

The Economic Outlook For U.S. Cotton 2020

Prepared by

Jody Campiche, Vice President, Economics and Policy Analysis
Shawn Boyd, Agricultural Economist
Michelle Huffman, Agricultural Economist

National Cotton Council of America




Summary

This past year can be characterized as a year with significant uncertainty and volatility in the global economy and the world cotton market. The U.S.-China trade dispute continued to impact world trade in 2019. Now, in the early weeks of 2020, the spread of the coronavirus is creating a new round of risks and challenges. With this report, National Cotton Council (NCC) staff hopes to present a thorough review of the current economic landscape and the prospects for the coming year.

Overall, cotton futures prices traded lower in 2019 as compared to 2018. During the first four months of 2019, cotton futures prices traded in the 70 to 80 cent range. From April until the end of August, prices steadily declined to a low of 57 cents per pound, which is the lowest level since early 2016. Prices remained in the upper 50's until October before continuing on an upward trajectory, approaching 70 cents by the end of the year.

Despite the political uncertainties surrounding the Trump administration during 2019, the U.S. economy continued to expand, albeit at a slower rate than previous years. The long-running bull market is expected to continue into 2020 with further growth in the U.S. economy. However, current economic projections for the U.S. and global economies should be viewed with caution given the lack of clarity regarding the potential impacts of the coronavirus.

The latest USDA estimates for the 2019 U.S. crop are a good reminder that planted acreage is just one of the factors determining the supply of cotton and cottonseed. Although planted acreage declined to 13.7 million acres in 2019, production was estimated to be 20.1 million bales, which was 1.7 million bales higher than in 2018 due to lower abandonment. In 2019, U.S. abandonment was estimated to be 14.1%, much lower than the 2018 value of 27.6%.

In the Southwest, planted cotton acreage decreased by 830 thousand acres to 7.9 million acres in 2019. Texas producers planted 7.1 million acres in 2019 as compared to 7.8 million acres in 2018. However, since Texas abandonment declined from 43.9% in 2018 to 23.4% in 2019, harvested acreage increased by 1.1 million acres in 2019. Kansas area increased slightly to 175 thousand acres in 2019. Oklahoma's acreage declined to 640 thousand acres as compared to 780 thousand acres in 2018. In the last three years, cotton acreage in Kansas and Oklahoma has greatly expanded. For the 2019 crop year, Oklahoma had the 4th highest cotton acreage in the United States.

In the Southeast, 2019 acreage expanded slightly to 3.0 million acres. Acreage increased in Alabama, North Carolina, and Virginia and declined in Florida and Georgia. South Carolina acreage was unchanged in 2019. Mid-South acreage increased by 415 thousand acres to 2.4 million acres in 2019, while upland acreage in the West declined by 7 thousand acres.

In 2019, the estimated national average cotton yield of 817 pounds was 47 pounds lower than the previous year and 35 pounds lower than the 5-year average. Looking at the numbers in more detail provides a better insight to the varying conditions faced by growers across the Cotton Belt. The Southwest region had below average yields in 2019 while all other regions had above average yields.

In the Southwest, the 2019 average yield of 583 pounds was 165 pounds lower than

2018 and 143 pounds below the 5-year average. In Texas, the yield of 569 pounds was 187 pounds lower than 2018 and 149 pounds lower than the 5-year average. The Oklahoma yield of 640 pounds was 45 pounds higher than 2018. However, it was 146 pounds below the 5-year average. At 910 pounds, the Kansas yield was 167 pounds lower than the previous year and 135 pounds below the 5-year average.

In the Southeast, the 2019 yield for all states was higher than both 2018 and the 5-year average. For the region, the 2019 yield of 932 pounds was 172 pounds higher than 2018 and 72 pounds higher than the 5-year average. In Alabama, the 2019 yield of 969 was 111 pounds higher than 2018 and 69 pounds higher than the 5-year average. In Florida, the 2019 yield of 822 pounds was 290 pounds higher than in 2018 and slightly above the 5-year average.

The 2019 Georgia yield of 915 pounds was 196 pounds higher than 2018 and 53 pounds higher than the 5-year average. The 2019 North Carolina yield of 1,018 pounds was 206 pounds higher than 2018 and 160 pounds higher than the 5-year average. In South Carolina, the 2019 yield of 808 pounds was 75 pounds higher than 2018 and 26 pounds higher than the 5-year average. At 1,035 pounds, the 2019 Virginia yield was 140 pounds higher than 2018 and 82 pounds higher than the 5-year average.

The 2019 Mid-South yield of 1,134 pounds was just 18 pounds lower than the record 2018 yield and 32 pounds above the 5-year average. In Missouri, the 2019 yield of 1,330 pounds was the 2nd highest on record behind the 2018 yield. The 2019 Tennessee yield of 1,138 pounds was the highest on record for the state. In Arkansas, the 2019 yield of 1,102 pounds was 31 pounds lower than the previous year and 28 pounds lower than the 5-year average. The 2019 Louisiana yield of 1,031 pounds was 36 pounds lower than in 2018 and 48 pounds above the 5-year average. In Mississippi, the 2019 yield of 1,097 pounds was 44 pounds lower than the previous year and 29 pounds lower than the 5-year average.

The average upland yield in the West was estimated at 1,464 pounds, which was 18 pounds above the 5-year average and 112 pounds higher than 2018. The Arizona yield of 1,443 pounds was 29 pounds below the 5-year average while the New Mexico yield of 1,328 pounds was 310 pounds above the 5-year average and a new record. The California yield of 1,644 pounds was 265 pounds lower than the record 2018 yield and 40 pounds lower than the 5-year average.

The national average ELS yield was estimated at 1,544 pounds, relatively unchanged from 2018 and 116 pounds above the 5-year average. Accounting for the majority of ELS acres, California heavily influences the U.S. average. With an average yield of 1,616 pounds, the California yield was 46 pounds lower than the previous year and 78 pounds above the 5-year average. At 896 pounds, ELS yields in Arizona were 32 pounds below the 5-year average. New Mexico's yield of 864 pounds was 13 pounds above the 5-year average. The 2019 Texas ELS yield of 912 pounds was slightly lower than 2018 and the 5-year average.

With 18.3 million running bales classed through February 6, color grades for the 2019 crop were generally lower than previous years. In total for the Cotton Belt, 76.4% of the 2019 crop was grading 41 or better as compared to the 5-year average of 83.5%. The Southeast region was the only region that did not fall below the respective five-year average in terms of color. In the Southeast, 81.3% of the 2019 crop was grading 41 or better. At 87.7%, the Mid-South was slightly behind the 5-year average of 89.1%. The Southwest had the lowest

percentage grading 41 or better with 62.4% of the 2019 crop. In the West, 88.0% of the 2019 crop was grading 41 or better.

The current marketing year began with cotton stocks at 4.9 million bales. When added to the recent harvest, total supplies for the 2019 marketing year are estimated at 25.0 million bales. Total supplies will be more than sufficient to satisfy estimated use of 19.5 million bales. According to the February USDA estimates, U.S. exports for the 2019 crop year are currently estimated at 16.5 million bales.

U.S. textile mills are expected to consume 3.00 million bales in the current marketing year. The Economic Adjustment Assistance for Textile Mills (EAATM), reauthorized and renamed in the 2018 Farm Bill, continues to be an important source of stability, allowing mills to invest in new facilities and equipment.

As we look ahead to the 2020 planting season, several factors will influence U.S. acreage decisions, including market price changes, weather events, and general agronomic conditions. The 2018 Farm Bill provides a measure of stability for cotton producers with the continuation of the seed cotton PLC/ARC program.

On January 15, 2020, President Trump signed the Phase 1 trade agreement with China. As part of the agreement, China has agreed to purchase an average of $40 billion in U.S. agricultural commodities, including cotton, over the next two years. However, the overall impact for cotton remains uncertain as commodity specific details have not been released. As a result, trade uncertainty will continue to impact the cotton market in 2020.

While the Phase 1 trade agreement has provided some renewed optimism for an improvement in world economic conditions, the China coronavirus epidemic in the early weeks of 2020 has created market disruptions, adding uncertainty in commodity markets. In the last few weeks, the outbreak of the coronavirus has contributed to a significant drop in commodity prices. For example, crude oil prices dropped from $60 per barrel in mid-January to $50 per barrel in early February.

The market disruptions could delay China's ability to increase purchases in the near-term as part of the Phase 1 trade agreement. As a result, the potential impacts of the coronavirus epidemic represent a significant wildcard in the outlook for the world cotton market in the 2020 crop year.

During the first four months of the 2019 marketing year, the December 2020 futures contract was trading in the mid to upper 60's. Prices steadily declined from May to September, reaching a low of 61 cents on September 3. Since reaching that low point, prices trended upward reaching 72 cents by the end of January. As compared to a year ago, futures prices are trading a few cents lower. At this time last year, the December 2019 contract was trading in the 74-75 cent range. In early February, prices dropped to 68 cents as concerns intensified regarding the spread of the coronavirus.

Corn prices traded in a sideways pattern during the first half of 2019 and followed a downward trend during the last half of the year. In mid-January, the December 2020 contract was trading at $4.04 per bushel, which is the same level as a year ago. In early February, prices dropped to $3.92 per bushel.

Soybean futures prices experienced some volatility in 2019, with a range of $8.88 to $9.81. In mid-January, the November 2020 contract traded at $9.70 per bushel, almost the same level as the November 2019 contract was trading a year earlier. In early

February, prices dropped to $9.18 per bushel.

A critical component of the economic outlook is the NCC's annual planting intentions survey. The 2020 survey was distributed in mid-December with responses collected through mid-January. Respondents were asked to provide their plantings of cotton, corn, soybeans, wheat, and 'other crops' for 2019 and intended acreage for 2020. As always, the survey results should be viewed as a measure of grower intentions prevailing at the time the survey was conducted. Changing climate and market conditions could cause actual plantings to be significantly different from growers' stated intentions.

Relative to average futures prices in the first quarter of 2019, average soybean prices during the 2020 survey period (December 15 – January 15) were up by 2.6%, corn prices were trading about 0.8% higher, and cotton prices were trading 4.3% lower. As a result, relative price ratios of cotton to corn and cotton to soybeans presented slightly less favorable planting incentives when compared to 2019.

It is important to call attention to the relative price ratios because experience has shown that these ratios are reliable indicators of changes in cotton acreage. Historical data over the past 10 years shows a clear relationship between the price ratios and changes in cotton acreage. A decrease in the price ratios generally indicates a decrease in cotton acreage.

For the 2020 crop year, corn, soybeans, and wheat are expected to provide modestly more competition for cotton acres. A review of the Council's survey will begin with a look at the Southeast.

In the Southeast, survey results indicate a 9.3% decrease in the region's upland area to 2.7 million acres, with all states showing a decline in acreage (See Table 4 on page 47). In Alabama, the survey responses indicate a 4.9% decrease in cotton acreage, an increase in corn and soybeans and a decline in 'other crops'. In Florida, respondents indicated slightly less cotton, soybeans, and 'other crops', likely peanuts, and more corn. In Georgia, cotton acreage is expected to decline by 11.9% to 1.2 million acres. Georgia growers expect to plant more corn, wheat, and 'other crops', likely peanuts, and less soybeans. In North Carolina, an 8.4% decline in cotton acreage is expected. Acreage of corn, wheat, and soybeans is expected to increase while 'other crops' is expected to decline. In South Carolina, acreage is expected to decline by 10.7%. South Carolina growers expect to plant more corn, soybeans, wheat, and 'other crops'. Cotton acreage is expected to decline by 3.6% in Virginia. Virginia growers intend to plant more corn and 'other crops' and less soybeans and wheat.

In the Mid-South, growers have demonstrated their ability to adjust acreage based on market signals. The relative prices and potential returns of competing crops play a significant role in cotton acreage. Mid-South growers intend to plant 2.2 million acres, a decline of 6.5% from the previous year. Survey results suggest that the decrease in cotton acres can be attributed to a shift to corn and soybeans.

Across the region, all states intend to decrease cotton acreage. Arkansas producers intend to plant 3.0% less cotton acreage and increase corn, wheat, and 'other crops'. Soybean acreage is expected to remain relatively unchanged from 2019. Louisiana growers expect to plant 6.4% less cotton acreage in 2020 and plant more corn, soybeans and 'other crops'. In Mississippi, respondents expect to plant 8.9% less cotton. Mississippi respondents expect to increase corn and soybean acreage and reduce 'other

crops'. Missouri growers expect to decrease cotton acres by 2.1% and plant more corn, and less soybeans. In Tennessee, cotton acreage is expected to decline by 11.8% as land shifts to corn, soybeans and wheat. All states in the Mid-South intend to plant more corn in 2020. Soybean acreage is expected to increase in Louisiana, Mississippi, and Tennessee.

Growers in the Southwest intend to plant 7.6 million acres of cotton, a decrease of 3.4%. Increases in cotton area are expected in Oklahoma and Kansas and a decline is expected in Texas. In Kansas, producers intend to plant 5.1% more cotton acres in 2020, with respondents indicating less corn and soybeans. In Oklahoma, a 3.3% increase in cotton acreage is expected. Oklahoma producers expect to plant slightly more wheat and less 'other crops'. Overall, Texas acreage is expected to decline by 4.2%. In south Texas, respondents indicate a 10.4% decrease in cotton acreage. South Texas growers intend to plant more corn and 'other crops', likely sorghum, and less wheat. Respondents from the Blacklands indicate a decrease of 8.3% in cotton acreage, an increase in corn acreage and 'other crops', and a decrease in wheat acreage. In West Texas, respondents indicated a 3.0% decrease in cotton acreage, an increase in corn and wheat, and a slight decrease in 'other crops'.

With intentions of 221 thousand acres, producers in the West expect to plant 20.5% less acres of upland cotton. Cotton acreage is expected to decrease in Arizona and California and increase slightly in New Mexico. The survey results for Arizona suggest a 25.7% decrease in upland cotton acres and an increase in corn, wheat, and 'other crops'. In California, growers intend to plant 30.9% less upland cotton and reduce acreage of corn and wheat. California producers expect to increase acreage of 'other crops'. Summing across the 4 regions gives intended 2020 upland cotton area of 12.8 million acres, 5.6% below 2019.

The survey indicates that growers intend to plant slightly less ELS cotton in 2020. California growers expect to plant 3.9% less ELS cotton, while Arizona growers expect to plant 1.8% less ELS cotton. New Mexico acreage is expected to remain unchanged while Texas growers expect to increase ELS acreage by 15.5%. Overall, U.S. cotton growers intend to plant 224 thousand ELS acres in 2020. Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2020 of 13.0 million acres, 5.5% lower than in 2019.

Based on the current prices of cotton and cottonseed, total revenue is expected to fall short of total costs. In recent years, U.S. cotton producers have struggled with low cotton prices, high production costs, and the resulting financial hardships. Many producers continue to face difficult economic conditions heading into 2020. Production costs remain high and prices are not high enough to cover all production expenses for many producers. While the Market Facilitation Program has provided some compensation to producers for the reduction in prices due to trade disruptions, the 2019 crop year has still been a very challenging year for many growers across the Cotton Belt. In addition, the most recent dip in commodity prices falls during the 2020 crop insurance price discovery period for a large portion of the Cotton Belt, which lowers the insurance guarantees.

Despite these challenges, cotton is still the better alternative for many growers. Based on current prices, projected cotton returns are currently more favorable than some competing commodities. Improved seed varieties continue to increase yield potential and improve the viability of cotton. In the West, expected water availability may be influencing cotton acreage decisions.

Planted acreage is just one of the factors that will determine supplies of cotton and cottonseed. Ultimately, weather events, insect pressures, and agronomic conditions play a significant role in determining crop size. Since the NCC economic outlook does not attempt to forecast weather patterns, the standard convention is to assume yields in line with recent trends and abandonment consistent with historical averages. However, it is important to remember the volatility around projected production given the uncertainty of weather patterns.

With average abandonment for the U.S. estimated at 13.8%, Cotton Belt harvested area totals 11.2 million acres. Using an average 2020 U.S. yield of 848 generates a cotton crop of 19.8 million bales, with 19.1 million bales of upland and 675 thousand bales of ELS.

Combining projected production with expected beginning stocks of 5.4 million bales and imports of 5 thousand bales gives a total U.S. supply of 25.2 million bales. This is an increase of 205 thousand bales from the 2019 level. Cottonseed production is estimated to decrease to 6.1 million tons in the 2020 marketing year. With 421 thousand tons of beginning stocks, 2020 cottonseed supply totals 6.5 million tons.

NCC projects domestic mill use of cotton at 2.85 million bales for the 2020 marketing year, slightly below the 2019 USDA estimate of 3.00 million bales. As one of the largest markets for U.S. cotton, U.S. mills continue to be critically important to the health of the cotton industry. In the face of rising textile imports from Asian suppliers, the U.S. textile industry has focused on new investment and technology adoption in order to remain competitive.

On January 29, 2020, President Trump signed the U.S.-Mexico-Canada Agreement (USMCA) into law. The USMCA includes some important provisions that should help boost the U.S. textile industry. However, while the U.S. and Mexico have approved the USMCA, Canada has only recently started its ratification process and is expected to conclude in the next few months. It is unlikely the USMCA will enter into force prior to July 1, 2020.

Now, we will turn our attention to the world market with a review of 2019 and then discuss prospects for the 2020 marketing year.

One of the most challenging issues facing the global cotton market has been the uncertainty surrounding the ongoing trade tensions between the U.S. and China. In mid-January, the two countries signed Phase 1 of the U.S.-China trade agreement.

World cotton production increased in 2019 to an estimated 121.3 million bales due to higher acreage. As compared to 2018, India’s crop increased by 3.7 million bales in 2019 while China’s 2019 crop declined by 500 thousand bales. Australia’s 2019 production was estimated to be 675 thousand bales, which was the lowest level in twelve years. Pakistan’s production was estimated to be 6.6 million bales in 2019, which is the lowest level since the 1994 crop year. Turkey’s 2019 production was 300 thousand bales lower than 2018. Brazil’s 2019 estimated production of 12.7 million bales was slightly below the record level in 2018.

World consumption is expected to be 119.0 million bales in the 2019 marketing year. Estimates have been revised downward due to the ongoing trade dispute, a slowdown in the Chinese and world economies, and disruptions to manufacturing and trade due to the coronavirus outbreak. China is projected to consume 37.5 million bales in 2019. The gap between China’s cotton consumption and production is currently

10.3 million bales. From 2015-2018, the gap was filled with reserve sales and a small level of imports. In the last five years, China reduced their total ending stocks from 66.4 million bales in the 2014 marketing year to an estimated 33.7 million bales in the 2019 marketing year, which is now considered to be a normal or maintainable level.

China's ending stocks include state reserve stocks and free stocks. From 2012 to 2017, the majority of total ending stocks were state-owned reserve stocks. China is now purchasing cotton to rotate the reserve stocks. For the 2019 crop year, China is expected to import 8.5 million bales, which is 1.1 million bales lower than in 2018. The drop in imports is in part due to the decline in mill use resulting from the trade restrictions of the U.S.-China dispute.

Prior to the implementation of tariffs, the U.S. was in a prime position to capitalize on the increase in Chinese cotton imports. In the absence of retaliatory tariffs, China was expected to purchase more U.S. cotton in the 2018 and 2019 marketing years as a result of declining stockpiles and larger gap between China's domestic production and consumption.

With the imposition of the 25% tariff, China has turned to other suppliers during the 2018 and 2019 marketing years. The U.S.-China trade dispute has allowed Brazil, Australia, and other countries to gain market share. For the past decade, China has imported 80.0% of raw cotton from four countries -- the U.S., Australia, Brazil, and India. Over the years, the market share for these countries has changed, particularly as China has imported less cotton from India and more from the U.S., Australia, and Brazil. For China, cotton imports from the U.S., Australia, and Brazil are comparable since the cotton is machine-picked and of higher quality. In the 2017 marketing year, the average market share of Chinese imports from the U.S., Australia, and Brazil was 45.0%, 22.7%, and 6.7%, respectively.

For the 2018 marketing year, the share of Chinese imports from the U.S., Australia, and Brazil was 17.7%, 26.5%, and 22.7%, respectively. Based on the current level of sales commitments, U.S. exports to China are projected to increase to 2.0 million bales in the 2019 crop year as compared to 1.6 million bales in 2018. This would result in a slight increase in the U.S. market share of Chinese imports to 23.0%. While an improvement from the previous marketing year, the ongoing trade restrictions are keeping U.S. market share below historical averages.

Based on the February 2020 USDA estimates, U.S. exports are projected to reach 16.5 million bales in the 2019 marketing year. Despite the continued U.S.-China trade disruptions, U.S. export sales have been relatively strong for the 2019 crop year, particularly to markets such as Vietnam, Pakistan and Turkey. Sales reached the highest level in the marketing year during the week ending January 23. Weekly shipments reached a marketing year high of 437 thousand bales during the week ending January 30. As of January 30, total commitments reached 13.7 million bales while 5.8 million bales have been shipped. Current commitments and shipments are at the highest level at this point in the marketing year since the 2010 crop year. While export competition from Brazil remains strong, the U.S. has had increased opportunities for export sales to other markets in the 2019 crop year. Lower production in Australia, Pakistan, and Turkey has led to higher export sales.

During the 2019 crop year, the Indian government has increased purchases of Indian cotton under the Minimum Support Price (MSP) program resulting in less cotton available to export. As of the end of January

2020, the Indian government had purchased 3.7 million bales under the MSP program.

Uzbekistan has drastically reduced cotton exports in 2018 and 2019 and recently announced a ban on cotton exports starting with the 2020 calendar year. From 2005 to 2015, Uzbekistan exported an average of 3.2 million bales per year. Uzbekistan cotton acreage has been declining in the last few years as the government has removed land from low-yielding cotton areas and switched to higher value crops. Starting with the 2020 crop year, the Uzbekistan government plans to maintain cotton acreage at 2.5 million acres for the next five years. With the expansion of the Uzbekistan textile industry, Uzbekistan mill use has been rapidly expanding and domestic cotton production is now entirely consumed by domestic mills. A further expansion of the Uzbekistan textile industry will require Uzbekistan to increase cotton production or become a cotton importer, which is an interesting dynamic since Uzbekistan has not previously imported raw cotton.

World trade is projected to be higher in the 2019 marketing year and the U.S. will remain the largest exporter of cotton with a projected market share of 37.9%, as compared to 35.7% in 2018.

World consumption is expected to be lower than world production in the 2019 marketing year. Ending stocks are projected to increase by 2.1 million bales to 82.1 million bales with a stocks-to-use ratio of 69.0%. Chinese stocks are projected to decrease by 1.9 million bales in 2019. Stocks outside of China are projected to increase in 2019 by 4.1 million bales to 48.4 million bales, which is a record level of stocks.

For the 2020 marketing year, world area is projected to decline by 2.8% to 82.8 million acres in response to the slight decline in cotton prices. World production is estimated to decline by 2.4 million bales in 2020 to 118.9 million bales due to lower area. World mill use is projected to increase to 120.7 million bales for the 2020 crop year, while world trade is estimated to increase to 44.8 million bales.

China is expected to increase mill use in 2020 to 37.9 million bales, with the increase in part due to increased access to imported cotton under the Phase 1 trade agreement. However, the projected increase may not materialize if economic growth continues to slowdown due to the coronavirus outbreak. Lower-priced manmade fibers are also providing strong competition for cotton demand.

China’s imports are expected to increase in the 2020 crop year to 9.1 million bales. The deficit between domestic production and consumption along with lower reserve stocks contribute to the increased trade position. Additional imports are also supported by the implementation of the Phase 1 agreement. However, the increased imports do not eliminate the need to drawdown inventories as Chinese stocks are projected to fall by 2.6 million bales during the 2020 marketing year to 31.1 million bales. If realized, stocks would be down 35.3 million bales from the 2014 peak. World ending stocks are projected to decline by 2.0 million bales in the 2020 marketing year to 80.1 million bales, resulting in a stocks-to-use ratio of 66.4%.

For the U.S. balance sheet, exports in the 2020 marketing year are projected to drop slightly to 16.4 million bales. While China is expected to increase purchases of U.S. cotton under the Phase 1 trade agreement, this outlook assumes a somewhat conservative estimate due to the lack of commodity-specific detail in the agreement. In addition, the U.S. will continue to face increased export competition from Brazil. For this outlook, the U.S. is assumed to

export 2.5 million bales to China in the 2020 crop year as compared to an estimated 2.0 million bales in the 2019 crop year. This would represent 27.5% of the projected 9.1 million bales of Chinese cotton imports, which is still well below the pre-trade war level. If the U.S. export projection of 16.4 million bales is realized, the U.S. share of world exports would be 36.6%, which is slightly lower than the 2018 share.

When combined with 2.85 million bales of U.S. mill use, total offtake falls short of expected production and ending stocks are projected at 5.9 million bales. In absolute terms, stocks would be the highest since the end of the 2008 marketing year, with a stocks-to-use ratio of 30.4%.

While the Council's economic outlook does not attempt to project cotton prices, it is important to review some of the factors shaping the current price situation. Although, cotton prices were weaker in 2019 as compared to 2018, prices had improved at the end of 2019 and in early 2020 prior to the coronavirus outbreak.

However, the resulting global balance sheet, stable stocks outside of China, increased export competition from Brazil, recovery in Australia's production, and low manmade fiber prices will have a bearish influence on cotton prices. A quick containment of the coronavirus and a successful implementation of the Phase 1 trade agreement would provide some price support.

As with any projections, there are uncertainties and unknowns that can change the outcome. For the coming year, key factors affecting the U.S. cotton industry will be the implementation of the Phase 1 trade agreement and impacts of the coronavirus. China has reduced their reserve stocks and is expected to import more cotton in the 2020 marketing year as China continues to rotate the reserve stocks.

Despite the setbacks and short-term challenges that have occurred during this past year, the overall trends for cotton demand remain promising as the global economy continues to expand and world population increases. World stocks are declining, and world production will eventually have to increase to maintain pace with consumption.

Table 1 - Balance Sheet for Selected Countries & Regions

World	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	75,988	73,663	83,327	82,724	85,198	82,837
Yield (Pounds/Acre)	607	695	713	688	684	689
Production (Thou Bales)	96,163	106,677	123,779	118,603	121,329	118,944
Trade (Thou Bales)	35,444	37,697	41,160	42,203	43,548	44,780
Mill Use (Thou Bales)	113,232	116,177	122,761	120,189	119,013	120,667
Ending Stocks (Thou Bales)	90,149	80,288	80,835	79,987	82,120	80,107
United States	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	8,075	9,508	11,100	10,205	11,804	11,180
Yield (Pounds/Acre)	766	867	905	864	817	848
Production (Thou Bales)	12,888	17,170	20,923	18,367	20,102	19,757
Net Exports (Thou Bales)	9,120	14,910	16,276	14,760	16,495	16,401
Mill Use (Thou Bales)	3,450	3,250	3,225	2,975	3,000	2,850
Ending Stocks (Thou Bales)	3,800	2,750	4,200	4,850	5,400	5,857
Australia	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	771	1,433	1,310	939	148	400
Yield (Pounds/Acre)	1,774	1,356	1,759	1,125	2,185	1,640
Production (Thou Bales)	2,850	4,050	4,800	2,200	675	1,367
Net Exports (Thou Bales)	2,828	3,731	3,915	3,632	1,300	1,367
Mill Use (Thou Bales)	35	35	35	35	35	35
Ending Stocks (Thou Bales)	1,880	2,189	3,039	1,572	912	876
Bangladesh	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	106	106	109	109	111	109
Yield (Pounds/Acre)	538	565	596	609	604	594
Production (Thou Bales)	119	125	135	138	140	135
Net Imports (Thou Bales)	6,375	6,800	7,600	6,900	7,200	7,322
Mill Use (Thou Bales)	6,300	6,800	7,500	7,300	7,300	7,410
Ending Stocks (Thou Bales)	1,515	1,630	1,855	1,583	1,613	1,650
Brazil	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	2,360	2,323	2,903	4,052	4,077	4,159
Yield (Pounds/Acre)	1,204	1,451	1,524	1,540	1,495	1,502
Production (Thou Bales)	5,920	7,020	9,220	13,000	12,700	13,017
Net Exports (Thou Bales)	4,223	2,600	4,092	6,001	8,875	9,548
Mill Use (Thou Bales)	3,100	3,200	3,400	3,400	3,400	3,450
Ending Stocks (Thou Bales)	5,709	6,929	8,657	12,256	12,681	12,700
China	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	7,537	7,166	8,401	8,649	8,525	8,184
Yield (Pounds/Acre)	1,401	1,524	1,571	1,540	1,534	1,542
Production (Thou Bales)	22,000	22,750	27,500	27,750	27,250	26,297
Net Imports (Thou Bales)	4,278	4,971	5,574	9,427	8,325	8,957
Mill Use (Thou Bales)	36,000	38,500	41,000	39,500	37,500	37,900
Ending Stocks (Thou Bales)	56,698	45,919	37,993	35,670	33,745	31,100
India	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	30,393	26,810	31,135	31,135	32,123	31,159
Yield (Pounds/Acre)	409	483	447	398	441	429
Production (Thou Bales)	25,900	27,000	29,000	25,800	29,500	27,820
Net Exports (Thou Bales)	4,692	1,814	3,505	1,711	1,300	2,759
Mill Use (Thou Bales)	24,750	24,350	24,150	24,000	24,500	24,875
Ending Stocks (Thou Bales)	7,044	7,880	9,225	9,314	13,014	13,200

Table 1 – Selected Countries and Regions (Continued)

Indonesia	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	7	7	7	7	7	5
Yield (Pounds/Acre)	324	324	194	194	194	246
Production (Thou Bales)	5	5	3	3	3	3
Net Imports (Thou Bales)	2,926	3,386	3,512	3,045	3,045	3,217
Mill Use (Thou Bales)	3,000	3,300	3,500	3,150	3,050	3,150
Ending Stocks (Thou Bales)	528	619	634	532	530	600
Mexico	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	329	257	519	600	556	550
Yield (Pounds/Acre)	1,377	1,429	1,443	1,387	1,355	1,400
Production (Thou Bales)	943	765	1,560	1,735	1,570	1,604
Net Imports (Thou Bales)	844	850	575	350	375	464
Mill Use (Thou Bales)	1,850	1,750	1,900	1,950	1,950	2,000
Ending Stocks (Thou Bales)	605	445	655	765	735	675
Pakistan	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	7,166	6,178	6,672	5,683	6,178	5,930
Yield (Pounds/Acre)	469	598	590	642	513	550
Production (Thou Bales)	7,000	7,700	8,200	7,600	6,600	6,795
Net Imports (Thou Bales)	3,050	2,325	3,240	2,790	4,100	4,260
Mill Use (Thou Bales)	10,300	10,300	10,900	10,700	10,800	10,800
Ending Stocks (Thou Bales)	2,615	2,315	2,830	2,495	2,370	2,600
Turkey	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	914	988	1,161	1,285	1,384	1,245
Yield (Pounds/Acre)	1,391	1,554	1,653	1,382	1,179	1,432
Production (Thou Bales)	2,650	3,200	4,000	3,700	3,400	3,715
Net Imports (Thou Bales)	3,987	3,345	3,699	3,017	3,750	3,791
Mill Use (Thou Bales)	6,700	6,550	7,450	6,900	7,200	7,300
Ending Stocks (Thou Bales)	1,533	1,528	1,777	1,594	1,544	1,750
Uzbekistan	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	3,175	2,916	3,089	2,718	2,595	2,569
Yield (Pounds/Acre)	574	613	600	578	648	626
Production (Thou Bales)	3,800	3,725	3,860	3,275	3,500	3,348
Net Exports (Thou Bales)	2,200	1,750	1,000	750	300	0
Mill Use (Thou Bales)	1,800	2,000	2,500	2,800	3,300	3,457
Ending Stocks (Thou Bales)	1,098	1,073	1,433	1,158	1,058	949
Vietnam	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	2	2	2	2	2	2
Yield (Pounds/Acre)	583	583	583	583	583	583
Production (Thou Bales)	3	3	3	3	3	3
Net Imports (Thou Bales)	4,600	5,500	7,000	6,900	6,800	7,106
Mill Use (Thou Bales)	4,500	5,400	6,600	7,000	6,800	7,100
Ending Stocks (Thou Bales)	779	882	1,285	1,188	1,191	1,200
West Africa	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**
Harvested Area (Thou Acres)	6,434	7,047	7,349	7,277	7,509	7,472
Yield (Pounds/Acre)	313	350	355	358	375	365
Production (Thou Bales)	4,200	5,142	5,439	5,422	5,866	5,682
Net Exports (Thou Bales)	4,553	4,605	5,060	5,548	5,603	5,652
Mill Use (Thou Bales)	131	135	135	140	138	140
Ending Stocks (Thou Bales)	1,066	1,457	1,701	1,435	1,560	1,450

U.S. and World Economy

In the early weeks of 2020, concerns of a slowdown in global economic activity have carried over from 2019. While some trade uncertainty has been reduced with the signing of the Phase 1 trade agreement, continued uncertainty regarding a renewed escalation of the trade war, the coronavirus outbreak, and other unexpected geopolitical events continues to slow economic growth.

The International Monetary Fund (IMF) January 2020 *World Economic Outlook* noted that the global expansion has weakened in part due to the negative effects of the tariffs in the U.S. and China. Escalating trade tensions, further tightening of financial conditions, and a greater-than-expected slowdown in China could create additional downside risks to global growth prospects.

The Wells Fargo Securities January 2020 *Monthly Outlook* also included a similar assessment and outlook for the global economy. However, the 2019 fourth quarter GDP growth forecast was revised upward due to a larger than expected growth in net exports. The U.S. growth forecast for 2020 is lower due in part to ongoing Boeing struggles. The federal funds rate is expected to remain unchanged through 2020 as additional easing should be unnecessary due to current economic conditions.

The latest survey of consumer attitudes reports a consensus among consumers that the economy will remain favorable and expansion will continue in 2020. As measured by the Reuters/University of Michigan's Consumer Sentiment Index, consumer confidence increased in December 2019 to 99.3, continuing the recovery from the sharp decline in August (Figure 1). The index is designed to gauge the attitudes of the American consumer with regards to the economy.

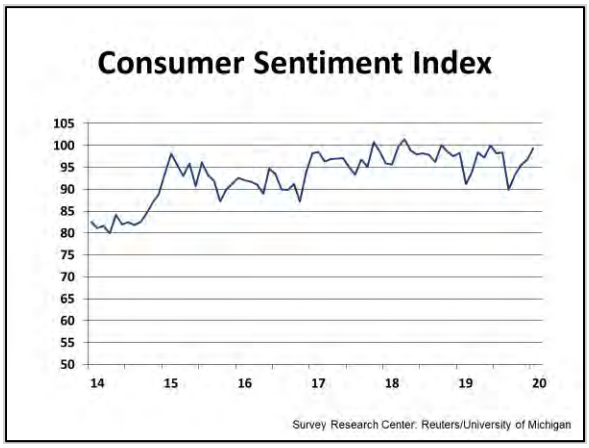

Figure 1 - Consumer Sentiment Index

While the current strength in personal finances should support consumer spending in 2020, consumers do see a need to increase savings in the near-term. They anticipate a slightly lower inflation rate of 2.3% in 2020 and 2.2% over the next five years, which is the lowest level reported since the question was first included in the survey in the 1970s.

U.S. Gross Domestic Product

As determined by the Bureau of Economic Analysis (BEA), U.S. 2019 preliminary third quarter real Gross Domestic Product (GDP) increased by 2.1% (Figure 2), following on gains of 2.0% in the second quarter. The increase in real GDP in the third quarter primarily reflected positive contributions from personal consumption expenditures (PCE), federal government spending, residential investment, exports, and state/local government spending that were partially offset by a negative contribution from nonresidential fixed investment and private inventory investment. Imports, which are a subtraction in the GDP calculation, increased.

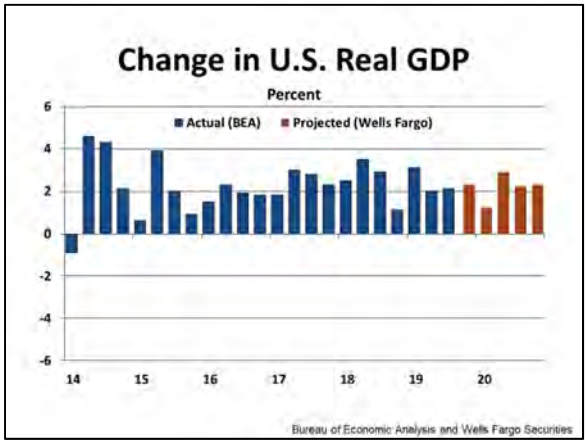

Figure 2 - Change in U.S. Real GDP

The acceleration in GDP growth in the third quarter is primarily due to a smaller decrease in private inventory investment and upturns in exports and residential fixed investment. This was partially offset by decelerations in PCE, federal government spending, and state and local government spending as well as a larger decrease in nonresidential fixed investment.

The Wells Fargo January 2020 *Monthly Outlook* projected GDP for the fourth quarter of 2019 at 2.3% and a 2019 annual rate of 2.3%. Economic growth is expected to lose momentum in 2020 with a projected GDP growth rate of 1.2% in the first quarter and a 2.1% annual growth rate. Business fixed investment is expected to increase by 1.6% in 2020, as compared to an estimated 2.3% in 2019 and 6.4% in 2018.

The manufacturing Purchasing Managers' Index (PMI) decreased in December 2019 to the lowest level since June 2009. The PMI is an indicator of the economic health of the manufacturing and service sectors. U.S. manufacturing employment increased by 46,000 in 2019, compared with an increase of 264,000 in 2018.

The latest IMF projections take a similar tone regarding U.S. GDP growth with expansion of 2.3% in 2019, followed by a slower growth rate of 2.0% in 2020.

According to the BEA, U.S. real personal consumption expenditures (PCEs) expanded in the third quarter of 2019 by 3.2% (Figure 3), compared with an increase of 4.6% in the second quarter. Durable goods increased 8.1% in the third quarter, compared with an increase of 13.0% in the second quarter. Nondurable goods increased 3.9% in the third quarter, compared with an increase of 6.5% in the second quarter. Services increased 2.2% in the third quarter, compared with an increase of 2.8% in the second quarter.

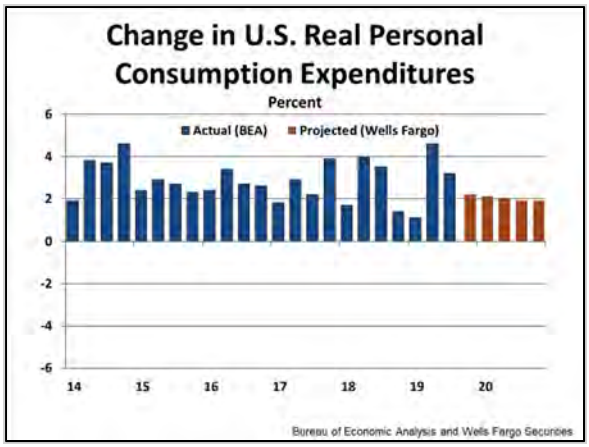

Figure 3 - Change in U.S. Real Personal Consumption Expenditures

The latest outlook by Wells Fargo puts the fourth quarter growth in PCEs at 2.2%. For 2020, PCEs are projected to grow at 1.9% to 2.1% per quarter.

U.S. Employment

Although still below pre-recession levels, the 2019 U.S. jobs market experienced its best performance of the current economic recovery. In December 2019, civilian employment stood at 61.0% of the population (Figure 4), with a slight increase throughout 2019 and slightly above the previous year. The latest data fall short of the pre-recession levels of 63.0%, but still come as welcomed news after the stagnant data reported between 2010 and 2013.

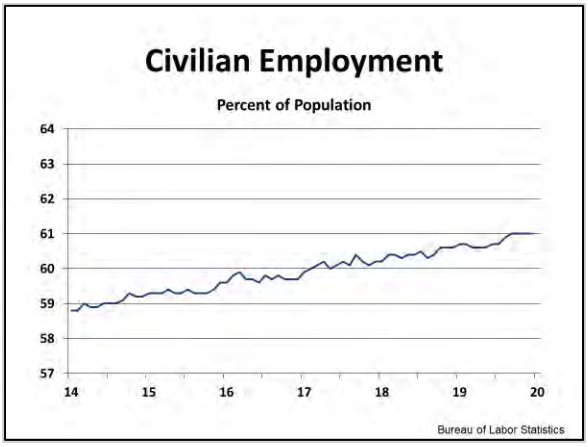

Figure 4 - Civilian Employment

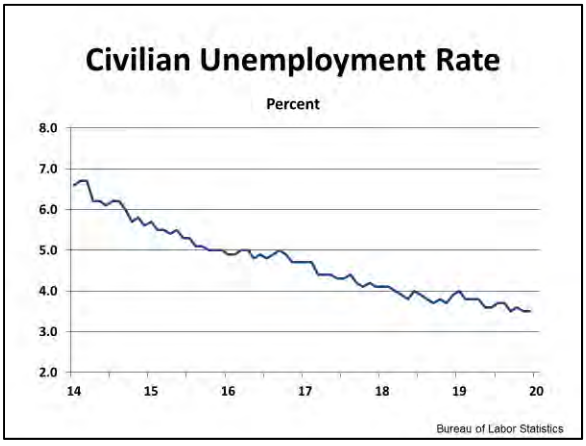

Figure 5 - Civilian Unemployment Rate

Total nonfarm payroll employment increased by 145,000 in December. For 2019 as a whole, job growth totaled 2.1 million, compared with 2.7 million in 2018.

Employment in professional and business services increased by 10,000 in December, and employment in food services and drinking establishments increased by 15,100. Health care added 28,000 jobs in December.

Manufacturing employment decreased by 12,000 in December. Construction employment increased by 20,000 and retail trade employment decreased by 41,000 in December. Employment in other major industries (mining, wholesale trade, transportation and warehousing, information, financial activities, and government) was relatively unchanged from the previous month.

According to the latest government estimates, the December 2019 unemployment rate was 3.5% (Figure 5), as compared to 3.9% a year ago.

U.S. Housing Market

The housing industry, a key barometer of the well-being of the economy, showed further improvement in 2020 as housing starts continued to increase. According to the U.S. Census Bureau, the seasonally-adjusted annual rate for new-home construction was 1.6 million units in December (Figure 6). This is 16.9% above the November estimate of 1.4 million units and is 40.8% above the December 2018 rate.

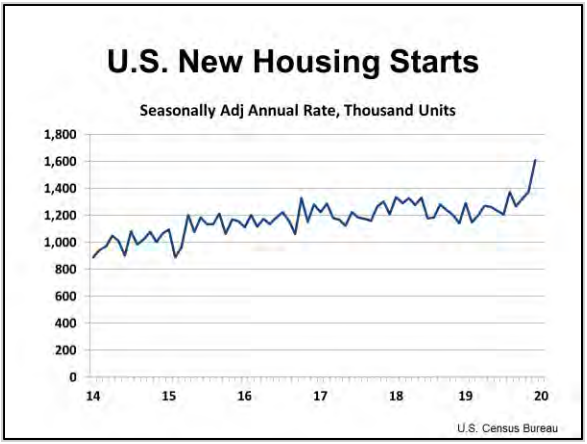

Figure 6 - U.S. New Housing Starts

According to Freddie Mac, sustained economic growth, low interest rates, and a strong labor market helped the U.S. housing market to recover in 2019. The housing market had contracted in early 2019 due to higher interest rates in 2018 and the beginning of 2019. The decline in interest rates in 2019 boosted the housing market.

Growth in home sales is expected to continue with a favorable economic environment and low interest rates in 2020 and 2021. Mortgage refinances increased in 2019 but are expected to slow in 2020 as rates remain steady.

At 3.7%, the 30-year mortgage rate for December 2019 increased by 0.02% from the previous month (Figure 7). Mortgage rates decreased throughout 2019 with the most recent surveys indicating a preliminary January 2020 number of 3.7%. Looking forward, Freddie Mac expects mortgage rates to average 3.8% in 2020 and 2021.

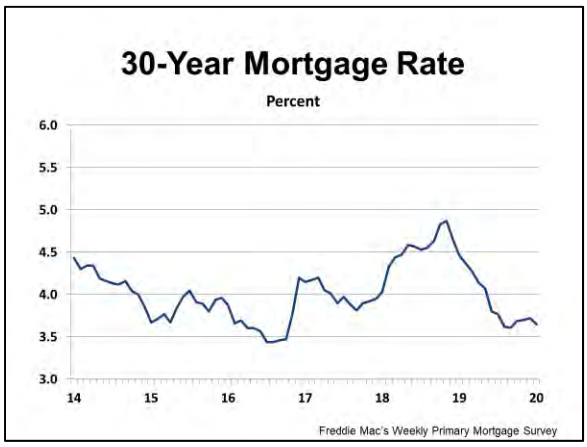

Figure 7 - 30-Year Mortgage Rate

Federal Reserve Board

Based on realized and expected labor market conditions and inflation, the target range for the federal funds rate was maintained at 1.5% to 1.75% in January 2020 (Figure 8). According to the minutes from the January 2020 Federal Open Market Committee, the Committee seeks to foster maximum employment and price stability. The Committee believes that the current stance on monetary policy supports sustained expansion of economic activity, strong labor market conditions, and inflation returning to the Committee's 2.0% objective. However, the Committee will continue to monitor economic information, global developments and subtle inflation pressures as it determines future adjustments to the target range.

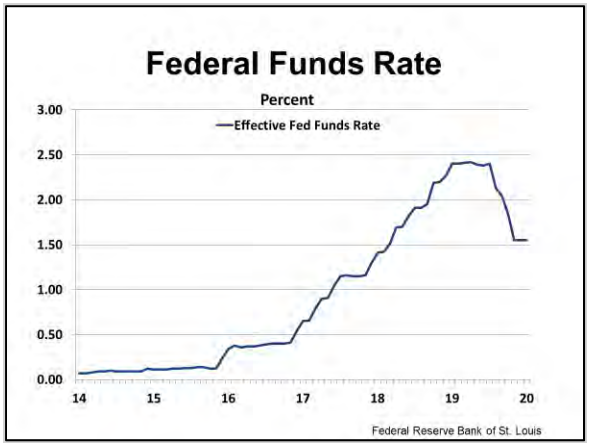

Figure 8 - Federal Funds Rate

A January 2020 *Wall Street Journal* survey indicates that 52.0% of respondents expect the next move in the federal funds rate will be an increase. The survey respondents had a somewhat positive outlook for 2020. However, most respondents indicated a larger risk of recession in the U.S. in 2021 and 2022 as compared to 2020. When asked about the impact of the Phase 1 trade deal on U.S. GDP growth in 2020, 67.7% of respondents reported a small positive impact in U.S. GDP growth.

Federal Budget Situation

The Congressional Budget Office (CBO) released the annual Budget and Economic Outlook in January. Projections by CBO indicate that federal outlays will continue to outpace revenues over the next decade. If current laws remain unchanged, CBO projects an upward path for budget deficits over the next decade due to higher spending for retirement and health care programs. For fiscal year 2019, federal spending is estimated at $4.4 trillion with estimated revenue of $3.5 trillion (Figure 9), resulting in a deficit of $984 billion.

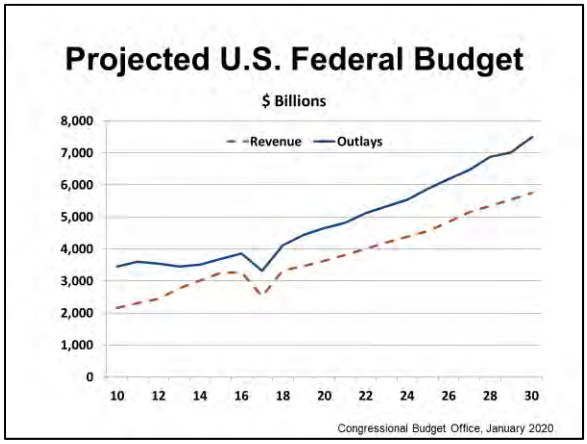

Figure 9 - Projected U.S. Federal Budget

Revenues for fiscal year 2020 are projected to set a new high with growth of 4.9% relative to 2019. However, outlays are also expected to increase, and as a result, for fiscal 2020, CBO estimates a deficit of $1 trillion (Figure 10). At 4.6% of GDP, the 2020 deficit will be higher than last year. According to CBO's long-term projections, the annual deficit would increase to 5.4% of GDP by 2030.

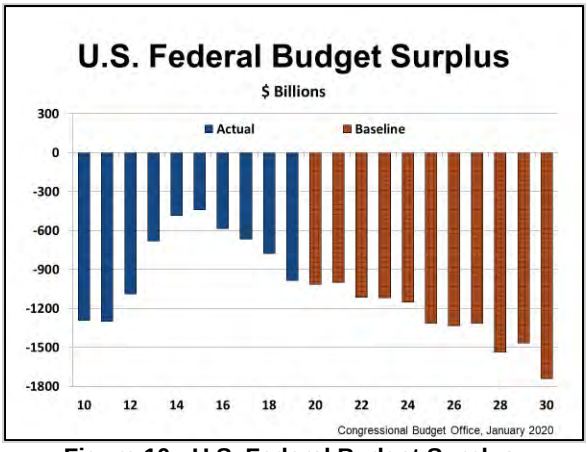

Figure 10 - U.S. Federal Budget Surplus

CBO's persistent and growing deficits would result in increasing amounts of federal debt held by the public. In CBO's baseline projections, that debt rises from 79.2% of GDP in 2019 to 98.3% of GDP in 2030. This amount would be the largest debt held by the public since 1947 and over twice the average of the past five decades as compared to GDP.

According to CBO, the large and increasing amount of federal debt as a percentage of GDP could have serious negative consequences, including: dampening of economic output over time, increased interest payments to foreign debt holders as interest costs rise, lower incomes of U.S. households, and constraints for policymakers to implement deficit-financed fiscal policy when needed.

Consumer and Producer Price Indices

Inflation acts as a tax on investment by increasing the cost of equity-financed investment and reducing corporate equity values. U.S. inflation is commonly measured by the Consumer Price Index (CPI) and the Producer Price Index (PPI).

Measured by the December-to-December change, the CPI rose 2.3% in 2019 after a 1.9% increase in 2018 (Figure 11). For 2019, the annual average CPI grew at 1.8%, which is lower than the 2018 value.

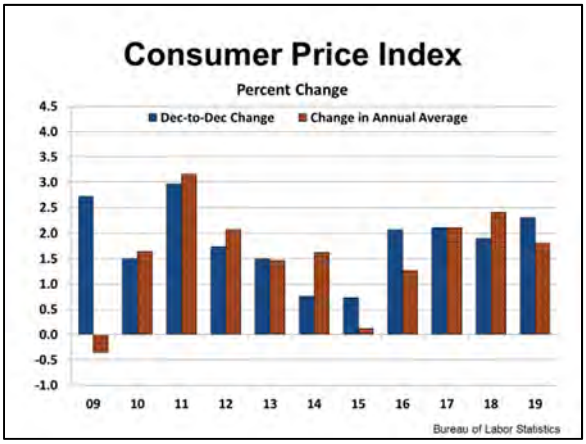

Figure 11 - Consumer Price Index

In December, the indexes for gasoline, shelter, and medical care increased and was largely responsible for the overall increase in all items. The energy index increased along with the food index. The indexes for food at home and food away from home both increased.

The index for all items less food and energy rose by 0.1% in December. The indexes for apparel, motor vehicle insurance, recreation, and new vehicles increased in December. The indexes for cars and trucks, household furnishings and operations, and airline fares declined in December.

Over the last 12 months, the all items index rose 2.3%. The index for all items less food and energy also rose by 2.3% over the last 12 months. The food index rose 1.8% over the last year, while the energy index increased by 3.4%.

On a December-to-December basis, the PPI for finished goods increased in 2019 by 1.9% (Figure 12).

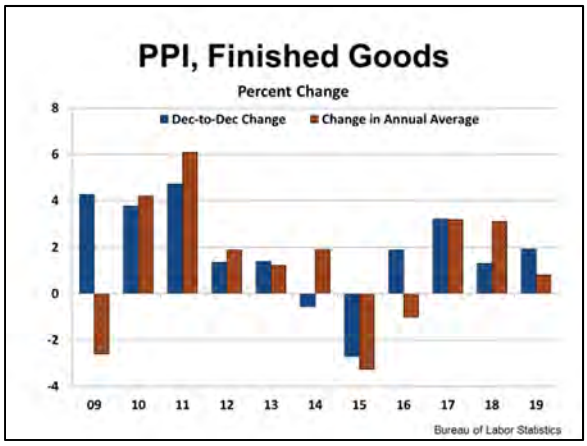

Figure 12 - Producer Price Index, Finished Goods

Energy Prices and Supply

For 2020, energy prices continue to stay at the forefront of any analysis of the general economy. After 5 years of crude oil prices (as measured by the West Texas Intermediate (WTI) market) ranging between $80 and $100 per barrel, the latter half of 2014 brought a pronounced change in energy markets with price declines approaching 50.0%. By the end of 2015, prices dropped to $37 per barrel. Prices continued to decline to $30 per barrel in February 2016 before starting a slow upward trajectory. The average price in 2017 was $51 per barrel compared to $43 per barrel in 2016. At the end of 2017, prices reached $58 per barrel. Prices continued to climb in 2018 to reach $71 per barrel in July, which was the highest level since November 2014. However, by December 2018, prices sharply declined to $50 per barrel. From January to April 2019, prices trended upward to reach $64 per barrel. From May to December 2019, prices ranged between $54 and $60 per barrel. At the end of the year, prices were at $60 per barrel and remained near $60 per barrel through mid-January. As of early February, prices dropped to $50 per barrel in response to the coronavirus outbreak.

The Department of Energy's Energy Information Administration (EIA) estimates that global petroleum and other liquid fuels inventories were mostly unchanged in 2019, with supply and consumption generally in balance. Global inventories are expected to rise in 2020 at a pace of 0.3 million bbl/d and then decline by 0.2 million bbl/d in 2021.

Global consumption of petroleum and other liquid fuels grew by 0.8 million bbl/d in 2019. EIA expects global consumption to grow by 1.3 million bbl/d in 2020 and by 1.4 million bbl/d in 2021. The expected rise in consumption growth is based on a rising global GDP forecast. Consumption is also expected to rise due to newly completed petrochemical plants in China, the U.S., and Russia that use liquefied petroleum gases as feedstock. Demand is also expected to grow due to the new International Maritime Organization (IMO) rules on sulfur content of fuel used by ocean vessels. Countries outside of the Organization for Economic Cooperation and Development (OECD) continue to drive demand growth in the forecast with growth accounting for 1.2 million bbl/d of the total global growth forecast for 2020 and 2021. China and India

account for about half of the global growth forecast.

On December 6, 2019, OPEC and a group of other oil producers announced additional production cuts. The cuts were first announced in December 2018 and required a reduction of 1.2 million bbl/d as compared to October 2018. The new target production is 1.7 bbl/d lower than the October 2018 level and will remain in effect until the end of March 2020. OPEC is expected to limit production through 2020 and 2021 to maintain a balanced global oil market. EIA estimated lower production in OPEC countries by 0.6 million bbl/d in 2019. Production is expected to increase by 0.1 million bbl/d in 2020.

In non-OPEC countries, EIA estimated an increase in crude oil supply of 2.0 million bbl/d in 2019, with most of the growth in the United States. For 2020, production in non-OPEC countries is expected to increase by 2.6 million bbl/d and 0.9 million bbl/d in 2021.

Uncertainty regarding global economic and political developments could affect EIA's price projections. Adherence to the current OPEC production cuts could also affect current and future crude oil prices.

The average monthly WTI crude oil spot price increased to $60 per barrel in December 2019 as compared to $51 per barrel in January 2019 (Figure 13). The average price for 2019 was $57 per barrel compared to a 2018 average of $65 per barrel. EIA now expects WTI crude oil prices to average $60 per barrel in 2020.

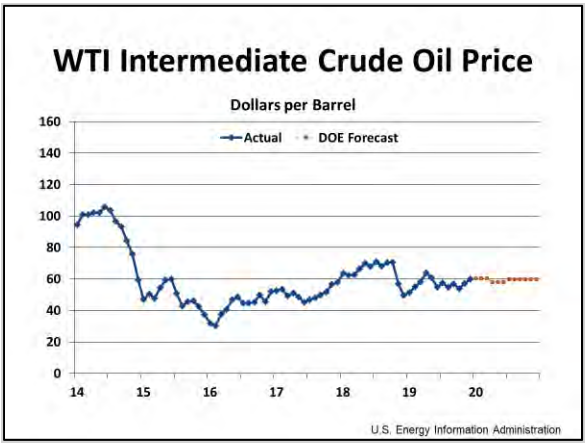

Figure 13 - WTX Intermediate Crude Oil Price

Retail diesel fuel prices (Figure 14), which track closely with crude oil prices, averaged $3.06 per gallon in 2019, which is 13 cents per gallon lower than the 2018 average price. The EIA projects diesel prices to average $3.11 per gallon in 2020 and $3.12 per gallon in 2021. The price forecast is higher as diesel refinery margins are expected to increase as a result of the IMO 2020 regulations.

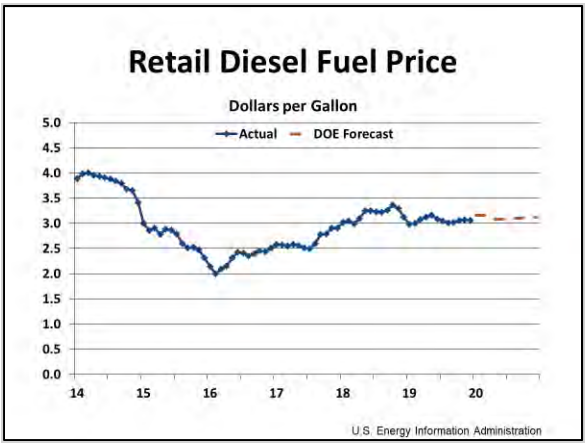

Figure 14 - Retail Diesel Fuel Price

The Henry Hub natural gas spot price averaged $2.57 per one million British thermal units (MMBtu) in 2019 (Figure 15). In December 2019, the spot price averaged $2.22 per MMBtu as compared to $4.04 in December 2018. EIA projects a price of $2.33 per MMBtu in 2020 and $2.54 per MMBtu in 2021.

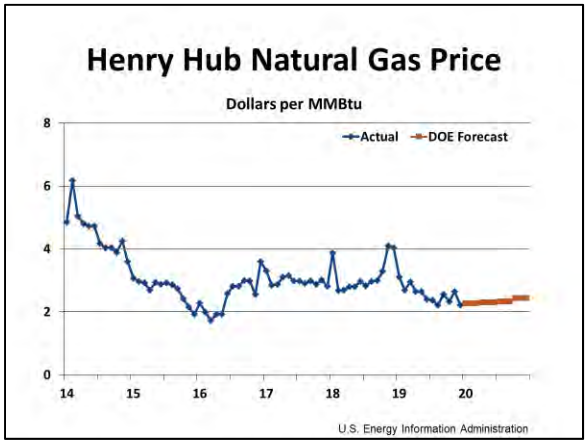

Figure 15 - Henry Hub Natural Gas Price

Natural gas production is expected to average 94.7 billion cubic feet per day (Bcf/d) in 2020, up 2.9% from 2019. EIA estimates that U.S. total natural gas consumption in 2019 averaged 85.3 Bcf/d. In 2020, EIA projects an increase of 1.4 Bcf/d.

U.S. Equity Markets

After closing 2017 at 24,719, the Dow Jones Industrials Average (Dow) decreased 5.6% to 23,327 by the end of 2018 (Figure 16). By the end of December 2019, the Dow grew to 28,538. Following the coronavirus outbreak, the Dow dropped to 28,242 at the end of January 2020. As of February 6, the Dow recovered slightly to 29,383.

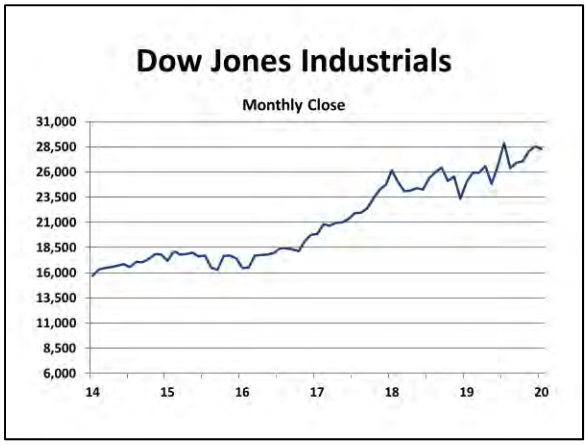

Figure 16 - Dow Jones Industrials

World Economies

Global economies grew at a slower pace in 2019 but projections for 2020 and 2021 call for increased economic activity. According to the latest projections by the International Monetary Fund (IMF), the world economy grew by 2.9% in 2019, as compared to 3.7% in 2018 (Figure 17). Global growth was revised downward from earlier forecasts due to the negative surprises in economic activity in India and increased social unrest in a few other emerging market economies. IMF projections call for the world economy to grow by 3.3% in 2020 and 3.4% in 2021.

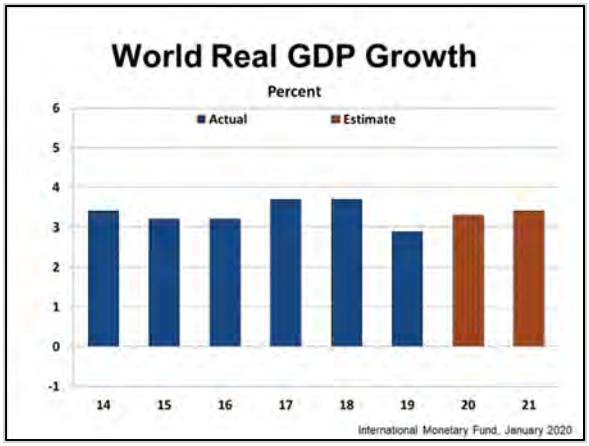

Figure 17 - World Real GDP Growth

The growth expectations reflect a boost in market sentiment based on signs that manufacturing activity and global trade are bottoming out, a shift toward accommodative monetary policy and favorable news on U.S.-China trade negotiations.

The IMF projects that growth in advanced economies will drop from 1.7% in 2019 to 1.6% in 2020 and 2021. Growth rates have been increased for a few economies in the euro area for 2020, particularly Germany and Italy. The growth rate for the United Kingdom is projected to be 1.3% in 2019 and 1.4% in 2020. This forecast assumes a transition to a new economic relationship with the European Union.

In the U.S., growth is expected to decline to 2.3% in 2019 to 2.0% in 2020. (Table 2).

Table 2 - Selected Economies: Real GDP

Year-Over-Year % Changes				
	2018	2019e	2020f	2021f
World	3.6	2.9	3.3	3.4
U.S.	2.9	2.3	2.0	1.7
Euro Area	1.9	1.2	1.3	1.4
Japan	0.3	1.0	0.7	0.5
China	6.6	6.1	6.0	5.8
India	6.8	4.8	5.8	6.5
Russia	2.3	1.1	1.9	2.0
Brazil	1.3	1.2	2.2	2.3
Mexico	2.1	0.0	1.0	1.6
Source: International Monetary Fund, January 2020				

IMF projects that output of emerging and developing economies (EMDEs) will expand at 4.4% in 2020 and 4.6% in 2021. The growth rate in emerging and developing Asia is expected to increase to 5.8% in 2020 which is a downward revision from the earlier estimates, mostly due to India. Domestic demand in India has slowed more than expected along with stress in the non-bank financial sector and a decline in credit expansion. While the Phase 1 trade agreement should alleviate some near-term weakness, growth in China is projected to be lower in 2020 and 2021 as unresolved disputes on broader US-China economic issues and financial regulatory weakness are expected to slow economic activity.

In emerging and developing Europe, growth is expected to strengthen due to robust growth in central and eastern Europe, an increase in economic activity in Russia, and ongoing recovery in Turkey due to an improvement in financing conditions.

Growth is expected to recover in Latin America over the next two years. The economic expansion was recently adjusted downward due to a reduction in growth potential for Mexico and Chile that is only partially offset by an upward revision in the 2020 forecast for Brazil.

In the Middle East and Central Asia region, growth is expected at 2.8% in 2020 and 3.2% in 2021. The 2020 forecast was revised downward due to lower expected oil output growth in Saudi Arabia as a result of the OPEC supply cut extension in December. In sub-Saharan Africa, growth is expected to strengthen to 3.5% in 2020 and 2021.

In the near-term, downside risks to the 2020 global outlook include the outcome of trade negotiations and financial market conditions. Additional uncertainty that could affect the outlook is rising geopolitical tensions, particularly between the U.S. and Iran, intensifying social unrest across many countries, further worsening of relations between the U.S. and its trading partners, and increased economic frictions between other countries.

Exchange Rates

During periods of market uncertainty, traders sell currencies that are perceived riskier and place their bets in safer havens.

In 2019, the euro averaged 0.89 per dollar, which is higher than the average value in 2018 (Table 3). At the close of 2019, the euro stood at 0.89 per dollar.

The Brazilian real depreciated against the dollar in 2019. With an average of 3.95 per dollar for 2019, the real declined by 8.2% against the dollar in 2019 but increased to 4.24 per dollar in late January 2020.

Table 3 - Selected Exchange Rates

Currency per U.S. Dollar			
	2017	2018	2019
Euro	0.89	0.85	0.89
Japanese Yen	112.15	110.46	109.03
Brazilian Real	3.19	3.65	3.95
South Korean Won	1,130	1,101	1,166
Indian Rupee	65.11	68.17	72.85
Indonesia Rupiah	13,380	14,234	14,140
Pakistani Rupee	105.32	121.53	150.41
Chinese Yuan	6.76	6.62	6.91
Source: WSJ.com			

The Japanese Yen and Indonesia Rupiah showed a slight appreciation against the dollar in 2019. The Euro, Brazilian Real, South Korean Won, Indian Rupee, Pakistani Rupee, and Chinese Yuan all had a decrease in 2019.

The Federal Reserve Board publishes a real exchange rate index comparing the dollar to a weighted average of currencies of important trading partners, excluding major developed economies.

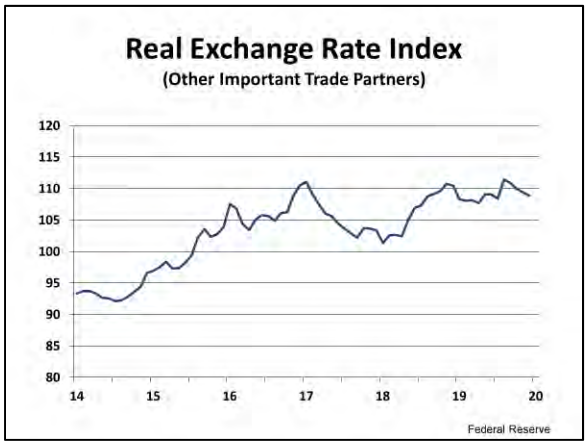

Figure 18 - Real Exchange Rate Index

The index has slowly trended upward since 2015 (Figure 18). In December 2016, the index was at the highest level since 2009. Throughout 2017, the index trended downward from the high observed at the end of 2016. In 2018, the index reached 110.4 at the end of the year. The index has dropped slightly in 2019 with a value of 108.9 in December.

Commodity Prices

The U.S. Department of Agriculture (USDA) publishes monthly indices of prices received by farmers. At the end of 2018, the crop price index was 87.7. In January 2019, the crop price index was 77.3, which was the lowest level since January 2017. Prices moved up and down throughout the year but ended up at 83.3 in December 2019. The December index represented a 0.9% increase from the November index (Figure 19).

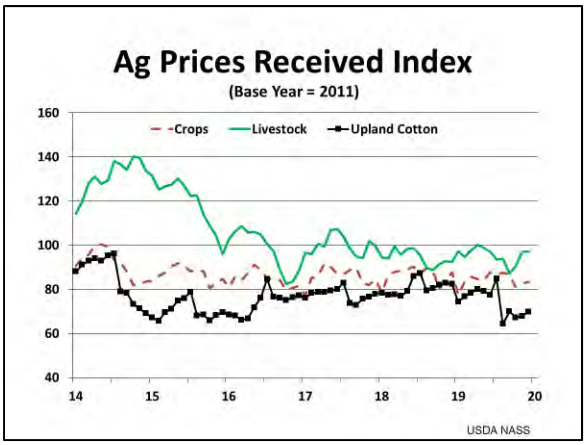

Figure 19 - Ag Prices Received Index

Cotton prices are lower than a year ago. The cotton price index steadily increased from January to April but then trended downward from May to December.

The livestock price index moved up and down throughout 2019 but ended the year higher than in 2018. Compared with a year ago, prices of cattle are about the same while prices of eggs, hogs, turkey, and milk increased. Prices of calves and broilers decreased in 2019.

USDA also publishes monthly indices of prices paid by farmers for various production inputs. Of particular interest are the indices for energy related inputs such as diesel fuel and nitrogen fertilizer. In line

with the previous discussion on retail diesel prices, the diesel prices paid index increased during the first half of 2019 then moved up and down throughout the second half of 2019. In December 2019, the diesel price index was 0.8% higher than a year ago but 0.4% lower than in November 2019.

Nitrogen prices followed a similar pattern to cotton prices throughout 2019, increased in the first quarter then following a downward trend for the remainder of the year (Figure 20). As of December 2019, the nitrogen price index was 10.3% lower than a year ago.

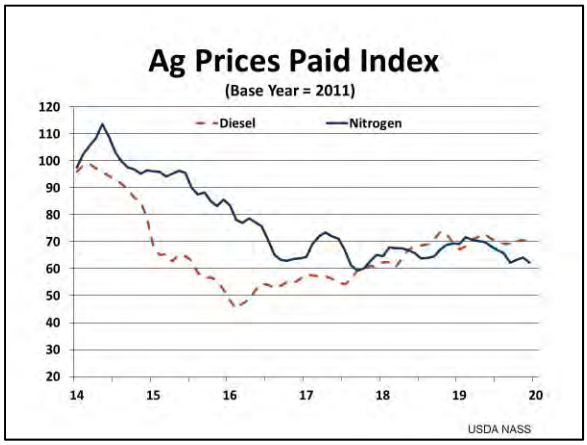

Figure 20 - Ag Prices Paid Index

U.S. Net Farm Income

The latest USDA estimates place U.S. net farm income at $93.6 billion in 2019, up 11.7% from 2018's estimate of $83.8 billion (Figure 21). Net cash income increased by 15.9% in 2019. U.S. net farm income is projected to increase by 3.6% in 2020 to $96.7 million, while net cash income is projected to decline by 9.0% in 2020. The two financial indicators move in opposite directions relative to 2019 due to a significant change in the value of inventory adjustment.

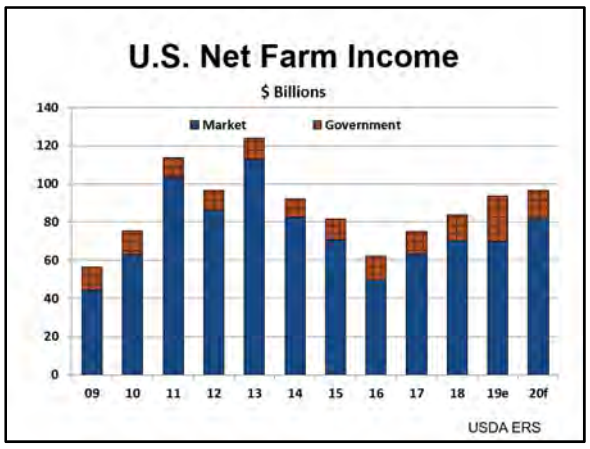

Figure 21 - U.S. Net Farm Income

According to USDA's Economic Research Service, total commodity receipts are projected to increase in 2020. Crop receipts are expected to increase by $1.9 billion in 2020. Cotton cash receipts are projected to increase by 2.1% in 2020 while fruit and nut receipts are projected to increase by 6.3% in 2020. Cash receipts for broilers, eggs, and chickens are expected to increase in 2020 by 1.0%, 2.7%, and 1.3%, respectively. Turkey receipts are expected to increase by 4.5% in 2020. Dairy product and milk receipts are expected to increase by 5.2% and hog receipts are projected to increase by 1.6% in 2020. Cattle/calves receipts are projected to increase by 1.6% in 2020.

Government payments are projected to decline by 73.0% to $15.0 billion in 2020, as compared to $23.7 billion in 2019. The 2019 level was the highest since the 2005 crop year due to Market Facilitation Program (MFP) payments. For the last decade, total government payments averaged $11.5 billion per year.

Total production expenses are forecast to increase by 3.0% in 2020. All expense categories except interest are projected to increase in 2020. The categories with the largest projected increases in 2020 include machine hire and custom work, fuel and oil, and feed with increases of 7.7%, 5.9%, and

5.8%, respectively. Interest expense is projected to decline by 7.0% in 2020.

Farm financial risk indicators such as the debt-to-asset and debt-to-equity ratios are expected to rise in 2020, for the seventh year in a row, indicating increasing financial pressure on the sector. However, debt-to-asset and debt-to-equity ratios remain low relative to historical levels.

Increasing farm sector assets are projected due to a modest increase in farm real estate assets and machinery and vehicles. Farm sector debt is expected to increase by 2.3% in 2020, with real estate debt rising by 3.2%. Farm sector equity is expected to increase by 1.1%, while equity-to-asset levels are projected to decrease.

U.S. Farm and Trade Policy

Agricultural policy provisions applying to the 2020 crop are authorized by the Agricultural Improvement Act of 2018, also known as the 2018 Farm Bill.

The Agricultural Improvement Act of 2018

The Agricultural Improvement Act of 2018 maintained policy provisions important to upland and ELS cotton with some modifications.

Seed Cotton PLC/ARC Program

The 2018 Farm Bill continued the seed cotton Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC) programs. The reference price was maintained at $0.367 per lb. Seed Cotton refers to unginned upland cotton that includes both lint and cottonseed.

Starting with the 2019 crop year, producers have the option to elect ARC or PLC for seed cotton and that election will be effective for the 2019 and 2020 crop years. In 2021, producers will have the option to make an annual ARC or PLC election for seed cotton.

The 2018 Farm Bill includes the addition of effective reference prices which allow PLC reference prices to adjust with sustained improvements in market prices. The effective reference price is equal to the greater of 85% of the rolling 5-year Olympic average price and the PLC Reference Price. The effective reference price cannot be less than the reference price or greater than 115% of the reference price.

When calculating the benchmark revenue for ARC, the effective reference price will be used as part of the calculation for the 5-year Olympic average price when the effective reference price is higher than the marketing year average price. The 5-year Olympic average yield will use either the county average yield or 80% of the county transitional yield, whichever is higher for that year.

Base Loan Rates, Marketing Assistance Loans and LDP's

The marketing assistance loan for upland cotton is maintained in the 2018 Farm Bill. The level of the upland cotton marketing loan rate is based on the 2-year moving average of the adjusted world price (AWP) as announced by USDA. The annual decline is limited to 2% of the previous year's loan rate.

Specifically, the loan rate is equal to the 2-year average AWP for the two most recently completed marketing years as of October 1 in the fall prior to planting. For example, the 2020 loan rate is based on the 2017 and 2018 marketing years since those are the 2 most recent years as of October 1, 2019. However, the loan rate cannot exceed 52 cents per pound nor be less than 45 cents per pound.

The 2018 Farm Bill includes an increase in the ELS loan rate to $0.95/lb. The maximum price trigger for the ELS competitiveness payment is adjusted from 134% of the loan rate to 113% of the loan rate so the adjustment does not result in the program triggering more often.

Marketing loan repayment provisions, the determination of the premium and discount schedules, and storage credits remain unchanged from the 2014 farm law.

Payment Yields

Effective for the 2020 crop, producers will have the opportunity to update payment yields on all crop bases on a farm-by-farm and commodity-by-commodity basis. The

yield update is based on 90% of the average farm yields from 2013-2017, only including years when a crop was planted. A plug yield equal to 75% of county average yield for 2013-2017 will be used for any years where the farm's yield is below that level. Each crop has an additional adjustment factor based on crop specific national yield data. The adjustment factor for cotton is 90%. So, the yield update for cotton is 90% times 90% of the average farm yields from 2013-2017, which is equal to 81% of the average farm yields from 2013-2017.

Payment Limitations and Eligibility Requirements

The 2018 Farm Bill maintains payment limitations and eligibility requirements contained in the 2014 Farm Bill, with a few modifications. The income means test is based on total adjusted gross income (AGI) of $900,000 for commodity and conservation benefits. A payment limit of $125,000 per entity applies to payments received under Title I price and revenue programs.

The $125,000 payment limit no longer applies to marketing loan benefits, including both marketing loan gains (MLGs) and loan deficiency payments (LDPs). The current legislation maintains the separate limit for peanuts.

Commodity Marketing Certificates

Commodity certificates are maintained in the 2018 Farm Bill. Certificates allow producers with outstanding marketing assistance loans to purchase certificates and then exchange the certificate for their outstanding loan collateral rather than forfeit that loan collateral to CCC at loan maturity. By redeeming a loan with commodity certificates, the MLG, if available, is not subject to the AGI means test or the $125,000 payment limitation. A commodity certificate exchange is not considered a "program benefit" but is considered an exchange in loan collateral.

Actively Engaged

The actively engaged provisions in the 2014 Farm Bill are maintained in the 2018 legislation, along with an expansion in the definition of family members. The family definition for actively engaged purposes now includes nieces, nephews, and first cousins as lineal family members.

To be considered "actively engaged in farming", certain requirements must be met for farming operations conducted by general partnerships and joint ventures that encompass non-family members. Additional details are available on the USDA-FSA website at www.fsa.usda.gov.

Stacked Income Protection Plan

The Stacked Income Protection Plan (STAX) is maintained in the 2018 Farm Bill. However, starting with the 2020 crop year, farms enrolled in ARC or PLC are not eligible for STAX coverage. Producers enroll annually in ARC or PLC, so they can choose to not enroll a farm in ARC or PLC for a particular year and purchase STAX.

STAX is available for purchase in essentially all counties in which USDA's Risk Management Agency (RMA) offers upland cotton insurance products. Administered in a manner consistent with current crop insurance delivery systems, STAX is designed to complement existing crop insurance products. The STAX plan addresses revenue losses on an area-wide basis, with a county being the designated area of coverage. In counties lacking sufficient data, larger geographical areas such as county groupings are necessary in order to preserve the integrity of the program.

As with other insurance products, STAX is not subject to payment limitations or means

tests. County-specific details are available both on the NCC website www.cotton.org and the USDA-RMA website www.rma.usda.gov.

Cotton Import Provisions

The 2018 Farm Bill continues without change the rules for triggering import quotas. A Special Import Quota will be opened when the average U.S. quote in the international market exceeds the prevailing world market price for 4 consecutive weeks. Global Import Quotas are triggered when the base quality spot price for a month exceeds 130% of the average for the previous 36 months.

ELS Cotton Competitiveness Provisions

The farm law continues competitiveness payments for eligible domestic users and exporters of American Pima cotton. The payment rate reflects the difference between the American Pima quote in the Far Eastern market (APFE) and the lowest foreign quote in the Far East (LFQ), adjusted for quality. The maximum price trigger for the ELS competitiveness payment is adjusted from 134% of the loan rate to 113% of the loan rate in order to reflect the higher ELS loan rate in the new legislation.

Following extended discussions with USDA, the Egyptian Giza 94 price is now being incorporated into the calculations as a competing foreign growth. On February 6, USDA announced a competitiveness payment rate of 6 cents per pound, effective from February 7 through February 13. Future payment rates will be dependent on prevailing price conditions.

Economic Adjustment Assistance for Textile Mills

The highly successful assistance for U.S. textile mills continues in the 2018 Farm Bill. The program makes a payment of 3 cents per pound for all upland cotton consumed. Payments must be used for specific purposes such as acquisition, construction, installation, modernization, development, conversion, or expansion of land, plant buildings, equipment, facilities, or machinery.

Trade Negotiations & Disputes

Trade policy issues remain at the forefront for the U.S. cotton industry. The United States-Mexico-Canada Agreement (USMCA) and China tariffs dominated trade headlines in 2019.

U.S-Mexico-Canada Agreement

On May 18, 2017, U.S. Trade Representative Robert Lighthizer notified Congress of the President's intention to begin negotiations with Canada and Mexico to modernize the North American Free Trade Agreement (NAFTA). On August 31, 2018, the President notified Congress of his intent to sign a free trade agreement with Mexico, and also including Canada, if agreement is reached within 90 days of August 31. On September 30, the U.S. and Canada reached an agreement, with the new trade deal called the USMCA. The USMCA was signed by all three countries on November 30, 2018 in Argentina.

Overall, the USMCA preserves the benefits of NAFTA and encourages continued regional integration of the cotton and textile supply chain. It also enhances regulatory coordination on sanitary and phytosanitary (SPS) disciplines and encourages greater cooperation in biotechnology, including gene editing. Finally, it improves the terms of trade for U.S. textile manufacturers.

Perhaps the most important feature of the USMCA is the preservation of NAFTA's market access benefits for U.S. cotton and cotton products. During the USMCA's negotiation, NCC – along with other U.S. agricultural organizations – advocated a "do

no harm" approach to market access for U.S. farm exports. USMCA retains NAFTA's market access benefits.

The new SPS chapter enhances regulatory transparency and encourages the compatibility of science-based measures. The advancement of transparent, non-discriminatory, science-based SPS and biotechnology measures in foreign markets was a primary negotiating objective of the U.S. agriculture community. The inclusion of these provisions in the USMCA represents a significant step forward.

Importantly, USMCA establishes a new, separate textile chapter, reflecting the scale and significance of regional textile and apparel trade, and incorporates NAFTA's yarn-forward rule of origin. Together with the preservation of market access for U.S. cotton exports, the incorporation of NAFTA's yarn-forward rule of origin represents another major benefit of the USMCA. Under NAFTA, the yarn-forward rule of origin has played a central role in the development of an integrated regional supply chain. It has also helped ensure that the benefits of increased trade accrued to manufacturers within the region.

The textile chapter also strengthens customs enforcement, which is particularly important to the sector, given that U.S. imports in the sector have annually accounted for approximately 40% of all U.S. duty revenue.

The USMCA also offers new benefits corresponding to the use of USMCA-origin sewing thread, pocketing, narrow elastics, and coated fabrics for certain end items. According to the National Council of Textile Organizations, the annual value of the regional market for sewing thread in apparel applications is approximately $250 million, while the annual market for pocketing is worth $70 million.

Finally, U.S. textile manufacturers will benefit from the USMCA's closure of a NAFTA loophole that exempts purchases by the U.S. Department of Homeland Security's Transportation Security Administration from the Buy American requirements known as the Kissell Amendment. The USMCA will no longer permit manufacturers from Canada and Mexico to qualify as "American" sources. In FY2019, TSA purchased approximately $35 million worth of textile and apparel products. Eliminating NAFTA's loophole will thus provide significant benefits to manufacturers of U.S.-origin textile and apparel products.

The USMCA was approved by the House in December 2019 and by the Senate on January 16, 2020. On January 29, 2020, President Trump signed into law USMCA's implementing legislation.

While the U.S. and Mexico have now approved the USMCA, Canada has only recently started its ratification process. Canada's ratification process is expected to conclude sometime in February or March.

USMCA will enter into force on the first day of the third month following the last party's (Canada) written notification that its internal ratification procedures have been completed. It is unlikely the USMCA will enter into force before July 1, 2020.

China Tariffs

In August 2017, the United States Trade Representative (USTR) initiated an investigation under Section 301 of the Trade Act of 1974 to determine if China's acts, policies, and practices related to technology transfer, intellectual property and innovation are unreasonable, unjustifiable, or discriminatory and burden or restrict U.S. commerce. In response to the findings of the investigation, President Trump announced on March 22, 2018 that the U.S. would

respond to China's harmful acts, policies, and practice in three separate actions: tariffs, dispute settlement in the WTO, and investment restrictions.

Currently, there have been four lists of goods for which the U.S. has announced tariffs. List 1, totaling $34 billion worth of imports from China is composed of 818 tariff lines. A 25% tariff was imposed on the items on this list with the tariffs going into effect July 6, 2018. List 1 did not contain any cotton, textile or apparel products. However, it did contain some textile machinery.

List 2 totaled $16 billion worth of imports from China. The 25% tariff on the 279 tariff lines on this list went into effect on August 23, 2018. List 2 also did not contain any cotton, textile or apparel products.

The third list of tariff lines of products from China totaled approximately $200 billion. Tariffs for the items on this list went into effect on September 24, 2018 and were initially set at 10%. The level of the additional tariffs increased to 25% starting May 10, 2019. List 3 contains products in HTS Chapters 50-60 which covers textile fibers, yarns, and fabrics. This includes all tariff lines in Chapter 52 covering products from cotton, not carded or combed, cotton waste, cotton thread, yarn, and woven fabric. Cotton knit fabric tariff lines from Chapter 60 are also covered by List 3.

The fourth list, totaling $300 billion worth of imports from China, is split into two groups, List 4A and List 4B. Both groups contain finished apparel and other sewn products covered in HTS Chapters 61-63. The 15% tariff on the goods included in List 4A went into effect September 1, 2019. The 15% tariff on goods included in List 4B was scheduled to go into effect December 15, 2019. However, earlier in December 2019, the U.S. government announced that it was suspending, until further notice, the additional duty of 15% on List 4B goods. The suspension was due to progress in negotiations between the U.S. and China.

On April 1, 2018, China's Ministry of Commerce announced China's intention to impose retaliatory tariffs on U.S. goods in response to the U.S. announcement of the 25% tariff on steel imports and 10% tariff on aluminum imports beginning June 1, 2018 (Sections 232 tariffs). China applied a 15% duty on 120 items including fruits, nuts, wine, and steel and iron tubes and pipes. A 25% duty was applied on 8 items including pork and aluminum scrap. These tariffs took effect on April 2, 2018.

On April 3, 2018, China released another retaliation list of U.S. goods worth $50 billion that could be subject to an additional 25% tariff. This list was the first one announced in retaliation to the Section 301 tariffs announced by the United States. China's List 1 contained 106 products which includes soybeans, airplanes, automobiles, beef, and chemicals. Cotton fiber (HTS 5201) was also included on this list. However, the list did not include any textiles or apparel. On June 15, 2018, China's State Council announced the addition of more goods to List 1. The 25% tariff on a total of 545 categories of goods went into effect July 6, 2018.

On August 8, 2018, China released another list of retaliatory tariffs on $16 billion in U.S. goods. This was in response to the USTR's announcement on August 7 of the final List 2 of Section 301 tariffs on $16 billion in Chinese imports. China's List 2 included cotton and MMF waste, but no other textile products were included. A tariff of 25% was applied to the goods on List 2 beginning on August 23, 2018.

Also, in August 2018, China announced List 3 for retaliatory tariffs. This announcement

was in response to the U.S. announcement of a 3rd list of Section 301 related tariffs. China's List 3 contains 5,207 tariff lines worth $60 billion. The original List 3 announcement stated tariffs on these goods would be 5, 10, 20, or 25% and the tariffs would be enacted beginning September 24, 2018. On September 19, 2018, China announced the tariff rates for List 3 would be 5 or 10%. China's List 3 includes combed cotton, cotton sewing thread, some cotton yarn, cotton woven and knit fabric, and some finished textile and apparel goods. Tariffs for goods included on List 3, Annex 1 increased from 10% to 25% on June 1, 2019. Tariffs for goods included on List 3, Annex 2 increased from 10% to 20% on June 1, 2019. List 3, Annex 3 goods tariffs increased from 5% to 10% on June 1, 2019. List 3, Annex 4 goods remained at a 5% tariff.

On August 23, 2019, China announced tariffs on additional goods that went into effect September 1, 2019. This list included some finished textile goods. Also, on August 23, 2019, China announced a list of goods that would be subject to additional tariffs beginning December 15, 2019. This list contained some woven fabrics. However, these tariffs have been delayed indefinitely due to progress in negotiations between the US and China.

On December 1, 2018, President Trump and China's President Xi reached an agreement on the margins of the G20 meeting in Buenos Aires to delay an increase on the third $200 billion portion of the Section 301 related tariffs from 10 to 25%, originally scheduled for January 1, 2019. The agreement included a 90-day period of talks to resolve issues around IP theft, non-tariff barriers, and forced technology transfers. If no agreement was reached at the end of the 90-day period, the tariff increase would be implemented. According to the White House, China also agreed to purchase substantial amounts of agricultural, energy, industrial and other products from the U.S. to reduce the trade imbalance. The first round of talks between the U.S. and China was held in Beijing January 7-9, 2019. Several other rounds of talks were held in 2019. On December 13, 2019, the U.S. and China reached an agreement on a Phase 1 trade deal that requires structural reforms and other changes to China's economic and trade regime.

The U.S. and China signed the Phase 1 agreement on January 15, 2020. The agreement is scheduled to enter into force on February 14, 2020, 30 days after signing. In light of the scheduled entry into force of the agreement, the U.S. Trade Representative determined to reduce the level of additional duties on goods included on List 4A from 15% to 7.5%. The 7.5% tariff will be effective February 14, 2020. On February 6, 2020 China announced it would cut in half some of the retaliatory tariffs on $75 worth of U.S. goods it imposed in September 2019. The 10% tariffs on roughly 900 items will drop to 5% and the 5% tariffs on approximately 800 items will drop to 2.5%. The tariff cuts are set to take effect on February 14, 2020.

The Phase 1 agreement includes a chapter on agriculture with Chinese purchases of total U.S. agricultural products, including cotton, intended to average at least $40 billion per year for 2020 and 2021. However, the overall impact for cotton remains uncertain as commodity specific details on purchase commitments have not been released. The U.S. government will be closely monitoring on an ongoing basis the level of export sales to China. The agreement includes a dispute resolution and enforcement mechanism to respond to industry issues related to any lack of compliance.

In January 2019, the WTO granted China's second request for a dispute panel to rule on the Section 301 tariffs the U.S. imposed on Chinese imports. China made its first request for a dispute panel in December 2018. That request was vetoed by the United States. However, WTO rules prevent members from blocking a dispute inquiry a second time. China asserts that the Section 301 tariffs violate WTO's Most Favored Nation rules saying the tariffs are "unilateral" and "WTO-inconsistent". The U.S. dismissed China's argument noting that China responded in kind with discriminatory duties on over $100 billion in U.S. exports.

In August 2018, in recognition of the impacts of China's retaliatory tariffs, the Trump Administration announced a plan to assist U.S. farmers and ranchers facing trade disruptions from these tariffs. The plan included three components to assist farmers and ranchers: a Market Facilitation Program (MFP), a Food Purchase & Distribution Program, and an Agricultural Trade Promotion (ATP) Program.

The MFP provided $0.06/lb on a producer's 2018 upland and ELS cotton production (paid in two installments). Producers could apply for MFP through February 14, 2019 but had until May 1, 2019 to certify their 2018 production. The Market Facilitation payments were subject to the existing $900,000 adjusted gross income means test and a separate $125,000 per person payment limit for the eligible crops. The other commodities eligible for the program included soybeans ($1.65/bu), sorghum ($0.86/bu), wheat ($0.14/bu), corn ($0.01/bu), dairy ($0.12/cwt) and pork ($8/head).

USDA's Agricultural Marketing Service (AMS) administers the Food Purchase and Distribution Program to purchase up to $1.2 billion in commodities. The specific commodities to be purchased are those impacted by unjustified tariffs imposed by other nations. Purchases are spread over several months. USDA's Food and Nutrition Service will distribute these commodities through nutrition assistance programs such as The Emergency Food Assistance Program and child nutrition programs.

Through the Foreign Agricultural Service, the ATP program provided $200 million to develop foreign markets for U.S. agricultural products. The program helps U.S. agricultural exporters identify and access new markets and help mitigate the adverse effects of other countries' restrictions. In a late January 2019 announcement, Cotton Council International received $9.2 million for promotional activities for cotton fiber, yarn and fabric exports.

On July 25, 2019, USDA announced a $16 billion package through the MFP, FPDP and ATP programs. MFP signup ran through July 29 to December 20, 2019. MFP payments for 2019 are being made in three tranches. The first round of payments began in August 2019 and was comprised of the higher of either 50% of a producer's calculated payment or $15 per acre. For producers who received payment in the first round, their second-round payments began the week of November 25, 2019. Producers of MFP-eligible commodities were eligible to receive 25% of the total payment expected during the second round. The third and final round of 2019 MFP payment was announced on February 3, 2020.

Turkey Antidumping Duties

Turkey's antidumping (AD) investigation of imports of U.S. cotton came to a conclusion in 2016. The investigation was self-initiated by Turkey's Ministry of Economy (MoE) in October 2014.

On April 16, 2016, the Turkish government released its final decision on its anti-

dumping investigation of U.S. cotton. Based on assertions that U.S. cotton was dumped into Turkey injuring the domestic market, a 3.0% CIF (cost, insurance and freight) duty was imposed on all U.S. cotton fiber imports into Turkey, effective immediately at the time of the final decision.

The duties put U.S. cotton at a competitive disadvantage to cotton produced in other countries, thus jeopardizing business with Turkish mills.

Entering 2020, the 3.0% duty continues to be in place and is anticipated to remain in place for the foreseeable future.

WTO Trade Talks

The Ministerial Conference is the highest decision-making body of the WTO. Under the Marrakesh Agreement Establishing the WTO, the Ministerial Conference is to meet at least once every two years. The next Ministerial Conference is scheduled for June 8-11, 2020 in Astana Kazakhstan. During the WTO 10th Ministerial Conference, the decision was made to continue cotton dedicated discussions within the WTO for purposes of providing greater transparency and complete notifications of subsidies by all countries. These dedicated discussions are to be held twice each year. The latest cotton dedicated discussion was held November 2019.

After the terms of two of its judges expired in December 2019, and in light of the continuing blockage of new appointments by the U.S., the WTO Appellate Body is unable to hear appeals of cases decided by the WTO Dispute Settlement Body panels. Therefore, without a functioning method for resolving trade disputes at the WTO, a group of 17 WTO members announced their own interim appeal arrangement on January 24, 2020. The group includes Australia, Brazil, Canada, China, Chile, Colombia, Costa Rica, the European Union, Guatemala, Korea, Mexico, New Zealand, Norway, Panama, Singapore, Switzerland, and Uruguay. Invoking Article 25 of the WTO Dispute Settlement Understanding, the group seeks to pursue an interim solution to the Appellate Body impasse. The interim arrangement would only remain in place until the Appellate Body becomes fully functional again. Other WTO members will be able to join as well.

AGOA

The African Growth and Opportunity Act (AGOA) provides preferential access of textile and apparel products to the U.S. market for qualifying countries in Africa. The Trade Preference Extension Act extended the provisions of AGOA to September 30, 2025.

The AGOA legislation requires an annual determination of which countries are eligible to receive benefits under the trade act. Countries must make continued progress toward a market-based economy, rule of law, free trade, and economic policies that will reduce poverty, and protect workers' rights. There are now 38 countries that are eligible for economic and trade benefits under AGOA. Of those 38 Sub-Saharan countries, 26 of them are eligible to receive AGOA's apparel benefits. Twenty-five countries also qualify for the Less Developed Country (LDC) special rule for apparel (third-country fabric). Seventeen countries also qualify for AGOA's provisions for hand-loomed and handmade articles. Five countries qualify for AGOA's ethnic printed fabric benefits.

Other Trade Issues

On October 16, 2018, USTR officially notified Congress that the Trump Administration intended to start negotiations following the completion of necessary domestic procedures on trade agreements with Japan, the UK and the EU. This began a 90-day consultation period under Trade

Promotion Authority (TPA) prior to the launch of negotiations. The U.S. would not begin negotiations on a trade agreement with the UK until after the UK left the EU on January 31, 2020.

The U.S. – Japan Trade Agreement was signed on October 7, 2019. In the U.S. – Japan Agreement, Japan has committed to provide substantial market access to American food and agricultural products by eliminating tariffs, enacting meaningful tariff reduction, or allowing a specific quantity of imports at a low duty. Tariff treatment for the products covered in this agreement will match the tariffs that Japan provides to countries in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CP-TPP) agreement. The agreement entered into force on January 1, 2020. Both countries agreed to enter into negotiations on a Phase 2 agreement which would cover customs duties and other restrictions on trade, barriers to trade in services and investment and other issues. Negotiations on Phase 2 are expected to begin in May 2020.

Recent reports have indicated the Trump Administration would be interested in trade pacts with India and in Africa, possibly Kenya.

A historical review of various trade agreements affecting textiles can be found at www.cotton.org.

U.S. Supply

2019 Planted Acreage

U.S. farmers planted 13.5 million acres of upland cotton in 2019, a decrease of 2.6% from the previous year (Figure 22).

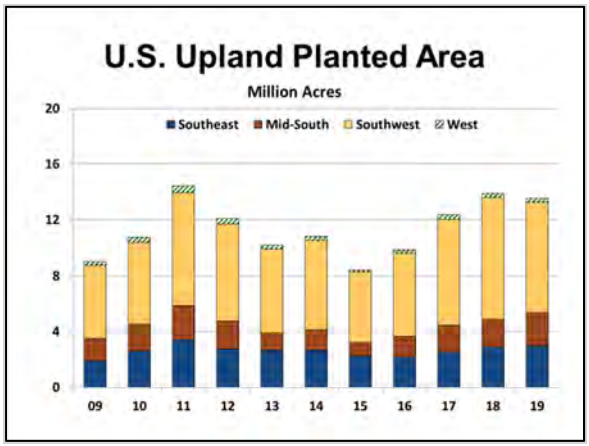

Figure 22 - U.S. Upland Planted Area

In the Southeast, 2019 cotton acreage increased slightly by 80 thousand acres, or 2.8% (Figure 23). Alabama, North Carolina, and Virginia increased cotton acreage by 5.9%, 18.6%, and 5.1%, respectively. South Carolina acreage was unchanged from 2018. Florida acreage declined by 4.3% while Georgia acreage declined by 2.1%. State totals for the region are: Alabama– 540 thousand acres, Florida – 112 thousand acres, Georgia – 1.4 million acres, North Carolina – 510 thousand acres, South Carolina – 300 thousand acres, and Virginia – 103 thousand acres.

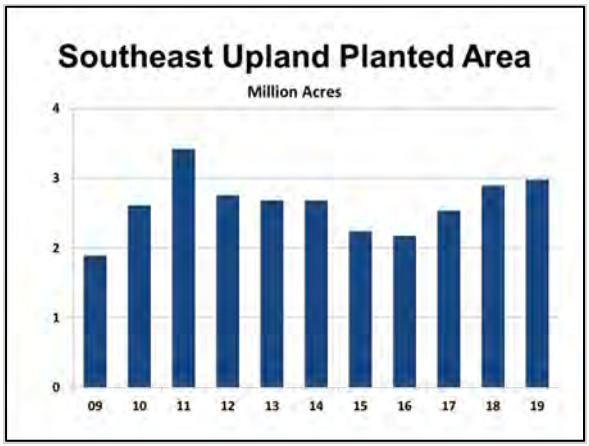

Figure 23 - Southeast Upland Planted Area

In 2019, plantings of 2.4 million acres in the Mid-South represented a 20.9% increase (Figure 24) from the previous year. In recent years, Mid-South farmers have demonstrated their ability and willingness to adjust their crop mix based on market signals. The increase in 2019 acreage continued that pattern as some growers moved away from corn and soybeans and planted more cotton. Acreage increased in all Mid-South states for 2019. For Arkansas, Louisiana, Mississippi, Missouri, and Tennessee, acreage increased by 27.8%, 43.6%, 14.5%, 16.9%, and 13.9%, respectively. State totals for the region are: Arkansas – 620 thousand acres, Louisiana – 280 thousand acres, Mississippi – 710 thousand acres, Missouri – 380 thousand acres, and Tennessee – 410 thousand acres. The 2019 Mississippi acreage was at the highest level since the 2006 crop year, while acreage in the other Mid-South states was at the highest level since the 2011 crop year.

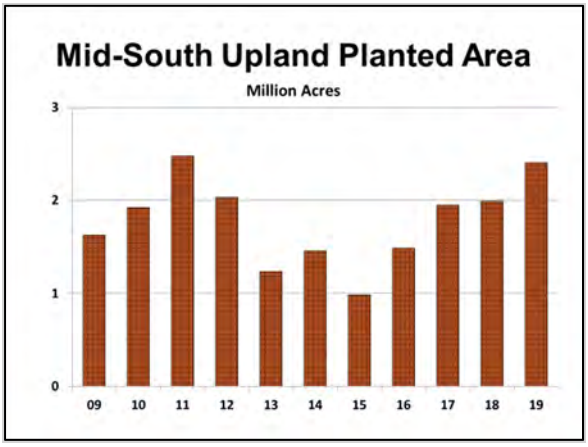

Figure 24 - Mid-South Upland Planted Area

In the Southwest, 2019 upland cotton area decreased by 9.5% to 7.9 million acres (Figure 25). With a 17.9% decrease, Oklahoma's cotton area declined from 780 thousand acres to 640 thousand acres. Kansas area increased by 6.1%, bringing the 2019 total to 175 thousand acres. In Texas, producers planted 7.1 million acres, a 9.0% decline from 2018.

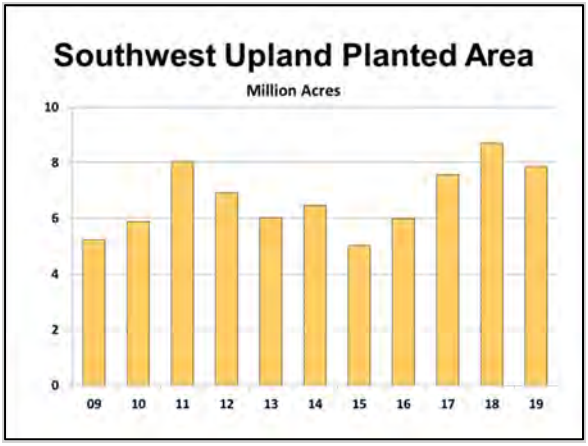

Figure 25 - Southwest Upland Planted Area

Upland acres in the West stood at 278 thousand acres in 2019, down 2.5% from 2018 (Figure 26). Acreage decreased by 18.2% in New Mexico, increased by 14.6% in California, and remained unchanged in Arizona.

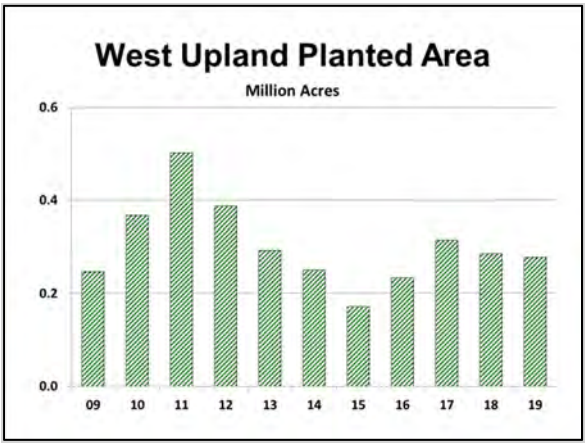

Figure 26 - West Upland Planted Area

In 2019, overall ELS acreage decreased by 8.2%, with planted area at 230 thousand acres (Figure 27). All states had a slight decline in ELS acres in 2019.

Figure 27 - U.S. ELS Planted Area

2019 Harvested Acreage

Overall U.S. abandonment was 14.1%, down 13.5 percentage points from 2018 (Figure 28). In Texas, 23.4% of upland acres were unharvested, which was close to the 5-year average of 23.1%. In Oklahoma, 25.0% of acres were unharvested, which was higher than the 5-year average of 15.0%.

In the Southeast, abandonment levels were much lower as compared to 2018. In Alabama, 0.9% of acres were abandoned as compared to the 5-year average of 1.5%. In Georgia, 0.7% of acres were abandoned as compared to the 5-year average of 2.7%. In

Florida, the abandonment rate was 0.9% as compared to the 5-year average of 5.9%. In North Carolina, 2019 abandonment of 2.0% was lower than the 5-year average of 4.3%. In South Carolina, abandonment was 1.0% as compared to the 5-year average of 10.8%.

In the Mid-South, the 2019 abandonment rate was slightly higher than the 5-year average for all states in the region except Tennessee. The abandonment rate for Arkansas, Louisiana, Mississippi, Missouri, and Tennessee, was 1.6%, 3.6%, 1.4%, 3.2%, and 1.2%, respectively. The 2019 abandonment rate for upland cotton in the West was also slightly higher than the 5-year average. For ELS cotton, the New Mexico abandonment rate was 5.7% as compared to the 5-year average of 1.4%. The Texas ELS abandonment rate of 16.7% was higher than the 5-year average of 7.8%.

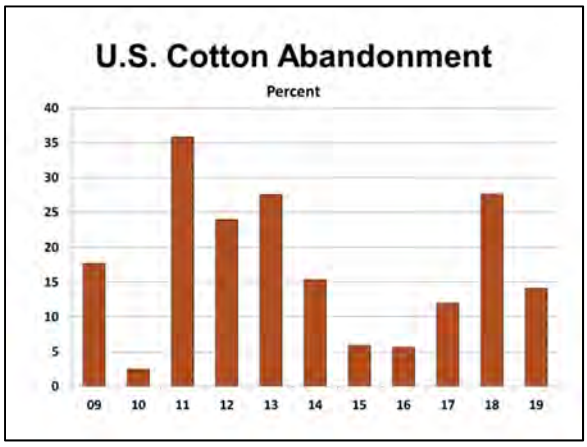

Figure 28 - U.S. Cotton Abandonment

2019 Yields

In 2019, the estimated national average cotton yield of 817 pounds was 46 pounds lower than the previous year and 35 pounds lower than the 5-year average (Figure 29). Looking at the numbers in more detail provides a better insight to the varying conditions faced by growers across the Cotton Belt. The Southwest region had below average yields in 2019 while all other regions had above average yields.

In the Southeast, the 2019 yield for all states was higher than 2018 and the 5-year average.

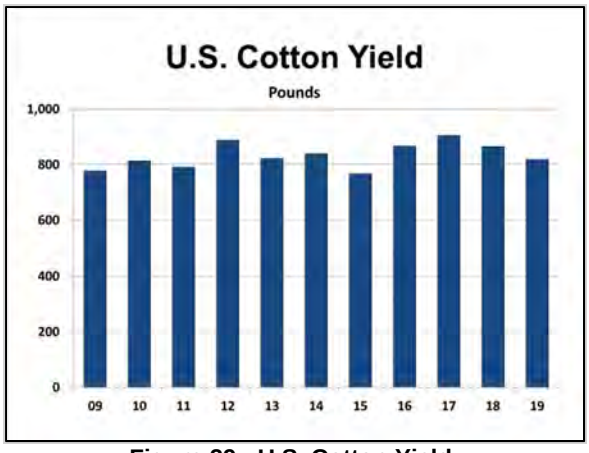

Figure 29 - U.S. Cotton Yield

For the region, the 2019 yield of 932 pounds was 172 pounds higher than 2018 and 72 pounds higher than the 5-year average (Figure 30). In Alabama, the 2019 yield of 969 was 111 pounds higher than 2018 and 69 pounds higher than the 5-year average. In Florida, the 2019 yield of 822 pounds was 290 pounds higher than in 2018 and slightly above the 5-year average. The 2019 Georgia yield of 915 pounds was 196 pounds higher than 2018 and 53 pounds higher than the 5-year average. The 2019 North Carolina yield of 1,018 pounds was 206 pounds higher than 2018 and 160 pounds higher than the 5-year average. In South Carolina, the 2019 yield of 808 pounds was 75 pounds higher than 2018 and 26 pounds higher than the 5-year average. At 1,035 pounds, the 2019 Virginia yield was 140 pounds higher than 2018 and 82 pounds higher than the 5-year average.

Southeast Upland Yields
Pounds per Harvested Acre

	2018	2019	5-Year Average
Alabama	858	969	900
Florida	532	822	797
Georgia	719	915	862
North Carolina	812	1,018	857
South Carolina	733	808	782
Virginia	896	1,035	953
SOUTHEAST	760	932	860

Figure 30 - Southeast Upland Yields

Overall, cotton acreage in the Mid-South produced yields above the 5-year average in 2019. At 1,138 pounds, the 2019 Tennessee yield was the highest on record (Figure 31). All Mid-South states had 2019 yields higher than the 5-year average except Arkansas with 2019 yields of 1,102 pounds, 27 pounds lower than the 5-year average.

Mid-South Upland Yields
Pounds per Harvested Acre

	2018	2019	5-Year Average
Arkansas	1,133	1,102	1,129
Louisiana	1,067	1,031	983
Mississippi	1,141	1,097	1,126
Missouri	1,373	1,330	1,180
Tennessee	1,041	1,138	1,019
MID-SOUTH	1,152	1,134	1,102

Figure 31 - Mid-South Upland Yields

Missouri had the 2nd highest yield on record at 1,330 pounds. In Arkansas, the 2019 yield of 1,102 was 31 pounds lower than the previous year and 27 pounds lower than the 5-year average. The 2019 Louisiana yield of 1,031 was 36 pounds lower than in 2018 and 48 pounds above the 5-year average. In Mississippi, the 2019 yield of 1,097 was 44 pounds lower than the previous year and 29 pounds lower than the 5-year average.

In the Southwest, the 2019 average yield of 583 pounds was 165 pounds lower than 2018 and 143 pounds below the 5-year average. In Texas, the yield of 569 was 187 pounds lower than 2018 and 149 pounds lower than the 5-year average. The Oklahoma yield of 640 pounds was 45 pounds higher than 2018. However, it was 146 pounds below the 5-year average. At 910 pounds, the Kansas yield was 167 pounds lower than the previous year and 135 pounds below the 5-year average (Figure 32).

Southwest Upland Yields
Pounds per Harvested Acre

	2018	2019	5-Year Average
Kansas	1,077	910	1,045
Oklahoma	595	640	786
Texas	756	569	718
SOUTHWEST	748	583	726

Figure 32 - Southwest Upland Yields

The average upland yield in the West was estimated at 1,464 pounds, which was 112 pounds higher than 2018 and 18 pounds above the 5-year average (Figure 33). The Arizona yield of 1,443 pounds was 29 pounds below the 5-year average while the New Mexico yield of 1,328 pounds was 310 pounds above the 5-year average and a new record. The California yield of 1,644 pounds was 266 pounds lower than the record 2018 yield and 40 pounds lower than the 5-year average.

West Upland Yields
Pounds per Harvested Acre

	2018	2019	5-Year Average
Arizona	1,319	1,443	1,472
California	1,910	1,644	1,685
New Mexico	977	1,328	1,018
WEST	1,352	1,464	1,446

Figure 33 - West Upland Yields

The national average ELS yield was estimated at 1,544 pounds, relatively unchanged from 2018 and 116 pounds above the 5-year average (Figure 34). Accounting for the majority of ELS acres, California heavily influences the U.S. average. With an average yield of 1,616 pounds, the California yield was 46 pounds lower than the previous year and 78 pounds above the 5-year average. At 896 pounds, ELS yields in Arizona were 32 pounds below the 5-year average. New Mexico's yield of 864 pounds was 13 pounds above the 5-year average. The 2019 Texas ELS yield of 912 pounds was slightly lower than 2018 and the 5-year average.

ELS Yields
Pounds per Harvested Acre

	2018	2019	5-Year Average
Arizona	943	896	928
California	1,662	1,616	1,538
New Mexico	812	864	851
Texas	933	912	935
U.S.	1,545	1,544	1,428

Figure 34 - ELS Yields

2019 Production

The January 2020 USDA estimate places the 2019 U.S. cotton crop at 20.1 million bales (Figure 35), up 1.7 million bales from 2018. The 2019 crop represents a 3.0 million bale increase relative to the 5-year average. Upland production was estimated at 19.4 million bales, and ELS farmers harvested 722 thousand bales.

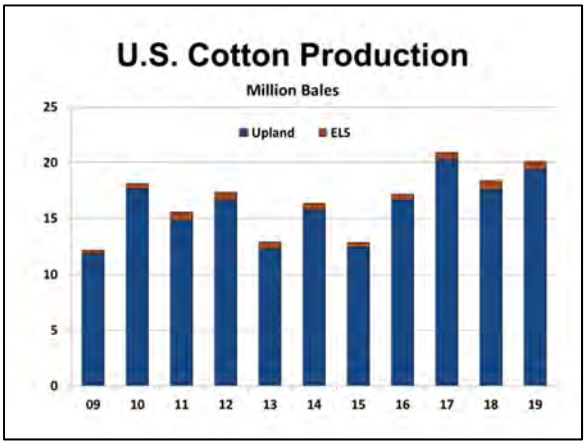

Figure 35 - U.S. Cotton Production

In 2019, the Southeast was estimated to have produced 5.7 million bales, accounting for 29.4% of the total upland crop (Figure 36). The region's 2019 crop was up by 1.5 million bales from the 2018 total.

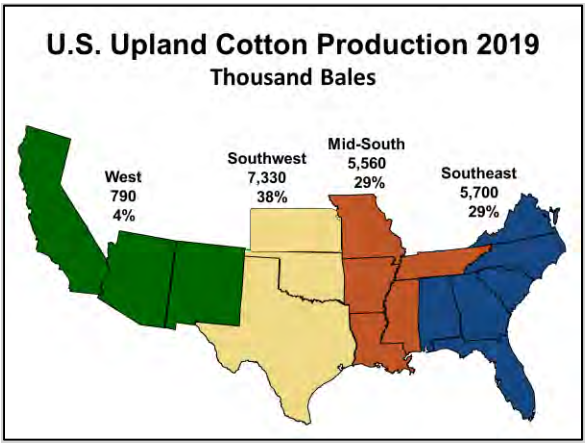

Figure 36 - U.S. Upland Cotton Production

For 2019, the Mid-South accounted for 28.7% of the total U.S. upland crop with 5.6 million bales, which was the highest level since the 2006 crop year. The Mid-South crop was 854 thousand bales higher than 2018 and 2 million bales higher than the 5-year average. The 2019 Missouri production

of 1.0 million bales was the highest on record. For Arkansas, 2019 production of 1.4 million bales was the highest since the 2007 crop year. For Louisiana, Mississippi, and Tennessee, the 2019 production was the highest since the 2006 crop year.

At 7.3 million bales, production in the Southwest accounted for 37.8% of the U.S. upland crop. The 543 thousand bale decline from 2018 resulted from lower yields across the region. Texas production of 6.4 million bales was 450 thousand bales lower than 2018 and 823 thousand bales lower than the 5-year average. In Oklahoma, 2019 production of 640 thousand was 42 thousand bales lower than the previous year but still higher than the 5-year average. Kansas production decreased by 51 thousand bales to 290 thousand bales in 2019.

The West produced 790 thousand bales of upland cotton in 2019, up 52 thousand bales from the region's 2018 crop. The region accounted for 4.1% of U.S. production. The Western crop surpassed the 5-year average by 80 thousand bales.

The 2019 ELS crop of 722 thousand bales was 79 thousand bales lower than 2018, but higher than the 5-year average of 614 thousand bales. At 680 thousand bales, the California ELS crop was 47 thousand bales lower than 2018 due to decreased acreage (Figure 37). The state accounted for 94.2% of the total 2019 U.S. ELS crop. Arizona's ELS crop decreased to 14 thousand bales, while the Texas crop dropped to 19 thousand bales. New Mexico's production of 9 thousand bales was slightly lower than 2018.

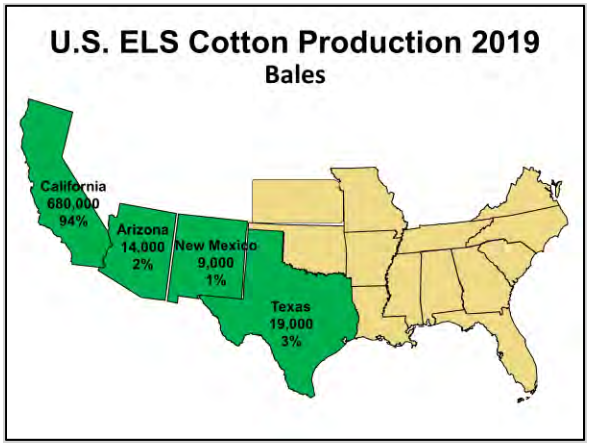

Figure 37 - U.S. ELS Cotton Production

2019 Stock Levels

With U.S. cotton production exceeding total demand for the 2018 marketing year, the resulting carryout from the 2018 marketing year, and equivalent carry-in or beginning stocks for the 2019 marketing year, stood at 4.9 million bales (Figure 38). That represented an increase of 650 thousand bales from the stocks that were brought into the 2018 marketing year. Upland stocks totaled 4.6 million bales and ELS stocks stood at 214 thousand bales.

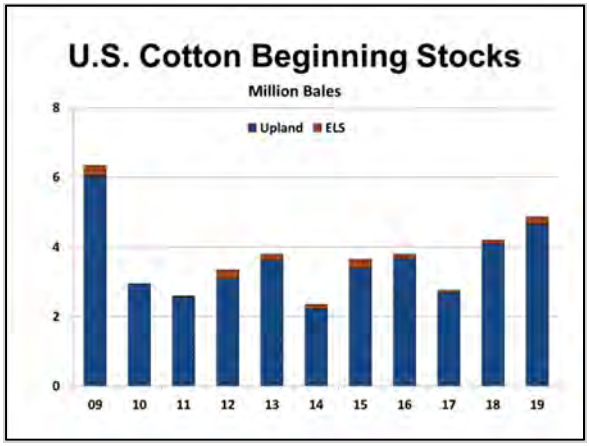

Figure 38 - U.S. Cotton Beginning Stocks

The larger 2019 crop and lower cotton prices are expected to lead to an increase in total CCC loan stocks. More bales will likely be placed under the loan over the next few months as ginning nears completion.

As of January 31, 2020, outstanding upland CCC loan stocks were 7.1 million bales (Figure 39), up from 4.5 million bales in January 31, 2019. As of the end of December, the Mid-South accounts for 52.2% of cotton placed under loan, the Southwest accounts for 22.5%, the Southeast accounts for 21.7%, and the remaining 3.6% in the West.

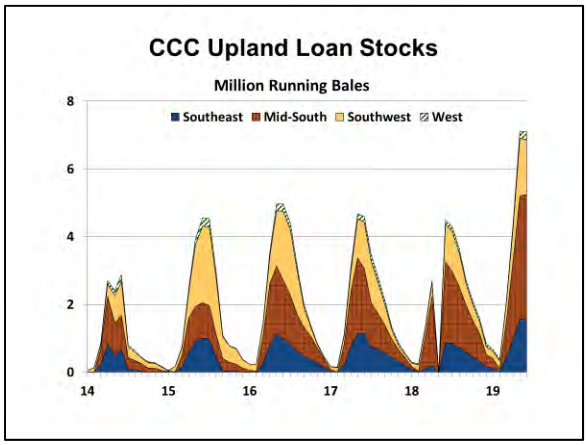

Figure 39 - CCC Upland Loan Stocks

2019 Total Supply

Total supply for the 2019 marketing year was estimated to be 25.0 million bales, up from 22.6 million bales the previous year (Figure 40). The larger supplies are due to higher beginning stocks and larger production. Total supplies for the 2019 marketing year are 4.5 million bales above the 5-year average.

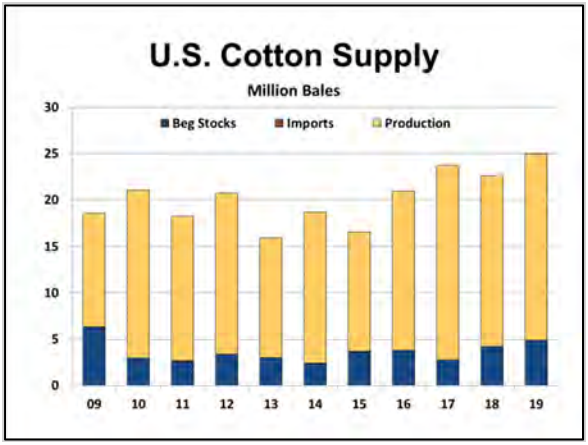

Figure 40- U.S. Cotton Supply

2019 Upland Cotton Quality

With 18.3 million running bales classed through February 6, the national average staple length (measured in thirty-second's of an inch) is 36.5, up from a 5-year average of 36.2 (Figure 41). The Southeast staple length of 36.5 is 0.5 thirty-seconds of an inch better than the 5-year average. In the Mid-South, the average staple length of 37.4 exceeds the 5-year average by 0.5 thirty-second's of an inch. The Southwest's average staple length of 35.6 is slightly off the 5-year average of 35.8. The West reports an average staple length of 37.3, up 0.2 from the 5-year average.

2019 Crop Staple and Strength

	Staple		Strength	
	2019	5-Year	2019	5-Year
Southeast	36.5	36.0	30.3	29.3
Mid-South	37.4	36.9	30.6	30.9
Southwest	35.6	35.8	30.8	29.9
West	37.3	37.1	32.2	31.5
U.S.	36.5	36.2	30.6	30.2

Figure 41 - Crop Staple and Strength

The average strength of the 2019 upland crop was 30.6 grams per tex (gpt). The highest strength occurred in the West, with an average of 32.2 gpt, exceeding the 5-year average of 31.5. At 30.3 gpt, the Southeast was higher than the 5-year average of 29.3 gpt. The Southwest crop has an average strength of 30.8 gpt, which is higher than the 5-year average. In the Mid-South, an average strength of 30.6 gpt was 0.3 gpt below the 5-year average of 30.9 gpt.

Color grades for the 2019 crop were generally lower than previous years. In total for the Cotton Belt, 76.4% of the 2019 crop was grading 41 or better as compared to the 5-year average of 83.5% (Figure 42). The Southeast region was the only region that

did not fall below their respective five-year average in terms of color. In the Southeast, 81.3% of the 2019 crop was grading 41 or better. At 87.8%, the Mid-South was slightly behind their 5-year average of 89.1%. The Southwest had the lowest percentage grading 41 or better with 62.4% of the 2019 crop grading 41 or better. In the West, 88.0% of the 2019 crop was grading 41 or better.

2019 Crop Color and Mike

	%SLM+		Micronaire	
	2019	5-Year	2019	5-Year
Southeast	81.3	80.3	4.6	4.6
Mid-South	87.7	89.1	4.5	4.6
Southwest	62.4	82.2	4.4	4.2
West	88.0	93.8	4.5	4.5
U.S.	76.4	83.5	4.5	4.3

Figure 42 - Crop Color and Mike

The average micronaire of the 2019 upland cotton crop was 4.5, which was above the 5-year average of 4.3. In the Southeast, the average micronaire was 4.6, unchanged from their 5-year average. The West was also unchanged in terms of micronaire with an average micronaire of 4.5, The Mid-South was just below their 5-year average with a 4.5 average micronaire and in the Southwest, the average micronaire for the 2019 crop was slightly above their 5-year average.

Cottonseed Situation

Cottonseed Supply

The USDA estimate for 2019 cottonseed production was 6.2 million tons, up 601 thousand tons from the previous year (Figure 43). The changes in cottonseed production generally mirror the movements in cotton lint production as average seed-to-lint ratios have remained relatively stable in recent years. From a longer-term perspective, seed-to-lint ratios, recently ranging between 1.27 and 1.31, are down over the past 15 years from a range of 1.55 to 1.60. For the 2019 crop year, the estimated seed-to-lint ratio is 1.29.

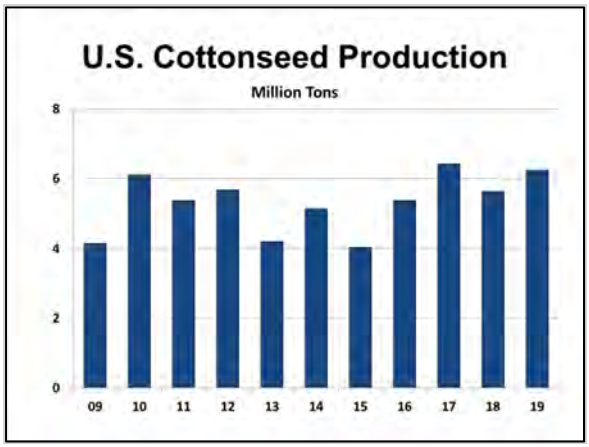

Figure 43 - U.S. Cottonseed Production

For the 2019 crop, a regional breakdown of production shows that the Southwest produced 2.3 million tons or 36.2% of the total, the largest of any region (Figure 44). They were followed by the Mid-South with production of 1.8 million tons for a 28.8% share. The Southeast produced 1.6 million tons, or 26.4% of total production, and the West accounted for 536 thousand tons, 8.6% of the total.

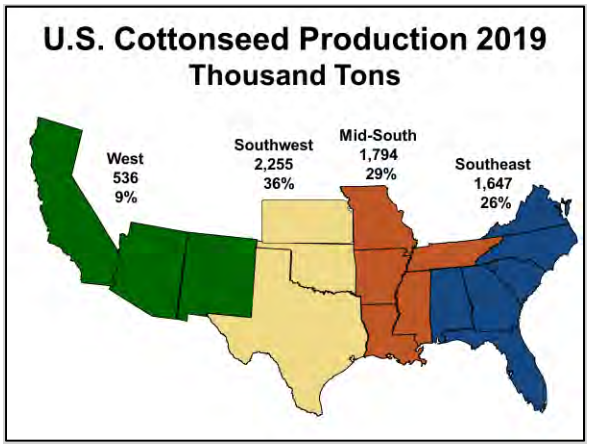

Figure 44 - U.S. Cottonseed Production

Supplementing U.S. production, beginning stocks of 477 thousand tons bring total

cottonseed supply for the 2019 marketing year to 6.7 million tons (Figure 45). Total supplies for 2019 were up by 629 thousand tons from the previous year. The 2019 total supply was 1.1 million tons higher than the 5-year average.

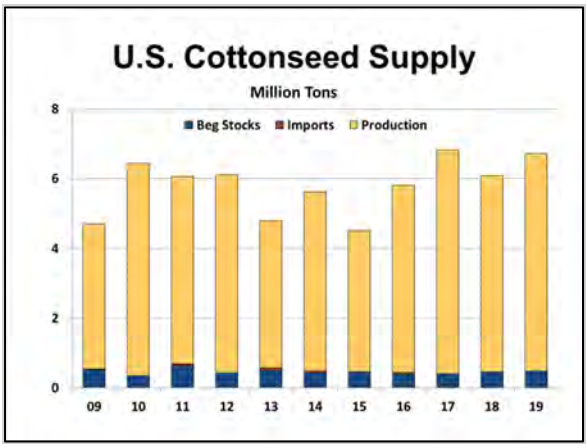

Figure 45 - U.S. Cottonseed Supply

Disappearance and Stock Levels

The January 2020 USDA estimate for cottonseed disappearance showed a crush level of 1.8 million tons for the 2019 crop year (Figure 46). Whole seed feeding was estimated at 4.2 million tons.

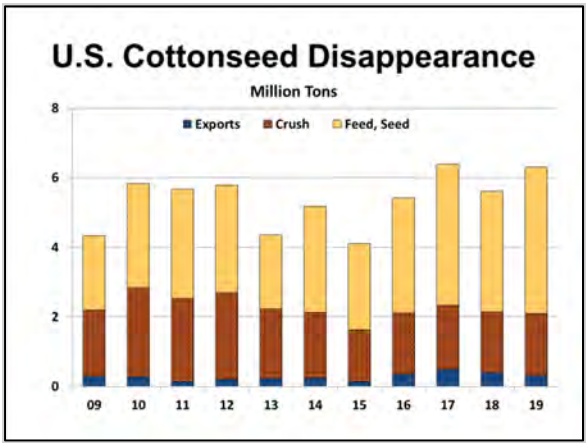

Figure 46 - U.S. Cottonseed Disappearance

While supplies were larger in 2019, feed use was projected to be higher, resulting in a decline in cottonseed stocks to 421 thousand tons (Figure 47).

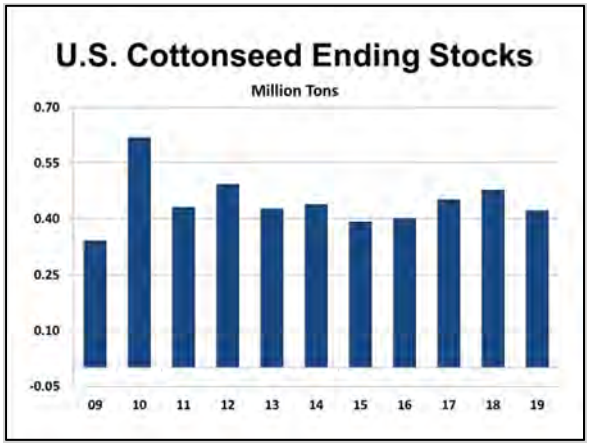

Figure 47 - U.S. Cottonseed Ending Stocks

2019 Cotton Prices

Upland Cotton Prices

Overall, cotton futures prices traded lower in 2019 as compared to 2018. During the first four months of 2019, the nearby December futures contract traded in the 70 to 80 cent range. From April through August, prices steadily declined before reaching a low of roughly 57 cents, which was the lowest level since early 2016. Prices remained in the upper 50's until October before continuing on an upward trajectory to approach 70 cents by the end of the year (Figure 48). The nearby New York futures and the world cotton price, as measured by Cotlook Ltd.'s "A" Index maintained a relationship consistent with historical experience.

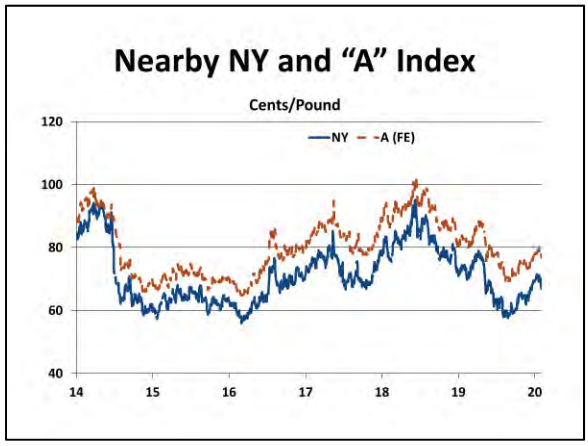

Figure 48 - Nearby NY and "A" (FE) Index

Over the last three weeks, prices have been trading between 70 and 72 cents/lb., with the "A" Index close to 80 cents/lb.

Thus far in the current marketing year (Aug-Jan), the nearby NY futures contract has averaged 63.7 cents per pound. During the 2018 marketing year, the average Aug-Jan futures price was 78.4 cents per pound.

Spot prices in the U.S. followed a similar pattern to the futures market and the "A" Index. For the 2019 marketing year, spot prices averaged 59.0 cents/lb. from August to December. The average spot price in January 2020 was 65.6 cents per pound (Figure 49). The average spot 4134 value for the 2018 crop cotton was 70.0 cents per pound.

Figure 49 - Spot 4134 Price

ELS Cotton Prices

For 2019, ELS prices declined throughout the year. ELS cotton prices began 2019 at $1.25 per pound and ended the year at $1.10 per pound (Figure 50). In addition to the impact of China's retaliatory tariff, increased export competition from Egyptian cotton continues to pressure ELS markets.

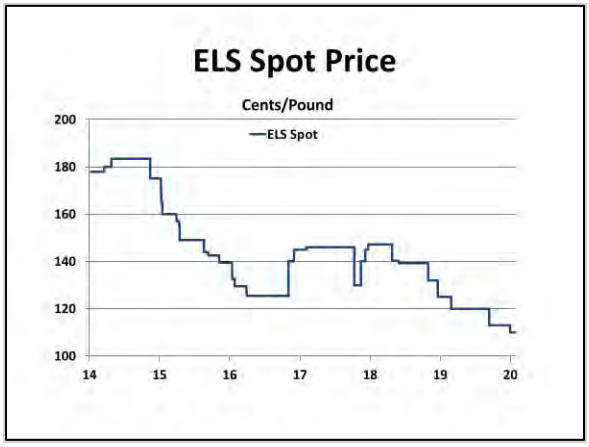

Figure 50 - ELS Spot Price

Cottonseed Prices

The movement in cottonseed prices reflects changes in competing feed prices as well as available supplies (Figure 51). The average cottonseed spot price is a weighted average of the four production regions. Cottonseed prices moved up and down throughout the year but traded higher than in 2018. The national average cottonseed spot price was $208 per ton in January 2019 and $235 per ton in January 2020. On a regional basis, the average January 2020 spot price was $175 per ton in the Southeast, $198 per ton in the Mid-South, $288 per ton in the Southwest, and $320 per ton in the West.

It is important to note that the cottonseed FOB delivered spot prices will range from $25 to $100 per ton above the cottonseed farmgate prices reported by NASS.

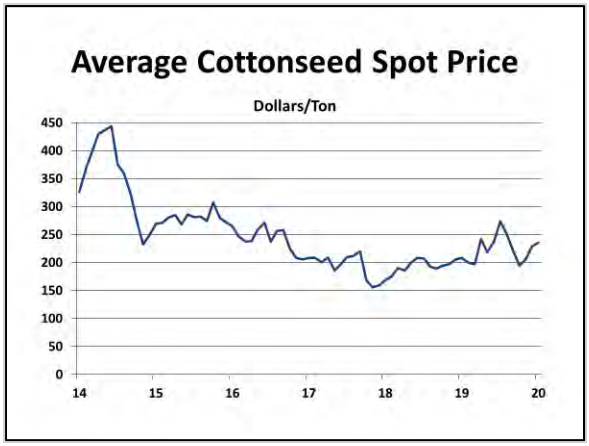

Figure 51 - Average Cottonseed Spot Price

2020 Planting Intentions

In consideration of their 2020 planting decisions, growers will compare prices for cotton, corn, soybeans and other regional crops. Growers will also be influenced by production costs for cotton and other crops. While final acreage decisions are influenced by expected returns of cotton and competing crops, farmers will also take into account weather and agronomic considerations such as crop rotation.

Price Prospects

As we look ahead to the 2020 planting season, cotton harvest-time futures contracts are currently trading at slightly lower levels than last year. In mid-January, the December 2020 contract was trading at $0.72 per pound, down 2 cents from year-ago levels (Figure 52). In early February, prices had dropped to 68 cents.

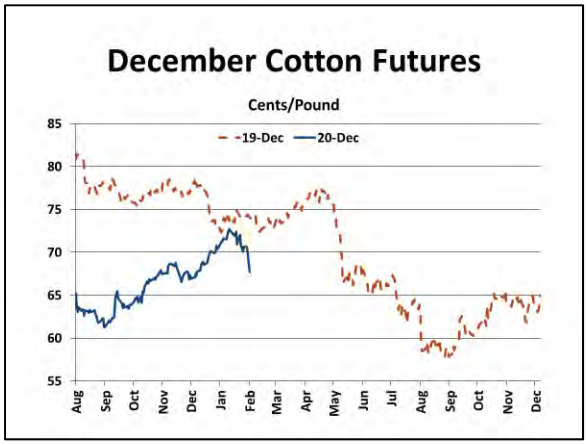

Figure 52 - December Cotton Futures

Corn prices traded in a sideways pattern during the first half of 2019 and followed a downward trend during the last half of the year. In mid-January, the December 2020 contract for corn was trading at $4.04 per bushel, which is about 14 cents per bushel higher than a year ago (Figure 53). Prices dropped to $3.94 per bushel in early February.

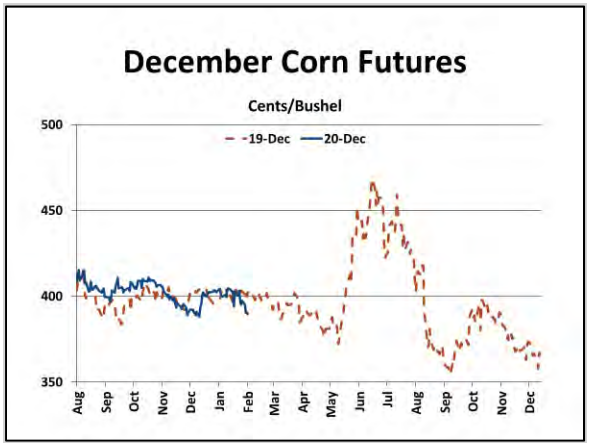

Figure 53 - December Corn Futures

Soybean prices, as measured by the Chicago Board of Trade November futures contract, are similar to year-ago levels. In mid-January, the November 2020 contract traded at $9.70 per bushel, almost the same level as the November 2019 contract was trading a year earlier (Figure 54). In early February, prices dropped to $9.18 per bushel.

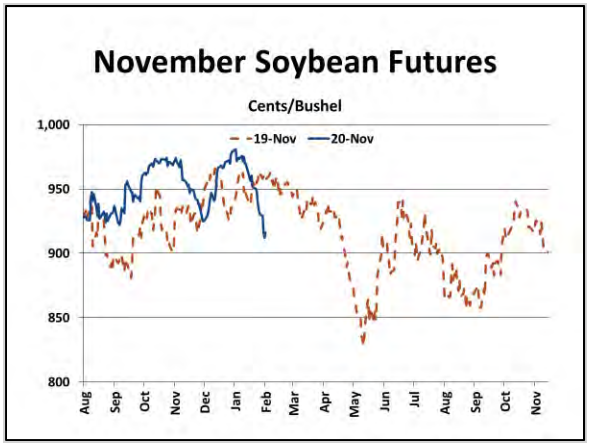

Figure 54 - November Soybean Futures

Relative to average futures in the first quarter of 2019, soybean prices during the 2020 survey period were up by 2.6%, corn prices were trading about 0.8% higher, and cotton prices were trading 4.3% lower. As a result, corn and soybeans are expected to provide increased competition for cotton acres in 2020 acreage decisions.

2020 U.S. Cotton Acreage Intentions

In mid-December 2019, the NCC distributed the annual early season planting intentions survey. Respondents were asked to provide their plantings of cotton, corn, soybeans, wheat, and 'other crops' for 2019 and intended acreage for 2020. As always, the survey results should be viewed as a measure of grower intentions prevailing at the time the survey was conducted. Changing climate and market conditions could cause actual plantings to be significantly different from growers' stated intentions.

The cotton-to-corn price ratio is lower than in 2019 due to lower cotton prices and slightly higher corn prices as compared to last year. The cotton-to-soybean price ratio is also lower than in 2019 due to lower cotton prices and higher soybean prices.

It is important to call attention to the ratios because experience has shown that these ratios are reliable indicators of changes in cotton acreage. Historical data over the past 10 years shows a clear relationship between the price ratios and changes in cotton acreage. An increase in the price ratio generally indicates an increase in cotton acreage. A review of the Council's survey will begin with a look at the Southeast.

In the Southeast, survey results indicate a 9.3% decrease in the region's upland area to 2.7 million acres (See Table 4 on page 47). All states in the region show a decline in acreage. In Alabama, the survey responses indicate a 4.9% decrease in cotton acreage, an increase in corn and soybeans and a decline in 'other crops'. In Florida, respondents indicated slightly less cotton, soybeans, and 'other crops', likely peanuts, and more corn. In Georgia, cotton acreage is expected to decline by 11.9% to 1.2 million acres. Georgia growers expect to plant more corn, wheat, and 'other crops', likely peanuts, and less soybeans. In North Carolina, an 8.4% decline in cotton acreage is expected. Acreage of corn, wheat, and soybeans is expected to increase while 'other crops' is expected to decline . In South Carolina, acreage is expected to decline by 10.7%. South Carolina growers expect to plant more corn, soybeans, wheat, and 'other crops'. Cotton acreage is expected to decline by 3.6% in Virginia. Virginia growers intend to plant more corn and 'other crops' and less soybeans and wheat.

In the Mid-South, growers have demonstrated their ability to adjust acreage based on market signals. The relative prices and potential returns of competing crops play a significant role in cotton acreage. Mid-South growers intend to plant 2.2 million acres, a decline of 6.5% from the previous year. Survey results suggest that the decrease in cotton acres can be attributed to a shift to corn and soybeans.

Across the region, all states intend to decrease cotton acreage. Arkansas producers intend to plant 3.0% less cotton acreage and increase corn, wheat, and 'other crops'. Soybean acreage is expected to remain relatively unchanged from 2019. Louisiana growers expect to plant 6.4% less cotton acreage in 2020 and plant more corn, soybeans and 'other crops'. In Mississippi, respondents expect to plant 8.9% less cotton. Mississippi respondents expect to increase corn and soybean acreage and reduce 'other crops'. Missouri growers expect to decrease cotton acres by 2.1% and plant more corn, and less soybeans. In Tennessee, cotton acreage is expected to decline by 11.8% as land shifts to corn, soybeans and wheat. All states in the Mid-South intend to plant more corn in 2020. Soybean acreage is expected to increase in Louisiana, Mississippi, and Tennessee.

Growers in the Southwest intend to plant 7.6 million acres of cotton, a decrease of 3.4%.

Increases in cotton area are expected in Oklahoma and Kansas and a decline is expected in Texas. In Kansas, producers intend to plant 5.1% more cotton acres in 2020. Kansas growers intend to plant more wheat and 'other crops', likely sorghum, and less corn and soybeans. In Oklahoma, a 3.3% increase in cotton acreage is expected. Oklahoma producers expect to plant slightly more wheat and less 'other crops'. Overall, Texas acreage is expected to decline by 4.2%. In south Texas, respondents indicate a 10.4% decrease in cotton acreage. South Texas growers intend to plant more corn and 'other crops, likely sorghum, and less wheat. Respondents from the Blacklands indicate a decrease of 8.3% in cotton acreage, an increase in corn acreage and 'other crops', and a decrease in wheat acreage. In West Texas, respondents indicated a 3.0% decrease in cotton acreage, an increase in corn, wheat, and a slight decrease in 'other crops'.

With intentions of 221 thousand acres, producers in the West expect to plant 20.5% less acres of upland cotton. Cotton acreage is expected to decrease in Arizona and California and increase slightly in New Mexico. The survey results for Arizona suggest a 25.7% decrease in upland cotton acres and an increase in corn, wheat, and 'other crops'. In California, growers intend to plant 30.9% less upland cotton and increase acreage of 'other crops'. Summing across the 4 regions gives intended 2020 upland cotton area of 12.8 million acres, 5.6% below 2019.

The survey indicates that growers intend to plant slightly less ELS cotton in 2020. California growers expect to plant 3.9% less ELS cotton, while Arizona growers expect to plant 1.8% less ELS cotton. New Mexico ELS acreage is expected to remain unchanged while Texas growers expect to increase ELS acreage by 15.5%. Overall, U.S. cotton growers intend to plant 224 thousand ELS acres in 2020. Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2020 of 13.0 million acres, 5.5% lower than in 2019.

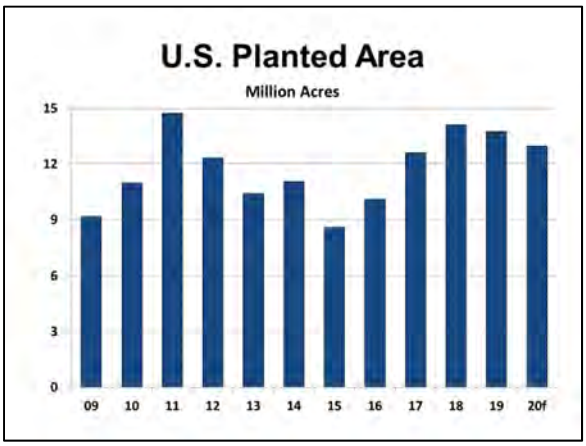

Figure 55 - U.S. Planted Area

2020 U.S. Cotton and Cottonseed Supply

In recent years, U.S. cotton producers have struggled with low cotton prices, high production costs, and the resulting financial hardships. Many producers continue to face difficult economic conditions heading into 2020. Production costs remain high and prices still fall short of total production expenses for many producers. While the Market Facilitation Program (MFP) payments have provided some compensation to producers for the reduction in prices due to trade disruptions, the 2019 crop year has still been a very challenging year for many growers across the Cotton Belt.

However, despite the challenging conditions, in the Southwest, cotton is still the better alternative for many growers. Low grain prices dampen the reduction in cotton acreage in the Southwest in 2020. In the Southeast and Mid-South, cotton continues to be a good alternative, but some growers may expect higher returns from other crops in 2020. In the West, expected water availability may be influencing cotton acreage decisions.

Planted acreage is just one of the factors that will determine supplies of cotton and cottonseed. Ultimately, weather, insect pressures, and agronomic conditions play a significant role in determining crop size. Since the NCC economic outlook does not attempt to forecast weather patterns, the standard convention is to assume yields in line with recent trends and abandonment consistent with historical averages. Also, it is important to remember the volatility around projected production given the uncertainty of weather patterns.

With average abandonment for the U.S. estimated at 13.8%, Cotton Belt harvested area totals 11.2 million acres (Figure 56). Using an average 2020 U.S. yield of 848 generates a cotton crop of 19.8 million bales, with 19.2 million bales of upland and 680 thousand bales of ELS.

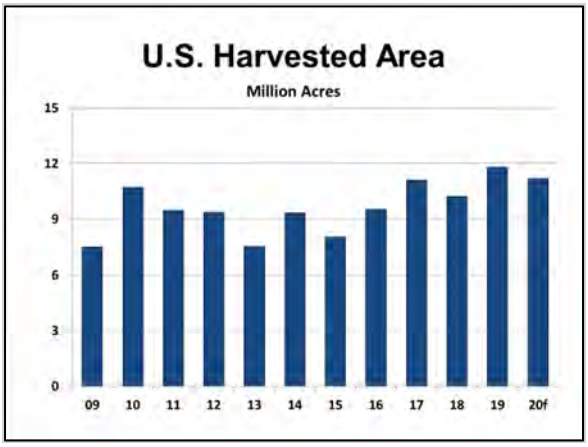

Figure 56 - U.S. Harvested Area

Combining projected production with expected beginning stocks of 5.4 million bales and imports of 5 thousand bales gives a total U.S. supply of 25.2 million bales (Figure 57). This is an increase of 205 thousand bales from the 2019 level.

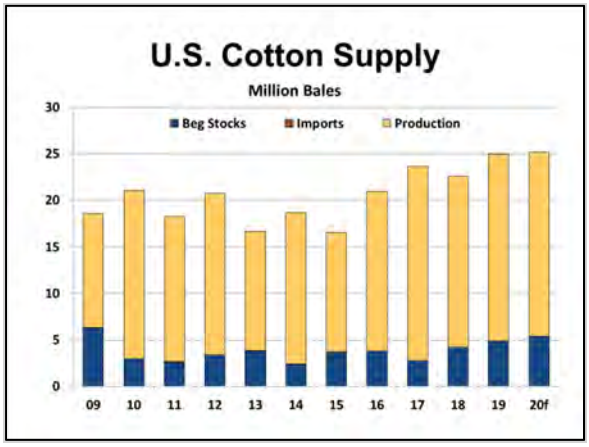

Figure 57 - U.S. Cotton Supply

For cottonseed, multiplying the point estimate of lint production by an average lint-seed ratio generates expected production of 6.1 million tons in the 2020 marketing year. With 421 thousand tons of beginning stocks, 2020 cottonseed supply totals 6.5 million tons (Figure 58).

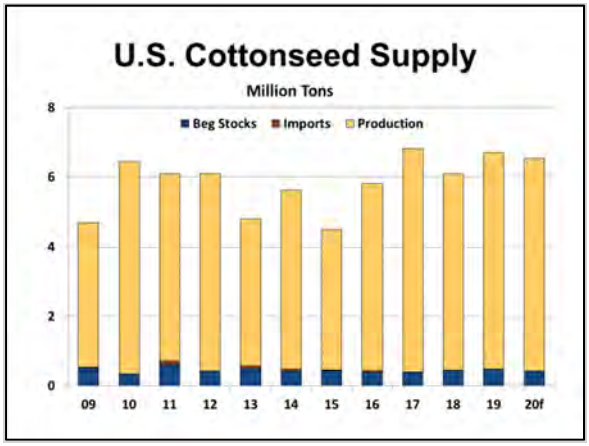

Figure 58 - U.S. Cottonseed Supply

Table 4 - Prospective 2020 U.S. Cotton Area

	2019 Actual (Thou.) 1/	2020 Intended (Thou.) 2/	Percent Change
SOUTHEAST	**2,965**	**2,690**	**-9.3%**
Alabama	540	513	-4.9%
Florida	112	110	-2.2%
Georgia	1,400	1,233	-11.9%
North Carolina	510	467	-8.4%
South Carolina	300	268	-10.7%
Virginia	103	99	-3.6%
MID-SOUTH	**2,400**	**2,244**	**-6.5%**
Arkansas	620	601	-3.0%
Louisiana	280	262	-6.4%
Mississippi	710	647	-8.9%
Missouri	380	372	-2.1%
Tennessee	410	362	-11.8%
SOUTHWEST	**7,865**	**7,598**	**-3.4%**
Kansas	175	184	5.1%
Oklahoma	640	661	3.3%
Texas	7,050	6,753	-4.2%
WEST	**278**	**221**	**-20.5%**
Arizona	160	119	-25.7%
California	55	38	-30.9%
New Mexico	63	64	1.7%
TOTAL UPLAND	**13,508**	**12,753**	**-5.6%**
TOTAL ELS	**230**	**224**	**-2.7%**
Arizona	8	7	-1.8%
California	205	197	-3.9%
New Mexico	5	5	0.0%
Texas	12	14	15.5%
ALL COTTON	**13,738**	**12,977**	**-5.5%**

U.S. Market

U.S. Textile Industry

Preliminary data from the U.S. Bureau of Labor Statistics indicate that textile industry employment in 2019 fell by approximately 14,100 workers. These figures represent employment in all three sectors of the U.S. textile industry - textile mills, textile product mills, and apparel mills.

Mill Use

Cotton mill use decreased from the previous year and was estimated at 2.98 million bales in calendar 2019, 4.6% below 2018 (Figure 59). For calendar 2020, NCC forecasts domestic mill use of cotton at 3.01 million bales. NCC projects domestic mill use of cotton at 2.85 million bales for the 2020 marketing year, slightly below the 2019 estimate of 3.00 (Figure 60). U.S. mills continue to be important and consistent customers of U.S. cotton.

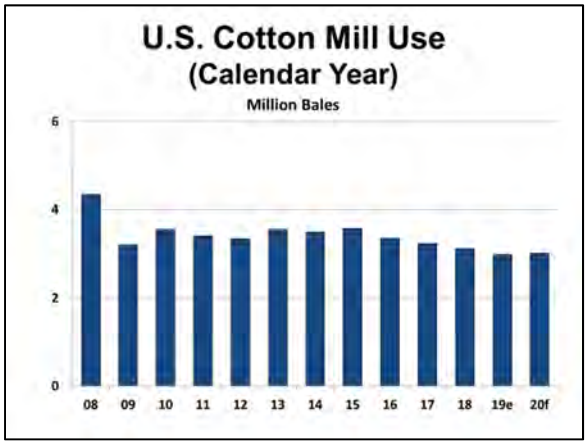

Figure 59 - U.S. Cotton Mill Use (Calendar Year)

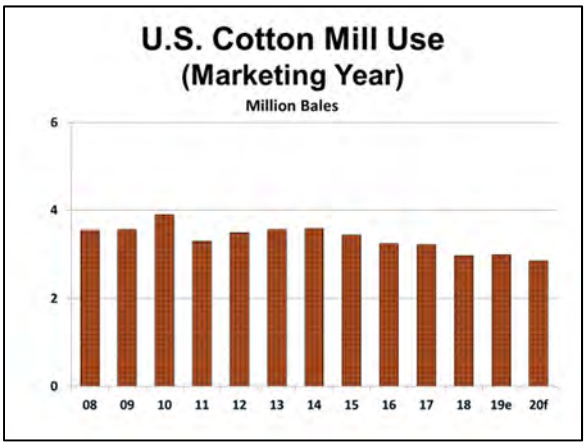

Figure 60 - U.S. Cotton Mill Use (Marketing Year)

Economic Adjustment Assistance for Textile Mills

The Economic Adjustment Assistance for Textile Mills (EAATM), reauthorized and renamed in the 2018 Farm Bill, has provided U.S. cotton textile manufacturers with much-needed assistance for capital investments and improvements.

Under the EAATM, domestic users receive 3 cents per pound for all upland cotton consumed. Recipients must agree to invest the EAATM proceeds in plants and equipment. For fiscal year 2020, 40 U.S. companies were approved to receive payments under the EAATM.

Net Domestic Consumption

Net domestic consumption is a measure of the size of the U.S. retail market. It measures both cotton spun in the U.S. (mill use) and cotton consumed through textile imports. Net domestic consumption of cotton in 2019 was estimated to be 18.28 million bale equivalents (Figure 61). For 2020, NCC projects net domestic consumption of cotton to increase to 18.45 million bales.

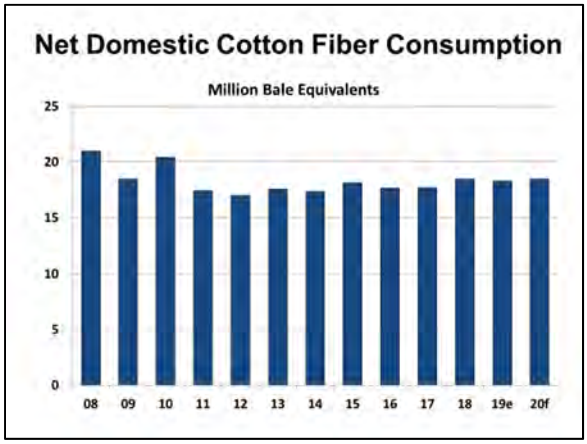

Figure 61 - Net Domestic Cotton Consumption

Imported goods make up the largest portion of U.S. net domestic consumption. Imported cotton textiles decreased from 18.73 million bale equivalents in 2018 to an estimated 18.65 million in 2019 (Figure 62).

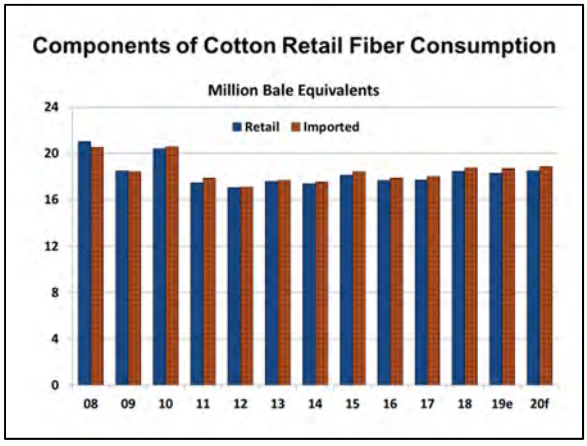

Figure 62 - Components of Retail Cotton Consumption

Textile Trade

Imports of cotton goods in calendar 2019 were estimated to have decreased by 0.4% to 18.65 million bale equivalents (Figure 63). In calendar 2020, NCC projects cotton textile imports to increase to 18.83 million bales.

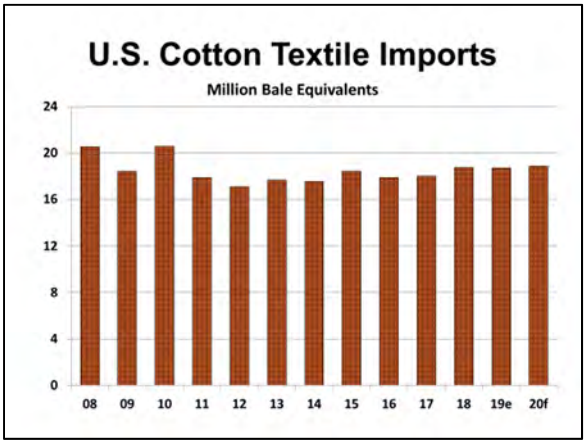

Figure 63 - U.S. Cotton Textile Imports

For textile imports, it is important to consider that a significant portion of imported goods contain U.S. cotton. Since much of the U.S. exports to the USMCA (formerly the North American Free Trade Agreement - NAFTA) and the CBI (Caribbean Basin Initiative) countries is in the form of fabric and piece goods that come back in the form of finished goods, the trade gap is not as wide as implied by gross imports and exports. NCC analysts estimate that 25.35% of all cotton goods imported in 2019 contained U.S. cotton. This was a 0.01% increase over the previous year. In bale equivalents, these imported cotton goods contained 4.73 million bales of U.S. cotton (Figure 64). This was due, in large part, to our trading partners in USMCA and the CBI.

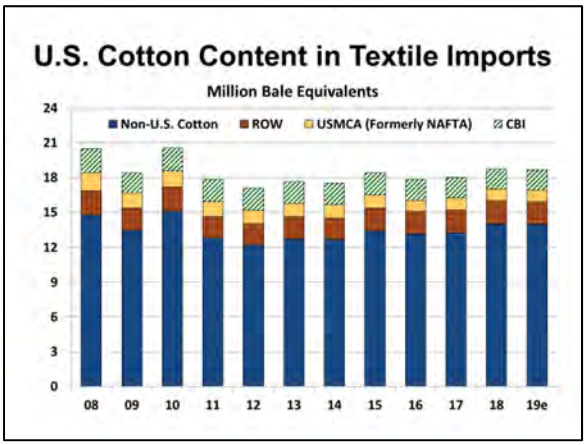

Figure 64 - U.S. Cotton Content in Textile Imports

U.S. Cotton Product Imports

Apparel was once again the largest category of imported cotton goods when compared to yarn, thread and fabric, and home furnishings (Figure 65). Cotton apparel imports were estimated at 13.0 million bale equivalents for 2019, up 0.1% from 2018. Imports of cotton home furnishings (including floor coverings) increased 2.1% in 2019 to an estimated 4.2 million bale equivalents. Cotton yarn, thread and fabric imports decreased 5.4% in 2019 to an estimated 1.4 million bales.

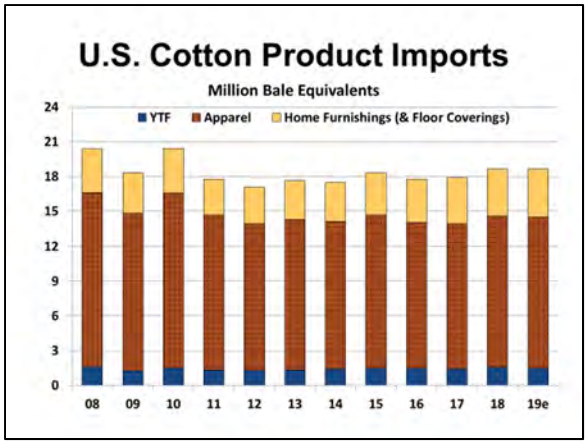

Figure 65 - U.S. Cotton Product Imports

Once again, countries in USMCA and CBI represented significant sources of imported cotton goods in 2019 (Figure 66). Imports from Mexico in 2019 were estimated at 924 thousand bales, down 5.1% from the previous year (Figure 67). Imports of cotton goods from Canada declined to an estimated 73 thousand bales in 2019, down 2.1% from the previous year (Figure 68). Imported cotton goods from CBI for the year were estimated at 2.2 million bale equivalents (Figure 69), down 2.5% from the previous year. The CAFTA-DR countries of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic are all part of the CBI region. Imports of cotton goods from CAFTA-DR in 2019 were 1.9 million, or 87.0% of the cotton textile imports from CBI. Combined, imports from USMCA and CBI countries decreased 3.3% and accounted for 17.0% of total U.S. cotton product imports in 2019.

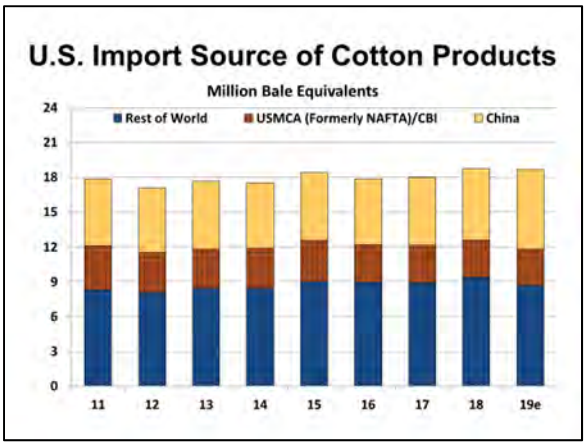

Figure 66 - U.S. Import Source of Cotton Products

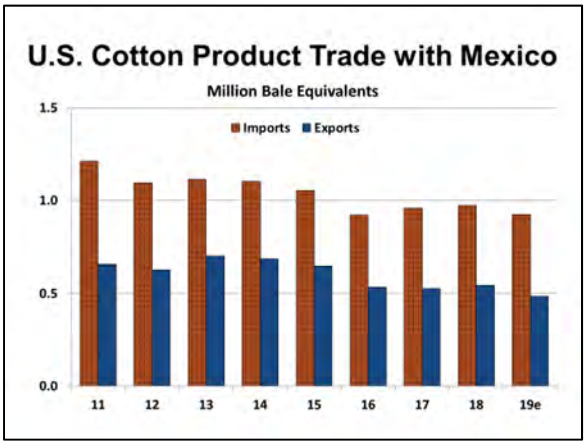

Figure 67 - U.S. Cotton Product Trade with Mexico

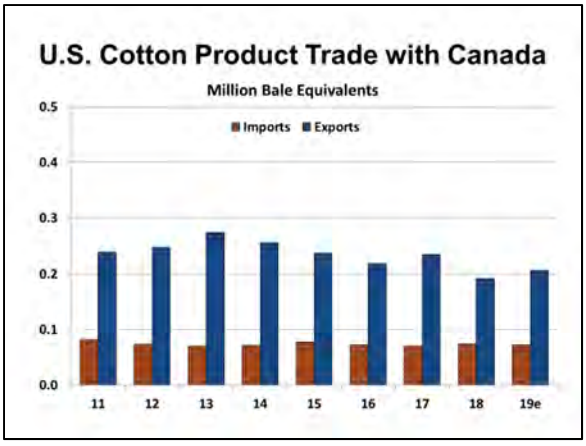

Figure 68 - U.S. Cotton Product Trade with Canada

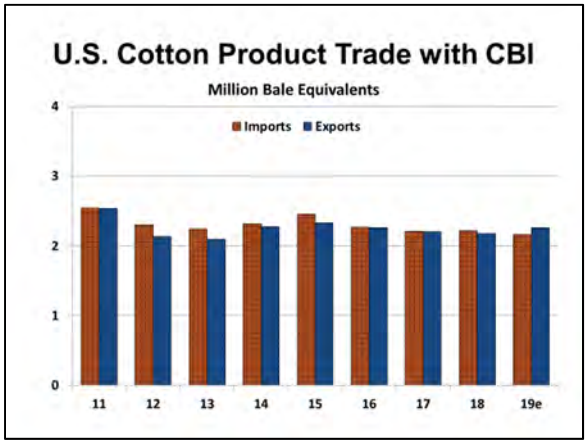

Figure 69 - U.S. Cotton Product Trade with CBI

Other top sources of imported cotton goods in 2019 were China, Pakistan, India, Hong Kong, Bangladesh, Vietnam, and South Korea. For the fifteenth consecutive year, China was the largest supplier of cotton textile imports into the U.S. (Figure 70). Total cotton product imports from China increased to an estimated 6.8 million bale equivalents in 2019, up 12.0% from 2018 and up by almost 732% from 2001 when China entered the WTO. China's share of imported cotton goods in the U.S. market accelerated from 5.5% in 2001 to an estimated 36.6% in 2019.

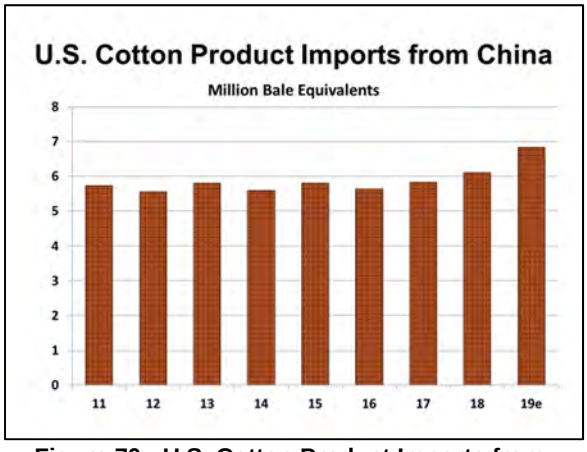

Figure 70 - U.S. Cotton Product Imports from China

Imports of cotton products from Pakistan were estimated at 1.6 million bale equivalents in 2019, an increase of 111 thousand bales. Pakistan's share of imported cotton goods in the U.S. market increased last year to 8.7%.

Imports from India stood at 2.2 million bale equivalents for 2019. This was a 5.0% increase from last year. India now accounts for 11.8% of all U.S. cotton product imports.

Imports from Hong Kong in 2019 were 14 thousand bale equivalents, down 30.3% from 2018. Hong Kong's share of imported cotton goods in the U.S. remained steady at 0.1% in 2019.

Bangladesh showed an increase in cotton product imports into the U.S. when compared to the previous year. Imports from Bangladesh in 2019 were up 6.6% from 2018 to 1.5 million bale equivalents. Bangladesh accounted for an estimated 8.2% of all cotton goods imported into the U.S. in 2019.

Vietnam showed an increase in cotton product imports into the U.S. when compared to the previous year. Total cotton product imports from Vietnam increased to an estimated 1.7 million bale equivalents in 2019, up 9.9% from 2018. Vietnam's share of cotton goods imported into the U.S. in 2019 increased to 9.2%, up 0.9% from the previous year. Cotton product imports from South Korea decreased 0.4% from 2018 to 131 thousand bale equivalents in 2019.

It is important to note in the following discussion that the most reliable data on imports by product category and by country is in the form of square meter equivalents (SME), rather than pounds or bales. Since different products have different weights per square meter, total imports reported in bale equivalents will not necessarily show the same trend as total imports expressed in SME. NCC reports imports in bale equivalents whenever possible, but the measurement of SME best represents

product categories imported from individual countries.

Mexico

Although declining relative to other countries, Mexico remained a large shipper of cotton goods to the U.S. in 2019. Cotton trousers remained the largest category of imported cotton goods from Mexico. Trousers accounted for 29.6% of all cotton product imports from Mexico based on SME (Figure 71). Knit cotton shirts were the next largest category of imports, accounting for 17.5%, followed by "other cotton apparel" (12.9%) and "other cotton manufactures" (9.9%). The U.S. Customs Service category "other cotton apparel" includes items such as waistcoats, swimwear, bodysuits and scarves. The U.S. Customs Service category "other cotton manufactures" includes items such as tablecloths, napkins, dishtowels and pillow covers.

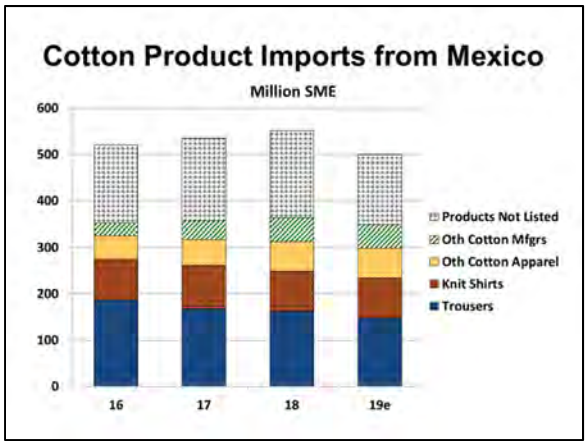

Figure 71 - Cotton Product Imports from Mexico

Canada

U.S. cotton SME imports from Canada decreased slightly in 2019. The largest category of imports from Canada in 2019 was "other cotton apparel", which accounted for 25.9% of total SME of cotton product imports from Canada (Figure 72). The next largest category was "other cotton manufactures" with 11.9% of total imports, followed by carded cotton yarn at 2.3% and cotton coats at 2.2%.

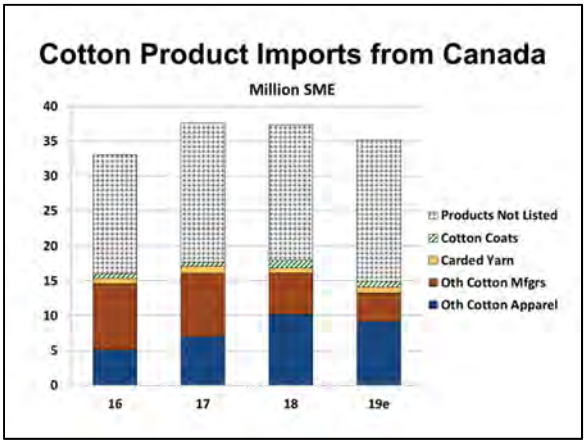

Figure 72 - Cotton Product Imports from Canada

Caribbean Basin Initiative (CBI)

Continuing the trend, CBI countries shipped more cotton goods to the U.S. than did USMCA (formerly NAFTA) countries in 2019. The largest category of imported cotton goods from the region was knit shirts, accounting for 48.0% of total imports, based on SME (Figure 73). Approximately 87.8% of the cotton knit shirt imports from CBI came from the CAFTA-DR countries. Underwear, the second largest category, accounted for 29.1% of imports, followed by cotton trousers (10.3%) and cotton hosiery (4.5%). Of these imports, 89.7% of the underwear, 82.3% of the cotton trousers and 100.0% of the cotton hosiery were from the CAFTA-DR countries.

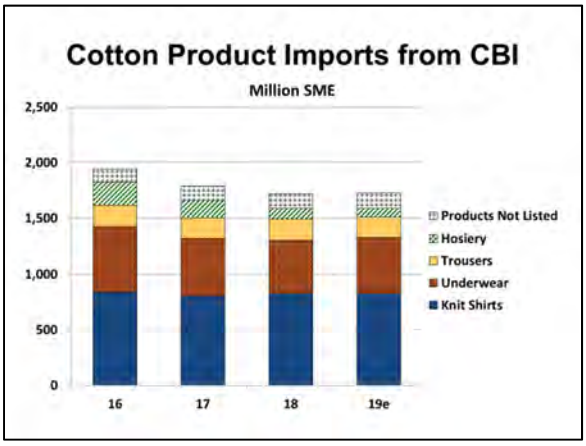

Figure 73 - Cotton Product Imports from CBI

African Growth & Opportunity Act (AGOA)

Over the past year, total cotton apparel product imports from the AGOA region increased by 24.3% to an estimated 161.6 million SMEs (Figure 74). During the past year, the percentage of U.S. cotton apparel imports from the AGOA region receiving preferential treatment under the act decreased from 98.4% to 97.8%.

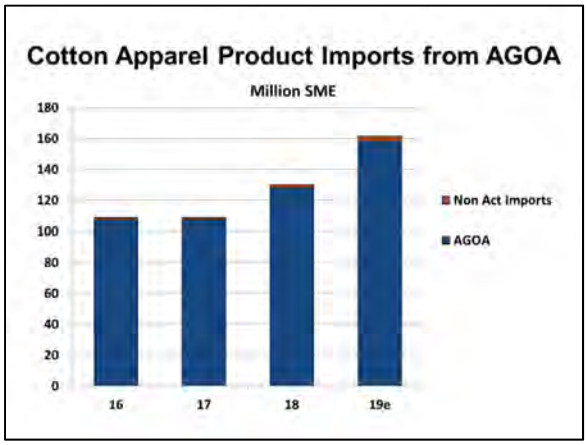

Figure 74 - Cotton Apparel Product Imports from AGOA

Pakistan

The largest category of imported goods from Pakistan in 2019 was "other cotton manufactures" (Figure 75). This category accounted for 43.6% of all cotton product imports from Pakistan based on SME. The second largest category imported from Pakistan was cotton sheets with 12.2% of total imports, followed by bedspreads and quilts (8.5%) and terry towels (4.7%).

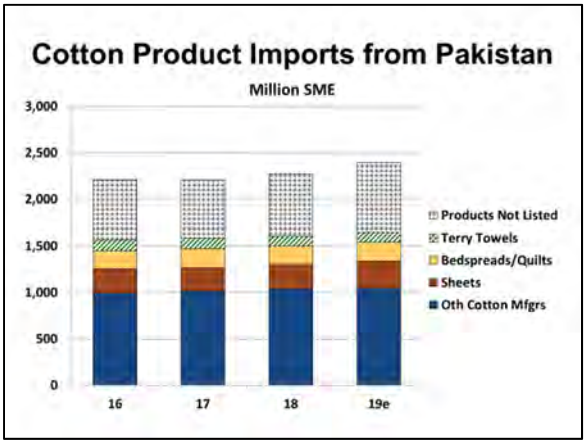

Figure 75 - Cotton Product Imports from Pakistan

China

China remained the single largest supplier of imported cotton goods into the U.S. market last year. On a SME basis, the largest category of cotton product imports from China in 2019 was "other cotton manufactures", which accounted for 26.9% of all cotton product imports from that country (Figure 76). Trousers was the second largest category, comprising 12.1% of total cotton product imports from that country. Nightwear accounted for 5.5% of U.S. cotton textile and apparel imports from China in 2019. "Other cotton apparel" was the fourth largest category and accounted for 5.4% of cotton product imports.

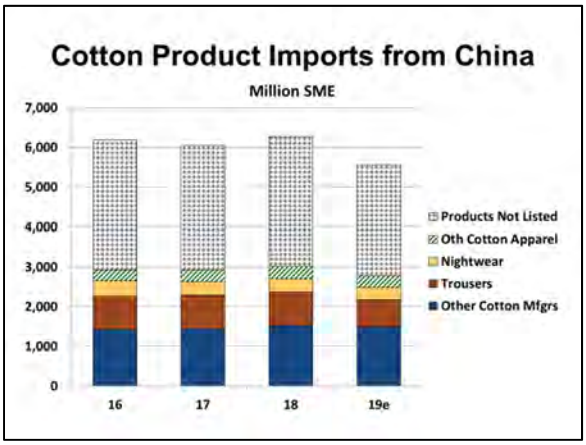

Figure 76- Cotton Product Imports from China

India

As was the case with Pakistan and China, the largest category of imported cotton

goods from India in 2019 was the category of “other cotton manufactures” (Figure 77). When based on SMEs, this category represented 34.6% of all cotton goods imported from India. The next largest category was cotton sheets (12.8%), followed by knit shirts (5.2%) and underwear (4.8%).

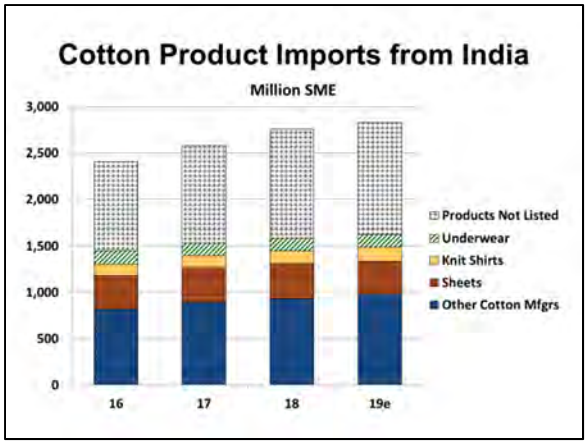

Figure 77 - Cotton Product Imports from India

Hong Kong

The largest category of imported cotton goods from Hong Kong in 2019 was “other cotton manufactures” (Figure 78). When looking at SMEs, “other cotton manufacturers” accounted for 18.5% of all cotton products imported. The second largest category was cotton trousers with 15.5% of imports, followed by ”other cotton apparel” (14.2%) and cotton dresses (11.4%).

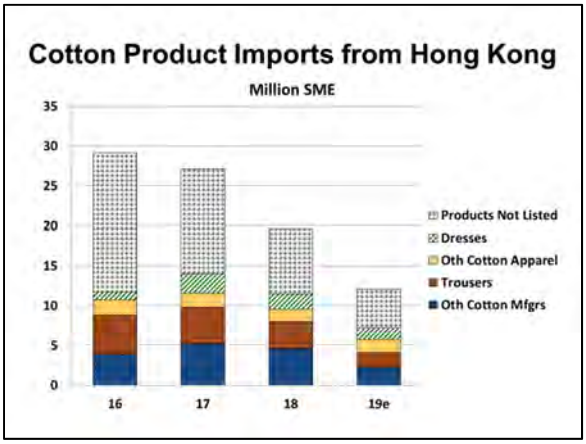

Figure 78 - Cotton Product Imports from Hong Kong

Bangladesh

Based on SMEs, the largest category of cotton goods imported from Bangladesh in 2019 (37.4%) was trousers (Figure 79). The second largest category in 2019 was woven shirts (14.4%). Cotton underwear was the third largest category in 2019, representing 12.2% of total cotton goods imported from Bangladesh, followed by knit shirts at 8.5%.

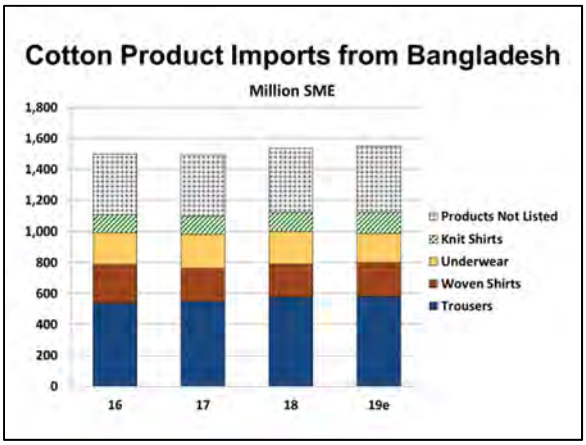

Figure 79 - Cotton Product Imports from Bangladesh

Vietnam

Vietnam continues to be a more significant supplier of cotton product imports (Figure 80). U.S. cotton product imports from Vietnam have increased by over 6,950% based on SME since 2001. In 2001, the U.S. imported 24.3 million SME of cotton goods from Vietnam. This number increased to an estimated 1.7 billion SME in 2019. The

largest category of imported cotton goods from Vietnam in 2019 was trousers. Based on SMEs, this category represented 25.0% of all cotton goods imported from Vietnam. The next largest category was knit shirts (17.7%), followed by underwear (16.4%) and nightwear (6.5%).

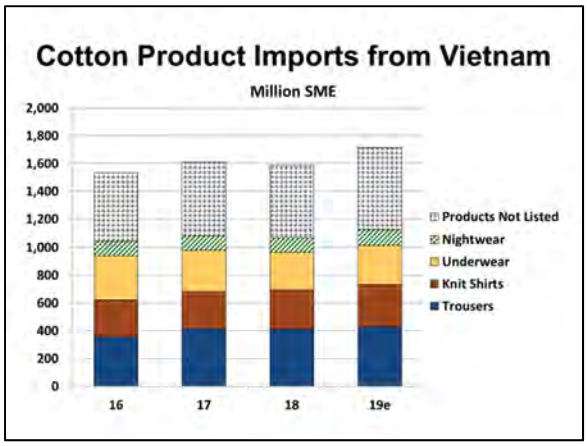

Figure 80 - Cotton Product Imports from Vietnam

South Korea

Based on SMEs, the largest category of cotton goods imported from South Korea in 2019 was combed cotton yarn, which accounted for 36.6% (Figure 81). The second largest category in 2019 was cotton sheeting fabric (22.5%), followed by cotton hosiery (10.9%) and cotton gloves and mittens (3.4%).

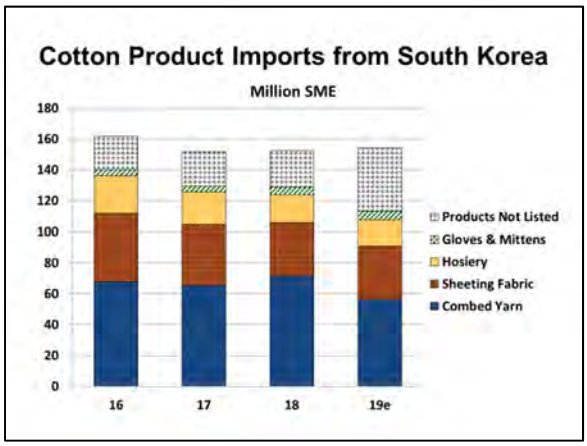

Figure 81 - Cotton Product Imports from South Korea

Turkey

Based on SMEs, the largest category of cotton goods imported from Turkey in 2019 was "other cotton manufactures", which accounted for 23.8% (Figure 82). The second largest category in 2019 was cotton sheets (19.0%), followed by terry towels (8.7%) and cotton trousers (8.2%).

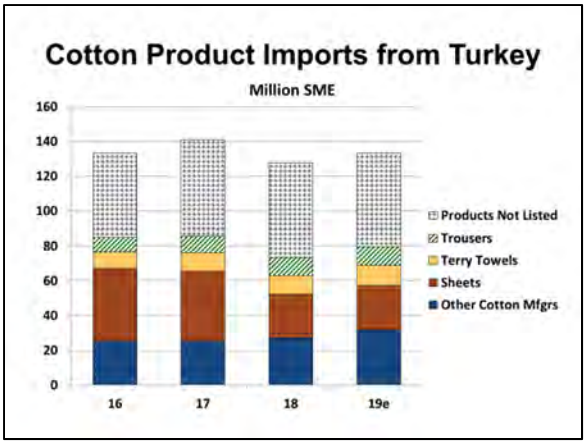

Figure 82 - Cotton Product Imports from Turkey

U.S. Cotton Product Exports

Exports of U.S. cotton textile and apparel products decreased in 2019 (Figure 83) by 1.8% to an estimated 3.35 million bale equivalents. This decrease was due to a decline in exports of cotton yarn, thread and fabric (Figure 84). Exports of cotton yarn, thread, and fabric decreased by 2.2% to 2.96 million bale equivalents. Exports of cotton apparel increased by 2.7% in 2019 to 284 thousand bale equivalents. Exports of home furnishings (including floor coverings) increased by 0.3% over the previous year to an estimated 102 thousand bale equivalents. For 2020, NCC projects U.S. cotton textile exports to increase 50 thousand bales to 3.40 million bale equivalents.

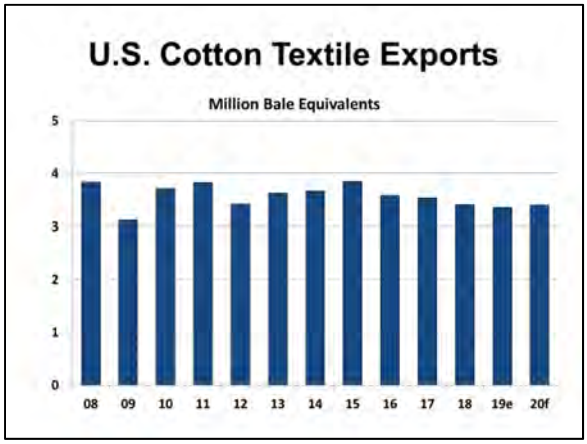

Figure 83 - U.S. Cotton Textile Exports

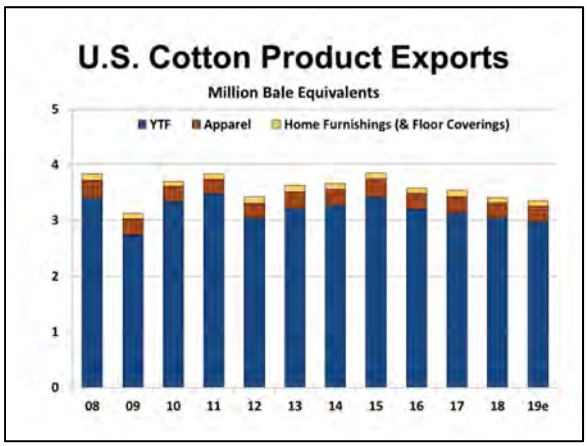

Figure 84- U.S. Cotton Product Exports

The top customers of exported U.S. cotton textiles and apparel in 2019 were once again the USMCA and CBI countries (Figure 85). Exports to the USMCA countries last year totaled an estimated 690 thousand bale equivalents, down 6.2% from the previous year.

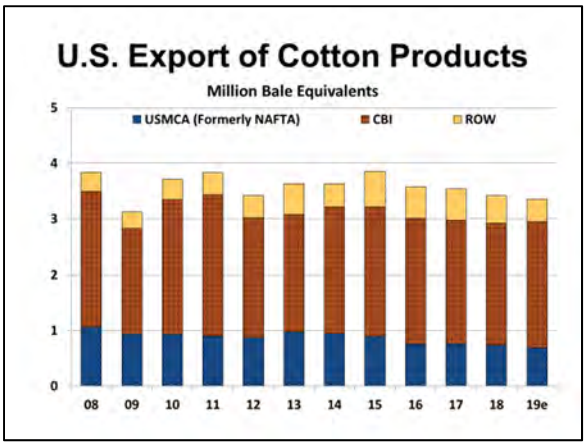

Figure 85 - U.S. Exports of Cotton Products

Exports to the region accounted for 20.6% of all U.S. cotton product exports. Exports to Mexico decreased to an estimated 484 thousand bale equivalents from 545 thousand in 2018. Cotton product exports to Canada increased by an estimated 7.7% to 207 thousand bale equivalents for 2019.

U.S. exports to the CBI countries increased last year. In 2019, exports increased 3.4%, reaching 2.3 million bale equivalents or 67.3% of all U.S. cotton exports. Approximately 98.2% of the cotton products exported to CBI went to the CAFTA-DR countries.

World Market Situation

World cotton prices, as measured by Cotlook Ltd.'s "A" Index, ranged between 69.2 and 88.4 cents per pound during the course of calendar year 2019 (Figure 86). For the current marketing year-to-date, the "A" Index has averaged 74.3 cents per pound, 13.4 cents lower than the previous marketing year.

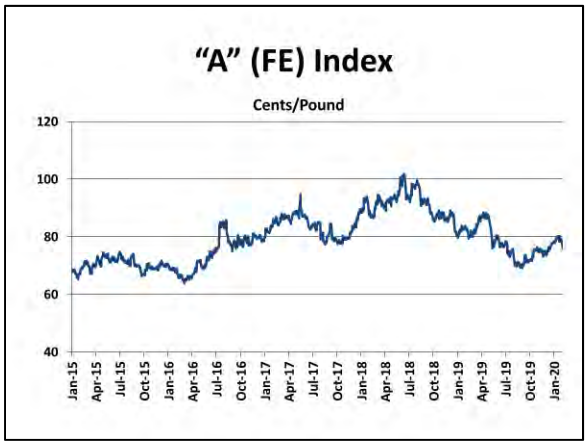

Figure 86 - "A" (FE) Index

World

World cotton production climbed in 2019 to an estimated 121.3 million bales (Figure 87). India and China remain the leading producers followed by the U.S., Brazil, and Pakistan. The U.S. crop of 20.1 million bales was 1.7 million bales higher than in 2018.

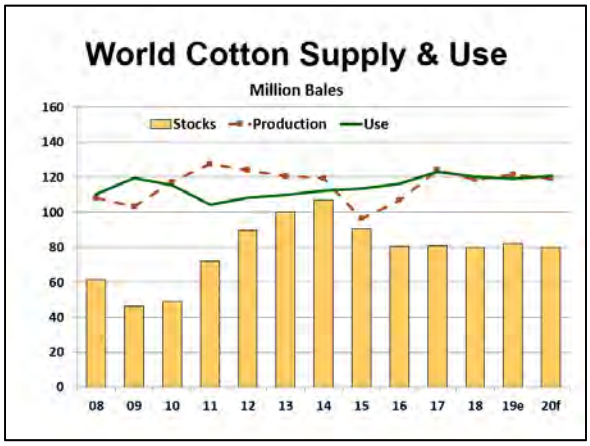

Figure 87 - World Cotton Supply & Use

World production is expected to exceed consumption in 2019. The latest world production estimate of 121.3 million bales is 2.3 million bales higher than projected mill use of 119.0 million bales. Ending stocks are projected to climb slightly to 82.1 million bales in the 2019 marketing year, resulting in a stocks-to-use ratio of 69.0%.

For the 2020 marketing year, world area is projected to decline by 2.8% to 82.8 million acres. World production is estimated to fall by 2.4 million bales in 2020 to 118.9 million bales. World consumption is projected to increase to 120.7 million bales in 2020. Ending stocks are projected to decline by 2.0 million bales in the 2020 marketing year to 80.1 million bales, resulting in a stocks-to-use ratio of 66.4%.

China

China remained one of the largest cotton producers in 2019 with a crop of 27.3 million bales (Figure 88). The crop estimate was 500 thousand bales lower than in 2018 due to a slight reduction in yields and lower harvested acres. Yields and planted area continue to vary by region in China. Xinjiang province, which has benefitted from a target-price subsidy since 2017, exhibits a more stable planted area and higher yields than China's other main cotton producing areas. Outside of Xinjiang, cotton farmers are at a relative disadvantage in terms of government subsidies. As a result, in these areas, yields are consistently lower and planted area continues to decline.

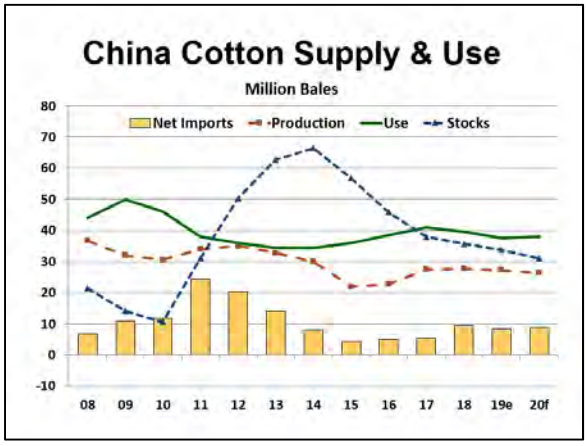

Figure 88 - China Cotton Supply & Use

Xinjiang continues to be the country's major cotton production base. The weather conditions in Xinjiang continue to be an advantage for cotton farming. Along with the favorable weather conditions, the government's "Target Price-based Subsidy" policy program (for 2017 to 2019) guarantees basic cotton profits which are expected to stimulate continuous cotton production in Xinjiang. The target price is fixed at RMB18,600 ($2,900)/ton for the 2017 through 2019 marketing years. The subsidy program stipulates that cotton planted in uncertified areas in Xinjiang will remain ineligible to receive support payments, and the yearly volume of cotton eligible for the subsidy is capped by the central government at 5.5 MMT. Nevertheless, cotton continues to be the most reliable income crop in Xinjiang.

The higher yields in Xinjiang are due to a relatively advantageous climate for cotton farming as well as the ongoing mechanization process in the province, which is expected to continue. The benefits of mechanization are especially significant for those farms under the umbrella of the governmental Production and Construction Corporation (PCC), which are organized on a larger scale than the non-PCC farms and are better equipped to incorporate the latest technologies. The PCC farms benefit from more investment in infrastructure as well as superior extension services.

For cotton-producing provinces outside of Xinjiang, maintaining area continue to be a challenged due to increases in labor costs (as almost 100% of harvest is hand-picked) and stagnant yields. Cotton planting in these regions is also impacted as farmers have more crop choices including grain and oilseeds (both demanding less labor inputs) and more work opportunities available in cities within the Yangtze River and the Yellow River regions.

For China, a 2020 crop of 26.3 million bales is projected, down 953 thousand bales from 2019 due to a 4.0% reduction in area. The China Cotton Association (CCA) has projected a larger decline in cotton acreage for 2020 of 7.5% due to lower internal prices as compared to a year ago.

Domestic demand for textiles and apparel continues to be robust. Chinese industry sources estimated that in 2018, the domestic market accounted for 88.0% of textile and apparel sales, compared to only 12.0% for the export market. China's overall increase in demand for textile and apparel products is fueled by higher disposable income, rising living standards, population growth, and urbanization. China's GDP growth hit 6.6% in 2018 and was estimated to have been above 6.0% in 2019. Population growth was 5.3 million in 2018. Additionally, rapid urbanization continues, with annual urban population growth averaging 20.6 million from 2011 to 2017, and 17.9 million new urban residents added in 2018.

Despite the growing population and consumer income, the textile industry still faces significant challenges. Constrained global economic growth and trade uncertainties were key factors to lower cotton consumption in the 2019 marketing year. However, those were not the only concerns facing China's textile industry. A rise in substitution of synthetic fibers for cotton is expected to limit China's cotton demand. Consumers are buying more

sportswear and other clothing made from blended yarn and fabrics. Cotton yarn and fabric production have already taken a hit in the face of expanding polyester and viscose fiber production. According to a Chinese textile industry source, pure cotton yarn production was down 8.0% during the first 3 quarters of 2019 compared to the previous year, while total yarn production was down 6.0%. Likewise, pure cotton fabric production was down over 6.0%, while pure synthetic fabric production was up 10.0%.

China's yarn imports are likely to continue to fall through the end of 2019 and into 2020, resulting in more concern for the country's slowing cotton consumption. Lower yarn imports also reflect weak demand and lack of confidence in the textile and apparel sectors.

For the 2019 crop year, a decline in China mill use is expected. China is projected to consume 37.5 million bales in 2019. The gap between China's cotton consumption and production is currently around 10.3 million bales. From 2015-2018, the gap was filled with reserve sales and a small level of imports. An increase in cotton mill use is expected for the 2020 marketing year, up 400 thousand bales to 37.9 million bales. However, the projected growth is not without downside risks, including a slowdown in economic activity due to the coronavirus, an escalation of trade tensions with the U.S. and strong competition from lower priced polyester.

Prior to the implementation of tariffs, the U.S. was in a prime position to capitalize on increased Chinese cotton imports. In the absence of retaliatory tariffs, China was expected to purchase more U.S. cotton in the 2018 and 2019 marketing years as a result of declining stockpiles and larger gap between China's domestic production and consumption.

With the imposition of the 25% tariff, China has turned to other suppliers during the 2018 and 2019 marketing years. The U.S.-China trade dispute has allowed Brazil, Australia, and other countries to gain market share. For the past decade, China imported 80.0% of raw cotton from four countries -- the U.S. , Australia, Brazil, and India. Over the years, the market share for these countries has changed, particularly as China has imported less cotton from India and more from the U.S., Australia, and Brazil.

For China, cotton imports from Australia, Brazil, and the U.S. are comparable since the cotton is machine-picked and of higher quality. In the 2017 marketing year, the average market share of Chinese imports for the U.S., Australia, and Brazil was 45.0%, 22.7%, and 6.7%, respectively. For the 2018 marketing year, the share of Chinese imports for the U.S., Australia, and Brazil was 17.7%, 26.5%, and 22.7%, respectively. Based on the latest available data for the 2019 marketing year (Aug – Nov), the market share of Chinese imports for the U.S., Australia, and Brazil was 15.5%, 34.5%, and 28.6%, respectively.

As of early February, the U.S and China had signed Phase 1 of the U.S.-China trade agreement. Given the overall balance between domestic production and consumption, China's imports are expected to increase in the 2020 crop year. Net imports are projected at 9.0 million bales. With the implementation of the Phase 1 agreement, the U.S. is expected to export more cotton to China in the 2020 marketing year and gain back some market share.

Despite the projected increase in imports, Chinese stocks are projected to fall by another 2.6 million bales during the 2020 marketing year to 31.1 million bales. If realized, stocks would be down 35.3 million bales from the 2014 peak.

India

The latest USDA estimates have India producing 29.5 million bales for the 2019 marketing year (Figure 89). If these estimates hold, the 2019 crop will be 3.7 million bales higher than the 2018 crop as a result of higher yields and an increase in harvested acres. For the past few years, India and China have been competing for the top spot in terms of cotton production. For the 2019 crop year, India was expected to produce 29.5 million bales, 2.3 million bales higher than China's estimated 27.3 million bales.

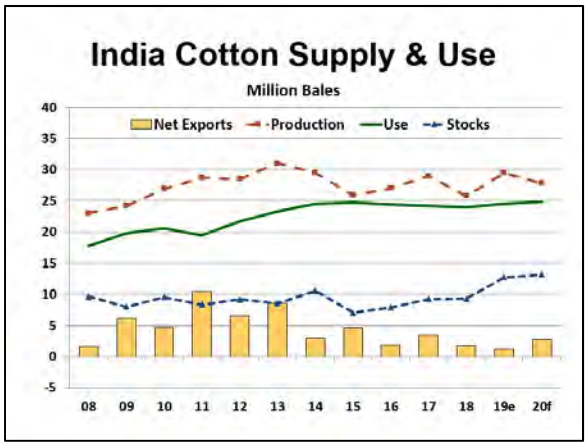

Figure 89 - India Cotton Supply & Use

India accounts for about one-third of global cotton area. Within India, the central cotton-growing zone produces two-thirds of cotton; including, the states of Maharashtra, Madhya Pradesh, Gujarat and Odisha, where much of the crop is rain fed. The northern zone, which consists of the states of Punjab, Haryana and Rajasthan, produces cotton under irrigated conditions and accounts for about 15.0% of production. In the south, the states of Andhra Pradesh, Karnataka and Tamil Nadu account for 30.0% of production. The Central and Southern zones typically grow long duration cotton that allows farmers to reap multiple harvests. While the number of pickings has declined as traditional varieties are replaced by biotech hybrids, farmers can still manage up to five pickings per plant depending on weather conditions. In contrast, the irrigated cotton in the northern zone is mostly a short season crop that fits into a cotton-wheat cropping system.

Cotton, a predominantly monsoon-season or Kharif crop, is planted from the end of April through September and harvested in the fall and winter. According to the Ministry of Agriculture and Farmers Welfare, the percentage share of area under cotton is 5.7% of total crop area in India. Cotton yields have plateaued over the last five years with an average of 436 pounds per acre. With the area under Bt cotton and improved varieties now reaching an estimated 92.0% of total area, prospects for future growth in productivity are limited as most cotton is grown under rain-fed conditions and on small farms. The regulatory approval process of introducing new biotech traits is at a standstill, which has led to many companies scaling back, stopping or withdrawing development of new biotech traits for cotton and other crops, which will likely impact future growth. Cotton plant populations are relatively low in density in India because farmers leave rows large enough to traverse with a bullock and cultivator for weed control purposes. Lower plant populations are offset to some extent by the multiple pickings farmers obtain through manual, rather than machine, harvesting.

Researchers are working on production schemes with higher plant populations that could improve yields. There are an estimated 6.0 million cotton farmers with the average farm size of 1.5 hectares (roughly four acres). Small land holdings seem to limit the ability to adopt capital-intensive production technologies and infrastructure. Even without changing holdings, yields would likely benefit from improved irrigation, fertilizer, micronutrients, pests and disease management. Future growth in cotton

production is more likely to come from higher yields rather than area expansion. Since 2013, yields have become more stagnant, and as a result, production has been stable to declining.

The government of India (GOI) establishes a minimum support price (MSP) for seed cotton. New MSP prices are announced annually and may or may not precede the start of the planting season. The Cotton Corporation of India (CCI), a government-run procurement and distribution company, is responsible for price support operations in all states. CCI, in addition to buying at MSP and marketing that cotton through an auction, is active in the market at other times, and buys or sells as conditions dictate. For MSP operations, CCI is assisted occasionally by other federal or state government marketing organizations (e.g., the Maharashtra State Co-op Cotton Growers Marketing Federation or Mahacot) to purchase cotton in support of local producers. State officials in Gujarat have also previously added a premium in addition to the MSP to support local producers. With the objective of doubling farmers' income by 2022, the GOI reports that it intends to maintain a price stabilization fund to deal with abrupt price increases in commodities, creating buffer stocks through its state owned agencies, and ensuring higher returns for farmers.

For 2020, India's acreage is projected to decline by 3.0% due to lower domestic prices. While India's MSP program does provide support for low prices, some producers have been disappointed with the MSP program during the 2019 crop year. Assuming yields are in line with recent averages, production is projected to drop to 27.8 million bales in 2020.

Domestic mill consumption has been growing in recent years with additional capacity added in many cotton-growing states. This growth has been championed by favorable textile policies at the federal and state levels of government. In the past year, the states of Maharashtra, Gujarat and Tamil Nadu announced new policies to promote economic growth in their respective states through various initiatives in the textile sector. Another trend has been forward integration by ginners that set up small spinning units to focus on production of cotton and blended yarns. The fiber share in textile mill consumption is heavily skewed in favor of cotton (70.0%) as compared to man-made fiber (30.0%). However, volatile cotton prices, weak demand, and cheaper man-made fibers are pushing consumption towards more blends and utilizing cotton waste (includes low fiber content cotton, cotton droppings, gin motes, comber noil which are all by-products of ginning and yarn processing which offer a cheaper alternative).

While the national textile policy discusses fiber neutrality, the Government of India (GOI) has set schemes geared towards promoting natural fibers. There are signs that consumption is rising and mill use is expected to reach significant volumes in the next five years as younger generations are adapting to newer fashion styles.

With continued government support and ample supplies of cotton, India's mill use should increase slightly to 24.9 million bales in the 2020 marketing year.

In 2020, India's net exports are expected to increase to 2.8 million bales as cotton procurements under the MSP eventually find their way into the marketing channels.

India's stocks are projected to climb to 13.2 million bales in the 2020 marketing year.

In terms of the global trade picture, government policies in India will play a role in the outlook for the coming year. India is

expected to continue as a net exporter. The government of India has enacted a variety of trade policies to ensure that competitively-priced and adequate supplies of cotton are available to the textile industry. India's national fiber policy affirms that cotton exports should be limited to an exportable surplus.

Uzbekistan

Current estimates put Uzbekistan cotton production at 3.5 million bales for 2019 (Figure 90).

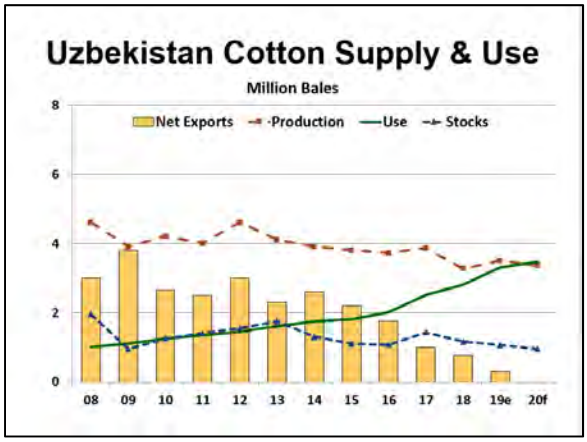

Figure 90 - Uzbekistan Cotton Supply & Use

The government of Uzbekistan (GOU) continues to maintain tight control over all aspects of cotton production, including planting area, production targets, prices, inputs, procurement and marketing. The GOU is moving along with the recent plan to carry out structural reforms in agriculture and the economy. Accordingly, the Republic of Uzbekistan continues with its plans to reduce cotton planting by a total of 185 thousand hectares (ha) in five years, starting from the 2016 marketing year. The intention of the government is to reduce planting in areas where field yields are lower than the country average, such as in highly salinized areas and mountain regions, and to facilitate production of other crops instead, including fruits and vegetables, potatoes, as well as grains.

According to the plan, cotton planting area will be reduced gradually until 2021 to a target of one million hectares and domestic production to about 3 MMT of seed cotton, compared to 3.35 MMT, which was the target in previous years. The initiative was to take out a total of 185,000 hectares of land from cotton planting. However, in the 2018 marketing year, in addition to the planned reduction of 35 thousand hectares for that year, the government reduced cotton planting by additional 20 thousand hectares, bringing the total reduction to 55 thousand hectares for the year, for a total production area of 1.1 million hectares.

In 2020, an additional 30 thousand hectares of land will be taken out of cotton planting as planned. When cotton planted areas are reduced, generally vegetables, fruit, orchards, and vineyards are replacing them. Recently, some other new cash crops for farmers have also been introduced in smaller areas, such as soybeans, saffron, and chili peppers, and also potatoes and grains have been noted.

For the 2020 marketing year, Uzbekistan cotton production is projected to fall to an estimated 3.3 million bales as a result of fewer acres planted to cotton.

The most important recent trend in the cotton sector in Uzbekistan is the rapid and continued growth in domestic consumption. According to government sources, presently about 500 enterprises are engaged in textile production in Uzbekistan. The Uzbekistan government is encouraging new partnerships to increase the use of cotton domestically. New textile investments are approved and about 10 new mills are expected to start operation in 2019 that will increase domestic consumption in the coming years. At the same time, existing mills are increasing their capacity as well. Government officials claim that due to the rapid increase in domestic consumption, Uzbekistan is aiming to utilize

all local cotton production domestically as early as the 2020 marketing year. A further expansion of the Uzbekistan textile industry will require Uzbekistan to increase cotton production or become a cotton importer, which is an interesting dynamic since Uzbek has not previously imported raw cotton.

Uzbekistan is moving forward with the new concept of implementing clusters for cotton and textile production to vertically integrate more of the sector and increase foreign investment. Through the textile clusters concept, the government will support foreign companies through tax and customs benefits, as well as providing land to grow cotton, process cotton, and produce final garments.

As a result of the ongoing expansion and investment, Uzbekistan domestic cotton consumption is estimated at 3.3 million bales in the 2019 marketing year. For 2020, Uzbekistan's mill use is projected to increase to 3.5 million bales.

Bangladesh and China used to be the main export destinations for Uzbekistan lint cotton, with combined annual exports reaching 300 thousand MT. However, Uzbekistan cotton exports have declined drastically over the last few years to both destinations. Net exports have been dwindling the past three years with 750 thousand bales in 2018 and 300 thousand bales in 2019. The Uzbek government recently announced a ban on cotton exports starting with the 2020 calendar year. This outlook assumes that ban continues into calendar year 2021.

Pakistan

Cotton is an important cash crop and lifeline of Pakistan's textile industry. The cotton crop is planted on 15.0% of arable land during the "Kharif" or monsoon season from April to June. Production is concentrated in two provinces with Punjab accounting for nearly 75.0% and Sindh nearly 25.0% of area. For the most part, cotton is produced by small farmers cultivating less than five hectares of land. An estimated 1.6 million farmers grow cotton.

Cotton planting begins in late March in Sindh and in early April in the main producing province of Punjab. Provincial officials prohibited planting prior to April 1. This policy is aimed at countering the timing of peak bollworm activity in cotton producing areas. The Government has procured a sufficient quantity of certified bioengineered seed of the latest cotton varieties that will increase farmers' choice to plant improved cultivars. The Provincial Government of the Punjab has announced it will provide, free of cost, certified seed for 100 thousand acres in the province. This is an increase from the previous year. Farmers will get seed for 1-2 acres through balloting after applying to the Agriculture Department. Arrangements for timely supply of fertilizer and pesticides are in process. There are a number of factors that affect yields, some positive and some negative. Factors weighing against improved yields include: 1) The narrow genetic base of cotton germplasm is prone to insect and diseases and is one of the major factors influencing crop productivity in the country; 2) Pakistan's continued reliance on a back-crossed 16-year-old biotechnology event means that crops are susceptible to bollworms; 3) "Sucking insects" such as white fly continue to spread cotton leaf curl virus and other plant diseases that affect yields and require farmer vigilance; and 4) Cotton seed quality is a perpetual issue with low germination rates and weak certification.

Factors that are supportive of yields include: 1) The major cotton-producing provinces of Punjab and Sindh have approved or are expected to soon approve 6-8 new seed

varieties that seem to be liked by farmers, and supplies of certified seed are up to 80.0% of all cottonseeds from 75.0% a year ago; 2) Farmers are increasingly aware of the risks associated with the weak expression of the Bt gene in local cotton plants and the need to monitor for bollworms. They are also increasingly attuned to the damage of "sucking" insects; 3) The government continues to heavily subsidize the supply of fertilizer, water, and power for farmers; and 4) Firmer prices encourage more pickings and input usage.

In 2019, cotton production was estimated at 6.6 million bales as pest problems continue to plague Pakistan's farmers, which is the lowest level since 1994. An increase in production is expected for the upcoming marketing year based on the assumption of better yields. Assuming normal weather conditions and lower pest infestation, production is projected to be 6.8 million bales in 2020 (Figure 91). Though a slight recovery from 2019, the projected crop remains well below historical averages.

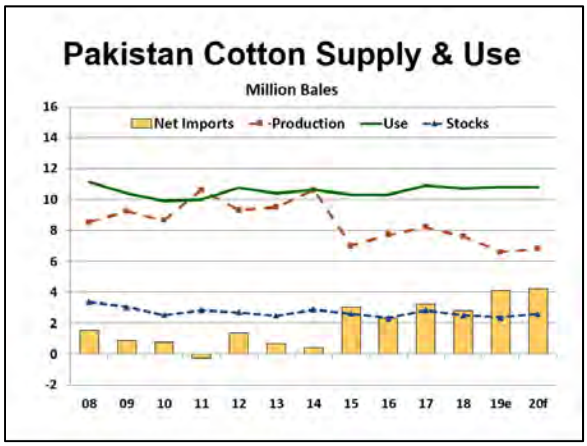

Figure 91 - Pakistan Cotton Supply & Use

Consumption has been largely unchanged over the past decade and is expected to remain at its current level of 10.8 million bales in 2020. Cotton continues to face competition from other man-made fibers and other manufacturers in Asia. Still, textiles continue to play an important role in Pakistan's economy. The textile sector is the largest industrial sector in Pakistan and accounts for about 40.0% of the industrial labor force and employs 10.0 million people. Increased foreign investment in Pakistan's energy and infrastructure sectors could help to spur future growth in the textile sector.

Pakistan continues to be a net importer of cotton, primarily because of strong demand for better grades of cotton for blending and producing export-oriented quality textile products. Typical imports include upland and long staple cotton, as well as medium staple cotton, to augment domestic supplies for processing and re-export. Demand for better quality fabrics for the export market and specialized products for the domestic market are growing. Thus, Pakistan's textile industry is expected to increasingly rely on imported long staple and quality cottons to produce high quality textile products.

Pakistan maintains minimal tariff restrictions on cotton imports. However, there is a tendency to impose tariffs during harvest and to limit the flow of cotton across the land border with India. Imports of cotton from India have dropped significantly due to tension on borders and Pakistan has diversified its imports from other origins. Pakistan is expected to increase net cotton imports for the 2020 marketing year to 4.3 million bales.

Turkey

Production dropped to 3.4 million bales in 2019 (Figure 92). For 2020, production is projected to be slightly higher at 3.7 million bales due to higher yields.

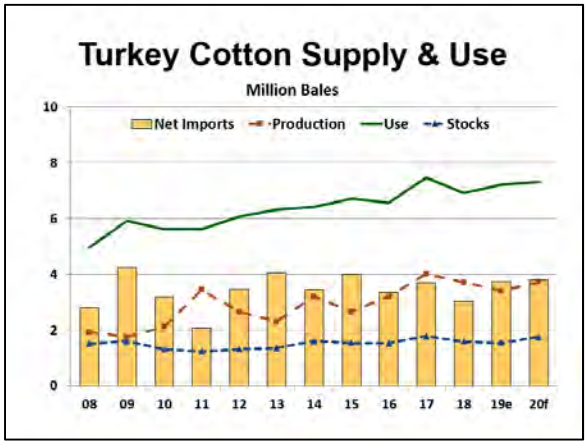

Figure 92 - Turkey Cotton Supply & Use

Turkey has a large textile industry capacity driving the demand for cotton, and due to low domestic cotton production and the slow pace of the GAP development project, the country will continue to import cotton for years to come.

The textile industry continues to be the one of the leading sectors in the Turkish economy, accounting for about 16.0% of total exports in 2018. Approximately 36 thousand companies operate in the sector, providing about 515 thousand jobs in garment production alone. Exports of ready-to-wear items in calendar year 2018 were $17.6 billion and textiles were $8.4 billion, both up about 4.0% compared to a year before. The EU has been the leading market for Turkish textile and garment exporters as buyers prefer to work with low stocks - hence they prefer to work with Turkey due to geographical proximity, short response time, and good quality.

Overall, domestic textiles and products sales had increased significantly in recent years due to a rapid increase in numbers of shopping malls with clothing and textile stores. The increasing youth population, immigration to urban areas and an increase in tourist numbers had all contributed to domestic consumption. However, the recent economic crisis is negatively affecting domestic consumption of textiles.

Despite the imposition of the 3.0% AD duty, Turkey has continued to be a large export market for U.S. cotton and has been one of the top 3 export markets for the past decade.

For 2019, Turkey's mill use and net imports are expected to be higher than in 2018 as the economy continues to recover. For 2020, Turkey's mill use is projected to increase slightly to 7.3 million bales. Turkey is projected to have net imports of 3.8 million bales, slightly higher than the 2019 crop year.

Australia

Current estimates put Australia's cotton production at 675 thousand bales for the 2019 marketing year (Figure 93) due to reduced acreage caused by poor weather conditions and severe drought in many growing areas.

Australian cotton production has been significantly affected by lower water levels in irrigation dams and very low levels of soil moisture due to hot and dry seasonal conditions in eastern Australia. Rainfall across most cotton growing regions has been well below average beginning in the latter half of 2018 and continuing into early 2020. Notably, the summer period (December to February) over most cotton growing areas was the hottest ever recorded in Australia and plantings of dryland cotton were unable to thrive in these conditions.

Assuming a return to more normal weather patterns, Australia's acreage is projected to increase in 2020 resulting in production of 1.4 million bales. However, if the current drought and heat conditions continue, 2020 acreage and production would likely be lower than the current projections.

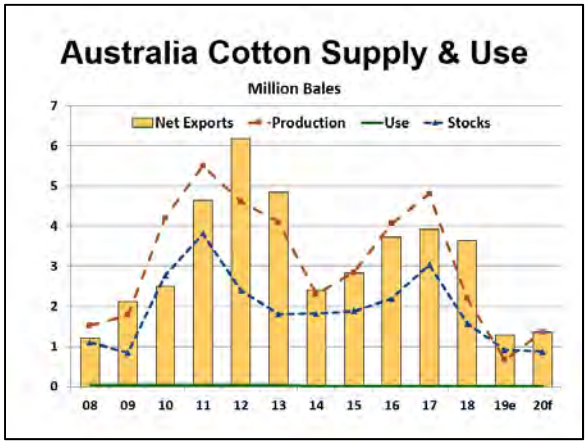

Figure 93- Australia Cotton Supply & Use

Australia is a key player in world trade with 99.0% of the domestic crop exported, mainly to China, Indonesia, and Thailand. Cotton is predominantly irrigated and grown in NSW and southern Queensland (see Chart 3). The major production area in NSW stretches south from the Macintyre River on the Queensland border and covers the Gwydir, Namoi, and Macquarie valleys. In NSW, cotton is also grown along the Barwon, and Darling Rivers in the west and the Lachlan and Murrumbidgee Rivers in the south. New plantings are also found in Forbes in southern NSW. In Queensland, cotton is grown mostly in Darling Downs, St. George, Dirranbandi, and the Macintyre Valley regions. Recently, cotton planting has extended into northern Victoria, the Gulf region of north Queensland, and the Ord River region of the Northern Territory. Cotton is usually planted from September in Queensland, mid-November in NSW, and harvested from March to June respectively. However, the widespread use of the Bollgard 3 biotech cotton variety has enabled farmers to extend the planting window to the end of December in some regions.

Historically, Australia is one of the world's largest exporters of raw cotton. Australia also exports cottonseed, a by-product of cotton gin processing, for animal feed to Japan (crushed and cattle feed), Korea (crushed cattle feed), and China (crushed cattle feed). For the 2019 marketing year, net exports are estimated to fall to 1.3 million bales, down more than 2 million bales from the previous year. With production of 1.4 million bales during the 2020 marketing year, net exports are expected to remain relatively stable at 1.4 million bales.

Brazil

Brazil's Center-West state of Mato Grosso and the northeast state of Bahia account for close to 90% of all cotton grown in Brazil, with roughly two thirds coming out of Mato Grosso and another 20-25.0% from Bahia. The remaining 10.0% 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 Goais, as well as the southeast state of Minas Gerais.

Brazil is one of the global leaders in the planting of Genetically Engineered (GE) crops. Cotton has the highest adoption rate at 94.0%. 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.

Brazil was projected to have an estimated production of 12.7 million bales for the 2019 marketing year (Figure 94). Cotton acreage increased to 4.1 million harvested acres while yields were down slightly to an estimated 1,495 pounds per acre in 2019.

Production for the 2020 marketing year is projected at 13.0 million bales. With the ongoing trade tensions between the U.S. and China, Brazil is responding to increased trade opportunities by maintaining a high level of cotton production.

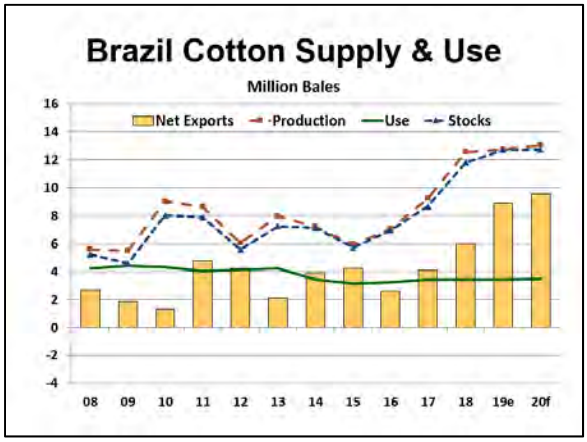

Figure 94 - Brazil Cotton Supply & Use

Brazilian mill use for the 2019 marketing year remained unchanged at an estimated 3.4 million bales when compared to the previous year. Brazilian cotton consumption is expected to climb in the 2020 marketing year with mill use estimated at 3.5 million bales.

In terms of trade, Brazil is expected to reach net exports of 8.9 million bales of cotton in the 2019 marketing year. For the 2020 marketing year, net exports are expected to climb to roughly 9.5 million bales. With ongoing investments in infrastructure, Brazil is expected to remain a formidable competitor in world cotton trade.

West Africa

In the West African cotton-producing countries, cotton production continues to play an important role in the economy. For all West African countries, the cotton planting season generally begins in June, with harvest starting in September/October and ending in November. Ginning mills collect cotton from October/November to March. Spurred by increased area and improved yields, cotton production in 2019 is an estimated 5.9 million bales.

Cotton producers in the region include Burkina Faso, Mali, Cote d'Ivoire, Chad, and Senegal. Despite the obstacles facing cotton producers in these countries, and the other cotton producing countries in this region, cotton remains an important cash crop in most of Francophone West Africa, Cote d'Ivoire and Senegal.

The current projections have West Africa producing 5.7 million bales in 2020 (Figure 95). West Africa continues to measurably affect the cotton export market, since virtually all of its production is sold abroad. The region exports between 95.0% and 98.0% of its cotton production. For the 2019 marketing year, net exports of 5.6 million bales are projected. For 2020, West African net exports are expected to increase slightly to 5.7 million bales. Collectively, the countries remain the 3rd largest exporter after the U.S. and Brazil.

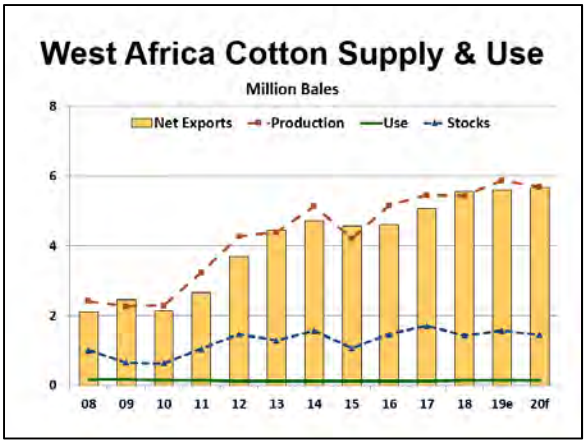

Figure 95 - West Africa Cotton Supply & Use

Longer term, West Africa's potential for growth and stability depends on whether or not they can address a number of internal issues related to their production, ginning, price discovery, and distribution systems.

Mexico

Mexican cotton production for marketing year 2019 reached an estimated 1.6 million bales. Production remains stable with an estimated crop of 1.6 million bales for the 2020 crop year as lower area is offset by slightly higher yields (Figure 96).

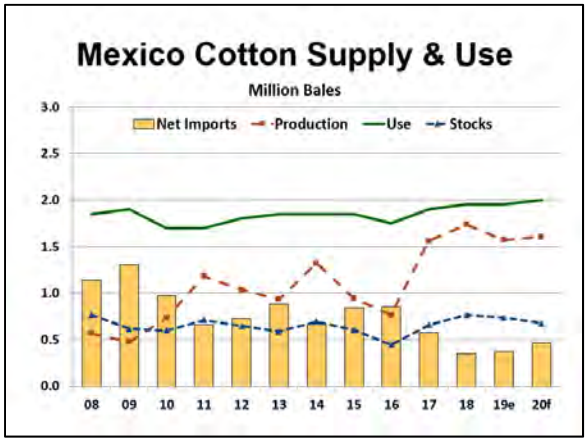

Figure 96 - Mexico Cotton Supply & Use

In terms of consumption, Mexico's outlook remains basically unchanged. Marketing year 2019 mill use is estimated at 2.0 million bales. For the 2020 marketing year, Mexican mill consumption is projected to remain unchanged at 2.0 million bales.

The Mexican textile industry prefers to use U.S. cotton over domestic supplies for several reasons: 1) In order to comply with origin content rules if the product is for re-export, 2) The U.S. produces cotton with a unique standard degree needed to feed high speed and energy efficient machines industry uses in Mexico. Mexican fiber does not always have the standard thickness necessary, and 3) With U.S. cotton, yearly or twice a year contracts are made with textile companies to provide monthly deliveries, which saves the buyer warehouse, insurance and financial expenses. Mexican producers must sell their complete harvest because there is insufficient storage facilities in-country. The textile and apparel industry in Mexico is based on competitive labor costs and geographic proximity to the United States. The pattern has been for U.S. companies to supply textiles and fibers to factories in Mexico (known as maquilas or maquiladoras) that receive favorable fiscal and trade treatment. The maquiladoras then re-export these inputs after processing in the form of finished garments.

Net imports dropped to an estimated 375 thousand bales during the 2019 marketing year. Mexico's net imports are expected to grow slightly to roughly 464 thousand bales for the 2020 marketing year.

Indonesia

Indonesian cotton production was estimated to be 3 thousand bales for the 2019 marketing year (Figure 97). Current projections show this number unchanged for 2020.

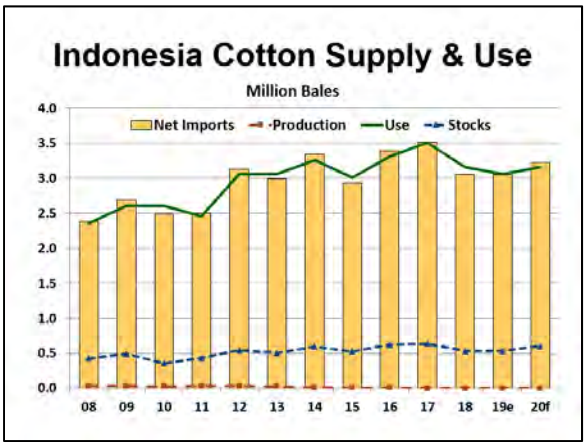

Figure 97 - Indonesia Cotton Supply & Use

Indonesian spinners rely heavily on imported cotton. In July 2018, an Indonesian trade delegation went to the U.S. and committed to increasing use of U.S. cotton. In addition, both industry and government representatives believe that U.S.-China trade tensions will ultimately result in more Indonesian garment exports to the U.S.s and more cotton imports from the United States. Compared to other origins, U.S. cotton is still considered to be of higher quality and more consistent. Meanwhile, the potential conclusion of an Indonesia–European Comprehensive Economic Partnership Agreement (IEU-CEPA) in 2019 could increase textile exports to the European market. Just over 300 spinners are operational, running at about 80.0% capacity.

Indonesian cotton consumption in marketing year 2020 is estimated to increase to 3.2 million bales, while net imports are also expected to increase to 3.2 million bales.

Vietnam

For the 2019 marketing year, Vietnam's cotton production was estimated to be 3 thousand bales with production estimates unchanged for the 2020 crop (Figure 98).

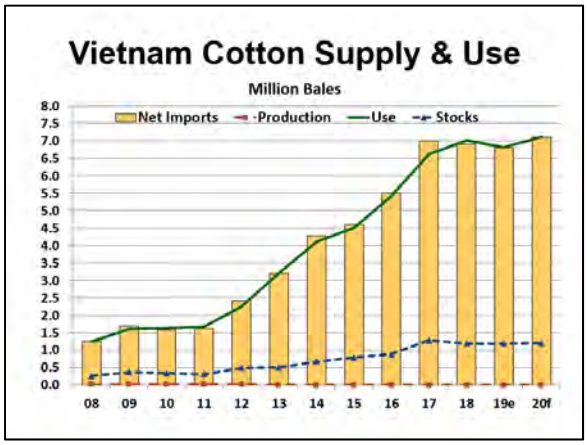

Figure 98 - Vietnam Cotton Supply & Use

Vietnam's textile and garment sector is steadily growing and remains one of the county's top export industries, significantly contributing to the country's Gross Domestic Product (GDP) growth. The ongoing trade tensions between the U.S and China have given Vietnam an opportunity to increase apparel exports to the United States. In anticipation of potential punitive tariffs, there have been movements of orders and production facilities from China to Southeast Asia, including Vietnam. The recent Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which came into effect on January 14, 2019, is expected to boost Vietnam's exports of textile and apparel products if the industry can meet the "yarn forward" rules of origin. These strict requirements are a real challenge for Vietnam as the country is still heavily dependent on materials sourced from non-CPTPP member countries, most significantly China. However, CPTPP has the potential to help Vietnam attract more foreign direct investment (FDI) in this sector.

Local spinners are closely watching the ongoing trade tensions and have been struggling with additional constraints caused by recent price increases in minimum salary, electricity, and gasoline since early 2019. These hikes hit the spinning industry hard and could jeopardize the competitiveness of Vietnam's cotton yarns.

Estimates place 2019 marketing year mill use at 6.8 million bales. Growth continues into the 2020 marketing year with consumption climbing to 7.1 million bales.

In order to keep pace with this rising cotton demand, Vietnam will remain a significant net importer for the foreseeable future. The country's top five cotton suppliers include the U.S., India, Brazil, Australia, and Cote d'Ivoire. These countries make up 70.0% to 80.0% of the total cotton supply to Vietnam. For the 2019 marketing year, Vietnam's net imports are estimated to be 6.8 million bales and estimates are higher for the 2020 marketing year at 7.1 million bales.

Bangladesh

Marketing year 2019 cotton production in Bangladesh totaled 140 thousand bales (Figure 99). Upland cotton is planted in July-August and harvested in December-January. Hill cotton is planted in March-April and harvested in December-January. Cotton production is vulnerable to excessive rainfalls/floods and pest infestations which are common in Bangladesh. With that in mind, production for the 2020 marketing year is expected to fall slightly to an estimated 135 thousand bales.

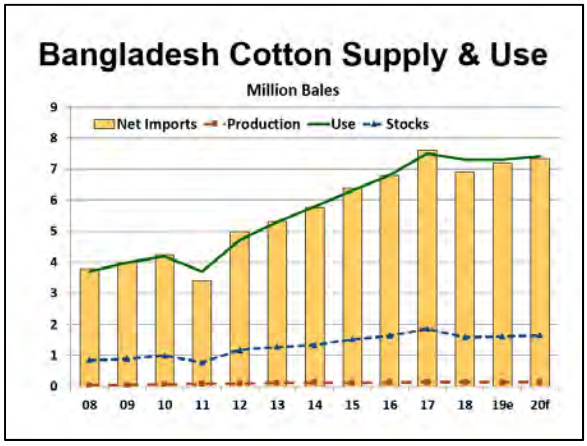

Figure 99 - Bangladesh Cotton Supply & Use

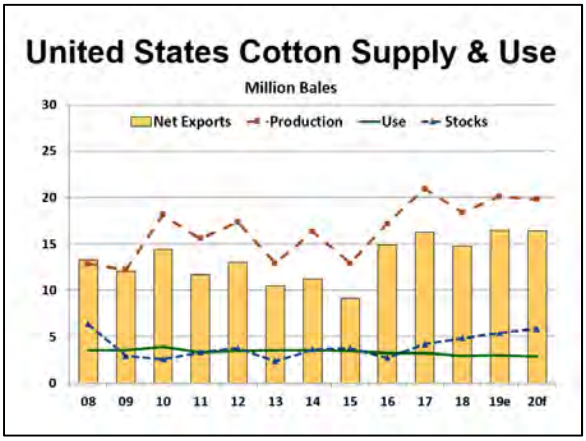

Figure 100 – U.S. Cotton Supply & Use

In terms of consumption, marketing year 2019 mill use was estimated at 7.3 million bales and an increase is expected in the 2020 marketing year with an estimate of 7.4 million bales.

As a result of increasing demand for quality cloth, raw cotton imports have steadily grown. Net imports have increased to an estimated 7.2 million bales for the 2019 marketing year and are projected to increase in 2020 to roughly 7.3 million bales.

U.S. Trade

For the 2019 marketing year, net U.S. exports of raw cotton are estimated to be 16.5 million bales (Figure 100). The reliance of the U.S. cotton market on exports has increased dramatically over the past 17 years as the domestic textile industry has contracted. It is estimated that exports will constitute roughly 85.0% of total use for the 2019 marketing year.

Customers of U.S. exports have changed in recent years. Vietnam remains one of the top customers, along with China, Pakistan, Turkey, Bangladesh , and Indonesia (Figure 101).

Top U.S. Raw Cotton Export Destinations

2010		2019YTD	
Country	(1,000 480-Lb. Bales)	Country	(1,000 480-Lb. Bales)
China	4,860	Vietnam	2,915
Turkey	2,076	China	2,138
Mexico	1,244	Pakistan	1,728
Indonesia	889	Turkey	1,367
Vietnam	717	Bangladesh	1,093
Thailand	712	Indonesia	911

Figure 101 - Top U.S. Raw Cotton Export Destinations

For the coming year, a key factor affecting U.S. cotton exports is the U.S.-China trade agreement, including implementation of the Phase 1 agreement and further discussions regarding Phase 2. China has reduced their reserve stocks and is expected to import more cotton in the 2020 marketing year as Phase 1 of the trade deal is implemented and China continues to rotate the reserve stocks. While U.S. exports to China are expected to increase in 2020, increased competition from other exporting countries results in a

slight reduction in net exports to 16.4 million bales in the 2020 marketing year.

World Trade

In the 2019 marketing year, world cotton trade climbed to roughly 43.5 million bales (Figure 102). Current projections put 2020 marketing year world cotton trade at 44.8 million bales. As previously discussed, U.S. net exports are projected to be 16.4 million bales in the 2020 marketing year.

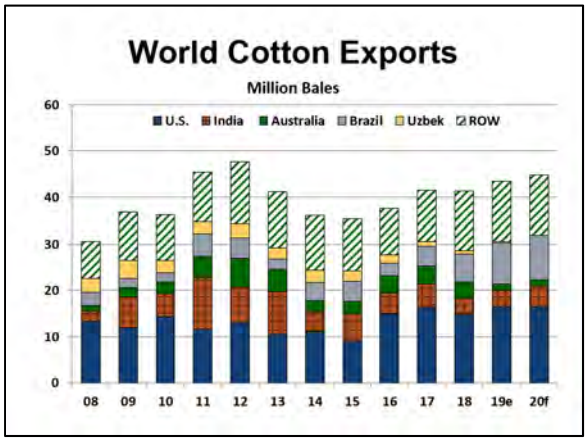

Figure 102 - World Cotton Exports

For 2020, cotton imports are projected to increase in most of the major cotton importing countries. (Figure 103).

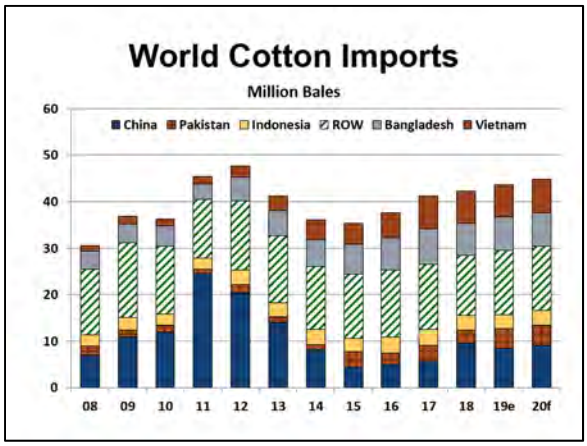

Figure 103 - World Cotton Imports

Examining the world trade-to-mill use ratio for the 2019 marketing year shows an increase to 36.6% from 34.4% in 2018 (Figure 104). For 2020, the ratio is expected to climb to 37.1%.

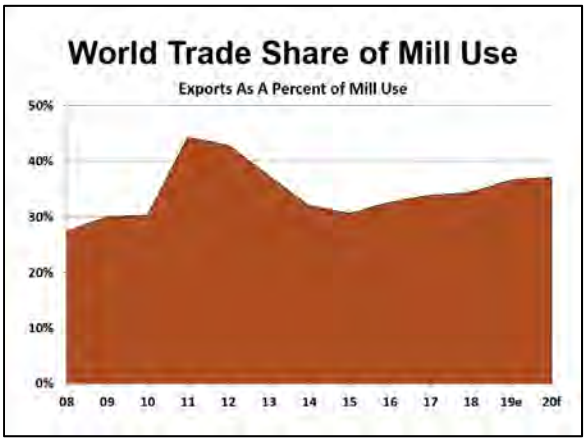

Figure 104 - World Trade Share of Mill Use

World Ending Stocks

For the 2020 marketing year, ending stocks are estimated to fall to 80.1 million bales (Figure 105). The two largest producers – China and India – will continue to be significant holders of cotton stocks due in part to various government programs.

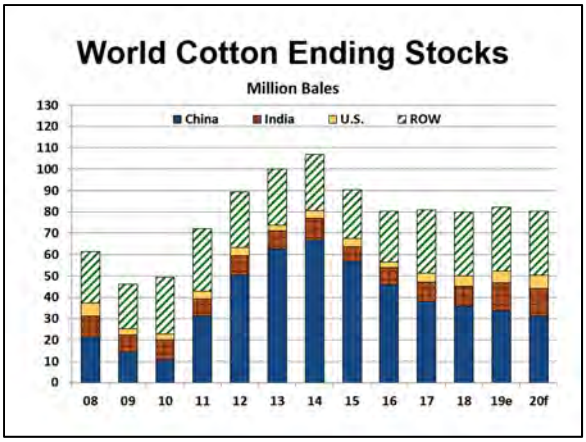

Figure 105 - World Cotton Ending Stocks

The projected world stocks-to-use ratio falls to 66.4% for the 2020 marketing year (Figure 106). Although global stocks are projected to fall, stocks outside of China are expected to increase in 2020. Declining global stocks would normally be supportive of prices, but in this case, the changing disposition of stocks could signal pressure on prices.

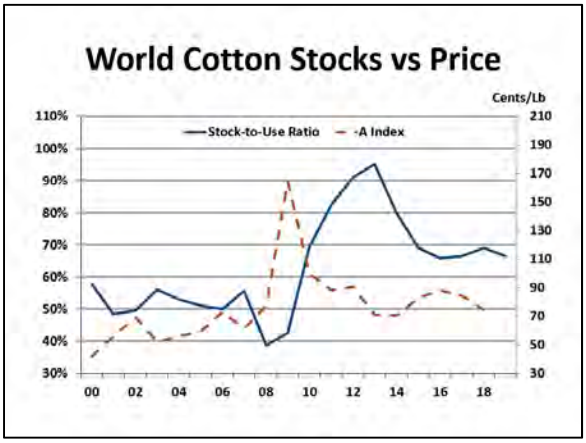

Figure 106 - World Cotton Stocks vs Price