

Cotton Outlook

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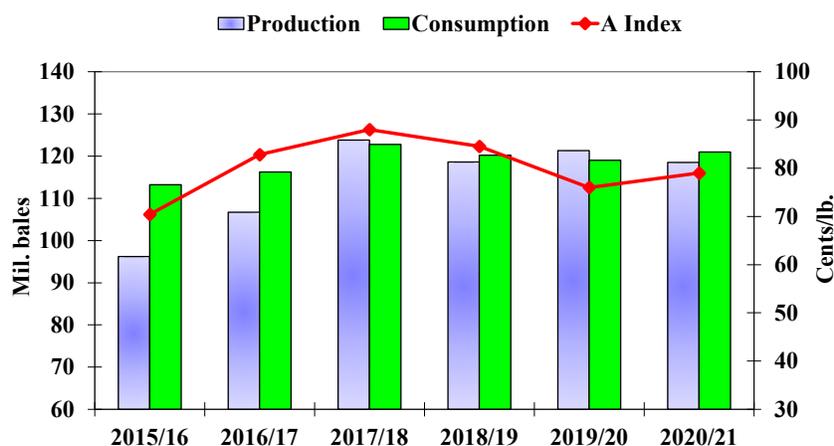
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THE WORLD AND UNITED STATES COTTON OUTLOOK

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U.S. Department of Agriculture

Introduction

World Production, Consumption, and Prices 2015/16 through 2020/21 projection



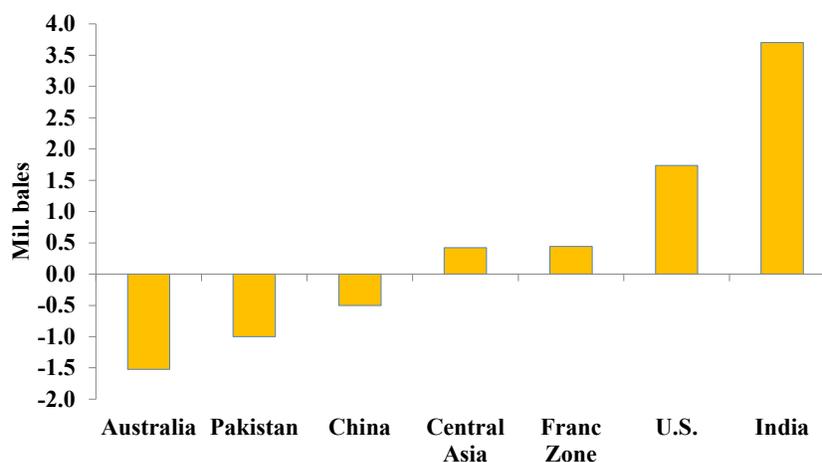
The U.S. Department of Agriculture's (USDA's) first 2020/21 world cotton projections anticipate that consumption will exceed production, reducing world stocks by 2.5 million bales. World cotton production is expected to fall 2.3 percent, with area declining in a number of countries. Global consumption is expected to resume growing, with the projected rate of expansion at its long-run average. It is expected that China will resume gradually expanding imports following years of significant import access limitations to facilitate disposal of surplus government-held stocks. The A Index is forecast to rise 3 cents to 79 cents per pound due to projected lower stocks outside of China.

U.S. 2020/21 cotton production is expected to decline to 19.5 million bales, based on a reduction in planted area, and a second year of close to median abandonment. Domestic mill use and exports are projected unchanged from their 2019/20 levels, but ending stocks are projected slightly lower.

World Cotton Situation, 2019/20

World Cotton Production, 2019/20

Estimated Changes in World Production, 2019/20 compared with 2018/19



Global 2019/20 cotton production is expected 2.3 percent higher from the previous year to 121.3 million bales, as increases in the United States and India more than offset lower output in Australia and Pakistan. The United States saw a 9.4-percent increase with the largest area harvested in thirteen years, and higher production in the Delta and Southeast regions. India was the world's largest producer as record area harvested helped drive production to its highest in five years at 29.5 million bales. In contrast, Australia witnessed the most significant downward shock in 2019/20, as severe drought drove production to its lowest in twelve years.

The world's second largest producer, China, witnessed area harvested and production down slightly from 2018/19 at 27.3 million bales. Lower yields in Xinjiang mostly led to the year-over-year decline due to unfavorable weather. China's 2019/20 harvested area is estimated at 3.45 million hectares, down marginally from the previous year, while yields fell below the previous two years at 1,720 kg/hectare.

India's 2019/20 production is estimated at 29.5 million bales, up more than 14 percent from the preceding year on higher area and yields. As a result, India surpassed China as the world's largest producer. Harvested area is estimated at 13.0 million hectares, up 3.2 percent despite some reports of pink bollworm infestations and late-season monsoon rainfall. India's 2019/20 yield is estimated at 494 kg/hectare, also above the previous season.

2019/20 China Supply and Demand

China Cotton Supply and Demand 2018/19 and 2019/20 est.

	Unit	<u>2018/19</u>	<u>2019/20</u>	Change (%)
Beg. Stocks	Mil. bales	38.0	35.7	-6.1
Production	"	27.8	27.3	-1.8
Imports	"	9.6	8.5	-11.8
Total supply	"	75.4	71.4	-5.3
Consumption	"	39.5	37.5	-5.1
Exports	"	0.2	0.2	-17.8
Total use	"	39.7	37.7	-5.1
Ending stocks	"	35.7	33.7	-5.4
Reserve stocks	"	10.5	10.5	0.0
Stocks-to-use	%	89.8	89.6	-0.2
% of world stks	"	44.6	41.1	-7.8

China's 2019/20 consumption is projected to decline due to effects from the past trade dispute and the outbreak of the novel coronavirus (COVID-19). Lower consumption has also pressured import demand which is projected at 8.5 million bales. High levels of cotton in consignment and industrial and commercial stocks at the start of the marketing year have also helped drive imports lower. China stocks are projected at 33.7 million bales, down from last year with lower mill and commercial stocks. State Reserve stocks are projected at 10.5 million, unchanged from the previous year, as the State Reserve is projected to auction old-crop supplies and replace with both new-crop domestic cotton and imports. State Reserve sales in 2019 (conducted from May to September) exceeded 4.5 million bales, a level equal to the State Reserve's announced target.

2019/20 World Consumption, Trade, Ending Stocks, and Prices

World cotton consumption in 2019/20 is expected to decline again and reach 119.0 million bales, a marginal 1.0 percent decrease from the previous year. Lower consumption is forecast in China, Vietnam, and Indonesia, more than offsetting gains for India, Pakistan, and Turkey. Uncertain market conditions have helped drive China's consumption down 2 million bales from the previous year, reaching a four-year low. Despite the reduction, consumption is set to expand in five of the top ten consuming countries, with India and Uzbekistan witnessing the most growth.

World Cotton Supply and Demand
2018/19 and 2019/20 est.

	<u>Unit</u>	<u>2018/19</u>	<u>2019/20</u>	<u>Change (%)</u>
Beg. Stocks	Mil. bales	80.8	82.1	-1.0
Production	"	118.6	121.3	2.3
Imports	"	<u>42.2</u>	<u>43.5</u>	<u>3.2</u>
Total supply	"	199.4	201.3	0.9
Consumption	"	120.2	119.0	-1.0
Exports	"	<u>41.3</u>	<u>43.5</u>	<u>5.3</u>
Total use	"	120.3	119.2	-0.9
Ending stocks	"	80.0	82.1	2.7
Stocks outside China	"	44.3	48.4	9.2
Stocks-to-consumption	%	66.6	69.0	3.6

World trade is expected at 43.5 million bales in 2019/20, the highest level since 2012/13's record of 47.6 million. Record exports from Brazil and higher U.S. shipments are helping meet strong demand from China and import-dependent countries such as Vietnam and Bangladesh. Lower domestic production in Pakistan and Turkey is also driving higher global trade. Although China's imports are forecast to decline, the country is expected to be the world's largest importer and at its second-highest level in six years. Brazil has witnessed greater exportable supplies with stagnant domestic demand, especially due to the second crop (safrina) season. Four of the world's top five exporters are expected to expand shipments from the previous year amid higher crops in each respective country. This more than offsets the lowest Australia exports in eleven years and declining shipments from Central Asia, where domestic consumption continues to replace exports. West Africa's Franc Zone exports are expected to marginally surpass the previous year's record to reach 5.7 million bales, with Benin, Mali, and Cote d'Ivoire as the top three exporters in the region (in that respective order).

World ending stocks are projected at a four-year high of 82.1 million bales, despite lower beginning stocks and China stocks declining almost 2 million bales from the previous year. Higher global production coupled with lower consumption are the primary drivers behind a higher stock-to-use ratio as well. India is expected to witness the largest increase, with stocks projected at 13.0 million bales, edging up 3.7 million from the previous year. The United States and Brazil are also expected to increase stocks despite larger exports. Stocks outside of China are forecast up 9 percent and at a record of 48.4 million bales. China stocks (including State Reserve) are projected at 33.7 million bales, down nearly 2 million from the previous year.

U.S. Cotton Situation, 2019/20

Area and Production

U.S. all-cotton production in 2019/20 is estimated at 20.1 million bales, 9 percent above last season's crop. Although 2019 planted area was slightly below the previous year, harvested area increased. Cotton planted acreage in 2019—at 13.7 million acres—decreased less than 3 percent, as relative prices slightly favored alternative crops over cotton. Planted area to cotton was the second highest during the last 7 years. The U.S. abandonment rate declined to 14 percent in 2019—nearly half the level of 2018—as harvested area reached 11.8 million acres, the highest since 2006. Meanwhile, the U.S. 2019 yield declined from last season's 864 pounds per harvested acre to 817 pounds. Upland production is estimated at nearly 19.4 million bales—1.8 million above 2018—with an average yield of 803 pounds per harvested acre, compared with the 5-year average of 835 pounds. Extra-long staple (ELS) cotton production is estimated 10 percent lower—at 722,000 bales—due to lower area in 2019.

U.S. Cotton Area, Abandonment, Yield, and Production

	Unit	2015/16	2016/17	2017/18	2018/19	2019/20
Planted acres	mil. acres	8.6	10.1	12.7	14.1	13.7
Harvested acres	mil. acres	8.1	9.5	11.1	10.2	11.8
Abandonment rate	%	5.9	5.6	12.7	27.6	14.1
Yield/harvested acre	lbs./acre	766	867	905	864	817
Production	mil. Bales	12.9	17.2	20.9	18.4	20.1

Compared with last season, 2019 upland cotton production was larger in three of the four Cotton Belt regions. Upland cotton production decreased only in the Southwest in 2019, declining over 500,000 bales to 7.3 million bales, the lowest in 4 years. The Southwest accounted for only 38 percent of total U.S. upland production, the smallest share since 2013. While Southwest abandonment reached 23 percent—slightly above the 5-year average—the yield decreased dramatically to 583 pounds per harvested acre, the lowest since 2003.

Southeast cotton production increased 34 percent in 2019 to 5.7 million bales, the largest crop since 2012, as production rebounded from the effects of two hurricanes in 2018. Planted area in 2019 increased for the third consecutive year to nearly 3.0 million acres—the highest since 2011—as some area shifted from soybeans. In addition, the Southeast yield reached 932 pounds per harvested acre in 2019, the third highest on record.

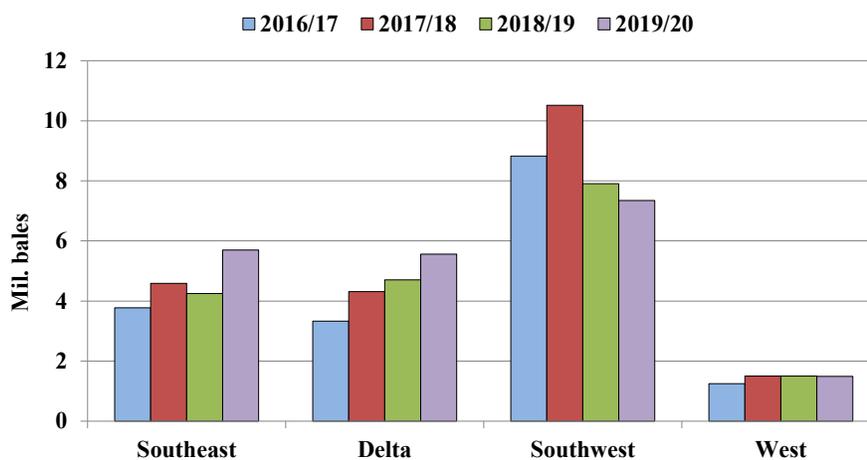
Delta cotton production in 2019 rose 18 percent from the previous year to nearly 5.6 million bales, or 29 percent of the total U.S. upland production. Planted area reached 2.4 million acres, the highest since 2011; with average abandonment, harvested area was also the highest in 8 years. The Delta yield reached 1,134 pounds per harvested acre in 2019—slightly below the 2018 record—contributing to a Delta crop that reached its highest since 2006.

Upland planted area in the West decreased in 2019, but production rose due to a higher yield. In the West, 2019 upland area totaled 278,000 acres, compared with 285,000 acres in 2018. However, the region's yield of 1,464 pounds per harvested acre—the West's highest yield in 3 years—increased upland production 7 percent above 2018 to 790,000 bales. ELS cotton area in the West was also lower in 2019, but a lower yield reduced ELS production for the region to 703,000 bales. Nevertheless, all cotton production in the West totaled 1.5 million bales, similar to 2018.

**U.S. Cotton Supply and Demand
2018/19 and 2019/20 est.**

	<u>Unit</u>	<u>2018/19</u>	<u>2019/20</u>	<u>Change (%)</u>
Beg. Stocks	mil bales	4.2	4.9	15.5
Production	"	18.4	20.1	9.4
Imports	"	0.0	0.0	0.0
Total supply	"	22.6	25.0	10.6
Mill use	"	3.0	3.0	0.8
Exports	"	14.8	16.5	11.8
Total use	"	17.7	19.5	9.9
Ending stocks	"	4.9	5.4	11.3
Stocks-to-use	%	27.3	27.7	1.5
Farm price	cents/lb.	70.3	62.0	-11.8

**U.S. Cotton Regional Production,
2016/17 to 2019/20**



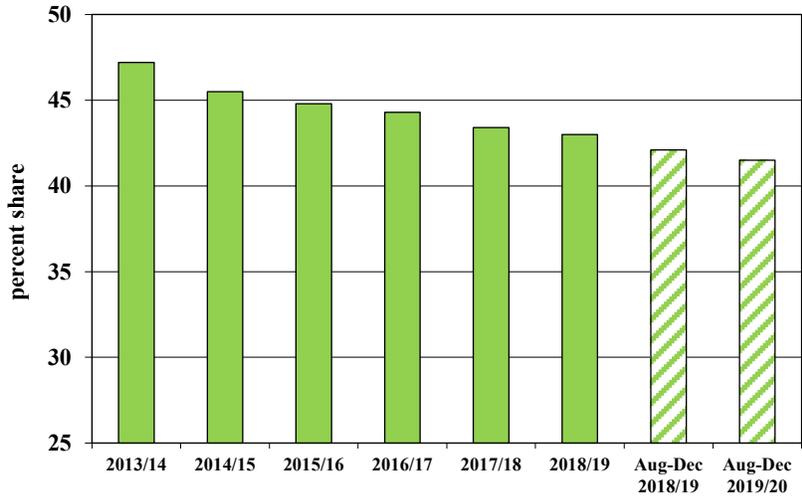
Domestic Mill Use and Consumer Demand

U.S. cotton mill use for 2019/20 is forecast at 3.0 million bales, slightly above 2018/19. Mill use is expected to remain near last season's level as polyester fiber prices remain competitive and cotton's share of fiber demand stabilizes. During the first 5 months of 2019/20, cotton mill use reached 1.2 million bales, comparable to a year earlier. Likewise, the pace of U.S. cotton mill use during the second half of 2019/20 is expected to remain near the previous year.

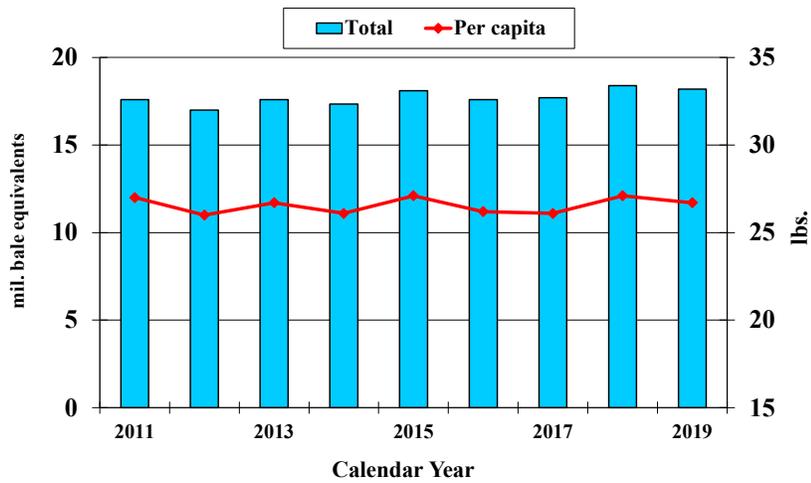
U.S. consumer demand for textiles and apparel products follows the global economy. With the U.S. GDP growth remaining strong in calendar year 2019—albeit below the previous year—total U.S. fiber product imports increased to a new record. Based on the 2019 data, fiber product imports rose slightly—compared with a year earlier—with synthetic fiber products accounting for the majority of imports. Meanwhile, total U.S. fiber product exports decreased 4 percent in 2019, with both cotton and synthetic fiber products indicating declines.

In calendar 2019, U.S. cotton textile and apparel imports were marginally lower at 18.6 million bale-equivalents, while synthetic product imports gained 1 percent. Competitively-priced synthetic fibers—like polyester—and consumer demand for athleisure clothing reduced the U.S. cotton product import share marginally in calendar 2019 to slightly below 43 percent. Meanwhile, U.S. cotton product exports decreased nearly 2 percent during 2019 to about 3.4 million bale-equivalents, the smallest since 2009. As a result, U.S. domestic consumption of cotton (mill use plus net textile trade) in calendar 2019 is estimated at 18.3 million bale-equivalents, slightly below 2018's 8-year high. In addition, U.S. per capita cotton consumption in 2019 is also estimated slightly below the previous year's 27 pounds, but remains near the 5-year average of 26.5 pounds.

Cotton's Share of U.S. Textile Imports, 2013/14 to Aug-Dec 2019/20 (raw-fiber-equivalent basis)



U.S. Domestic Cotton Consumption: Total and Per Capita



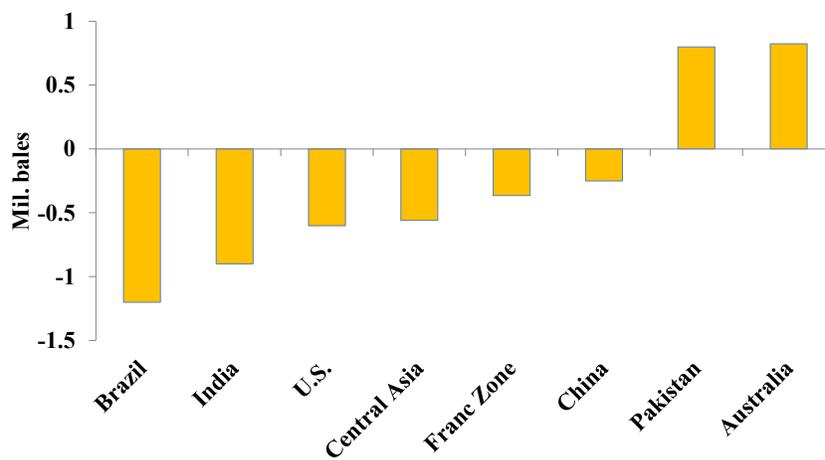
World Cotton Outlook, 2020/21

World Cotton Production, 2020/21

World cotton production is projected to fall 2.3 percent in 2020/21, to 118.5 million bales, as both production and consumption remain largely within the narrow range of fluctuations prevailing since 2017/18. Falling area planted to cotton, projected to fall about 4 percent worldwide, is expected to offset the impact of rebounding yields in a number of countries.

The largest decline in area is expected in India, where as much as 40 percent of the world's cotton area is located in a typical year. India's 2020/21 cotton area is projected to fall about 3 percent, while—assuming a normal monsoon—yields are expected to be about unchanged. Currently, cotton prices in India have lost ground compared with other crops competing for area there, suggesting a decline in the following year's planted area, and India's 2020/21 cotton output is expected to be 900,000 bales below 2019/20's 29.5 million.

Estimated Changes in World Production, 2020/21 compared with 2019/20



Lower area is also projected for Brazil, and while the expected decline is smaller than that foreseen for India, Brazil's substantially higher yields mean a larger expected change in production volume: down 1.2 million bales from the year before in 2020/21, to 11.5 million. Brazil has maintained area at record-high levels the last 2 years, and has increased its underlying productive capacity significantly. While down from the year before, Brazil's 2020/21 cotton area is expected to remain 25 percent greater than that planted in 2017/18 and 55 percent greater than in 2016/17.

After Brazil and India, the next largest drop in production is that projected for the United States, a 600,000-bale decline driven by lower area. Smaller declines are foreseen for two other regions that compete with the United States on world export markets, Central Asia and West Africa's Franc Zone.

Higher production is expected for two countries that suffered significant setbacks in 2019/20, Australia and Pakistan. Australia's 2020/21 cotton output is expected to rise about 800,000 bales to 1.5 million. El Nino conditions resulted in a significant shortfall in Australian precipitation stretching back into the latter part of their 2018/19 growing season. Assuming that the resumption of higher rainfall that began in January 2020 keeps Australia on course for normal weather during the rest of 2020, then improved irrigation supplies can be expected to support increased plantings of irrigated cotton, and bolster dryland prospects as well.

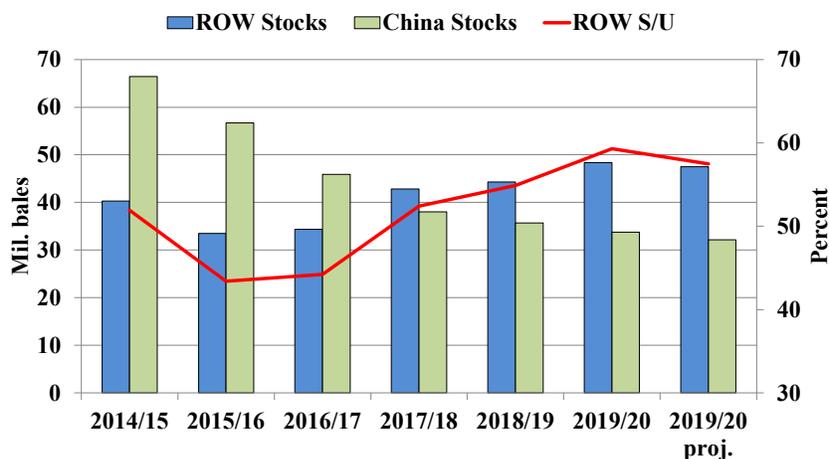
While higher year-to-year, Australia's 2020/21 production is still forecast at about half of its long-term level. Similarly, while Pakistan's output is expected to rebound about 800,000 bales from the year before, at 7.4 million bales, cotton output in 2020/21 is projected at one of the lowest levels for Pakistan since the 1990s.

Little change is expected in China's production from the year before in 2020/21. Current surveys of planting intentions there suggest China's 2020/21 cotton area will be slightly lower than during the year before. Some of these declines are likely to be offset by a rebound in Xinjiang's yield. China was the world's largest cotton producer from 1982 until 2014, when it was first surpassed by India. China regained the top rank briefly in 2018/19, but India is projected to again be the world's largest cotton producer in 2020/21, as in 2019/20.

USDA Projections for China, 2020/21

USDA's China outlook is based on the policies outlined in the Appendix. Imports and consumption are projected to increase. Production is forecast down slightly while stocks are expected to fall for the sixth consecutive year in 2020/21. China's production is projected to decrease slightly again, as declines in the east again more than offset any gains in Xinjiang production. China's consumption is projected to increase slightly due to recovery from the impacts of the COVID-19 outbreak and reduced U.S. – China trade tensions.

China's Stocks, Stocks Outside China, and Stocks Outside China as % of Use



China's State Reserve is expected to both buy and sell cotton during the 2020/21 season. Programs to purchase both foreign cotton and domestic cotton similar to the programs for the 2019/20 season are expected in 2020/21 as part of the stated rotation policy for the State Reserve. Likewise, sales from the State Reserve are expected in the spring of 2021. Reserve stocks at the end of 2020/21 are expected to be roughly the same as the beginning level.

China Cotton Supply and Demand 2019/20 est. and 2020/21 proj.

	Unit	2019/20	2020/21	Change (%)
Beg. Stocks	Mil. bales	35.7	33.7	-5.4
Production	"	27.3	27.0	-0.9
Imports	"	8.5	10.0	17.6
Total supply	"	71.4	70.7	-0.9
Consumption	"	37.5	38.5	2.7
Exports	"	0.2	0.2	-14.3
Total use	"	37.7	38.7	2.6
Ending stocks	"	33.7	32.1	-4.9
Reserve stocks	"	10.5	10.5	0.0
Stocks-to-use	%	89.6	83.0	-7.4

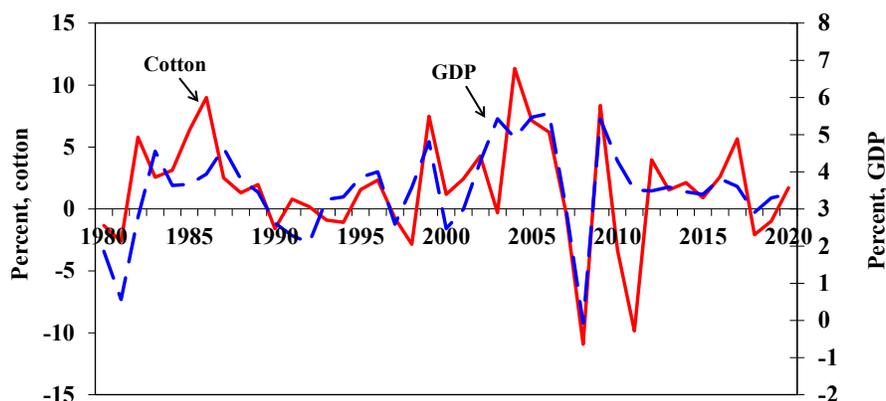
World Cotton Consumption, 2020/21

World cotton consumption in 2020/21 is expected to resume growing after declining for two consecutive years. After declining 2 percent in 2018/19 and 1 percent in 2019/20, consumption is expected to grow nearly 1.7 percent in 2020/21, returning to the long-run average growth rate. According to the International Monetary Fund (IMF), world income growth in calendar 2019 was its weakest since the Global Financial Crisis a decade before. This, combined with uncertainty regarding textile supply chains during 2019, has had a negative effect on clothing and cotton consumption.

With the IMF's January 2020 forecasts indicating that global income gains in calendar 2020 and 2021 are expected to rebound to close to the median growth rate realized before 2019, cotton consumption is likely to grow. The Phase One trade agreement between China and the United States helped reduce the uncertainty that weighed on global income gains, but since the agreement the spread of COVID-19 across large portions of China and to other countries has added additional uncertainty. This outlook assumes that the negative economic impact of the COVID-19 outbreak is relatively small and affects only marketing year 2019/20.

China's 1-million-bale expected consumption gain in 2020/21 equals half of the 2 million bales expected globally. With 38.5 million bales of cotton consumption, China's share of global activity is expected to be about unchanged. China has been the world's largest cotton consuming country since the mid-1960s, and while its share of world cotton spinning fell sharply after 2009, it has stabilized in recent years. While higher than in 2019/20, China's projected 2020/21 cotton consumption would be its second lowest since 2015/16.

World Cotton Consumption and Economic Growth



Sources: USDA and International Monetary Fund.

The second and third largest consuming countries—India and Pakistan—saw rebounds in their consumption in 2019/20 and are expected to continue growing in 2020/21. Bangladesh and Vietnam have had setbacks to their consumption in recent years, and are expected to resume growth in 2020/21, albeit at rates far below the stellar gains regularly achieved before 2018/19.

Cotton continues to lose share to polyester in world textile markets, but the annual losses in share have been relatively moderate since 2012. The cotton polyester price ratio has risen in recent months, but remains within the range established since 2015. The International Cotton Advisory Committee is forecasting only a small fiber share loss for cotton in calendar 2020.

World Trade, Stocks, and Prices, 2020/21

World Cotton Supply and Demand 2019/20 and 2020/21 est.

Attribute	Unit	2019/20	2020/21	Change (%)
Beginning Stocks	mil. bales	80.0	82.1	2.7
Area Harvested	mil. HA	34.5	33.1	-4.0
Production	mil. bales	121.3	118.5	-2.3
Imports	"	43.5	44.5	2.2
Total Supply	"	201.3	200.6	-0.3
Exports	"	43.5	44.5	2.2
Use	"	119.0	121.0	1.7
Total Use	"	119.2	121.2	1.7
Ending Stocks	"	82.1	79.4	-3.3
Outside of China		48.4	47.3	-2.1
Stocks-to-use %	%	69.0	65.6	-4.9

World trade in 2020/21 is projected at 44.5 million bales, up modestly from 2019/20. China's imports are projected higher, as are those for Vietnam and Bangladesh. Exports from the United States, Brazil, Australia, and Greece are expected to be flat, while exports from Central Asia and the Franc Zone will be lower on smaller crops. Exports from India are forecast higher despite lower production and higher use as stocks held in the Minimum Support Price program are pushed back into the market.

A lower global production forecast coupled with higher use will result in a more than 3-percent

reduction in world ending stocks. While most of the reduction will be seen in China, stocks outside of China are also expected to go down. The reduction in stocks outside of China follows four consecutive years of higher stocks there.

The change in direction of stocks outside of China coupled with a positive growth rate in consumption, following two years of lower global demand, will support higher price levels in 2020/21, both U.S. and international. The average price received by U.S. farmers is forecast up 2 cents at 64 cents/pound.

U.S. Cotton Outlook for 2020/21

Area, Production, and Supply

The early USDA projection for 2020 U.S. cotton planted acreage is 12.5 million acres, 9 percent below 2019 and the smallest area since 2016. Historically, the relationship between expected harvest prices for cotton relative to corn and soybeans has played a key role in the cotton area planted. Cotton futures prices from mid-January through mid-February 2020 averaged 4 cents (nearly 5.5 percent) below price expectations in early 2019; for the same period, price declines for corn (-1.5 percent) and soybeans (-2.5 percent) were smaller, indicating that alternative crops are relatively more competitive this year.

Another contributing factor to acreage decisions stems from the cotton farmers' experiences during the previous season. While crop yields in 2019 were above average in three of the four Cotton Belt regions, they were significantly lower in the Southwest, where approximately 60 percent of the upland cotton is planted. Additionally, the effects of the Phase One trade deal with China—along with the demand impact of COVID-19—add further uncertainty about 2020 as the spring planting season approaches (see the U.S. Farm Bill appendix for overview of U.S. policy assumptions).

U.S. Cotton Area, Yield, and Production 2019/20 and 2020/21 proj.

	<u>Unit</u>	<u>2019/20</u>	<u>2020/21</u>	<u>Change (%)</u>
Planted area	mil. acres	13.74	12.50	-9.0
Harvested area	"	11.80	10.95	-7.2
Abandonment rate	%	14.1	12.4	-12.1
Yield/harvested acre	lbs./acre	817	855	4.7
Production	mil. bales	20.10	19.50	-3.0

The USDA projection is about 4 percent (500,000 acres) below the recent National Cotton

Council (NCC) survey, which indicated 2020 cotton plantings near 13.0 million acres; the NCC survey was released on February 15, reflecting responses received from mid-December through mid-January. Survey respondents reported 2020 upland cotton area decreases for each of the Cotton Belt regions. In the Southeast, the NCC survey revealed that cotton acreage would decline 9 percent in 2020, with decreases indicated for each of the States. For the Delta region, 2020 intentions also were expected lower across all States, with 6.5 percent fewer cotton acres due to anticipated area increases for corn and soybeans. In the Southwest, the survey indicated a nearly 3.5-percent reduction in cotton acreage as producers in Texas expect to plant fewer acres, while those in Oklahoma and Kansas plant more cotton. In the West, the NCC reported that upland cotton acreage is expected 20 percent lower in 2020. In addition, the survey indicated that producers intend to modestly reduce ELS cotton area in 2020. USDA's first survey of producer planting intentions—*Prospective Plantings*—will be conducted in early March and published on March 31, 2020.

For the purposes of this analysis, cotton plantings of 12.5 million acres are estimated to result in harvested acreage of about 11.0 million acres, 7 percent below 2019. The projected national abandonment rate of approximately 12.5 percent is based on regional long-run averages, with the exception of the Southwest, where 2020 abandonment is projected at 19 percent—down from 23 percent in 2019. Southwest abandonment rates are highly variable and conditions there will have a considerable impact on the U.S. crop. The latest NOAA seasonal outlook for the Southwest indicates that drought is not forecast to be an issue through at least the end of April.

USDA is forecasting a national average yield—based on regional average yields—of 855 pounds per harvested acre, up from the 2019 yield of 817 pounds. The 2020 U.S. cotton crop is projected at 19.5 million bales, 3 percent (600,000 bales) below 2019, as a rebound in the U.S. yield offsets much of the area reduction in 2020. Smaller crops are anticipated for most of the Cotton Belt, with the exception of the Southwest, where 2020 cotton production could rise to its second highest on record. Based on higher U.S. carry-in stocks of 5.4 million bales for 2020/21 but lower production, the total supply—24.9 million bales—would nearly match that from 2019/20, which was the highest since 2007/08.

U.S. Disappearance, Ending Stocks, and Farm Price

U.S. Cotton Supply and Demand 2019/20 est. and 2020/21 proj.

	Unit	2019/20	2020/21	Change(%)
Beg. Stocks	Mil. bales	4.85	5.40	11.3
Production	"	20.10	19.50	3.0
Imports	"	0.01	0.01	0.0
Total supply	"	24.96	24.91	-0.2
Mill use	"	3.00	3.00	0.0
Exports	"	16.50	16.50	0.0
Total use	"	19.50	19.50	0.0
Ending stocks	"	5.40	5.30	-1.9
Stocks-to-use	%	27.7	27.2	-1.8
Farm price	cents/lb.	62.0	64.0	3.2

U.S. domestic mill use is projected at 3.0 million bales, essentially unchanged from 2019/20, due to continued import competition and moderate growth in domestic demand. U.S. cotton mill use will also be sustained by a rebound in semi-processed textile and apparel exports—mainly to Mexico and the CAFTA-DR/CBI countries—that are finished and shipped back to the United States.

Exports are projected unchanged at 16.5 million bales, reflecting in part the stability of U.S. exportable supply. China's rising imports and easing U.S.-China trade tensions are favorable for U.S. exports to some degree, but Brazilian exports are expected to remain near record levels and the United States will face additional competition early in the season as India's remaining price-intervention stocks become available to world markets.

Ending stocks are projected to decline slightly, their first decline in 4 years. At 5.3 million bales, U.S. ending stocks in 2020/21 are expected to be 100,000 bales lower than during the year before. Reduced stocks in the United States and in other countries outside of China are expected to reduce pressure on cotton prices in 2020/21, and the average price received by producers could rise to 64 cents per pound, compared with the 2019/20 current forecast of 62 cents.

Appendix: China Cotton Policy and USDA Assumptions

Import Policy: Sliding Scale Quota Issued Starting in 2018

2018

- Out-of-quota import duty is 40% ad valorem.
- 894,000 metric tons (MT) TRQ at 1% duty; calendar year basis, one-third reserved for State Enterprises.
- Sliding scale import licenses, 800,000 MT issued; valid Sept/18-Feb/19, but licenses were not fully used.
- Imports of U.S. cotton faced additional 25% duty starting in June; some imports by State Enterprises and for processing exempt from additional duties.
- Imports of foreign cotton by State Reserve.

2019

- Out-of-quota duty, TRQ, and duty-free processing imports same as previous year.
- Imports of U.S. cotton face additional 25% duty; some imports by State Enterprises and for processing exempt from additional duties.
- Imports of foreign cotton by State Reserve, but U.S. imports excluded.
- Additional access provided; additional Sliding Scale quota of 800,000 tons issued, but licenses were not fully used.

2020 & 2021

- Out-of-quota duty, TRQ, and duty-free processing imports same as previous year.
- Imports of U.S. cotton face additional 25% duty; some imports by State Enterprises and for processing exempt from additional duties. On Feb. 17, 2020 China announced procedures for other importers to apply for exemptions from the additional duties.
- Imports of foreign cotton by State Reserve.
- Additional access provided; additional Sliding Scale quota likely.

State Reserve Policy:

2018

- Sales from March 12 thru September 30, 2018.
- Daily offers of 30,000 MT, 2.49 million MT sold, 58 percent of total amount offered.
- Offer price based on weekly average of internal price and A Index (same as 2016 and 2017).
- Purchased 100,000-120,000 MT foreign cotton.

2019

- Sales from May 5 thru September 30, 2019..
- Daily offers of 30,000 MT, 998,500 MT sold, 91 percent of total amount offered.
- Offer price based on weekly average of internal price and A Index (same as 2016, 2017, and 2018).
- Purchased 200,000-225,000 MT foreign and 35,000 MT domestic cotton.

2020

- Sale of remaining 2012 and 2013 stocks.
- Additional purchases of foreign cotton and of domestic new crop (up to 400,000 tons of 2019 domestic crop).
- Stock level at end of year roughly equal to that at beginning of the year.

Domestic Support Policy: Target Price Policy

2016/17 - 2019/20

- Target price of 18,600 renminbi (RMB)/MT for Xinjiang.
- Xinjiang subsidy level based on difference between target price and average price received by gins during ginning period.
- For inland farmers, subsidy equals lesser of 2,000 RMB/MT or 60 percent of Xinjiang target price payments in given year.
- Further shift to payments being linked to production rather than area. Xinjiang yearly (2017-19) volume entitled for subsidy capped at 85 percent of 2012-14 average China cotton production. Some regions in Xinjiang have set ceilings on seedcotton yield that can be attributed to individual farmers, limiting ability of production from unregistered land to receive subsidy payments.
- Subsidy for long staple cotton at 1.3 times base rate.

2020/21

- No formal announcement yet, no major changes expected (rumors say likely to moderately increase subsidy to farmers in inland provinces).

Other Support for Cotton

- High quality planting seeds subsidy.
- Xinjiang transport subsidy: Subsidies are provided to transport cotton lint and cotton containing yarn from Xinjiang to other regions.
- Government support for spinning in Xinjiang: Government provides direct support for spinning and for investment in spinning capacity in Xinjiang.

Appendix: U.S. Farm Bill

On December 20, 2018, the Agriculture Improvement Act of 2018 became law and will be in place for the crop years 2019 through 2023. In general, many of the provisions of the 2014 Farm Bill such as Marketing Assistance Loans and the ARC/PLC programs were retained, with some upward adjustments to loan rates for some crops and an allowance for ARC/PLC reference prices to rise as much as 15% above the statutory reference prices. Also, producers were required to allocate “generic” base acres (former cotton base acres before 2014) to seed cotton base acres in an amount equal to the greater of 80% of their generic base acres (up to 100% in some cases), or the average number of seed cotton acres planted on the farm during 2009-12, not to exceed total generic base acres on the farm.

For cotton, most of the Title I provisions are unchanged or modestly adjusted from the 2014 Farm Bill, with the noteworthy exception of incorporating the “seed cotton” (unginned cotton containing both lint and seed) ARC/PLC provisions from the Bipartisan Budget Act of 2018 (signed February 9, 2018), which made seed cotton eligible for ARC/PLC for the 2018/19 crop. This was after cotton lint was removed as a “covered” commodity in the 2014 Farm Bill following a successful WTO challenge of the U.S. cotton program by Brazil. The upland cotton marketing assistance loan rate remains between 45 and 52 cents/lb., the ELS rate was raised from \$0.7977/lb. to \$0.95/lb., and seed cotton loan rates correspond with their respective upland and ELS loan rates. The Economic Adjustment Assistance Program for domestic users of upland cotton (“EAAP”) is unchanged. The Extra Long Staple (ELS) Competitiveness payment program remains in place but several parameters potentially affecting payments have been changed.

Seed Cotton ARC/PLC Provisions

When cotton lint was removed as a covered crop in the 2014 Farm Bill, cotton base acres were eliminated and were replaced by “generic” base acres. With no cotton base acres, no payments could be made under ARC/PLC based on cotton lint prices or revenues, as could be made to owners of other covered crop base acres. Instead, generic base acres, on an annual basis, could be eligible for payments based on the proportion of other covered crops planted on a farm with generic base acres. If conditions warranted, payments would be made for the covered crops attributed to that generic base.

The 2018 Bipartisan Budget Act (BBA) applied only to the 2018/19 crop, but the 2018 Agriculture Improvement Act applies to the 2019-23 crops. Under the BBA, owners of generic base had several options to convert generic base into seed cotton or other covered commodity base acreage, either to 80-100% seed cotton base depending on cotton planting history during 2009-12 or to the proportion of all covered crops planted during that time period. If a producer planted no covered commodities since 2009, all generic base would become unassigned and ineligible for ARC/PLC payments.

The seed cotton ARC and PLC programs will operate with the same general parameters as they have with other covered crops during the 2014 Farm Bill. Seed cotton will have a reference price of \$0.367/lb., and the effective price will be the higher of \$0.25/lb. or the weighted average

price of cotton lint and cottonseed. Payments would equal the payment rate (if the effective price is lower than the reference price), times the payment yield, times 85% of the seed cotton base acres. The payment yield, by default, is the Counter-Cyclical Payment yield under previous legislation for lint cotton times 2.4, and the option to update yields also exists under the same conditions as for other covered commodities under the 2018 Farm Act.

Marketing Assistance Loans

There are different provisions for upland cotton, ELS, and seed cotton marketing assistance loans (MALs) in the 2018 Farm Bill. The upland cotton and ELS MALs remains nonrecourse, meaning that producers may forfeit the cotton as full repayment of the MAL, but only upland cotton is eligible for Marketing Loan Benefits. The upland cotton loan rate remains between \$0.45/lb. and \$0.52/lb., based on the simple average of the preceding two crop year's Adjusted World Price (AWP), but with the new provision that the loan rate can be no less than 98% of the previous year's loan rate. The ELS loan rate, along with a number of other crops, had its loan rate raised, in this case from \$0.7977/lb. to \$0.95/lb. Seed cotton loans (unrelated to the ARC/PLC provisions discussed above) are recourse loans, requiring full repayment with interest. The loan rate for seed cotton is the same for upland cotton and ELS cotton, respectively, depending on the variety of the cotton.

Other Cotton Provisions

The other main cotton programs that were continued, with some modification in one case, are the Economic Adjustment Assistance to domestic users of Upland Cotton ("EAAP") program, the ELS Competitiveness Payment Program, and the upland Special Import Quota.

The EAAP program, established in 2008, provides a fixed payment of \$0.03/lb. to domestic users (e.g., mills) of upland cotton. The payments are to be used for capital improvements such as purchasing or improving equipment, machinery, and structures.

The ELS Competitive Payment Program is designed to make payments to domestic users or exporters of ELS when, for four consecutive weeks, a) the lowest foreign price quote for a competing variety is lower than the U.S. price quote and, b) the low foreign price quote is less than a certain percentage of the U.S. loan rate (previously 134% and changed to 113% in the 2018 Farm Act). The change to 113% is offsetting to the increased loan rate but perhaps not completely so based on an examination of historical price data. Finally, a special import quota, is continued and unchanged from prior farm bills.

On January 9, 2020 USDA changed the foreign price quote used in the ELS Competitive Program calculations to the more widely available Giza 94. Quotes for Israeli Pima H1 had been utilized for several years, but the growing availability of Giza 94 resulted in a change.