The Economic Outlook

For U.S. Cotton 2024

Executive Summary

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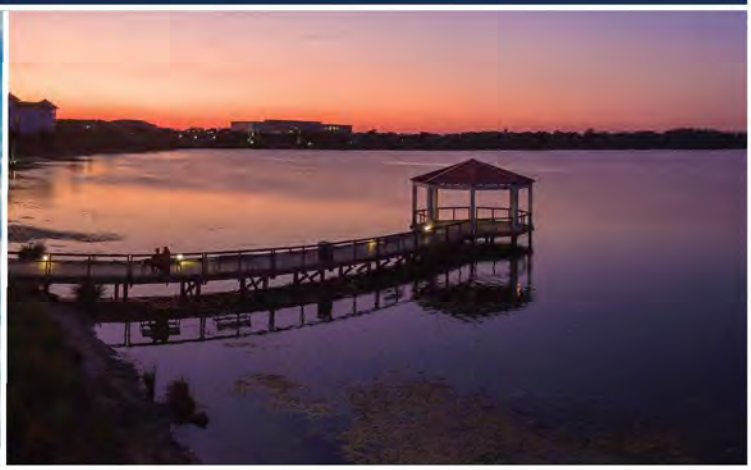


Summary

Given significant uncertainty in the global economy, 2023 can be characterized as a year when an anticipated recovery in cotton demand was slow to materialize. Weak demand translated to pressures throughout the supply chain. As the 2024 season approaches, growers are facing difficult planting decisions as current prices fall short of production costs for many producers.

The outlook for the world cotton market will, in part, be determined by continued expansion in economic activity. Modest economic growth is projected for the next two years with the International Monetary Fund (IMF) calling for global growth rates of 3.1% in 2024 and 3.2% in 2025. IMF increased the 2024 growth rate as compared to the October forecast due to unexpected resilience in major advanced and emerging market economies. However, the updated growth rates are still well below the recent historical average of 3.8%. For the U.S., IMF has projected slower growth for 2024 and 2025. The U.S. GDP is projected to be 2.1% in 2024 and 1.7% in 2025 as compared to 2.5% in 2023. As with any projections, there are uncertainties and unknowns that can alter the eventual outcome. Current economic projections for the U.S. and global economies should be viewed with caution given the continued impacts of tighter monetary policy, high interest rates, and geopolitical tensions.

The complete 2024 Annual Outlook can be found on the NCC website at https://www.cotton.org/econ/reports/annual-outlook.cfm. 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.

U.S. Supply and Demand

- For the 2023/24 marketing year, U.S. growers planted 10.2 million acres of cotton, a decrease of 25.6% from the previous year due to lower prices. Overall U.S. abandonment was 30.9%, as compared to 47.0% in 2022/23. U.S. production of 12.4 million bales was 2.0 million bales lower than 2022/23 and at the lowest level since 2009. A further reduction in the size of the 2023/24 crop is likely since only 12.0 million bales had been classed as of February 8, 2024.

- The reduced U.S. supply in 2023/24, combined with strong competition from Brazil and Australia, resulted in a lower export projection of 12.3 million bales for 2023/24 as compared to 12.8 million bales in 2022/23.

    - China's current U.S. sales commitment level of 4.3 million bales is 2.2 million bales higher than at the same time last year. China is projected to import 12.0 million bales in 2023/24 as compared to 6.2 million bales in 2022/23. USDA has estimated that over one-third of total 2023/24 China imports will be used to replenish government reserve stocks.

    - Pakistan is currently the second largest export customer of U.S. cotton with 1.5 million bales in sales commitments. Pakistan's ability to purchase imported goods has been limited due to low foreign currency reserves and their ability to fulfill current

U.S. export sales commitments remains in question. As of February 1, 2024, 1.2 million bales of U.S. cotton had been sold to Pakistan but not shipped. Pakistan has been plagued with political and economic instability over the last few years and the recent failure to elect a new Prime Minister has created more uncertainty. While Pakistan received a critical bailout package from the IMF in June 2022, the bailout package expires in March.

- Reductions in foreign reserves are also evident in Bangladesh, leading to concerns that that country could also face challenges when importing cotton. However, as compared to Pakistan, the potential number of bales at risk is lower (314 thousand bales currently sold but not shipped). Bangladesh has just implemented a plan to gradually phase-out export subsidies for all sectors as they move away from their Least Developed Country (LDC) status in 2026. This change could have a significant impact on the Bangladesh textile and apparel industry which accounts for the largest percentage of total exports.

- U.S. mills are expected to consume 1.75 million bales in 2023/24 and 1.85 million bales in 2024/25 as compared to 2.05 million bales in 2022/23. U.S. textile manufacturing remains under pressure from weaker Western Hemisphere trade due to concerns about the impacts of increased U.S. textile imports under *de minimis* provisions. Between August and December 2023, eight U.S. textile manufacturing facilities shutdown operation.

- U.S. ending stocks are currently projected to be 2.8 million bales at the end of 2023/24, resulting in a very tight balance sheet. However, if production is further reduced without a change in exports, ending stocks will be even lower. U.S. ending stocks have only been below 2.8 million bales in four of the last 20 years.

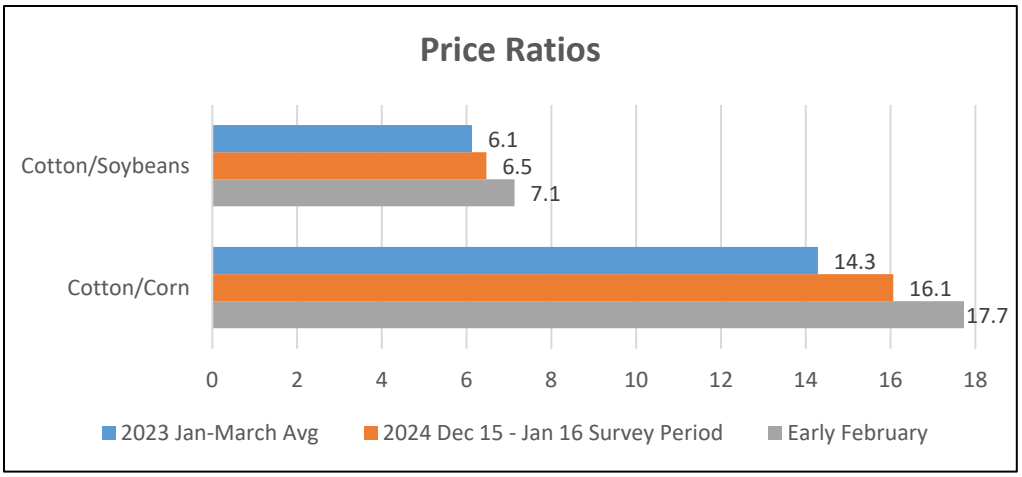
- Looking ahead to the 2024/25 marketing year, production costs remain elevated and are only slightly lower than a year ago. According to USDA's Economic Research Service, projected U.S. cotton production costs for 2024/25 are 23.1% (or $164 per acre) higher than in 2018/19.

- During the 2024 survey period, the average cotton harvest-time futures price was $0.80 per pound as compared to the 2023 Jan-March average of $0.83. The average corn futures price was $4.98 per bushel as compared to the 2023 Jan-March average of $5.81. The average futures price for soybeans was $12.37 per bushel as compared to the Jan-March average of $13.55 in 2023.

    - Since the end of the 2024 survey period, cotton prices have increased, while corn and soybean prices have both declined. Cotton harvest-time futures prices in early February 2024 are 3.8% higher, corn prices are 6.0% lower, and soybean prices are 5.9% lower.

Dec (Nov) Futures	2023 Jan-Mar Avg	2024 Survey Period	Early February
Cotton	$0.83	$0.80	$0.83
Corn	$5.81	$4.98	$4.68
Soybeans	$13.55	$12.37	$11.64

- As compared to the average price ratios in Jan-March 2023, the cotton/corn and cotton/soybean price ratios were higher during the 2024 survey period. While these ratios are generally reliable indicators of changes in cotton acreage, the 2024 survey results did not show an increase in cotton acreage. While the 2024 cotton-to-corn and cotton-to-soybean price ratios have increased, the projected net returns from other competing commodities may still be higher than cotton, particularly for commodities with lower production costs.
- In early February, the cotton-to-corn price ratio (cents/lb divided by $/bu) had increased from 16.1 to 17.7 while the cotton-to-soybean price ratio increased from 6.5 to 7.1. The recent improvement in the price ratios could result in final cotton acreage higher than reported in the NCC survey.



- While the outlook is not particularly attractive for cotton net returns in 2024, the situation is similar for other commodities. This is reflected in the 2024 survey results as growers indicate only a slight shift away from cotton to other competing commodities. For the 2024/25 marketing year, U.S. growers intend to plant 9.8 million acres, which is 3.7% lower than in 2023/24.

- To estimate U.S. production for 2024/25, the 10-year average (2014-2023) abandonment rate was used for most states with a few minor adjustments. To estimate the yield, the 5-year average yield was used for the Southeast and the Midsouth, while the 10-year average yield was used for the Southwest and the West.

- For 2024/25, U.S. harvested area is estimated to be 8.1 million acres with an overall abandonment rate of 17.9%. U.S. production is estimated to be 14.6 million bales with an

average yield of 865 pounds per acre, which includes 14.0 million upland bales and 538,000 ELS bales.

U.S. Supply & Demand

	2023/24	2024/25
Planted (million acres)	10.23	9.85
Abandonment	30.9%	17.9%
Harvested (million acres)	7.07	8.08
Lint Yield (lbs/harv acre)	845	865
Lint Production (million bales)	12.43	14.56
Cottonseed Production (million tons)	3.89	4.46
U.S. Mill Use (million bales)	1.75	1.85
U.S Exports (million bales)	12.30	12.59
U.S. Ending Stocks (million bales)	2.80	2.93

- For the 2024/25 marketing year, a projected increase in world consumption along with a larger U.S. supply results in a larger U.S. export projection as compared to 2023/24.

- For the 2023/24 marketing year, U.S. cottonseed production was estimated to be 3.9 million tons, down 0.6 million tons from the previous year. U.S. cottonseed production is projected to increase to 4.5 million tons for the 2024/25 marketing year.

U.S. Retail Demand

- 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 net textile trade (imports – exports). Net domestic consumption of cotton in 2023 was 14.6 million bale equivalents, which is 23.2% below 2022 and the lowest level since 1991.

- Imported goods make up the largest portion of U.S. net domestic consumption. Imported cotton textiles decreased from 19.6 million bale equivalents in 2022 to 15.1 million in 2023, which is the lowest level since 2001. However, the value of U.S. retail sales of clothing and clothing accessories as reported by the U.S. census bureau has continued to increase (even after accounting for inflation). Part of this decline may be attributed to partial drawdown of the excess inventories that accumulated in 2021-2022. Another contributing factor is the inability to accurately track *de minimis* shipments.

- The U.S. *de minimis* provision allows items under $800 (per day) to be imported duty-free and tax-free and are not routinely subjected to Customs and Border Protection (CBP) regulations, including forced labor checks. The *de minimis* exception has created a situation that harms U.S. manufacturers and undermines Western Hemisphere trading arrangements.

- In 2023, the number of duty-free *de minimis* shipments coming into the U.S. is estimated to have increased to over one billion packages with about half of those packages believed to be

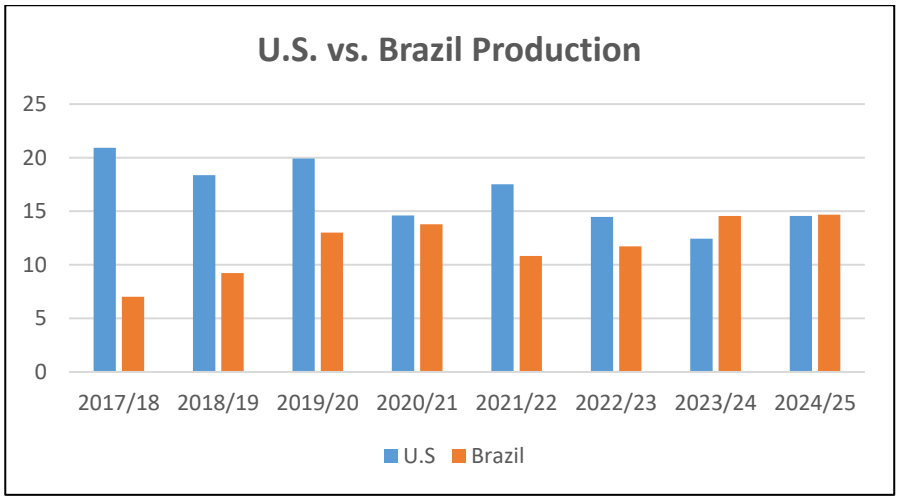
textile and apparel products. It is also estimated that nearly half of all *de minimis* shipments to the U.S. originate from China.

World Supply and Demand

- For the 2023/24 marketing year, world area declined slightly to 78.3 million acres. World production was estimated to decline by 3.4 million bales to 112.8 million for the 2023/24 marketing year. Overall, large declines in several major cotton producing countries were partially offset by large increases in Brazil and Pakistan.

    - Along with the 2.0 million bale decline in the U.S. crop, 2023/24 production declined by 3.2 million bales in China, 1.7 million bales in Turkey, and 1.3 billion bales in India. These declines were mostly due to lower harvested acreage.

    - Brazil's 2023/24 production increased by 2.8 million bales to reach a record level of 14.6 million bales. This is the first time that Brazil's production surpassed U.S. production. While Brazil's acreage increased by 3.8% in 2023/24, most of the production increase was attributed to higher yields. The record 2023/24 yield of 1,704 pounds per acre was 281 pounds higher than in 2022/23.



    - Pakistan's production also increased by 2.8 million bales in 2023/24. Acreage bounced back by 33.3% in 2023/24 following the very low level in 2022/23 that was impacted by flooding and abandoned acres. Various weather, pest, and production issues have impacted Pakistan's production over the last few years. Pakistan's production declined from 8.2 million bales in 2017/18 to 3.9 million bales in 2022/23, which was the lowest level since 1983. Pakistan's 2023/24 production estimate of 6.7 million bales would be the highest level since 2018.

- For the 2024/25 marketing year, world harvested area is projected to grow by 1.7% to 79.6 million acres. World production is projected to increase to 115.2 million bales, with the largest projected increase in the United States and the largest decline in China. The projected decline for China is due to a lower yield and acreage as compared to 2023/24. An increase in 2024/25

acreage is expected for Brazil and India resulting in higher production as compared to 2023/24. Brazilian production is projected to be slightly higher than U.S. production in 2024/25.

World Production (million bales)

	2022/23	2023/24	2024/25
U.S.	14.47	12.43	14.56
Australia	5.80	4.80	4.75
Brazil	11.72	14.56	14.68
China	30.70	27.50	26.16
India	26.30	25.00	25.88
Pakistan	3.90	6.70	6.20
Turkey	4.90	3.20	3.69
World	116.26	112.82	115.15

- For the 2023/24 marketing year, world consumption is projected to increase by 1.3 million bales to 112.5 million based on the February 2024 USDA estimate. Despite the slight increase for 2023/24, consumption is still well below 2016-2018 levels. Several factors have contributed to weak cotton demand including declining global economic conditions, high inflation levels, higher interest rates, low foreign currency reserves, high inventories in the textile supply chain, and lower profit margins for spinning mills.

World Consumption (million bales)

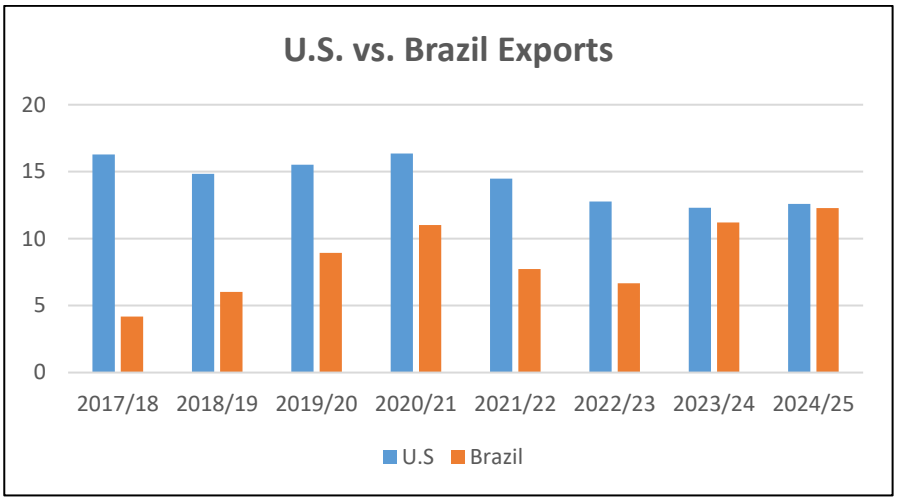
	2022/23	2023/24	2024/25
China	37.50	37.00	37.50
India	23.50	23.70	24.25
Pakistan	8.70	9.80	10.00
Bangladesh	7.70	7.80	8.00
Turkey	7.50	7.20	7.40
Vietnam	6.45	6.80	7.00
World	111.17	112.46	115.33

- Overall, the outlook for world cotton demand for the 2024/25 marketing year takes on a more positive tone as the economic outlook has improved in the past month. For the 2024/25 marketing year, world consumption is projected to increase by 2.6% to 115.3 million bales. Although China's consumption is projected to increase by 1.3% in 2024/25, additional downside risks are present due to China's current economic situation. IMF has projected a decline in China's growth rate from 5.2% in 2023 to 4.6% in 2024 as property sector issues continue to weigh on the Chinese economy.

- For the 2023/24 marketing year, world cotton trade increased to 42.9 million bales. The increase in trade is largely attributed to a 5.8 million bale increase in China's imports as compared to 2022/23. Since China's consumption is projected to decline by 500 thousand bales in 2023/24, a portion of the additional imports will likely replenish China's reserve stock levels.

- The share of 2023/24 world exports for the top three exporting countries would be 28.7% for the U.S., 26.1% for Brazil, and 13.3% for Australia. From 2018-2022, the average U.S. market share of world exports was 34.9%. Lower U.S. supplies combined with increased production in Brazil has reduced the U.S. market share.

- For the 2024/25 marketing year, world trade is projected to increase to 43.4 million bales. The share of 2024/25 world exports for the top three exporting countries would be 29.0% for the U.S., 28.3% for Brazil, and 11.6% for Australia. While the U.S. is projected to remain the largest exporter in 2024/25, Brazil is just slightly behind the U.S. in export sales. The U.S. will continue to face very strong export competition from Brazil. Given the recent trends in exports from the two countries, Brazil is on track to become the largest cotton exporter in the very near future.



- With world production slightly exceeding consumption in the 2023/24 marketing year, ending stocks are projected to increase by 730 thousand bales to 83.7 million, resulting in a stocks-to-use ratio of 74.4%. For the 2024/25 marketing year, higher world production, consumption, and trade result in a slight decline in ending stocks to 83.5 million bales.

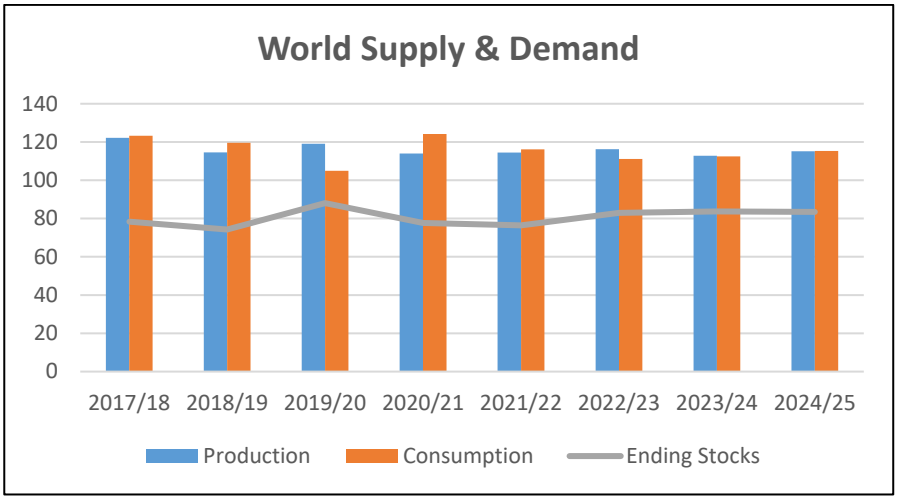


Table 1 - Balance Sheet for Selected Countries & Regions

World	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	78,200	79,761	78,341	78,304	79,635
Yield (Pounds/Acre)	700	689	712	692	694
Production (Thou Bales)	113,988	114,485	116,256	112,824	115,146
Trade (Thou Bales)	48,648	42,969	37,695	42,881	43,365
Mill Use (Thou Bales)	124,168	116,114	111,165	112,463	115,330
Ending Stocks (Thou Bales)	77,675	76,421	82,966	83,696	83,452
United States	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	8,211	10,262	7,289	7,065	8,083
Yield (Pounds/Acre)	854	820	953	845	865
Production (Thou Bales)	14,608	17,523	14,468	12,434	14,563
Net Exports (Thou Bales)	16,350	14,476	12,764	12,295	12,583
Mill Use (Thou Bales)	2,400	2,550	2,050	1,750	1,850
Ending Stocks (Thou Bales)	3,150	4,050	4,250	2,800	2,930
Australia	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	680	1,569	1,606	1,273	1,222
Yield (Pounds/Acre)	1,978	1,790	1,733	1,811	1,867
Production (Thou Bales)	2,800	5,850	5,800	4,800	4,752
Net Exports (Thou Bales)	1,581	3,577	6,168	5,650	5,050
Mill Use (Thou Bales)	10	10	10	10	35
Ending Stocks (Thou Bales)	2,507	4,960	4,772	4,112	3,779
Bangladesh	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	109	111	111	114	112
Yield (Pounds/Acre)	649	652	660	655	654
Production (Thou Bales)	147	151	153	155	155
Net Imports (Thou Bales)	8,400	8,450	7,000	7,500	7,769
Mill Use (Thou Bales)	8,700	8,800	7,700	7,800	8,000
Ending Stocks (Thou Bales)	2,477	2,278	1,731	1,586	1,500
Brazil	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	4,114	3,385	3,954	4,102	4,512
Yield (Pounds/Acre)	1,608	1,534	1,423	1,704	1,562
Production (Thou Bales)	13,780	10,820	11,720	14,560	14,680
Net Exports (Thou Bales)	11,002	7,703	6,648	11,180	12,265
Mill Use (Thou Bales)	3,100	3,300	3,200	3,300	3,350
Ending Stocks (Thou Bales)	4,066	3,883	5,755	5,835	4,900
China	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	7,907	7,660	7,784	7,166	6,965
Yield (Pounds/Acre)	1,797	1,679	1,893	1,842	1,803
Production (Thou Bales)	29,600	26,800	30,700	27,500	26,161
Net Imports (Thou Bales)	12,850	7,720	6,138	11,950	11,450
Mill Use (Thou Bales)	41,250	33,750	37,500	37,000	37,500
Ending Stocks (Thou Bales)	37,294	38,064	37,402	39,852	39,963
India	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	32,830	30,571	31,943	31,382	31,460
Yield (Pounds/Acre)	402	382	395	382	395
Production (Thou Bales)	27,500	24,300	26,300	25,000	25,881
Net Exports (Thou Bales)	5,345	2,743	-628	600	155
Mill Use (Thou Bales)	26,000	25,000	23,500	23,700	24,250
Ending Stocks (Thou Bales)	11,839	8,396	11,824	12,524	14,000

Table 1 – Selected Countries and Regions (Continued)

Indonesia	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	5	2	2	2	5
Yield (Pounds/Acre)	194	389	389	389	389
Production (Thou Bales)	2	2	2	2	4
Net Imports (Thou Bales)	2,301	2,564	1,647	1,985	2,098
Mill Use (Thou Bales)	2,450	2,600	1,750	1,900	2,100
Ending Stocks (Thou Bales)	496	462	361	448	450
Mexico	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	358	381	494	321	360
Yield (Pounds/Acre)	1,366	1,539	1,535	1,382	1,436
Production (Thou Bales)	1,020	1,220	1,580	925	1,076
Net Imports (Thou Bales)	440	556	282	450	583
Mill Use (Thou Bales)	1,725	1,900	1,750	1,500	1,650
Ending Stocks (Thou Bales)	439	315	109	302	286
Pakistan	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	5,436	4,942	4,448	5,930	6,108
Yield (Pounds/Acre)	397	583	421	542	487
Production (Thou Bales)	4,500	6,000	3,900	6,700	6,197
Net Imports (Thou Bales)	5,375	4,450	4,400	3,525	3,628
Mill Use (Thou Bales)	10,900	10,700	8,700	9,800	10,000
Ending Stocks (Thou Bales)	2,175	1,925	1,525	1,950	1,750
Turkey	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	865	1,112	1,371	1,087	1,114
Yield (Pounds/Acre)	1,610	1,640	1,715	1,413	1,589
Production (Thou Bales)	2,900	3,800	4,900	3,200	3,690
Net Imports (Thou Bales)	4,742	4,957	3,329	2,850	3,731
Mill Use (Thou Bales)	8,350	8,600	7,500	7,200	7,400
Ending Stocks (Thou Bales)	1,758	1,915	2,629	1,479	1,500
Uzbekistan	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	2,619	2,545	2,595	2,545	2,550
Yield (Pounds/Acre)	583	540	611	547	546
Production (Thou Bales)	3,180	2,865	3,300	2,900	2,903
Net Exports (Thou Bales)	425	-1	0	-50	-26
Mill Use (Thou Bales)	3,250	3,250	2,625	3,000	3,100
Ending Stocks (Thou Bales)	1,774	1,390	2,065	2,015	1,844
Vietnam	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	2	2	2	2	2
Yield (Pounds/Acre)	583	583	583	583	583
Production (Thou Bales)	3	3	3	3	3
Net Imports (Thou Bales)	7,288	6,631	6,471	6,800	6,998
Mill Use (Thou Bales)	7,300	6,700	6,450	6,800	7,000
Ending Stocks (Thou Bales)	1,088	1,022	1,046	1,049	1,050
West Africa	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**
Harvested Area (Thou Acres)	5,923	7,677	6,855	6,771	6,703
Yield (Pounds/Acre)	392	374	281	350	352
Production (Thou Bales)	4,835	5,982	4,015	4,930	4,914
Net Exports (Thou Bales)	5,642	6,430	3,875	4,633	4,806
Mill Use (Thou Bales)	95	95	95	95	95
Ending Stocks (Thou Bales)	1,678	1,140	1,185	1,387	1,400

Table 2 - Prospective 2024 U.S. Cotton Area

	2023 Actual (Thou.) 1/	2024 Intended (Thou.) 2/	Percent Change
SOUTHEAST	**2,250**	**2,141**	**-4.8%**
Alabama	380	347	-8.8%
Florida	89	83	-6.2%
Georgia	1,110	1,103	-0.6%
North Carolina	380	332	-12.6%
South Carolina	210	203	-3.3%
Virginia	81	73	-9.6%
MID-SOUTH	**1,630**	**1,591**	**-2.4%**
Arkansas	510	473	-7.3%
Louisiana	120	114	-5.0%
Mississippi	400	405	1.3%
Missouri	335	336	0.3%
Tennessee	265	263	-0.8%
SOUTHWEST	**6,082**	**5,767**	**-5.2%**
Kansas	112	111	-0.8%
Oklahoma	420	391	-6.9%
Texas	5,550	5,265	-5.1%
WEST	**121**	**147**	**21.5%**
Arizona	76	79	3.7%
California	13	21	62.9%
New Mexico	32	47	46.9%
TOTAL UPLAND	**10,083**	**9,646**	**-4.3%**
TOTAL ELS	**147**	**202**	**37.7%**
Arizona	16	18	14.3%
California	86	139	62.2%
New Mexico	16	9	-42.1%
Texas	29	35	22.0%
ALL COTTON	**10,230**	**9,849**	**-3.7%**

1/ USDA-NASS
2/ National Cotton Council