

**WORLD COTTON OUTLOOK: PROJECTIONS TO 2015/16**  
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**Abstract**

The Global Fibers Model developed at the Cotton Economics Research Institute at Texas Tech University was used to generate 10-year projections of cotton and textile production, mill use, and trade for 24 countries/regions under specified assumptions for macroeconomic variables, weather, and policies/programs, referred to as the baseline. Global results and results for selected major countries are presented here. Results indicate a continued dominance of China in textile production and cotton trade, rising global production of cotton, and shifting cotton export market shares, with the U.S. losing and Brazil gaining.

### **Introduction**

The World Cotton Baseline is a multi-year projection of supply and demand conditions which affect the domestic and world price of cotton, predicated on assumed political, environmental, and economic conditions for the future. Developed in collaboration with the Food and Agricultural Policy Research Institute (FAPRI), the baseline is a useful tool for policy analysis in that it provides a beginning point of reference from which alternative scenarios regarding economic and policy conditions may be considered.

The baseline is estimated using the World Fiber Model developed at Texas Tech University and a set of assumptions discussed below. This medium- to long-range outlook for the U.S. and world cotton market is intended to inform producers, government policy makers, and others interested in the impacts of changing conditions in the world cotton market. The information presented here includes United States Department of Agriculture (USDA) estimates for the 2005/06 marketing year and model forecasts for the period 2006/07 to 2015/16.

The paper is organized as follows: following a discussion of the baseline model and critical assumptions, the global outlook for fibers and cotton is presented; this is followed by projections for the world's leading cotton mill users, the largest cotton exporters, and other cotton producing nations of interest to the U.S. and the world trade situation; after concluding comments, a section of data tables completes the paper.

### **World Fiber Model**

The world fiber model of the Cotton Economics Research Institute includes 24 countries and regions, including all major cotton exporters and importers. Some of the unique characteristics of the model include the incorporation of regional supply responses for cotton (accounting for production area heterogeneity) within some countries, substitutability between cotton and competing fibers, and linkages between raw fiber and the textile manufacturing sectors. Model documentation is provided in Fadiga et al. (2005), Li et al. (2005), and Pan et al. (2005).

For a representative country, the model includes supply, demand, ending stocks, and market equilibrium conditions for both cotton and man-made fibers. The cotton A-index, domestic cotton price, cotton textile price index, non-cotton textile price index, farm price, and polyester price are endogenously solved by respectively equalizing world exports and imports. A two-step procedure is used for estimating fiber demand that connects textile output to fiber inputs. The first step involves the estimation of total domestic textile production from which is derived the demand for all fibers. In the second step, total domestic textile production (total fiber demand) is allocated among the various fibers. Thus, demand for each fiber type (cotton, man-made, and wool) can be estimated according to its utilization in the textile production process. It is important to note that total fiber mill use is a residual of textile fiber consumption and textile fiber net trade.

Cotton production is modeled using separate acreage and yield relationships. Cotton production is a function of the previous year's cotton net returns and the relative net returns of competing crops. Man-made fiber production is modeled using estimations of capacity and utilization. The capacity and utilization equations depend on the man-made fiber price and petroleum spot price. Imports and exports are functions of domestic price, international price (A-index), exchange rates, tariff rates, and quota restrictions.

### **Baseline Assumptions**

The World Cotton Outlook is founded on several baseline assumptions regarding general macroeconomic factors, weather, and agricultural and trade policy. The economic variables incorporated in the model are provided by FAPRI and include changes in such factors as population, exchange rates, and gross domestic product. Baseline estimates are founded on normal weather patterns throughout the projection period. No efforts are made to forecast variations from historical means as regards precipitation or temperature.

Baseline projections assume a continuation of current trade and agricultural policies and programs. For the cotton industry, this includes a continuation of all forms of domestic support as well as border protection measures such as import tariffs. Of particular importance to this baseline outlook are changes to the U.S. Step 2 program. The baseline projections presented here are based on commitments by the United States to eliminate Step 2. Beginning with the 2006/07 marketing year, Step 2 payments are assumed to immediately drop to zero. While the loss of Step 2 payments causes no changes in expected cotton production levels, exports from the U.S. decline slightly and ending stocks begin to increase. For a more complete discussion of this issue see Mohanty et al. (2005) (<http://www.ceri.ttu.edu/policy/index.htm>).

## World Outlook

### Fiber Mill Use and Price

Worldwide consumption of cotton and man-made fibers (mmf) are projected to continue their upward trends; cotton mill use grows by 17% and mmf by 16% by the end of the baseline period compared to current marketing year estimates. Cotton usage relative to mmf is projected to remain relatively constant with cotton usage running 60% that of mmf. Cotton prices are expected to continue to increase in 2006/07, becoming virtually equivalent to mmf prices in that year and remaining so over the course of the forecast.

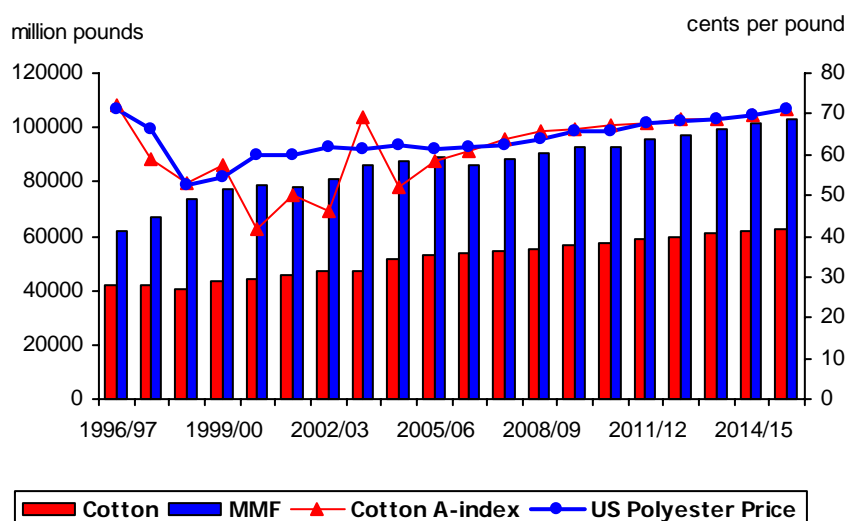


Figure 1. World Fiber Demand and Prices

### Cotton Production and Mill Use

Consumption of cotton at the mill level is projected to increase by 17%, or 20 million bales, over the forecast period. Production is estimated to be more closely in line with mill use in 2005/06 following record levels of production in 2004/05. Mill use exceeds production by 2 million bales in 2006/07 before equilibrating in 2007/08.

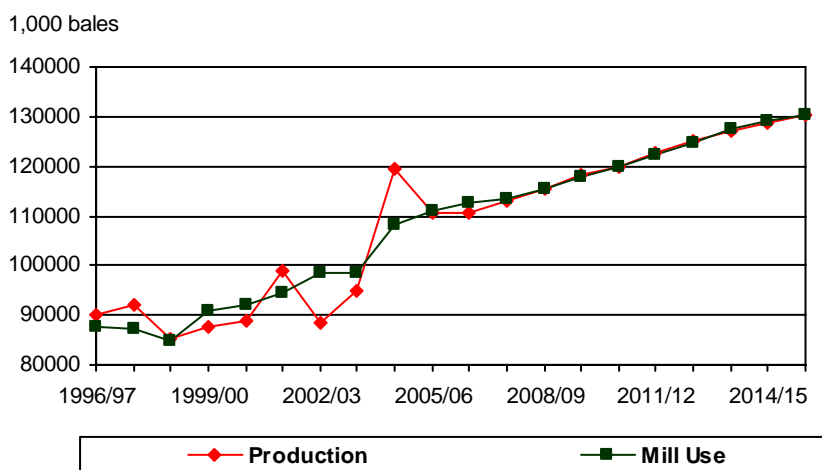


Figure 2. World Cotton Production and Cotton Mill Use

**Harvested Area and Yield per Acre**

Cotton production increases to meet rising mill use demand are expected to come primarily in the form of increased yields per acre rather than widespread increases in harvested area. Worldwide, yields are projected to increase by 0.1 bales per acre (10.6%) over the baseline, or by about 50 pounds of lint per acre. Harvested area is projected to increase by 3 million acres (3.8%) over that of 2004/05.

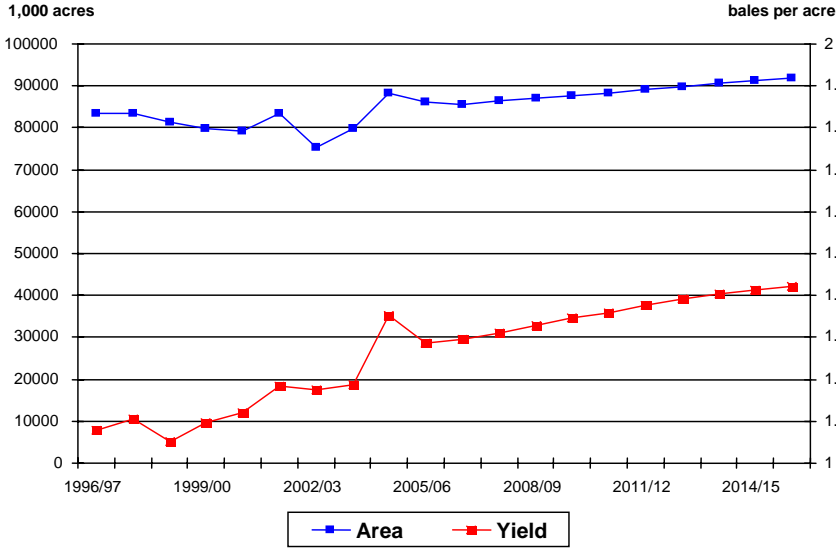


Figure 3. World Cotton Harvested Area (000 acres) and Yield per Acre (bales per acre)

**Cotton Trade**

Trade of cotton increased significantly in 2005/06. This is due to generally large crops in many exporting countries combined with China’s relatively poor crop and textile expansion (China’s imports doubled in 2005/06 compared to the previous year). Trade is projected to decline in 2006/07 as production and use forecasts converge, but not below trend line growth. World cotton trade is expected to increase by about 9 million bales over the forecast period, accounting for roughly ½ of increased mill use.

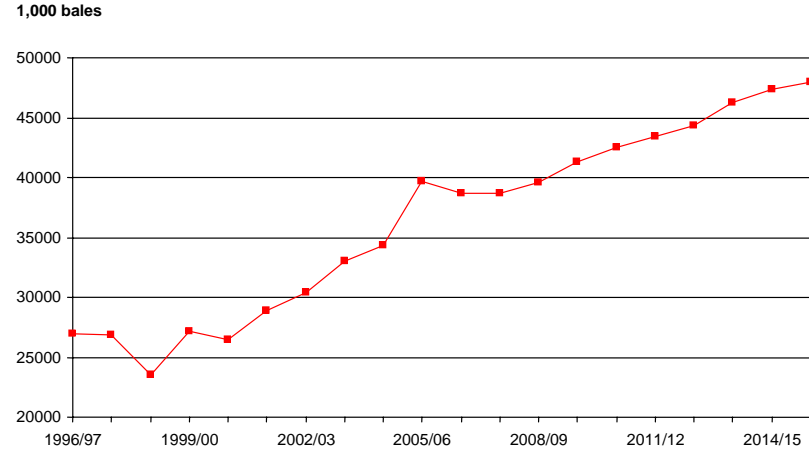


Figure 4. World Cotton Trade

**Cotton Price and Stocks-to-use.**

The stocks-to-use ratio is projected to decline gradually over the next ten years and remain in the low 40% range. Cotton prices continue to rebound from 51.87 cents per pound in 2004/05 to an estimated 71 cents per pound in 2015/06. This represents an increase of 21% over the current marketing year's 58.60 cent price.

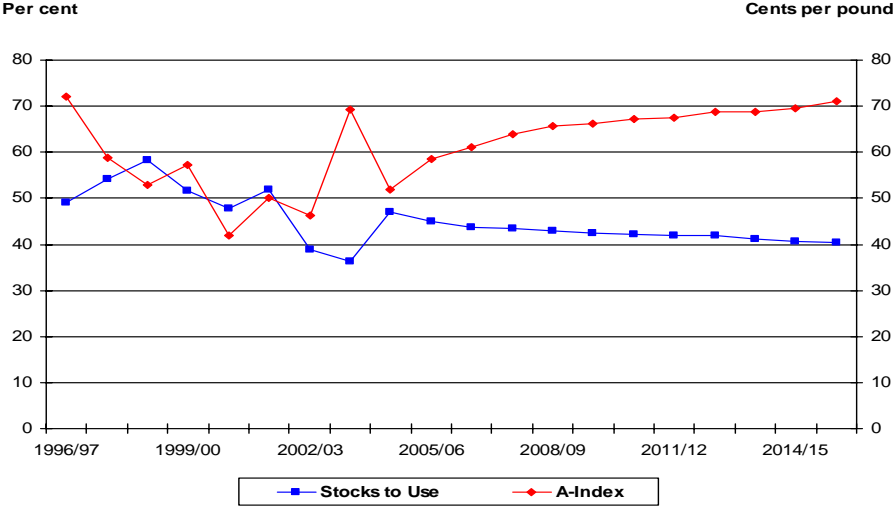


Figure 5. World Cotton Price Versus Stocks-to-use Ratio

**Major Users of Cotton**

For 2005/06, the top five nations in the world in terms of cotton mill use (with market share in parentheses) are China (37%), India (15%), Pakistan (10%), Turkey (6%), and the United States (5%). Since the U.S. is also the world's leading cotton exporter, a discussion of the U.S. cotton situation will be included in the section on major cotton exporters.

**China**

The dominance of the world's largest user and producer of cotton is projected to increase over the next ten years. Trade liberalization in the textile industry has opened market opportunities which are projected to expand further as temporary tariff impositions with the U.S. and E.U. expire in 2008. Cotton mill use in China is expected to grow by about 13 million bales. Production is not expected to keep pace with mill use, resulting in further import growth.

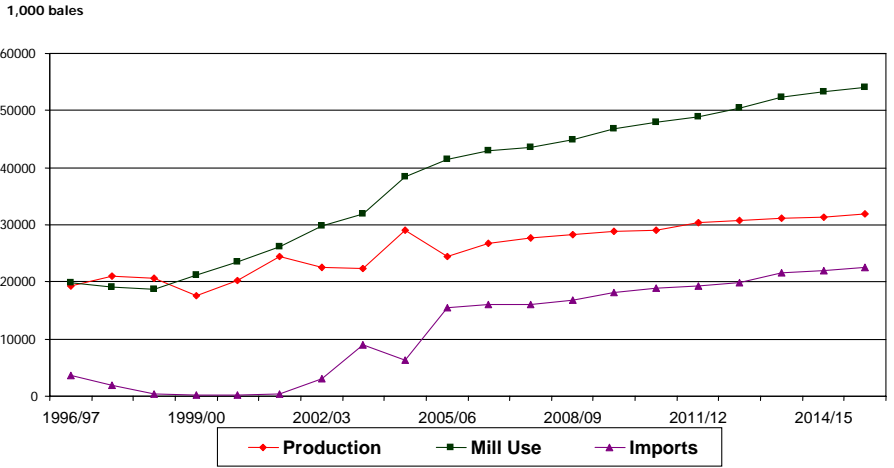


Figure 6. China: Production, Mill Use, and Imports

Harvested area in China is expected to increase in response to higher cotton prices and increased domestic usage. Harvested acres should reach 14.8 million acres in 2015/16 compared to a recent high of 14 million acres in 2004/05. Cotton yield improvement in China is expected to be around 11% over the course of the baseline, increasing from 1.94 bales per acre to 2.15.

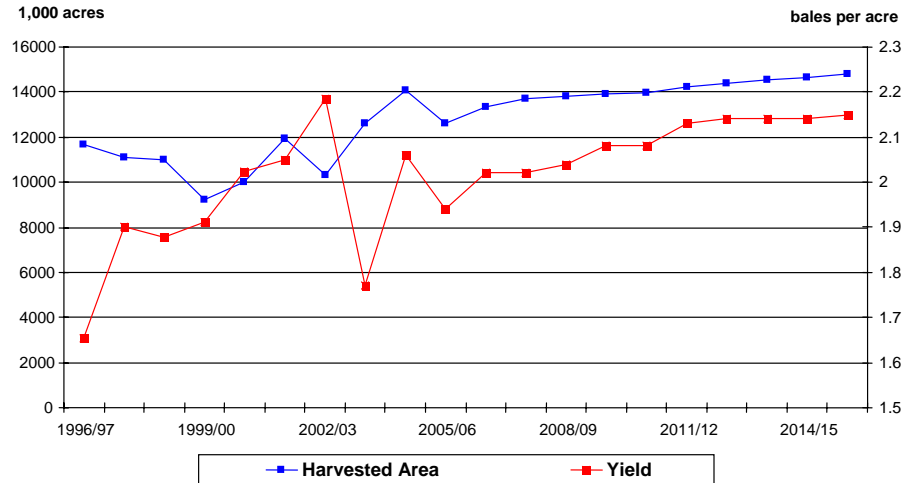


Figure 7. China: Harvested Area and Yield

**India**

India is expected to continue its growth in cotton mill use, utilizing an additional 3 million bales by 2015/16 compared to present levels, a 19% increase. India is projected to continue to import cotton (primarily longer staple varieties from Egypt and the U.S.) while it increases its share of the world cotton export market. Exports from India are expected to more than double from 2005/06 to 2015/16.

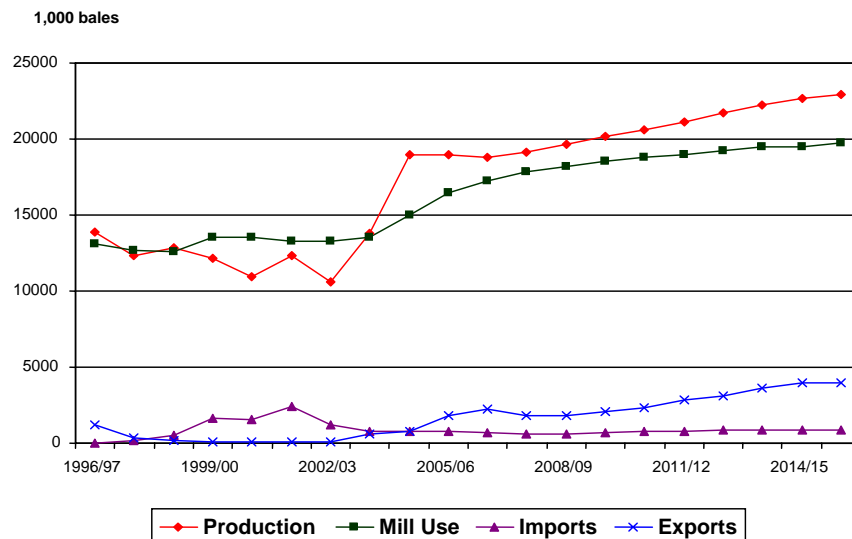


Figure 8. India: Production, Mill Use, Imports, and Exports

Harvested cotton area in India is projected to remain stable at around 23 million acres. The yield estimate for 2005/06 and projection for 2006/07 are down from the 2004/05 crop but are expected to resume a strong upward trend. Significant production increases are projected with the more widespread adoption of technological innovation in cotton farming (e.g., Bt cotton varieties).

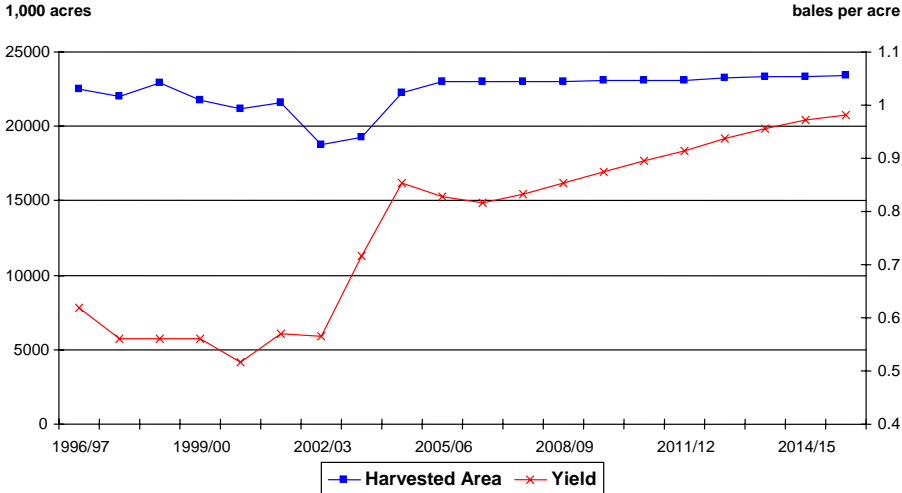


Figure 9. India: Harvested Area and Yield

**Pakistan**

Mill use is projected to continue its steady growth (24%) over the baseline with mills requiring an additional 3 million bales by 2015/16. Production over this period is projected to increase, but by less than 2 million bales. This will result in a doubling of Pakistani cotton imports, from 1.6 million bales to 3.2 million.

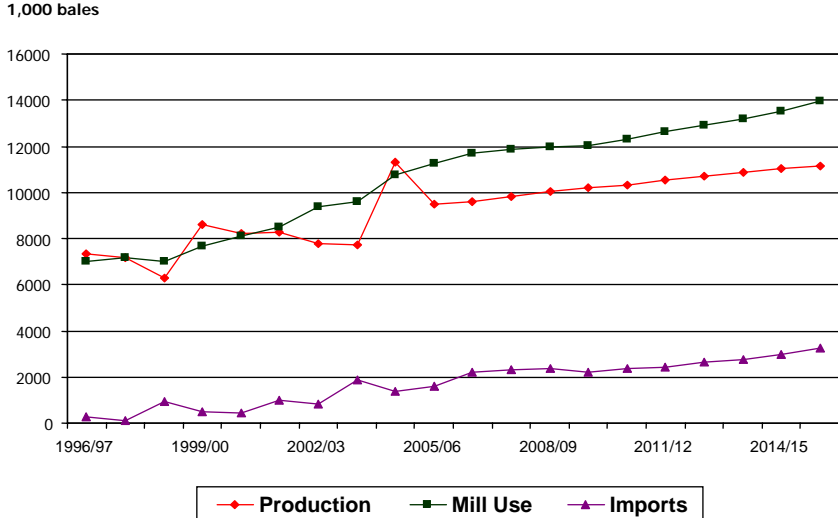


Figure 10. Pakistan: Production, Mill Use and Imports

Harvested area is projected to remain flat at just under 8 million acres. Cotton yields projection is down in 2005/06 following a large crop in 2004/05. Yield improvement is expected to resume its trend line growth in 2006/07.

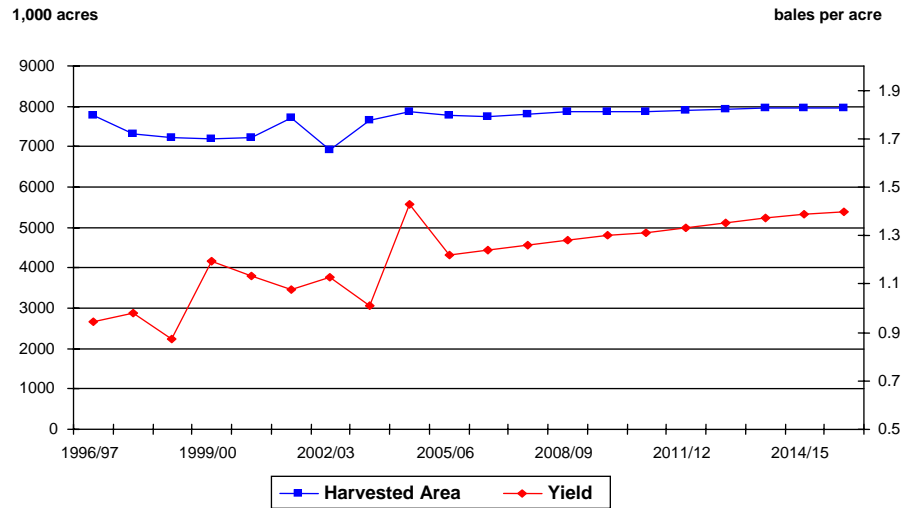


Figure 11. Pakistan: Harvested Area and Yield

**Turkey**

Steady growth is projected for the Turkish textile industry. Cotton use is projected to increase from 7 million bales in 2005/06 to 8 million bales in 2015/16. Production during this time period is expected to be down some 400,000 bales in 2005/06 but gradually increase over the course of the baseline to levels achieved in recent years. Imports thus show a gradual increase to make up for production growth not keeping pace with the growth in mill use.

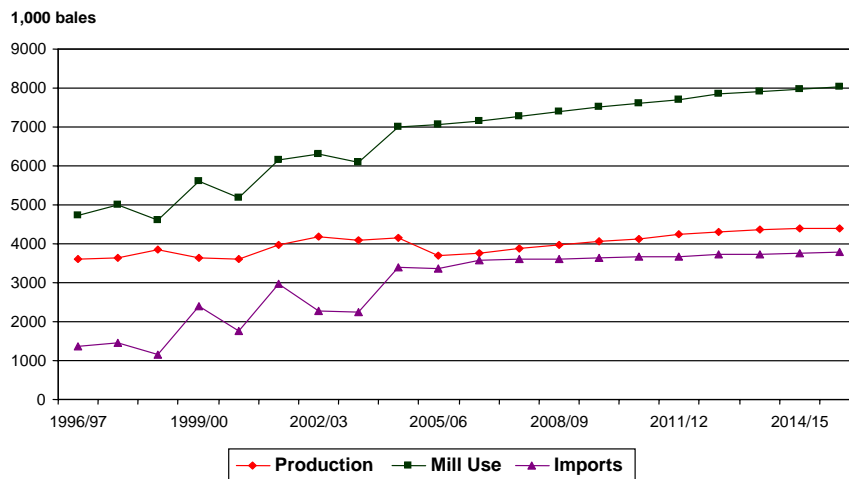


Figure 12. Turkey: Production, Mill Use, and Imports

Harvested area in Turkey is down in 2005/06, from 1.7 to under 1.6 million acres. While area is projected to increase, in ten years it does not achieve levels seen in 2004/05. Trend line yield growth in Turkey results in average yields increasing from 2.38 bales per acre to over 2½ bales.

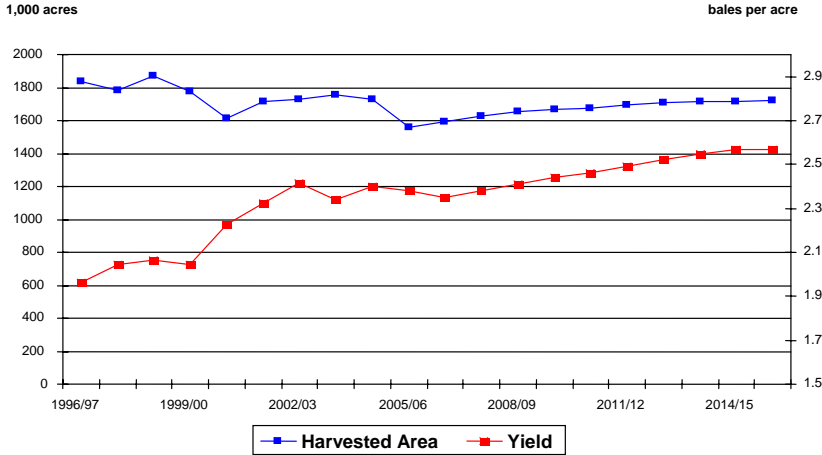


Figure 13. Turkey: Harvested Area and Yield

**Mill Use Summary**

By the end of the baseline, the world’s top five users of cotton are expected to be the same nations in the same order, but a significant shift in market share is anticipated. China’s share of world cotton mill use grows from 37% to 42%. Growth in India, Pakistan, and Turkey are projected to match world growth leaving their market share basically unchanged at 15%, 11%, and 6%, respectively. Declining mill use in the U.S. is projected to drop its share of the world market from 5% to about 4%.

**Major Cotton Exporters**

For 2005/06, the world’s leading cotton exporters (market share in parentheses) are the United States (48%), Uzbekistan (13%), Australia (9%), India (6%), and Brazil (5%). The projection for cotton mill use in India was discussed in the previous section and is not repeated here.

**United States**

Large cotton crops in 2004/05 and 2005/06 are projected to be followed with a return to more normal production levels in 2007/08, then resume their long-term growth trends. Cotton exports are projected to continue to grow in proportion to continued declines in domestic mill use.

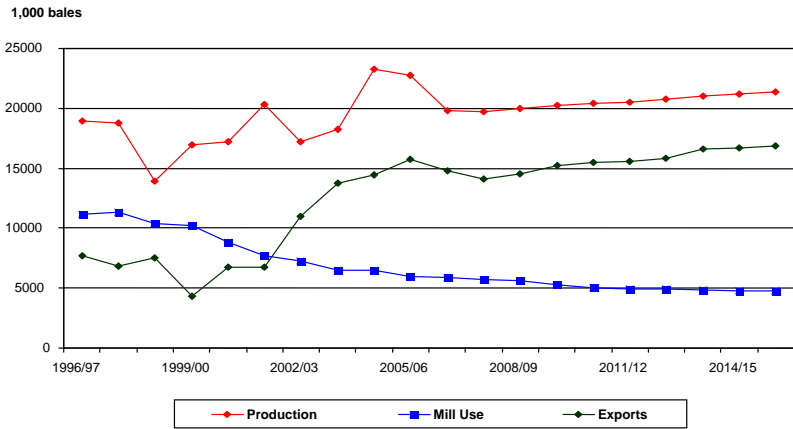


Figure 14. United States: Production, Exports, and Mill Use

Returns from cotton production in the U.S. are not expected to attract a significant amount of new acreage over the course of the baseline. Production increases are projected to be a result of increased yields, although a return to record yields seen in 2004/05 is not anticipated.

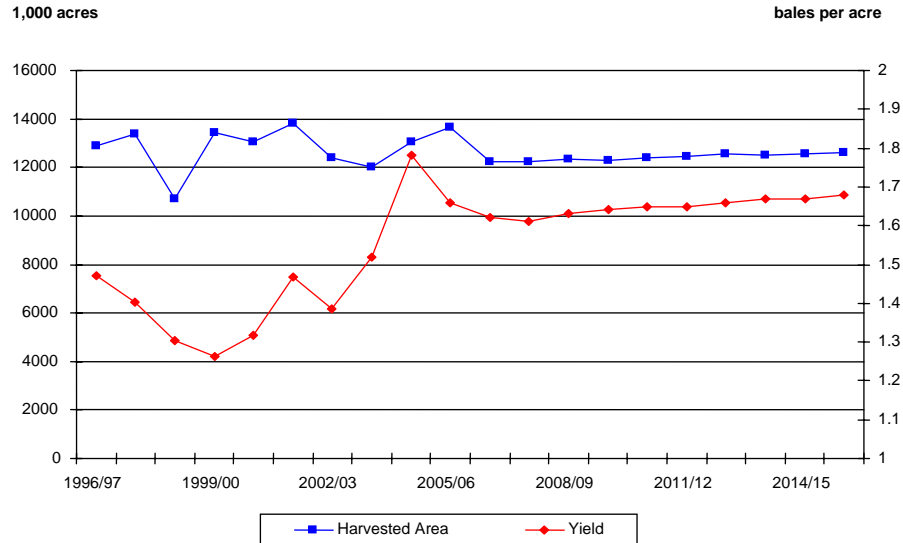


Figure 15. United States: Harvested Area and Yield

Within the U.S., projections are for slight declines in cotton acreage in the Delta, Southeast and West, accompanied by some increase in production in all areas except the West. In the West region, the projected increase in yields is not sufficient to offset the decline in acres.

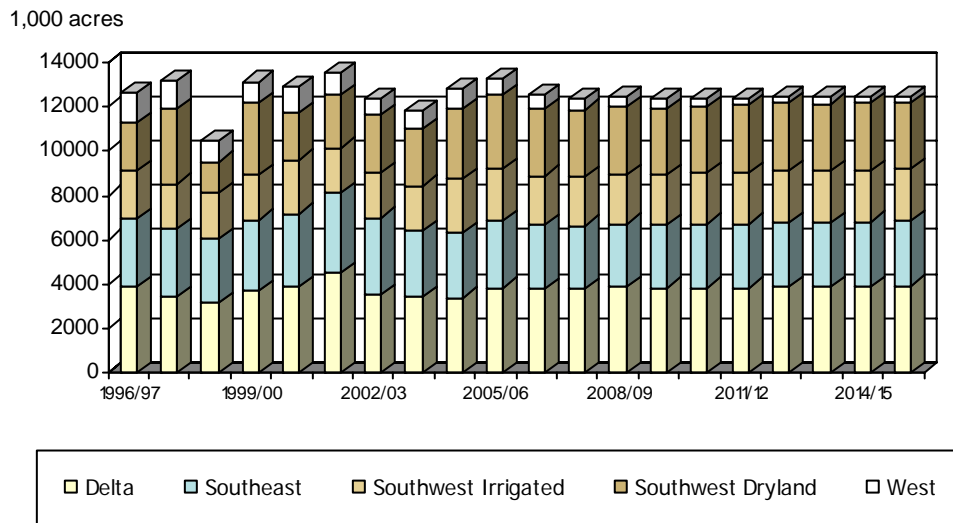


Figure 16. United States: Upland Cotton Harvested Area by Region

**Uzbekistan**

No major changes in cotton production or exports are expected. By the end of the baseline, Uzbekistan is projected to lose its long-standing position as the world's second leading cotton exporter, falling to third behind emerging cotton exporter Brazil.

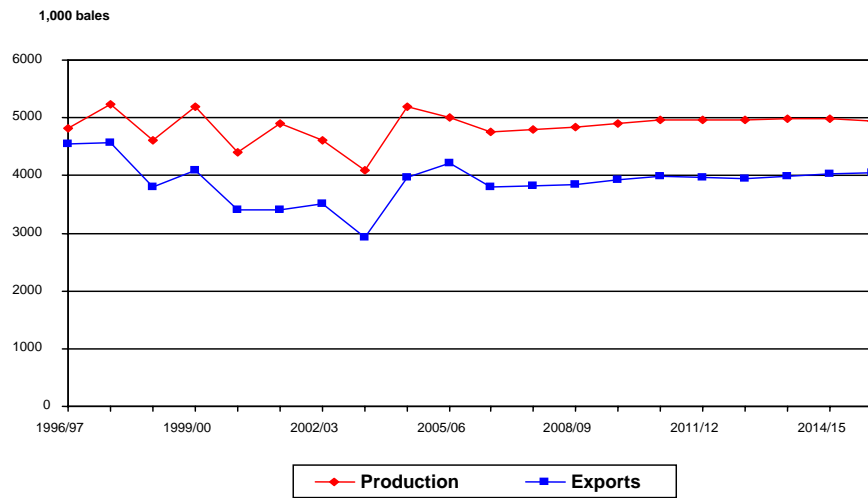


Figure 17. Uzbekistan: Production and Exports

Yields are expected to be down in 2005/06 and 2006/07 following a large crop in 2004/05. Yield increases are projected to offset acreage losses to maintain production at a relatively constant level.

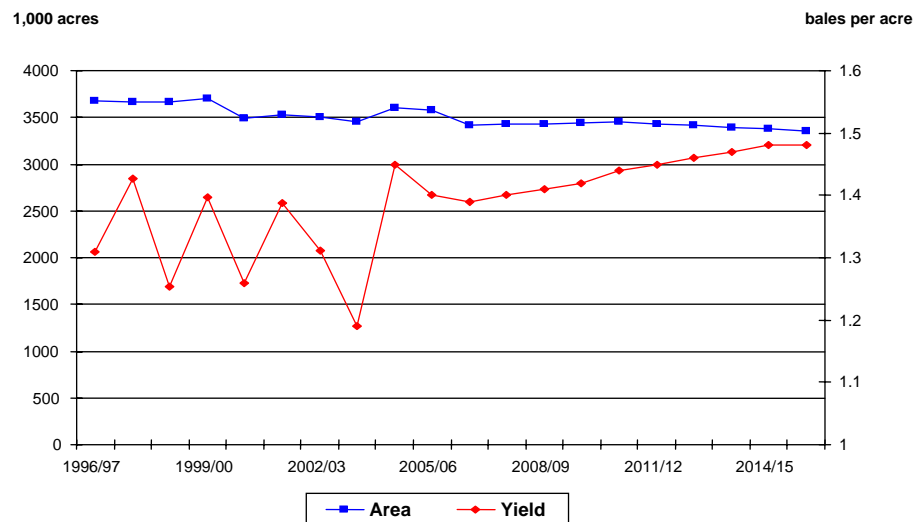


Figure 18. Uzbekistan: Harvested Area and Yield

**Australia**

Australia is projected to continue as a major world exporter of cotton. With a very small domestic textile industry, virtually all of Australia's cotton enters the world market. Production is expected to increase by 1 million bales by 2015/16 over the current marketing year, but stay below the level achieved in 2000/01.

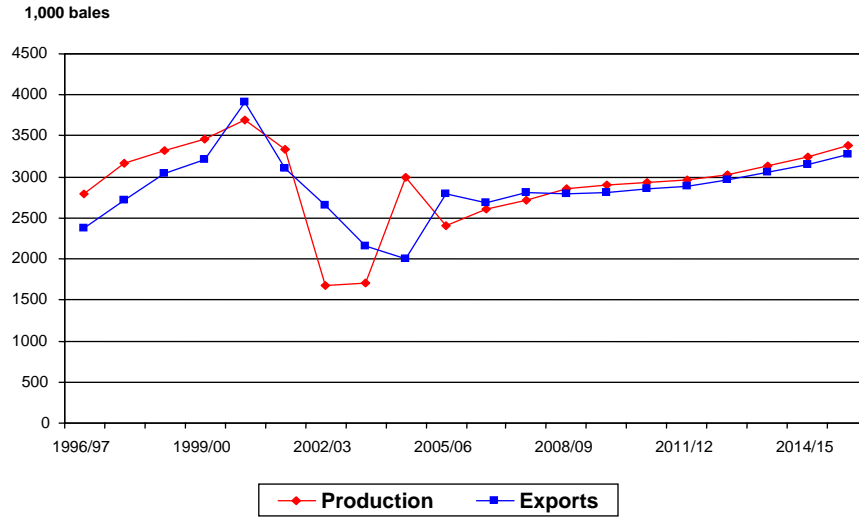


Figure 19. Australia: Production and Exports

Almost all of Australia's cotton is grown on irrigated acreage, meaning that cotton production is directly dependent on water supplies. While 4 bale per acre average yields are possible, cotton harvested area is not expected to return to levels seen in the late 1990s and early 2000s.

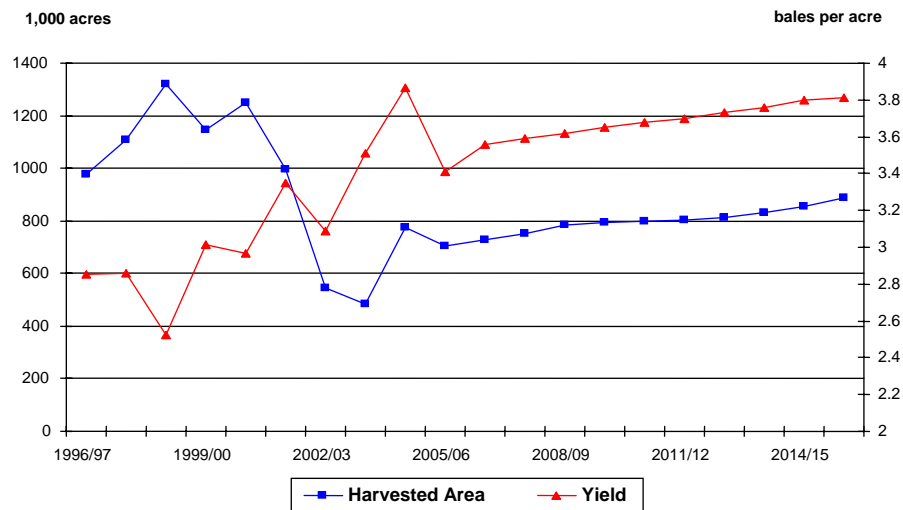


Figure 20. Australia: Harvested Area and Yield

**Brazil**

Brazil continues to emerge as a major force in cotton production. Static mill use combined with a sharp increase in production is expected to rank Brazil only behind the U.S. in cotton exports by 2015/16. From exporting no cotton as recently as 2000, exports are projected to reach almost 5 million bales by the end of the baseline period.

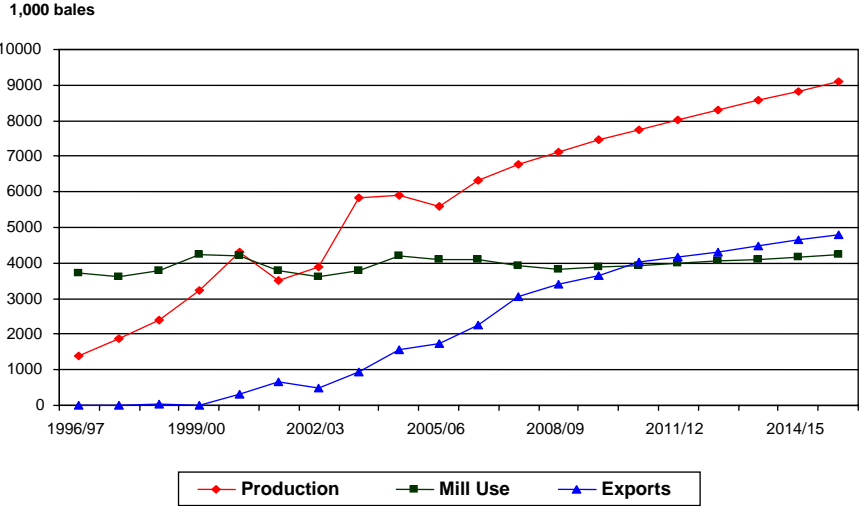


Figure 21. Brazil: Production, Mill Use, and Exports

Cotton’s share of new agricultural production in the frontier regions of Brazil is expected to increase harvested acres from 2.5 million acres today to 4 million by 2015/16, a 60% increase. A combination of newly cultivated, fertile soil with technological innovation has resulted in significant yield gains in Brazil. While this rate of yield growth is not anticipated to continue, yields are projected to be sustained at these higher levels.

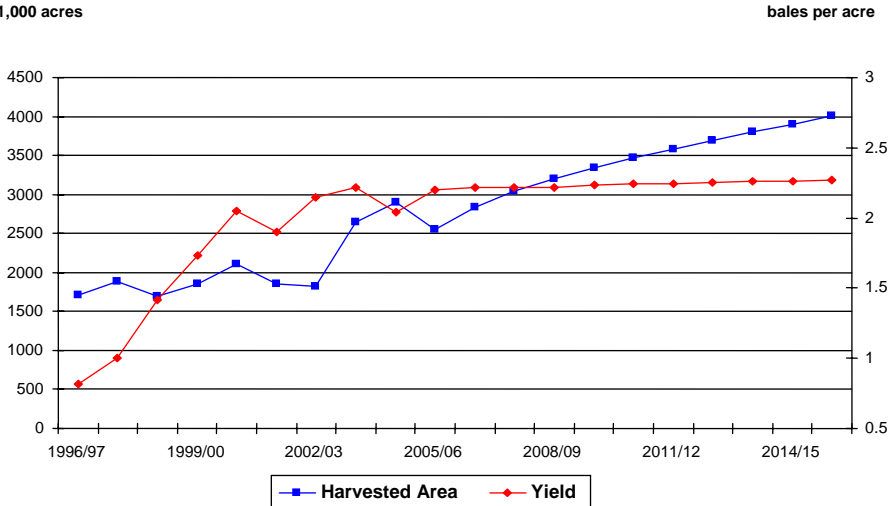


Figure 22. Brazil: Harvested Area and Yield

**Cotton Export Summary**

By the end of the baseline period, Brazil is expected to become the world’s number 2 exporter of raw cotton. India is projected to increase its share of the export market from a current 6% to 10%. The U.S., still number 1 in 2015/16, will likely see its share of exports decrease from 48% to 43%. Likewise, Uzbekistan and Australia are projected to show slight decreases of 3% and 1%, respectively.

**Other Nations of Interest**

**Mexico**

After an initial surge of cotton mill use in Mexico following the signing of the North American Free Trade Agreement (NAFTA), competition from Asia has caused a significant and persistent decline that is projected to continue throughout the baseline. Imports are expected to remain steady as production declines match reduced mill consumption.

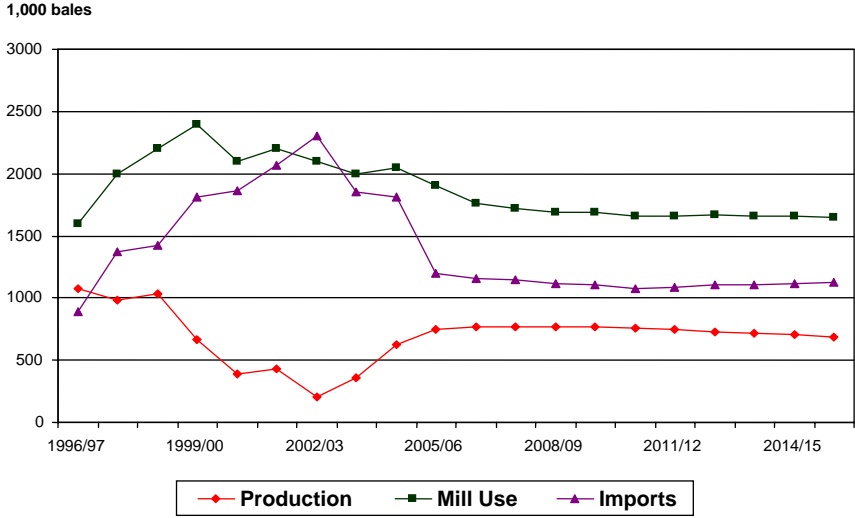


Figure 23. Mexico: Production, Mill Use, and Imports

Mexico has shown substantial yield growth in the past ten years and yields are expected to be sustained at these high levels. However, total production will decline as harvested area is reduced throughout the baseline period

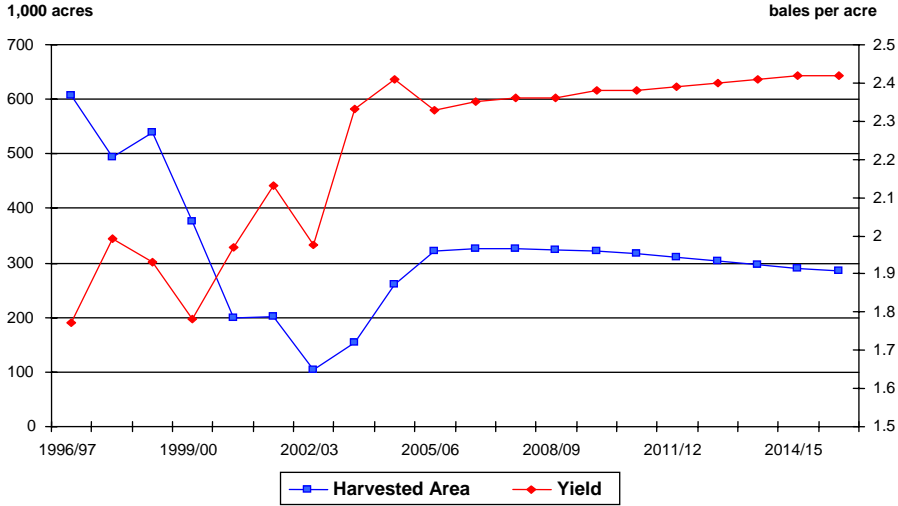


Figure 24. Mexico: Harvested Area and Yield

**European Union**

The long trend in declining cotton mill use and exports in the E.U. is expected to continue. With declining cotton use and constant production, the E.U. is expected to become a net exporter of cotton by 2012/13. By the end of the baseline, net trade from the E.U. is expected to add 400,000 bales of cotton to the world market.

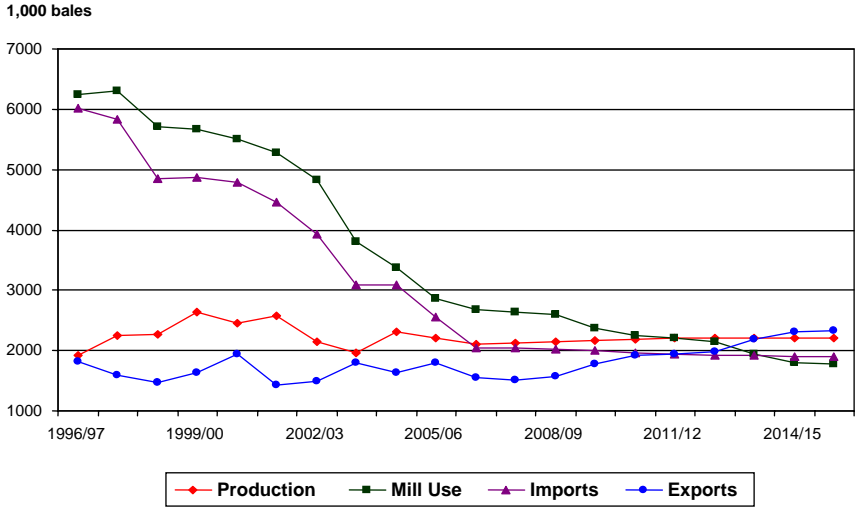


Figure 25. EU: Production, Mill Use, Imports, and Exports

Total cotton production is not expected to increase substantially in the E.U. as harvested area remains basically unchanged and yield levels show only slight increases.

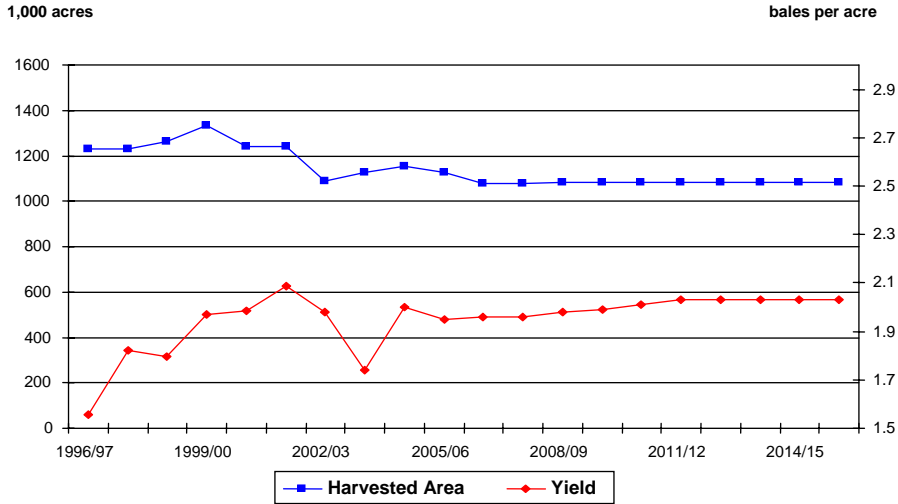


Figure 26. EU: Harvested Area and Yield

**West Central African Nations (WCA) of Benin, Burkina Faso, Chad, and Mali**

The role of cotton in economic development is a central concern of many developing nations around the world. This issue has focused much attention on the cotton exporting nations of West and Central Africa and the impact of World Trade Organization agreements on their economies. As a group, WCA ranks just behind Uzbekistan as the world's third largest exporter of raw cotton.

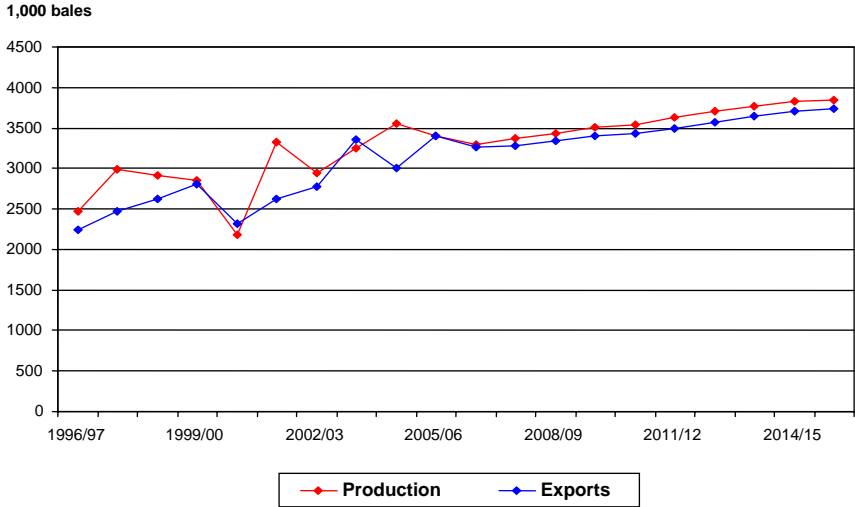


Figure 27. WCA: Production and Exports

The 12% projected increase in cotton production forecast for WCA falls behind growth projections for the rest of the world. Harvested area is projected to be down in 2006/07 but return to recent highs by the end of the baseline. Projected yield increases of about 38 pounds of lint per acre are lower than average yield gain estimates in the rest of the world.

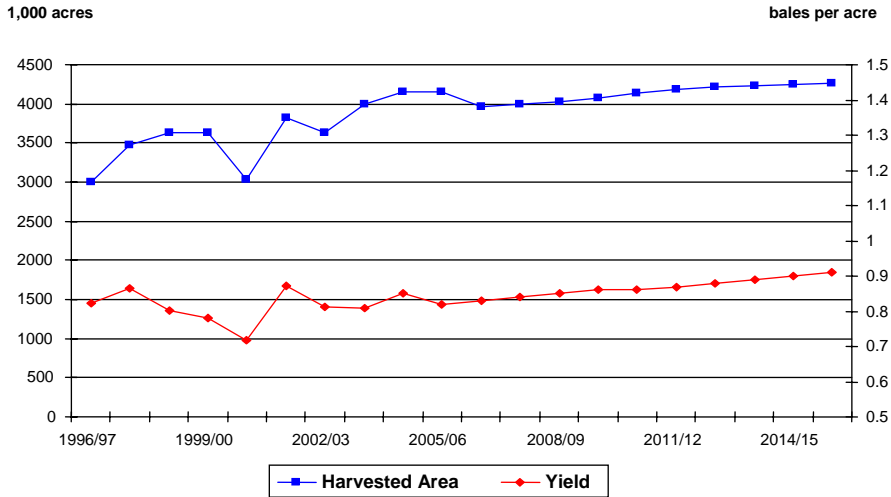


Figure 28. WCA: Harvested Area and Yield

### Conclusions

While worldwide cotton production is projected to increase by 20 million bales in the course of the baseline period, most of this increase is a result of increased yields rather significant gains in harvested area. Approximately one-half of this increased production is projected to occur in the same nations consuming the cotton and one-half from increased cotton exports.

In cotton mill use, continued concentration of the cotton textile industry among the world's present leading users of cotton is expected. While cotton mill use declines in nations such as Japan, Korea, and Taiwan, use is projected to continue to expand in other East and South Asian nations. China continues to grow in its dominance of the world textile industry under the conditions used for these projections

Significant changes in cotton export marketing shares are projected to occur over the baseline time horizon. While the U.S. remains as the leading exporter, its market share decreases from 48% to 43%. Brazil becomes the world's second leading exporter while Uzbekistan falls to third, but only slightly ahead of India and Australia.

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### Acknowledgements

This research was supported by the Cooperative State Research, Education, and Extension Service, U. S. Department of Agriculture.

### Supplemental Tables

Table 1. Australia: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
					Thousand Acres						
Area	704.24	729.89	753.94	786.51	793.97	797.87	801.04	811.68	831.83	856.28	886.23
					Bales Per Acre						
Yield	3.41	3.56	3.59	3.62	3.65	3.68	3.70	3.73	3.76	3.80	3.81
					Thousand Bales						
Domestic Supply	4353.04	4219.44	4188.04	4169.03	4220.78	4291.02	4339.61	4417.83	4532.14	4676.05	4842.54
Production	2400.02	2601.42	2708.20	2847.94	2897.27	2933.44	2967.34	3028.99	3127.21	3250.37	3380.08
Beginning Stock	1953.02	1618.02	1479.85	1321.09	1323.50	1357.58	1372.27	1388.84	1404.93	1425.68	1462.46
Domestic Demand	1553.02	1539.98	1379.72	1381.44	1415.12	1429.57	1445.79	1461.62	1482.02	1518.53	1564.41
Mill Utilization	60.00	60.14	58.63	57.93	57.54	57.30	56.95	56.69	56.34	56.07	55.82
Loss	-125.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	1618.02	1479.85	1321.09	1323.50	1357.58	1372.27	1388.84	1404.93	1425.68	1462.46	1508.59
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	2800.03	2679.46	2808.32	2787.60	2805.65	2861.45	2893.82	2956.21	3050.12	3157.52	3278.13
<b>Price</b>											
					Australian Dollars Per Pound						
Cotton	0.76	0.78	0.82	0.84	0.84	0.86	0.86	0.87	0.87	0.88	0.89

Table 2. Brazil: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	2545.13	2840.12	3047.60	3207.60	3342.09	3462.90	3576.95	3687.38	3796.09	3903.68	4011.00
	Bales Per Acre										
Yield	2.20	2.22	2.22	2.22	2.23	2.24	2.24	2.25	2.26	2.26	2.27
	Thousand Bales										
Domestic Supply	10681.11	11449.62	12042.95	12421.37	12918.37	13388.50	13709.07	14062.68	14452.85	14824.17	15194.54
Production	5600.0568	6318.5693	6762.1687	7104.9217	7460.1724	7744.7211	8028.3131	8307.5847	8566.1074	8836.7963	9112.9476
Beginning Stock	5081.05	5131.05	5280.78	5316.45	5458.20	5643.78	5680.75	5755.10	5886.74	5987.37	6081.59
Domestic Demand	9131.09	9379.33	9224.49	9267.07	9516.73	9613.08	9746.86	9936.89	10096.12	10255.47	10419.56
Mill Utilization	4100.04	4098.54	3908.04	3808.88	3872.95	3932.33	3991.76	4050.14	4108.75	4173.88	4244.89
Loss Demand	-100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	5131.05	5280.78	5316.45	5458.20	5643.78	5680.75	5755.10	5886.74	5987.37	6081.59	6174.68
Trade											
Imports	200.00	184.16	240.51	262.41	259.33	238.69	208.86	170.33	126.79	78.57	24.39
Exports	1750.02	2254.46	3058.97	3416.71	3660.97	4014.11	4171.06	4296.12	4483.52	4647.26	4799.37
<b>Price</b>											
	Reais Per Pound										
Cotton	1.47	1.59	1.78	1.95	2.09	2.23	2.33	2.46	2.56	2.67	2.82

Table 3. China: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	12602.10	13316.64	13682.34	13829.10	13892.71	13942.66	14222.98	14408.54	14560.04	14630.69	14802.16
	Bales Per Acre										
Yield	1.94	2.02	2.02	2.04	2.08	2.08	2.13	2.14	2.14	2.14	2.15
	Thousand Bales										
Domestic Supply	35063.35	36916.53	37640.60	38381.36	39055.11	39320.40	40655.11	41781.56	42369.07	42619.07	43123.58
Production	24500.24	26833.42	27704.51	28195.92	28859.29	29066.57	30304.69	30800.93	31169.73	31352.19	31895.96
Beginning Stock	10563.11	10083.11	9936.09	10185.44	10195.81	10253.83	10350.42	10980.63	11199.35	11266.89	11227.62
Domestic Demand	50538.50	52921.23	53700.40	55155.84	57130.92	58239.83	59944.28	61718.31	63843.95	64610.67	65567.61
Mill Utilization	41500.41	42985.14	43514.95	44960.03	46877.08	47889.41	48963.65	50518.96	52577.07	53383.05	54212.17
Loss	-1000.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	10038.10	9936.09	10185.44	10195.81	10253.83	10350.42	10980.63	11199.35	11266.89	11227.62	11355.43
Trade											
Imports	15821.01	16062.04	16117.00	16847.81	18165.60	18936.35	19300.60	19950.98	21508.57	22039.77	22508.86
Exports	25.00	57.34	57.20	73.33	89.79	16.92	11.44	14.24	33.68	48.17	64.83
<b>Man-Made Fibers</b>											
	Million Pounds										
Domestic Supply	36156.84	36997.60	37225.78	37779.07	38833.03	38644.70	40788.26	42379.08	43186.88	44192.44	45279.08
Capacity	40541.57	41007.97	41280.10	41913.50	43121.64	42925.64	45294.20	47104.73	48166.15	49652.18	51091.00
Utilization	0.89	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89
Domestic Demand	35738.82	36967.46	37954.95	39944.43	41504.12	41882.29	43393.43	44475.98	46209.17	47556.75	49062.11
Net Trade	418.01	30.15	-729.18	-2165.36	-2671.09	-3237.59	-2605.17	-2096.91	-3022.29	-3364.31	-3783.03
<b>Prices</b>											
	Chinese Yuan Per Pound										
Cotton	5.64	5.62	5.84	5.87	5.87	6.14	6.20	6.25	6.58	6.62	6.70
Polyester	5.08	5.12	5.16	5.28	5.44	5.45	5.62	5.66	5.70	5.76	5.89

Table 4. European Union: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	1126.78	1079.10	1079.66	1081.75	1083.28	1084.31	1084.91	1085.10	1084.76	1084.67	1083.87
	Bales Per Acre										
Yield	1.95	1.96	1.96	1.98	1.99	2.01	2.03	2.03	2.03	2.03	2.03
	Thousand Bales										
Domestic Supply	3351.03	3143.16	3081.65	3104.58	3120.18	3139.69	3162.10	3171.47	3175.81	3182.13	3182.76
Production	2201.02	2110.15	2118.38	2146.49	2160.44	2183.22	2204.78	2206.08	2205.71	2206.98	2204.83
Beginning Stock	1150.01	1033.01	963.27	958.09	959.74	956.47	957.33	965.39	970.10	975.15	977.93
Domestic Demand	3896.05	3642.23	3605.49	3551.24	3329.16	3196.54	3175.72	3118.71	2908.68	2782.19	2755.23
Mill Utilization	2863.04	2678.96	2647.40	2591.50	2372.69	2239.21	2210.33	2148.61	1933.53	1804.26	1778.10
Ending Stock	1033.01	963.27	958.09	959.74	956.47	957.33	965.39	970.10	975.15	977.93	977.12
Trade											
Imports	2555.23	2054.57	2037.35	2018.48	1994.94	1969.79	1948.98	1931.48	1918.18	1906.69	1894.86
Exports	1789.71	1556.86	1513.51	1571.83	1785.96	1912.94	1935.36	1984.23	2185.31	2306.63	2322.39
<b>Price</b>											
	Euros Per Pound										
Cotton	0.45	0.44	0.43	0.45	0.47	0.49	0.48	0.49	0.48	0.49	0.50

Table 5. India: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	22980.30	23013.72	23029.64	23041.56	23070.88	23067.79	23083.87	23223.65	23311.63	23374.07	23423.93
	Bales Per Acre										
Yield	0.826803	0.816863	0.831553	0.853489	0.875144	0.894761	0.913881	0.934548	0.955244	0.971135	0.978222
	Thousand Bales										
Domestic Supply	27061.27	28360.15	28716.62	29306.02	30016.94	30718.75	31413.46	32081.67	32880.22	33425.51	33701.87
Production	19000.19	18799.05	19150.37	19665.72	20190.35	20640.17	21095.91	21703.61	22268.29	22699.38	22913.80
Beginning Stock	8061.08	9561.10	9566.25	9640.30	9826.59	10078.59	10317.55	10378.06	10611.92	10726.13	10788.07
Domestic Demand	26061.26	26841.61	27512.75	28042.41	28601.23	29115.77	29374.10	29840.98	30166.44	30258.84	30556.39
Mill Utilization	16500.16	17275.36	17872.46	18215.82	18522.65	18798.22	18996.03	19229.06	19440.31	19470.77	19698.99
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	9561.10	9566.25	9640.30	9826.59	10078.59	10317.55	10378.06	10611.92	10726.13	10788.07	10857.40
Trade											
Imports	800.01	703.86	626.52	565.04	672.86	754.55	816.69	863.20	897.82	876.52	857.42
Exports	1800.02	2234.59	1830.38	1828.65	2088.57	2357.54	2856.05	3103.89	3611.59	4043.20	4002.91
<b>Price</b>											
	Indian Rupees Per Pound										
Cotton	25.55	26.87	28.61	29.73	30.32	31.20	31.73	32.63	33.45	34.84	36.76

Table 6. Mexico: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	321.23	325.81	326.09	323.87	322.26	317.96	310.55	303.55	297.13	290.92	285.24
	Bales Per Acre										
Yield	2.33	2.35	2.36	2.36	2.38	2.38	2.39	2.40	2.41	2.42	2.42
	Thousand Bales										
Domestic Supply	2119.02	1958.07	1929.52	1925.65	1917.39	1901.31	1875.95	1849.76	1824.82	1800.10	1773.15
Production	750.01	764.06	768.01	765.92	765.36	758.15	743.22	729.26	716.60	704.33	690.34
Beginning Stock	1369.02	1194.01	1161.51	1159.73	1152.02	1143.16	1132.73	1120.50	1108.22	1095.77	1082.81
Domestic Demand	3119.03	2918.21	2877.83	2843.04	2830.25	2792.98	2781.32	2772.44	2752.37	2739.36	2718.18
Mill Utilization	1900.02	1756.70	1718.09	1691.02	1687.09	1660.25	1660.81	1664.22	1656.60	1656.55	1648.89
Loss	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Stock	1194.01	1161.51	1159.73	1152.02	1143.16	1132.73	1120.50	1108.22	1095.77	1082.81	1069.30
Trade											
Imports	1200.01	1153.39	1142.71	1111.38	1104.94	1073.75	1086.05	1102.99	1107.35	1120.91	1129.89
Exports	200.00	193.25	194.40	193.99	192.08	182.07	180.68	180.31	179.80	181.65	184.86
<b>Price</b>											
	Mexican Pesos Per Pound										
Cotton	6.47	6.85	7.34	7.71	7.95	8.28	8.57	8.94	9.27	9.78	10.45

Table 7. Pakistan: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	7783.65	7747.11	7800.28	7845.37	7868.18	7860.27	7918.11	7922.78	7943.70	7952.69	7960.92
	Bales Per Acre										
Yield	1.22	1.24	1.26	1.28	1.30	1.31	1.33	1.35	1.37	1.39	1.40
	Thousand Bales										
Domestic Supply	12905.13	12457.11	12415.36	12540.61	12751.27	12852.82	13082.05	13160.13	13358.85	13573.34	13714.96
Production	9500.09	9602.05	9815.17	10020.21	10197.89	10335.80	10561.16	10716.68	10894.74	11056.93	11142.16
Beginning Stock	3405.03	2855.06	2600.19	2520.39	2553.39	2517.02	2520.90	2443.45	2464.12	2516.41	2572.80
Domestic Demand	14130.14	14296.24	14366.38	14515.53	14571.35	14842.88	15105.14	15378.39	15723.12	16117.79	16544.83
Mill Utilization	11275.11	11696.05	11845.99	11962.15	12054.33	12321.99	12661.69	12914.27	13206.71	13544.99	13934.76
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	2855.03	2600.19	2520.39	2553.39	2517.02	2520.90	2443.45	2464.12	2516.41	2572.80	2610.07
Trade											
Imports	1600.01	2216.57	2340.26	2372.22	2221.53	2396.92	2433.66	2634.05	2784.80	2972.12	3266.67
Exports	375.00	377.44	389.23	397.30	401.45	406.86	410.58	415.79	420.54	427.67	436.81
<b>Price</b>											
	Pakistani Rupees Per Pound										
Cotton	35.26	38.02	41.58	44.13	45.49	47.29	48.56	50.38	52.07	54.68	58.14

Table 8. Turkey: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	1556.73	1596.14	1629.32	1653.00	1667.90	1675.58	1696.80	1707.08	1713.69	1716.23	1718.24
	Bales Per Acre										
Yield	2.38	2.35	2.37	2.41	2.44	2.47	2.49	2.52	2.55	2.57	2.57
	Thousand Bales										
Domestic Supply	5385.05	5287.65	5418.55	5574.61	5712.19	5826.64	5964.81	6078.01	6175.31	6242.62	6271.81
Production	3700.04	3752.64	3868.89	3980.42	4066.33	4131.21	4231.25	4302.69	4369.00	4405.80	4412.04
Beginning Stock	1685.02	1535.01	1549.66	1594.18	1645.86	1695.43	1733.55	1775.32	1806.31	1836.83	1859.77
Domestic Demand	8585.08	8716.13	8876.33	9044.78	9203.52	9345.26	9486.14	9644.69	9758.45	9839.67	9898.24
Mill Utilization	7050.07	7166.46	7282.15	7398.93	7508.10	7611.71	7710.82	7838.38	7921.62	7979.90	8026.68
Ending Stock	1535.01	1549.66	1594.18	1645.86	1695.43	1733.55	1775.32	1806.31	1836.83	1859.77	1871.55
Trade											
Imports	3350.03	3578.24	3607.52	3619.85	3640.93	3668.23	3670.96	3716.39	3732.89	3746.85	3776.34
Exports	150.00	149.77	149.74	149.67	149.59	149.61	149.63	149.70	149.75	149.81	149.91
<b>Price</b>											
	Turkish Lira Per Pound										
Cotton	767.37	755.21	746.64	731.59	713.35	716.66	721.30	739.25	749.47	764.38	789.48

Table 9. United States: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
Area	Thousand Acres										
Delta Area Harvested	3838.12	3406.10	3457.07	3516.68	3515.82	3513.05	3511.33	3539.34	3594.30	3609.57	3633.04
Southeast Area Harvested	3044.17	2888.41	2851.52	2879.95	2871.40	2871.80	2871.03	2908.47	2916.74	2925.09	2945.70
Southwest Irrigated Area Harvested	2320.57	2222.40	2205.97	2265.79	2287.48	2290.31	2339.27	2356.04	2357.98	2357.48	2358.62
Southwest Dryland Area Harvested	3337.67	3116.31	3185.70	3189.22	3195.10	3273.81	3267.44	3266.57	3268.25	3269.48	3309.69
West Area Harvested	710.13	620.47	533.30	460.24	448.08	445.93	441.96	456.89	468.58	477.49	485.83
Total Area	13672.04	12253.69	12233.56	12311.87	12317.87	12394.90	12431.03	12527.31	12605.84	12639.10	12732.89
Yield	Bales Per Acre										
Delta Yield	1.87	1.73	1.74	1.76	1.79	1.79	1.79	1.80	1.80	1.81	1.81
Southeast Yield	1.57	1.54	1.55	1.58	1.61	1.61	1.62	1.63	1.64	1.65	1.65
Southwest Irrigated Yield	1.41	1.38	1.38	1.39	1.39	1.40	1.40	1.41	1.44	1.44	1.44
Southwest Dryland Yield	1.36	1.33	1.31	1.32	1.32	1.33	1.33	1.34	1.34	1.35	1.35
West Yield	2.74	2.67	2.75	2.79	2.81	2.83	2.85	2.86	2.87	2.88	2.88
Total Yield	1.66	1.62	1.61	1.63	1.64	1.65	1.65	1.66	1.67	1.68	1.68
	Thousand Bales										
Domestic Supply	28367.28	26207.70	25285.65	25494.67	25661.57	25613.01	25731.28	26053.00	26398.12	26186.09	26179.46
Delta Production	7190.26	5897.51	6000.44	6191.11	6277.07	6287.46	6299.34	6364.52	6478.45	6521.12	6563.56
Southeast Production	4790.57	4448.11	4414.10	4540.95	4610.27	4634.16	4656.28	4740.66	4777.90	4815.47	4855.42
Southwest Irrigated Production	3280.38	3057.64	3048.37	3143.25	3187.00	3204.63	3286.50	3323.40	3388.63	3401.27	3402.98
Southwest Dryland Production	4547.11	4130.76	4174.27	4195.14	4220.65	4342.99	4351.68	4367.64	4387.05	4405.92	4459.96
West Production	1945.31	1659.55	1466.76	1282.93	1258.35	1263.77	1257.39	1305.00	1343.89	1375.38	1397.06
ELS Production	704.00	614.06	609.98	664.10	669.17	674.49	675.59	676.78	678.75	681.55	683.88
Total Production	22717.22	19807.63	19713.93	20017.49	20222.50	20407.50	20526.77	20778.01	21054.66	21200.71	21362.85
Beginning Stock	5650.06	6400.06	5571.72	5477.18	5439.07	5205.51	5204.50	5274.99	5343.46	4985.38	4816.62
Domestic Demand	12400.12	11455.23	11208.48	11034.48	10448.49	10209.02	10242.15	10254.10	9870.42	9615.56	9433.39
Mill Utilization	6000.06	5883.51	5731.31	5595.41	5242.97	5004.52	4967.16	4910.64	4885.04	4798.94	4717.53
Ending Stock	6400.06	5571.72	5477.18	5439.07	5205.51	5204.50	5274.99	5343.46	4985.38	4816.62	4715.86
Trade											
Imports	39.03	38.70	37.60	39.11	43.01	43.19	43.60	74.03	83.40	86.51	86.78
Exports	15758.19	14764.93	14114.76	14499.30	15256.09	15447.18	15532.73	15872.93	16611.10	16657.04	16832.86
<b>Price</b>											
	U.S. Cents Per Pound										
Cotton	46.99	47.96	49.72	51.87	54.13	54.60	55.11	55.94	57.13	58.12	59.09

Table 10. Uzbekistan: Fiber Supply and Utilization

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>											
	Thousand Acres										
Area	3582.95	3419.78	3426.79	3427.26	3438.24	3450.56	3433.76	3409.00	3392.64	3371.50	3345.68
	Bales Per Acre										
Yield	1.40	1.39	1.40	1.41	1.43	1.44	1.45	1.46	1.47	1.48	1.48
	Thousand Bales										
Domestic Supply	6298.06	5947.20	5984.37	6017.15	6074.54	6139.37	6173.04	6200.45	6237.70	6253.53	6212.83
Production	5000.05	4749.19	4794.73	4837.26	4899.92	4959.20	4972.28	4967.85	4979.43	4980.80	4942.59
Beginning Stock	1298.01	1198.01	1189.64	1179.89	1174.62	1180.17	1200.76	1232.60	1258.27	1272.72	1270.24
Domestic Demand	2098.02	2154.72	2166.25	2182.28	2149.14	2168.37	2214.61	2254.65	2255.06	2209.66	2154.30
Mill Utilization	900.01	965.08	986.36	1007.66	968.97	967.61	982.01	996.38	982.33	939.42	892.20
Ending Stock	1198.01	1189.64	1179.89	1174.62	1180.17	1200.76	1232.60	1258.27	1272.72	1270.24	1262.09
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	4205.05	3797.49	3823.12	3839.87	3930.40	3976.00	3963.44	3950.80	3987.65	4048.87	4063.54
<b>Price</b>											
	Uzbekistani Som per Pound										
Cotton	713.59	840.06	978.26	1120.00	1233.34	1290.50	1302.68	1344.43	1360.82	1373.09	1403.04

Table 11. West and Central Africa: Fiber Supply and Utilization

	1980/81	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Cotton</b>												
						Thousand Acres						
Area		4151.28	3964.55	3997.74	4016.88	4070.09	4133.95	4188.86	4214.79	4229.87	4233.65	4243.85
						Bales Per Acre						
Yield		0.82	0.83	0.84	0.85	0.86	0.86	0.87	0.88	0.89	0.90	0.90
						Thousand Bales						
Domestic Supply		4808.05	4611.95	4633.51	4708.02	4820.94	4886.90	5007.10	5136.03	5258.22	5369.78	5424.67
Production		3395.04	3287.94	3361.42	3423.68	3515.82	3541.66	3636.86	3707.82	3769.70	3821.74	3830.94
Beginning Stock		1413.01	1324.01	1272.10	1284.34	1305.11	1345.23	1370.24	1428.21	1488.52	1548.04	1593.73
Domestic Demand		1408.01	1346.68	1351.48	1372.65	1424.85	1445.64	1510.84	1560.87	1620.14	1676.70	1686.93
Mill Utilization		84.00	74.58	67.13	67.54	79.62	75.39	82.63	72.35	72.10	82.97	76.81
Ending Stock		1324.01	1272.10	1284.34	1305.11	1345.23	1370.24	1428.21	1488.52	1548.04	1593.73	1610.12
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		3400.03	3265.28	3282.04	3335.37	3396.08	3441.26	3496.26	3575.16	3638.08	3693.08	3737.74
<b>Price</b>												
						Egyptian Pounds per pound						
Cotton		3.43	3.66	3.92	4.11	4.22	4.35	4.48	4.68	4.76	4.81	4.91

Table 12. World Fiber Supply and Utilization

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
<b>Cotton</b>											
	Thousand Acres										
Area	86084.70	85572.58	86395.56	87129.08	87709.94	88283.71	89123.12	89897.61	90646.78	91146.42	91759.78
	Bales Per Acre										
Yield	1.285	1.295	1.309	1.327	1.347	1.358	1.378	1.391	1.403	1.414	1.421
	Thousand bales										
Domestic Supply	161480.51	161334.76	162300.85	164783.78	167707.76	169889.19	173155.98	176341.75	179354.26	181207.5	182941.01
Production	110617.11	110804.32	113107.10	115615.02	118133.28	119893.62	122792.13	125029.48	127205.83	128845.24	130347.13
Beginning Stock	50863.40	50530.44	49193.74	49168.76	49574.49	49995.57	50363.85	51312.27	52148.43	52362.26	52593.88
Domestic Demand	161845.15	161809.53	162415.90	164735.30	167663.85	169845.33	173113.07	176414.55	179471.98	181347.07	183026.72
Mill Utilization	111324.72	112677.93	113358.17	115325.29	117909.29	119763.88	122118.13	124611.13	127474.05	129134.41	130535.81
Ending Stock	50530.44	49193.74	49168.76	49574.49	49995.57	50363.85	51312.27	52148.43	52362.26	52593.88	52887.49
Trade	39714.64	38649.96	38683.89	39618.99	41325.57	42490.06	43385.46	44315.45	46242.01	47329.65	47972.44
Stocks-to-use	.4548400	0.4368287	0.4341722	0.4304805	0.4248858	0.4215202	0.4212802	0.4200428	0.4124885	0.4091059	0.4068331
<b>Man-Made Fiber</b>											
	Million Pounds										
Domestic Supply	78693.11	77450.75	79627.80	81852.91	83747.53	84328.24	86895.82	88861.37	90515.73	92782.82	94807.09
Capacity	97453.09	97890.10	98277.29	99301.01	100822.21	101026.98	103986.62	106613.95	108877.56	111981.50	114526.78
Utilization	0.81	0.79	0.81	0.82	0.83	0.83	0.84	0.83	0.83	0.83	0.83
Domestic Demand	88861.27	86330.42	88418.22	90609.84	92447.64	92958.93	95499.76	97441.99	99029.31	101275.44	103271.60
Unaccounted	-10168.16	-8879.68	-8790.42	-8756.92	-8700.11	-8630.70	-8603.93	-8580.62	-8513.58	-8492.62	-8464.51
<b>Price</b>											
	U.S. Cents per Pound										
Cotton A-index	58.60	61.09	63.98	65.63	66.11	67.21	67.55	68.68	68.88	69.50	71.02
US Polyester Price	61.41	61.87	62.39	63.77	65.77	65.80	67.89	68.39	68.89	69.54	71.16