Weekly Publication of

Cotton Association of India

COTTON STATISTICS & NEWS

Edited & Published by Amar Singh

2017-18 • No. 30 • 24th October, 2017 Published every Tuesday

Cotton Exchange Building, 2nd Floor, Cotton Green, Mumbai - 400 033
Phone: 3006 3400 Fax: 2370 0337 Email: cai@caionline.in
www.caionline.in

Age of Cheap Polyester Ending as Environmental Concerns Mount

With a Ph.D. in Agricultural and Resource Economics from Oregon State University in the USA, Dr. Terry Townsend is a consultant on commodity issues. He is currently working with the African Cotton and Textile Industries Federation (ACTIF). He served as executive director of the International Cotton Advisory Committee (ICAC) and has also worked at the United States Department of Agriculture for five years, analyzing the U.S. cotton industry and editing a magazine devoted to a cross-section of agricultural issues.

EXPERT's Column

Dr. Terry Townsend
Cotton Analytics

Eddie Jernigan
CEO of JG Global

Ed Jernigan, the CEO of JG Global has over 35 years of experience in the global cotton and commodities industry, spanning a wide cross section of the industry. He was a member of the New York Cotton Exchange where he went on to serve on the board of directors. He has been nominated as one of the top 10 commodity brokers in the world. He has been at the forefront in advocating for the development of a new clean transparent supply chain in the food and fibre commodities that assures the consumer of a higher quality product and a fairer distribution of the proceeds of the supply chain.

Cotton has been attacked by environmental groups for decades for the use of pesticides, fertilizer and water. Meanwhile, the manmade fibre industry has experienced unchecked growth with hardly a word regarding the damage caused by fossil fuel extraction, fibre production and end-of-life disposal of manmade fibre products, especially in China.

As China started to industrialise in the early 1980s, textile production was a leading area of investment. In 1990, polyester fibre production in China was about 1 million tons, but by 2015, polyester production in China had grown to approximately 35 million tons, equal to 70% of the world total. The 35-fold increase in polyester production in China in 25 years is the single biggest factor reducing world demand for cotton today.

Since 1990, China's manmade fibre sector has enjoyed record growth, with fixed asset investment breaking all records as new capacity was added throughout the supply chain, from

the production of feedstocks to finished fibre products. This growth occurred with little consideration for air and water quality. The policy of economic growth and jobs first meant that any attempt to enforce the few regulations which existed were systematically overlooked. During this period, China became the largest manmade fibre feedstock and fibre producer in the world and came to dominate the sector.

There has been wholesale destruction to China's water, air and soil caused by the unparalleled pace of industrialisation over the past twenty years. Recent reports indicate that 80% of the underground water supply is unsafe to drink. Any visitor to Beijing in the winter can testify to the smog and the "Airocalypse", the term used to describe the periods when the air is unhealthy and almost unbreathable.

Previous Chinese government appeared to view environmental issues as part of a western conspiracy to limit China's growth. However, things have changed under the leadership of Xi Jinping. President Xi took office in November of 2012 and has led a radical shift in Chinese environmental policy, with air and water quality exceeding economic growth in terms of importance to his government's agenda. Other data, such as from social media and spending habits, illustrate that the issue has become extremely important to the Chinese people.

One significant difference in the administration of Xi Jinping is that the Communist party has reasserted power from the top down. In the past, local governments often ignored directives from Beijing, and city, county and provincial leaders focused on economic growth, often at any cost to the environment or individual rights.

However, under Xi Jinping, Beijing's directives now override local economic concerns, and a series of important new laws and enforcement initiatives were launched in late 2016 to tackle air and water pollution. These programs have real power, and the effort to rein in industrial pollution is influencing almost every major business that has an impact on air or water quality.

China's production of MEG and PTA, the main raw materials for polyester fibre, entered a phase of uncontrolled growth after the global financial crisis of 2008. China responded to the financial crisis with the launch of a $586 billion stimulus plan that allowed for the flow of funds into investments in industrial sectors at subsidied interest rates and easy terms.

Chemical feedstock industries have large capital requirements, and the stimulus plan provided the capital for these industries to rapidly expand. In just the last five years, PTA capacity in China has grown by more than 200%, and in 2016 China accounted for 56% of global PTA production. In addition, from 2011 to 2017, China's MEG production increased more than 500%. A large block of these MEG plants use coal as a feedstock.

Polyester staple fibre accounts for about 22% of China's total polyester production, and filament accounts for 51%. Viscose fibre production has also accelerated in recent years, with China today accounting for 65% of global production.

There are no comprehensive statistics on the number of polyester fibre production plants in China, their ownership, sources of financing or operating costs. However, the growth in polyester production in China has been so rapid, so enormous and so incongruous with investment patterns in other countries in Asia, that it is impossible to believe that industry expansion is a result of competitive, private sector investment.

The cost of construction of a polyester plant with a capacity of 250,000 tons per year is estimated at about US$150 million. It has been widely reported that the national, provincial and local governments in China encourage industrial expansion through loans that are never repaid made by government-owned banks. There are numerous stories in China of "ghost cities" and industrial plants producing only for inventory because they have no customers. Given the emphasis by all levels of government in China on textile production since 1990, it is highly likely that much of the expansion of polyester production capacity occurred with the help of loans that have become grants. It would be naïve to think that the expansion in polyester production in China occurred because Chinese consumers were demanding more polyester or that other market forces encouraged such growth. The expansion resulted from the industrial policies of the Government of China.

Enormous Polluter

The manmade fibre sector has been an enormous polluter of both air and water. Until now, environmental controls were not enforced in China. However, the new initiatives have begun the process of bringing these industries into compliance, and pollution controls are having significant impacts on the manmade fibre sector and textile operations. Viscose fibre plants in a few areas have been forced to close due to smog emissions, and the polyester fibre supply chain has had major disruptions due to shut downs and closures. Coal based MEG plants have been forced to close because of air pollution.

Much of China's manmade fibre production base is located only a few hundred miles from either Beijing or Shanghai, and these populations are demanding clean air and safe water. Average income based on measures of purchasing power parity for the Tianjin region is US$33,290, for Beijing $32,995, Shanghai $32,684 and for the entire province of Shandong it is $27,428. The importance of the spending power of this population is now more important economically than the benefit of the jobs provided by the older industrial plants. Consequently, the manmade fibre sector will be either forced to close or to install treatment facilities.

Polyester staple fibre (PSF) is made up of virgin polyester and recycled polyester. The recycled PSF plants do not have end-of-pipe wastewater treatment systems, and thus they release a host of potentially dangerous substances, including antimony, cobalt, manganese salts, sodium bromide and titanium dioxide. To install the necessary water treatment equipment would end the economic advantage of the recycling process. In the crackdown on pollution, the recycled polyester fibre plants are being shut down.

In addition to water pollution issues, the recycled PSF plants in many areas are fired by coal, and in East China this is a chief source of air pollutants. In Hebei, which is close to Beijing, a number of plants have been recently closed which removed as much as 500,000 tons of production capacity from the market. This, plus the other closures, has had a significant impact on prices.

The demonisation of cotton is very misguided. The facts are quite clear: the process of converting crude oil, natural gas and coal into a wearable fibre is very damaging to the environment if expensive environmental safeguards are not in place. This fact is now coming to light in China. The enforcement of the environmental standards and cleanup will be costly, which could mark an important turning point for the cotton industry.

Since the 2008/09 global financial crisis, cotton has lost approximately ten percentage points of market share, driven by the production of cheap manmade fibres, especially polyester fibre. The production of cheaper apparel has caused environmental destruction in the regions in which artificial fibres have been produced.

The pace of expansion of feedstock and polyester fibre and filament production may have peaked. New capacity will be much more expensive to bring on line as plants will be required to meet stricter environmental standards. Energy consumption in East China is changing, and the days of cheap coal based plants are over. Any feedstock plants using coal or coal based energy will be closed or will have to invest in expensive new equipment. PSF is a heavy consumer of water, and this is becoming a precious commodity.

In the near-term, China's production capacity of PSF is adequate, so there is enough idle capacity to come on-line to fill demand. However, additional growth will be much costlier.

These new dynamics mean that a PSF floor price is developing in China, which indicates that cotton should expect an increase in consumption just from changes in fibre blends. This floor price will be near the 55 - 60 cents per pound level for now, and may even move higher.

Cotton still faces a battle with consumer preference, its ability to innovate and meet changing tastes. Cotton also faces the task of communicating to the consumer the environmental cost of manmade fibre production, while also improving its own track record. Nevertheless, the changing price dynamics of polyester staple fibre in China will be an important global macroeconomic development during the next decade.

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

Growth In Capacity Of Cotton / Man-Made Fibre Textile Mills (Non SSI)

YEAR	NO. OF MILLS			INSTALLED CAPACITY		
	SPINNING	COMPOSITE	TOTAL	SPINDLES (Mn.)	ROTORS (000)	LOOMS (000)
31-03-2010	1673	180	1853	37.68	494	57
31-03-2011	1757	183	1940	42.69	518	52
31.03.2012	1761	196	1957	43.31	523	52
31.03.2013	1771	198	1969	44.17	546	52
31.03.2014	1757	197	1954	44.47	553	51
31.03.2015	1776	200	1976	45.08	565	52
31.03.2016	1779	201	1980	46.00	581	53
31.03.2017	1803	205	2008	47.12	587	53
2015-16 (P)						
April	1776	200	1976	45.09	565	52
May	1776	200	1976	45.09	565	52
June	1776	200	1976	45.10	565	52
July	1776	200	1976	45.24	565	52
August	1776	200	1976	45.08	565	52
September	1776	201	1977	45.54	511	52
October	1778	201	1979	45.57	515	52
November	1778	201	1979	44.65	573	52
December	1778	201	1979	44.69	575	52
January	1778	201	1979	45.82	579	53
February	1779	201	1980	46.02	581	53
March	1779	201	1980	46.00	581	53
2016-17 (P)						
April	1781	201	1982	46.14	578	53
May	1784	201	1985	46.18	579	53
June	1787	201	1988	46.42	583	53
July	1792	204	1996	46.85	583	53
August	1797	204	2001	46.73	586	53
September	1798	204	2002	46.94	586	53
October	1800	204	2004	46.97	586	53
November	1803	204	2007	47.04	586	53
December	1803	204	2007	47.07	587	53
January	1803	205	2008	47.12	587	53
February	1803	205	2008	47.12	587	53
March	1803	205	2008	47.12	587	53
2017-18 (P)						
April	1803	205	2008	47.12	587	53
May	1803	205	2008	47.12	587	53
June	1803	205	2008	47.12	587	53
July	1803	205	2008	47.12	587	53
August	1804	205	2009	47.14	587	53
September	1804	205	2009	47.14	587	53

P - Provisional

Source : Office of the Textile Commissioner

COTTON EXCHANGE MARCHES AHEAD

Madhoo Pavaskar, Rama Pavaskar

Chapter 7
Revival of Futures Trading

(Contd. from Issue No.28….)

Contract in Four Varieties

Initially, E.I.C.A. requested the FMC to allow at least all the exportable long and extra long staple varieties of staple length exceeding 24.5 mm to be made tenderable so as to make the futures contract more broad – based and serve as a reliable barometer of prices for such a staple group. Such a contract would have served almost half the cotton crop, and met to a large extent the hedging needs of most exporters. The Commission, however, suggested to the Exchange to start futures trading in the four permissible varieties as proposed by the government. Probably, the Commission then did not want the matter to be unnecessarily dragged on by approaching other ministries to seek their sanction for extending the contract to other varieties.

The Cotton Exchange was reluctant, but helpless. It was at the mercy of the Forward Markets Commission, and did not wish to displease the latter. In consultation with the upcountry cotton associations, it decided to finalise the terms of the futures contract and even proposed to commence trading during May 1987 in the January 1988 contract. But it was still dragging its feet. Although the trade was looking forward to the hedging facility in cotton after a lapse of 21 years, it was developing cold feet, since it knew that the contract with just four tenderable varieties would be unworkable. Even out of these four varieties, H-4 was hardly available for delivery, being then grown mainly in Maharashtra and was subject to the monopoly scheme of the State government. And the production of the remaining three varieties in Andhra Pradesh, Karnataka and Gujarat was not at that time large enough to provide an adequate base for a viable futures market.

Against this dismal backdrop, in a letter dated April 20, 1987 addressed to the FMC, the Cotton Exchange reiterated that "apart from the fact that the narrow market tends to reduce competition and liquidity, it may leave scope for the speculators to obtain control on the market. It is true that both the Commission and the Association are vested with powers to deal with unhealthy situations; but it is equally true that once the stringent regulatory measures are imposed, the market is crippled and divorced from the conditions in the ready market. In such circumstances, the basic requirement of involving a large number of traders would not be possible and also it will not be possible to promote competition". The Exchange therefore once again pleaded that "at least all the exportable varieties, namely those above 24.5 mm in staple length, be made tenderable. In that case, the contract will get further backing of about 16 lakh bales."

The Forward Markets Commission felt that since the government had granted permission for futures trading in four cotton varieties, the Exchange should not miss the opportunity and must make a beginning, instead of wavering time and again. The Exchange was left with little option. It proceeded to accomplish the task with as much caution as possible. The futures contract terms were finalised during the next few months and the By-laws of the Exchange were suitably amended on August 26, 1987. The FMC approved the amendments by their letter dated September 25/28, 1987.

The futures contract provided for Fine M.G. MCU-5 (A) cotton of 32 mm staple length and within the micronaire range of 3.0 to 3.5 as the basis variety. January, April and August were proposed as delivery months. The trading units were fixed at 50 bales and 10 bales, but deliveries were permitted for units of 50 bales only. The contracts for units of 10 bales were required to be closed out compulsorily before the commencement of the delivery month at rates fixed by the Board. The Association called for an additional security deposit of Rs.50,000 from the interested brokers and clearing members to ensure solvency of the market. It seemed that the stage was set to resume futures trading in cotton, with the Exchange deciding to start trading on October 27, 1987.

But the weather gods were far from pleased. The stars were still not in favour of the Cotton Exchange. The 1987-88 cotton season witnessed an unprecedented drought situation. For the second year in succession, cotton production declined. It dropped to 91.40 lakh bales from 92.90 lakh bales in the previous year, as against 115.50 lakh in 1985-86. Not that a futures market was not needed under

conditions of short supply. But with the all-round rise in cotton prices, the FMC advised the Cotton Exchange to convince the Ministry of Civil Supplies that futures trading would not lead to any undue rise in prices. The attempts by the Exchange to pursuade the Ministry to allow futures trading did not succeed. Finally, the curtain was rung down the stage, when the FMC informed the Cotton Exchange by their letter dated December 4, 1987 "that the Government of India have now decided to keep in abeyance such resumption of futures trading in cotton for the time being". Thereafter, it took yet another decade before the curtain was rung up for the inauguration of cotton futures trading.

Mr. Conlin's Mission

Nevertheless, the Cotton Exchange did not give up hope. The Exchange had the courage of its conviction. Since the prospects for the cotton crop of 1988-89 season were bright, the Exchange approached the Forward Markets Commission on August 23, 1988 to permit trading in a more broad-based futures contract with the bulk of the cotton crop of 22 mm staple length and above tenderable. The Commission was apparently not averse to the revival of futures trading in cotton, but desired that the Exchange should convince the Ministry of Textiles, which had time after time thrown spanners in all the attempts at such a revival in the past.

The East India Cotton Association decided to invite Mr. Donald B. Conlin, who was then the Chairman of the New York Cotton Exchange and an acknowledged authority on futures trading and hedging, to visit India and meet the government officials concerned in Mumbai and Delhi to convince them of the need for futures trading in cotton in times of surpluses as well as shortages. Mr. Conlin arrived in Mumbai in early December 1988, and at a workshop organised by the Association, gave an excellent exposition on the techniques of hedging through the use of futures contracts and options.

Mr. Conlin met with the Forward Markets Commission and subsequently visited New Delhi to meet with the secretaries and other senior officials of the Ministry of Civil Supplies and Co-operation and the Ministry of Textiles. He explained to the government officials concerned how the futures market in cotton at New York serves as a barometer for the U.S. as well as the world cotton markets, and the introduction of options in the market had helped the producers and spinners to hedge without much risk of loss, irrespective of the crop size. After all, prices are determined by the underlying supply and demand conditions, and not by market operations. Market transactions reflect such conditions, but do not determine them.

While Mr. Conlin's Mission was educative and informative to the cotton trade and industry, the government appeared adamant and seemed unable to see reason and shed its misgivings about the role of speculation in a futures market. To the government, speculation in a commodity futures market was still an anathema. Unsurprisingly, the government did not accede to the E.I.C.A.'s request for the resumption of futures trading in cotton, even though the cotton crop rose to 106 lakh bales in 1988-89 and expanded further to as much as 135.75 lakh in 1989-90.

T.S.D. Contracts

Cotton production remained at a high level in the early 1990s, but the authorities appeared as usual allergic to the concept of futures trading. The concept probably conjured in their minds the nightmare of a runaway boom in the cotton prices. In 1991 the country finally abandoned the socialist approach (of license-permit-control raj) to economic growth, and launched economic liberalization programmes in industry and financial sectors, partly at the behest of the International Monetary Fund and the World Bank to whom it approached to bolster up its depleted foreign exchange reserves.

In the changed economic policy ambiance, the Cotton Exchange represented to the government to permit futures trading in cotton through a broad based contract to cover the price risks in a wide range of cotton varieties. Pending such permission, it pleaded with the government to allow it to start trading in the transferable specific delivery (t.s.d.) contracts in as many varieties as possible. The authorities unabashedly ignored all such pleas.

Instead, in June 1993 the Government of India appointed yet another Committee (the third one in three decades, even though the reports of the first two were never implemented) under the chairmanship of Prof. Kamal Nayan Kabra, to assess the working of the commodity exchanges in the country and to determine the role that forward (mainly futures) trading can play in commodities in which such trading was demanded. The Committee submitted its report in September 1994 and recommended in tune with the earlier committees the revival of futures trading in a large number of agricultural commodities, including cotton. Earlier, in December 1993 the Indian Cotton Mills Federation representing the organised textile industry, which was all along hostile to futures trading in cotton, came round and decided to support the revival of such trading.

To be continued .....

Since 1921,
we are dedicated to the cause of Indian cotton.

Just one of the reasons, you should use our Laboratory Testing Services.

The Cotton Association of India (CAI) is respected as the chief trade body in the hierarchy of the Indian cotton economy. Since its origin in 1921, CAI's contribution has been unparalleled in the development of cotton across India.

The CAI is setting benchmarks across a wide spectrum of services targeting the entire cotton value chain. These range from research and development at the grass root level to education, providing an arbitration mechanism, maintaining Indian cotton grade standards, issuing Certificates of Origin to collecting and disseminating statistics and information. Moreover, CAI is an autonomous organization portraying professionalism and reliability in cotton testing.

The CAI's network of independent cotton testing & research is strategically spread across major cotton centres in India and is equipped with:

- State-of-the-art technology & world-class Premier testing machines
- HVI test mode with trash % tested gravimetrically

LABORATORY LOCATIONS

Current locations : • **Maharashtra :** Mumbai; Akola; Aurangabad • **Gujarat :** Rajkot; Mundra; Ahmedabad • **Andhra Pradesh :** Guntur, Warangal • **Madhya Pradesh :** Indore • **Karnataka :** Hubli • **Punjab :** Bathinda
Upcoming locations : • **Telangana:** Adilabad

COTTON ASSOCIATION OF INDIA
Established 1921

COTTON ASSOCIATION OF INDIA

Cotton Exchange Building, 2nd Floor, Opposite Cotton Green Station, Cotton Green (East), Mumbai 400 033, Maharashtra, INDIA.
Tel.: +91 22-3006 3400 • Fax: +91 22-2370 0337 • E-mail: cai@caionline.in • www.caionline.in

UPCOUNTRY SPOT RATES

(Rs./Qtl)

Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	Spot Rate (Upcountry) 2017-18 Crop OCTOBER 2017 16th	17th	18th	19th	20th	21st
	Standard Descriptions with Basic Grade & Staple in Millimetres based on Upper Half Mean Length [By law 66 (A) (a) (4)]											
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	11220 (39900)	11220 (39900)	11220 (39900)			
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	11501 (40900)	11501 (40900)	11501 (40900)	H	H	H
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	7733 (27500)	7733 (27500)	7733 (27500)			
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	8942 (31800)	8942 (31800)	8942 (31800)			
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	9701 (34500)	9701 (34500)	9701 (34500)	O	O	O
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	10011 (35600)	9898 (35200)	9898 (35200)			
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	9617 (34200)	9589 (34100)	9448 (33600)	L	L	L
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	9870 (35100)	9870 (35100)	9814 (34900)			
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	10151 (36100)	10039 (35700)	10039 (35700)			
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	9954 (35400)	9926 (35300)	9729 (34600)	I	I	I
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	10179 (36200)	10179 (36200)	10123 (36000)			
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	10348 (36800)	10320 (36700)	10320 (36700)			
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	10826 (38500)	10798 (38400)	10714 (38100)	D	D	D
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	10826 (38500)	10798 (38400)	10714 (38100)			
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	10967 (39000)	10939 (38900)	10854 (38600)			
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	10939 (38900)	10911 (38800)	10826 (38500)	A	A	A
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	11164 (39700)	11135 (39600)	10995 (39100)			
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	11529 (41000)	11501 (40900)	11332 (40300)			
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	12007 (42700)	11979 (42600)	11810 (42000)	Y	Y	Y
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	14060 (50000)	14060 (50000)	13919 (49500)			

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