

A close-up photograph of cotton bolls on a branch. The bolls are white and fluffy, with some showing the brown, dried husks. The background is blurred, showing more cotton plants.

# GLOBAL COTTON BASELINE

*2008/09 - 2018/19*

CERI OR09-01  
MARCH 2009

COTTON ECONOMICS RESEARCH INSTITUTE

*Texas Tech University  
College of Agricultural Sciences & Natural Resources  
Department of Agricultural & Applied Economics*

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# EXECUTIVE SUMMARY

- **ECONOMIC FUNDAMENTALS**

- Real GDP growth is projected at -2.16% in 2009 for developed countries before it slowly recovers to about 2.3% per year. Developing economies, on the other hand, are projected to grow by 2.6% in 2009 before they recuperate to an average of 5.3% thereafter.
- A more favorable exchange rate between the Chinese yuan and the U.S. dollar will allow for U.S. cotton to be more affordable to China's cotton textile industry.

- **COTTON MILL USE**

- Cotton mill use is expected to decrease 8% in 2008/09 compared with 2007/08.
- Demand for cotton fiber is projected to grow by about 26 million bales over the next 10 years (22%). Mill use is projected to remain concentrated in Asia. By 2018/19, the nations/regions that lead the world in cotton mill use are projected to be (share of world mill use in parentheses): China (45%), India (16%), Pakistan (10%), Other Asia (10%), and Turkey (4%).

- **COTTON PRODUCTION**

- Cotton harvest area is expected to decrease 6% in 2008/09 compared with 2007/08.
- Production gains to meet increased mill use will largely come from improved yields due to technological advances rather than increased area (notable exceptions include Brazil and the African region). By 2018/19, leading producers of cotton are projected to be (share of world production in parentheses): China (30%), India (23%), the United States (11%), Pakistan (8%), and Brazil (7%).

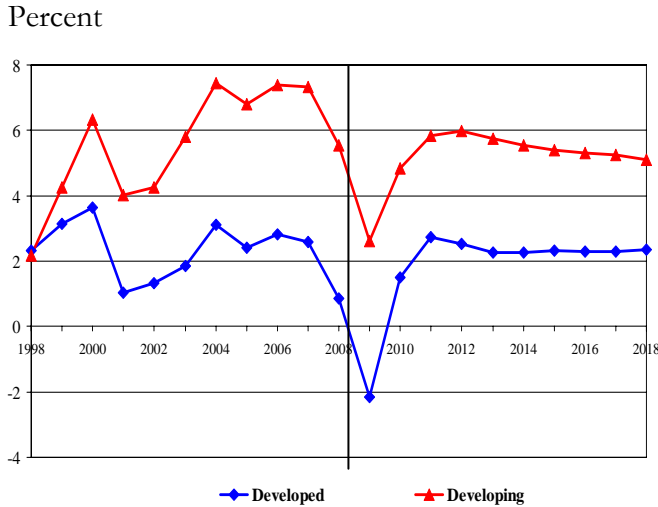
- **WORLD COTTON TRADE**

- Cotton trade is expected to decrease 19% in 2008/09 compared with 2007/08.
- World trade in cotton is projected to continue its upward trend, growing by 17 million bales by 2018/19, a 55% increase.
- China will account for the vast majority of this increase as Chinese cotton imports are projected to expand by 12.8 million bales. Leading cotton importers in 2018/19 are projected to be (world import share in parentheses): China (42%), Other Asia (28%), and Pakistan (7%).
- The United States is projected to remain the world's leading cotton exporter in 2018/19 with a 29% market share. Increased competition in the export market (with projected export market share in parentheses) will come from India (20%), Brazil (12%), Uzbekistan (10%), and WCA (8%).

# GLOBAL AND U.S. OUTLOOK

# MACROECONOMIC PROJECTIONS

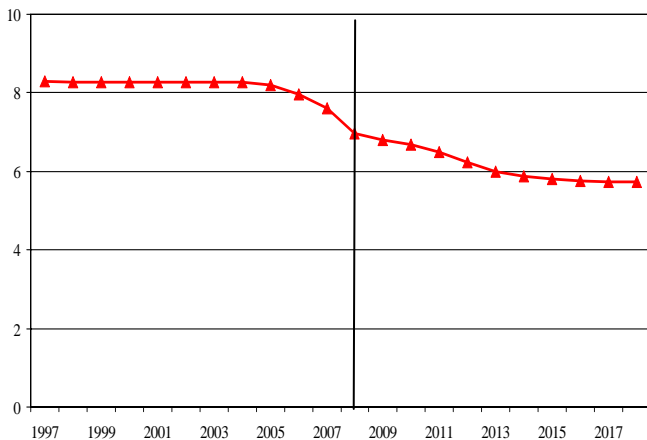
## REAL GDP GROWTH RATE: DEVELOPED vs. DEVELOPING COUNTRIES



- Owing to the economic recession, real GDP growth rates will be negative in developed countries while remaining positive in developing countries in 2009.
- In developed countries, average annual growth rate will be -2.16% in 2009 and recover to around 2.3% for the rest of the period.
- In developing countries, average real GDP growth is projected to be 2.6% in 2009 and slowly recover to around 5.1%, on average, for the rest of the period.

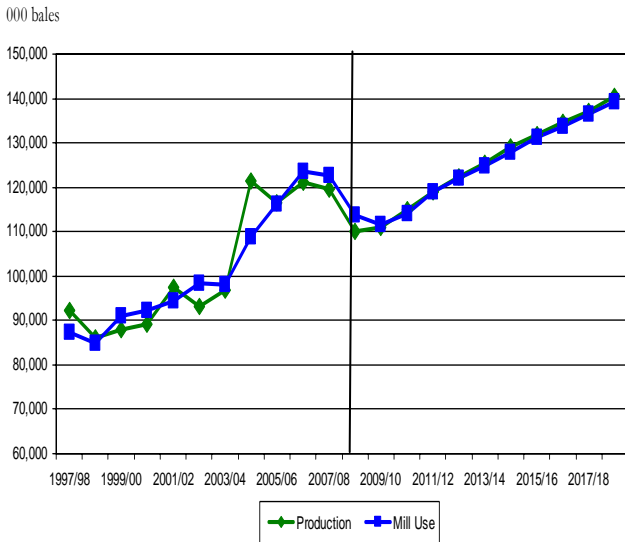
## CHINESE EXCHANGE RATE PROJECTIONS

Yuan per Dollar



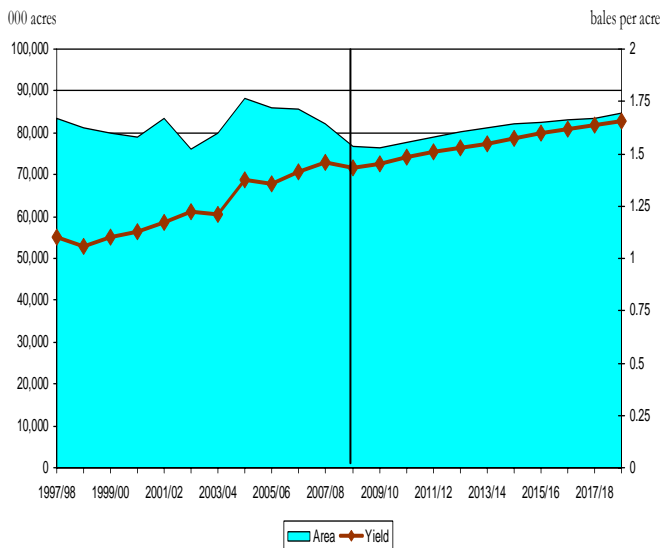
- The Chinese yuan is projected to strengthen from 7.0 yuan per U.S. dollar in 2008 to 5.7 yuan per U.S. dollar in 2018.

## WORLD COTTON PRODUCTION and COTTON MILL USE



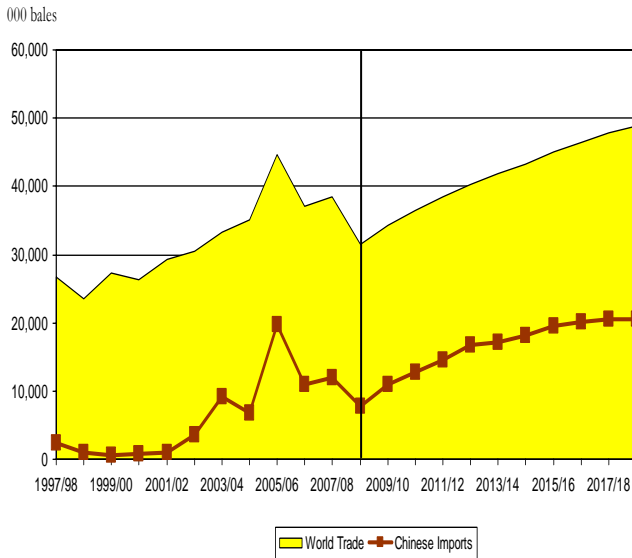
- Mill use, which has exceeded production in the last 3 years, is projected to grow by about 25.6 million bales over the next ten years.
- World cotton production is projected to track the growth of mill demand by increasing from 110 million bales in 2008/09 to around 140 million bales in 2018/19.

## WORLD COTTON HARVESTED AREA and YIELD



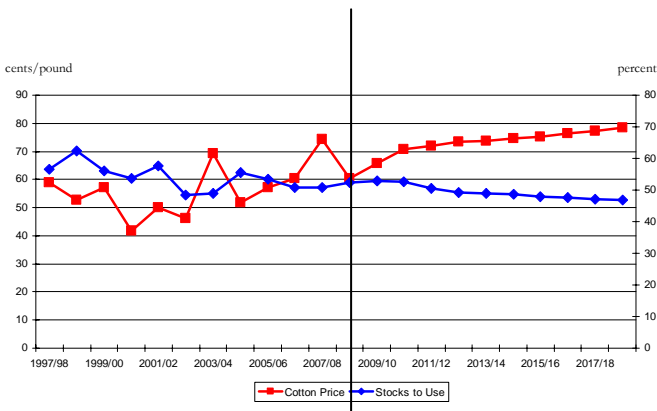
- A steady recovery in cotton acreage is projected in the next ten years with harvested area increasing from 77 million acres in 2008/09 to 85 million acres by 2018/19.
- Worldwide gains in cotton production are projected to come from improved yields as well, with the average projected to increase from 1.43 bales per acre in the current marketing year to 1.66 bales per acre by 2018/19 - a gain of 16%.

## WORLD COTTON TRADE



- World cotton trade is projected to grow in line with its historical trend: 31 million bales in 2008/09 to 49 million bales in 2018/19.
- China is projected to account for the bulk of this increase with imports projected to increase by 13 million bales.

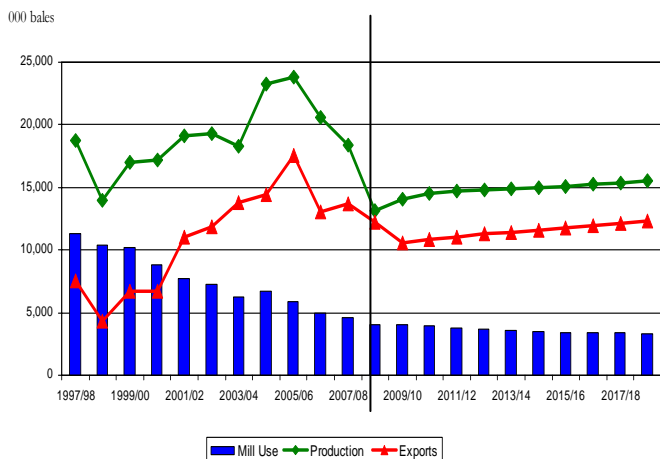
## WORLD COTTON PRICE vs. STOCK-TO-USE RATIO



- The stocks-to-use ratio is projected to decline from 52% to 47% over the next ten years. The world cotton price (A-index) is expected to recover from 60.5 cents/lb in 2008/09 to a range of 70-78 cents/lb for the rest of the projection period.

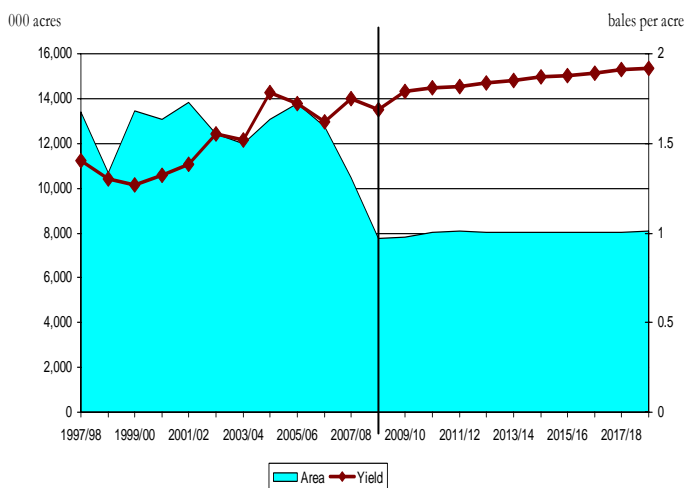


## UNITED STATES: PRODUCTION, EXPORTS, and MILL USE



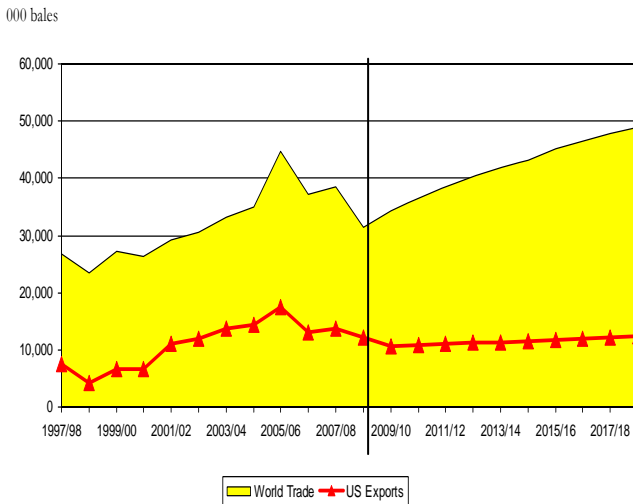
- Ethanol development in the U.S. contributed to a 28% lower cotton production in 2008/09 relative to 2007/08. Cotton production is estimated at 13.1 million bales in 2008/09. From 2008/09 onward, production is expected to recover slightly to around 15.5 million bales in 2018/19.

## UNITED STATES: HARVESTED AREA and YIELD



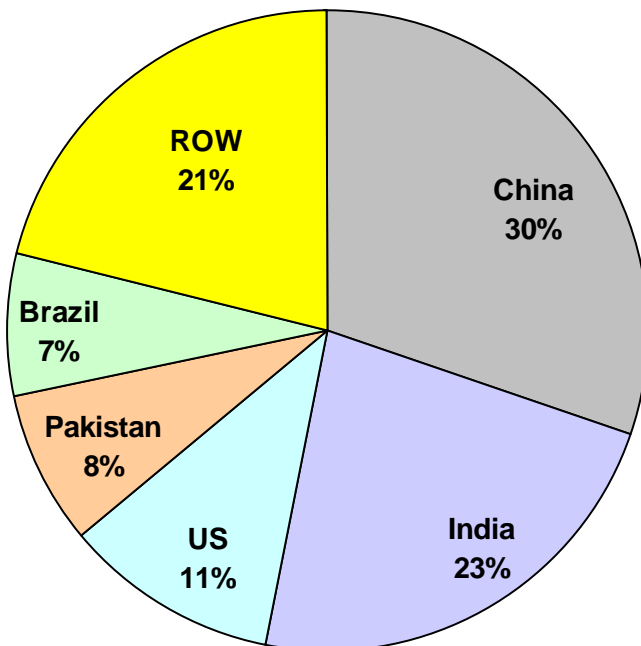
- Ethanol development has significantly restrained the growth in cotton area in the U.S. Consequently, harvested area is expected to contract by another 26% in 2008/09.
- Cotton yield averaged nationally at 1.69 bales per acre in 2008/09, lower than its long term trend.

## WORLD COTTON TRADE and U.S. EXPORTS



- World cotton trade is expected to be lower by 7.3 million bales in 2008/09 due primarily to a weaker imports from China.
- Exports from the United States are estimated to account for about 39% of world cotton trade in 2008/09. This percentage is projected to fall to 25% by 2018/19.

## SHARE OF WORLD COTTON PRODUCTION: 2018/19



- Over the next ten years, China's share of world cotton production is expected to decline by 3% and India and Brazil's to increase by 2% each. China still leads the world cotton production with India and the U.S. at second and third, respectively.

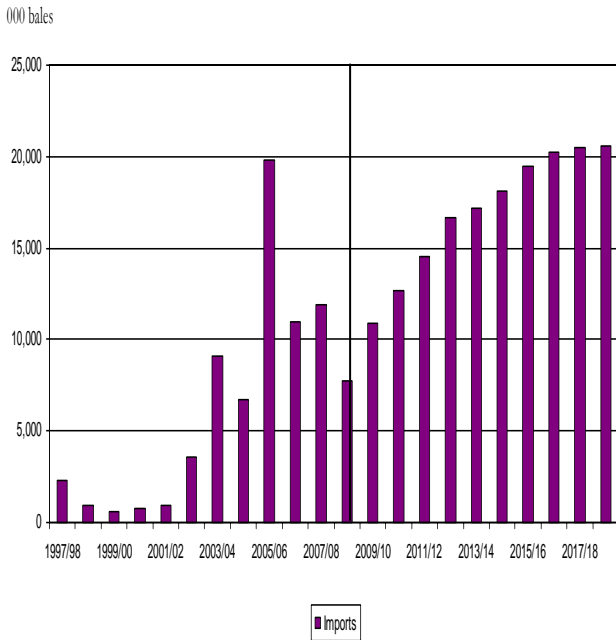
2008/09

2018/19

- |                  |               |
|------------------|---------------|
| 1. China (33%)   | China (30%)   |
| 2. India (21%)   | India (23%)   |
| 3. U.S. (12%)    | U.S. (11%)    |
| 4. Pakistan (9%) | Pakistan (8%) |
| 5. Brazil (5%)   | Brazil (7%)   |

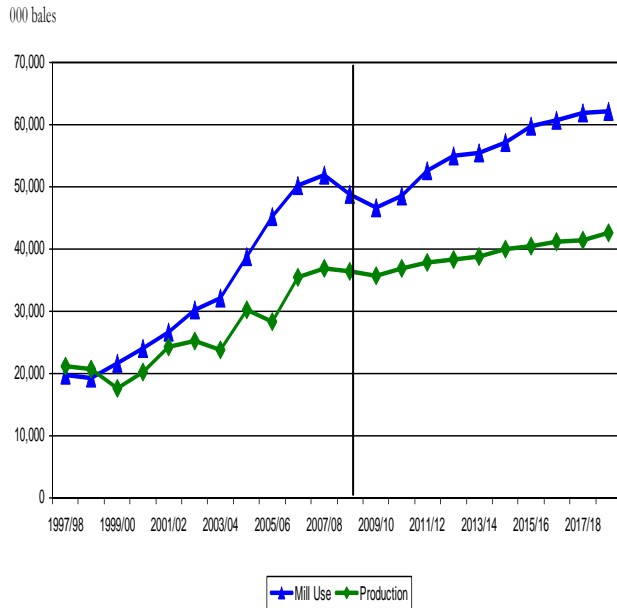
# MAJOR GROWTH MARKETS

# CHINA: COTTON IMPORTS



- Due to the world economic recession, Chinese mill use is 6.8% lower 2008/09 compared to 2007/08. Imports are expected to drop 34.8%. However, as the economy recovers in the future, Chinese cotton imports are projected to increase from 7.8 million bales in 2008/09 to 20.5 million bales in 2018/19.

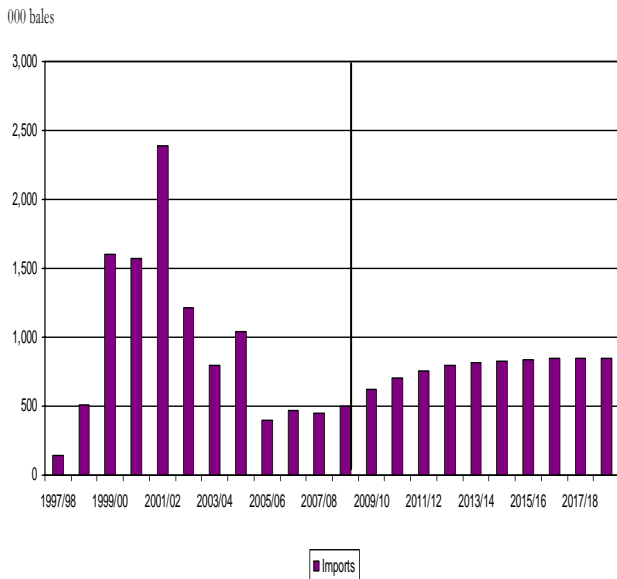
# CHINA: COTTON PRODUCTION and CONSUMPTION



- China is projected to remain the world's largest cotton user (43% of world total in 2008/09).
- Chinese mill use is projected to decline by 6.8% in 2008/09 and 4.1% in 2009/10 before it recovers back to normal levels. China's share of world cotton mill use is projected to reach 45% in 2018/19.

## INDIA: COTTON IMPORTS

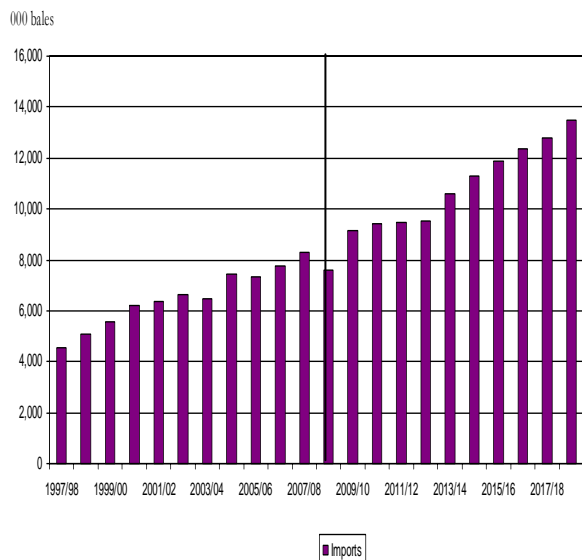
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- An expanding cotton textile industry is projected to increase mill use by 33% over the next 10 years.
- However, imports of cotton will be limited due to significant production increases in the next 10 years.

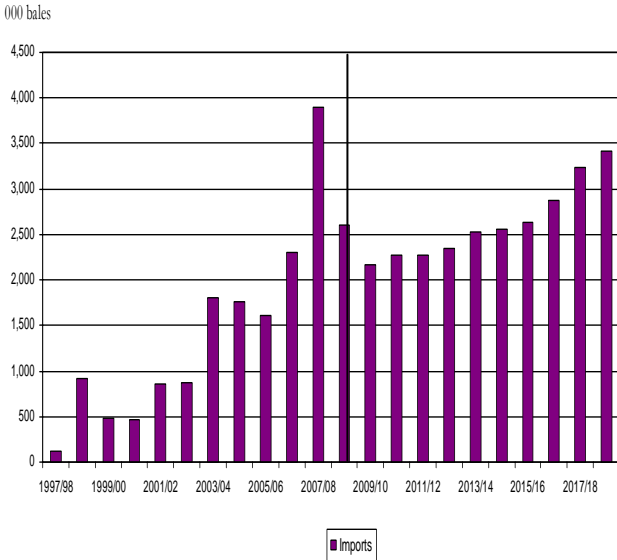
## OTHER ASIA: IMPORTS

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- Cotton mill use by Other Asia is projected to grow by about 75% over the next 10 years, sustaining this region's position as the fourth largest cotton mill user in the world.
- The U.S. is a leading supplier of cotton to several countries in this region, but faces competition from India, Australia, and African countries.

# PAKISTAN: COTTON IMPORTS



- Pakistan’s cotton imports are expected to drop 33% in 2008/09 compared with 2007/08 before it starts to trend upward from 2.6 million bales in the current marketing year to 3.4 million bales by 2018/19.

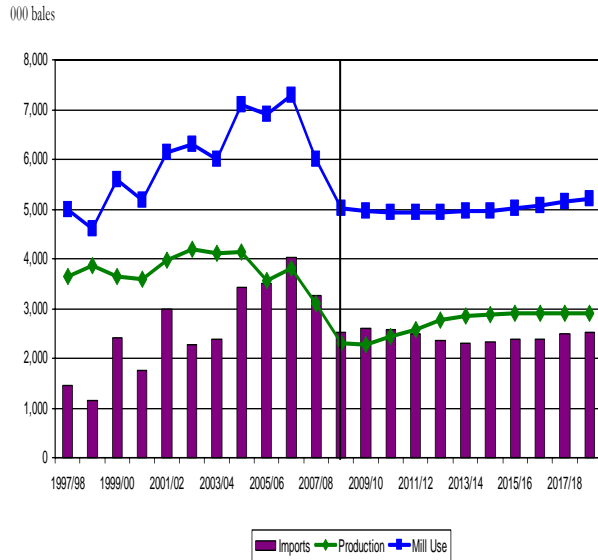
# PAKISTAN: COTTON PRODUCTION and CONSUMPTION



- A 7.6% decline in mill use in 2008/09 compared with 2007/08 is expected due to the world economic recession. A modernizing and expanding Pakistani textile industry is projected to boost cotton mill use to over 1.3 million bales in the next 10 years.
- The 2008/09 cotton area forecast is lower by 3.3% to 7.2 million acres. Heavy rains and floods followed by pest problems are likely to adversely affect cotton productivity. However, gains in cotton production are projected to come from increased yields as government and industry cooperate in enhancing biotechnological advances in cotton production.

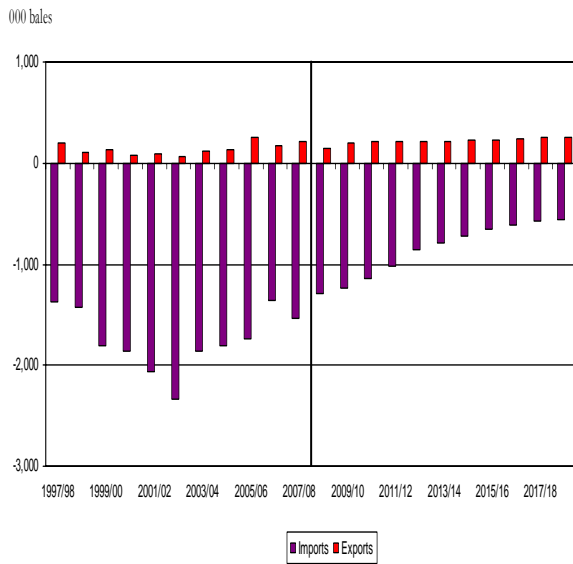
# DECLINING/STAGNANT MARKETS

## TURKEY: MILL USE, PRODUCTION, and IMPORTS



- Turkish textile producers are expected to face tougher competition from Asia over the next 10 years. In the previous decade, mill use grew by 46% (an increase of 2 million bales). Projected mill use growth is 4% for the next 10 years.
- Due to better returns on corn and vegetables, the planting area is expected to decrease 27% in 2008/09. However, cotton production is projected to grow slowly at trend levels as cotton price recovers.

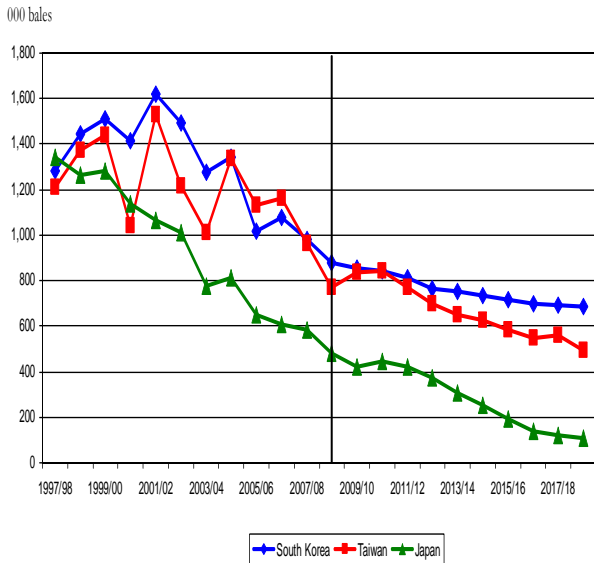
## MEXICO: COTTON TRADE



- After an initial surge of cotton mill use (and imports) in Mexico following the signing of NAFTA, competition from Asia has caused a significant and persistent decline in Mexico's cotton textile industry. This decline is projected to continue.
- However, a stable export market has developed for Mexican producers which is projected to sustain cotton production at its current level, albeit at a decreasing rate.

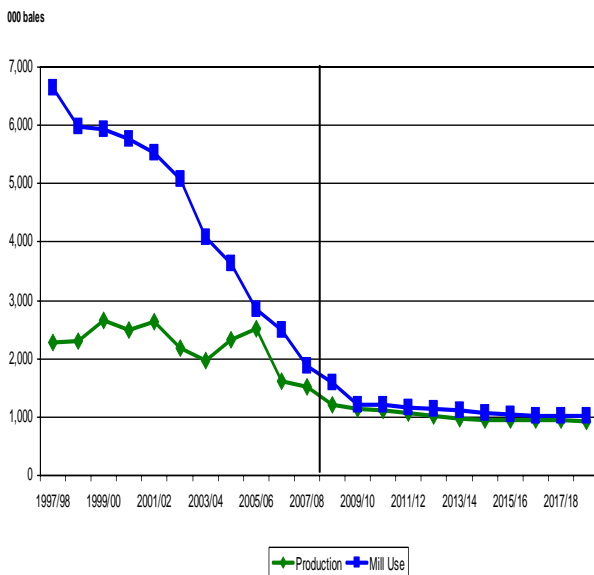


## SOUTH KOREA, TAIWAN, and JAPAN: COTTON IMPORTS



- South Korea, Taiwan, and Japan continue to experience steep declines in cotton imports - from a combined 2.1 million bales in the current period down to 1.3 million bales by 2018/19.
- Reports of new investments in South Korea and Taiwan's cotton spinning industry may slow the decline in cotton imports.

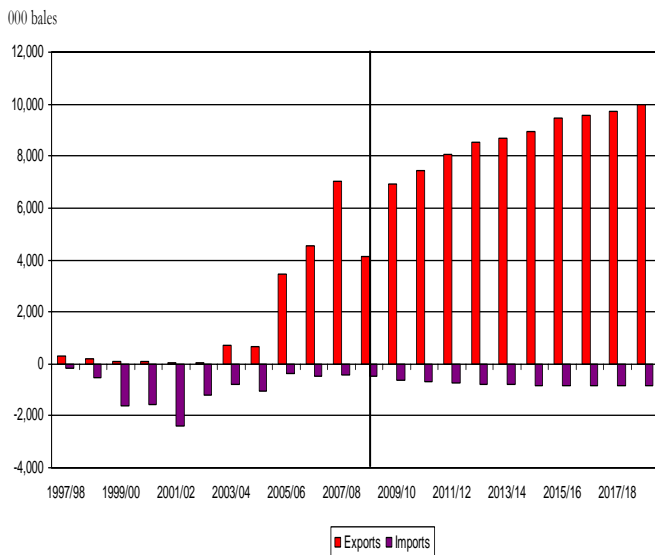
## EUROPEAN UNION: COTTON PRODUCTION and CONSUMPTION



- The overall decline of the cotton industry in the E.U. is projected to continue.
- Cotton trade (imports and exports) falls to around 0.8 million bales by 2018/19 while production and mill use fall to about 1 million bales.

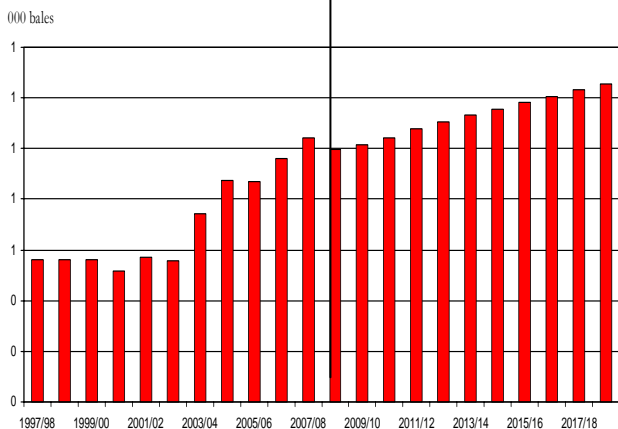
# MAJOR COMPETITORS

## INDIA: COTTON TRADE



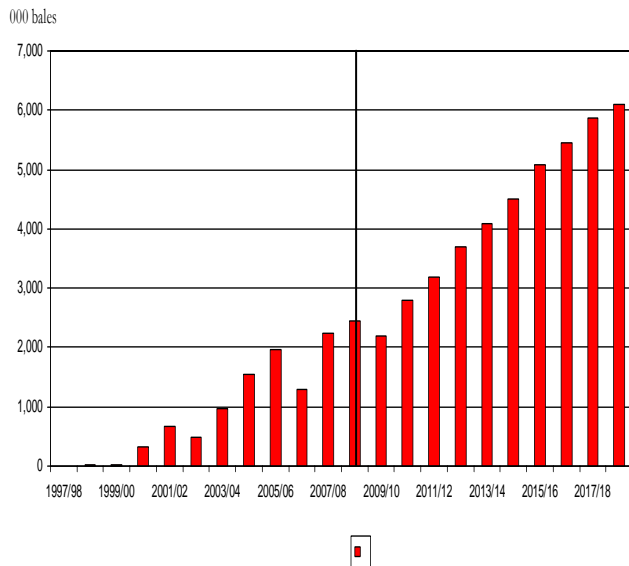
- India became the second largest cotton producer in the world in 2006/07 and is expected to remain as such in the next ten years.
- India is also projected to be the world's second largest exporter over the projection period, 2.3 million bales short of U.S. exports in 2018/19.

## INDIA: COTTON YIELD



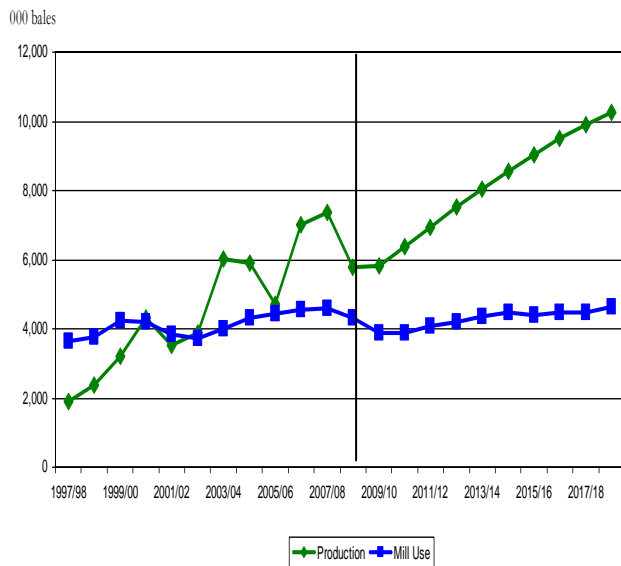
- Harvested cotton area in India is projected to increase due to the high net return in cotton and high minimum support price recently announced by the Indian government; it is expected to reach 25.3 million acres in 2018/19 relative to 23.1 million acres in 2008/09.
- Production gains are projected to come from both increased areas and improved yields.
- The upward trend in yield is projected to continue as more Bt cotton varieties are approved for cultivation, as varieties are adopted to a wider range of cotton growing areas, and as utilization rates increase.

## BRAZIL: COTTON EXPORTS



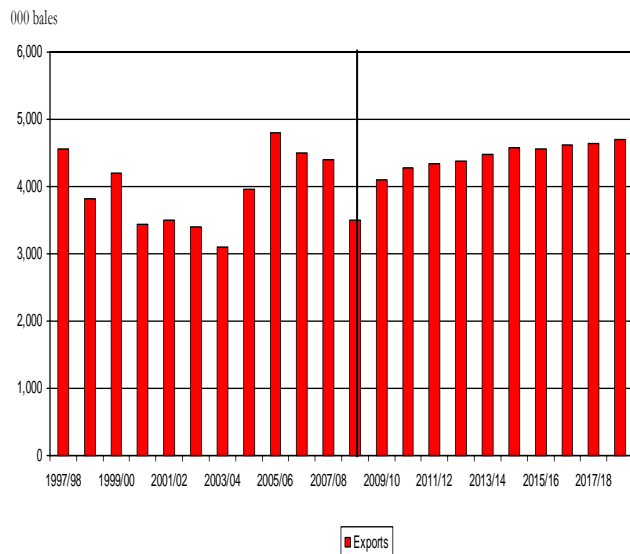
- Brazilian cotton exports weakened in 2008/09 due to exchange rate valuation, credit difficulties, ethanol development, and infrastructure limitations.
- However, cotton exports are projected to continue their upward trend increasing from 2.4 million bales in 2008/09 to 6.1 million bales in 2017/18.

## BRAZIL: COTTON PRODUCTION and CONSUMPTION



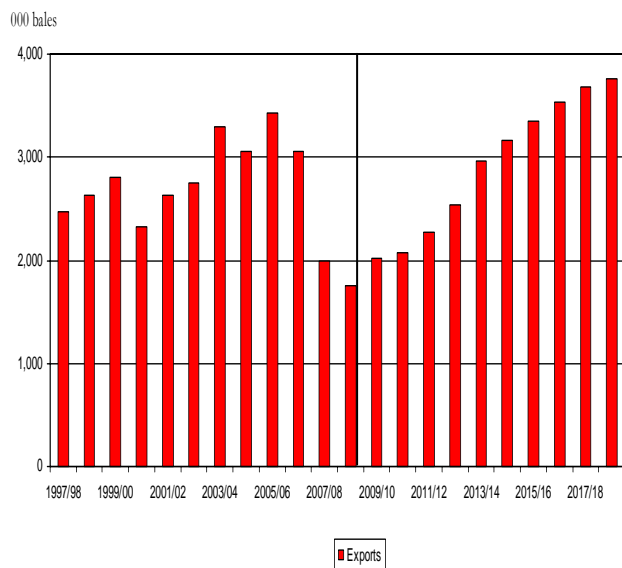
- Production gains will stem primarily from increased acreage as harvested area is projected to increase from 2.8 million acres to 3.4 million acres over the next 10 years.
- Yields are projected to increase from 2.65 bales per acre to 3.00 bales per acre.
- With steady mill use, exports are projected to increase proportionally to production.

## UZBEKISTAN: COTTON EXPORTS



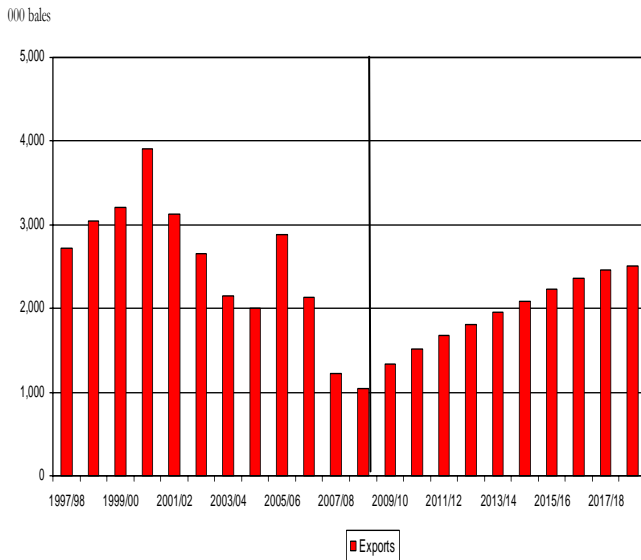
- Uzbekistan has been the world's third largest cotton exporter behind the United States and India since 2006/07.
- Cotton exports from Uzbekistan are projected to increase by almost 1.2 million bales over the next ten years. It is projected that Brazil will overtake Uzbekistan in 2015/16.

## WEST CENTRAL AFRICA: COTTON EXPORTS



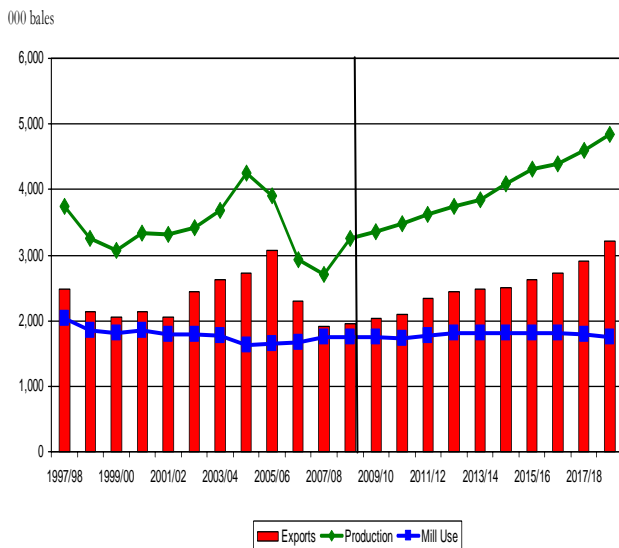
- As a group, the WCA region (Benin, Burkina Faso, Chad, and Mali) ranks fourth in world cotton exports.
- With a relatively small textile industry, cotton exports are an important component of economic development in this region.
- Projections are for a 2.1 million bale increase in production and 2.0 million bales rise in exports over the next 10 years.

## AUSTRALIA: COTTON EXPORTS



- Widespread drought has severely reduced the Australian cotton crop in recent years, dropping Australia out of the top five in world cotton exporters.
- Resumption of significant cotton production and exports is contingent on the rate of recharge of water resources.
- Australia is projected to export 2.5 million bales in 2018/19 due to the slow recovery process.

## OTHER AFRICA: COTTON PRODUCTION, EXPORTS and CONSUMPTION



- Other Africa Region is projected to rank just before Australia in world cotton exports by 2018/19 (3.2 million bales) because of significant gains in cotton production.

# TABLES

**Argentina Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	803.06	829.91	848.53	862.09	871.97	879.17	884.07	887.11	888.79	889.51	889.49
	Bales Per Acre										
Yield	0.87	0.89	0.91	0.93	0.95	0.97	0.99	1.01	1.02	1.02	1.02
	Thousand Bales										
Domestic Supply	1479.00	1559.27	1622.54	1674.40	1718.31	1756.53	1790.27	1820.37	1843.02	1844.45	1835.88
Production	700.00	739.27	772.08	800.90	826.75	850.39	872.03	891.99	910.68	911.40	911.39
Beginning Stock	779.00	820.00	850.46	873.50	891.56	906.14	918.24	928.38	932.34	933.05	924.49
Domestic Demand	1559.55	1527.38	1522.82	1524.09	1534.09	1551.91	1566.43	1577.71	1586.88	1593.61	1600.31
Mill Utilization	739.55	676.92	649.32	632.53	627.95	633.67	638.05	645.37	653.83	669.12	688.75
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	820.00	850.46	873.50	891.56	906.14	918.24	928.38	932.34	933.05	924.49	911.56
Trade											
Imports	141.07	190.15	189.53	189.26	188.97	188.85	197.98	197.95	207.07	220.79	234.49
Exports	60.52	222.04	289.26	339.58	373.19	393.47	421.82	440.60	463.21	471.64	470.07

**Australian Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	395.35	416.97	448.55	484.57	512.25	540.89	568.12	594.75	619.08	642.99	651.40
	Bales Per Acre										
Yield	3.41	3.52	3.61	3.70	3.74	3.81	3.88	3.95	4.02	4.02	4.02
	Thousand Bales										
Domestic Supply	1879.90	2303.69	2538.45	2765.65	2959.97	3164.89	3368.45	3573.42	3773.34	3936.16	4034.36
Production	1349.90	1466.32	1620.69	1790.80	1917.50	2063.38	2205.15	2349.70	2485.68	2586.38	2621.73
Beginning Stock	530.00	837.37	917.76	974.85	1042.46	1101.51	1163.30	1223.72	1287.66	1349.77	1412.63
Domestic Demand	884.42	966.97	1026.81	1095.25	1154.74	1217.68	1278.20	1342.42	1404.93	1469.28	1531.94
Mill Utilization	47.06	49.21	51.96	52.79	53.23	54.38	54.47	54.76	55.16	56.66	59.19
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	837.37	917.76	974.85	1042.46	1101.51	1163.30	1223.72	1287.66	1349.77	1412.63	1472.75
Trade											
Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exports	1045.58	1336.71	1511.64	1670.39	1805.23	1947.21	2090.25	2231.01	2368.41	2466.87	2502.42



**India Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	23103.53	23033.90	23350.64	23711.39	24103.82	24395.60	24584.63	24742.03	24815.05	24956.50	25338.14
	Bales Per Acre										
Yield	1.00	1.02	1.04	1.08	1.11	1.13	1.16	1.18	1.20	1.23	1.26
	Thousand Bales										
Domestic Supply	30384.00	33010.07	34172.31	35713.53	36891.50	37908.23	38817.84	39713.47	40388.06	41412.79	42570.57
Production	23000.00	23391.37	24363.11	25600.44	26652.53	27614.80	28417.91	29210.72	29876.53	30777.92	31815.15
Beginning Stock	7384.00	9618.70	9809.20	10113.09	10238.96	10293.42	10399.93	10502.75	10511.54	10634.87	10755.42
Domestic Demand	26767.07	26721.33	27436.91	28412.39	29172.24	30037.98	30718.86	31084.36	31677.63	32512.41	33439.80
Mill Utilization	17148.36	16912.13	17323.82	18173.43	18878.82	19638.05	20216.11	20572.82	21042.76	21756.99	22792.61
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	9618.70	9809.20	10113.09	10238.96	10293.42	10399.93	10502.75	10511.54	10634.87	10755.42	10647.19
Trade											
Imports	500.42	622.58	702.82	756.35	791.53	814.51	828.90	837.67	842.48	844.68	845.00
Exports	4117.35	6911.33	7438.23	8057.49	8510.79	8684.76	8927.88	9466.79	9552.92	9745.06	9975.77

**Pakistan Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	7165.80	7091.67	7121.25	7138.83	7179.52	7217.44	7250.94	7279.82	7304.41	7325.44	7343.16
	Bales Per Acre										
Yield	1.31	1.32	1.34	1.35	1.38	1.41	1.41	1.42	1.42	1.44	1.46
	Thousand Bales										
Domestic Supply	13880.00	13992.43	14212.85	14354.99	14601.66	14845.08	14931.64	15013.53	15090.50	15240.56	15388.03
Production	9400.00	9362.11	9537.91	9666.23	9907.76	10148.77	10233.48	10313.92	10389.66	10538.67	10685.13
Beginning Stock	4480.00	4630.32	4674.94	4688.76	4693.90	4696.31	4698.16	4699.61	4700.85	4701.89	4702.90
Domestic Demand	16088.31	15767.21	16071.11	16213.12	16523.16	16941.04	17042.12	17193.31	17506.98	18005.96	18328.03
Mill Utilization	11458.00	11092.27	11382.35	11519.22	11826.85	12242.88	12342.51	12492.46	12805.08	13303.06	13624.22
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	4630.32	4674.94	4688.76	4693.90	4696.31	4698.16	4699.61	4700.85	4701.89	4702.90	4703.82
Trade											
Imports	2605.76	2168.65	2268.34	2276.38	2349.87	2531.77	2554.97	2631.95	2877.90	3235.77	3420.45
Exports	397.45	393.87	410.08	418.24	428.37	435.80	444.49	452.17	461.43	470.37	480.44

**South Korea Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47
	Bales Per Acre										
Yield	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Thousand Bales										
Domestic Supply	239.00	235.81	233.53	234.65	236.53	215.46	200.54	189.72	182.11	176.63	172.84
Production	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Beginning Stock	238.00	234.81	232.53	233.65	235.53	214.46	199.54	188.72	181.11	175.63	171.84
Domestic Demand	1109.58	1080.30	1065.42	1038.67	990.97	957.50	923.79	893.56	869.31	856.09	851.74
Mill Utilization	874.77	847.77	831.77	803.14	776.51	757.96	735.07	712.45	693.69	684.25	682.54
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	234.81	232.53	233.65	235.53	214.46	199.54	188.72	181.11	175.63	171.84	169.19
Trade											
Imports	880.58	854.50	841.89	814.02	764.44	752.04	733.25	713.85	697.20	689.46	688.90
Exports	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00

**China Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	14825.80	14468.04	14644.97	14800.36	14953.86	14983.07	15123.57	15134.35	15136.52	15142.51	15385.58
	Bales Per Acre										
Yield	2.46	2.47	2.52	2.55	2.57	2.58	2.64	2.67	2.72	2.74	2.77
	Thousand Bales										
Domestic Supply	56618.01	53836.13	54755.83	56587.28	56829.22	57163.52	58802.68	60265.82	61147.34	61901.84	63071.35
Production	36500.01	35776.55	36847.81	37765.35	38410.03	38724.83	39924.00	40455.62	41175.20	41433.90	42579.78
Beginning Stock	20118.00	18059.58	17908.02	18821.93	18419.19	18438.70	18878.68	19810.19	19972.14	20467.93	20491.57
Domestic Demand	66781.14	64616.30	67327.17	71038.26	73387.64	74269.25	76847.82	79657.88	81277.14	82298.65	83548.06
Mill Utilization	48721.56	46708.28	48505.24	52619.07	54948.94	55390.57	57037.63	59685.74	60809.20	61807.08	62185.45
Loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	18059.58	17908.02	18821.93	18419.19	18438.70	18878.68	19810.19	19972.14	20467.93	20491.57	21362.62
Trade											
Imports	7778.13	10890.57	12677.15	14552.21	16655.05	17197.76	18132.58	19474.92	20208.06	20470.47	20545.79
Exports	115.00	110.41	105.81	101.22	96.63	92.04	87.44	82.85	78.26	73.66	69.07



**Other Asia Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
			Thousand Acres								
Area	1111.93	1132.74	1149.86	1164.16	1175.55	1184.81	1192.21	1198.24	1203.08	1207.12	1214.01
			Bales Per Acre								
Yield	0.50	0.50	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52
			Thousand Bales								
Domestic Supply	2261.00	2306.12	2354.74	2405.23	2458.78	2513.54	2569.27	2624.68	2679.51	2729.99	2778.31
Production	558.00	571.29	582.82	593.00	601.76	609.48	616.29	622.42	627.96	630.07	633.66
Beginning Stock	1703.00	1734.83	1771.92	1812.24	1857.02	1904.06	1952.98	2002.26	2051.54	2099.92	2144.65
Domestic Demand	9701.17	11324.76	11610.70	11738.83	11836.81	12957.45	13719.22	14357.82	14871.83	15395.13	16134.15
Mill Utilization	7966.34	9552.84	9798.46	9881.80	9932.74	11004.46	11716.96	12306.28	12771.90	13250.49	13946.89
Ending Stock	1734.83	1771.92	1812.24	1857.02	1904.06	1952.98	2002.26	2051.54	2099.92	2144.65	2187.25
Trade											
Imports	7586.41	9166.58	9405.37	9481.97	9525.70	10590.10	11295.09	11876.93	12335.11	12806.83	13496.64
Exports	146.24	147.94	149.41	148.38	147.67	146.20	145.13	143.79	142.79	141.69	140.80

**Brazil Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	2186.80	2157.16	2348.28	2527.83	2718.84	2873.72	3013.74	3137.22	3245.05	3338.97	3419.33
	Bales Per Acre										
Yield	2.65	2.70	2.72	2.74	2.77	2.80	2.84	2.88	2.93	2.97	3.00
	Thousand Bales										
Domestic Supply	12051.00	11484.93	12079.47	12697.49	13396.54	14037.23	14674.72	15299.45	15908.67	16479.06	17008.16
Production	5800.00	5833.01	6390.31	6936.55	7536.53	8059.39	8563.05	9041.72	9496.37	9906.96	10272.82
Beginning Stock	6251.00	5651.92	5689.16	5760.94	5860.01	5977.84	6111.68	6257.74	6412.30	6572.10	6735.35
Domestic Demand	9959.32	9586.63	9655.90	9942.77	10184.95	10460.67	10736.43	10803.82	11054.82	11228.54	11528.36
Mill Utilization	4307.40	3897.47	3894.96	4082.76	4207.11	4348.99	4478.70	4391.52	4482.72	4493.20	4627.86
Loss Demand	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	5651.92	5689.16	5760.94	5860.01	5977.84	6111.68	6257.74	6412.30	6572.10	6735.35	6900.50
Trade											
Imports	350.23	294.37	370.27	431.94	482.28	523.35	556.40	582.72	603.13	618.51	629.46
Exports	2441.91	2192.68	2793.84	3186.66	3693.87	4099.91	4494.69	5078.35	5456.98	5869.03	6109.25

**Other Latin America Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	657.28	658.26	670.84	693.10	713.99	734.95	752.78	769.68	784.62	799.41	813.61
	Bales Per Acre										
Yield	1.13	1.14	1.14	1.14	1.15	1.15	1.16	1.16	1.16	1.16	1.16
	Thousand Bales										
Domestic Supply	1437.00	1428.75	1438.54	1462.30	1537.31	1574.22	1603.13	1629.02	1652.84	1672.64	1691.35
Production	745.00	748.52	765.29	793.22	819.74	846.49	869.79	892.13	912.32	929.52	946.04
Beginning Stock	692.00	680.23	673.25	669.08	717.57	727.73	733.34	736.89	740.52	743.12	745.31
Domestic Demand	2266.22	2253.21	2089.58	2150.95	2208.45	2215.92	2364.86	2404.18	2448.35	2437.49	2481.07
Mill Utilization	1585.99	1579.96	1420.50	1433.38	1480.72	1482.58	1627.97	1663.66	1705.22	1692.18	1734.23
Ending Stock	680.23	673.25	669.08	717.57	727.73	733.34	736.89	740.52	743.12	745.31	746.85
Trade											
Imports	941.74	1097.13	1091.54	1117.40	1138.89	1171.14	1198.71	1231.13	1259.24	1289.80	1317.64
Exports	112.52	272.67	440.50	428.75	467.76	529.44	436.98	455.96	463.74	524.96	527.91



**United States Fiber Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Area</b>	Thousand Acres										
Delta Area Harvested	1847.62	1853.45	1855.93	1854.35	1824.60	1824.14	1824.02	1824.27	1825.08	1826.01	1826.87
Southeast Area Harvested	1930.02	1948.33	1965.66	1959.10	1959.68	1960.25	1960.90	1964.47	1971.04	1979.80	1984.37
Southwest Irrigated Area Harvested	2105.14	2282.70	2419.05	2402.43	2394.26	2382.95	2378.22	2375.94	2378.53	2382.41	2388.08
Southwest dryland Area Harvested	1439.38	1553.70	1617.99	1652.04	1649.88	1646.11	1645.13	1645.59	1648.83	1648.96	1650.65
West Area Harvested	183.65	189.73	195.31	199.67	203.10	205.72	207.71	209.23	210.38	211.53	212.70
Total Area	7757.79	7827.91	8053.95	8067.59	8031.53	8019.18	8015.97	8019.51	8033.86	8048.70	8062.67
<b>Yield</b>	Bales Per Acre										
Delta Yield	1.82	1.85	1.87	1.89	1.90	1.92	1.93	1.95	1.96	1.98	2.01
Southeast Yield	1.54	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66
Southwest Irrigated Yield	1.95	1.98	2.00	2.03	2.05	2.07	2.09	2.12	2.14	2.15	2.16
Southwest Dryland Yield	0.84	0.85	0.86	0.86	0.86	0.87	0.87	0.88	0.88	0.89	0.90
West Yield	4.90	4.97	4.99	5.01	5.02	5.04	5.05	5.07	5.09	5.10	5.11
Total Yield	1.69	1.79	1.81	1.82	1.84	1.85	1.87	1.88	1.89	1.91	1.92
	Thousand Bales										
Domestic Supply	23163.75	20987.26	21047.46	20952.68	20897.12	20887.16	20921.35	20972.88	21024.98	21071.02	21090.15
Delta Production	3361.12	3425.60	3475.12	3505.85	3475.84	3499.17	3524.59	3552.75	3584.50	3624.12	3663.43
Southeast Production	2968.19	3055.94	3108.68	3123.29	3139.91	3153.94	3169.97	3193.45	3222.67	3257.30	3284.88
Southwest Irrigated Production	4110.03	4512.92	4841.54	4865.18	4904.85	4936.15	4981.82	5032.88	5094.65	5127.46	5164.30
Southwest Dryland Production	1205.34	1320.31	1384.25	1421.52	1426.45	1429.65	1435.18	1442.70	1453.00	1470.30	1489.07
West Production	899.07	942.12	974.46	1000.10	1020.38	1036.57	1049.54	1060.72	1070.24	1078.24	1086.44
ELS Production	576.00	768.82	776.41	785.87	787.04	788.94	789.12	789.80	792.55	794.66	799.62
Total Production	13119.75	14025.71	14560.46	14701.82	14754.46	14844.43	14950.23	15072.29	15217.60	15352.09	15487.75
Beginning Stock	10044.00	6961.55	6487.00	6250.86	6142.65	6042.73	5971.12	5900.59	5807.38	5718.93	5602.40
Domestic Demand	10975.48	10504.83	10248.92	9933.80	9686.47	9542.25	9385.92	9242.33	9102.15	9008.84	8853.55
Mill Utilization	4013.93	4017.83	3998.05	3791.15	3643.74	3571.13	3485.33	3434.95	3383.22	3406.43	3325.53
Ending Stock	6961.55	6487.00	6250.86	6142.65	6042.73	5971.12	5900.59	5807.38	5718.93	5602.40	5528.02
	1926.69	1928.56	1919.07	1819.75	1748.99	1714.14	1672.96	1648.78	1623.94	1635.09	1596.25
<b>Trade</b>											
Imports	8.16	44.22	52.63	54.04	53.52	53.16	52.26	53.18	53.36	55.27	54.49
Exports	12196.43	10526.65	10851.17	11072.92	11264.18	11398.07	11587.70	11783.72	11976.19	12117.45	12291.10
Cotton Farm Price	49.38	52.33	56.00	56.45	57.20	57.27	57.53	58.59	59.42	61.34	61.55

**Africa Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Egypt</b>											
	Thousand Acres										
Area	321.23	313.90	308.47	306.46	305.30	329.99	353.10	374.17	392.93	409.86	423.45
	Bales Per Acre										
Yield	1.48	1.50	1.53	1.55	1.58	1.60	1.62	1.64	1.66	1.66	1.65
	Thousand Bales										
Domestic Supply	1136.00	995.23	980.86	971.87	965.49	1002.20	1039.82	1077.57	1114.42	1142.10	1164.27
Production	475.00	471.42	471.21	476.09	480.91	527.15	571.16	612.66	650.93	678.72	699.92
Beginning Stock	661.00	523.81	509.65	495.78	484.57	475.05	468.66	464.92	463.50	463.38	464.36
Domestic Demand	1247.23	1277.08	1319.73	1311.35	1281.22	1252.20	1258.82	1282.51	1302.47	1354.51	1439.00
Mill Utilization	723.42	767.43	823.95	826.78	806.17	783.54	793.91	819.01	839.09	890.15	973.11
loss											
Ending Stock	523.81	509.65	495.78	484.57	475.05	468.66	464.92	463.50	463.38	464.36	465.89
Trade											
Imports	449.64	451.50	454.45	456.85	459.11	460.71	461.88	462.69	463.45	464.12	464.84
Exports	338.41	169.65	115.57	117.37	143.38	210.71	242.88	257.76	275.40	251.70	190.11
<b>Western Africa</b>											
	Thousand Acres										
Area	2532.74	2446.37	2549.72	2690.56	2908.56	3116.56	3210.16	3268.68	3302.62	3336.49	3366.80
	Bales Per Acre										
Yield	0.74	0.79	0.84	0.89	0.93	0.98	1.03	1.07	1.12	1.16	1.19
	Thousand Bales										
Domestic Supply	2515.00	2619.63	2678.91	2925.32	3290.72	3727.82	3971.92	4215.89	4441.47	4623.20	4781.46
Production	1885.00	1935.57	2137.04	2381.40	2710.89	3051.08	3293.41	3506.91	3698.37	3860.33	4020.56
Beginning Stock	630.00	684.06	541.87	543.92	579.83	676.75	678.51	708.98	743.10	762.87	760.90
Domestic Demand	756.59	603.79	607.87	647.75	751.39	766.73	812.34	865.49	909.41	943.37	1025.36
Mill Utilization	72.53	61.92	63.94	67.92	74.64	88.23	103.37	122.39	146.54	182.47	236.04
Ending Stock	684.06	541.87	543.92	579.83	676.75	678.51	708.98	743.10	762.87	760.90	789.32
Trade											
Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exports	1758.41	2015.84	2071.04	2277.57	2539.33	2961.09	3159.57	3350.39	3532.06	3679.83	3756.10
<b>Other Africa</b>											
	Thousand Acres										
Area	6978.01	7128.86	7311.64	7516.86	7697.03	7846.87	7965.66	8063.77	8142.02	8210.58	8395.80
	Bales Per Acre										
Yield	0.47	0.47	0.48	0.48	0.49	0.49	0.51	0.54	0.54	0.56	0.58
	Thousand Bales										
Domestic Supply	4799.00	5190.03	5353.24	5521.04	5670.19	5790.81	6044.51	6290.94	6425.12	6627.43	6924.57
Production	3262.00	3364.09	3482.74	3613.78	3734.50	3841.95	4083.46	4319.36	4397.34	4586.99	4846.52
Beginning Stock	1537.00	1825.94	1870.50	1907.26	1935.69	1948.86	1961.05	1971.58	2027.78	2040.44	2078.05
Domestic Demand	3582.36	3615.99	3637.10	3705.24	3750.34	3772.38	3785.89	3836.87	3840.57	3861.07	3905.90
Mill Utilization	1756.42	1745.49	1729.84	1769.55	1801.48	1811.34	1814.31	1809.09	1800.13	1783.02	1758.77
Ending Stock	1825.94	1870.50	1907.26	1935.69	1948.86	1961.05	1971.58	2027.78	2040.44	2078.05	2147.12
Trade											
Imports	739.81	467.19	370.50	515.22	517.30	460.19	233.91	177.07	149.99	147.55	200.98
Exports	1956.45	2041.24	2086.64	2331.02	2437.15	2478.62	2492.52	2631.14	2734.54	2913.91	3219.65



**Middle East Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Turkey</b>											
			Thousand Acres								
Area	938.97	928.07	985.62	1024.97	1071.02	1098.00	1107.94	1111.62	1112.00	1112.81	1113.44
			Bales Per Acre								
Yield	2.45	2.46	2.47	2.52	2.57	2.58	2.59	2.60	2.62	2.62	2.62
			Thousand Bales								
Domestic Supply	4249.00	3847.73	3733.80	3755.34	3852.36	3910.00	3927.18	3974.14	4032.41	4078.06	4123.93
Production	2300.00	2283.63	2439.17	2587.48	2755.32	2836.72	2873.90	2895.67	2908.88	2911.58	2913.73
Beginning Stock	1949.00	1564.11	1294.64	1167.86	1097.04	1073.29	1053.29	1078.47	1123.53	1166.48	1210.20
Domestic Demand	6581.99	6257.06	6096.95	6034.81	5996.91	6016.54	6044.30	6147.64	6221.89	6357.56	6457.89
Mill Utilization	5017.89	4962.42	4929.09	4937.77	4923.62	4963.26	4965.83	5024.12	5055.41	5147.36	5209.03
Ending Stock	1564.11	1294.64	1167.86	1097.04	1073.29	1053.29	1078.47	1123.53	1166.48	1210.20	1248.86
Trade											
Imports	2532.99	2609.32	2563.14	2479.46	2344.54	2306.54	2317.11	2373.50	2389.48	2479.50	2533.96
Exports	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
<b>Other Middle East</b>											
			Thousand Acres								
Area	906.84	906.39	906.78	907.86	908.85	909.87	910.76	911.64	924.77	947.18	979.51
			Bales Per Acre								
Yield	1.70	1.73	1.75	1.77	1.80	1.82	1.85	1.87	1.89	1.89	1.89
			Thousand Bales								
Domestic Supply	2096.00	2102.62	2126.66	2157.27	2189.86	2223.14	2256.47	2289.82	2346.42	2406.16	2485.63
Production	1545.00	1565.59	1587.65	1610.95	1634.14	1657.42	1680.52	1703.64	1749.99	1792.40	1853.58
Beginning Stock	551.00	537.03	539.01	546.32	555.73	565.72	575.95	586.18	596.43	613.76	632.05
Domestic Demand	2037.92	2075.65	2085.40	2132.42	2134.44	2144.84	2196.49	2275.83	2274.48	2298.66	2347.81
Mill Utilization	1500.90	1536.64	1539.08	1576.70	1568.72	1568.88	1610.31	1679.41	1660.72	1666.61	1691.45
Ending Stock	537.03	539.01	546.32	555.73	565.72	575.95	586.18	596.43	613.76	632.05	656.37
Trade											
Imports	326.37	459.22	522.41	596.44	609.12	618.22	706.50	804.25	784.95	778.30	769.92
Exports	384.45	486.19	563.67	621.29	664.54	696.52	766.48	818.24	856.89	885.80	907.73



**Former Soviet Union Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Russia</b>											
	Thousand Acres										
Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bales Per Acre										
Yield	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Thousand Bales										
Domestic Supply	197.00	197.92	194.06	191.54	192.56	194.01	197.22	202.16	208.93	216.86	226.01
Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beginning Stock	197.00	197.92	194.06	191.54	192.56	194.01	197.22	202.16	208.93	216.86	226.01
Domestic Demand	1264.10	1202.44	1197.84	1168.70	1141.60	1125.03	1104.27	1086.72	1072.45	1069.96	1080.16
Mill Utilization	1066.18	1008.38	1006.30	976.14	947.59	927.81	902.12	877.79	855.59	843.95	844.19
Ending Stock	197.92	194.06	191.54	192.56	194.01	197.22	202.16	208.93	216.86	226.01	235.97
Trade											
Imports	1067.10	1004.52	1003.79	977.16	949.04	931.03	907.05	884.56	863.51	853.10	854.15
Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Uzbek</b>											
	Thousand Acres										
Area	3508.77	3433.39	3459.94	3515.34	3550.99	3582.03	3632.46	3646.94	3671.20	3682.82	3690.07
	Bales Per Acre										
Yield	1.43	1.51	1.53	1.55	1.56	1.57	1.58	1.59	1.60	1.60	1.60
	Thousand Bales										
Domestic Supply	6298.00	6850.93	6958.91	7099.62	7227.26	7349.32	7485.59	7541.51	7614.43	7632.29	7642.09
Production	5000.00	5199.61	5293.62	5436.57	5536.47	5630.88	5747.45	5804.69	5878.47	5900.39	5914.70
Beginning Stock	1298.00	1651.32	1665.28	1663.05	1690.79	1718.44	1738.14	1736.81	1735.96	1731.91	1727.39
Domestic Demand	2800.80	2747.25	2677.50	2764.11	2846.39	2877.39	2918.56	2978.81	3001.87	2992.06	2943.55
Mill Utilization	1149.48	1081.96	1014.45	1073.32	1127.94	1139.24	1181.75	1242.86	1269.96	1264.66	1223.28
Ending Stock	1651.32	1665.28	1663.05	1690.79	1718.44	1738.14	1736.81	1735.96	1731.91	1727.39	1720.27
Trade											
Imports	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Exports	3502.20	4108.68	4286.41	4340.51	4385.87	4476.93	4572.03	4567.69	4617.56	4645.24	4703.55
<b>Other FSU</b>											
	Thousand Acres										
Area	2653.82	2606.57	2579.98	2575.74	2576.17	2584.67	2596.52	2614.02	2634.43	2660.57	2773.17
	Bales Per Acre										
Yield	0.91	0.92	0.92	0.93	0.93	0.94	0.94	0.95	0.96	0.96	0.96
	Thousand Bales										
Domestic Supply	3643.00	3769.33	3796.81	3815.76	3836.96	3866.31	3901.44	3943.67	3990.99	4030.27	4150.93
Production	2415.00	2386.11	2376.78	2387.87	2403.06	2425.87	2451.88	2483.42	2517.91	2542.97	2651.76
Beginning Stock	1228.00	1383.21	1420.04	1427.89	1433.90	1440.44	1449.56	1460.25	1473.08	1487.30	1499.17
Domestic Demand	1992.38	2064.99	2160.86	2199.24	2209.27	2236.73	2224.52	2206.27	2188.60	2337.96	2540.81
Mill Utilization	609.17	644.95	732.97	765.34	768.83	787.17	764.27	733.19	701.31	838.78	1005.98
Ending Stock	1383.21	1420.04	1427.89	1433.90	1440.44	1449.56	1460.25	1473.08	1487.30	1499.17	1534.83
Trade											
Imports	12.12	26.40	277.30	361.92	395.21	406.46	380.67	333.00	383.84	532.60	647.95
Exports	1662.74	1704.34	1913.25	1978.45	2022.90	2036.04	2057.58	2070.40	2186.22	2224.91	2258.07

**World Cotton Supply and Utilization**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Thousand Acres										
Area	76883.07	76384.60	77691.05	78909.53	80184.08	81179.90	82030.50	82608.02	83052.21	83540.87	84674.68
	Bales Per Acre										
Yield	1.43	1.45	1.48	1.51	1.53	1.55	1.57	1.60	1.62	1.64	1.66
	Thousand bales										
Domestic Supply	172229.66	170540.34	174067.45	179023.45	182458.97	185750.14	190087	194204.59	197427.78	200768.48	204662.39
Production	109916.66	110963.40	115051.74	118931.90	122448.85	125465.89	129065.41	131878.80	134585.24	137005.73	140487.62
Beginning Stock	62313.00	59576.94	59015.71	60091.56	60010.12	60284.26	61021.59	62325.79	62842.54	63762.75	64174.77
Domestic Demand	173323.20	170535.45	174062.56	179018.58	182454.11	185745.29	190082.16	194199.76	197422.96	200763.66	204657.58
Mill Utilization	113746.25	111519.74	113971.01	119008.46	122169.86	124723.70	127756.37	131357.22	133660.21	136588.89	139335.84
Ending Stock	59576.94	59015.71	60091.56	60010.12	60284.26	61021.59	62325.79	62842.54	63762.75	64174.77	65321.73
Trade	31463.01	34270.99	36567.51	38483.50	40280.88	41764.24	43171.74	45083.92	46439.11	47772.78	48896.97
Stock-to-mill use ratio	0.52	0.53	0.53	0.50	0.49	0.49	0.49	0.48	0.48	0.47	0.47
	U.S. Cents per Pound										
<b>Price</b>											
Cotton A-index	60.47	65.59	70.77	71.88	73.51	73.76	74.72	75.17	76.25	77.13	78.44



TEXAS TECH UNIVERSITY

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