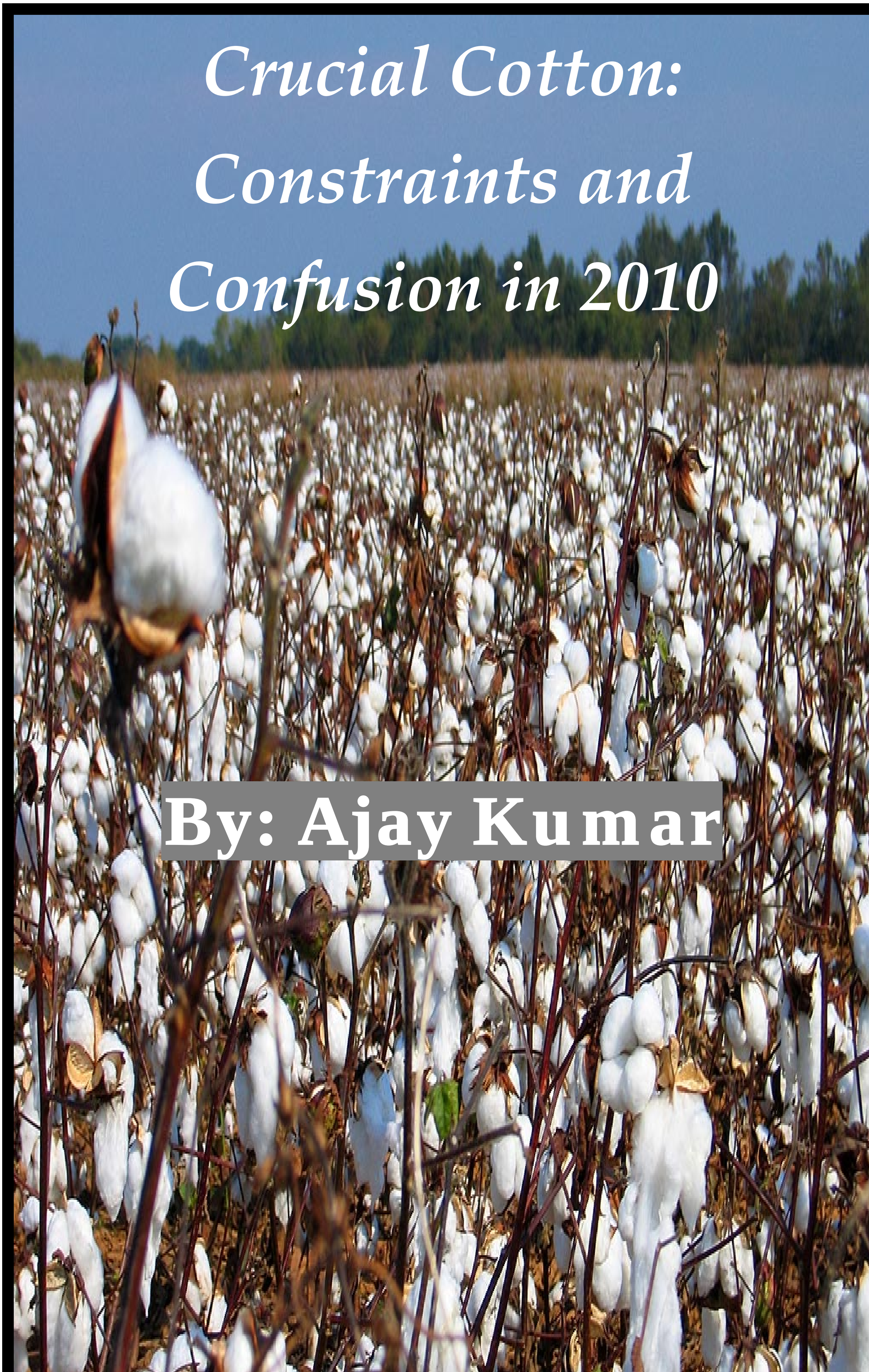
Crucial Cotton:
Constraints and
Confusion in 2010
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Crucial Cotton: Constraints and Confusion in 2010

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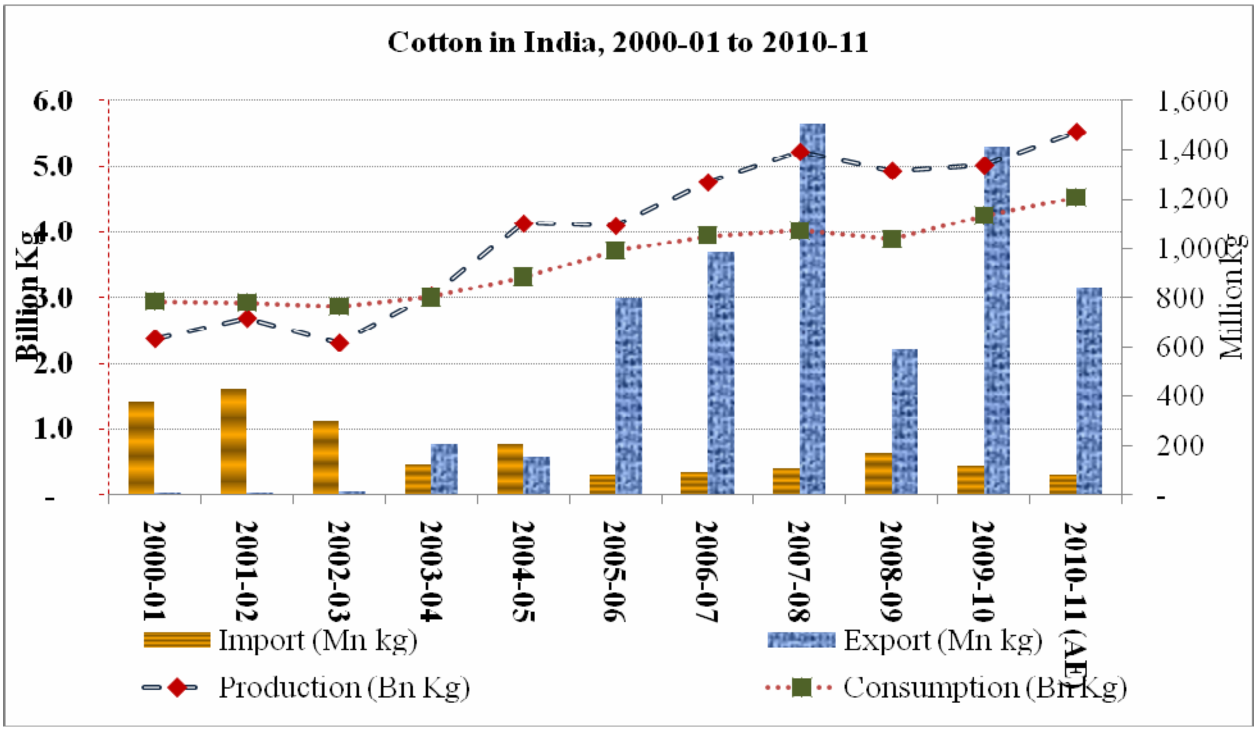
Cotton now signifies the proposition of '*White Gold*'. The '**Gold Price**' has increment of around **30%** whereas **Cotton Price**[i] by more than **100%** on the global commodity brochures during one year. Is not commodity beating the metals? *Jim Rogers*[ii] are more bullish than ever! Many of global factors are leveraging the high growth of Indian economy. There could be more liberal trading regime. Why not speculative market? At least not for the sake of Indian commodities as economic costs are much higher than benefits. In cotton context, Government cannot relinquish the ongoing efforts to tide the home conditions (holding of the flickering downstream under cotton product producers) and facilitation process for strengthening manufacturing with more value addition in cotton crop. Indian cotton has myriads of cultivators (farmers), cotton based industries (entrepreneurs), employees (under various cotton activities) and traders as major stakeholders. It is valid and desired to have growth for all stakeholders under cotton economy, but with objective preferences. One economic agent cannot subside its benefits (even if it comes with certain windfall gains) for the growth of others in private sphere, but Government can do through certain regulatory mechanisms. As it has a larger role to play for growth and development for domestic cotton economy. In this context, it becomes imperative to observe the Cotton Economy of India and recent undue malign arguments that restriction on Indian cotton exports has led the price volatility in international cotton markets; failures for international binding contracts (if any) and not propelling the right image for Indian brand cottons and hence exports restriction is not warranted at all. In fact the present circumstances warrant regulatory mechanism (restrictions) more than ever before.

Crucial cotton for Indian economy

In acreage terms, India has the largest land area under cotton cultivation in the world. There are over 10 million hectares cotton cropped land, which constitutes around 5% of total area under agricultural commodity for India. The total area under cotton have fluctuated over time, but witnessing an overall rising trend. India's present share is 34% out of 30.4 million hectares in world cotton area during 2009/10. Second largest is china with 5.3 million hectares of land in the world (with share of 17%) for cotton cultivation. Total production of cotton in India is at 5.05 billion kg, which is 23% share of world cotton production of 22.06 billion kg during 2009-10. World's largest producer is china with 6.97 billion kg. Quality wise roughly 78% Indian cotton production is of superior long staple, 19% of Medium/Medium Long, around 2% of Extra Long staple and little over 1% under short staple. The increase in share of long staple cotton (Shankar-6 as most popular variety) from 38% in 2000-01 to 78% in 2009-10 is a major achievement. Total production as well as yield and quality have improved due to extensive cultivation of Bt cotton, which has surpassed 80% of total area under cotton cultivation. Introduction of Bt cotton on commercial scale in year 2002 and various programmes under cotton Technology Mission (TMC) helped in reducing cost and increasing yield. Bt cotton was very lately introduced in India in comparison to other major cotton producers in the world. India has still lowest yield among all major cotton producer countries in world including Asians, but above Africans. China has cotton yield of 1,315 kg/hectare, while India has merely 492 against the world average of 732 kg/hectare during 2009/10 (USDA[iii] data). Over 37 million Indians are engaged under cotton cultivation and in its ancillary activities to process the produce in domestic market as ginners, traders and marketers.

India has occupied 2nd slot in world for cotton production, consumption and for exports in world. Consumption is basically driven by textile mills, of which 90% falls under organised sector. Further consumption is bound to increase with more addition in capacity with increase in investments, up-gradation and modernisation of spinning technologies.

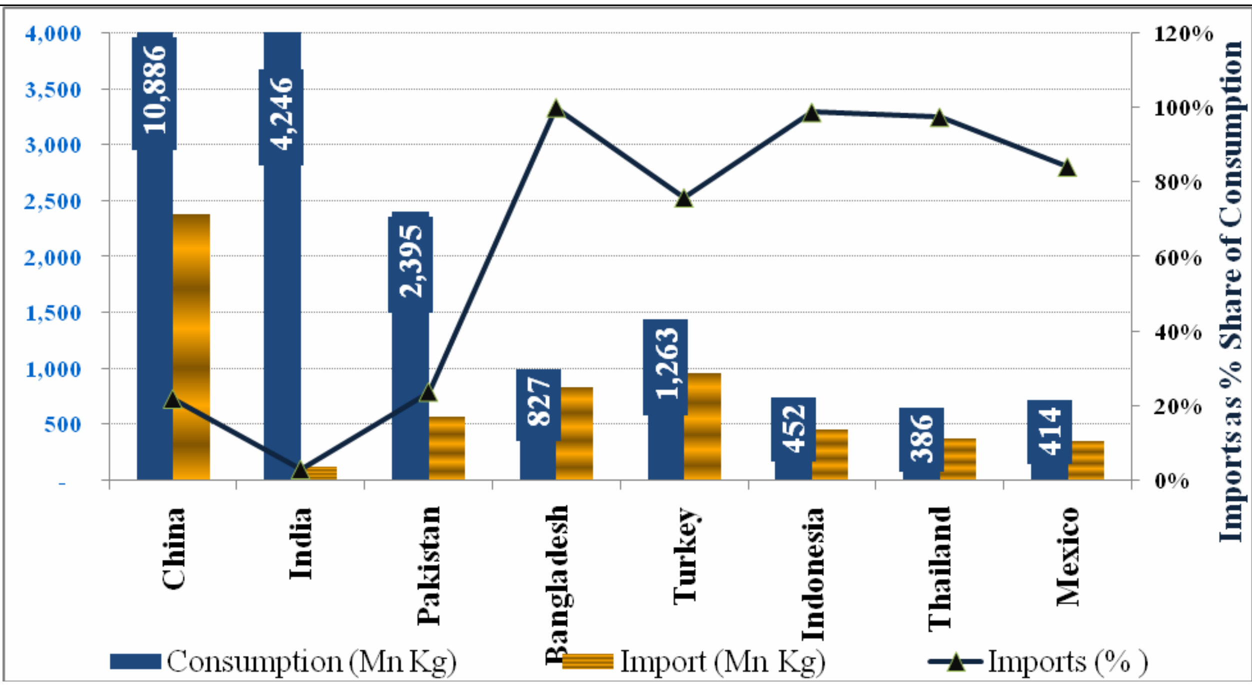
Chart-1. Production- Consumption& trade trends for Cotton in India, 2000-01 to 2010-11



Source: Cotton Advisory Board (CAB), India AE- Advance Estimates

India's domestic cotton consumption has increased from 2.9 in cotton year[iv] 200-01 to 4.6 billion kg in 2009-10, representing a higher growth rate (CAGR) of 3.7 % against the world average at 2.5%. But this is much lower in comparisons to Chinese consumption growth of 7.8% and 13.3% for Bangladesh during the same time period. Because of higher cotton production increments, India was able to convert its position from net cotton imports till 2002-03 to whopping more than 28% of produce for exports after 2006-07 (except during demand crisis of 2008-09). In future also the exports are bound to increase, but pace could be linked to yield achievements directly. However, we cannot undermine the preferable feed to our cotton to domestic industries which have second largest investments and capacity built up in the world. China is largest and now hunger for surplus cotton from the world market. In recent future Chinese are not going to increase their production much and shall be cotton deficit country. USA is the other larger producer in the world, but produces more for trade and driven by commodity market prices (as a hub for traders and speculators) than the need for local industry. Similar story is with Uzbekistan, where over to one billion kg cotton is being produced and mostly gets exported. Brazil is another larger producer and consumer of cotton, but its consumption is stagnant around one billion kg for last ten years. Pakistan and Bangladesh much rely on surplus cotton from world produce. Though Pakistan has major consumption (around 75%) from domestic produce, Bangladesh is entirely dependent on surplus cotton from world. Similar story is for Turkey with 1.2 billion kg of cotton consumption mostly comes through imports. Indonesia, Thailand, Mexico, Vietnam, Taiwan and South Korea, all have significant cotton based textile industries fed by imported cotton.

Chart-2 Major Cotton Consumption Countries are Import dependent, Except India in World



Source: USDA

Only India has a unique position in the world now to produce and feed cotton as much as its desire for manufacturing in the country. Cotton accounts for nearly 60% of fibre consumption in India (vis-à-vis world for 60% of man-made fibres). Almost 20% of world active spindles (over 40 million under cotton system) are in India. The domestic textile and clothing (T&C) market in India is witnessing strong growth owing to a large share of young population, an increase in disposable incomes and a rapid growth in organized retail. The growing penetration of organized retail (around 10% now) are facilitating availability, thus substantially increasing purchases by Indian consumers. Urban consumers are increasingly seeking branded and lifestyle products. Culturally Indian sticks with more cotton fiber based product than of any other. In the export sector, the end of the Multi Fibre Agreement (MFA) has given a boost to the Indian textile entrepreneur trend, which has been augmented by the progressive dismantling of spinning and weaving from the developed world especially from US & EU. In fact, in response to the growth drivers, and in anticipation of those drivers becoming sustainable in the long term, the Indian textile industry has been making substantial investments in the past four-five years. Out of over one trillion rupees of investments in the T&C sector during last three years, the cotton textile segment accounting for around 75%. Domestic value addition is pushing up employment and foreign exchange realization. Over 25 million people are directly engaged with cotton based textile and clothing sector. Out of total US $ 23 billion T&C exports in 2009-10, over 65% share came through cotton based products. Since world cotton producers and manufacturers are going to be from developing and less developed countries and shall be propelled the fierce competition among themselves to supply cotton based apparels to developed markets, the strategic thinking must prevail for Indian cotton to strengthen its domestic industry. Moreover, mostly cotton based textiles and clothing are being manufactured in Asian regions where mill consumptions are significantly higher (over 25%) than production for cotton. So, scarcity for cotton in the region shall persist. It is also agreeable fact that the surplus cotton exist in India to feed some of world mill consumptions and shall help to fix the international prices as benchmark for domestic produce as well. But, India cannot allow the '*Beggar thy neighbour policy*' for the pursuit of hyperboles and also cannot afford to import unemployment or under utilization of our mill capacity by truncating the cotton availability in domestic market. So, preferences for domestic manufacturing under policy should hold it ahead of any other interests after satisfying the farmers. Crucial cotton is of paramount importance for Indian textile and clothing growth and future. We need manufacturing to transit labours from over burdened agriculture sector.

Price factors for domestic cotton

Cotton availability and procurement in India is as complex & lengthy as of long value chain in whole textile and clothing sector. But briefly, we can discuss its procurement in Indian market to understand its pricing factors. After harvesting from crop fields, unginned cotton (*Kapas*), it arrives in the local markets (*Mandis*.) These *Kapas* are purchased by either traders or ginners. After *Kapas* is ginned, corresponding cotton lint is pressed into bales. Bales are sold by the traders or ginners to either cotton merchants in the terminal markets or textile mills. In glut market situation Government agencies owe the minimum support prices (MSP fixed by Govt. itself) and hence procure the cotton with pre announced MSP. Otherwise market forces determine the prices. Pricing factors get install and incorporated every steps from field to mills or end users. In this context, fundamentally cotton prices are primarily determined by supply and demand factors. In the short run (a year or a season), supply and demand are key determinants. In the long run, price is both cause and effect as supply responds to demand through the price mechanism. Hence, major factors affecting the demand-supply or through some other influences can be categorised under following sub-heads:

- **Factors affecting cotton demand-** demand for cotton products (like yarns, fabrics, cloths etc.), which depend on domestic and exports market conditions, prices of cotton and cotton product substitutes (like man-made fibres or any other fibre), consumer preferences for alternative fibre products and development of cotton based industries (like spinning and weaving capacities , downstream value chains, apparel making etc).

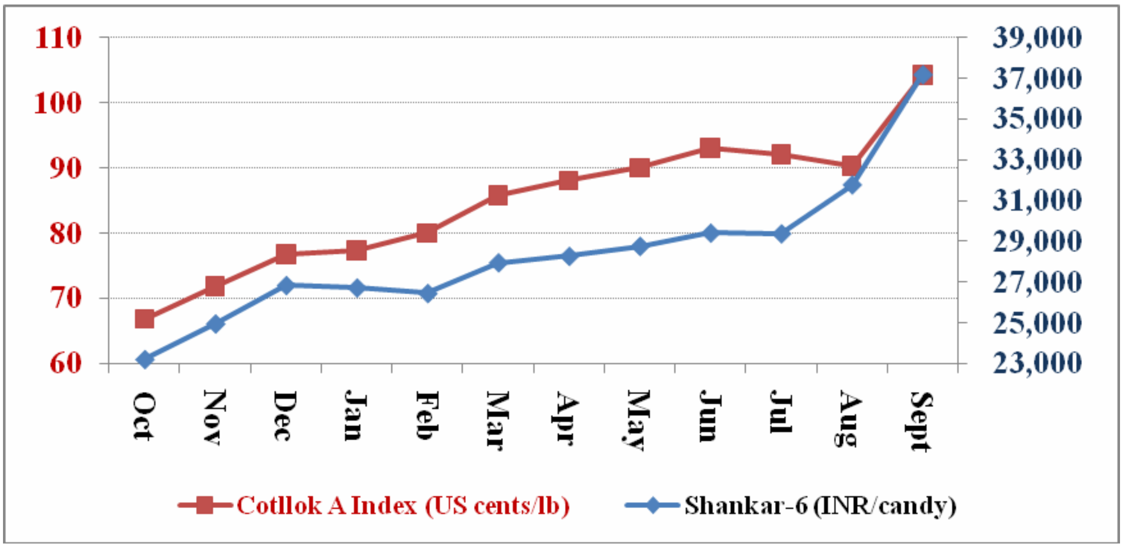
- **Factors affecting cotton supply-** it determined by the availability of land for cotton planting and the relative prices of substitute crops (or any other crop) competing for the same land; cotton yields which are mainly drive by cultivation and input technology and management; labours and its productivities; favourable climatic and pest conditions.

Fortunately all above factors in Indian cotton contexts are getting much favourable than ever before. But, most of price volatility and intermediary factors could be understood with following observations:

- **Intra seasonal price movements-** These kind of price movements are determined by pace of arrivals of *Kapas* in the assembling *Mandis*, and stocks of both *Kapas* and cotton with the ginners as well as with the cotton trade and industry in the upcountry and terminal markets. Since the arrival of *Kapas* peaks from December through May, while the consumption of cotton spread round the year, cotton prices normally disclose a seasonal rise in prices. Theoretically, it should be equal to the cost of carrying stocks from the peak to season to the lean months. But, traders' greed and tactics to hold and create artificial scarcity are often notorious to add more cost.

- **Another least factors but now playing prominent role-** cotton prices fluctuate from day to day basis. These fluctuations not only depend on the arrivals in the *Mandis*, but also weather conditions, export-import deals, and prices in the exporting and importing countries. Besides there are the macro-economic factors as money supply, monetary and fiscal policies, and conditions in other investment markets. Commodity markets, hedge funds, future trading etc. are most volatile factors on the pretension of price discovery. For example- however intelligent the cotton buyers could be, but cannot validate/guess when shall hedge funds could flood or drought the market especially for emerging markets. Speculative funds are in (a continuous flux) always adding to volatility and try to reap the benefits (premiums for manipulation and tactics master). It is getting difficult to mitigate the consequences of virtual market (future or speculative) from physical market.

Chart-3 During 2009-10 the significant price increments after April mostly influenced by trading activities



Source: CCI

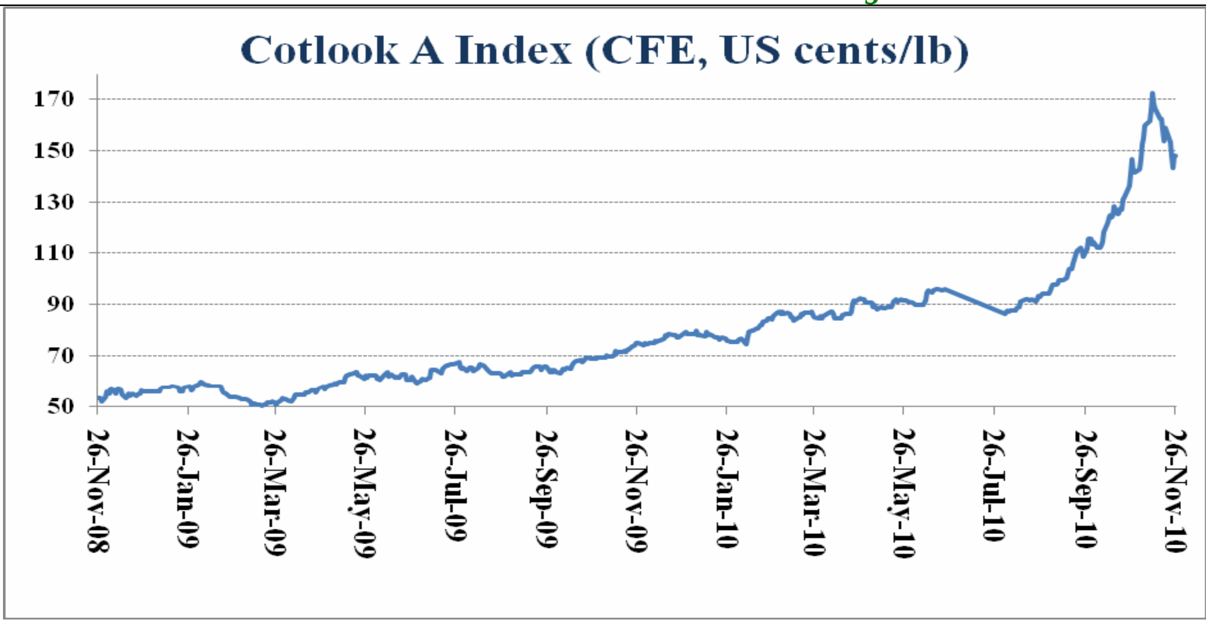
Theoretically the price of raw cotton in the country should be determined by its demand and supply. As India is a second largest producer, consumer and exporter of cotton, its production influences the world availability and in turn is influenced by the rest of the world production. Consequently under a paradigm of costless flow of information and law of '*one price*' domestic price is influenced and influences the world price and thereby index of international prices. The domestic price more or less moves in tandem with the index of international prices in India. This can be seen in **Chart-3.** During 200910, the price increments and trends for Indian Shankar-6 prices and Cotlook A Index were highly correlated. Despite the high restrictions on cotton exports from India during April 2009 to December 2010, price trends under international and Indian domestic cotton remain replica of each other. This invalidates the apprehension that calibrated exports shall decouple the price increments in domestic market and thus denies the cotton farmers' remuneration in tandem with world prices. Increased mill plus non-mill consumption also supports the domestic price. In cotton glut situations only, Government agencies (like Cotton Corporation of India) have been asked for and they always facilitated reasonable prices must be paid to farmers. It is worth observation that when international prices were coming down in 2008, through Government determined minimum support price (MSP) operations, Indian cotton has increasing price trend. Moreover, this is most secure (price) insurance only for Indian farmers among all major cotton producers in the world.

Cotton consumption demand is already high in domestic market; mills are not able to run with existing capacity due artificial scarcity created with astronomical rises in cotton prices. Cotton price spirals are directly cascading into the downstream products and fuelling the domestic inflation through costly clothing for Indians. It wonders many people how news articles globally as well as produced from Indian elites are against cotton export restrictions and blaming it for the price volatility and vociferously maligning the developmental agendas to brand their liberal image for speculative markets and global trader's view points. We simply cannot afford it at the cost of manufacturing units.

Confusions with International cotton price rise

The fundamental fact (data) that caused international cotton prices to increase continually for several months have been dominated by the lack of available raw material. Speculative factors are over riding on it. World cotton cash and futures prices have surged in the past months, showing extraordinary volatility and exceeding all previous historical records. Several developments have contributed to the run-up in prices, major are : declining world production in the three previous seasons; stronger than expected recovery in demand from the 2008-2009 world recession; sharply higher prices for agricultural commodities that compete with cotton for land; restrictions on exports by the government of India owning to surge in domestic demand consumption; concerns about 2010- crop production in China and Pakistan; the weaker dollar; and speculative pressures. However, the single most important price driver is a supply shortage in China, which has far exceeded expectations and has resulted in recent prices paid to producers of an unprecedented $2.00 per pound (lb).

Chart-4 Cotton Prices rose to uncharted heights



Source: Cotton Outlook

International cotton prices have increased almost continuously since March 2009. The rise in prices has been particularly steep since August 2010. The Cotlook A Index reached 172 U.S. cents per pound on November 10, 2010, highest ever for Cotlook A Index history.

Chinese factors

China remains a dominant force in the world cotton market. The largest and most significant impetus to the growth of world trade was provided by a sharp increase of cotton use in China. With the reduction of stocks in China to minimum levels, the government began to provide full support to imports by issuing sufficient import quotas as a measure to balance supply and use, reduce domestic prices and make the textile industry more competitive. But, during 2009/10, China's mill use was estimated at 50 million bales (1 bale=480 lb=217.44 kg), up substantially from the recession-reduced level of 44 million bales in 2008/09. While mill use was recovering, China's domestic production slipped to 32 million bales during 2009-10 in comparison to 36.7 million bales in 2008-09. In addition to importing almost 11 million bales in the 2009/10, the Chinese government aggressively auctioned cotton from state reserves in an effort to satisfy the internal deficit. Since May 2009, China has auctioned more than 16 million bales from state reserves. At this point, the big unknown is how much is left in the reserves and at what point will China choose to rebuild reserves.

In light of developments in China, United States Agriculture Department (USDA) has made significant revisions to supply and demand for 2009/10 and 2010/11 in every subsequent monthly bulletin. According to December 2010 release, China's ending stocks for 2009/10 are reduced 3.0 million bales based on the shortages which have become apparent over the past several months and weeks, indicating minimal inventories available for mills to continue operations.

Uncertainty also exists regarding China's production. In the October World Agricultural Supply and Demand Estimates **(**WASDE**),** USDA lowered the '2010/11 crop from 32.5 million bales down to 31.5 million. However, due to recent weather problems, internal estimates from China suggest an even smaller crop – perhaps as low as 29.5 million bales. If a crop below 30 million bales comes to fruition, China will very likely be a larger cotton importer than currently called for by USDA.

Pakistanis factors

Pakistan's standing as a producer and consumer of cotton in the world is fairly high, as it is the fourth largest producer and third largest consumer of cotton. Cotton based textiles contribute over 60% to the total exports, accounts for 46% of the total manufacturing and provides employment to 40% of the manufacturing labour force. Till the nineties (1990s), domestic production was sufficient to meet the domestic demand, but the latter outstripped the former and since then imports have become more or less a regular yearly feature. In times of below normal crop, Pakistan imports a substantial quantity to meet the requirement of the domestic industry. During 2009-10 domestic produce decreased by 28 million kg (from 1,193 in 2008-09 million kg to 1,165 million kg).

In late summer of 2010, devastating floods affected portions of the cotton-producing regions in Pakistan, and initial estimates indicate that production losses could exceed 1 million bales. As a result, imports for the 2010/11 marketing year are expected to increase from previously expected levels. So there shall be continued cotton supply deficit in Pakistan.

Low stock to use ratio

The steep rise and high volatility of cotton prices over the first three months of the current season reflect primarily a combination of low global cotton stocks and continued demand by spinning mills. The demand for cotton has grown over 7%, from 23.9 billion kg in 2008/09 to 25.8 billion kg in 2009/10, whereas the production declined by 5%. Global cotton stocks fell over 27% in 2009/10 to 9.5 billion kg, the smallest in seven seasons. In 2010/11, rising production and mill use are expected to keep global stocks tight. According to USDA advance estimates, for current marketing year the ending stock is going to fall further.

World Cotton Production, Consumption (billion Kg) and Stock (Ending stock) to use ratio %

	Production (Bn kg)	Mill Use (Bn kg)	Ending Stock (Bn kg)	Stock to use ratio (%)
2006-07	26.58	26.86	13.27	49.94
2007-08	26.06	26.85	13.22	50.72
2008-09	23.32	23.94	13.17	56.46
2009-10	22.07	25.80	9.50	43.07
2010-11 (AE)	25.09	25.44	9.19	36.62

AE- Advance estimates Source: USDA

Year Ahead

As larger arrivals would be reaching at physical markets (in China and India), the financial speculation shall be retreating from the futures markets and hence dimming of cotton surging prices for remaining time of 2010 and also in 2011. Global cotton consumption is also being depressed by a shift to cheaper polyester fibers. The fiber substitution on a very large scale is resulting in lower global consumption than earlier estimates. Looking ahead to the 2011 planting season, there will be tremendous focus on potential acreage shifts, not only in the United States but also in other countries. Historically, US cotton acres have tracked very closely with expected market prices, as measured by harvest-time futures contracts during the weeks leading up to planting. In 2010, the ratios moved in cotton's favour as cotton prices increased. As of mid-October, cotton prices for the December 2011 contract are trading substantially higher than the previous year.

Nevertheless, India must not have any confusion regarding scarcity of cotton, concerns for their domestic prices and calibrated effort to raise the consumption and hence much needful cotton product exports in 2010 as well as ahead. Good sense must prevail to realize the potential of crucial cotton for cotton based domestic industry and exports market.

Author is Economist with confederation of Indian Textile Industry. Views are strictly personal.

Sources:

1. United Sates Department of Agriculture (USDA) Estimates on Cotton World Markets & Trade, Washington, DC 20250, USA
2. Cotton Corporation of India (CCI), India
3. International Cotton Advisory Committee (ICAC), Washington, DC 20006 USA
4. Cotton Advisory Board (CAB) , India

Image Courtesy: http://www.kushtush.com/mississippi_cotton_large.jpg

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[i] Cotlook A Index

[ii] Commodity Guru

[iii] United States department of Agriculture (USDA) publishes World Agricultural Supply and Demand Estimates (WASDE)

[iv] Corresponds to cotton marketing year of US which is period between 1 August to 31 July every year