

6 October 2009

A close-up photograph of a cotton boll on a stem. The boll is brown and has split open, revealing a large amount of white, fluffy cotton lint. The stem is light brown and has a small, circular mark on it. The background is a plain, light gray color.

Cotton Seasonal Report

Cotton is a perennial shrub that has been cultivated by man for several thousand years. It is primarily used by the textile industry to produce thread, fabrics, linen and apparel. Cotton, also known as 'white gold', enjoys a predominant position amongst all cash crops in India. It is an important raw material for the Indian textile industry, constituting about 65% of its requirements. The Indian textile industry occupies a significant place in the country's economy with over 1500 mills, 4 million handlooms, 1.7 million power looms and thousands of garment, hosiery and processing units, providing employment directly or indirectly to around 35 million people. Besides being primarily a fibre crop it also serves as a feed crop for cattle. Cotton seed is used to extract the cotton oil, which is the world's second most used oilseeds for culinary purposes, and the oilcake, which is a protein rich feed for livestock.

Major Cotton species

- *Gossypium hirsutum*, also known as Upland cotton, is the variety (plus hybrids) that is primarily cultivated around the world, and has a staple length of 1 to 1¼ inches.
- *Gossypium barbadense*, also known as Extra Long Staple (ELS) is grown primarily in the U.S, Southwest, primarily in California, Arizona, New Mexico, and southwestern Texas. Egyptian cotton is extra long staple cotton produced in Egypt. Sea Island cotton (*Gossypium vitifolium*) is also an ELS variety that is from the southeast United States. ELS cotton is at least 1 3/8 inches or longer.
- *Gossypium arboreum* is native to India and Pakistan.
- *Gossypium herbaceum* is native to southern Africa and the Arabian Peninsula.

Ginning and processing

After harvesting, seed cotton fibers are "ginned", the fibers are separated from the seed, leaf and plant residue and all foreign matters are separated leaving only clean fiber. The fibers are then pressed together into a lint bale. The cotton seeds have their own use in being pressed to produce cottonseed oil.

The cottonseeds are removed from the raw cotton during the cotton ginning process. Cottonseed by-products include cottonseed oil for the food industry, whole Cottonseed, cottonseed hulls and cottonseed meal (primarily used as nutritional ingredients in the livestock feed), and cotton linters, which are short fibers were not removed by ginning and remain on the cottonseeds (used primarily paper making, industrial products). Small, immature cottonseeds are known as motes. Motes with attached fiber that are removed at a different stage of the gin stand than the mature seeds. The fiber can be removed from the motes using a de-linting machine. This fiber is called gin mote fiber and is used in nonwoven products.

Cotton Bale Dimensions

Bale weights are measured differently around the world and each bale can be different due to the moisture content of the cotton at the time of compression. For instance, in the United States bale

dimensions and weight are set by the Joint Cotton Industry Bale Packaging Committee (JCIBPC) of the National Cotton Council. The Gin Universal Density measurements are:

- Length: 54-55 inches (1400mm)
- Width: 20-21 inches (535mm)
- Thickness at bale tie: 28 inches (710mm)

1. In the U.S., a bale weight is approximately 500 lbs. (226.8 kilograms; the ICE, Cotton No. 2 Futures Contract is based on the Trading Unit of 50,000 lbs. net weight or approximately 100 bales).
2. The Australian Cotton Shippers Association sets bale weight at 227 kilograms (500 lbs.; range is set at 185 to 245 kilograms).
3. In Egypt a bale weighs 327 kilograms (720 lbs.) to 330 kilograms (725 lbs).
4. In India, a bale weighs 170 kilogram, candy weighs 355.62 Kg (2.09 bales).
5. The Pakistan Cotton Ginners Association (PCGA) sets bale weight at 170 kilograms.
6. In Brazil, the Bolsa de Mercadorias & Futuros (BF&M) sets bale weight from 180 to 250 kilograms (contract size is 12,500 kilograms).

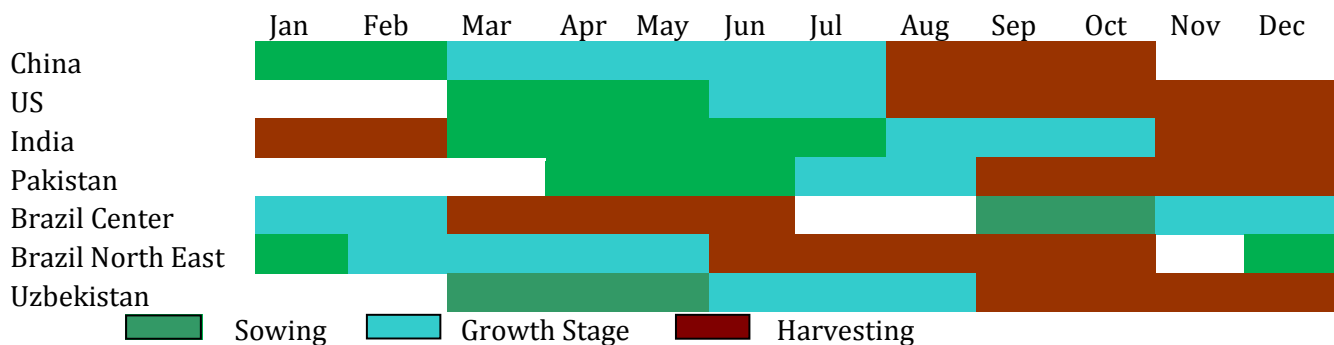
In India, cotton is cultivated in three regions:

- Northern India in the states of Punjab, Haryana and Rajasthan
- Central India in the states of Maharashtra, Madhya Pradesh and Gujarat
- Southern India in the states of Andhra Pradesh , Karnataka and Tamil Nadu

Seasonality of cotton

Seasonality in Major Producing Countries:

Cotton is grown in different seasons in different countries. Among major countries, US, India and Pakistan have similar seasonality. Most of the countries harvest cotton in the second half of the year. Cotton is harvested early in India and US compared to other major producers.



In USA, India, Pakistan and Uzbekistan, sowing commences from March, April and continues till May and harvesting is done in November and December. Whereas in China, sowing starts in the months of January and February, March to July is the growth stage, harvesting is done in August to September.

Cotton season in India

The major planting season in India commences in April – May when most of the irrigated cotton is sown in the North and Central Zones. Sowing of rain-fed cotton in Central Zone and part of the South Zone begins with the onset of South-west monsoon in June–July followed by planting of irrigated cotton in parts of South Zone.

The cotton marketing season commences in October and extends up to February in the North Zone and up to April – May in the Central Zone and parts of the South Zone. The five months from January – May constitute major marketing months in the South Zone.

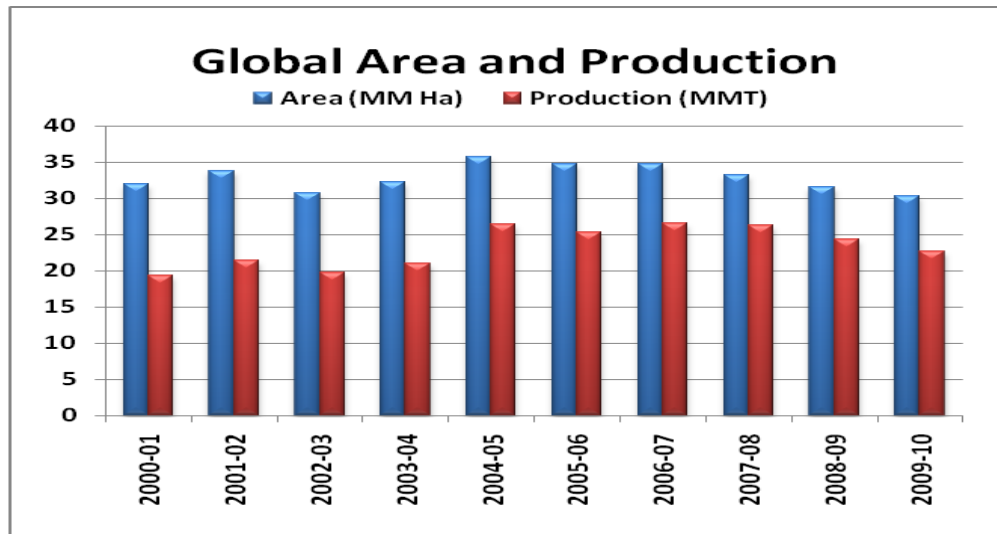
Global cotton scenario

Cotton acreage across the world has not witnessed major changes during last five decades; the area under cotton remained stagnant between 30 to 35 million hectares. But the production has increased gradually over the years due to introduction and improvements in high yielding varieties. Global cotton output has increased at compounded annual growth rate of 2.65% since 2000

Year	Area (MMHa)	Beg Stocks (MMT)	Production (MMT)	Imports (MMT)	Total supply (MMT)	Consumption (MMT)	Exports (MMT)	Ending stock (MMT)
2000-01	32.02	11.13	19.40	5.71	36.24	19.62	5.72	10.67
2001-02	33.73	10.75	21.49	6.38	38.61	20.25	6.33	11.78
2002-03	30.75	11.91	19.81	6.56	38.27	21.08	6.60	10.20
2003-04	32.31	10.41	21.06	7.40	38.88	20.98	7.24	10.38
2004-05	35.71	10.49	26.44	7.28	44.21	23.22	7.62	13.06
2005-06	34.74	13.19	25.38	9.67	48.23	24.80	9.70	13.45
2006-07	34.71	13.55	26.56	8.15	48.26	26.21	8.08	13.67
2007-08	33.26	13.68	26.25	8.28	48.21	26.07	8.38	13.62
2008-09	31.57	13.36	24.29	7.14	44.78	23.32	7.14	13.28
2009-10	30.29	13.27	22.69	6.91	42.88	23.82	6.91	12.15
CAGR	-0.23	2.96	2.65	2.60	2.72	2.78	2.64	2.64

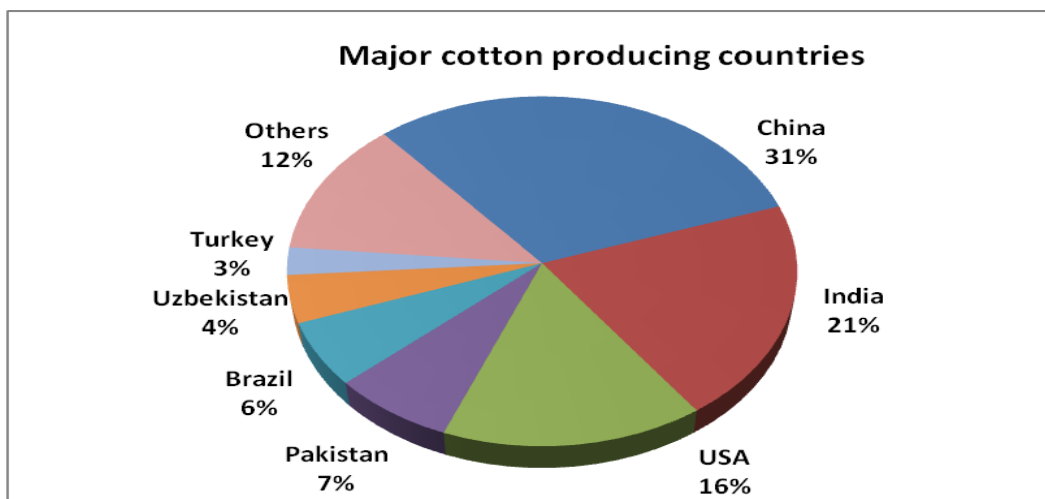
World cotton scenario

Since the beginning of current decade, the world cotton production has been hovering in the range of 19-26 million tonnes. The highest production was in 2006-07 at 26.56 million tonnes. According to USDA, world cotton production in 2008-09 was 24.29 million tonnes, down 7.46% from last year. Output in 2009-10 is expected to be lower at 22.69 million tonnes due to lower acreage in major producing countries. But, these forecasts are changing owing to improved weather conditions during last couple of months in major cotton growing regions of the world, including, USA, China and India.



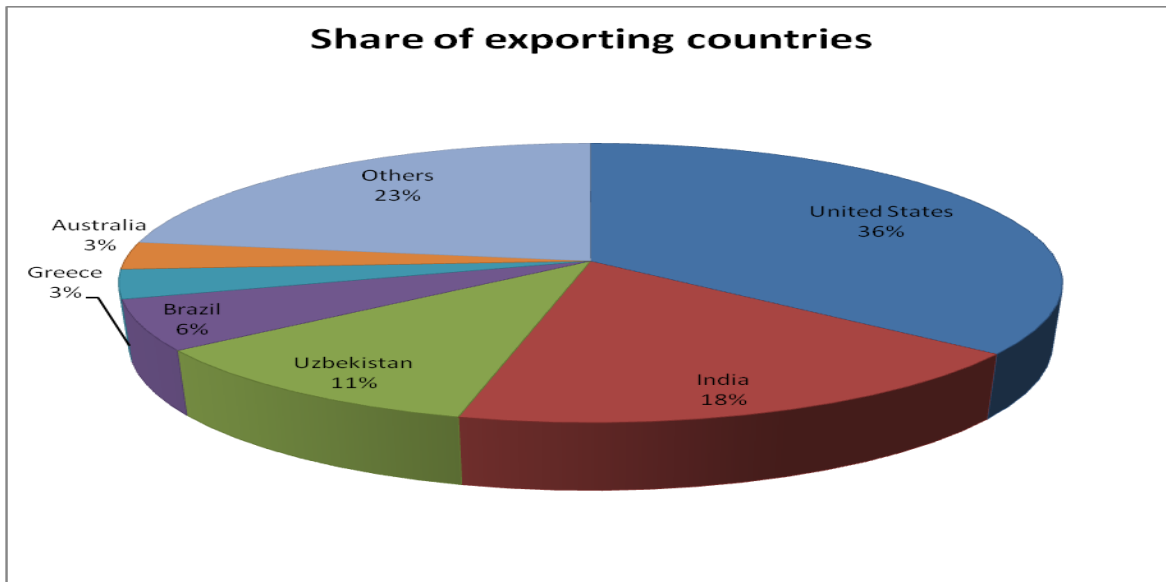
Major producers

China is the largest producer of cotton in the world and contributing to one-third of the total global output. India and USA are other major producers and together contribute to 37% of the total global production. Output of cotton has increased significantly in developing countries like China, India, Brazil and Pakistan in recent years whereas in developed countries like USA and Australia, it has declined marginally.

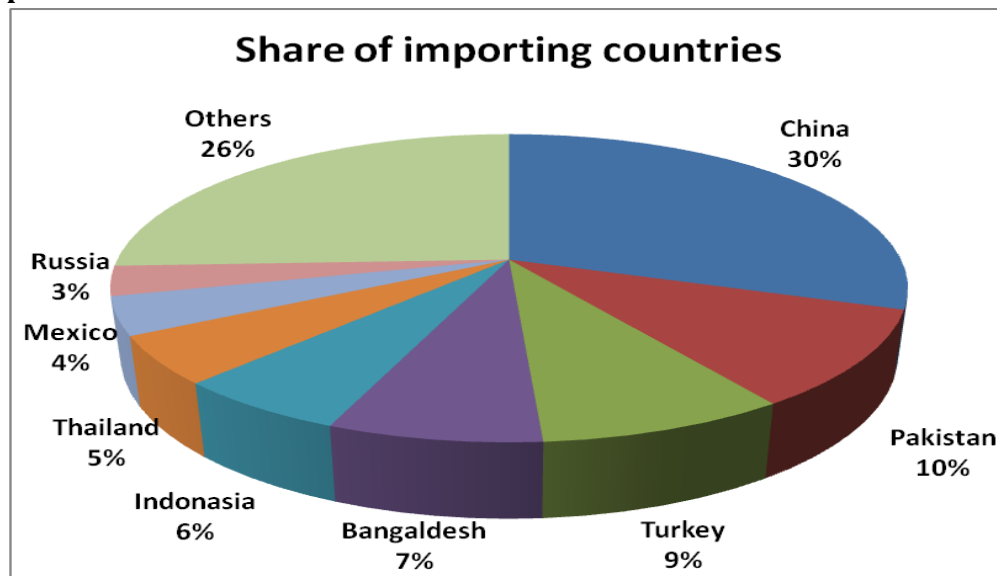


Global Cotton Exports

The five leading exporters of cotton in 2009 are (1) the United States, (2) India, (3) Uzbekistan, (4) Brazil, and (5) Australia. India exported 92 lakh bales in 2007-08, which was an all time record in the history of Indian cotton. This represents a remarkable growth when compared to the exports in the beginning of the current decade.



Major importers



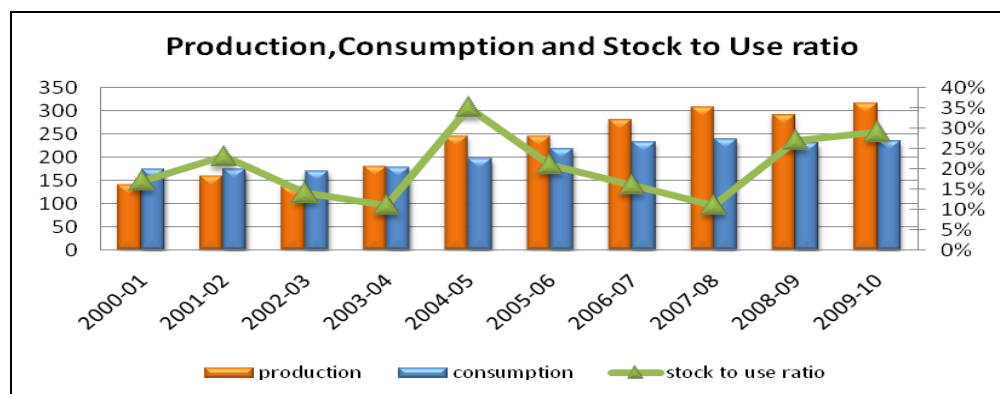
Cotton scenario-India

Cotton, being a major agri-crop in India, has a major impact on overall Indian agriculture sector. Cotton crop contributes about 14 – 16% to the total agri-crop in India. It has the largest area under cotton (9 million hectares) in the world constituting 26% of total world cotton area. India presently produces 5.35 MMT which constitutes 20% of the world cotton production. 60 million people including 4.5 million farmers in India depend on cotton for their livelihood. Cotton scenario in India has dramatically changed from a shortage situation to surplus from the season 2004-05 and onwards.

Supply-demand dynamics

In the context of International cotton scenario, India now plays a predominant role

- India is the largest cotton cultivator in the world
- India is the second largest producer of cotton
- India is the second largest consumer of cotton
- India is the second largest exporter of cotton



Cotton production in India more than doubled from 140 lakh bales (1 bale=170 kg) in 2003-04 to 315 lakh bales in 2007-08. The year 2007-08 recorded an all time high of 315 lakh bales. According to USDA report, cotton output has been forecasted to decline during the current season (2009-10) to 290 lakh bales, but the revival of monsoon in most of the cotton growing regions, in the later part of the sowing season improved the condition of cotton crop, which is likely to ease the yield loss. The overall cotton output of the country is projected to reach 325 lakh bales, against 315 lakh bales achieved in the previous crop year. Planted area of cotton may reach 10 million hectares i.e. 24.7 million acres.

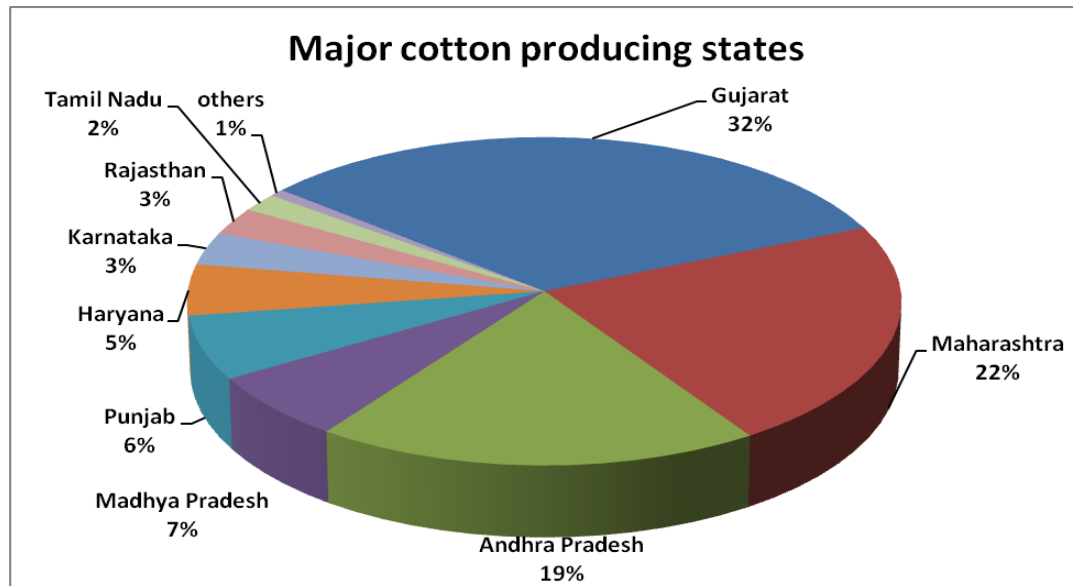
Cotton varieties and Hybrids in India

Shankar-6 is the best known hybrid seed variety cultivates primarily in the states of Gujarat. Other varieties cultivated in India include Bangladeshi, Brahma, bunny, DCH-32, H4/MECH-1.j34, MCU-5, NHH-44/LRA-5166, Surabai, V-797, Y-1.

State wise area, production and productivity (2008-09)

State	Area	Production	Productivity
Punjab	5.37	17.5	554
Haryana	4.55	14	523
Rajasthan	2.23	7.5	572
Gujarat	24.17	90	633
Maharashtra	31.33	62	336
Madhya Pradesh	6.55	18	467
Andhra Pradesh	13.45	53	670
Karnataka	3.9	9	392
Tamil Nadu	1.2	5	708
Others	0.98	2	347
Total	93.73	278	

Source: Cotton Corporation of India

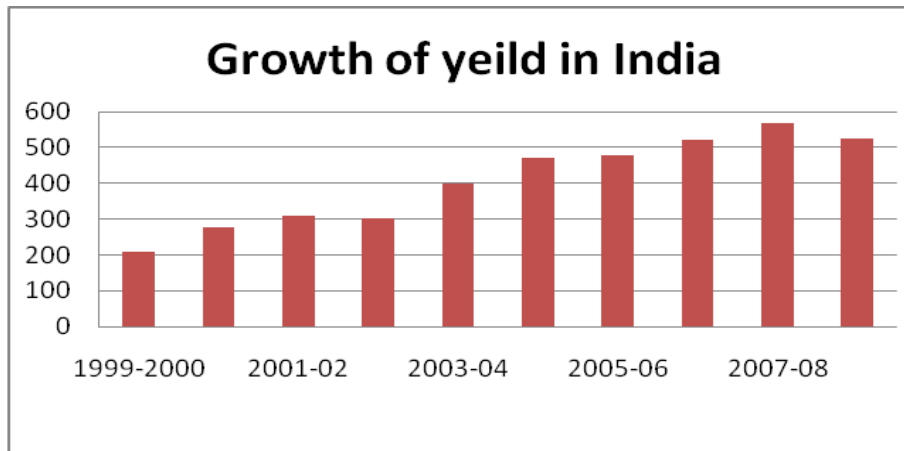


Gujarat is the largest cotton producing state in India having a contribution of 32% followed by Maharashtra (22%) and Andhra Pradesh 19%. These states have a predominantly tropical wet and dry climate, which is an ideal for cotton cultivation.

Growth of Yield in India

Indian cotton sector has come a long way in achieving record productivity, production, consumption and exports. However, the momentum in growth is expected to be accelerated in the coming years. There is a vast potential for increase in yield. The present national yield of 500 kg per hectare in India works out to 3 bales of 170 kgs per hectare with reference to total area under cotton being 9 million hectares approximately. This leaves a lot of potential to be exploited. Even today, productivity in several cotton growing states in India is well above the world average. India has the potential to increase its yield to 4 bales of 170 kgs per hectare by 2010.

Between 1947-48 and 2007-08, the national average yield of cotton in India has gone up by more than five-fold. Although, the current yield of 500 kgs per hectare is still lower by world standards, the growth so far made is no mean achievement, having regard to the odds against which it was accomplished. The cotton crop in India is grown on a massive area which encompasses diverse agro-climatic zones from arid to semi-arid to high rainfall zones. No irrigation facility exists in major parts of agricultural area. The average size of land holding is small and farmers are generally weak economically.



The real breakthrough came about during the current decade, especially during the last two seasons. This was due to several initiatives detailed earlier, the phenomenal spread of hybrid and Bt. cottons, adoption of scientific agronomic practices by farmers, effective check on pest and disease infestation, increase in the area under irrigated cotton and augmented availability of good quality seeds by private producers. Alongside the productivity, there has been a significant reduction in the contamination level and marked improvement in the quality of Indian cotton. This is having a positive impact on the quality of cotton textile products and garments in the domestic and export markets.

Indian textile industry

The Indian textile industry is one of the oldest and most significant industries in the country. It accounts for around 4% of the gross domestic product (GDP), 14% of industrial production and over 13% of the country's total export earnings. In fact, it is the largest foreign exchange earning sector in the country. Moreover, it provides employment to over 35 million people. The Indian textile industry is estimated to be around US\$ 52 billion and is likely to reach US\$ 115 billion by 2012. The domestic market is likely to increase from US\$ 34.6 billion to US\$ 60 billion by 2012. It is expected that India's share of exports to the world would also increase from the current 4% to around 7% during this period. India's textile exports have shot up from US\$ 19.14 billion in 2006-07 to US\$ 22.13 billion in 2007-08, registering a growth of over 15%.

The major sectors forming part of the Textile Industry include the organized Cotton / Man-made Fiber Textile Mill Industry, Wool and Woolen Textile Industry, Sericulture and Silk Textile Industry, Handloom Industry, Handicraft Industry, Jute and Jute Textile Industry and Textile Exports.

Undoubtedly, there has been a refreshing transformation of the Indian textile industry in the last few years. The industry is fully confident of facing global challenges, which have emerged after termination of the quota regime in the world textile trade. Indian Textile and Clothing Industry is poised for a rapid growth in the coming years. It has embarked on a vision of capturing market worth USD 110 billion by the year 2012 from USD 52 billion in 2006. To achieve this target, the textile industry has estimated total cotton requirement of 5.95 million tons (35 million bales of 170 kgs) by 2010 and 7.65 million tons (45 million bales of 170 kgs) by 2012.

Present scenario: India

Monsoon and area covered under cotton

Cotton, being the kharif crop, its sowing starts in India with the onset of southwest monsoon. The monsoon hit the Indian mainland in the last week of May, almost one-week prior to normal date of onset i.e., 1st June. The initial rains were very good in south India but the northern states experienced delayed rains.

Aided by early arrival of monsoon in the first week of June, the kharif sowing operations in southern part of the country began on a positive note. Even as monsoon trends remain weak in most parts of the country in the first week of June, the sowing of cotton had reached the level of 12.48 lakh hectares compared to 10.83 lakh hectares area of corresponding period in the last year.

Despite the scanty rainfall across the northern states like Punjab, Haryana, and Gujarat in the month of August, the sowing condition was very good. According to latest Weather Watch Report released by Union Ministry of Agriculture, till the end of August, area brought under cotton cultivation was 96.21 lakh hectares, with an increase of 13.37% as compared to the same period a year ago.

The cotton Association of India has projected a rise in the total cotton output in the country at 312.25 lakh bales (1 bale=170 kg) during the current 2009-10 seasons, up from 290 lakh bales in cotton year 2008-09.

The North Zone comprising Punjab, Haryana, upper and lower Rajasthan is expected to produce 43 lakh bales (38.25 lakh bales) whereas output in the Central Zone consisting of Gujarat, Maharashtra and Madhya Pradesh is seen up at 189 lakh bales (171.75 lakh bales) and in Gujarat earlier was expected to cross 100 lakh bales, but due to scanty rainfalls this season the production is expected to decline by about 20 to 30 % of earlier estimation.

According to the Cotton Association of India, besides imports and production, the demand will be met by a stock of 67.75 lakh bales carried from this season. The association is estimates total cotton supply in the country at 38.65 million bales and consumption at 25 million bales.

World cotton scenario for 2009-10

Production: According to USDA, world cotton production in 2009-10 is expected to fall for the fourth consecutive year to 105.1 million bales, down 1.5% from the previous year. Global cotton area is estimated to decline by 1% from the previous year at 30.3 million hectare. Although global economic prospects are beginning to improve, production in 2009-10 is expected to decline, partly

due to the aftermath effect of global economic crisis and also because of shift in cultivation to more profitable alternative crops, especially food grains.

But, according to International Cotton Advisory Board, the world's cotton crop in 2009-10 will marginally lower than previous year, while consumption and trade will be higher. As the world economy gradually stabilizes and economic prospects for 2009-10 improve in most of the world, global cotton mill use is expected to recover by a small amount to 23.6 million tonnes, after declining significantly in 2008-09. A major drop in production is expected in the US and smaller declines are expected in China, Brazil, Egypt, Turkey and Central Asia. On the other hand, production increases are projected for India, Australia, Pakistan and African zone.

Consumption: Global cotton consumption in 2009-10 is estimated at 122.7 million bales, an increase of 2% from the previous year. As the world economic indicators are recovering gradually, the global mill use is expected to rebound. China is expected to use 46.3 million bales in 2009-10, up 2% from the previous year. India and Pakistan are expected to consume 18.5 million bales and 12 million bales, with an increase of 3% and 4 % from the previous year.

Exports: Global cotton exports are estimated at 32 million bales in 2009-10, up 8% from a year earlier. Exports are expected to decline in US and Brazil, but the overall trade is expected to rebound in 2009-10 due to offsetting increases in India, Uzbekistan and Australia. India is expected to export 6.1 million bales of cotton in 2009-10, more than double the volume exported previous year.

Imports: Cotton imports are expected to rise across the world in major importing countries. In 2009-10, Chinese imports are estimated at 8 million bales, up 14% from last year. While the Pakistan's imports are estimated to increase 36% to 3 million bales and Bangladeshi imports are estimated at 3.1 million bales, up 3% from previous year.

After a sharp decline during the beginning of the decade due to rapid expansion of the domestic cotton industry, the Indian imports got a major boost after the Indian government abolished the duty on cotton imports in 2008, and the total imports during the same year were recorded at 130,000 tons. India mainly imports Extra Long Staple from countries like US, Egypt and West Africa.

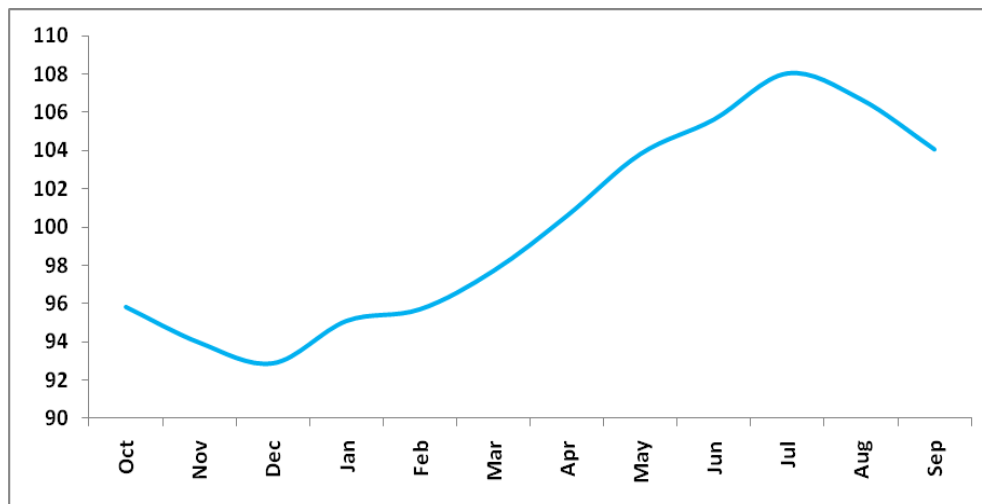
Stocks: According to the latest U.S. Department of Agriculture (USDA) projections for 2009-10, the world cotton stocks are expected to decline for the third consecutive season. Global ending stocks are currently forecast at 56.3 million bales for 2009-10, 5.2 million bales (8.5 percent) below 2008-09 and the lowest since 2003-04 48.1 million bales. Meanwhile, stocks in India, which is the second largest producer and consumer are forecast only marginally lower and will likely play a key role in the global trade of raw cotton in 2009/10.

Price analysis

The cotton prices are mainly driven by output and export demand. Cotton prices have shown a volatile movement during entire decade. The highest price was recorded in the year 2003-04, due to decline in imports and stagnant output during 2002-03 and 2003-04. While the biggest crash was seen in the next year itself, i.e. 2004-05 following increase in output.

Cotton seasonality index

Seasonal indices method has been adopted to find out seasonality of Cotton prices in India. The monthly average auction price from 1990-91 to 2008-09 has been collected from spot market. Seasonal Indices were calculated by averaging monthly average prices and correcting the total to 1200. Correcting the sum to 1200 will be done to give equal weightage to each month. After getting correction factor by dividing 1200 by the sum of average, this correction factor will be multiplied with monthly average price to get adjusted Seasonal Indices.



The seasonality index for domestic cotton lint prices from 1990-91 to 2008-09, indicates smooth movement of prices. Like other commodities, cotton also shows a seasonality pattern in the price movement. As shown in the above figure, the cotton prices traded lower during the early arrival season, i.e., from October to December and started rising after January. The seasonality index remained below 100 units till March and started increasing only after mid April till August, which is the peak arrival season for cotton in Indian domestic markets and it has reached its highest at 108 units in the month of August.

Price outlook for domestic cotton for 2009-10 season

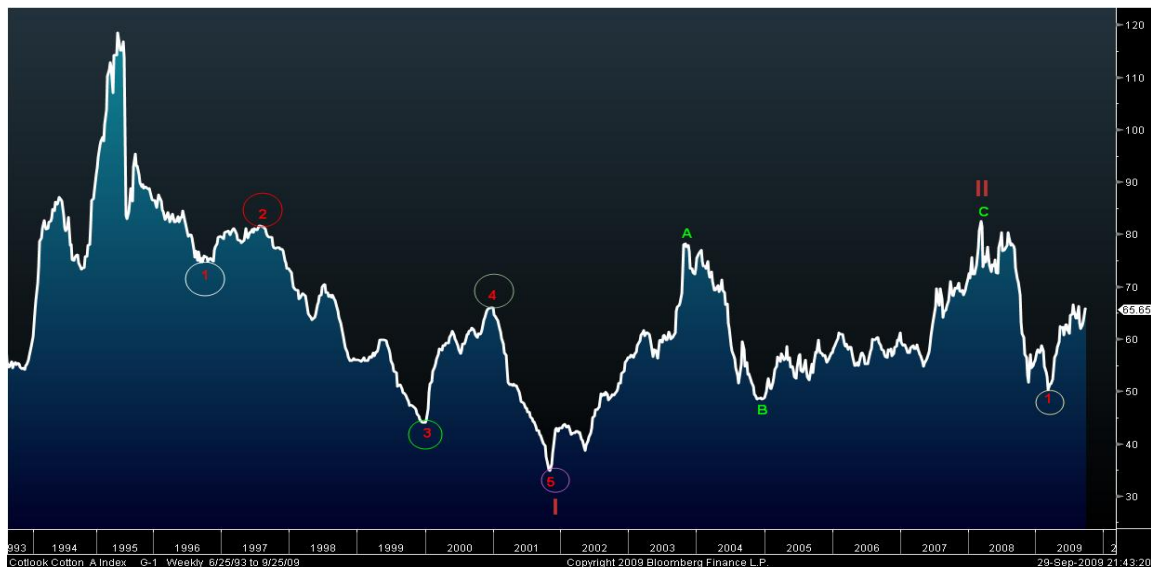
The raw cotton (kapas) price of the popular variety shanksr 6 is quoting in the range of Rs 21000 to 21600 per candy. The cotton prices are expected to reach Rs 23500 to 24000 per candy during next 2- 3 months and may decline during the peak arrival season which starts from November and extends till February. During lean arrival period i.e., between March and May, prices may touch Rs 28000 per candy.

Since, the crop is still in the field, the crop scenario is still uncertain and the weather could still impact the productivity. But in the immediate term, kapas is bullish. The change in the production estimates from 315 lakh bales to around 290 lakh bales has triggered the prices as of now, while the crop in major producing states like Gujrat and Maharashtra has been damaged to certain extent due to scanty rainfall in Gujrat and pest and disease attack in Maharashtra and heavy unprecedented rains in Andhra Pradesh and Karnataka has badly hurt the prospects of the cotton

crop. Since Gujrath, Maharashtra, Karnataka and Anhra pradesh are the major producers which contributes more than 70 percent to the total output, further damage of crop will scale down the total output in the country to a large extent and fuel the prices to reach Rs 23500 to 24000 in near future (2-3 months).

Also most of the stocks with government agencies are not of very good quality and as the world cotton crop is expected to be the lowest in recent years and China is expected to import higher than the last year, thus the exports are expected to be more than double compared to last year and these estimates also serves as a major factor to support the bullish trend as of now.

Technical analysis



- COTLOOK INDEX Chart is in falling trend since the year 1995, it has completed 2 cycles and now in the Primary 2nd wave of Cycle 3.
- The first Cycle in the falling trend started on 04/28/95 and ended on 10/26/01. (118 – 34.95)
- The second Cycle (Correction Wave) started on 11/10/01 and ended on 03/07/08 (38.65 – 81.40).
- The Third Cycle started on 06/27/08 and currently the Index is in this Cycle.



Third Cycle in Detail

- The primary 1st wave of the 3rd Cycle started on 04/03/08 and ended on 03/06/09. (82.5 – 50.4)
- The primary 2nd wave started on 03/20/09 (51.35) is still in progress. As per the rules of wave count, 2nd wave which is a corrective of 1st wave can take a **maximum of 61.8 % retracement**, i.e. 61.8% retracement for wave 1 (82.5 – 50.4) which comes near to 70 level. We Expect 2nd wave to complete at these levels.
- The primary 3rd starts from 70 levels and it should be at least 1.382% of 1st wave. **(Since as per the rules of Elliot wave 3rd Wave should not be the least wave among 1, 3 & 5 waves)** i.e., 3rd wave should end close to 35 to 32 levels (App).
- The primary 4th Wave which starts from 35 levels is a corrective wave and has to take minimum of 38.2 % correction of the wave 3 (70 – 35 assumed levels) i.e., up to **45 to 49 levels (App)**.
- The Primary 5th wave, which starts at 45 levels, may end around **22 levels**.

Outlook: In the short term we expect Cot look index A to trade higher and test 70 levels. However, since then it may trade lower side to test 35 and 22 in medium to long term.

Price range

Currently, the April 2010 kapas contract on MCX is trading at Rs.554 per 20 kg. The supports are seen at 530 and 510; likewise, resistances are seen at 595 and 615 levels.

Contract specification of KAPAS

Symbol	KAPAS (Kalyan/ V797)
Decryption	KAPAS MMMYY
Trading unit	4MT (200 mounds of 20 kg each)
Quotation and base value	20 kg
Tick size	10 paisa
Daily price limit	3%-4% with a daily cooling off period of 15 minutes
Initial margin	5%
Max available open position	For individual client-20,000 MT For members-25% of open market position
Delivery unit	4 MT
Delivery center	Within 50 km limits of Kadi, Viramgham, lakhtar , Limdi and Surendranagar
Delivery logic	Seller's option

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