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Fertilizers Gave High Yields Bt Only Provided Cover

(Dr. K.R. Kranthi, Director of Central Institute for Cotton Research (CICR), Nagpur has completed his Ph.D in Entomology from IARI, New Delhi. He has more than 20 years of experience in the field of cotton research.)

If the yields increased it was all because of Bt. If yields decreased it was bad weather. Why does an entire country get carried away in a band-wagon? Economists need to be more incisive. Analysis by overseas economists can be overlooked. But how can we ignore the massive increase in fertilizers and irrigation that concomitantly increased along with Bt-cotton, and undoubtedly contributed to higher yields?

A recent (May 2016) report "GM crops: global socio-economic and environmental impacts 1996- 2014" was published in Graham Brookes & Peter Barfoot, PG Economics Ltd, UK. <http://www.pgeconomics.co.uk/pdf/2016globalimpactstudymay2016.pdf>

The report states that 1. The main impact of Bt-cotton in India was major increases in yield. 2. Farmers made a net cost saving of US \$ 17-15 /ha (Rs 1190-1750/ha) due to Bt-cotton. 3. Coupled with the yield gains, profitability was between US\$ 82 to 356/ha (Rs. 5740 to 24,920/ha). 4. The total cumulative farm income gains from 2002 to 2014 were US\$ 18.3 billion (Rs. 127,876 crores).

Several studies were conducted on Bt-cotton to understand the net gains. These studies showed

that yields in Bt-cotton farms were 30 to 46% more than the yields obtained in non-Bt-cotton farms and insecticide sprays were reduced by 25 to 55%. The studies also indicated that the net returns in Bt-cotton farms were 50% to 110% more than non-Bt cotton with the increase in average net returns in Bt-cotton farms estimated to be higher by US\$ 76 to 250 (Rs 5320 to 17500) per hectare compared to the non-Bt cotton farms. It is interesting that majority of

the reports give complete credit to 'Bt-cotton' for all the benefits whatsoever. The fact remains that increase in yields could be due to other factors as well. Many eminent economists find the Bt-cotton factor inseparable from changes in fertiliser, hybrids, labour, pesticides and irrigation. Because of the high seed cost, farmers in India are known to bestow special attention to Bt-cotton, while non-Bt cotton is cultivated on marginal soils under neglected conditions.

EXPERT'S Column



Dr. K.R. Kranthi

Why is it important to identify key factors that may have caused significant yield gains? The answer is: these factors can be protected and saved so as to harness the gains for a longer time. If we do not know the precise factors that brought us benefits, we may lose them and will not have a handle on the gains. Interestingly, India's cotton yields increased from 302 kg/ha in 2002 to 399 kg/ha in 2003 when the Bt-area was only 0.38% and illegal Bt-area was only 0.4%. What caused the increase? In 2004 yields jumped to 470 kg/ha when the Bt-area was just 1.22% and illegal Bt-area was estimated to be about 2.5%. In 2005, Yields did not increase even when the

Bt-area increased to 11.7% along with illegal Bt-area at 8.0%. Why did the yields not increase in 2005, despite good rains and higher Bt-area?

I tried hard to unravel the key factors that caused cotton yield gains in India over the past 10-15 years. If Bt-cotton was the factor alone, then I need to surmise that a small 5.7% Bt-area with just 4 Bt-hybrids in 2004 caused a massive yield increase from 302 kg/ha in 2002 to 470 kg/ha in 2004. This was a feat that could never be repeated. On the contrary, things became worse after 2007. My own analysis leads me to two factors, fertilizers and irrigation. However, I want the readers to go through the following questions, to be able to draw their own inferences.

Was Bt-cotton alone responsible for high yields? Regression-correlation analysis between Bt-cotton area and yields does not indicate any trends especially with data from 2006 to 2015. There are a number of questions that need explanation. *How did yields double during 2002 to 2004, when the area under Bt-cotton was less than 5%? Why did the yields decline from 554 kg/ha in 2007 with 67% Bt-area to less than 524 kg/ha continuously for five years from 2008 to 2012 despite progressive increase in Bt-area from 80 to 93%? There are other specific questions. Why did the yields decrease despite significant increase in area under Bt-cotton in Punjab during 2007 to 2011?* Bt was introduced in 2005. Yield was 551 kg/ha in 2004 before Bt and 610 kg/ha in 2005 with just 6.7% area under Bt-cotton. Yield was high at 672 kg/ha with 20.6% area under Bt-cotton. During the subsequent 5 years, Bt-area increased from 49.7% in 2007 to 97% in 2011. But, the yields were only 432 to 607 kg/ha during these 5 years. In 2014, the yield was only 486 kg/ha with 93.3% area under Bt. It is important to analyse the reasons for these discrepancies. Why were the yield gains highly insignificant in Rajasthan during the first five years from 2005 to 2009? Yields were 452 kg/ha in 2003 when there was no Bt cotton. Yields did not increase above 459 kg/ha by the year 2009 despite the significant 67% increase of in Bt-area. Traditionally, North India was always under pure-line cotton varieties prior to the introduction of Bt-cotton hybrids in 2005. Hybrid cotton had a miniscule area prior to 2005. Though there were a few non-Bt hybrids and some illegal Bt-hybrids smuggled from Gujarat, these hybrids were not found suitable. There were a few issues that did not suit the region. Long duration did not fit into the cotton-wheat rotation. Whitefly and CLCuD (Cotton Leaf Curl Disease) started resurfacing. Excessive vegetative growth caused nutrient imbalances. The hybrid area was less than 1.0% in any case and about 99% of the area was under pure-line varieties. Yields

increased mainly in Gujarat. *Was the illegal Bt-cotton a major factor in yields? Why did the yields in Gujarat decline constantly from 795 kg/ha in 2005 with just 10% Bt-cotton area to the five-year average of 660 kg/ha from 2008 to 2012, despite increase in the Bt-cotton area from 10% in 2005 to >85% after 2011?* These are difficult questions.

Bt-cotton technology was considered as a game changer for Indian cotton, because of the huge damage caused by insecticide-resistant American bollworm *Helicoverpa armigera* for more than a decade prior to 2002. However, circumstantial evidence indicates that *Helicoverpa armigera* was an induced problem on cotton in India. It was a minor, insignificant pest of cotton in India prior to 1980, but became a major monstrous pest due to two major factors, namely, introduction and indiscriminate use of synthetic pyrethroids and increased area under long duration American cotton *Gossypium hirsutum* hybrids. Initially, the pest caused severe damage on hybrids in irrigated regions of the three Central-southern states, namely, Andhra Pradesh, Gujarat and Maharashtra. Interestingly, synthetic pyrethroids were introduced into India in 1981 to control the pink bollworm and the tobacco leafworm, *Spodoptera litura*, which were major pests of long duration cotton. Synthetic pyrethroid insecticides effectively controlled these pests but within 5-6 years of intensive use, brought the American bollworms and whiteflies to the fore. By 1990 American bollworm not only became a major pest but turned into a monster that was highly resistant to all recommended insecticides. Bt-cotton was considered to be the 'messiah' at this juncture.

Bt-cotton was supposed to have conferred two major benefits to cotton production. 1. High yields due to effective protection of bolls from bollworm damage and 2. Reduction in insecticides recommended for bollworm control. Official data show that none of the two expectations were met in the past 10 years in India. India cultivates cotton in about 11.0 to 13.0 million hectares that constitutes about 36 to 38% of the global area. It is dismal that cotton production progress in India has hit a dead-end over the past 10 years. Over the period 2006 to 2015, yields stagnated at 520 + 24kg lint per hectare, despite the deployment of all available latest technologies including the introduction of new potent GM technologies and two-fold increase in the use of fertilizers, insecticides and water. India's global rank is 30-32nd in yield. The low yields are despite > 90% area under GM Bt-hybrid-seeds, which are used commercially as hybrids only in India. Further, through tremendous Government support, irrigation infrastructure in 4.8 million hectares improved significantly. But, none

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Table 1. National average data on cost of production, fertilizers, yields and Bt-cotton

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cost Rs per ha	15758	14872	18146	20603	23351	23987	26200	26415	29196	37809	39693	50537	59051	63751	72434
Cost per Q	1932	2236	2449	2220	1997	1851	1959	1858	1848	2302	2438	3049	3499	3994	3893
Fertilizer Kg/ha	99	91	94	96	98	112	118	131	140	164	171	206	222	197	224
Fertilizers Rs/ha	1504	1517	1644	1621	1769	2030	2154	2398	2700	3249	3409	4270	5641	7430	8246
Market Value/ha	16068	15020	14932	20033	29322	25497	28125	30571	37101	46101	50168	75220	69679	65509	87984
Insecticide usage Kg/ha	1.45	1.35	1.53	0.88	1.29	1.05	0.67	0.50	0.59	0.54	0.66	0.71	0.56	0.63	0.97
Total cotton area M ha	9	8.576	8.73	7.667	7.63	8.786	8.677	9.144	9.414	9.406	10.31	11.142	12.178	11.978	11.96
Number of Bt-hybrids				3	3	4	20	62	131	274	522	780	884	1097	1167
Area under Bollgard M ha				0.029	0.093	0.499	1.015	3.650	5.874	5.560	3.680	3.740	2.650	1.11	0.44
Area under Bollgard-II M ha								0.150	0.460	2.040	4.820	6.380	8.540	9.130	9.12
Bt-cotton Area M ha				0.029	0.093	0.499	1.015	3.800	6.334	7.600	8.500	10.120	11.190	11.140	11.12
% Area under Bt-cotton				0.38	1.22	5.67	11.70	41.56	67.28	80.80	82.44	90.83	91.89	93.00	92.98
CAB Yield Kg lint/ha	304	278	308	302	399	470	472	521	554	524	503	517	512	518	566

Compiled from Data from Ministry of Agriculture, Government of India <http://eands.dacnet.nic.in/>

of these technologies made any difference to the stagnant yields.

During the first four years from 2002-06, area under Bt-cotton increased to only 37%, but insecticide usage declined from 0.8 kg/ha in 2002 to 0.5 kg/ha in 2006. Yields improved significantly by 50%. However, the benefits were short-lived and did not continue in a positive trend after 2006. In 2006, Bollgard-II was introduced as a more potent bollworm-control technology. In a short span during 2007-2011, more than 1000 Bt-cotton hybrids were approved by the Ministry of Environment for commercial cultivation. Many of these were poorly tested prior to release. The area under Bt-cotton increased from 37% in 2006 to more than 95% after 2011. By 2013, insecticide usage in cotton fields doubled to 11,598 million tonnes. During 2006-2015, expenditure on insecticides increased by 2.3-fold from Rs. 1240/ha in 2006 to 2799 in 2013. During this period yields ranged from 484 to 566 kg lint per hectare in an average area of 11.0 million hectares each year. Yield stagnation was despite the 1.7-fold increase in fertilizer usage

from 131 kg/ha in 2006 to 224 kg/ha in 2013. The total fertilizer use on cotton in India increased by 2.2-fold, from 1.2 metric tonnes in 2006 to 2.68 metric tonnes in 2013. Fertilizer cost increased by 3.3-fold, from Rs. 2397/ha in 2006 to 8246/ha in 2013. Finally, as a result of increased cost of inputs, the cost of production increased by 2.7-fold from Rs. 26,414/ha in 2006 to 72,434 in 2013. But yields were stagnant, only to indicate that over the past 10 years, cotton production systems were rapidly moving towards un-sustainability in India. Unfortunately, due to the excessive usage of insecticides sap-sucking pests such as leaf-hoppers, aphids, thrips and whiteflies rapidly developed high levels of resistance to almost all chemical insecticides recommended for their control. The pink bollworm has developed high levels of resistance against Bollgard-II that contains Cry1Ac and Cry2Ab toxins. Thus insecticide usage is increasing steadily in India thereby leading towards unsustainable cotton ecosystems and environment.

Did illegal Bt-cotton area contribute to yield increases? There is an argument that though the

Figure 1. Correlation of yields with fertilizer usage in Punjab



Figure 2. Correlation of yields with fertilizer usage in Haryana



Figure 3. Correlation of yields with fertilizer usage in Rajasthan



area under Bt-cotton was less than 5% in 2004, illegal Bt-cotton was rampant. Our surveys during 2000 to 2005 showed that illegal versions of Bt-cotton were available mainly in Gujarat, Maharashtra and AP. But the quality was not always good. Many of them were contained F-2 seed. A paper by professor Ramaswamy http://www.isid.ac.in/~bharat/Research/worlddevt_Ramaswami_feb11.pdf states that during the first three years from 2002, the area under illegal Bt was 0.4, 2.5 and 8% respectively. Therefore it would be grossly incorrect to presume that the yield gains were mainly from Bt-cotton, illegal or legal, during the period 2002-2004.

Was it hybrid cotton? The hybrid area increased from 38% in 2002 to 95% in 2011. Did the new proprietary Bt-hybrids of the rejuvenated seed industry make the difference? Indian seed industry made huge competitive investments into development of new proprietary hybrids. More than 1000 new Bt-hybrids were released in just 4 years from 2007 to 2011.

Was it the new insecticides? Trials conducted by CICR showed that seed treatment of cotton hybrids with imidacloprid (Gaucho) was

Figure 5. Correlation of yields with fertilizer usage in Andhra Pradesh

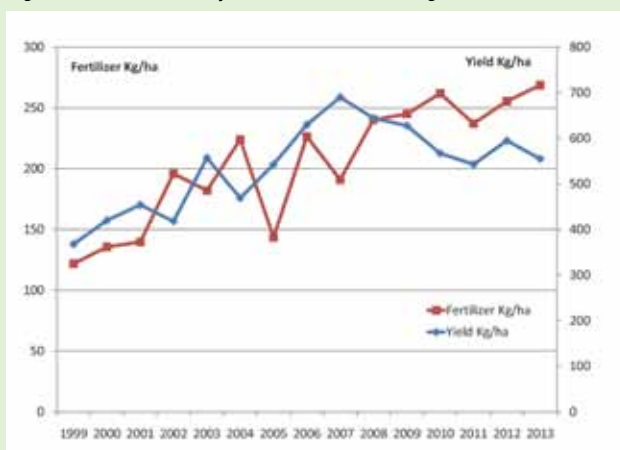
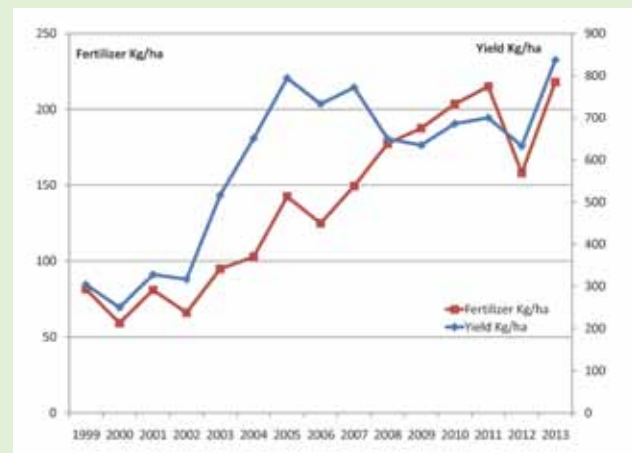


Figure 4. Correlation of yields with fertilizer usage in Gujarat



found to increase yields by 25-30%. Along with Imidacloprid, new insecticides such as Acetamiprid and Thiomethoxam were also released almost about the same time as that of Bt-cotton hybrids in 2002. Simultaneously new insecticides such as spinosad, indoxacard, emamectin benzoate and chlorfenapyr were released around the same time. These insecticides were highly effective for bollworm control and were used extensively from 2001 to 2005 when the area under Bt-cotton was just increasing and was less than 11% even in 2005.

Was it the bollworm-retreat? Pheromone trap catches and field damage levels indicate that the bollworms had taken a back-seat in majority of the cotton growing states from the year 2000 itself. It is widely believed that large-scale use of the insecticides ‘synthetic pyrethroids’ promoted the American bollworm from an inconsequential pest prior to 1981 on cotton, to a major monstrous pest by 1986. After 1998, the usage of pyrethroids declined significantly due to bollworm resistance to this group of insecticides. Was it the pyrethroid decline that caused the bollworm populations to decline?

Was it irrigation? Yield increases in Gujarat

Figure 6. Correlation of yields with fertilizer usage in Karnataka

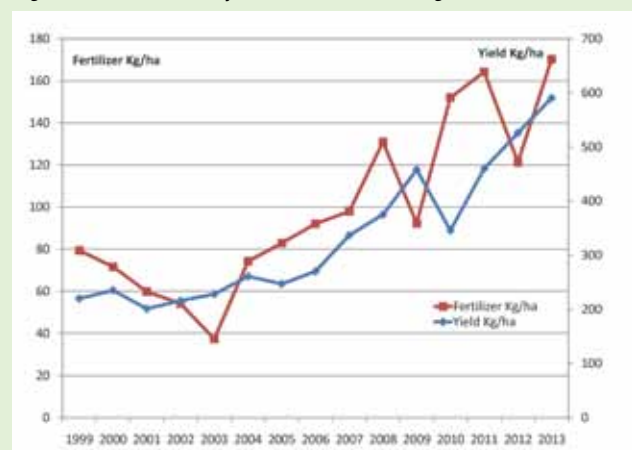
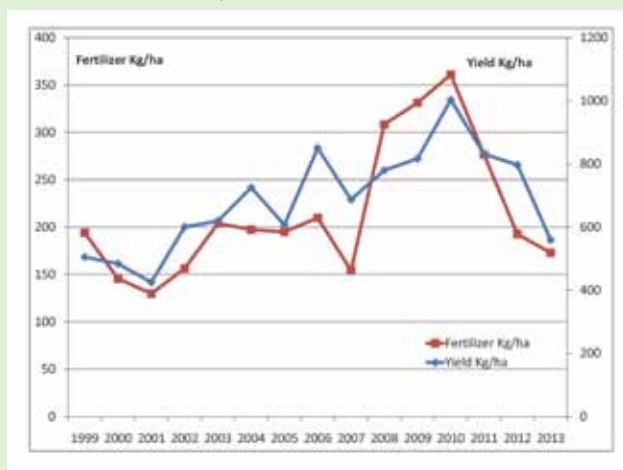


Figure 7. Correlation of yields with fertilizer usage in Tamilnadu



were the most significant. More than 1.5 lakh ponds and 1.6 lakh check dams were constructed after 2002 in the main cotton growing districts of Gujarat. Micro-irrigation increased in cotton growing regions of Maharashtra and MP by leaps during the period after 2002. Irrigated area increased significantly in the cotton growing regions of South India.

Was it good rainfall? Four consecutive years from 1999 to 2002 were drought year in India. The cotton growing regions suffered the most. It was sheer coincidence that good rains were received during the subsequent 10-15 years, except for 2014 when the shortfall in rains was actually not felt because of good distribution.

Was it the new fertile area? About 7.5 lakh hectares of new area was added to cotton in Gujarat from 16.47 lakh ha in 2003 to 23.9 lakh ha in 2006. A massive area of 14.28 lakh hectares was added in Andhra Pradesh from 9.72 lakh ha in 2006 to 24 lakh ha in 2012. Interestingly the new area of 21.78 lakh hectares in these two states came mostly from irrigated legume crops such as ground-nut and pulses, which fixed nitrogen.

Was it fertilizers? Prior to 2003, fertilizer usage never exceeded 100 kg/ha on cotton. After Bt-cotton hybrids were introduced, fertilizer usage went up to 222 kg/ha in 2011. Needless to say, increased use of fertilizers leads to yield increase.

A clear look at data <http://eands.dacnet.nic.in/> shows that fertilizer usage increased like never before in the history of cotton cultivation in India. Analysis also shows a clear correlation in yield increase with fertilizer increase, at least in the initial years from 2000 to 2007.

A few examples are being shown in Figures 1-7 and data in Table 1, here to impress the reader on the

correlation of yields with fertilizer usage and the lack of relationship with yields.

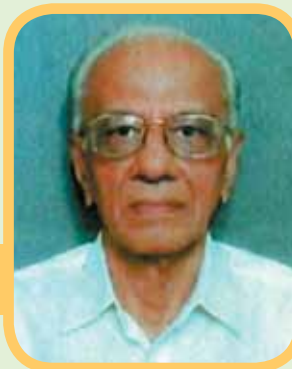
The trends and patterns of data in the seven graphs clearly show that yields were directly influenced by fertilizer usage. Data from central India are a bit skewed primarily because majority of the seasonal conditions. In Gujarat, much of change happened with fertilizers plus irrigation. Exact data on the changes in irrigation technologies and the new area were unavailable. Therefore proper correlation analysis was not done. Nevertheless it is clear that the check dams and farm ponds were constructed mainly during 2002 to 2008 and it is only during this time that the yield increases were exactly not commensurate with fertilizer usage and were influenced by other factors as well. One major factor of course could be irrigation. Data from Maharashtra also indicates the relationship of yields with fertilizer usage. However, there are several variables that are related to the vast expanse of area and the highly different conditions that are prevalent in Vidarbha, Marathwada and Khandesh regions that do not permit a uniform assessment for the whole state.

CONCLUSION: Bt-cotton undoubtedly did a great job in controlling the bollworms. Instead of crediting the technology with all the yield benefits, it would be appropriate to appreciate the excellent season-long bollworm control from 2002 to 2009, before pink bollworm struck with resistance. Thus Bt-technology provided cover from bollworm damage to allow the best genetic potential of cotton to be expressed under suitable seasonal conditions and better management practices. While Bt-cotton conferred excellent protection cover, high yields could have been due to the better management practices that farmers resorted to. High market prices mainly due to the higher cotton exports to China, Bangladesh, Vietnam and Indonesia ensured that Indian farmers got a higher price in the domestic market. This led to higher investment and higher cost of cultivation. Increased usage of fertilizers coupled with increase in the area under irrigation eventually helped farmers to obtain higher yields. Bt-cotton plus higher fertilizers plus increased irrigation also received a protective cover from the seed treatment of neonicotinoid insecticides such as imidacloprid, without which majority of the Bt-cotton hybrids which were susceptible to sucking pests would have yielded far less. It can safely be said that yield-increase in India would not have happened with Bt-cotton alone without enhanced fertilizer usage, without increased irrigation, without seed treatment chemicals, and the absence of drought-free decade.

The views expressed in this column are of the author and not that of Cotton Association of India

Legacy

Shri. Jasubhai Mehta



This sprightly octogenarian totally belies his age. Shri. Jaswantrai Damodardas Mehta, better known as Jasubhai to one and all, was born in Sihor, near Bhavnagar, Saurashtra, on December 10, 1934. And although he's an extremely respected name in the cotton fraternity today, his family had nothing to do with cotton whatsoever. In fact, the family business was iron and steel and ran under the name, Mangaldas Damodardas Mehta.

"We were six brothers and one sister and I studied in the Gujarati medium L. D. Muni High School, in Sihor (Bhavnagar). I always stood first in each standard and obtained the highest marks in the state level examination in Sanskrit and was awarded the Gold Medal. In fact, the school organised a special ceremony in 1952, where Dr. Shahani, the principal of Shamaldas College of Bhavnagar specially came to Sihor to felicitate me and present me with the medal."

Jasubhai traces the steps that brought to him to Mumbai and eventually led to cotton. "When I was 18, I came to drop my sister-in-law, my brother Mangaldas' wife to Mumbai. Just then the SSC results were announced and I had obtained a first class with distinction. I was always a distinction student and thought I would go back to Bhavnagar and study engineering. But my brother had other ideas. He told me to stay put in Mumbai and study Commerce."

Ever the obedient brother, Jasubhai filled out the admission form for both Sydenham and Siddharth Colleges. "But when I went to Sydenham Colleges, there was such a long queue just to submit the admission form, that I was debating whether to stay on or try my luck at Siddharth College. But as luck would have it, the principal Dr. S.K. Murunjan, told his peon to go through the line and pick out distinction students. So five of us were herded into his office and he straightaway signed our admission forms and told us to pay the fees. That's how I got into Sydenham and completed my B.Com from there."

His admission may have been a cakewalk, but life was hard for the young student. From 10.30 am to 1.30 pm, Jasubhai would attend college and then make his way to the family iron and steel shop in Masjid Bunder. "It was around this time that

my brother Amulakhbhai suggested that since so many of us were already in the iron/steel business, I should pursue another line."

Jasubhai's brother-in-law, Shri. Kanubhai Parekh was working with Shamji Kalidas & Company whose main office was in Mombasa. "He requested his friend Shri. Jayantibhai Popat, to take me

to Sewri and to show me around the place. I was very impressed with what I saw and took up a job with a company called S.B Enterprises Pvt. Ltd. in Dhobi Talao. Besides being a subsidiary of Kishanchand Chellaram, the company was a big importer of Egyptian cotton. The Managing Director was Shri. Dauji Mehrotra. So from Monday to Friday I would attend the first lecture in college and get myself marked present. Then I would head to office by 11.30 am. Saturday was the only day I could attend all the lectures and take notes from friends for the lectures I had missed during the week. A month before my exam, I would take leave from office to study and that's how I completed my B.Com."

Jasubhai continues, "Since I was the only Gujarati in the S.B Enterprises office, Daujibhai decided that I should be the one to go to the Sewri cotton market daily and report on rates at which transactions materialised, volume of business, market fluctuations, etc. I did this diligently for two years, and in the process learnt a lot about the cotton business."

One day Jasubhai suggested to Daujibhai that they should trade in Indian cotton. But Daujibhai was not keen because he felt that the margin of profit in Indian cotton was very limited. But Jasubhai reasoned with him that he would still get an additional income. Was Jasubhai surprised when Daujibhai asked him whether he was ready to handle this responsibility!



Shri. Jasubhai Mehta with his three sons - Pradeep, Kiran and Rajesh.



With Shri Shankarsinh Vaghela

"I said yes and before I knew it, I was collecting samples from Mumbai and upcountry and sending them to our Coimbatore office to Shri. K.K. Panikkar. My first transaction was for 900 bales of Jarila cotton and we made a profit of Rs. 200 per candy," Jasubhai remembers clearly. "Daujibhai was impressed because he wasn't expecting to make more than Rs. 75 to Rs. 100 per candy. He gave me a free hand after that."

Jasubhai continued working with the company for another four years. "But then I left because I wanted to start my own brokerage independently. I started a proprietary trading company in 1970 under the name of Kiran Cotton Company, named after my second son Kiran."

But his association with S.B Enterprises was far from over. "Just after a year of leaving, Daujibhai's son Virendrabhai called me and told me that they had got Rohit Group's business for purchasing cotton and he wanted me to come back. He also told me that I could use the S.B office and phone, and continue to do my work along with theirs. So in 1962 I started operating from the S.B Enterprises office and also continued doing my brokerage activities as well."

Due to his creative thinking and problem solving skills, Ichalkaranji Cooperative Spinning Mills, Indira Gandhi Mahila Sutgirmi, Kolhapur Zilla Sutgirmi at Ichalkaranji and Swami Samarth Sarkari Sutgirmi, Sholapur had appointed Jasubhai as their authorised broker for purchasing cotton for them from Maharashtra Federation and other Government Procurement Agencies.

"Babaseth from Khimji Visram and I were in college together. So he was always somebody I could count on for advice. But other top people like Ramnikbhai from Bhaidas Cursondas, Kishorebhai Jhunjhunwala, Sureshbhai Kotak and his brother Madhubhai Kotak also gave me their unstinted support and encouragement, when I started off."

Everything was running smoothly for him, when disaster struck. "Four of the mills I did business with

- Jupiter Mills, Gulmohar Mills, Finaly Mills and New City Mills - were included in the list of 13 mills that were nationalised in 1982, by Indira Gandhi. I lost Rs. 12 lakhs, because I was an unsecured creditor of cotton and this was a huge loss for me in those days," he recollects. This sudden reversal of fortune brought about a new resolve.

Jasubhai knew that behind every success story there are countless failures and disappointments. "I decided not to view failures as a disaster from which you will never recover, but as a stepping stone on the road of success. Life is a challenge which puts obstacles in your way occasionally, but you should have faith in your ability to overcome them. I was determined to have my own textile unit; so that my children would never suffer losses like I did and so that they would be owners of their own unit. I also decided that I would stick to selling cotton on credit basis."

He continues, "I was heavily inspired by what I had read in Philip Holder's book Super Success that there are three steps to success - 1) Desire 2) Determination and 3) Snatching of opportunities."

Since the desire to have his own mill was already burning fiercely within; with determination, he now began looking out for opportunities to further his dreams. In Lalbaug, Mumbai, he came across the sick unit Jam Manufacturing Company Ltd. "I told the management that your mill is not working, but you still have to pay workers minimum salary. So you start the mill, I will give you cotton and per kg of yarn I will pay you job work charges." The management agreed and Jasubhai started doing job work in Jam Mfg. Co. and thereafter with several NTC Mills in Mumbai Like Finlay Mills, Indian United Mills, Jupiter Mills, Gold Mohur, Digvijay Mills, etc.

"I made sure that whatever I did, my money was safe," he asserts.

But the dream of owning a spinning mill unit was still gnawing within. He came across an advertisement in the Economic Times about the sale of 28 acres of Deccan Cooperative Spinning Mill land in Ichalkaranji. This he bought in an open auction by offering the highest price. "Shri. Shamrao Patil, Chairman of the Kolhapur Zilla Cooperative Spinning Mills, guided me all the way during this purchase. As a well wisher, I had earlier offered my honest services in purchasing and procuring cotton for his Ichalkaranji Mills and at Bhiwandi Co-op Mills. Since then, he considered me to be his guide in procurement of cotton purchases."

Now that Jasubhai had his land, he was eager to build his own spinning mill unit. But he hit a major snag. The Technical Upgradation Fund

Scheme (TUFS) mooted by the Central Government had specified that to be eligible for the 5% interest subsidy and avail of the other benefits accorded to a new spinning unit, the minimum economic size must be 25,000 spindles.

“The cost for 25,000 spindles was a whopping 50 crores! To invest that kind of money was just not viable for me,” he says. But with his never-say-die attitude, and problem solving skills, Jasubhai began looking for a solution. He came across a spinning mill unit with 12,000 spindles in the Kolhapur area and it was working fine. So, Jasubhai collected authentic data from this unit, and had a project report prepared, proving the viability of a new spinning unit even for 12,000 spindles.

Just around this time, the textile Minister, Shri. Shankarsinghji Waghela came to Mumbai to address a meeting at the WIAA organised by CAI. Jasubhai managed to meet him as he was leaving and gave him the project report and told him what it was about. Jasubhai further explained to Waghelaji that at present the minimum economic size as prescribed in the TUFS was 25,000 spindles to set up a spinning unit. But there were many benefits if the same was reduced to 12,000 spindles. “I told him that firstly, many cotton ginners, merchants and yarn merchants would get the opportunity to enter into textile industry in spite of their limited resources. Secondly, since the acreage of cotton sowing was increasing every year, the size of cotton crop would also increase every year, leading to additional demand for cotton from new spinning units. In turn, there would be price support to cotton commodity throughout the year which would generate additional revenue / income to farmers/cultivators. Thirdly, that the price fluctuation would be in a narrow range which would help the industry and lastly, if the export of cotton was adversely affected any given year, the fall in cotton prices would be restricted. I think my ideas appealed to him and he asked me to meet him the next time when he was in Mumbai.”

Jasubhai met him again in Mumbai for the second time, but nothing conclusive came of it. “It was only during my third meeting with him at the

VVIP Lounge at the airport in Mumbai that some progress was made,” Jasubhai remembers. “Shri. Vishwanath, of CCI, was with him that day at the airport. They told me to send a copy of the project report to Shri. Subodh Kumarji, the then Textile Commissioner of Mumbai.”

Jasubhai did so, but the battle was far from over. “I went to Ahmedabad with my Chartered Accountant to discuss and understand Waghelaji reactions to my project report. And finally Waghelaji directed Subodh Kumarji to send the report to New Delhi. My project report was successfully approved by two committees at New Delhi - The Technical Advisory Committee and The Inter Ministerial Steering Committee. Finally, the Central Government made the necessary amendment. A new chapter was added in the TUFS approving the minimum economic size of a New Spinning Unit as 12,000 spindles instead of 25,000 spindles,” he exclaims jubilantly.

“Thanks to this amendment, many New Spinning Units started opening in Andhra Pradesh, Tamil Nadu, Gujarat, Maharashtra, Madhya Pradesh and Punjab. I consider this to be the biggest achievement of my life,” he says with satisfaction. “There is a joy in having done something as well as you could and better than others thought you could.”

Now that all the obstacles were cleared, in 2005, Jasubhai and his three sons - Pradeep, Kiran and Rajesh - finally started construction and commercial production at their own spinning unit, Shree Siddhivinayak Cotspin Pvt. Ltd. (SSCPL) started in July 2007.

Today SSCPL has 22,560 spindles and Jasubhai is planning to add another 19,800 within a year or so. “Our brand “SHREE” is well established even in overseas market and 90 per cent of our production is exported to overseas markets.”

He continues, “My second achievement is that I had been in service, been a broker, trader, done job work, and now I’m also running a spinning unit. I think I may be the only person in the cotton trade to have donned so many hats,” he chuckles.



At the bhumi pooja of his spinning unit.



Shri. Jasubhai Mehta's Shree Siddhivinayak Cotspin Pvt. Ltd. (SSCPL) starts commercial production in July 2007.

"I am committed to cotton...to quality cotton," he asserts. "I have always remained fair in my trade practices. Those days everybody engaged in cotton trade had high moral principles. But today's generation believes in earning quick money and at times resorting to malpractices and ignoring the basic principles of this rich cotton trade. But cotton demands hard work, deep knowledge of cotton, proper understanding, patience and fair dealings. Cotton itself is a rich commodity and expects due respect from all because it provides bread and butter to millions of people. People engaged in this trade are better respected and hold a unique place in society. But nowadays more and more youngsters from cotton families are preferring to go away from cotton and diversifying into different professions and trades," he rues.

But Jasubhai is blessed that all his three sons are very hard working and happy to be in cotton. "My wife, Kusum has always supported me in my activities. I have six grandchildren - three girls and three boys. Radha and Dwarika are architects, while Shivani is in Std. 12. The three grandsons- Manan, Darshan and Maanav are all studying in school."

According to Jasubhai, the best time for him was when he was doing trading and job work. "That's when my name became known, not only in Mumbai, but other places in India as well. My skill is selection of cotton and I will share an anecdote connected with this. Shri. H.R. Kale, G.M of Maharashtra Federation was presiding over a cotton auction where almost 75 of us were present. Along with us was a newcomer who was very nervous and since he had even missed the display before the auction, he wasn't participating in bids. But Shri. Kale told this fellow, 'Don't worry so much even if you have not examined each lot's quality yesterday. All you have to do is watch Jasubhai closely. Whichever lot he bids for, you bid Rs. 100 more and you won't go wrong with the quality of those lots.'"

Jasubhai was on the board of directors of CAI for 10 years. Not only was he an honorary surveyor with CAI from 1990 to 1995, but he was also appointed on the panels of its arbitrators and conciliators. At present he is a member of the Clearing House

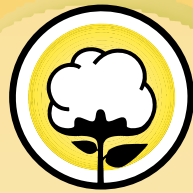
Committee. "One of the persons I remember most vividly is Shri. Hansrajseth. Since his son Babaseth and I were in college together, I knew I could always count on his advice. The other person I remember very fondly is Shri. Damle, the Secretary, who was always helpful."

Jasubhai has nothing but praise for Shri. Dhiren N. Sheth, the present President of the CAI. "He is such a motivated man," exclaims Jasubhai. "He has initiated so many activities like the Cotton School, Cotton Promotion and started Cotton Testing Laboratories all over India. Under his leadership, COTAAP is also taking on newer challenges. In the Association itself, he has initiated so many committees and got so many able and interested members involved. I feel this is a very professional approach that will bear fruit in the long run. Thanks to him, CAI is today, one of the most reputed and dynamic of all cotton associations in India."

For the future generation in cotton, he has these golden words. "They should have a thorough knowledge of all factors affecting cotton, including the cotton crop and yarn. They should know the market scenario and be aware of the volume of business in yarn and cloth trade also. They should be very careful about management of finance. They should be as skilled in purchasing cotton as in selling it. They should have the ability to make quick and timely decisions. It's by following these principles that I have been very successful in whatever I've done. And I firmly believe that success breeds success!"

He continues, "Cotton is a complex commodity and by its very nature, very sensitive, so at times the day to day fluctuation in prices is so slippery that mathematics do not work. We have noticed during the last two three years that few competitive players increase their volume of trade beyond their reach, which lands them in very uncomfortable position. This is a lesson that future generation should learn - that they should balance their activities in such a way that whatever risk they take does not compromise their security," he concludes with a smile.

Written by Jayashree Menon



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UPCOUNTRY SPOT RATES							(Rs./Qtl)					
Standard Descriptions with Basic Grade & Staple in Millimetres based on Upper Half Mean Length [By law 66 (A) (a) (4)]							Spot Rate (Upcountry) 2016-17 Crop DECEMBER 2016					
Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	19th	20th	21st	22nd	23rd	24th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	7452 (26500)	7452 (26500)	7452 (26500)	7508 (26700)	7649 (27200)	7705 (27400)
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	7733 (27500)	7677 (27300)	7677 (27300)	7733 (27500)	7874 (28000)	7930 (28200)
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	7845 (27900)	7930 (28200)	8070 (28700)	8155 (29000)	8183 (29100)	8183 (29100)
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	9223 (32800)	9223 (32800)	9251 (32900)	9251 (32900)	9251 (32900)	9251 (32900)
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	10404 (37000)	10404 (37000)	10432 (37100)	10432 (37100)	10432 (37100)	10432 (37100)
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	10686 (38000)	10601 (37700)	10601 (37700)	10742 (38200)	10770 (38300)	10798 (38400)
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	10067 (35800)	10067 (35800)	10067 (35800)	10095 (35900)	10095 (35900)	10095 (35900)
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	10264 (36500)	10264 (36500)	10264 (36500)	10320 (36700)	10348 (36800)	10348 (36800)
9	P/H/R	ICS-105	Fine	27mm	3.5-4.9	26	10854 (38600)	10770 (38300)	10798 (38400)	10911 (38800)	10939 (38900)	10967 (39000)
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	10179 (36200)	10179 (36200)	10179 (36200)	10208 (36300)	10208 (36300)	10208 (36300)
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	10489 (37300)	10489 (37300)	10517 (37400)	10573 (37600)	10601 (37700)	10601 (37700)
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	10911 (38800)	10854 (38600)	10854 (38600)	11023 (39200)	11051 (39300)	11079 (39400)
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	10686 (38000)	10629 (37800)	10657 (37900)	10742 (38200)	10770 (38300)	10770 (38300)
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	10742 (38200)	10742 (38200)	10770 (38300)	10826 (38500)	10854 (38600)	10854 (38600)
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	10798 (38400)	10742 (38200)	10770 (38300)	10826 (38500)	10854 (38600)	10854 (38600)
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	10911 (38800)	10854 (38600)	10882 (38700)	10939 (38900)	10967 (39000)	10967 (39000)
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	10911 (38800)	10882 (38700)	10911 (38800)	10967 (39000)	10995 (39100)	10995 (39100)
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	11023 (39200)	11023 (39200)	11051 (39300)	11107 (39500)	11135 (39600)	11135 (39600)
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	11304 (40200)	11304 (40200)	11304 (40200)	11332 (40300)	11332 (40300)	11332 (40300)
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	15325 (54500)	15185 (54000)	15185 (54000)	15185 (54000)	15185 (54000)	15185 (54000)

(Note: Figures in bracket indicate prices in Rs./Candy)