



Commodity Intelligence Report

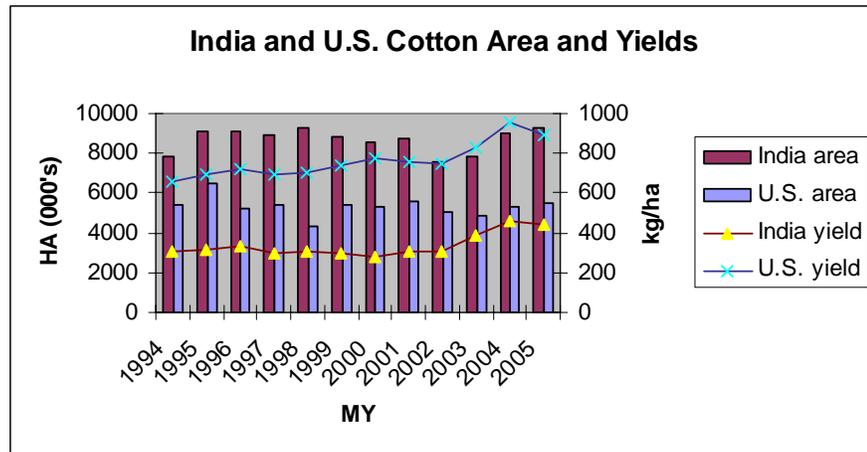
Indian Cotton Production Continues its Upward Climb

Could India surpass the United States and even China as the largest cotton producer in the world and if so, how will this affect U.S. cotton producers? The United States, China and India produced record crops in 2004/05, and the 2005/06 crops are not far behind. The USDA is currently forecasting India's 2005/06 cotton crop at 19 million bales and the U.S. crop at 22.7 million bales. While the majority of India's cotton is consumed domestically, the majority of the U.S. cotton crop is exported. It is unlikely, at least in the short term, that India's expanding cotton production will affect U.S. cotton producers. However, if India's cotton production continues to outpace its consumption needs, Indian cotton could begin to displace U.S. cotton in other markets.

Cotton area continued to increase in India and the U.S. in 2005. The distribution of cotton area among regions in India changed little year-to-year. The central states of Maharashtra, Gujarat, and Madhya Pradesh continue to plant approximately 63 percent of India's total cotton area.

Overall yields(kg/ha) in both countries have increased rather dramatically over the last several years. Yields prior to the 2003/04 season hardly varied year-to-year. Over the last two years,

yields in India increased 50 percent while yields in the U.S. increased 28 percent. The current yields are forecast to decline slightly from last years records. Ideal weather across the Northern Hemisphere



contributed, in part, to record yields in most cotton producing countries last year leading to record world production of 120.4 million bales. Scientific advances in seed technology also have contributed to climbing yields, particularly in the United States and India.

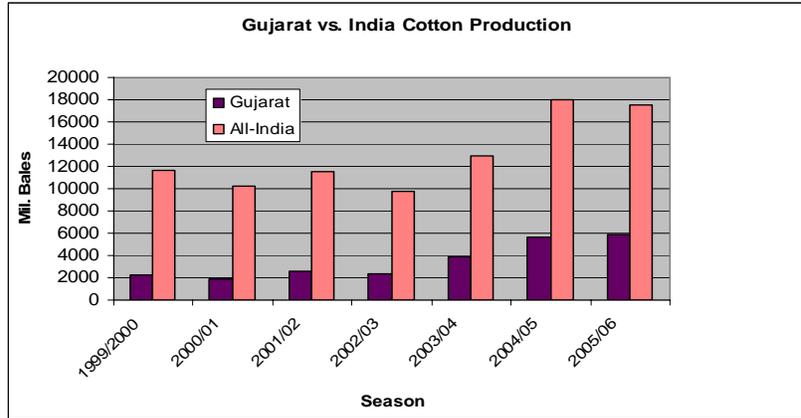
The Government of India (GOI) first approved the use of Bt cotton in 2002 in the central and southern states and approval was obtained in the northern states in 2005. The number of varieties of Bt cotton with Government approval now stands at 20 up from 4 varieties last year. Area sown with Bt cotton seed is expanding, growing from



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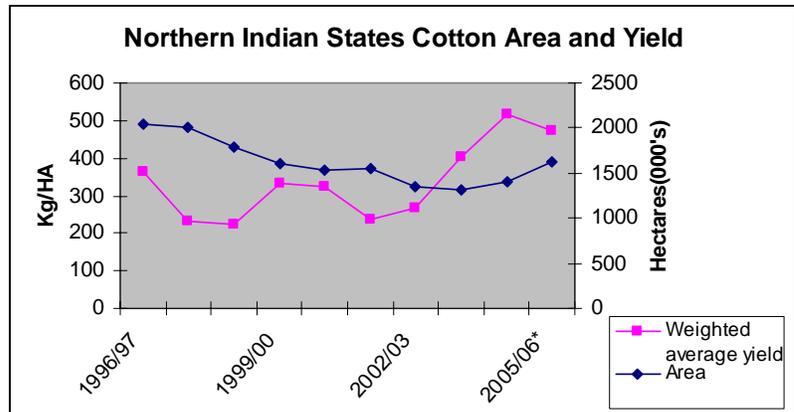
approximately 40,000 ha in 2002, to 100,000 ha in 2003 and 550,000 ha in 2004.¹ A seed company that licenses the technology reported that it had sold enough Bt seed to plant approximately 1.3 million hectares. In addition, several sources indicate that unlicensed/unapproved Bt cotton seed² is being sold and planted, and speculation about the area planted with Bt cotton seed (approved and unapproved) ranges from 25-50 percent of the total 9.3 million hectares.

Gujurat has rapidly emerged as India's largest cotton producing state. The adoption of Bt cotton by farmers in this state (and others) is believed to be the dominant contributing factor of the rapid rise along with increased use of irrigation. Although difficult to quantify, unlicensed/unapproved



varieties of Bt cotton are believed to be proliferating the market. The unapproved seeds are substantially cheaper than the approved varieties due to pirated technology. India's existing regulations are inadequate to tackle Intellectual Property Right protection. This lack of enforcement has spurred the development of alternative seed production (unapproved). Sixteen new varieties were approved for the 2005 growing season and information is not yet available on their effect on cotton production.

Along with Gujarat, the Northern Zone states of Punjab, Haryana, and Rajasthan also produce higher yielding cotton. The GOI approved the use of Bt cotton seed in the Northern states for the first time in 2005. A majority of the crops in this region are irrigated and along with the planting



¹ These figures do not include areas planted with unapproved Bt cotton varieties, as official data is unavailable.

² It must be noted that Bt cotton seed reduces yield losses caused by bollworm infestations that have historically attacked the Indian and other developing countries cotton crop. Although the price for the Bt seed is greater, typically cost savings due to reduced pesticide use offsets the farmers' increased cost for seed.

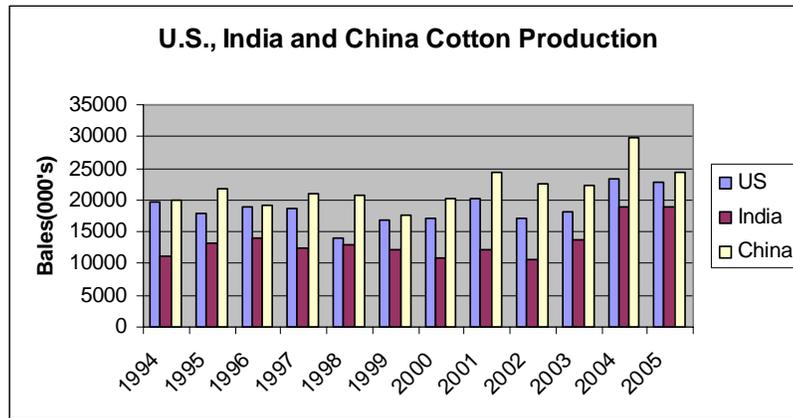


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of approved and unapproved Bt cotton seed, yields will likely continue to improve. After trending downward rather significantly, planted area in the Northern zone started increasing in 2004/05. The forecast area in this region increased nearly 15 percent in 2005 while production is forecast to increase 5 percent in this region. To the extent that farmers increase area planted with approved and unapproved varieties of Bt cotton, cost savings will be realized and yields can be expected to grow in the coming years. The majority of the crops in the North are already irrigated, so any improvement in seed technology will only enhance production in these areas.

After last year's record cotton production, the United States is forecast at the second highest production on record at 22.7 while India's cotton production forecast is equal to last years' record of

19 million bales in 2005. China's production currently stands at 24.5 million bales, 4.5 million bales below last years' record crop of 29 million bales. As a comparison, while Indian cotton yields are about half of



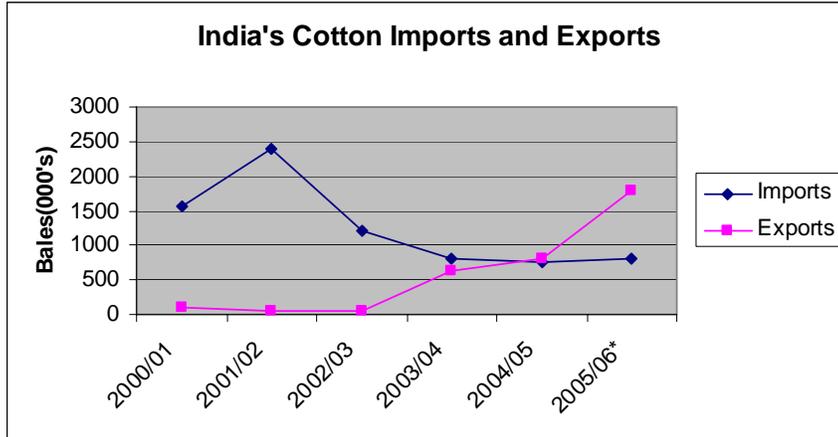
those obtained in the U.S., India planted close to 41 percent more area to cotton than the United States. India's cotton crop in the last 2 years has surpassed the United States 10-year average production of 18.3 million bales. However, yields in the U.S. are also on an upward trend. If India's yields were the same as those forecast this year for the U.S. crop, India's cotton production would reach close to 38 million bales and if China's yield was substituted, India production would reach close to 45 million bales.

How would this continued growth in cotton production affect U.S. cotton producers? While U.S. mill use continues its decline, cotton consumption in India has grown markedly over the last two years after stagnating the previous 4 years. The expiration of the long standing textile quotas in the U.S. and EU in January 2005 helped fuel increased consumption. China's cotton product exports to the U.S. surged 75 percent year-over-year as of July 2005, while India's cotton product exports increased 17 percent. India's textile industry hopes to take advantage of opportunities in the U.S. and EU market created by the possible safeguards (quotas) being placed on China's surging textile exports into those markets.



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India's increased demand for cotton is mostly being filled by domestic production. However, quality issues persist with India's cotton and imports of higher quality cotton will continue to be needed. Over the last two years, India has imported approximately 800,000 bales of cotton each year and is forecast unchanged this year, approximately 25 percent of which is U.S. cotton.



Cotton production has outpaced consumption in India the last several years and some cotton has made its way into the export market. India's current forecast of 1.8 million bales of exports is a record. If this forecast proves accurate, India would become the sixth largest cotton exporter in the world.³

The U.S. is currently forecast to export 16 million bales this year, up 1.5 million bales from last year, compared to India's 1.8 million bales. Although India's cotton exports are forecast to more than double this year, it is unlikely to displace very much U.S. cotton in other markets this year. Cotton consumption in India is unlikely to keep pace with India's growing production. An increasing amount of India's cotton will find its way into export channels, particularly if world prices rise relative to domestic prices, as the rising stock situation is unsustainable. India's increased cotton production will have a growing impact on the U.S. cotton industry in future years.

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³ For this comparison, Franc-zone Africa is treated as one large exporter.