking at the state-by-state breakdown, in 2019/20, the producers in Mato Grosso planted more than 1.15 million hectares. Producers in the state completed sowing 99.95 percent of safrinha cotton by February 15 –within the ideal planting time frame. The rate is almost identical to last season, when producers had sowed 99.91 percent of the cotton crop, and above the five-year average which is 97.93 percent. Overall, assuming typical weather patterns and slightly decreased yields owing to the new areas being put into production, Mato Grosso is well on track for cotton production to reach over 9 million bales (1.975 million tons).

As of mid-March, producers in Bahia have also finished sowing all of the planned hectares for the 2019/20 season. Post estimates area planted in the state to decrease by about five percent to 315 thousand hectares, down from 331 thousand hectares in the previous season, due to falling international cotton prices starting in the second half of 2019 when farmers were making their planting decisions. Unlike Mato Grosso, producers in Bahia do not have the option to sow second-season cotton. Most producers sow either (1) first-season cotton followed by a cover crop; or (2) first-season soybeans followed by corn or a cover crop. Production this season is estimated at over 2.5 million bales (550 thousand mt). The estimate may be revised up if favorable weather continues to hold in April and May ahead of the harvest in June. Producers in the state have told Post that so far, cotton crops are in excellent condition and that they may see yields on the upside.

Area and Production Forecast by State for 2019/20

	Planted Area (1000 HA)	Percent of Total Area Planted	Production (MT)	Percent of Total Production
Total	1,675	---	2,839	---
Mato Grosso	1,152	69%	1,975	70%
Bahia	315	19%	550	19%
Goias	43	3%	72	3%
Mato Grosso Do Sul	34	2%	59	2%
Minas Gerais	39	2%	65	2%
Maranhao	27	2%	42	1%
Piaui	20	1%	32	1%
Others	45	4%	44	2%

Source: Post Brasília Forecast

PRICES

Exchange Rate Key for Brazilian Commodity Prices

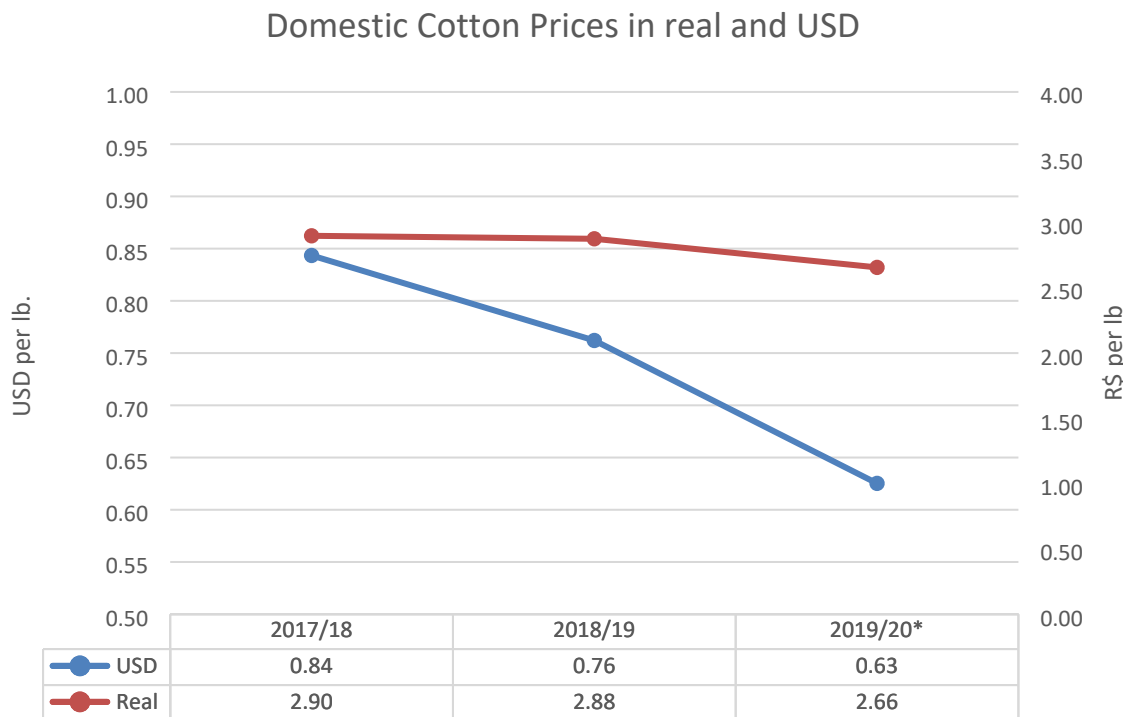
Global cotton prices have been under pressure since the second half of 2018 due in part to concerns of large stocks worldwide and lower consumption. Downward pressure on cotton prices was compounded by market concerns over uncertainty stemming from the U.S.- China trade dispute. Although China has pledged to increase its overall agricultural purchases from the United States this year and next, there has been no clarity on just how much cotton it will buy under the terms of the agreement. As a result, cotton prices in New York actually skidded lower on the news of the agreement.

Cotton prices saw another negative shock in the first quarter of 2020 with the coronavirus pandemic spreading around the globe, grinding factory production to a halt, interrupting operations up and down the supply chain, and impeding trade flows with reduced operations at ports.

The impact of these events has been reflected on the cotton price index in New York and mirrored in Brazilian cotton prices. According to the price index from the University of Sao Paulo's Superior Agricultural School Research Center (CEPEA/ESALQ), Brazil's cotton prices in U.S. dollars (USD) saw almost a 10 percent drop to 76 US cents / pound (lb) in 2018/19, from a banner 2017/18 marketing year, when the average price was over 84 US cents /lb. The USD denominated cotton price plummeted a further 17 percent to an average of 63 US cents /lb in the first 7 months of the current marketing year (Aug 2019-July 2020).

Despite these fluctuations in global prices, as the graph below shows, Brazilian farmers are not experiencing the same level of turbulence thanks to the exchange rate. The sharp devaluation of the Brazilian currency, the Real (R\$), especially over the course of the first three months of this year, has

helped to inoculate Brazilian domestic cotton prices to a degree. Domestic prices remained nearly stagnant between 2017/18 and 2018/19 at R\$ 2.90 per lb and R\$ 2.88 per lb in the two MYs respectively. The average domestic price in Reais is down about 7.6 percent in the first seven months of the current season to R\$ 2.66 per lb, as compared to R\$2.88 last MY. Although the impact on Real price is notable, the dollar prices have declined much more steeply, falling close to 10 percent from 2017/18 to 2018/19, and then 17 percent in the first seven months of the current MY.



Source: CEPEA/ESALQ price data tracking 41-4 type of cotton, delivered to Sao Paulo

CONSUMPTION

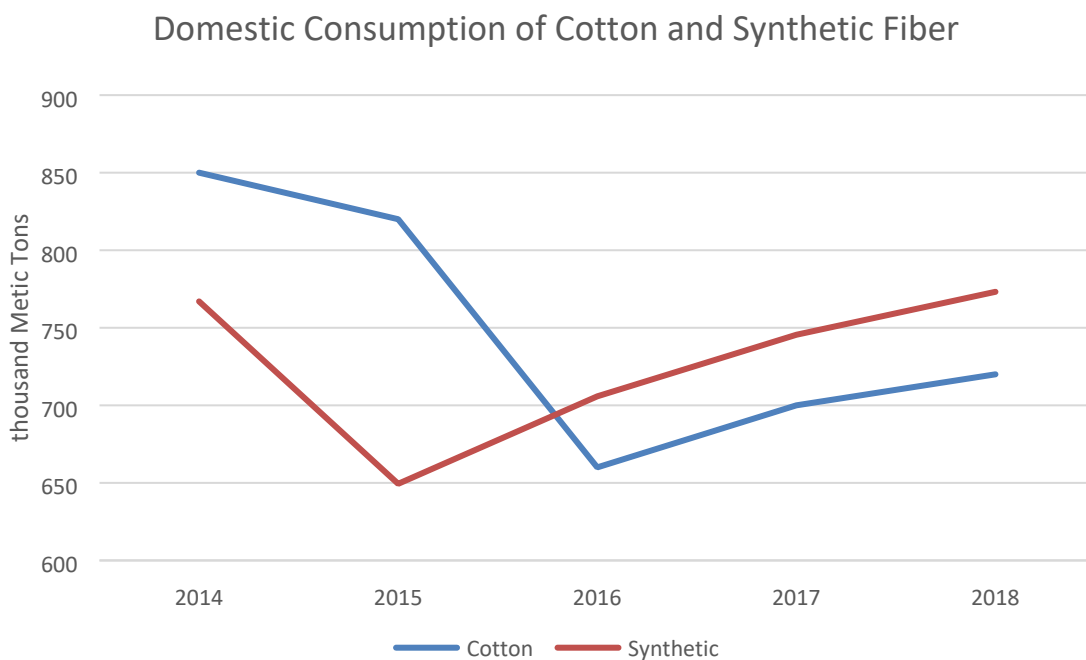
Domestic Consumption to Shrink in Both Seasons

Post forecasts Brazil’s domestic cotton consumption at 3.2 million bales for 2020/21 (697 thousand metric tons (mt), a decline of 100 thousand bales on the estimate for the current MY. The negative forecast is based on the expected recession this year and possibly slow economic growth next year, as well as possible negative investor sentiment over the long economic recovery, ballooning deficit, and uncertainty on whether the government would be able to continue structural reforms. Post’s domestic consumption forecast may be further revised downward if the economy continues to decline. The third week of March 2020, the government revised the official GDP outlook to zero percent growth for this year.

Post revised its 2019/20 estimate for domestic cotton consumption down by 200 thousand bales to 3.3 million bales (718 thousand mt). In addition to accounting for the deteriorating economic situation due

to the coronavirus pandemic, the estimate takes into account the recent steep fall in oil prices. As a result of this price decline, cotton will face stiffer competition from synthetic, petroleum-based materials.

The forecasted fall in domestic consumption reinforces the long existing trend of declining internal cotton demand, registering on average, a three percent annual drop in the last five years, and a two percent average annual decrease over the last ten years. Brazil's Textile Association (ABIT) data shows that in last five years, cumulative domestic cotton consumption is down more than 15 percent to 720 thousand mt in 2018, from 850 thousand mt in 2014. Meanwhile, consumption of synthetic fibers is up to 773 thousand mt from 767 thousand mt in the same time frame.



Source: ABIT

According to Brazil's Textile Association (ABIT), Brazil's textile industry has struggled with rising costs, difficult logistics, and consumers' preferences, which have been shifting in favor of imported items. For 2019, ABIT's preliminary data indicates that the domestic textile and clothing sector will grow around 2.3 percent. However, in the next two years, the industry is expected to face pressure from rising costs of dollarized inputs, as well as a possibility of economic recession.

TRADE

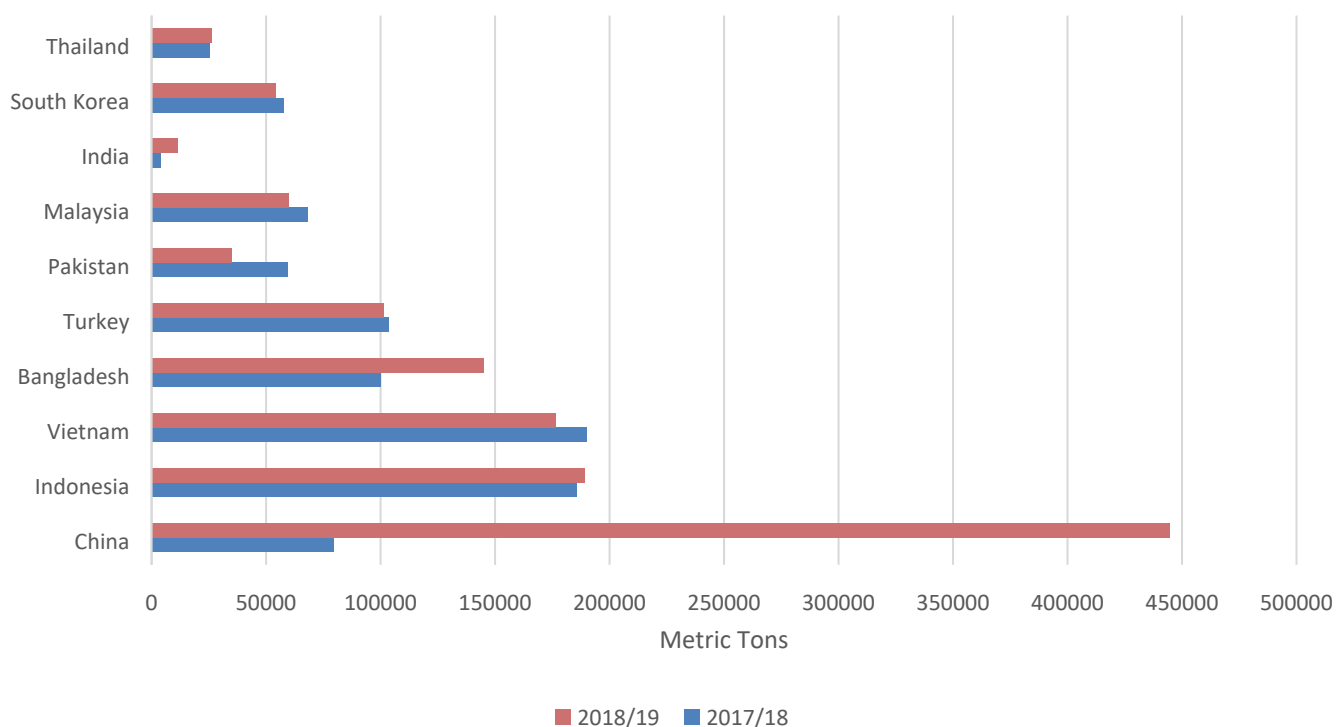
Exports to Dip in 2020/21

Post forecasts cotton exports for the 2020/21 MY (August 2020- July 2021) to decrease to 8.5 million bales (1.85 MMT), as compared to the current season export estimate of 8.9 million bales. The 4.5 percent decline is based on the expected slump in the global economy following the unfolding coronavirus pandemic. Although the worst of the disruption witnessed to factories, ports, and logistic

hubs may be over by the second half of 2020, the global economy and therefore consumer demand will likely continue to slump. Post expects that the aftershocks of the pandemic will be acutely felt by multiple industries, including cotton and textiles, well into 2021.

In addition, Post expects that due to the U.S.-China trade deal, Beijing will source more cotton from the United States, and invariably that will come at the expense of Brazilian exports. (See discussion in first section of the report). Yet, despite the leveling off in demand, Post anticipates that the majority of Brazil’s cotton exports will continue to be destined for Asia in 2020/21.

Brazil's Major Export Markets: 2017/18 & 2018/19



Data Source: Foreign Trade Secretariat, SECEX

Brazil to Export Record Volume in 2019/20

Post revised its export estimate by 100 thousand bales to 8.9 million bales (1.94 million metric tons) for the 2019/2020 marketing year (MY, August 2019-July 2020). The estimated 50 percent annual export increase is based on the fact that more than 80 percent of the 2019/20 crop has been commercialized. In addition, as has been discussed in the price section of this report, an exceptionally weak Real – trading at R\$ 5.12 to USD in mid-March as compared to R\$ 3.9 to USD same time last year - is expected to boost sales for whatever remains to be contracted.

Despite the optimistic outlook, there are several downside risks for Post’s export estimate. First, with China’s economy reeling from the coronavirus pandemic, its cotton demand in the next several months

is still a wildcard and may negatively affect shipments from Brazil toward the end of the season. Second, with a crash in oil prices, the demand for cotton fiber may see a dip in the next few months.

Finally, there is a risk of disruption of logistics at the Port of Santos, which ships 95 percent of Brazil's cotton exports. Santos was already grappling with excess capacity in February due to strong demand, harvest delays, and excessive rainfall. Then, on March 18, local media reported that dock workers were organizing a two-week strike to protest lack of protection and precaution measures against the spread of coronavirus at the port. The agricultural industry quickly appealed to the government to step in, and a hastily arranged agreement pledged to ensure that the port will stay open while operators will step up policies to protect the health of all personnel involved in port activities. Despite the apparent resolution, if the virus strikes the port workforce, there is significant potential for reduced operations and capacity, if not outright shuttering of exports.

Notably, even if Brazil were to not export any more cotton at all this marketing year, the export volume for the first 7 months of this season – 7 million bales (1.5 mmt) - has already surpassed the total volume of 6 million bales (1.3 mmt) shipped in 2018/19.

In terms of cotton export destinations, China is set to remain the main buyer of Brazilian cotton, followed by a cluster of consumers in Asia. In the last marketing season, China emerged as the dominant buyer of Brazil's cotton, importing twice as much as Brazil's next biggest buyer. As such, although China's demand is expected to slow, Post anticipates that China will continue to be the largest buyer. Notably, so far this marketing season, China imported over 515 thousand mt of cotton from Brazil, which is more than twice as much as Brazil's second biggest buyer, Vietnam at over 216 thousand mt.

Brazilian Cotton Exports (in metric tons)

Partner	2017/18	2018/19	% change 2018/19	Aug-Feb 2018/19	Aug-Feb 2019/20	% change Aug 2019/20
World	908,932	1,310,376	44%	937,739	1,511,339	63%
China	79,512	444,884	460%	354,614	515,446	125%
Vietnam	189,945	176,504	-7%	135,265	216,489	22%
Bangladesh	100,224	145,189	45%	100,040	172,787	45%
Pakistan	59,663	35,276	-41%	29,155	172,429	144%
Indonesia	185,624	189,142	2%	111,724	139,480	0%
Turkey	103,528	101,580	-2%	47,368	118,348	251%
Malaysia	68,379	59,773	-13%	40,144	66,883	232%
India	3,996	11,686	192%	2,827	31,473	1767%
South Korea	57,950	54,466	-6%	43,418	31,452	-23%
Thailand	25,595	26,454	3%	19,774	18,774	-16%

Source: Foreign Trade Secretariat, SECEX

Post estimates that cotton imports will be at 15 thousand bales in 2020/21, a decrease on the 20 thousand bales in 2019/20. Although Brazil produces ample cotton supplies, the textile industry sometimes sources imports just before and during the main harvest months of June through August. That said, Post expects demand for cotton imports to be dampened because of the weak Real, which will make cotton imports more expensive than domestic supplies. In addition, prices for synthetic fibers are expected to fall commensurate with the oil price decline, further depressing cotton import demand.

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 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 2019/20 runs from August 2019 to July 2020. 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.

As the main harvest takes place in June, July, and August, stocks build dramatically and then outpace domestic consumption and exports. Part of the reason for the inevitable buildup of USDA reported stocks is the structural delay between harvest and the shipment of exports. Ginning, consolidating, and transport to ports delays exports of the new crop cotton and exports do not start in earnest until August, which according to the USDA MY, falls into the next crop reporting season.

Cotton PSD in Bales

Cotton	2018/2019		2019/2020		2020/2021	
Market Begin Year	Aug 2018		Aug 2019		Aug 2020	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	1640	1640	1700	1675	0	1700
Beginning Stocks	8657	8657	12256	12256	0	13116
Production	13000	13000	13000	13040	0	13500
Imports	17	17	25	20	0	15
MY Imports from U.S.	0	0	0	0	0	0
Total Supply	21674	21674	25281	25316	0	26631
Exports	6018	6018	8800	8900	0	8500
Use	3400	3400	3400	3300	0	3200
Loss	0	0	0	0	0	0
Total Dom. Cons.	3400	3400	3400	3300	0	3200
Ending Stocks	12256	12256	13081	13116	0	14931
Total Distribution	21674	21674	25281	25316	0	26631
Stock to Use %	130.13	130.13	107.22	107.51	0	122.89
Yield	1726	1726	1665	1695	0	1729

(1000 HA), (480 lb. Bales), (PERCENT), (KG/HA)

Cotton PSD in 1,000 Tons

Cotton	2018/2019		2019/2020		2020/2021	
Market Begin Year	Aug 2018		Aug 2019		Aug 2020	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	1640	1640	1700	1675	0	1700
Beginning Stocks	1885	1885	2668	2668	0	2856
Production	2830	2830	2830	2839	0	2939
Imports	4	4	5	4	0	3
MY Imports from U.S.	0	0	0	0	0	0
Total Supply	4719	4719	5504	5512	0	5798
Exports	1310	1310	1916	1938	0	1851
Use	740	740	740	718	0	697
Loss	0	0	0	0	0	0
Total Dom. Cons.	740	740	740	718	0	697
Ending Stocks	2668	2668	2848	2856	0	3251
Total Distribution	107.15	109.15	110.15	112.15	113.15	115.15
Stock to Use %	130.13	130.13	107.22	107.51	0	122.89
Yield	1726	1726	1665	1695	0	1729

(1000 HA), (1,000 tons), (PERCENT), (KG/HA)

Attachments:

No Attachments