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Global Agricultural Information Network

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POLICY

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Brazil

Cotton and Products Annual

Brazil to Cement its Standing as World's Second Largest Cotton Exporter

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Report Highlights:

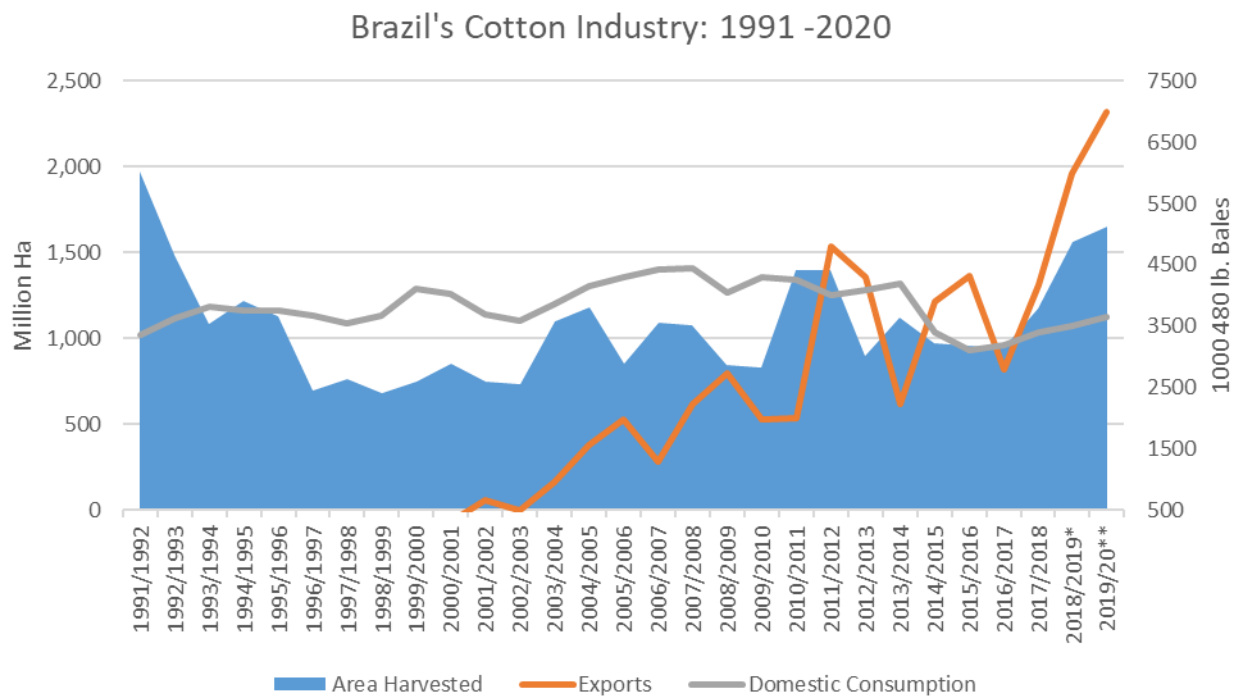
Post forecasts Brazil's 2019/20 marketing year (MY) cotton area to reach 1.65 million hectares (ha), an increase of five percent compared to the current MY estimate of 1.57 million ha. Post forecasts that 2019/20 production and exports will top current records, at 12.5 million bales and 7 million bales respectively. Nevertheless, both in 2018/19 and 2019/20, Brazilian producers are expected to face greater costs and lower prices than during the previous season. Political risk should continue to have notable impact on the exchange rate and therefore commodity prices in Brazil.

PRODUCTION

Outlook 2019/20: Production to Grow, but at a Slower Rate

Post forecasts 2019/20 cotton planted area to increase five percent to 1.65 million hectares as compared to the current marketing year (MY). Over the past two MYs, Brazilian producers increased planted area by more than two thirds – from 940 thousand hectares in 2016/17 to an estimated 1.57 million hectares in 2018/19. The estimated cotton area planted for 2018/19 is the largest in almost two decades. The last time Brazilian producers had planted more cotton was in 1991/92, when farmers across the country sowed almost two million hectares. Notably, the graph below shows that the substantial area expansion seen over the last several years has been driven almost exclusively by strong external demand coupled with high international prices, as growth in domestic consumption has been anemic at best.

Graph 1



Source: FAS, PSD. Note that numbers for 2018/19* and 2019/20** are Post estimates and forecasts.

Given the context of the last several years, a five percent annual planted area increase is almost negligible. Post area planted forecast is based on conversations with contacts, who note that Brazilian producers are likely close to a point of maximizing economies of scale with existing equipment and arable land that easily available. In addition, Post contacts indicate that producers are watching export demand and futures price signals closely, which indicate that global consumption is set for only a modest expansion in the coming year. Meanwhile, as was the case in recent years, domestic consumption of cotton is not expected to drive demand in any meaningful way.

The Post forecast for 2019/20 cotton production is 12.5 million bales, a five percent increase from 2018/19 estimated production. The yield is forecast to rise two percent to 1,649 kilograms (kg) per hectare as compared to the previous season. Although producers do not tend to skimp on seeds and other inputs, Post assumes a conservative yield forecast based on the fact that new areas being added to cotton production tend to have lower-than-average yields for the first several years. For example, despite average to favorable weather patterns so far for the current cotton crop, the yield is actually projected to decline four percent on the last MY, taking into account the new area that was planted in Q1 2019.

Post does not forecast any major shifts in cotton production 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, with roughly two thirds coming out of Mato Grosso and another 20-25 percent from Bahia. 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. Based on planting trends in the last five years, this approximate breakdown is forecast to hold in 2019/20.

Nearly all of the cotton planted in Bahia is first season crop, while producers in Mato Grosso plant most of their cotton crop during the second, or *safrinha* harvest. Overall in 2019/20, about ten percent of cotton is forecast to be first season, while the remaining 90 percent will be safrinha cotton mostly grown in Mato Grosso, as well as Mato Grosso do Sul and Goias.

Profitability: Revenues are expected to decrease on lower international prices and the creeping cost of production. According to the Mato Grosso Institute of Agricultural Economics (IMEA), in Mato Grosso, production costs in 2019/20 are expected to rise by about three percent driven mostly by higher taxes, an increase in labor as well as machinery operation costs.

Table 1: Estimated Production Costs for Cotton in Mato Grosso (Reals per ha)

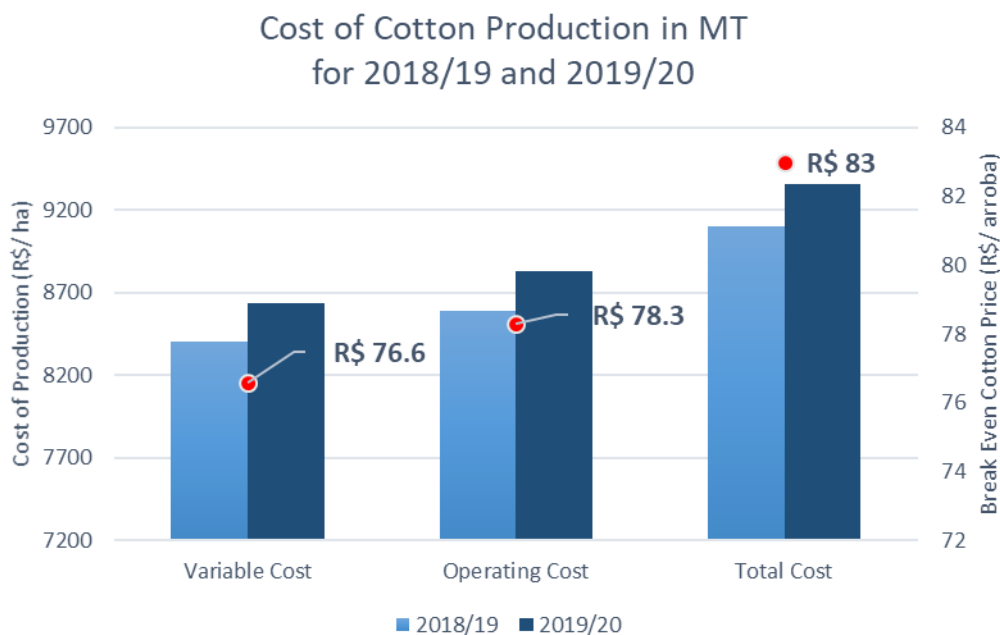
	2018/19	2019/20	% Change
Variable Cost of Production	8400.62	8636.01	3%
<i>Variable Costs of Production (on Farm)</i>			
Fertilizers	1743.1	1713.32	-2%
herbicides, fungicides, insecticides	2912.6	3032.46	4%
seeds	802.13	749.8	-7%
machinery operation	297.55	342.77	13%
labor	96.03	106.01	9%
Other variable expenses	255.34	273.08	6%
<i>Variable Costs of Production (ex Farm)</i>			
Transport	198.75	210.43	6%
Classification, Processing	851.18	923.15	8%
Taxes and Tariffs	277.44	343.76	19%
Maintenance of machineries and installations	264.34	264.14	0%
Admin Costs	107.09	92.05	-16%

Interest Rates	595.07	585.04	-2%
Fixed Costs of Production	191.14	192.8	1%
Depreciation	165.3	165.65	0%
Other fixed costs	25.84	27.15	5%
Total Operating costs	8,591.76	8,828.81	3%
Expected returns on Capital	123.37	138.62	11%
Land	384.69	389.93	1%
Income Factors	508.06	528.55	4%
Total Cost (Operating Cost and Income Factors)	9,099.82	9,357.36	3%
*all costs cited in Brazilian Real			

Source: IMEA

With the rising cost of production, farmers will require greater earnings in order to break even on their cost for the season. The graph below shows that assuming the same yield for 2019/20, as is currently projected for the 2018/19, producers are looking at a required farm-gate cotton price of R\$ 76.6 per arroba (unit of measure that equates to about 15 kilograms) to cover variable costs of production for the season. With the exchange rate at \$1 to R\$3.75 as of March 22, 2019, this equates to approximately \$0.62 per pound.

Graph 2



Source: IMEA

Technology: Brazil is one of the global leaders in the planting of Genetically Engineered (GE) crops. Cotton has the highest adoption rate at 94 percent. As of 2018, Brazil's National Technical Commission of Biosafety (CTNBio) had approved a total of 90 GE events for cultivation, of which 17 are for cotton.

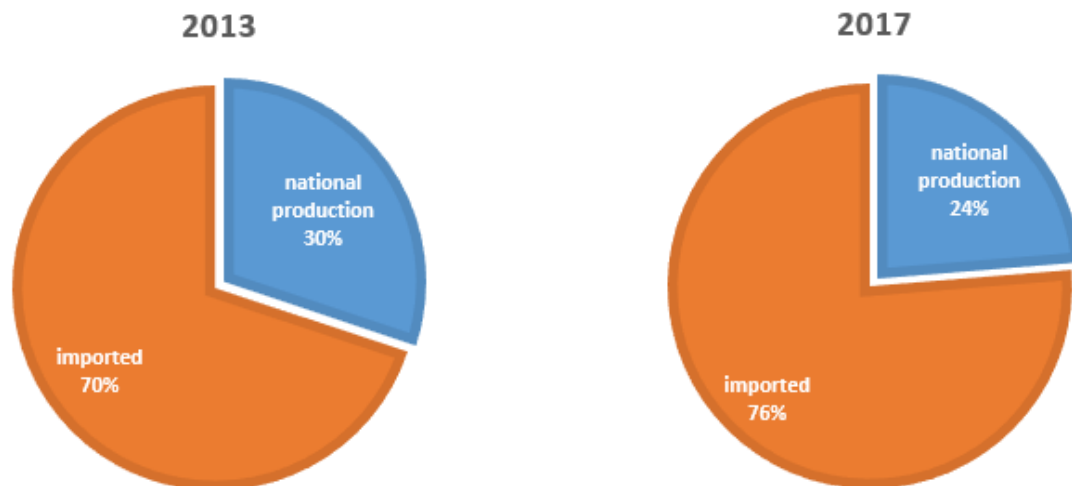
It should be noted that the significant year-on-year increase in area planted and production volume has strained production inputs; producers now face limits on harvest equipment and ginning capacity. Recent press reports indicate that the U.S. multinational John Deere, which makes a modern harvester on the market valued at \$1 million, cannot meet the demand and is only accepting orders for 2020. Brazilian farmers have sought to purchase used harvesters in lieu of new equipment, but that niche too is plagued by scarcity and higher prices. According to the Prime Imptacao e Exportacao firm, each used harvester retails for about \$650,000. The company imported 23 machines for this season, and expects to have orders for 25 more in 2019/20.

Fertilizer Use: Post forecasts that Brazil’s fertilizer demand for 2019/20 will grow by about four percent in 2019/2020, inline with trends in recent years. The latest available data from the National Fertilizer Association (ANDA) shows that for the first ten months of 2018, the total fertilizer volume supplied to the Brazilian market increased by 3.9 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 about 75 percent of total domestic use in 2017/18. According to ANDA, fertilizer imports were up 4.5 percent year-on-year in 2018, in line with the historic five year average. National fertilizer production for the first 10 months of 2018 was down 2.9 percent from the previous year, which nevertheless was a better performance than the five-year average annual decline of four percent.

Graph 3.

Fertilizer Use in Brazil



Source: ANDA

Brazil’s 2018/19 Cotton Production to Top Records

Post raised the 2018/19 MY planted area estimate to 1.57 million hectares, an increase of 34 percent on the previous season. Post raised the 2018/19 MY cotton production estimate to 11.85 million bales, a 30 percent increase on the 2017/18 season and a new record for Brazil. At the same time, Post lowered the

projected yield to 1643 kilograms per hectares. Post's estimates are in line with both USDA and the Ministry of Agriculture Brazilian Food Supply Company (Conab) March 2019 projections.

Soaring domestic prices have spurred planted area increases across all cotton producing states in Brazil. In Post conversations with trade contacts in Sao Palo and producers in Mato Grosso, numerous interlocutors indicated that in the current season many farmers made planted area adjustments on the upper maximum of their planned range. In addition, a slew of smaller producers, some of whom have not grown cotton in years, decided to plant cotton – driven by very high expected margins. Based on those two factors, Post revised up the planted area estimate for 2018/19 by ten percent from the previous update. (See GAIN BR 1821 for expanded coverage).

Looking at the state-by-state breakdown, in 2018/19 the producers in Mato Grosso increased cotton cultivation area by over 35 percent to more than 1 million hectares, up from 778 thousand hectares in the previous season. Producers in the state completed sowing safrinha cotton by February 15 - well ahead of last year, as well as the five-year average planting timeframe. This was made possible by very early planting of the first crop soybeans back in September 2018. 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 the cotton production to reach almost 5 million bales.

As of mid March, producers in Bahia have also finished sowing all of the planned hectares for the 2018/19 season. Post estimates area planted in the state to increase by more than 20 percent to 332 thousand hectares, up from 264 thousand hectares in the previous season, with production topping 2.5 million bales. So far, Bahian cotton is reported to be in excellent condition, but the harvest will not begin until June, so there is some scope for productivity adjustments pending weather patterns.

Historically high prices brought back some cotton acreage in the traditional producing state of Sao Paulo where production had almost disappeared. In 2018/19, Sao Paulo producers planted just over 9.3 thousand hectares of cotton, up from 5.7 thousand hectares in 2017/18, and 2.8 thousand hectares in 2016/17. In the agricultural frontier region of Matopi the planted area saw an increase of 44 percent to 46.4 thousand hectares this MY, up from 32.2 thousand hectares registered last year.

PRICES

Political Uncertainty to Continue Affecting Commodity Prices

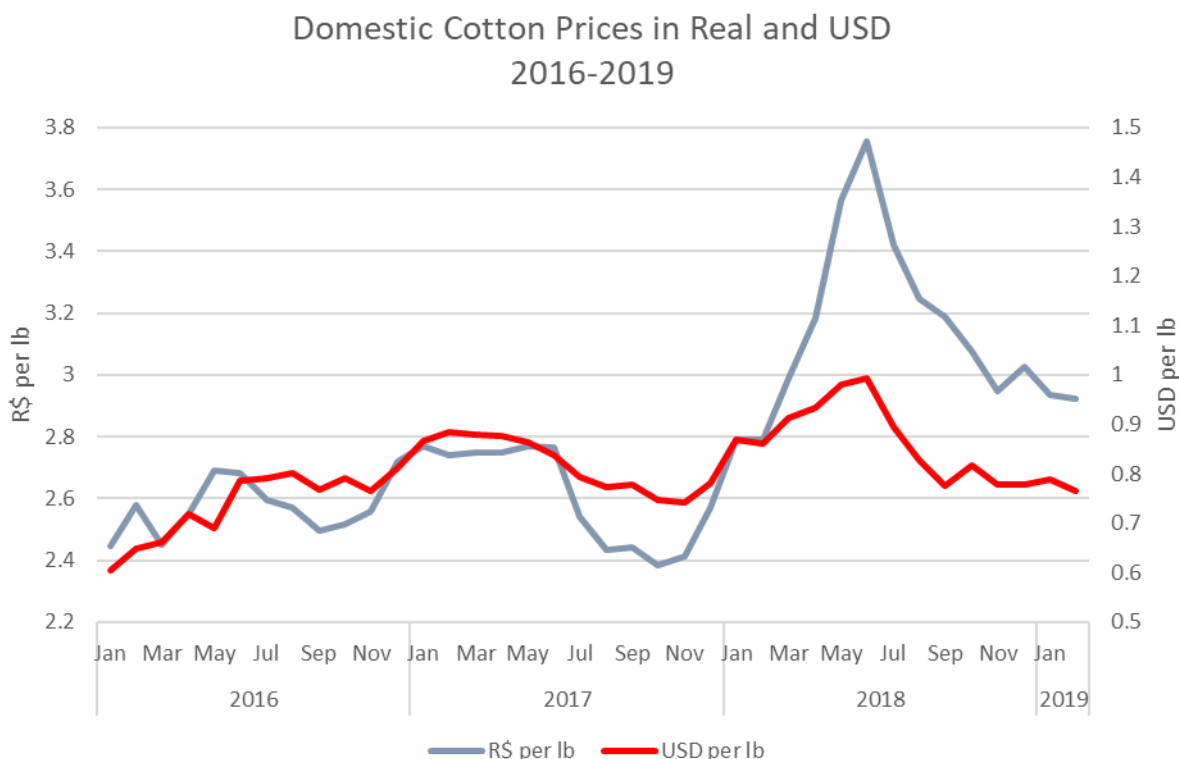
Last year was a banner year for cotton producers, with international demand, and therefore prices, spiking to as high as \$0.99 per pound (\$0.99/ lb) in June of 2018, up more than 20 percent from an average of \$0.81/ lb in 2017, according to the data from the University of Sao Paulo's Superior Agricultural School Research Center (CEPEA/ESALQ).

Yet, as the graph below shows, Brazilian farmers saw an even bigger windfall thanks in large part due to the sharp devaluation of the Brazilian currency, the Real (R\$) in the run up to the Fall 2018 presidential elections. With investors spooked by a substantial degree of political uncertainty, both the Brazilian stock market and the Real tumbled 15 percent in second quarter of last year. Since commodities are

priced in U.S. dollars in the international market, the weaker exchange rate spiked domestic cotton prices by close to 50 percent to R\$ 3.76 /lb in June 2018, up from an average of R\$ 2.61 /lb in 2017.

As of Q4 2018, international cotton prices have eased on weaker global demand. At the same time, Brazilian cotton prices in Real also came under pressure from the currency's renewed strength. In the aftermath of the election, which saw center-right candidate Jair Bolsonaro claim victory, the Real clawed back most of its losses from earlier in the year. CEPEA/ESALQ indicated that by third week of March, Brazil's domestic prices tracked at around R\$ 2.9 /lb (\$0.78 /lb). The current price is well below the high point recorded last June, as well as the R\$ 3.16 /lb average price averaged in 2018, albeit more than averages of R\$ 2.57 /lb and R\$ 2.61 /lb for 2016 and 2017 respectively.

Graph 4.



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

Going forward, political developments in Brazil will continue to play an outsized importance for the commodity producers. In recent months, investors were particularly optimistic that the new government's economic team – headed by the University of Chicago trained economist Paulo Guedes – would push through sorely needed social security, or *providencia* reform. In Post's recent conversations with traders and producers alike, interlocutors noted that they are keenly watching whether the Bolsonaro administration will be successful in the reform effort as it would have a pronounced effect on the exchange rate, with the Real gaining strength in the event that serious structural changes are to be ratified into law.

At this point markets are optimistic, however, most analysts note that there is still a considerable chance that Guedes will ultimately fail. The latest salvo in the reform saga came on March 22, with the arrest of former president Michel Temer in a graft probe. Former Mines and Energy Minister Wellington

Moreira Franco was also arrested; the two politicians are members of the MDP party – one of the largest in Brazil’s highly fractured Congress. Markets sank on the news of arrests, on the presumption that the probe is likely to divert attention, and potentially MDP support from the *providencia* reform push. The Real lost almost two percent that afternoon.

CONSUMPTION

Domestic Consumption in 2018/19 and 2019/20 to Remain Anemic

Post forecasts Brazil’s domestic cotton consumption at 3.65 million bales for 2019/20. Post maintained Brazil’s domestic consumption for MY 2018/19 at an estimated 3.5 million bales, inline with the USDA projection. The estimated three percent increase in each MY is based on the expected moderate economic growth this year and next, as well as positive investor sentiment over potential structural reforms espoused by the Bolsonaro administration. However, Post’s domestic consumption estimates may well be revised downward if the reform drive falls apart, and the economic growth projections do not materialize.

Graph one shows that Brazil’s domestic cotton consumption has generally been in decline, 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. In the last decade, cumulative domestic cotton consumption is down from almost 4.5 million bales in 2007/08, to 3.4 million bales in 2017/18. The consumption decline is driven by the struggles of Brazil’s textile industry. According to Brazil’s Textile Association (ABIT), the domestic textile industry contracted by two percent on average in the last five years. Despite growing by five percent year-on-year in 2017, textile production remained below the 2.1 million tons of textiles that Brazil produced in 2014 in the run up to that year’s World Cup and the 2015 Summer Olympics.

Brazil’s textile industry has struggled with the rising costs, difficult logistics, and consumers’ preferences, which have been shifting in favor of imported items. For 2018, ABIT revised domestic clothing sector growth to one percent, from the previously expected 2.5 percent. ABIT attributed the slow down to the trucker’s strike in May 2018, which halted commerce across the country for more than a week, a shorter than expected Brazilian winter, typically from June to August, as well as higher than expected prices for both cotton, and for oil - a key input for synthetic fabric.

The textile industry projects growth of around three percent for 2019. In the next two years, the industry is expected to face the same pressure factors such as cost of inputs and logistics. However, overall, there is more optimism surrounding economic prospects for the country as whole, which would translate to higher consumer confidence and increased purchases. Although the outlook for domestic cotton consumption is tepid, it should be noted that Brazil’s cotton production has been a beneficiary of the fact that the domestic textile industry has one of the highest cotton usage ratios in world, with cotton representing 60 percent of all fiber usage compared to the worldwide average of 35 percent.

TRADE

Bumper Current Crop Points to Record Exports in 2019/20

Post forecasts cotton exports for the 2019/20 MY to increase by almost 20 percent, to 7 million bales (1.5 MMT) as compared to the current MY. The rate of increase is inline with a ten-year annual historic average.

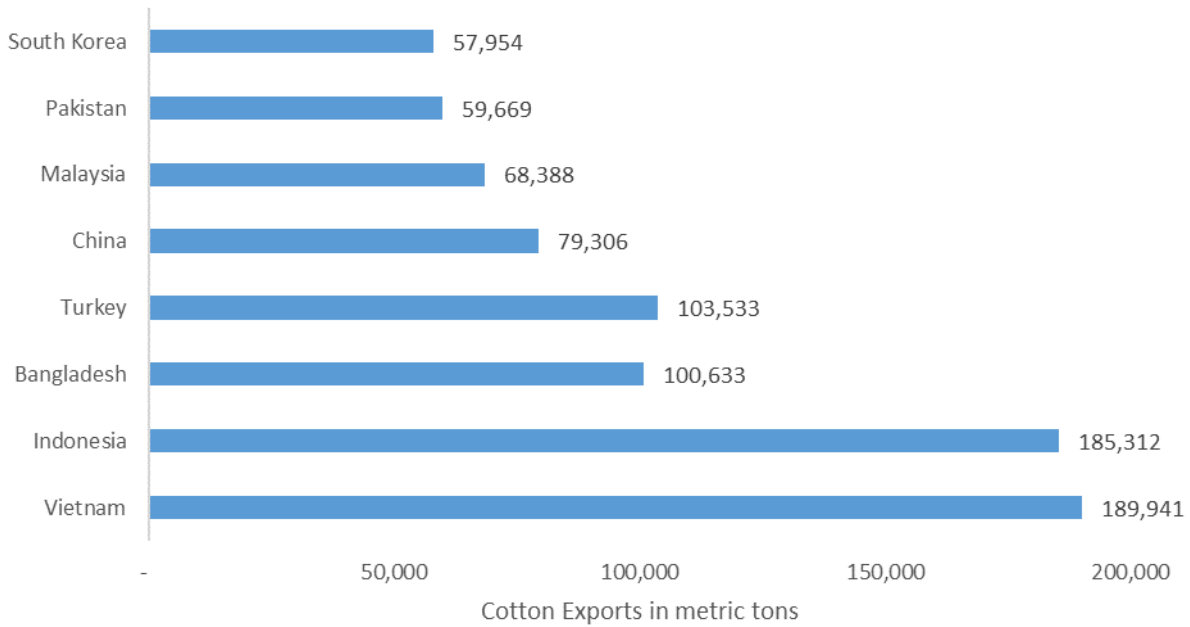
Based on the record setting harvest projected for the 2018/19 season, Brazil will have ample supplies to fulfill the export forecast. Due to the USDA August-July MY calendar, Brazil ships the majority of its harvest from one season during the following season. In other words, peak months for Brazil's cotton harvest are April to August, which fall within one MY; meanwhile, exports gather momentum from August onwards, with peak volumes shipped during the September–December timeframe that falls into the following MY. The Post forecast is further supported by the fact that producers have already forward sold more than 70 percent of their anticipated 2019 harvest that they just finished sowing.

One key factor to watch for 2019/20 will be whether traders will bump up against capacity challenges at the Port of Santos, where over 90 percent of Brazil's cotton is shipped. There are varying opinions in the industry, with some Post contacts believing that the current volume of around 6 million bales is already pushing the maximum limit, while others indicate that Santos could handle as much as 8.5 million bales without any major issues. However, all trade contacts agree that eventually shipping volumes will have to be redistributed to other ports, or capacity would have to be expanded in Sao Paulo.

Post anticipates that the majority of Brazil's cotton exports will be destined for Asia in 2019/20. Graph five shows that 2017/18, Vietnam and Indonesia combined for more than a third of all Brazilian cotton purchases. These countries are forecast to remain among the top five of Brazil's customers. However, China is forecast to emerge as Brazil's top customer, cementing the trend that is expected to materialize in 2018/19 (see section below for greater detail).

Graph 5

Brazil's Major Export Markets in 2017/18



Source: Foreign Trade Secretariat, SECEX

Brazil to Become World's Second Largest Cotton Exporter in 2018/19

With a sizeable supply from the 2017/18 harvest, Brazil is set to overtake India as the second largest cotton exporter in the world behind the United States. Post revised slightly its export estimate to 5.9 million bales (1.3 MMT) for the current MY. The estimated 40 percent annual export increase is based on the fact that most of the 2017/18 crop has been commercialized. In addition, relatively high international prices are expected to translate into strong sales for whatever remains to be contracted.

Although the Post export estimate for 2018/19 is inline with USDA forecast and market expectations, it should be noted that in the first seven months of the current MY total exports were only up nine percent year-on-year. Typically, Brazil ships more than two thirds of its harvest during August-December timeframe, meaning that most of Brazil's cotton exports for the current MY should already be completed. As such, the projected volume may be revised downward in forthcoming updates.

Table 2: Brazilian Cotton Exports (in metric tons)

	2016/17	2017/18	% change 2017/18	Aug-Feb 2017/18	Aug-Feb 2018/19	% change Aug-Feb 17/18 & Aug-Feb 18/19
World	607,171	908,879	50%	797,096	866,468	9%
Vietnam	82,599	189,941	130%	174,907	121,855	-30%
Indonesia	124,200	185,312	49%	154,772	106,914	-31%
Turkey	87,336	103,533	89%	83,903	45,009	-46%
Bangladesh	53,367	100,633	19%	92,708	91,396	-1%
China	41,806	79,306	90%	79,306	332,052	319%
Malaysia	36,184	68,388	89%	46,979	38,406	-18%
Pakistan	34,579	59,669	73%	59,399	26,974	-55%
South Korea	77,984	57,954	-26%	49,171	38,591	-22%
Thailand	23,175	25,599	10%	23,481	17,727	-25%

Source: Foreign Trade Secretariat, SECEX

It is more likely, however, that Brazil's cotton export calendar is becoming more stretched out, with increasing volumes being shipped during the January-July timeframe. In recent conversations, trade contacts have indicated that this is an emerging trend partly due to shifting demand patterns, and partly due to the cost of truck freight rates and shipping lines during the months of June to September. Numerous contacts pointed out that truck space is at a premium during those months due to competition from corn and soybean exports. In addition, container and shipping rates also tend to be higher during Q3 of the calendar year due to higher volumes of other commodities being shipped. Therefore, if demand is low, or contracts have longer deliverable windows, traders elect to ship lower cotton volumes during this timeframe.

This scenario has played out during the July 2018- February 2019 period, with traditional peak export months inverted on the back of shifting purchase patterns from China. Chinese buyers were motivated to redirect their cotton sourcing, amid punitive tariffs on the U.S. cotton and favorable cotton prices in Brazil. As such, Brazil's cotton export volumes to China were down between 100 and 50 percent month-on-month during June-September 2018 timeframe, but up by 570 and 924 percent monthly in November and December 2018, with another increase of 961 and 2,579 percent monthly in January and February 2019. In fact, as table 2 shows, sales to China just in the first seven months of the current MY are already more than four times what Brazil shipped in total during the previous season. As a result, China is set to emerge as the number one export destination for Brazil's cotton in 2018/19.

Post estimates that cotton imports will be at 85 thousand bales in 2018/19, just a slight increase on the 82 thousand bales in 2017/18. Although Brazil produces ample cotton supplies, the textile industry often sources imports just before and during the main harvest months of June through August.

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 2017/18 runs from August 2017 to July 2018 and correlates with Northern Hemisphere countries and not Southern Hemisphere countries such as Brazil. 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.

POLICY

Federal-Level Spending in Question

Aside from broad macroeconomic and political developments, farmers are keenly watching the federal government's policy approach to the agricultural sector. The new Minister of Agriculture, Livestock, and Food Supply (MAPA) Tereza Cristina is well liked by the sector. In fact, she was nominated by President Bolsonaro based on the recommendation from a number of influential farm groups, including the Brazilian Confederation of Agriculture and Livestock (CNA) – Brazil's equivalent of the Farm Bureau – and the influential Agricultural Parliamentary Front (FPA), which includes about 300 deputies across 15 different parties represented in the Brazilian Congress.

Among Tereza Cristina's stated domestic priorities are the expansion of rural credit and crop insurance programs offered under MAPA's "Plano Safra." In February, MAPA announced plans to expand subsidized loans and offer R\$ 1 billion in resources for rural insurance - compared to R\$ 440 million offered under the current plan. How successful the Ministry will be in pushing through those priorities remains to be seen, as budgetary expenses require the blessing of the Ministry of Economy, which has been focused on cutting back – rather than expanding – government expenditures.

In late March, the Brazilian press reported that the Economy Ministry ordered state lender Banco do Brasil to reduce subsidized farm credit lines, giving more room to private sector banks. The state-controlled lender has historically been the leader in this segment, with an average share of 58-60 percent of loans in the last six crop seasons. This runs counter to Minister Tereza Cristina's previous statements that expanding rural credit would help lower the private sector banking spread and interest rates, which currently run around 15 percent annual interest for the large producers. The final Plano Safra for 2019 is expected to be unveiled sometime this Spring.

But Taxes Are Set to Rise

Regardless of how Plano Safra pans out, producers are bracing for higher taxes potentially at both the federal and the state level in 2019/20.

In February 2019, Brazil's Supreme Court (STF) gave Congress one year to either scrap or make changes to the so-called Kandir Law, originally instituted in 1996. In 2016, a group of state

governments had petitioned the STF to mediate between them and the federal government in a dispute over lost tax revenues, resulting from the Kandir injunction.

The controversial legislation exempts commodities destined for export from the state level Tax on the Circulation of Goods and Services (ICMS). Each state has jurisdiction over the amount of the ICMS tax it charges, which generally varies between nine and 13 percent. The tax is collected before products are allowed to cross state lines, and as such is a major source of revenue for the states. State governments have argued that they stand to collect substantially more, if it were not for faulty implementation of the Kandir injunction. The legislation calls for the federal government to compensate states for lost ICMS revenue, but the implementation mechanism for the reimbursement was never spelled out. According to the treasurer of Mato Grosso, the state failed to collect R\$ 37 billion of ICMS taxes over the past two decades due to the Kandir Law, while the federal government compensated the state only R\$ 5 billion in the same time frame, amounting to a net loss of more than R\$ 30 billion.

Across Brazil, producer organizations are generally opposed to the elimination of the law. In conversations with Post, contacts argue that re-institution of the export tax would push up Brazilian commodity prices in the international market, in turn forcing traders to offer lower farm gate prices to producers. It remains to be seen how the matter will be resolved, particularly in the current fiscal environment where a number of states are facing an increasingly difficult situation.

In January 2019, the governors of Mato Grosso, Goias, Rio Grande do Norte, and Roraima declared their states to be in a “fiscal calamity.” Under Brazilian law, states can declare a fiscal calamity, which allows them to postpone payments to vendors, reschedule their federal government debt, and issue contracts without following standard bidding procedures. In return, states must agree to implement austerity measures, which typically include raising revenues via privatization, sales of state assets, and tax hikes.

The Mato Grosso austerity program includes a proposal to increase taxes on sales of soybeans, cotton, corn, timber, live cattle, and boned meat and offal. The taxes are levied on both inter-state and export sales, and are collected via contributions to the State Fund for Transport and Housing (Fethab). Fethab contributions are indexed to other fees charged by the state, including the ICMS, and eliminate the requirement to pay the former. The Mato Grosso government forecasts that the increase in Fethab taxes would bring in an additional R \$1.46 billion in annual revenues, of which R \$250 million would be derived from cotton sales.

Table 3. Cotton PSD in Bales

Cotton	2017/2018		2018/2019		2019/2020	
Market Begin Year	Aug 2017		Aug 2018		Aug-19	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	1175	1175	1560	1570	0	1650
Beginning Stocks	6929	6929	8657	8657	0	11192
Production	9220	9220	11750	11850	0	12500
Imports	82	82	100	85	0	70
Total Supply	16231	16231	20507	20592	0	23762
Exports	4174	4174	6000	5900	0	7000
Use	3400	3400	3500	3500	0	3650
Loss	0	0	0	0	0	0
Total Dom. Cons.	3400	3400	3500	3500	0	3650
Ending Stocks	8657	8657	11007	11192	0	13112
Total Distribution	16231	16231	20507	20592	0	23762
Stock to Use %	114.30	114.30	115.86	119.06	0.00	123.12
Yield	1708	1708	1640	1643	0	1649

(1000 HECTARES), 1000 48 lb. Bales, (PERCENT), (KG/HECTARES)

Table 4. Cotton PSD in 1,000 Tons

Cotton	2017/2018		2018/2019		2019/2020	
Market Begin Year	Aug 2017		Aug 2018		Aug-19	
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0		
Area Harvested	1175	1175	1560	1570	0	1650
Beginning Stocks	1509	1509	1885	1885	0	2437
Production	2007	2007	2558	2580	0	2722
Imports	18	18	22	19	0	15
Total Supply	3534	3534	4465	4483	0	5174
Exports	909	909	1306	1285	0	1524
Use	740	740	762	762	0	795
Loss	0	0	0	0	0	0
Total Dom. Cons.	740	740	762	762	0	795
Ending Stocks	1885	1885	2396	2437	0	2855
Total Distribution	3534	3534	4465	4483	0	5174
Stock to Use %	114.30	114.30	115.86	119.06	0.00	123.12
Yield	1708	1708	1640	1643	0	1649
(1000 HECTARES), (1,000 tons), (PERCENT), (KG/HECTARES)						