

TEXTILE



CONFEDERATION OF INDIAN TEXTILE INDUSTRY
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TIMES

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AUG - SEP 2021

QUALITY COTTON

Towards Attaining
SELF-SUFFICIENCY IN INDIA

Make the Difference

R 37 – Economic rotor spinning for low priced raw materials

The new spinning box of the rotor spinning machine R 37 enables the efficient processing of a wide range of raw materials, particularly those with a high trash content. Together with the excellent spinning stability the R 37 ensures high-volume production. The robot ROBOdoff, which is available as an option, automates package change.

Friends, warm greetings to everyone! The second quarter of the year has turned out to be a very positive phase for the Textiles and Clothing (T&C) Industry especially post COVID-19 pandemic! The Government has made a series of pathbreaking historic announcements one after the other for the textile sector – starting with the continuation of RoSCTL for Garments and Made-ups till 31st March 2024, then the much-awaited announcement of rolling out of RoDTEP for all the textile products covering fibres, yarns and fabrics to give a huge fillip to the Indian Textiles and Clothing Industry, and then the landmark announcement and long pending demand of the MMF textiles value chain of the removal of Anti-Dumping Duty on Viscose Staple Fibre (VSF) which would enable the MMF downstream textile value chain in getting the raw materials at internationally competitive prices, and now approving the Production Linked Incentive Scheme (PLIS) for MMF Fabrics, MMF Garments and Technical Textiles, which will result in fresh investments in the textile sector and enable Indian companies to emerge as the Global Champions! These announcements will definitely enhance the production capacity of the Indian textile industry and go a long way in achieving the ambitious target of increasing the textile business size to US\$ 350 bn, including US\$ 100 bn exports by 2025-26 and to resiliently face the daunting challenges posed by the COVID -19 pandemic.



I, on behalf of the Confederation of Indian Textile Industry (CITI) and the Members of the National Committee on Textiles and Clothing (NCTC), profusely thank the Hon'ble Prime Minister, Shri Narendra Modi Ji, Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs and Food & Public Distribution, Shri Piyush Goyal Ji, Hon'ble Union Minister of Finance and Corporate Affairs, Smt. Nirmala Sitharaman Ji and our former Hon'ble Union Minister of Textiles, Smt. Smriti Zubin Irani Ji for all these major announcements!

Under PLI Scheme, incentives worth Rs. 10,683 crore will be provided to the textile industry over five years. It is expected that this Scheme will result in fresh investments of above Rs 19,000 crore, an additional production turnover of over Rs.3 lakh crore in five years and create additional employment of over 7.5 lakh people directly and several lakhs more for supporting activities. The Scheme will positively impact especially States like Gujarat, Uttar Pradesh, Maharashtra, Tamil Nadu, Punjab, Andhra Pradesh, Telangana, Odisha, etc.

The Hon'ble Prime Minister recently interacted with the Heads of Indian Missions abroad and the stakeholders of the trade and commerce sector on the occasion of marking the 75th year of India's Independence and exhorted them to enhance India's overall merchandise exports to US\$ 400 billion and textile and clothing exports to US\$ 44 billion by 31st March 2022. The Government is also targeting every district to increase its export potential and find out new products which can help India to enhance its export basket and make India Aatmanirbhar in all respects.

Friends, let me also share the good news that the Government of Tamil Nadu has removed Agricultural Market Committee Cess on cotton and cotton waste which was the long pending demand of the T&C Industry for more than 35 years. I thank the Hon'ble Chief Minister of Tamil Nadu, Shri M.K. Stalin and Hon'ble Minister of Handlooms and Textiles, Shri R. Gandhi for accepting our demand.

As per the data released by DGCI&S, while the overall merchandise exports have increased by 45.76% the total Textiles & Apparel rose by 32.73% during August 2021 in comparison to the corresponding period of last year. Separately, the exports of Textiles and Apparels have increased by 46.60% and 14.15%, respectively during the same period. Similarly, while the overall merchandise exports have increased by 67.33% during April - August 2021 in comparison to the corresponding period of last year, the total Textiles & Apparel rose by 82.17% during the same period. Separately, the exports of Textiles and Apparel increased by 92.15% and 67.79%, respectively during April-August 2021 compared to the corresponding

period of last year. On the imports front, the import of Cotton Raw & Waste increased by 88.99% while Textile Yarn, Fabric, Made-ups increased by 58.17% during August 2021 in comparison to the corresponding period of last year. Similarly, the import of Cotton Raw & Waste increased by 66.49% while Textile Yarn, Fabric, Made-ups increased by 79.08% during Apr-Aug 2021.

CITI organised an Interactive Session in association with Ernst & Young (E&Y) on Government Schemes – PLIS, MITRA and Other Government Incentive Schemes for the T&C Industry on 25th August 2021. E&Y Team gave a detailed presentation on the prevailing and recently announced Government schemes which were well appreciated by the Secretary (Textiles), Trade Advisor and the stakeholders. The Secretary (Textiles), delivered the Keynote Address while Trade Advisor, delivered the Special Address at the event.

FICCI along with Industry Partners – CITI and NITRA organised the 1st edition of “India Tex. in Sri Lanka: Showcasing Colours of India” on 26th August 2021. The event was supported by the Government of India, Joint Apparel Association Forum (JAAF) and Sri Lanka Apparel Brands Association. Shri Dayasiri Jayasekara, Hon’ble State Minister of Batik, Handloom and Local Apparel Products of Sri Lanka graced the occasion as the Guest of Honour and delivered the Keynote Address. In the Inaugural Session, I shared my insights on the trade relationship between India and Sri Lanka and how the two countries can move ahead in the future to boost the present trade.

I also attended an Interactive Meeting of the Hon’ble Union Minister of Textiles, Commerce & Industry, with the leading textile exporters and MSME textile exporters to discuss measures to enhance textile exports. The theme of the Meeting was “Local Goes Global – Make in India for the World”. The Hon’ble Minister of State for Textiles and Railways, Secretary (Textiles), and many other senior officials of the Ministry of Textiles were present during the meeting. I apprised the Hon’ble Union Textile Minister that though, the major structural issues on the raw material front and also refund of all the embedded taxes on exports have been resolved. Technology Mission on Cotton (TMC) 2.0 is another major pending issue of the textile industry where Government needs to pay its attention. I also brought to the Hon’ble Minister’s notice the various issues which the Indian Cotton Sector have been facing for the last eight years after the closure of TMC 1.0 and requested him to kindly persuade the Hon’ble Prime Minister and the Cabinet Committee to launch Technology Mission on Cotton 2.0 at the earliest in the larger interest of over 6.5 million cotton farmers and the cotton textiles value chain.

Friends, let me also bring to your kind notice that in the recent GST Council Meeting headed by the Hon’ble Union Minister of Finance, Smt. Nirmala Sitharaman Ji, the Council has decided to correct the anomaly of inverted duty incidence in the MMF textiles value chain. However, there are reports in the media that GST rate on garments below Rs. 1000 will be increased to 12% from 5% and the same will be effective from 1st January 2022. The T&C Industry has taken a serious view of this development as there was already a slump in the demand for garments in the domestic as well international market and this will further add to the garment sector’s woes as it will increase the cost of the garments by 7%, particularly for the middle and lower-middle-class, which is a big segment in India. CITI along with NCTC will take up this issue with the Government of India and apprise them about its serious repercussions on the T&C Industry.

Recently, I again met the Secretary (Textiles) and the Trade Advisor on our pending textiles and clothing issues especially with regard to 10% Import Duty on cotton and cotton waste and classifying Extra Long Staple (ELS) Cotton under separate HS Code and exempt from the 5% Basic Customs Duty (BCD) and 5% Agriculture Infrastructure Development Cess (AIDC). I am happy to inform you that the Government is trying to remove every possible hurdle which is restricting the growth of T&C Industry. I am hopeful to hear some more good news from the Government of India on our representations submitted to the various Ministries.

T. Rajkumar

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At the outset, I would like to express our deep gratitude to the Hon'ble Prime Minister, Shri Narendra Modi Ji, Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs and Food & Public Distribution, Shri Piyush Goyal Ji, Hon'ble Union Minister of Finance and Corporate Affairs, Smt. Nirmala Sitharaman Ji and our former Hon'ble Union Minister of Textiles, Smt. Smriti Zubin Irani Ji for the recent progressive announcements for the textiles and clothing sector. These included rollover of RoSCTL for Garments and Made-ups till 31st March 2024, extending RoDTEP for all the textile products covering fibres, yarns, and fabrics, removal of Anti-Dumping Duty on Viscose Staple Fibre (VSF) and approving the Production Linked Incentive Scheme (PLIS). These steps are designed to enable the Indian textiles and clothing industry to be globally competitive.



The present edition of Textile Times is focussed on "Cotton", which is commonly known as the "White Gold". It is not only one of the prominent cash crops of India but also a source of livelihood for an estimated 6.5 million cotton farmers. Cotton has been the growth engine of the Indian Textile & Apparel industry. The present acreage of cotton cultivation in India is 13 million hectares. This is the largest share of acreage under cotton cultivation globally, accounting for 36% to 38%. The sub-tropical Indian climate provides ideal conditions for cultivating wide varieties of cotton, which can be used to produce coarse to super fine yarn (2s to 200s).

Under the dynamic leadership of the Hon'ble Prime Minister of India, Shri Narendra Modi Ji, Government has set an ambitious target of US\$ 400 billion for merchandise exports during 2021-22. The share of Textiles & Apparel (T&A) exports have been kept at about 11% i.e. US\$ 44 billion. The cotton sector will play a key role in achieving the target of the T&A industry.

Though, India has the largest area under cotton cultivation in the world, yet the domestic industry is unable to reap the benefits. It experiences a price advantage only during the peak season i.e. from December to March. Despite having one of the strongest cotton textile value chains in the world, the Indian cotton sector is going through several challenges. Indian farmers are majorly dependent on hybrid cotton, driven by the belief that it can give higher yields. However, the world - over that is not the case. Countries like the USA, Brazil, China, Israel etc., have gone generations ahead of India. The average yield of cotton per hectare in these countries is more than 1500 kg lint per hectare in recent years. As against this, India's cotton yield per hectare is stagnated at around 450 kgs of lint.

An introspection is needed on what went wrong in the Indian context. Indian cotton sector faces a number of challenges. Apart from low yield, there is a high level of contamination in cotton, the high moisture content in seed cotton and the absence of a sound bale tagging system. To add to that, cotton statistics is not regularly updated. Low ginning out-turn ratio, lack of integrated pest management, etc are the other problem areas. India is still using the traditional cotton seed technology, while many competing countries have switched over to state-of-the-art seed technologies and concepts. India, therefore, must work towards replacing the existing unsustainable practices in cotton production with a more holistic approach, both at the producers' and consumer's ends.

Doubling of farmers' income in India is one of the dreams of the Hon'ble Prime Minister of India, Shri Narendra Modi Ji. However, for cotton farmers where the cost of production is high and the duration of crops is also long, the task of doubling the



income is very difficult without adopting appropriate measures. Also, the inclusion of the entire cotton-based value chain under RoDTEP is likely to increase demand for cotton fibre in near future. To meet this rise in demand and to increase the income of cotton farmers, India needs to work upon improving its cotton value chain, achieve higher yield, and reduce the cost of production by improving supply chain management, backward linkages, standardization of trade practices, and incorporating sustainable agricultural practices like improving irrigation infrastructure, innovation in seeds, and its application, etc. At present, India has access to all the cotton technologies and agri-ingredients that are available to all other advanced countries, including Australia, Brazil, the USA, and China, etc. The Central Institute for Cotton Research has pioneered a new concept of 'High-Density Planting Systems' (HDPS) that has the potential to obtain record yields in rain-fed farming systems, especially in Maharashtra and Madhya Pradesh. In the last few decades, countries like China, the USA, Australia, Brazil and Greece have been able to ramp up their yield mainly due to their concentration on the 'High-Density Planting Systems'.

CITI-CDRA is undertaking various cotton development activities in the states of Rajasthan, Maharashtra and Madhya Pradesh to improve the productivity and quality of cotton. It is heartening to know that its activities are proving to be beneficial and the performance of the projects in these States is quite encouraging as compared to non-project areas. We are hopeful to expand the scope of CITI-CDRA in other States as well to improve cotton productivity and quality.

Productivity enhancement in any crop is dependent on the development of a suitable genotype and cotton is no exception. There is a dire need for India to seriously introspect and explore such new ideas to develop roadmaps to establish alternative cotton production systems to usher in a new sustainable era of high yields with low production costs. India may also collaborate with organisations like Better Cotton Initiative (BCI) to enforce better standards in the production as well as in the whole supply chain.

Globally, there is a growing trend for finer fabrics and with this trend continuing the demand for Extra Long Staple (ELS) cotton is going up further for producing high value-added fabrics and garments. India at present produces only 4-5 lakh bales of ELS Cotton which merely serves only 1/4th of the actual requirement of 20 lakh bales to produce around 200 Mn. Kg. of yarn in the count 61s and above. Though we have the required climatic conditions for extra-long cotton production in India, its production has not increased to the expected level. The shortfall in this category of high-value cotton is met by importing the same from the USA, Egypt, Sudan, etc. Hence, concerted efforts are needed to enhance the production of ELS cotton in India and make the economy self-sufficient in production of quality cotton. Measures like better crop insurance, Minimum Support Price for ELS Cotton, Direct Benefit Transfer to farmers, separate HSN Code for ELS Cotton, acceleration of fibre strength improvement program, and contract farming will surely encourage farmers to enhance its production. Initiatives are needed to fit ELS cotton into the existing cropping system. Self-sufficiency in ELS cotton would lead to increased income for the farmers, lesser imports of cotton, and an increase in exports of high-value-added cotton textile products.

Though, Government from time to time has taken several measures for improving the Indian cotton textile sector, yet there is a lot more to be done. When most of the cotton-producing countries in the world are able to achieve over 1500 kgs per hectare productivity, Indian productivity has declined from 565 kgs to around 450 kgs in recent years. If the trend continues, we may have to import cotton and its related products. Thus, there is an urgent need for the Government to announce the Technology Mission on Cotton II (TMC II) at the earliest and also work towards implementing the 2012 "Keshav Kranthi Report" to improve the productivity of cotton in India. An improved cotton sector will be beneficial to each stakeholder as the farmers will get higher returns, the industry will get cotton at a competitive price and in turn, textile products will be more competitive in the global market and India will have an upper hand on its competitors.



AATMANIRBHAR IN QUALITY COTTON



Mr. T. Rajkumar
Chairman, CITI

Cotton commonly known as the “White Gold” is one of the prominent cash crops in India and holds a predominant position for the Indian Textile & Apparel (T&A) sector. Cotton cultivation plays a major role in sustaining the livelihood of an estimated 6.5 million cotton farmers and several million people engaged in related activities such as cotton processing and trade, thus, making Cotton the backbone of the Indian economy.

Hon'ble Prime Minister of India, Shri Narendra Modi Ji has set an ambitious target of US\$ 400 bn. merchandise exports for 2021-22. Accordingly, the export target of Textile & Apparel (including handicrafts) for India has been set at US\$ 44 bn for 2021-22. The cotton sector will play a key role in achieving this target. Despite producing 25% of the world's total cotton, the domestic textile industry is unable to reap the benefits. Price advantage for the textile mills exists only during the cotton peak season,

which is December to March. Thus, a situation arises wherein the Indian cotton is exported normally at a lower price during peak season and the mills end up importing at a higher price, which in turn affects the competitiveness.

Cotton Yield in India has declined to the level of 450 kgs/hectare since the last few years in absence of new technologies. Many cotton-growing countries like the USA, Brazil, China, etc., have gone generations ahead of India in cotton seed technology. The entire cotton value chain of India is facing challenges of inefficiency, wastage, contamination, high short fibre content, lower fibre strength, high trash content, as well as unsustainable use of inputs, such as water, pesticides, and fertilizers. With the present technology, the farmers go for three and more pickings while most of the cotton-growing countries have only single picking. Around 80% of the cotton yield is plucked in two pickings and the quality of the remaining cotton is

much inferior that cannot be used for producing high-quality yarn. Hence, practically we are heading towards a big crisis in terms of cotton quantity and quality mismatch.

Inclusion of the entire cotton-based value chain under RoDTEP is likely to increase demand for cotton fibre and to meet this future demand growth there is an urgent need to improve the value chain of cotton which can be achieved through improving supply chain management, backward linkages, standardisation of trade practices and achieving economies of scale by incorporating sustainable agricultural practices.

There is an urgent need for the Government to launch the Technology Mission on Cotton II (TMC II) and implement the recommendations of the 2012 Keshav Kranthi Report on “National Cotton Mission to Enhance Farmers’ Income” as it will improve the quality and productivity of cotton in India which will be beneficial to each stakeholder, as the farmers will get higher returns, the textile industry will get cotton at a competitive price and in turn, textile products will be more competitive in the global market and India will have an upper hand on its competitors.

The Technology Mission on Cotton (TMC) 1.0 implemented by the earlier NDA Government led by Shri Atal Bihari Vajpayee became a boon for the cotton farmers and made the Indian cotton textile industry become a global leader. India's cotton production which prevailed around 156 lakh bales during 1999-00 increased to 398 lakh bales during 2013-14 due to TMC. The area under cotton increased from 8.7 million hectares to 12 million hectares during the same period. However, the TMC got closed eight years back, and thereafter, the productivity started depleting in the

absence of appropriate technology. When most of the cotton-producing countries in the world are able to achieve over 1250 kgs per hectare productivity, Indian productivity has declined from 565 kgs to around 450 kgs in recent years. If the trend continues, we may have to import cotton and other products. The Cotton Advisory Board under the Ministry of Textiles has already submitted the proposal for TMC 2.0. We request the Hon'ble Prime Minister and the Cabinet Committee to launch Technology Mission on Cotton 2.0 at the earliest in the interest of over 6.5 million farmers and the cotton textile value chain.

Production Scenario of Cotton in India and World

Indian T&A exports to the world are dominated by cotton. The share of cotton in total fiber consumption in India is above 60% while it is around 30% across the globe.

India has the highest area of cotton cultivation in the world. Cotton is currently cultivated in around 13 million hectares in India. The sub-tropical Indian climate provides ideal conditions for cultivating wide varieties of cotton that could be used to produce coarse to super fine yarn (2s to 120s). However, after the introduction of Bt technology for long-staple cotton covering over 95% of the cotton area in the country, we now produce cotton predominantly suitable to spin up to 50s. The extra long-staple cotton that prevailed at around 25 lakh bales got reduced to 5 lakh bales.

India's share in the world's cotton production is estimated to be around 25% during 2020-21 as shown in table 1:

Table 1: Global Production of Cotton (mn kg)

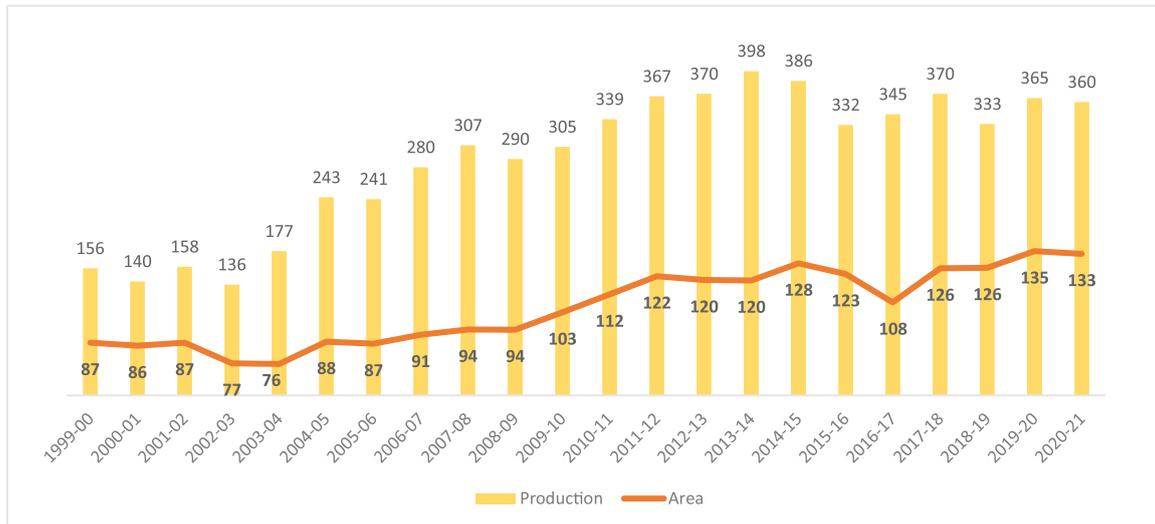
Country	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
China	7,991	6,967	6,641	7,403	7,620	7,131	6,532	4,790	4,953	5,987	6,042	5,933	6,423
India	4,930	5,185	5,763	6,239	6,290	6,766	6,562	5,644	5,865	6,290	5,610	6,205*	6,120*
Pakistan	1,859	2,012	1,881	2,308	2,025	2,068	2,308	1,524	1,676	1,785	1,676	1,350	980
World	23,365	22,258	25,342	27,736	26,960	26,231	25,906	20,935	23,227	26,951	25,881	26,432	24,477
India's Share in World	21%	23%	23%	22%	23%	26%	25%	27%	25%	23%	22%	23%	25%

Source: USDA Reports of, August 2021, June 2019, August 2015, August 2012, August 2009

*As estimated by the Committee on Cotton Production and Consumption formed by the Office of Textile Commissioner

For 2020-21, India's cotton production is estimated to be 360 lakh bales of 170 kg each which is about 1.4% lower than the production of 2019-20. Production and sowing area for the last 20 years is shown in figure 1:

Figure 1: Production of Cotton (Lakh Bales) and Sowing Area (Lakh Hectare)



Source: Office of Textile Commissioner

State-wise analysis of cotton production shows that Gujarat and Maharashtra are the key cotton-growing states of India and both together account for about 48% of the total production of cotton in India followed by Telangana which accounts for about 14% of cotton production share. State-wise sowing area, total production, and yield are shown in table 2:

Table 2: Cotton Balance Sheet of India

Cotton season: October to September
 Area in lakh hectares
 Production in lakh bales of 170 kgs each
 Yield in kgs/hectare

Name of the state	2019-20 (P)*					2020-21 (P)*				
	Area	Production			Yield	Area	Production			Yield
		Pressed bales	Loose Cotton	Total			Pressed bales	Loose Cotton	Total	
Punjab	2.48	9.35	0.15	9.50	651.21	5.01	10.85	0.15	11.00	373.25
Haryana	7.23	26.14	0.36	26.50	623.10	7.22	22.14	0.36	22.50	529.78
Rajasthan	7.60	28.51	0.49	29.00	648.68	8.08	31.51	0.49	32.00	673.27
NORTHERN ZONE	17.31	64.00	1.00	65.00	638.36	20.31	64.50	1.00	65.50	548.25
Gujarat	26.55	87.51	1.49	89.00	569.87	22.79	88.51	1.49	90.00	671.35
Maharashtra	44.91	85.91	1.09	87.00	329.33	42.86	82.91	1.09	84.00	333.18
Madhya Pradesh	6.50	19.62	0.38	20.00	523.08	5.89	17.62	0.38	18.00	519.52
CENTRAL ZONE	77.96	193.04	2.96	196.00	427.40	71.54	189.04	2.96	192.00	456.25
Telangana	21.27	53.31	0.69	54.00	431.59	24.51	50.31	0.69	51.00	353.73
Andhra Pradesh	6.57	17.77	0.23	18.00	465.75	6.06	16.77	0.23	17.00	476.90
Karnataka	8.17	19.59	0.41	20.00	416.16	7.65	21.59	0.41	22.00	488.89
Tamilnadu	1.70	5.90	0.10	6.00	600.00	1.55	5.90	0.10	6.00	658.06
SOUTHERN ZONE	37.71	96.57	1.43	98.00	441.79	39.77	94.57	1.43	96.00	410.36
Orissa	1.70	3.94	0.06	4.00	400.00	1.71	4.44	0.06	4.50	447.37
Others	0.09	2.00	0.00	2.00	--	0.08	2.00	0.00	2.00	--
TOTAL	134.77	359.55	5.45	365.00	460.41	133.41	354.55	5.45	360.00	458.74

Source: P – Provisional
 Loose Cotton delivery is based on the survey of "loose cotton delivery and consumption in India" undertaken by Sardar Vallabhbhai Patel International School of Textiles and Management
 * - As estimated by Committee on Cotton Production and Consumption (COCPC) formed by the Office of Textile Commissioner in its meeting held on 30.04.2021

Status of Organic Cotton, Extra Long Staple, and Coloured Cotton in India

• Organic cotton

India is the largest producer of organic cotton in the world. Organic farming in India is certified under the National Programme for Organic Production (NPOP).

During 2020-21, Madhya Pradesh was the leading producer of Organic Cotton in India followed by Maharashtra and Odisha. State-wise organic cotton production is given in table 3:

• Extra Long Staple Cotton

India was a surplus country in the production of Extra Long Staple (ELS) Cotton but after the introduction of Bt (technology developed in long-staple) production of ELS dropped. At present, ELS accounts for less than 1.5% of the total cotton production in India. India's requirement of Extra Long Staple (ELS) Cotton is met through imports. United States of America (USA) is the leading supplier of ELS cotton to India along with other suppliers like Brazil, Egypt, Israel, and Australia.

Table 3: Organic Cotton Production in India (Metric Ton)

State	2018-19		2019-20		2020-21	
	Organic	In Conversion	Organic	In Conversion	Organic	In Conversion
Bihar	1.16	-	1.16	-	7.47	-
Gujarat	51,020.28	-	55,898.80	-	85,782.60	5,008.48
Karnataka	363.35	-	1,152.12	-	2,998.09	-
Madhya Pradesh	91,925.51	-	84,701.23	34,284.87	3,83,133.39	1,75,366.18
Maharashtra	58,423.37	-	63,720.49	-	1,68,009.36	23,597.90
Odisha	74,001.57	0.55	1,03,312.96	-	1,06,495.89	3,587.28
Rajasthan	34,033.27	-	23,211.39	-	59,173.79	18,942.46
Tamil Nadu	1,790.42	857.93	2,369.82	-	3,771.77	-
Telangana	1,316.74	29.60	1,343.86	-	1,561.88	-
Total	3,12,875.68	888.07	3,35,711.83	34,284.87	8,10,934.22	2,26,502.31

Source: Agricultural & Processed Food Products Export Development Authority (APEDA)

Indian cotton varieties (DCH-32, TCH-213, and Suvin grown mostly in southern India) meet international ELS specifications. Table showing the production data of ELS cotton for different countries is given in table 4:

Table 4: Extra Long Cotton Production for Different Countries (in Metric Tons)

	2016/17	2017/18	2018/19	2019/20	2020/21
Egypt ELS (G/87/88/92/96)	2,000	3,800	5,500	1,200	1,500
Egypt LS (G/86 + G94)	32,000	58,000	1,03,000	65,000	56,500
United States	1,21,000	1,54,000	1,77,000	1,56,000	1,20,000
China	1,80,000	70,000	90,000	70,000	55,000
India (staple over 33 mm)	95,000	90,000	80,000	90,000	90,000
Turkmenistan	21,000	25,000	15,000	15,000	10,000
Uzbekistan	1,000	1,000	4,000	4,000	1,000
Tajikistan	1,000	1,000	1,000	1,000	
Israel	14,000	12,000	9,000	9,000	7,950
Peru	1,000	4,000	4,000	4,000	4,000
Sudan	2,500	2,500	900	1,000	1,000
Spain	4,000	3,500	3,500	4,000	3,500
Greece	1,000	1,000	2,000	2,800	2,000
Total	4,75,500	4,25,800	4,94,900	4,23,000	3,52,450

Source: SIMA

• **Coloured Cotton**

India has been the home to naturally occurring coloured cotton. The research and commercial release of these varieties had been hampered in the past due to the fear of these varieties contaminating the white cotton and limitations in terms of length and productivity. With the Government of India paying attention to coloured cotton research in recent years, there could be a commercial release of about four to five coloured cotton lines (seeds under pre-release trials) in 2021 which is likely to reduce the environmental pollution caused by dyes and will be a great step in preventing the environment and water bodies from getting damaged.

Major issues in Cotton Cultivation in India

The Technology Mission on Cotton (TMC) implemented by the earlier NDA Government led by Shri Atal Bihari Vajpayee proved to be a boon for the cotton farmers and made the Indian cotton textile industry a global leader. India's cotton production which prevailed around 156 lakh bales during 1999-00 increased to 398 lakh bales during 2013-14 due to TMC.

The area under cotton increased from 8.7 million hectares to 12 million hectares during the same period. The area under cotton cultivation has increased from 77 lakh hectares in 2002-03 to 120 lakh hectares in 2013-14 and further increased to 133 lakh hectares in 2020-21.

The TMC was closed in 2012 stating that necessary benefits would be made available through different schemes of the Ministry of Agriculture. In the process, cotton has lost its importance. For agriculturists/cotton farmers, there are several choices, but for the predominantly cotton-based Indian textile industry, which is not globally competitive (especially with China) in MMF textiles, the only choice is enhancing cotton production. For the Indian cotton-based textile industry there is a dire need for good quality cotton to be made available consistently throughout the season so that India can export high-quality cotton-based T&A products to the world.

Currently, the cotton yield per hectare is stagnated at around 450 kgs of lint per hectare. Interestingly, the National average yields in Australia, China, Mexico, and Brazil are more than 1500 kg lint per hectare in recent years as shown in figure 2:

Figure 2: Cotton Yield Comparison of India with Other BT Cotton Growing Countries



Source:
 India: Committee on Cotton Production and Consumption (CoCPC) formed by the Office of Textile Commissioner
 World: ICAC Journal, "Cotton this Month" dated 2nd August 2021.

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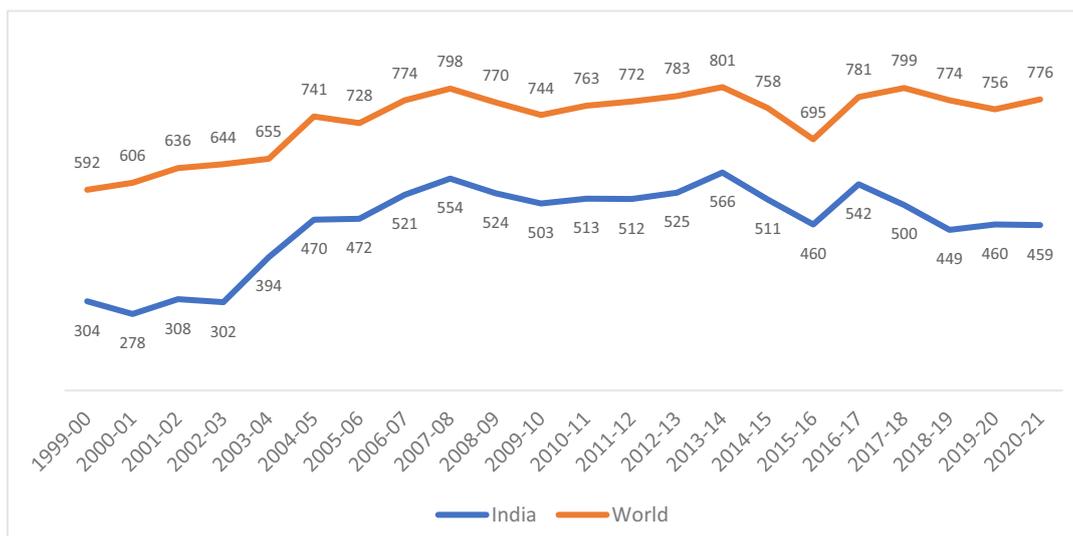
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There is also a huge gap between the yield in India and the world average yield as depicted in figure 3:

Figure 3: Cotton Yield of India and the World (Kgs/hectare)



Source: Office of Textile Commissioner

Cotton cultivation in India follows a different pattern from the rest of the world which is majorly due to one policy factor-Hybrid cotton. While India is now saturated with hybrid cotton, the rest of the world did not adopt the concept of hybrid cotton. There was a general belief in India that hybrid cotton technology could lead India towards high yields. Efforts were made from 1970 to develop high-yielding hybrids. In 30 years

of intensive efforts, about 30 new intra-hirsutum hybrids were released for commercial cultivation and the area under cotton hybrids reached 38% to 40% by the year 2000. With the introduction of Bt-cotton only in hybrids, the area under hybrid cotton reached 95% by 2011.

The following aspects related to hybrid cotton are unique to India and differ completely from many advanced countries as listed in table 5 below.

Table 5: Aspects Related to Hybrid Cotton in India and other major countries

	India	Australia, Brazil, Turkey, China, USA and Mexico
Cultivars	Hybrids	Pure-line varieties
Crop duration: days	160-240	140-160
Flowering-fruiting duration: days	80-160	60-100
Plant Population /ha	11,000	>110,000
Bolls/plant	20-100	7-9
Number of pickings	3-5	1
Sowing and picking	Manual	Mechanized
Laborers employed per hectare	100 to 120	1-10
Harvest index (seed-cotton v/s plant-bio-mass)	0.2-0.4	0.4-1.0
Lint % in seed cotton (Ginning%)	32-34	38-44
Plant architecture	Bushy	Erect-compact
Plants in meter row	1 to 2	10
Seed Rate Kg/ha	2	12
Seed production	cumbersome	Easy
Pink bollworm infestation in long-duration crop	High	low
Non-Bt seeds in bolls	present	absent
Bollworm resistance risk	High	low
Area Lakh ha	119	224
Average lint yield Kg/ha	500	>1500

Source: Keshav Kranthi Report

Reasons For Low Yields in India

Long duration: Cotton crop needs more than 80% of the total water and nitrogen requirements during the critical flowering and fruiting period. Crop thirst and hunger at this critical stage lower yields significantly. Additionally, the long duration of the flowering and boll-formation phase leads to prolonged vulnerability of the crop to insect, pests and diseases, which leads to yield losses

Low harvest index: Another factor that is responsible for low yield is the low harvest index of the long-duration hybrids that were developed in India. The long duration, high vigor hybrid crop puts forth excessive vegetation and has low harvest indices of 0.2 to 0.5, compared to 0.5 to 1.0 in countries that harvest high yields. Low harvest index with excessive vegetation leads to a massive wastage of fertilizers thereby resulting in low yields

Low ginning out-turn (GOT): Indian cotton is characterized by a low ginning percentage of 32-34% as

compared to 38-44% in the six countries. For example, from 1000 kg seed-cotton India gets 330 kg fiber, whereas other countries on average get 390 kg fiber. Thus, the fiber yields are low. The low GOT of Indian cotton could be due to the focus on more bolls per plant, which leads to a compromise of traits such as GOT and fiber strength.

Even though Indian cotton has excellent fibre qualities, it suffers from a high level of contamination. All the varieties of Indian cotton consistently score the top ranks in the ITMF contamination for decades. This is because, as the cotton is handpicked, the picked cotton contains contaminants like hairs, threads, polypropylene, feather, plastic, jute, etc. that are also picked up during its movement from the collection of the seed cotton in the cotton field to ginning and pressing stage. Further contamination happens in the storage, transportation, market yards, and ginning & processing stage as well. The farmers normally use old fertilizer HDPE bags and hessian cloth for handling the kapas which further adds to contamination.

Table 6: Descriptions of the most contaminated varieties of cotton

Rank	Description	Degree of Contamination (%)			No. of Samples
		Non-existent/ insignificant	Moderate Contamination %	Serious Contamination %	
1	India - Others	49	41	10	17
2	Pakistan - Others	49	40	11	5
3	India - J-34	50	34	16	12
4	India - MCU-5	55	28	17	19
5	Ivory Coast	61	30	9	9
6	India - Shankar-6	61	27	12	30
7	India DCH	68	22	10	13
8	Uzbekistan - Medium Staples	69	28	3	7
9	Greece	71	23	6	8
10	Turkey -Izmir	73	25	2	6
11	China - Hebei	74	26	0	12
12	Benin	77	23	0	7
13	Argentina	77	19	4	5
14	Spain	77	19	4	5
15	Burkina Faso	81	17	2	10

Source: ITMF Survey

There is a dire need to conduct awareness programs and educate farmers to follow practices and steps which help in reducing cotton contamination. The Government may also consider organizing skill development programs for farmers and other cotton handling people like market yard personnel, ginners, and traders (covering all the people involved in handling cotton fibre) to reduce the level of contamination.

Apart from lower yield and high contamination, the Indian cotton sector faces certain other challenges also like

- High moisture content in seed cotton
- No bale tagging system - cotton statistics not updated
- Illegal deployment of HT variety of Cotton
- Manual Plucking of Cotton
- Price Volatility
- Doubling of usage of the insecticide and fertilizers mainly after 2006
- Pink bollworm developed resistance to Bollgard-II only in India just in 4-5 years while in other countries even after 16 years of exposure to Bt cotton there is no resistance to Bollgard II yet.

These challenges are a cause of worry as these affect cotton availability which directly impacts the output across the cotton value chain: yarn, fabric, and apparel. Therefore, it is important to assess the issues impacting the cotton output and work towards resolving the same.

Way Forward

In India, the cotton yield has stagnated to around 500 kg/hectare but the cost of cultivation increased about three-fold in the past 10 years. It became imperative to develop new technologies to enhance yields and reduce the cost of production.

Currently, 11.0 to 12.9 mn. ha of land is saturated with Bt-hybrids in India. There is an imminent need to establish alternative cotton production systems using compact-statured varieties under high-density planting in India. India never had short-duration (150 days) compact varieties suitable for the plant to plant at 10 cm spacing.

It is imperative that Indian cotton farming practices are adopted in line with the crop duration, monsoon patterns, and soil. For instance, hybrids provide high yields of infertile soils and require input-intensive

management. Meanwhile, the pure-line varieties of the short duration are best suited for rain-fed farms. But along with this, the adoption of global best practices is of equal importance to realize the true potential of Indian cotton production.

From the list of 'best global practices' a few that are new to India are as follows:

1. High-density planting
2. Popularize usage of Bt-varieties
3. Conservation tillage
4. Plastic mulching
5. Canopy management
6. Square and boll retention and
7. Precision chemical input management
8. Establish a system of Voice-mail messages, SMS, Apps & weekly advisories in local languages
9. Focus of production of seeds of elite compact varieties (Desi, Bt and non-Bt) for large scale cultivation
10. Establish market linkages for the procurement and marketing of cotton produced

The Central Institute for Cotton Research has pioneered a new concept of 'High-density Planting Systems' (HDPS) that has the potential to obtain record yields in rain-fed farming systems, especially in Maharashtra and Madhya Pradesh. HDPS of short-duration varieties enhances yields significantly. Yields can be increased with HDPS of Bt-varieties now available from Public Sector to be taken up at 75x10 cm (133,000 plants/ha which is 10 times the current density) at 150 to 160 days. HDPS system would result in higher yields due to a greater number of plants producing fewer bolls in a short time.

It is evident that the cost of production is high with long-duration cotton crops which India is cultivating at present. Management of water, pests, and fertilizers are most critical for high yields during the flowering-fruiting window. The short duration of cotton varieties and hybrids greatly enhances management efficiency due to the narrow critical „flowering-fruiting window. Pest vulnerability is greatly reduced and fertilizer use- efficiency is greatly enhanced because of the narrow critical window thereby resulting in low production costs and high yields. The new short-duration cotton varieties (Desi and Bt) are tolerant to sucking pests and escape the pink bollworm, which occurs mainly late in the season. Bt-varieties are effective in controlling American bollworm due to the homozygous of cry1Ac genes. One or two insecticide sprays may be required only on Desi cotton for the control of American bollworm at economic threshold

levels. Thus insecticide usage and pest damage would be almost negligible. Reduction in input usage would decrease production costs.

How to double Income of Indian Cotton Farmers

The Government of India in 2016 constituted an Inter-ministerial Committee to examine issues relating to the doubling of farmers' income by 2022. The Government is taking several considerable measures to make this happen. Enhancement of income can happen either by increasing yields or by reducing production costs or both provided that the market demand remains sustainable and there is an imminent need to set up strategies for that.

Currently, India has access to all the cotton technologies and agri-ingredients that are available to all other advanced countries, including Australia, Brazil, the USA, and China, etc. More than 90% of the total cultivated land in India is saturated with Bollgard-II Bt-hybrids. Cotton yield in India has declined to around 450 kg lint/ha for quite some time and still there is no prospective promising technology being worked upon either from the private or public sector in the form of GM (genetically modified) or otherwise, that has the potential to trigger a change towards yield enhancement.

Therefore, there is an imminent need to seriously introspect and explore ideas to develop roadmaps to establish alternative cotton production systems to usher in a new sustainable era of high yields from low production costs.

2012 Keshav Kranthi Report on “National Cotton Mission to Enhance Farmers' Income” suggested the below probable strategies that have great potential to enhance yields at low production costs in consonance with ecology and environment and thus increasing farmers income:

- New short-duration varieties: long-lint Desi (*Gossypium arboreum*) and Bt-varieties
- High-density planting systems & short-dense-early pattern
- Sub-soiling to break hard-pans
- Precision planting, north-south oriented row direction & nursery raised plants
- Plastic mulching, drip irrigation under plastic mulch & water management
- Stale-weed-seed-bed system

- Conservation tillage, cover crops, crop residue recycling, or mulching
- Square and boll retention with plant growth regulating chemicals
- Canopy management
- Precision chemical input management

Policy Recommendations for Indian Cotton Sector

There is a dire need to address the different policy-related issues by the Government for the development of the Indian cotton sector. The government may kindly consider the below-given suggestions for the holistic development of the cotton sector of India:

- Withdraw 10% import duty (5% Basic Customs Duty (BCD) and 5% Agriculture and Infrastructure Development Cess (AIDC)) levied on cotton in the Union Budget 2021-22
- Classify Extra Long Staple (ELS) Cotton under separate HS Code and exempt it from 5% BCD and 5% AIDC as it is produced only to the tune of 25% of the annual requirement in India and its value-added segment make a business size of around Rs.75,000 crores including Rs.50,000 crores exports
- Expand the role of CCI to be more focused on improving the quality of cotton fiber and promoting R&D activities in India.
- Approve the proposal submitted by the Ministry of Textiles for “Nirmal Cotton Mission” with the objective of producing clean cotton with individual bale tagging on par with several top cotton-producing countries.
- Launch Technology Mission on Cotton 2.0 (TMC 2.0) to enhance cotton production
- Reduce and stabilizing the prices of Raw cotton through direct benefit transfers

Introduce best practices in ginning

- Modernized cotton farming techniques like mulching films and drip irrigation should be subsidized as they will help in conserving water and will also increase cotton productivity
- Announce Cotton Price Stabilization Fund Scheme with 5% interest subvention for the cotton procured and stored during the peak season to benefit the farmers, curb price speculation by the trade during



off season, and enable the industry to have a level playing field in the working capital cost. Also, enhance credit limit from three months to nine months, and reduce the margin money from 25% to 10% (Price Stabilization Scheme announced by the Government recently while revising the MSP).

- Research should be made for mechanically harvested cotton, as with rising labour costs, cotton pick cost has increased to almost 15% of the cotton value
- Global Cotton Contract should be launched on Future Exchanges in India
- Standardize cotton bale packing and adopt bale identification systems like the USA and China. It will add value to the entire cotton value chain and will also provide traceability to help consolidate Indian cotton branding
- Satellite imaging and similar technology-enabled practices need to be followed for estimating the crop size of India
- Liberalize cotton seed research as new varieties of seed-like drought-tolerant, herbicide-tolerant can increase yield and thus productivity of cotton
- Use only colored bags instead of white bags for HDPE fertilizers. It will help in controlling contamination and will increase the value of cotton
- Devise a cotton policy that enables CCI to sell the MSP procured cotton at international prices regularly to avoid the accumulation of stock and thereby speculating the pieces
- The government can promote the production of organic cotton in a bit to ensure the sustainability of water and soil in cotton cultivation. Organic cotton helps reduce greenhouse gas emissions, restores soil health as well as the health of cultivators. This segment requires government support in form of

improved marketability, encouraging contract farming as well as easing quality standards so that cultivation of the same can be promoted.

Lower yield and high contamination are major causes of worry for the Indian textile industry as it limits the availability of cotton which directly impacts the output across the cotton value chain i.e. yarn, fabric, and apparel. Therefore, it is important to assess the issues impacting the cotton output and work towards resolving the same. This can be brought about by measures such as re-thinking and re-introducing the Technological Mission on Cotton to improve yields, while also supporting in reducing price volatility of cotton to sustain global competitiveness of the entire cotton textile value chain.

Unlike the traditional technique, India should work on the lines of developing a portfolio of new cotton cultivars with not only improved agronomic performance (e.g., yield, yield stability, tolerance against drought, flooding, pest, and diseases, easy picking) and high fiber quality and good ginning outturn, but also with high resilience towards climate change and changing weather patterns. Indian cotton scientists are highly capable of developing the required technology and enhancing farmers' income, all they need is adequate support from Government. Over the past 10 years, scientists of the Central Institute for Cotton Research have developed 21 varieties of Desi cotton that yielded excellent results. In addition, several organisations like SIMA & CDRA have also succeeded in developing several cotton varieties especially the extra-long-staple cotton. The textile industry is extremely hopeful that by looking at the potential contribution of the cotton sector in the Indian economy, Government will surely work towards removing all the hurdles of this sector and India will soon become a global champion not only in cotton cultivation but in exports as well.

MAJOR ACTIVITIES OF CITI

Interactive Meeting of the Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs, Food and Public Distribution with the leading textile exporters and MSME textile exporters to discuss measures to enhance textile exports



Shri Piyush Goyal, Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs and Food & Public Distribution addressing the Interactive Meeting "Local Goes Global - Make in India for the World" held on 3rd September 2021

Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs, Food and Public Distribution, Shri Piyush Goyal held an Interactive Meeting with the leading textile exporters and MSME textile exporters on 3rd September 2021 to discuss measures to enhance textile exports. The theme of the Interactive Meeting was "Local Goes Global – Make in India for the World".

Hon'ble Minister of State for Textiles and Railways, Smt. Darshana Vikram Jardosh, Secretary Textiles, Shri Upendra Prasad Singh, IAS and many other senior officials of the Ministry of Textiles were present during the meeting.



Smt. Darshana Vikram Jardosh, Hon'ble Minister of State for Textiles and Railways addressing the Interactive Meeting "Local Goes Global - Make in India for the World" held on 3rd September 2021

MAJOR ACTIVITIES OF CITI



Shri T. Rajkumar, Chairman, CITI, addressing the "Local Goes Global - Make in India for the World" Interactive Meeting held on 3rd September 2021

On behalf of CITI, Shri T. Rajkumar, Chairman, CITI, Shri R. L. Nolkha, Vice Chairman, CITI, Dr. K. Selvaraju, Secretary General, SIMA, Dr. S. Sunanda, Secretary General, CITI and a few CITI Committee Members attended the meeting.

Shri T. Rajkumar was invited to discuss the prevailing issues being faced by the Indian Textile industry. While addressing the meeting, Shri Rajkumar thanked the Government of India and Ministry of Textiles for the recent policy initiatives for the Textiles and Clothing (T&C Industry). He informed the Hon'ble Union Minister of Textiles that when a delegation of T&C Industry met with the Hon'ble Prime Minister, Shri Narendra Modi Ji on 26th December 2019 at his residence, they made an appeal to enhance the global competitiveness of the Indian T&A Industry to become a global leader by addressing the structural issues on raw material front and also refund all the embedded taxes on exports. Shri Rajkumar cited that while the Government has resolved many of the issues, however, on the raw material front, Technology Mission on Cotton (TMC 2.0 is the major pending issue of the textile industry. He apprised the Hon'ble Union Minister of Textiles about various issues which the Indian Cotton Sector are facing since the last eight years after closure of TMC 1.0 and requested him to kindly persuade the Hon'ble Prime Minister and the Cabinet Committee to launch Technology Mission on Cotton 2.0 at the earliest in the interest of over 6.5 million cotton farmers and the cotton textiles value chain.

The issues raised by Shri T. Rajkumar were well received by the Hon'ble Union Minister of Textiles and other officials of the Textile Ministry.



QUALITY COTTON: TOWARDS ATTAINING SELF-SUFFICIENCY IN INDIA



Mr. Suresh Kotak
Chairman, Kotak Ginning & Pressing Co.

The subject of the article is very relevant to find India's rightful place in the universe of Cotton and Cotton related Textiles. This should be considered as a National Object. In other words it is upgradation of our cotton qualitatively with self-sufficiency.

In order to appreciate our present situation in Cotton we need to introspect our cotton scenario to get actionating background for correctives.

This probed and concluding road map will improve our prospects of raising quality bar of our cotton as well as attaining self-sufficiency in cotton of required and appropriate quality.

Introspection of Indian Cotton Economy from Quality Point of View

Today, India ranks as the biggest producer of Cotton in the world. It also has the highest acreage devoted to cotton production but still it has to import certain extra length staple cotton as well as certain extra strength cotton and contamination free cotton regularly from various countries such as Egypt, USA, and Brazil.

We need to address ourselves to alter this position by removing persisting and blemishing lacunas in quality of Indian Cotton.

The quality of our cotton suffers very heavily from wilful and rampant adulteration of our cotton with

inferior cottons and even waste which impactfully reduces the value of usable cotton.

Today Indian textile mills compromisingly are using this mixed up cottons which mars and limits our qualitative production of textiles. The effect is on total supply chain of cotton to textiles.

This regretfully diminishes and decelerates the value of our cotton significantly and apart from harming our textile industry's efficiency, it lowers the value and price of our cotton internationally.

Internationally we are chronic sufferers due to this unethical practice. We have to realise that this has serious backlash effect on our credibility as a good supplier of cotton internationally.

Such practice of adulteration affects the dye-ability aspect of our fabric, which gets impaired and hence we cannot stand in competition qualitatively with other fabric exporting nations of the world.

Therefore, many quality conscious mills have to resort to import which has become uncompetitive due to recent imposition of high import duty. Even for the cotton which has meagre production here. Extra Long Staple cotton which we have to import is due to insufficiency of our own production of quality cotton in extra-long staple group.

Further, we also need to improve our fibre attributes specially strength in all cotton, elongation in some cotton and micronaire particularly in finer varieties of cotton, to equate ourselves to become comparable quality wise with high ranking global cottons of similar staple lengths. We are deficient in this aspect and need to correct this situation.

It is rather imperative that we take number of steps in right earnest to improve our cotton quality in various ways as enumerated in the road map below.

1. India needs to have a strong technology mission empowered with instituting improvements en-mass in quality of cotton.
 - A. Firstly, processing of quality process from Picking Kapas to ginning and pressing, still needs a number of improvements.
 - B. Secondly, strict vigilance on adulteration and strict avoidance of contamination is sine qua non of primary start of improvements.
 - C. Thirdly, each ginning factory must only process one quality of cotton at a time and notify that quality to APM, Panchayat or Collector as the case could be properly done.
2. All institutions must work in a mission manner to ward off adulteration and contamination ruthlessly.

3. At national level, the agriculture and textile departments of governments must conjointly collaborate to prevent and even institute punitive measures to stop above described most unethical practice of adulteration of cotton which tantamounts to false packing. The virus of adulteration must be stamped out.
4. Contamination equally decelerates value of Indian cotton as reflected in discounted prices.
5. Brand Promotion on an individual level must be encouraged and people with better brands of cotton should be incentivised by the institutions like CITI and Texprocil, etc.

Individual Incentivization – the Japanese way

A glaring reflection of past is a lesson of Japanese way of incentivization of individual exporters from India.

Japan used to import huge quantities of Indian Bengal Deshi Cotton and used to pay huge premium for good quality and those exporters who achieved and performed the high standard quality norms set by Japan had very easy and profitable marketing which benefited not only Japanese consumers but also the exporters could earn well.

This was because of individual incentivization and encouragement to good quality suppliers. Our textile mills I suggest them to adopt this kind of policy to get good quality cotton and impart encouragement and create a culture of quality in cotton and textile economy.

There are very few mills in India who rate the supplier appreciatively and incentivise them. The classic example of past is Madura Cots and GTN Textiles and Arvind Mills.

The present marketing is largely done on basis of parameters but that does not give that consistency which the brand gives.

Admirably Cotton Corporation of India has realised this and started Kasturi as a brand. Ultimately a customer has to be well-customised.

In economic parlance “Cotton is a derived demand” and production and the qualities have to follow the demand patterns and changing requirements of customers regularly to sustain themselves adaptively.

In the changing times today marketing should be proactivised to be in association with both consumer and producer i.e. prosumer approach as described by Edwin Toffler.

In this scenario it is suggested that people must revolve around the idea that producer and consumers have a common identical interest – a producer is also a consumer in some way and a consumer is a producer in other way in the value chain. So, it is imperative that both co-operate with each other for common mutual interest.

In the long run we have to also strategize our research range and intensities to get better parameters inculcated in cotton rapidly. Today, we have erudite scientists with advanced knowledge of Genomics. The scientific thinking as well as our agricultural brilliant scientists are still much underutilized and needs good encouragement and believe we shall get fabulous results out of our scientist's contribution.

As a typical example of research utility, we have to draw lesson from research outfits of Australia which develops all aspects of cotton and they have every year renewal guide to help the farmers with the current most developments in research and agricultural practices. Therefore they are able to get extra ordinary result of cotton quality and quantity. This gives incremental value to Australian cotton and every stake holder of the total value chain becomes a gainer.

Attainment of Self Sufficiency

To attain the sufficiency, we have to reckon with one significant fact that though we have highest acreage we still suffer from serious inefficiency and inadequacy in terms of Productivity, apart from the quality stigmas that we have in our Indian cotton.

There is stagnation in productivity improvement and productivity is hovering around 500kg per hectare, whereas many other cotton nations have attained productivity upto 2200kg per hectare.

The sparkling examples in higher productivity are Brazil, Australia and Israel.

Thus, we are beset with two problems – lack of quality supply and surplus of lower cotton and hence, we have to export our unrequired surplus cotton at quite a discounted price.

Though we import relatively small quantity but still the quality gap itself is so very serious and wide that our mills do not always get sufficient A-rated cotton of international standards. This definitely impairs our product development as well as diversification in terms of new products.

Ofcourse, I appreciate the new economic culture recently created by our government's ushering in production linked incentives which in my opinion will

also change course of our cotton and textile economics for better. These concepts of production boost (Needs equal emphasis of quality), will be very helpful.

Expectantly, this would lead to required capacity building in terms of our quality resources and our manufacturing capabilities of textiles also.

I would therefore suggest that PLI's must give sufficient booster impetus to the quality of our raw material to quality of final goods.

Ultimately, quality is a utility value, which adds to the national wealth. It enhances our credibility and can impart stimulus to our total value chain and become a forerunner of our future eminence in textiles.

We have examples of Japan and Germany in particular for their emphasis on quality in all products and how it has proved them to be a winning national game.

Realization of Cotton Power

The two aspect of Cotton, one is quality improvements and second is sufficiency of required quality cotton, needs to be focused right away. The quantity augmentation to achieve sufficiency may take some more time and efforts.

The quality aspect must be taken up, “as on yesterday with a start-up” of eradication of denigrating practices of wilful adulteration and contamination.

Aspectually, we must also incidentally realise that Cotton is essentially a bi-component product and it has elongated utilizable supply chain with lot of values imbedded and untapped.

This chain extends backward and forward. The economics of this value chain is still underutilized or not sufficiently unfolded.

The cotton comes in an unginned form having 2/3rd in form of cotton seed, and 1/3rd of raw cotton fibre. Thus, it is a forward and backward supply chain – one is that of cotton i.e. 33% and 67% of oil bearing cotton seeds and its derivatives sordidly it has remained relatively unutilized.

A Cotton seed is a huge oil economy and it enriches cotton eco system. The total cotton seed production averages 10million tonnes of cotton seeds.

Requirement of Quality Organic Cotton

This area of requirement has been in the forefront as an accelerating consumer requirement globally. Though some beginnings have been made but a lot has to be done in our country.

A special program of having good quality organic cotton with proper fibre properties needs to be undertaken with care and planning. This has to be done very systematically and scientifically. In essence, it is farmer related program and mobilization has to be done at that level.

Actionating -- all around -- at every level -- required

We need to have a systematic plan of action to raise our quality bar with efforts from various institutions like Cotton Association of India, Governments agriculture and textile departments, promotion council's and CITI-CDRA, etc. etc.

We need to have a wholesale program from research level to growing and farm practising levels. In Egypt care is exercised for the right time to pick up the cotton so that un-matured cotton is not picked up and gets into tarnishing the quality of the total bale.

The time of sowing, the supply of water intermittently supplements rain water, even drip irrigation and proper fustigation and ofcourse picking and assorting the cotton as well as aggregating it, etc. needs attention.

Organic cotton needs a process of detoxification of the land and also compensatory help to the farmers and

actionating requires the formation of corporate like FPO – Farmers Produce Organisation.

Conclusion

I must compliment CITI's Cotton research wing CITI-CDRA which has done qualitative work by encouraging qualitative production of cotton in Rajasthan having achieved also productivity of around 900-1000kg and also attempting intently to bring up production of Extra Long Staple Cotton. They deserve great appreciation.

Let us realise that we are entering globally a golden period in textiles when there is a universal search for having alternate suppliers in order to have greater open trade. It is well known that a few countries have strangled hold on cotton economics of the world as well as on textile economics of the world.

India has the entire potential and skilled scientist and research apparatus to become most prominent cotton power with all its economic multiple advantages.

Let us arise to this situation.

Friends today's action is a destiny of tomorrow. Let us not miss out.

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MAJOR ACTIVITIES OF CITI



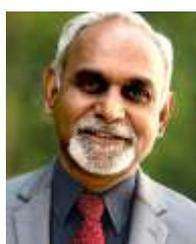
A Textile industry delegation headed by Shri T. Rajkumar, Chairman, CITI thanked the Hon'ble Chief Minister of Tamil Nadu, Shri M.K. Stalin and Hon'ble Minister of Handlooms and Textiles, Shri R. Gandhi for announcing the removal of Agricultural Market Committee Cess on cotton and cotton waste.



Meeting with the Hon'ble Chief Minister, Government of Tamil Nadu during the inauguration of CCI Cotton Depot Sales in Tamil Nadu for the benefit of the MSME Spinning Mills at the Tamil Nadu Export Conclave



INDIAN COTTON: GLOBAL LEADERSHIP



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India is one of the top cotton growing countries in the world. Cotton is being cultivated in the country for more than 5000 years! With an estimated 10 million farmers, India has the largest number of cotton farmers in the world. Nevertheless, cotton cultivation continues to pose challenges with yields and quality. For those in the know, it wouldn't sound exaggerated to say that India has everything that can usher its cotton to global leadership. What does it take for India to become the global leader in cotton? The answer is that 'India requires the will to make minor amends' and probably little else; -amends in its approaches to specific cultivation patterns so that yields increase at least above the global average and the fibre quality competes with the best in the world. No other country has the opportunities for global leadership as much as India does. With 13 million hectares under cotton cultivation, which is 40% of the global area, India alone has the opportunity to double its yield, production, and income. Undoubtedly, Indian weather is best suited for cotton cultivation. India has access to all the latest advanced cotton technologies. It has the best scientific networks in the world. Farmers in very few countries enjoy as much support from the Government policies as in India. So, what is stopping India from becoming the global leader in the cotton production and textiles. This article attempts to focus on two key strategies that draw lessons from the globe.

Two Key Strategies

Two key strategic areas deserve attention both from a national and a global perspective. The first strategy is to increase the national average yields through testing, validation, and adaptation of global standard planting geometry coupled with soil health rejuvenation that can enable long-term sustainability of production systems. The second strategy is to focus on branding sustainability of Indian cotton. This strategy aims to define and establish sustainable technologies, develop reliable methods of measurement, certification, traceability, and labeling of sustainable production systems and sustainable raw cotton and textile products to ensure global competitiveness.

What Works For Yields?

We will look at the first challenge which is 'yield enhancement'. What can India do to increase yields? We will examine four major technologies that are often discussed in India as strategies for yield enhancement. The first is irrigation, second - fertilizers, third - hybrid seeds and fourth is Genetically Modified (GM) technologies. Interestingly, the simple technology of 'modified planting geometry' that caused a breakthrough across the world is rarely considered as a key factor for yield enhancement in India. We will look at the four major technologies first before examining

how “planting geometry” was instrumental in ushering in a system of high yields.

- a. Irrigation:** There is a general belief that irrigation could lead to yield enhancement. Irrigation is certainly important because cotton plants need about 70% of their water requirements during the peak green-boll formation stage. However, there is no guarantee that irrigation alone can lead to high yields. The low yield of fully irrigated North India is a case in point. Indian cotton yields in its 4.4 million hectares of irrigated land are just about the global average of 750 Kg lint per hectare and less than half of other irrigated farms elsewhere in the world. Sadly, even to harvest the mediocre yields, it takes about six to eight months in irrigated regions of Gujarat and Andhra Pradesh with multiple pickings, compared to more than double the yields harvested within five months elsewhere in the world. A few irrigated farms in India do get good yields of about 1000 Kg lint per hectare but these farms generally use excessive water and fertilizers and extend the season for a long period. This ruins sustainability.

Interestingly, with 4.4 million hectares, India has the largest irrigated cotton acreage in the world. In fact, the Indian irrigated area is 25% more than the total cotton acreage of China. But from its 3.0 million hectares, China produces 5.9 million tonnes of cotton which is almost equivalent to what is produced by India in 13 million hectares. The question now arises is why are cotton yields so low in irrigated farms in India? While, the efforts for irrigation must continue, it may be noted that many rainfed regions in the world, for example, Brazil, the USA, and Australia harvest more than double the Indian yields with minimum inputs. While continuing with its excellent initiatives on watershed management and water harvesting in rainfed regions, what India needs to do is to use cover crops, mulches and enrich soils with organic matter to capture rainwater better and to minimize evaporation losses.

- b. Fertilizers:** Indian farmers benefit immensely from the policies on fertilizers of the Government. However, the efficiency obtained from the use of fertilizers in cotton harvesting in India is amongst the lowest in the world. For example, on a global average, 287 grams of fertilizers are used to produce 1 Kg cotton lint whereas India uses 538 grams of fertilizers to produce 1 Kg cotton lint. The global average efficiency is 173:67:47 grams of N:P:K per Kg cotton lint. Indian fertilizer-use-efficiency is 337:123:78 grams of N:P:K per Kg lint production. It is inconceivable to think that any further increase in fertilizer use would lead to yield enhancement. What India needs is to

rejuvenate its soils through manures, green manures, composts, biochar, etc., to increase organic matter to increase fertilizer-use-efficiency for yield enhancement.

- c. Hybrid Seeds:** India has the unique distinction of being the only country in the world with its area saturated with hybrid cotton seeds. Most proponents of Bt cotton give full credit to Bt for yield increase in India without apportioning any credit for hybrid seeds. It must be mentioned that over the past 20 years hybrid seed market grew from 35% to 95%, concomitantly with the Bt seed market and contributed immensely to seed quality. The new market influenced positive changes in seed quality, germination rate, and seed replacement ratio in India. The highly competitive environment also ushered in a few excellent hybrids. Irrigated farms certainly benefitted most with Bt cotton hybrids, but rainfed regions continued to get low yields. Despite being saturated with probably the best of hybrid seeds, with very high levels of fertilizer usage, Indian cotton yields continue to be at least 30-40% less than the world average and have been stagnant for more than 12 years now. More glaringly, despite the use of the excellent Bt hybrid seeds and high levels of fertilizer use, the yields in Maharashtra (98% rainfed cotton) are amongst the lowest in the world and are equivalent to resource-poor countries of Africa (98% rainfed cotton) where fertilizers are rare and Bt cotton or hybrid seeds don't exist. China and Pakistan tested hybrid seeds but finally preferred open-pollinated varieties over hybrids like the rest of the world. The question now arises is, why does India still persist with hybrid seeds despite the fact that even with a Bt-hybrid-saturated area, the country's cotton yields are nowhere near the world average? What India needs to explore here is to establish robust sustainable production systems of its own open-pollinated elite varieties - a strategy that is followed in all the high-yielding countries across the globe.
- d. GM Technologies:** India has the dual-gene Bt hybrids, whereas the world has 3-gene Bt varieties. The proponents of GM technologies argue that Bt cotton increased yields in India and the introduction of the 3-gene Bt cotton may increase yields. Needless to say, the introduction of the single gene Bt-cotton helped Indian farmers to reduce insecticide use on cotton by about 50% within 4-5 years after introduction. But, insecticide usage started to increase again after the introduction of 2-gene Bt cotton. Therefore, the fact remains that there is hardly any evidence that insecticide usage decreased, or yields increased after the introduction of the second Bt gene in India. A lot of confusion still remains as to

what may have caused the yield increase between 2002 to 2005, because along with the area increase of single gene Bt-cotton there was a simultaneous increase in the use of fertilizers, irrigation, and novel insecticides as seed treatment and foliar applications. Currently, the 2-gene Bt cotton is ineffective against the pink bollworm and insecticide usage has almost reached the pre-Bt levels in India. Unfortunately, there is no evidence that the 3-gene Bt-technology is effective against the pink bollworm. Therefore, there is no merit in the argument that the introduction of the 3-gene Bt technology could benefit India in any manner. What India needs to do here is, to utilize the GM (Bt) technologies in open-pollinated varieties so that Indian farmers like farmers in the rest of the world, will have a choice of elite public sector Bt varieties apart from having access to the commercial Bt-hybrid seeds.

High yields and better fibre quality

Why are the yields high (1800 to 2400 Kg per hectare) in China, Australia, Brazil, Mexico, Turkey, etc., (hereafter referred to as high yielding countries) compared to the low yields of 500 Kg per hectare in India? If anything, India has the most ideal weather and rainfall patterns for cotton growth, compared to all the high-yielding countries. Yields were low a few decades ago in the high-yielding countries too. But these countries altered their agronomic technologies to race towards high yields. Though, it may appear reductionistic and oversimplified, what appears to have changed in these countries is the agronomy of planting geometry that laid the foundation for high yields. A planting geometry with wide spacing between rows (90 to 100cm) and a closer spacing (8 to 10cm) between plants within the rows is now a standard common practice in all the high yielding countries. Apart from planting geometry, two other technologies appear to influence high yields. One technology relates to enhancing soil organic matter and precision nutrition application so that plants get food and water during the peak green-boll formation stage. The other technology relates to canopy management to minimize shedding of early formed squares and bolls which leads to high yields in a short season, apart from retaining and harvesting bolls that have the best quality fibres. Retention of early formed squares leads to synchronous boll opening, especially of the bolls on the first proximal fruiting nodes of the fruiting branches, which have bolls with the best fibre quality. Thus, a combination of planting geometry plus canopy management and soil health management in high yielding countries appears to hold the key to high yields. India could immensely benefit from these strategies and technologies to enhance its yields and

fibre quality and that too in a short season, which helps to manage the pink bollworm menace.

Importance of planting geometry: Spindle-type machine pickers mandate a specific planting geometry of wider spacing between rows and very narrow spacing between plants. As mentioned in the above passages, the global standard planting geometry is 100cm between rows and 10cm between plants within a row. It was soon discovered that when seeds were sown at a close spacing of 10cm within the row, plants produced more number (14 to 20) fruiting branches and very few (1 to 2) vegetative branches. Conversely, when seeds are sown at a wider spacing of 30cm or 60cm or more within the rows as in India and Africa, the plants become bushy and produce a greater number (4 to 8) vegetative branches which leads to fewer numbers (6 to 8 or even less) of fruiting branches. Fruiting branches are efficient in producing bolls. They have one leaf (subtending leaf) per boll on their nodes. However, vegetative branches are very inefficient because they produce excessive leaves and wasteful biomass compared to the fewer number of bolls that they produce. The excessive vegetative branches divert nutrients to wasteful plant biomass thereby leading to low yields despite high use of fertilizers and water. Thus, the low density of plants within rows leads to bushy plants with an excessive number of vegetative branches and fewer fruiting branches. The bushy plants spell disaster. They attract sap-sucking insects and plant bugs which cause the shedding of squares and bolls. Shedding of early formed squares and bolls is very common also due to shading of the fruiting branches in the bushy plants. Shedding of fruiting parts leads to compensatory vegetative growth and a long season. A long season encourages pink bollworms to thrive and cause more damage to the late formed bolls. India must seriously consider working on the feasibility of a planting geometry that discourages vegetative branch formation. Though, open pollinated varieties are best suited for closer planting, a few recently developed hybrid seeds show immense promise for high density (within rows) planting. Unfortunately, the prohibitively high cost of hybrid seeds may not make it feasible to plant at higher densities.

The global sustainability challenge

We will now look at the second challenge of sustainability. Global markets are rapidly geared towards establishing sustainable systems of cotton production, textile processing, and apparel use. The cotton production system represents the first and most important step in the supply chain. Enhancing the ecological sustainability of cotton production systems

is expected to have a significant positive impact on the environment and societies. Sustainable cotton farms deploy agronomic technologies that could result in healthy soils, clean water, and healthier farm ecosystems, thereby enhancing environmental and social sustainability. Sustainable cotton production and processing systems are expected to conserve ecological balance and enhance the sustainability of ecosystems and the environment. Though, India has initiated commendable sustainability measures on the ground, there appear to be very little effort in developing sustainability metrics, measurement, quantification, traceability, and labeling of sustainability so as to enhance trade competitiveness in a global market.

Raw cotton is mainly exported by the USA, India, Brazil, Australia, and African countries. All the major cotton exporting countries that compete with India have recently developed their own systems to measure and certify 'sustainable cotton'. The USA has developed three brand systems called 'US-Cotton Trust Protocol', BASF-e3, and 'Field to Market'; Brazil has developed a National brand 'ABR', Australia has developed brand 'MyBMP' and Africa has Fairtrade and CMIA. While fibre quality is certainly a key factor, sustainability certification is likely to strongly influence trade in the near immediate future. Several countries are developing purchase guidelines for sourcing of sustainable raw materials and finished goods. The Green Button label is a unique example of sustainable labeling that provides purchasing guidance for sustainably produced clothing and the production of cotton fibers in Germany. Sustainability measurement, certification, and labeling is fast emerging. India must keep itself abreast to evolve systems that will give it a competitive edge in the international markets.

Measuring sustainability, certification, and labelling

Certification and labeling require data collection, measurement, and quantitative assessment. Data collection is one of the biggest challenges of sustainability assessment. Though, sustainability measurement indicators have been devised by several sustainability initiatives, a robust system of measurement that enables the labeling of either the production system or the product itself has been elusive. Sustainability measurement helps producers to assess the sustainability of their production systems to work towards betterment; it also helps brands, retailers, and consumers to participate and contribute towards achieving the UN sustainable development goals. The Delta Framework project worked on the 68 indicators developed in 2015 by the ICAC-SEEP panel and has recently identified 15 core indicators for the

measurement of sustainability in cotton production systems. The environmental indicators include use of highly hazardous pesticides (HHP); pesticide risk indicator; irrigation water management; topsoil carbon content; fertilizer use by type (nitrogen use efficiency in future); forest, wet-land, and grassland converted for cotton or coffee production and greenhouse gas emissions. Economic indicators include yield (average), gross margin from cotton and coffee production (living income in future), and price (at farmgate). Social indicators include the proportion of workers earning a legal minimum wage by gender, incidence of the worst forms of child labour, the incidence of forced labour, women's empowerment, and frequency of fatalities and non-fatalities on the farm by gender (percentage).

Kasturi Cotton:

'Sustainability is emerging as an imperative aspect in the global trading of raw cotton and textile goods. India has declared 'Kasturi cotton' as a new brand to represent premium fibre qualities. This is a commendable initiative. Kasturi cotton has been described for a set of fibre traits. In the global context, it would be important to develop the brand for its sustainability parameters as well as its superior fibre traits. It is important to initiate a project to quickly examine all the global indicators and identify the best-suited protocols to measure and certify sustainability for Kasturi cotton. Concomitantly, there is an urgent need to establish production systems to improve land use efficiency, irrigation efficiency, nitrogen use efficiency, greenhouse gas reduction (Life cycle assessment), soil carbon content, pesticide safety, social compliance, and Fibre quality (HVI parameters of length, strength, micronaire, and colour) to give Indian cotton specific advantages in the global market. Premier research institutions such as the ICAR-CICR and ICAR-CIRCOT must work to develop robust sustainability measurement, certification, and labeling systems for KASTURI to strengthen its global competitiveness.

Conclusion

India needs to focus on at least the two strategies mentioned in this paper to strengthen the global competitiveness of Indian cotton. India needs to increase its cotton yields, brand its fibre quality, rejuvenate soil health, develop sustainable production systems and develop metrics to measure, quantify, certify, and label sustainability. Though, seemingly simple, the two strategies will need a mission-mode approach through combined efforts of all stakeholders dovetailed with policy



QUALITATIVE & QUANTITATIVE TRANSFORMATION FOR PRODUCTION OF QUALITY COTTON



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Cotton is the most important commercial crop of India cultivated mainly for its textile fibre due to its inherent eco-friendly and comfort characteristics. It can be used to create different types of fabrics that are strong, water absorbent, and comfortable. Nearly 64% of cotton fibre is used in apparel, 28% used for home furnishings, and 8% for industrial applications. Qualitative and quantitative transformation has taken place in cotton production in India ever since Independence (Tables 1 & 2). The production increased from a meager 3.3 million bales in 1947-48 to a 36.0 million bales in 2020-21. At the time of independence, mostly short and medium staple cottons were produced. Today, India produces the

widest range of cottons from 6s to 120s counts, from non-spinnable coarse to medium, long, extra long and superfine cotton.

India is the largest country in world in terms of area under cotton with 133.50 lakh hectare which is 41% of the world cotton area. In terms of production, the country is sharing the leading position with China at 290 lakh bales of 480 lb (equivalent to 371 lakh bales of 170 kg). Per hectare productivity in India is still much lower compared to many leading cotton growing countries. India stands third largest country to export raw cotton after the USA and Brazil.

Table 1. Quantitative change in area and production of cotton in India

Period	Area (million ha)	Production (million bales of 170 kg each)	Yield (kg/ha)
1947-48	4.4	3.3	132
1950-51	5.9	3.4	99
1960-61	7.6	6.0	134
1970-71	7.6	5.7	127
1980-81	7.8	7.8	169
1990-91	7.4	11.7	267
2000-01	8.7	14.0	278
2010-11	11.1	33.9	517
2020-21	13.3	36.0	459

Table 2. Qualitative change in production of three staple length group of cotton

Period	Production in Million bales (170 kg each)			
	Long and Extra long	Medium	Short	Total
1947-48	--	1.53 (67)	0.76 (33)	2.29
1961-66	0.92 (17)	3.70 (68)	0.82 (15)	5.44
2004-05	10.90 (47)	11.25 (48)	1.04 (5)	23.20
2009-10	19.50 (55)	12.10 (35)	3.40 (10)	35.00
2019-20*	24.46 (67)	11.68 (32)	0.36 (1)	36.5

*Projected figure; (Figures in parenthesis indicate the percentage of total)

Indeed, it is a matter of pride that India continues to be the global leader in raw cotton production in recent years, besides its increasing global market share in cotton textiles and apparels. It is also a known fact that during the last five years, export of cotton and cotton – based textiles account for as much as one third of the total export earnings of the country. During 2011-12, the country exported the highest quantity (129.57 lakh bales) worth Rs. 23,488.59 crores. During 2019-20, it is estimated to be around 50 lakh bales.

Though, India is exporting the raw cotton every year during the past one decade, it is also importing to some extent. During 2018-19, the country imported the highest quantity (35.37 lakh bales) worth Rs. 8339.29 crores, whereas in 2019-20, it is expected to be around 25 lakh bales. Mostly, long and extra long staple cottons are imported to meet the Industrial needs.

Currently, the long and extra long staple cotton production (67 %) is better than medium staple cotton production, which was only 17 % before establishment of ICAR-All India Coordinated Research Project on Cotton (ICAR-AICRP) in the country. This is mainly due to the concerted efforts of cotton breeders who developed high yielding long and extra long staple cotton varieties and hybrids suitable to different agro ecosystem of the country. The cotton productivity has been enhanced remarkably especially after the establishment of ICAR-AICRP. The productivity has been increased from a mere 99 kg lint/ha during 1950-

51 to as high as 517 kg/ha during 2010-11.

Ideally, the textile mills look for suitable combination of staple length, micronaire and strength for spinning yarn of appropriate quality. An estimate of staple wise cotton requirements in the year 20219-20 has been worked out at ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT), Mumbai (Table 3). Despite good harvest, there is mismatch in demand and supply of different staple group of cotton. Scrutiny of staple wise cotton production and demand clearly indicates that there is a huge deficit in production of both short and extra-long staple cotton fibres in the country. Shortage in short staple cotton is managed, to some extent, by utilizing the comber noil, which is obtained from spinning of cotton with higher UHML. However, the short supply of ELS cotton can be compensated only by import. The country is importing ELS cotton (more than 8-10 lakh bales annually) from Egypt, Sudan, U.S.A and other countries. Self sufficiency in ELS cotton would increase the income of the farmers, handloom sector and reduce foreign exchange to a greater extent. To meet the future requirement and to reduce import, a special thrust on ELS cotton production is of utmost importance. In the days to come, the demand for extra-long staple cotton in domestic market is expected to increase because of sharp escalation in cost of imported cotton due to levy of import duty by GOI. So, there is an urgent need to be self sufficient in quality cotton production, especially, the ELS cotton.

Table 3. Cotton Requirements in Different Staple Length Classes

Staple Length Class	Requirement in 2019-2020 (Lakh Bales)
Short	54
Medium and Medium Long	151
Long	137
Extra Long	18
Total	360

The term '**Extra Long Staple**' (ELS) cotton typically denotes a cotton fibre of extraordinary fibre length. The recognized industry standard for the minimum fibre length of an ELS fibre is 1-3/8" or 34.925 mm. But as per the ICAR-CIRCOT, Mumbai classification, staple length of more than 32.5 mm is considered as ELS cotton in India. In addition to superior fibre length, ELS cottons are also recognized for their superior strength and better uniformity.

With the establishment of ICAR-AICRP on Cotton during the year 1967, more emphasis was given to the improvement of yield as well as quality in cotton, which led to the quantum increase in the production of long and extra long staple cotton in India. A brief account of some of the important milestones in fibre quality improvement in cotton is furnished below.

- 1967: All India Coordinated Cotton Improvement Project was established with head quarter at Coimbatore and all the research centers of cotton in different State Agricultural University were brought under one project.
- 1970: First commercial cotton hybrid of the world (Hybrid 4) was released from Surat by the noted breeder Dr. C. T. Patel.
- 1972: First commercial interspecific cotton hybrid of the world (Varalaxmi) was released from Dharwad by the noted breeder Dr. Katarki
- 1976: Infrastructure of cotton research got strengthened with the establishment of Central Institute for Cotton Research at Nagpur.
- 1982: Regional station of Central Institute for Cotton Research was established at Sirsa to strengthen the research efforts in North Zone.
- 1999: Technology Mission on Cotton was launched.
- 2002: Transgenic Bt Cotton was approved for commercial cultivation in India.
- 2005: First transgenic extra-long staple interspecific Bt cotton hybrid (MRC 6918) of M/s. Mahyco was approved for commercial cultivation in India.
- 2006: Transgenic extra-long staple interspecific Bt cotton hybrid (RCHB 708) of M/s. Rasi Seeds was approved for commercial cultivation in India.

Since cotton is processed into yarn in groups of fibres rather than as individual fibres, properties such as length variability, short fibre content, fineness, maturity and bundle strength among others influence the yarn quality and strength and resulting in textile products. Steady gains in longer fibre and higher bundle strength have been accomplished through breeding in 20th century.

Improvements in fibre quality have long been a primary objective of cotton breeders. One major obstacle for early breeders was the lack of reliable methods to measure fibre characteristics. Those methods have become available with the advent of HVI (High Volume Instrument) in late 1960s and AFIS (Advanced Fibre Information System) in 1980s. During the last two decades, cotton breeders have used HVI as their primary and often sole source for fibre quality evaluation and using the HVI data for making plant selections, especially in India. However, earlier research recognized the need for additional information about AFIS properties and the potential role of AFIS in breeding programmes. The intent of the AFIS design was not to correlate other fibre measurements with AFIS. It was designed to provide unique fibre data. Fibre data generated by AFIS technology is also now available to plant breeders, and provides additional information on length characteristics and fibre maturity. Variation in fibre lengths and therefore shape of the distribution curves vary across cultivars with more uniform length and distribution desirable to reduce wastage in spinning and to produce better yarn.

The quantity of short fibres in a cotton sample is an important cotton quality parameter. Short cotton fibres have detrimental impacts on yarn production performance and yarn quality. There are different parameters for characterizing the amount of short fibres in a cotton sample. The most widely used parameter is short fibre content (SFC). It is a general practice in the textile industry to remove short immature fibres in the combing process to improve the fibre length distribution and tenacity.

The AFIS instrument individualizes and presents individual fibres to electro-optical sensors in order to

measure fibre maturity, which is otherwise difficult in conventional method, and requires only very little quantity of lint for testing. Further, AFIS method of maturity measurements shows good correlations with the reference method.

Cotton fibre maturity, degree of secondary cell wall thickening relative to the perimeter, is one of the most

The major problem with regard to long and extra long staple cotton varieties and hybrids in India is that these varieties / hybrids are cultivated in varied agro-climatic conditions including rainfed situations, which lead to the variation in fibre quality attributes. For instance, the fibre quality attributes of some of the varieties / hybrids which showed the variability in the lint sampled in the market are furnished in Table 5.

Table 4. Popular and recently released conventional extra long staple cotton variety / hybrids in India

Variety /Hybrid	Species	2.5% SL (mm)	Mic. (µg/inch)	Strength (g/tex)	Count	Year	States
MCU 5	H	33.0	3.2	26.0	60s	1968	TN, AP, GJ
Suvin	B	39.0	3.2	38.0	120s	1974	TN, AP
DCH 32	HB	38.0	3.0	30.0	80s	1981	KA, TN, MH, AP, GJ
Surabhi	H	33.0	3.2	24.0	60s	1997	KA, TN, AP
CO 14	H	35.0	4.0	23.4	70s	2016	TN
Subiksha	H	32.7*	3.7	33.8*	60s	2018	KA, TN, AP
Sunantha	H	32.5*	3.7	32.7*	50s	2020	KA, TN, AP, TE
Suraksha	H	33.0*	3.7	34.3*	70s	2020	KA, TN, AP, TE, MH, GJ, MP
CICR B Cotton 37	B	34.8*	3.4	36.6*	95s	2021	KA, TN, AP

*under HVIMode, others in ICCMode

H=*G. hirsutum* variety, B=*G. barbadense* variety, HB=*G. hirsutum* X *G. barbadense* hybrid

TN=Tamil Nadu, AP=Andhra Pradesh, GJ=Gujarat, MH=Maharashtra, KA=Karnataka, TE=Telangana, MP=Madhya Pradesh

Table 5. Fibre Attributes of cottons in the staple group 31 to 36 mm

Variety/Hybrid	2.5% S.L.(mm)	U.R. %	Mic. Value	Tenacity (g/t)
DCH-32	30.1 – 37.9	42 – 53	2.6 – 3.9	23.4 – 29.6
Surabhi	31.3 – 34.2	45 – 51	3.3 – 4.6	21.5 – 27.1
Suvin	38.8 – 39.4	46 – 50	3.5 – 3.6	32.7 – 35.4

important fibre quality and processing parameters of cotton. Immature fibres result in low dye uptake, increased fibre breakage, fabric defects, and waste.

The most commonly cultivated ELS cotton variety is Suvin, belonging *Gossypium barbadense* species. As per ICAR-CIRCOT standard, few other *G. hirsutum* cotton varieties like Surabhi, MCU 5, Suraj etc are also considered as ELS cotton varieties and are cultivated in certain districts of Tamil Nadu. In India, Suvin is the only ELS variety with a fibre length of 39 mm and above. The fibre qualities of the important non-Bt ELS variety / hybrids available in India are furnished in Table 4.

It is evident from the Table 5 that Indian cottons in the staple group 31- 36 mm have been found to have lower micronaire value not exceeding 3.5 units in majority of the cases as compared to an average value of 4.0 in imported cotton fibres. The lower micronaire value has been found to be not due to intrinsic finer nature of the cotton but has more to do with immaturity arising from lack of adequate cell wall development. The tenacity values in Indian cottons in this category have been noted to be on the lower side by about 4 – 10 g/tex. The Uniformity Index of the cotton is also one of the major factors, which determines the outcome of the product as well as processing efficiency. The required quality of cotton depends upon the type of yarn to be

produced to achieve desired end product. Although fibre quality per se cannot be improved during processing, improper handling or processing of fibres can adversely affect the quality. The poor quality cotton in terms of its physical properties not only raises the processing costs at the initial input and intermediate stages, but also reduces the output and quality of the final product such as yarns, fabrics and apparels. From the above discussion, it is clear that the ELS cotton should be cultivated in an ideal agro climatic condition to achieve the maximum lint yield as well as the uniform and better fibre quality.

Several ELS Bt cotton hybrids have been released by private sector and can contribute towards increased ELS production with required thrust for cultivation of ELS cotton through Best Management Practices, besides matching marketing facility and assured buy back in case of contract farming. The characteristics of some of the commonly cultivated ELS Bt cotton hybrids are given in Table 6.

Table 5: Aspects Related to Hybrid Cotton in India and other major countries

H X B Hybrid	Developer Company	2.5% Length (mm)	Micronaire	Tenacity (g/tex)
MRC 7918 BG-II (Bahubali)	M/s. Mahyco	35.3	3.5	31.0
MRC 6918 XXL BG-II	M/s. Mahyco	35.6	3.7	29.7
RCHB 708 BG II (EXCEL)	M/s. Rasi Seeds	35.2	3.7	25.6
NCHB 9905 (Kisan Jyothi) Bt2	M/s Nuziveedu Seeds	35-36	2.8-3.5	36-37
NCHB 9903 ELS Cot Bt2	M/s Nuziveedu Seeds	35-37	3.0-3.5	35-36
Chamundi BGII	M/s JK Agri Genetics	35.4	3.2	30.1

Egypt and USA are the leading suppliers of ELS cotton to India. The cost of Giza cotton of Egypt are generally higher than that of Pima cottons of USA. The United States is the leading supplier of Pima cotton (ELS) to India since 2015 surpassing Egypt. Indian mills importing U.S. Pima and upland cotton recognize its quality and consistency, ready to pay a premium over competing origins. However, U.S. cotton faces competition from suppliers such as Brazil, Egypt, and Australia due to occasional freight advantages and shorter delivery periods. When we compare the market price of Suvin (Rs. 202/kg lint), the best quality variety available in India, it is cheaper than both Giza cotton (Rs. 376/kg lint) and Pima cotton (Rs. 206/kg lint). Even the spot prices for 34 mm grade (Rs. 164/kg lint) is far cheaper. It clearly indicates that we can produce the required ELS cotton domestically with a lesser cost saving huge foreign exchange.

Prospects of ELS Cultivation in various States

Gujarat: Anand, Talod and Surat have potential areas of 4000-5000 ha, which can be re-introduced with ELS cotton.

Madhya Pradesh: The ELS hybrids were commonly grown in Ratlam, Dhar and Jhabua district of the state. The approximate area under ELS cotton is about 30,000 ha. Undulating topography, low organic content, poor water retention capacity, high run off and leaching losses are some of the major problems in these potential districts.

Tamil Nadu: Currently, it is estimated that Suvin is approximately cultivated in an area of 500 ha in Tamil Nadu. During summer season, ELS varieties like MCU 5, Surabhi are grown. Contract farming, area expansion through drip, proper water and pest management, etc will definitely increase the scope of ELS cotton in the state.

Andhra Pradesh & Telangana: There was a cultivation of Suvin, Varalaxmi and Jayalaxmi in the state of Andhra Pradesh in the districts of Adilabad, Warangal, Khammam, Krishna and Kurnool. But the area drastically reduced and the farmers shifted to Bt cotton hybrids. Earmarking of area under irrigation, support to contract farming, good quality seed, timely credit to the farmers, market support may be strengthened to boost ELS cotton in the state.

Karnataka: There is a shifting in cultivation from traditional to non traditional areas in southern Karnataka, heavy rainfall area in Uttar Kannada and problems inherited from G barbadense parents are discouraging the farmers who cultivate it. There is scope to reintroduce ELS cotton in irrigated tracts of Karnataka.

SWOT Analysis of ELS cotton cultivation in India

Strengths

- Strong Research & Development infrastructure viz., ICAR-CICR, Different State Agriculture Universities, Textile Research Institutes, Private R & Ds like SIMA CD & RA, CITI CD & RA etc are available in the country to cater the research need of ELS cotton.
- Vast germplasm collection is maintained by ICAR-CICR and other SAUs to meet the research needs.
- Depending on the need, several location specific ELS cotton varieties / hybrids are available at the disposal of cotton farmers for cultivation.
- State Seed Corporations can produce and supply the ELS seeds as and when required.
- Strong private sector seed producers to cater the seed requirement of ELS cotton varieties / hybrids.
- Different crop seasons are suitable for ELS cotton growing in different parts of the country like August-February; February-June; October-March
- Dynamic textile industry providing assured market with growing demand for ELS cotton

Weakness

- Generally ELS variety / hybrids are longer in duration compared to medium staple cotton varieties / hybrids,
- Non-availability of seeds of suitable variety / hybrid in time.
- Vagaries of monsoon rainfall, pest incidence, limited irrigation facilities (most of the area under cotton are rainfed).
- Shrinking availability of farm hands and smaller land holdings make the mechanization practically not feasible.
- Illiteracy of cotton farmers ignorance of farmers to go for better cotton production practices for harvesting better yields.
- Drudgery in harvesting small sized bolls in ELS cotton especially in barbadense varieties
- Competition from other high yielding cotton variety / hybrids or other crops.
- Market distortions (both in the domestic and international) in cotton price affects income of the farmers.

Opportunity

- Availability of new high yielding ELS cotton variety / hybrid for cultivation in various States.

- Molecular breeding to develop good quality ELS cotton.
- Progressive farmer oriented policies to stimulate ELS cotton production.
- Contract farming with assured price.
- Well organised and integrated cotton development programmes through participatory contribution from all the stakeholders.

Threats

- Competition from man-made fibres and cotton imports. Suitable policies to be framed.
- Buyers insisting use of Giza cotton for export of garments and finished products.

Challenges in Cultivation / Production:

- Long duration of ELS cotton varieties / hybrids as compared to long staple cotton.
- Susceptibility to sucking pest, boll worms and severely to pink boll worms
- High Labour requirement for harvesting and drudgery involved in picking small bolls
- Less suitable for rainfed because of longer duration
- Sensitivity with water logging and Mg deficiency
- Competition from high value crops and also within the species (*G. hirsutum*)
- Higher production cost
- Low and non stable market price
- Low productivity as compared to long staple Bt cotton intra-hirsutum hybrids

Sustainability Challenges

- **New and improved *G. hirsutum* cottons:** With improved fibre properties and advent of fabric finishes and chemical treatments that may attain improved looks and feel equivalent to ELS cotton. The technically advanced spinning equipment that may allow long staple cottons to be spun at higher yarn counts with improved yarn qualities.
- **Consumer demand:** A certain percentage of consumers are willing to pay a higher price for a product that offers more. The ELS cottons of the world would continue to satisfy this demanding role.
- **Cotton contamination:** Because of upgradation of ginning process cotton contamination has reduced in India but not stopped. The main source of contamination is foreign matter like dust, dirt and plastic items.

- **Problem of admixtures:** Different types of cottons have a huge versatility in its physical parameters like strength, length, micronaire, colour and reflectance. In industry these different types of cottons are mixed together.
- **Branding initiatives:** The proposal to implement measures envisaged under the draft policy for improving the marketing and branding of cotton are extremely beneficial. Such measures should also include boosting the production and promoting the consumption of cotton in the country. Cotton Association of India has branded garment made from Suvin yarn as 'Suvin Ratna'. Similarly, CCI has given brand name 'Kasturi Cotton' for long staple cotton with predetermined fibre quality. The Kasturi Cotton brand will represent Whiteness, Brightness, Softness, Purity, Luster, Uniqueness and Indianness.
- **Need for stronger Indian arbitration for imported cotton:** The Indian textile mills importing cotton have to encounter numerous problems, because foreign buyers invariably stipulate arbitration by International Cotton Association (ICA), Liverpool, in the sale contracts. India has been a regular importer of cotton and imports will continue in future.
- Developing location specific soil moisture conservation techniques to increase productivity of rainfed ELS cotton
- Testing of early sowing to avoid moisture stress at peak period of growth
- Developing Integrated Nutrient Management and Integrated Weed Management practice for different ELS domains
- Developing suitable weed control practices
- Fitting ELS cotton in existing cropping system
- Developing suitable intercropping system
- Developing barbadense genotypes with improved productivity, earliness and high ginning outturn. The quality improvement especially micronaire and strength to international standards
- Development of intra barbadense hybrids to enhance productivity with ELS quality
- Development of potential interspecific hybrids (HXB) meeting the CIRCOT quality norms (35-36 mm; 3.6 micronaire; 31 g/tex) with improved yield and ginning outturn.
- Population improvement and development of heterotic pools to develop superior parents and high yielding hybrids with improved fibre quality
- Improvement in physiological, biochemical and crop canopy traits of ELS cottons
- Thrust on Best Crop Management Practices (BCMP) and protection methodologies to enhance productivity and quality of ELS cotton
- Identification and precision mapping of ELS cotton growing tracts through detailed soil survey and plant – soil – water - climate relationships for enhanced productivity
- More Bt hybrids by private seed industries under ELS group
- Dissemination of modern technologies for increasing productivity of DCH 32 and Suvin
- Revival of the area in summer irrigated tract of Tamil Nadu and Gujarat
- Project mode approach through contract farming of ELS. Tie-up arrangement with farmers and textile mills in the form of contract farming needs to be promoted besides providing remunerative prices to the farmers. Contract farming is an extension of transfer of technology in which not only the technology is disseminated but also supply of inputs, credit and sale of produce is ensured which increase the profitability of the farmers and guarantees adequate supply of cotton to the mills. It is very successful in horticultural and floriculture. In cotton substantial area has come under contract farming since 2002-03.
- Identification of potential area of each state at micro level, relaxing the age bar for ELS cotton varieties for getting subsidy, organization of large scale FLDs, strengthening seed production chain, farmers training through FFS, introduction of ELS contract farming, special incentive to ELS cotton over MSP are some of steps to increase the ELS cotton production in the country.

Conclusion:

- In Indian Perspective, Cotton Production is satisfactory, though not matching the mill requirement in different staple class.
- Use of latest best cultivation practices is available to increase the productivity of ELS Cotton hybrids.
- More number of Front Line Demonstrations are to be taken up by to demonstrate the advantage of growing ELS hybrids.
- Much needs to be done to increase the area under ELS cotton in various States to attain self sufficiency.
- Contract Farming needs to be encouraged to increase the ELS cotton production.

MAJOR ACTIVITIES OF CITI

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INTERACTIVE SESSION ON GOVERNMENT SCHEMES –

PLI, MITRA and other Government Incentive Schemes for Textiles and Clothing Sector

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AN INITIATIVE UNDER ATMANIRBHAR BHARAT TO BOOST INDIA'S MANUFACTURING SECTOR.

CONFEDERATION OF INDIAN TEXTILE INDUSTRY
www.citiindia.org

EMINENT SPEAKERS

Sri Inderjit Prasad Singh (IAS)
Secretary, Ministry of Textiles

Sri Jay Kumar Singh
Trade Advisor, Ministry of Textiles

Sri L. Rajasekar
Secretary, CITI

Sri J.K. Khandekar
Deputy Commissioner, CBIC

Sri Jigy Prasad
ETI India, Director, Text. Dept.

Sri Prakash Palzode
ETI India, Associate Fellow, Research Lab.

Sri Anoop Thakur
ETI India, Director, Text. Dept.

Sri Nilesh Goyal
ETI India, Director, Text. Dept.

ON WEDNESDAY, 25 AUGUST 2021 AT 4:00 PM (IST)

Interactive Webinar on GST Customs and Foreign Trade Policy Focused on Ease of Doing Business

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INVITATION FOR WEBINAR ON GST, CUSTOMS AND FOREIGN TRADE POLICY FOCUSED ON EASE OF DOING BUSINESS

EMINENT SPEAKERS

Ms. Subathra Muthuraj
Partner at A.K. Muthuraj and Associates LLP will be moderating the event.
(Moderator)

Dr. R. Srinivas
Secretary General, The Southern India Mills Association (SIMA)
(Host of Thanks)

Mr. P. Maheswari
Partner, A.K. Muthuraj and Associates LLP and Former Commissioner, Customs, Central Excise & GST (Panaji)

Sri T. Rajasekar
Chairman, Confederation of Indian Textile Industry (CITI)
(Welcome Address)

Mr. K. Rajeshwari
Head of Industries Tax, A.K. Muthuraj & Associates LLP and Former Indian Revenue Service (IRS) officer
(Panelist)

Mr. M. Parasuram, IRS
Former Principal Commissioner of Customs & GST
(Panelist)

Mr. B. Srinivas, IRS
(Customs, Central Excise and Service) and Former Principal Commissioner
(Panelist)

DATE: THURSDAY, 23RD SEPTEMBER 2021 | TIME: 03:30 PM INDIA

MEETING ID: 846 0526 4697, PASSCODE: 223867



STRATEGIES TO BRING SELF-SUFFICIENCY IN ELS COTTON IN INDIA



Dr. K. Selvaraju
Secretary General, The Southern India Mills' Association, Coimbatore, Tamil Nadu

1. Position of Indian Textile Industry

The Indian textiles & clothing industry is the 2nd largest employment provider in the country and employs around 110 Mn workforces both direct and indirect, particularly the rural masses and women folks. It contributes to 14% of Industrial Production, 2% of India's GDP and 15% of Exports Earnings of the nation.

The sector holds a massive 22% of world spindle capacity and installed the highest number of looms in the world. It is now the largest producer of jute and second largest producer of cotton and silk in the world. Considering the potential of the sector the Ministry of Textiles has set a target of USD 350 Bn total business size during 2025 from the current level of USD 167 Bn. The envisaged investment requirement to achieve the target is listed in the table given below.

Table - 1: MoT Vision 2025

S. No.	Sector	Machinery Requirement	(Rs.Crs.)
1.	Spinning	50 Million Spindles	1,25,000
2.	Weaving	5 lakh shuttleless looms	23,939
3.	Knitting	50,000 machines	15,000
4.	Processing	2000 units with one lakh metres/day each and 1000 units with 50 tons/day knits/yarns /fibres	2,50,000
5.	Garment	50 Lakh machines	75,000
Total			7,15,000

2. Cotton Scenario – World Vs India

Cotton is currently cultivated in around 13 million hectares in India. The Country has the largest share of 36 to 38% in the total global cotton acreage. The subtropical Indian climate provides ideal conditions for cultivating wide varieties of cotton that could be used to produce coarse to superfine yarn (2s to 200s).

2.1. Cotton - The Engine of Growth for Indian Textile Industry

Indian cotton textile industry is more than 5000 years old and has presence in the entire value chain (farm to fashion). The sector is capable of producing all types and varieties of cotton suitable to spin yarns from 2s to 200s. Indian textiles and clothing industry is predominantly cotton based and consumes over 80%

Table - 2: Comparison of World Vs Indian Cotton Scenario

Description	World	India	%
Area (Mn. hectares)	33.40	12.50	37
Production (1000 MT)	25,899	6,205	24
Yield (Kgs/hectare)	775	496	-
Consumption (1000 MT)	25,356	5,117	21
Imports (1000 MT)	9,328	239	2
Exports (1000 MT)	9,347	980	11
	21,649	4,292	-

of the cotton produced in the country. With respect to spun yarn, cotton and its blended spun yarns account over 85% of the total spun yarn produced in the country.

Chart - 1: Indian Cotton Supply & Demand Position

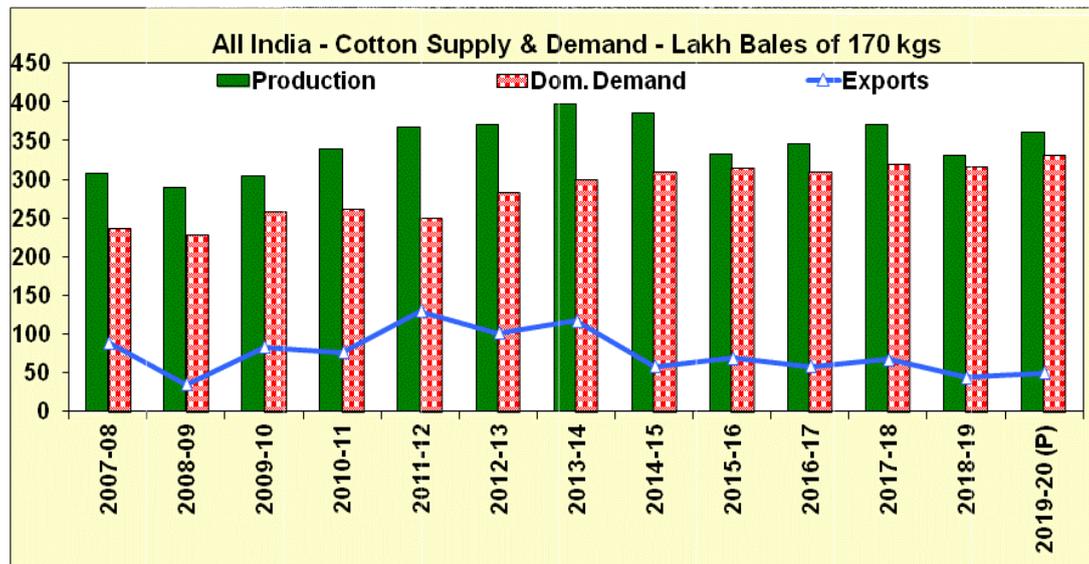
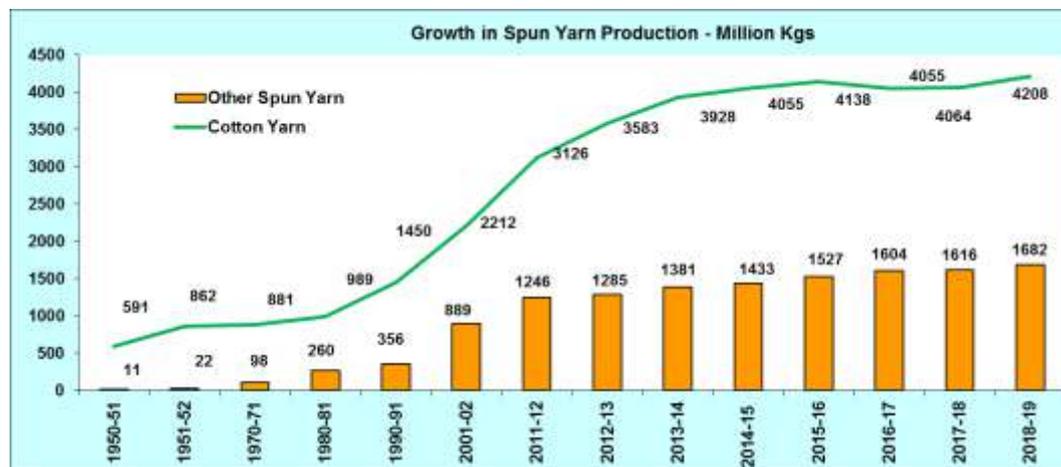


Chart - 2: Spun Yarn Production in India



The heritage industries like handlooms, khadi, powerlooms, etc., predominantly produce cotton textile products. Since India being a tropical country, it has huge market for cotton textiles (cotton fibre to MMF fibre consumption ratio is 65:35), whereas it is reverse globally (70% MMF and 30% cotton).

Cotton being the king of all fibres and eco-friendly, India has been encouraging cotton through various schemes including technology mission on cotton, minimum support price, export benefits, etc. Cotton sector (agriculture, ginning/pressing and trade) alone provides employment to 40 million people in the country.

2.2. Impact of Technology Mission on Cotton – I (TMC – I)

India has become the second largest producer of cotton in the world and net exporter of cotton only because of the introduction of Technology Mission on Cotton – I. The mission was brought by the earlier NDA Government led by Shri Atal Bihari Vajpayee and became a boon for the cotton farmers and made Indian

Table - 3: Export Share of Indian Textile Products

Items	Export Share %
Cotton Fibre	9%
Cotton yarn, Fabrics and Made-ups	23%
Man-made Textiles	14%
Garments	39%
Handlooms & Handicrafts	11%
Others	4%

cotton textile industry a global leader. The mission has helped the country to achieve a historical cotton production of up to 398 lakh bales during the year 2013-14 from around 178 lakhs bales prevailed during the year 1999. The mission also helped the country to increase the Area under cotton from 92 lakh hectares to 120 lakh hectares during its implementation period.

Chart - 3: Impact of Technology Mission on Cotton-I (TMC-I)

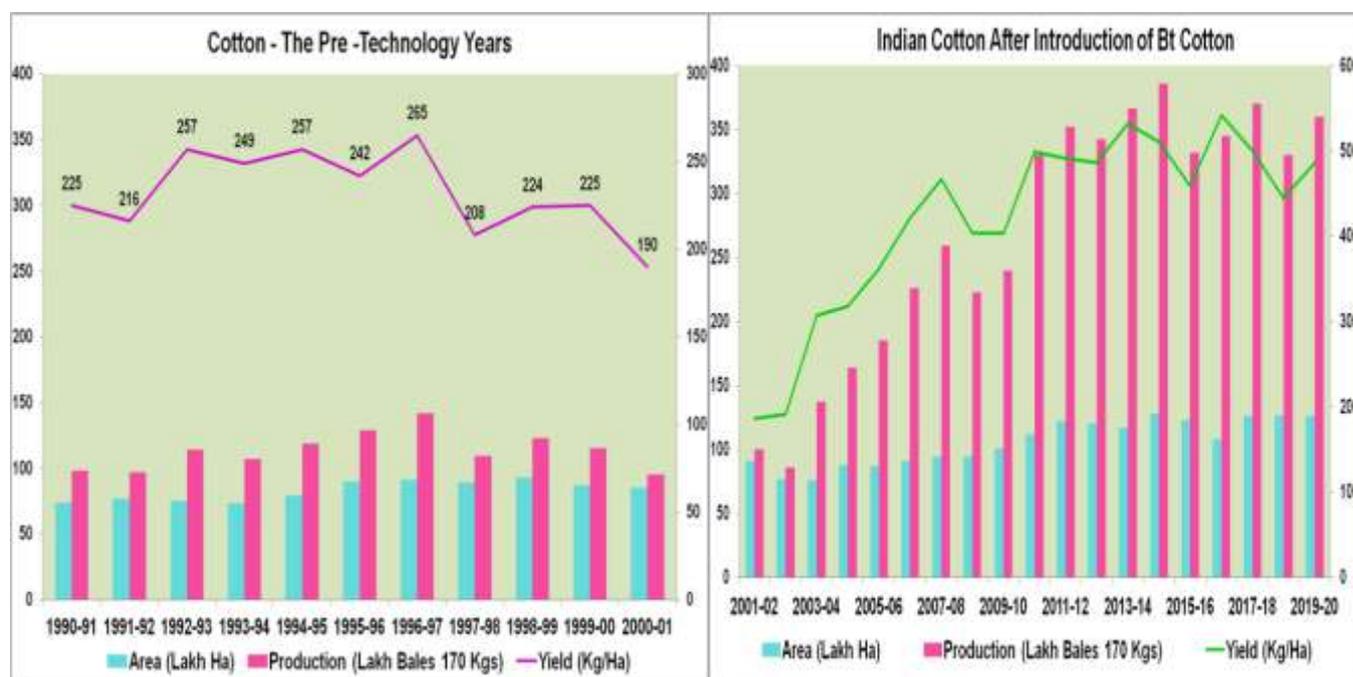


Table - 4: Area, Production and Yield Growth - Major Countries

Year	Particulars	India#	Australia	Brazil	China	Turkey	Mexico	Israel	World	
									Excl. India	Incl. India
1999-00	Area (lakh ha)	88.83	4.50	7.35	37.26	7.19	1.52	0.15	235.10	323.93
	Prdn (1000 T)	2678	707	631	3832	800	145	24	16276	18954
	Yield (kg/ha)	301	1571	859	1028	1113	954	1600	692	585
2019-20	Area (lakh ha)	125	1.80	15.50	33	4.50	1.65	0.04	209.47	334.47
	Prdn (1000 T)	6205	370	2613	5770	718	250	8	19647	25852
	Yield (kg/ha)	496	2056	1686	1748	1596	1515	2000	938	773
Change in Area (%)		40.72	-60.00	110.88	-11.43	-37.41	8.55	-73.33	-10.91	3.25
Change in Yield (%)		64.66	30.83	96.37	70.01	43.40	58.83	25.00	35.55	32.10

Source: USDA

Table - 5: Cotton Area, Production & Yield - All India

Year	Area	Production	Yield (Kgs/ha)	Year	Area	Production	Yield (Kgs/ha)
	(Lakh ha)	(Lakh bales)			(Lakh ha)	(Lakh bales)	
1999-00	87.31	156	304	2010-11	112.35	339	513
2000-01	85.76	140	278	2011-12	121.78	367	512
2001-02	87.30	158	308	2012-13	119.78	370	525
2002-03	76.67	136	302	2013-14	119.60	398	566
2003-04	76.30	177	394	2014-15	128.46	386	511
2004-05	87.86	243	470	2015-16	122.92	332	460
2005-06	86.77	241	472	2016-17	108.26	345	542
2006-07	91.44	280	521	2017-18	125.86	370	500
2007-08	94.14	307	554	2018-19	126.14	333	449
2008-09	94.06	290	524	2019-20	134.77	365	460
2009-10	103.10	305	503	2020-21	133.41	360	459

Source: O/oTxc

Table - 6: Comparison of Quality Parameters for Branded Indian Cotton

S. No.	Parameters	Existing Long Staple Cotton	Branded Long Staple Cotton
1.	Staple Length	30 mm+	30 mm+
2.	Mic.	3.6 or below	3.8 to 4.2
3.	RD Value	75	78+
4.	Strength	28 g/tex	29 g/tex or more
5.	Uniformity Index	80%	85%
6.	Trash	More than 3%	Less than 1.7%
7.	Moisture Content	9 to 10%	8% or below

2.3. Government Initiatives

Government of India has launched India's premium cotton brand “**Kasturi Cotton**” to help textile manufacturers and exporters get better price realization for the products in the international markets. The Kasturi Cotton brand will represent parameters like whiteness, brightness, softness, purity, lustre and uniqueness. Also, it would enable the Indian cotton value chain to improve quality and emerge as one of the best in the world.

Government of India has been rendering support to the cotton textile sector through initiatives such as:

- Minimum Support Price to sustain the area under cotton and maintain fair average quality
- Contract Farming
- Promoting Speciality Cotton such as organic cotton, BCI cotton, ELS cotton, naturally coloured cotton, etc.
- Supply of SIMA Kapas Plucker at free of cost that has enabled the farmers in most of the areas to double their net income, apart from reducing the trash level to less than 1.5% and eliminating cotton contamination problem at farm level.

The Ministry of Textiles is also in the process of formulating a New Textiles Policy with a vision to

3. ELS Cotton - Current Scenario

India produces wide varieties of cotton and is the second largest producer in the world after China. Though the country is self-sufficient in short, medium and long staple cottons, it faces shortage of ELS cotton suitable to spin fine and super fine count yarns (60s & above). The demand for textile products made out of Extra Long Staple cotton (32 mm and above) is growing exponentially and the potential for value addition of the products made out of these cotton is very high.

The short supply in the coarser yarn count production is met with the waste generated in the medium and superfine count yarn and also by using recycled fibre generated out of garment/made-ups cut waste and also similarly, waste imported from various countries. Whereas, the short supply in ELS cotton is met only by imports.

Table - 7: Indian Cotton Supply-Demand Mismatch

S. No.	Staple Group of Cotton	Count Group	Supply	Demand	Mismatch
			(Quantity in Lakh Bales)		
1	Short & medium Staple variety of cotton (Staple length below 24.5 mm) viz, Assam Komila / Bengal Deshi / Jayadhar / V797	1s-30s	7	112	-40
2	Medium Long Staple variety of cotton (Staple length 25 mm to 27.5 mm) viz, LRA / J-34		65		
3	Long staple cotton:				
i)	Staple length: 27.5mm to 29 mm viz, H-4 / MECH / S-6	31s-60s	111	129	165
ii)	Staple length: 29.5mm to 30.5 mm viz, Bunny Brahma		183		
4	Extra Long Staple Cotton (staple length 32.5 mm & above) viz, DCH-32 / Suvin	61s & Above	5	19	-14
Total			371	260	-

develop a competitive textile sector in India which is modern, sustainable and inclusive with special focus on manufacturing of apparel and garment, technical textiles and man-made fibre products.

The production of ELS cotton has been continuously decreasing against the increasing demand by the textile industry. During 1983-84, India achieved a record production of 24.71 lakh bales (including 13.25 lakh

Table - 8: ELS Cotton Production in India

Year	bales	Remarks
1983-84	24.71 lakhs	Of which MCU-5 13.25 lakh bales and others 11.46 lakh bales
1989-90	44,000	Suvin
Currently	< 5 lakhs	Of which Suvin around 2,000 bales
Demand by 2030	20 to 25 lakhs	Projected figure based on future growth potential

bales of MCU 5) and the same had come down to 12.21 lakh bales in DCH 32 alone. Over a period, the production has fallen, the area under ELS cotton got drastically reduced and the gap in the demand-supply has been increasing continuously. Production in 2020-21 has been estimated to be around 5 lakh bales only as against its demand of over 15 lakh bales. Production of ELS cotton accounts for less than 1.5% of the total cotton production in the country. Considering the high market demand and future growth potential the

demand for ELS cotton is projected to be 20 to 25 lakh bales by the year 2030. Hence, urgent measures are needed to increase the production of ELS cotton in the country to reduce the dependence on imports and at the same time save precious foreign exchange.

3.1. ELS Cotton Varieties/Hybrids

The following table shows the release of ELS varieties/hybrids for cultivation in the country.

Table - 9: Popular and Recently Released Conventional Extra Long Staple Cotton Variety / Hybrids in India

Variety /Hybrid	Species	2.5% SL (mm)	Mic. (µg/inch)	Strength (g/tex)	Count	Year	States
MCU 5	H	33	3.2	26	60s	1968	TN, AP, GJ
Varalaxmi	HB	34	3.2	28	80s	1972	KA, TN, MH, AP, GJ
Suvin	B	39	3.2	38	120s	1974	TN, AP
DCH 32	HB	38	3	30	80s	1981	KA, TN, MH, AP, GJ
TCHB 213	HB	35	3.6	25	80s	1989	TN
Surabhi	H	33	3.2	24	60s	1997	KA, TN, AP
CO 14	H	35	4	23.4	70s	2016	TN
DHB 915	HB	34.5	3.4	28.2	80s	2016	KA
RHB 388	HB	34.9	2.8	26.6	60s	2002	MH
RAHB 87	HB	35.6	3.5	28.7	80s	2009	KA
RHB 0711	HB	34	3.4	28	80s	2016	GJ, MH
DHB 1071	HB	35.5	3.3	26.4	80s	2017	KA
Phule Prabha	HB	34.8	3.3	26.6	80s	2016	KA, TN, MH, AP, GJ
Subiksha	H	32.7*	3.7	33.8*	60s	2018	KA, TN, AP
Sunantha	H	32.5*	3.7	32.7*	50s	2020	KA, TN, AP, TE
Suraksha	H	33.0*	3.7	34.3*	70s	2020	KA, TN, AP, TE, MH, GJ, MP
SBSG 1-5 (SIMA Platinum)	Variety	38	3.3	38.8	120s-140s	2020	MP, MH, GJ

* - under HVI Mode

It may be observed that, over a period, cultivation of most of the variety/hybrids had become outdated and only few existed. Farmers have switched over to Bt cotton (introduced in the year 2002) in large number because of shorter duration and resistance to bollworm attack. This had reduced the area under ELS cotton significantly. Though the Government had supported by promoting integrated cultivation through contract farming of ELS cotton, farmers were reluctant to form groups and join hands with the Private Sector in promotion of ELS cotton cultivation.

Globally ELS cotton production is decreasing steeply. The share of ELS cotton has come down to 1.6% in 2017-18 from 6.4% in 1981-82, while the demand for ELS cotton is increasing steadily. This gives vast opportunity for exporting surplus ELS cotton from the country.

Table - 10: ELS Cotton Share in Global Cotton Production

Year	Global Cotton Production		Share of ELS %
	Total (MT)	ELS (1000 T)	
1981-82	14.99	961	6.4
1991-92	20.68	893	4.3
2001-02	21.67	769	3.5
2017-18	25.97	422	1.6

Popular ELS cotton varieties imported by the domestic industry are Giza-70, Giza-88, Giza-86, Pima, etc. It may be noted that there are practical difficulties in multiplying foreign ELS varieties like PIMA, GIZA, etc., in the country due to varying agro-climatic conditions. Hence, it is preferable to develop our own ELS varieties for long-term benefit and attain self-sufficiency.

3.2. States Suitable for ELS Varieties / Hybrids

ELS varieties / hybrids could be grown at States that are already into cotton farming viz., Rajasthan, Gujarat, Maharashtra, Karnataka, Tamil Nadu, etc. The State-wise ELS varieties / hybrids that could be grown are tabulated below:

Table - 11: State-wise Suitable ELS Varieties / Hybrids

S. No.	State	Cotton Variety
1	Tamil Nadu	MCU-5, Surabhi, TCHB-213, DCH-32, RCHB-708 Bt. and MRC -6918 Bt
2	Karnataka	DCH-32, MRC-6918 Bt, RCHB -708 Bt, Kashinath, MRC-7918Bt. Chamunda, Bahubali, NCHB-990, NCHB-992 and Surpass
3	Madhya Pradesh	Surpass Bt., RCHB-708 Bt. Bumbac, Varadhan-1, Omkar, Cotton gold, Nava Bharat Gold, Bahubali, Thulasinath and Parasnath etc.
4	Rajasthan	MRC-6971, Nava Bharat Kranti, NCHB -990, Kashinath and Surpass.
5	Maharashtra	DCH-32, Varalakshmi, MRC-6918 Bt, Nava Bharat kranti, Bahubali, MRC-7918 Bt, etc.

In addition to the above states, ELS cotton could also be grown in the states of Andhra Pradesh, Telangana and Gujarat.

Table - 12: Popular Extra Long Staple Variety / Bt Cotton Hybrids Under Cultivation and their Characteristics

Variety	2.5% Length (mm)	Micronaire	Tenacity (g/tex)
SBSG 1-5 (SIMA Platinum)	38	3.3	38.83
Suvin	39	3.2	38
MCU-5	33	3.2	26
Surabi	33	3.2	24
Suraj	32.5	3.5	23
CO 14	35	4	23.4

Table - 13: Major Hybrid ELS Cotton Varieties

H X B Hybrid	Company name	2.5% Length (mm)	Micronaire	Tenacity (g/tex)
MRC 7918 BG-II (Bahubali)	M/s. Mahyco	35.3	3.5	31.0
MRC 6918 XXL BG-II	M/s. Mahyco	35.6	3.7	29.7
RCHB 708 BG II (EXCEL)	M/s. Rasi Seeds	35.2	3.7	25.6
NCHB 9905 (Kisan Jyothi) Bt2	M/s Nuziveedu Seeds	35-36	2.8-3.5	36-37
NCHB 9903 ELS Cot Bt2	M/s Nuziveedu Seeds	35-37	3.0-3.5	35-36
Chamundi BGII	M/s JK Agri Genetics	35.4	3.2	30.1

3.3. ELS Seed Producers

The country has a vast pool of seed producers – organisations both in the public and private sectors. To name a few;

CICR, Agricultural Universities of various states; SIMA CD & RA, Mahyco Seeds Pvt Ltd, JK Agro Genetics, Mills, Rasi Seeds, Nava Bharat Seeds, Nath Seeds Pvt Ltd, Bayer Crop Sciences, Varadhan Seeds, Nuziveedu Seeds, Gujarat Seeds Corporation, etc.

While the public sector organisations are financially supported, organisations in the private sectors need to be supported financially for producing Foundation and Certified Seeds, distributing genetically pure and high yielding seeds and conducting demonstration of latest technologies to increase the yield, etc.

4. Reasons for inconsistent and lower ELS Cotton Production in India

- Long duration
- High cost of production
- Severe damage by bollworms
- Bad boll opening
- Availability of foreign ELS Cotton
- Non-remunerative price for kapas

4.1. Cost of Cultivation of ELS Cotton Vs. Prevailing MSP

Given below is the cost of ELS cotton cultivation in India and the Minimum Support Price (MSP) fixed for the same for the year 2021-22:

Table- 14: Actual MSP Workings for ELS Cotton

Item of Cost	ELS Surabhi		DCH-32		Suvin	
	Labour Cost	Material Cost	Labour Cost	Material Cost	Labour Cost	Material Cost
	(A)	(B)	(A)	(B)	(A)	(B)
Variable Expenses						
Pre-cultivation	7,500	-	7,500	-	7,500	-
Seeds and sowing	600	750	600	1,500	600	1,500
Manure and manuring	2,067	4,300	2,067	6,000	2,067	4,800
Weeding & cultivation	11,475	2,620	13,275	2,620	12,623	2,620
Plant protection	1,333	4,000	1,333	5,000	1,333	5,000
Harvesting	9,180	-	12,600	-	7,128	-
Transportation	-	1,500	-	3,000	-	1,500
Total variable expenses	32,155	13,170	37,375	18,120	31,251	15,420
Estimated family members' salary						
Seeds and sowing	300	-	300	-	300	-
Manure and manuring	1,033	-	1,033	-	1,033	-
Weeding & cultivation	1,275	-	1,475	-	1,403	-
Irrigation (assumed 30% only)	600	-	600	-	600	-
Plant protection	667	-	667	-	667	-
Harvesting	1,020	-	1,400	-	792	-
Total estimated family members' salary	4,895	0	5,475	0	4,795	0
Fixed Expenses						
Loan interest		2,100		2,100		2,100
Land lease rent		5,000		5,000		5,000
Total fixed expenses		7,100		7,100		7,100
Total production cost (A2+F - own land)	52,320		63,070		53,565	
Staple length (mm)	32.5 to 33.0		33.5 to 34.5		38.0 to 39.5	
Micronaire value	3.5 to 3.8		3.8 to 4.0		3.4 to 3.8	
Average crop duration (days)	150		180		210	
Average yield per acre (Qtls)	8.5		10		6	
Production cost - own land (Rs./qtl)	6,155		6,307		8,928	
MSP Suggestions for ELS Cotton						
SIMA Model-I ((A2+FL)x1.3 remuneration to farmers)						
Calculated average MSP/Qtl	7,681		7,926		11,151	
Suggested MSP/Qtl	7,700		7,950		11,200	
SIMA Model-II (C2x1.3 remuneration to farmers)						
Calculated average MSP/Qtl	8,117		8,297		11,768	
Suggested MSP/Qtl	8,150		8,300		11,800	
GoI fixed MSP for the year 2021-22	6,225		6,425		7,225	
<i>* - Please note that we have suggested SIMA Model-I MSP/quintal (considering the total variable expenses and estimated family members contribution only) with a margin of 30% to the farmer and not taken into account fixed expenses like interest on loan s, land lease amount, etc.</i>						

Table- 15: Scope for increasing ELS Cotton Production

Item	2021-22	2024-25	2029-30
Private Players Bt Hybrid (0.450 kg packet)	1700 tonnes (37 lakh packets)	2425 tonnes (54 lakh packets)	3700 tonnes (83 lakh packets)
SIMA CD & RA variety (1 kg packet)	400 tonnes (4 lakh packets)	700 tonnes (7 lakh packets)	1000 tonnes (10 lakh packets)
Area -ha	4,16,700	6,25,050	9,37,575
ELS Cotton Production (1.64 bales/ha)	6.8 lakh bales	10.25 lakh bales	15.38 lakh bales
No of farmers Engaged (2/ha)	8.33 lakh	12.50 lakh	18.75 lakh

5. Strategies to achieve self-sufficiency in ELS cotton

To achieve the above desired ELS cotton production level, the industry need the following measures:

- Co-ordination between R & D, seed producers, Government and the Textile industry
- Seed producers need to be encouraged to produce ELS variety seed by way of providing subsidy for production of foundation and certified seeds direct to them and not to farmers as the process of getting the seeds certified is a cumbersome process which an individual farmer could not adhere and would face problems in selling the lint as their holdings are smaller and have to sell the lint in small quantities.
 - o In the case of production of varietal seeds, subsidy is required as the seeds have to be purified every season to retain its genetic purity and yield.
 - o It may be noted that varietal seeds are cheaper than Bt hybrid seeds. While varietal cotton seeds, Suvin is priced at Rs 600/kg and MCU-5

& other varieties are priced at Rs 350/kg; Bt cotton hybrids prices are Rs 650-750/450 grams packet.

- To motivate the farmers to migrate to ELS cotton cultivation, they should be made aware of the benefits to them in cultivating ELS cotton through Farm Field Schools, Field Level Demonstrations (like Suvin type cotton) by providing financial support to the ELS varietal seed producers.
- Farmers should be motivated to use hand-held battery operated mechanical kapas pluckers (SIMA Kapas Plucker) which would save the cost of kapas plucking significantly and at the same time help in plucking contamination free kapas which would fetch premium price (higher than market price).
- The farmers should be motivated with higher MSP for ELS cotton with buy-back assurance from the textile industry
- Bring back the Technology Mission on Cotton in a revised format (TMC - II) with the following four Mini Missions:-

Mini Mission - I	Cotton Technology Development
Mini Mission - II	Cotton Technology Transfer
Mini Mission - III	Cotton Lint Preparation (on par with international cotton quality parameters)
Mini Mission - IV	Branding of Indian cotton and its textiles & clothing products (like SUPIMA brand developed by PIMA in US)

MAJOR ACTIVITIES OF CITI

India Tex. in Sri Lanka: Showcasing Colours of India jointly organised by FICCI, CITI AND NITRA

FICCI along with Industry Partners – CITI and NITRA organised the 1st edition of “India Tex. in Sri Lanka: Showcasing Colors of India” on 26th August 2021. The mega event was supported by the Government of India, Joint Apparel Association Forum (JAAF) and Sri Lanka Apparel Brands Association.

Shri Dayasiri Jayasekara, Hon’ble State Minister of Batik, Handloom and Local Apparel Products of Sri Lanka graced the occasion as Guest of Honor and delivered the keynote address at the mega event.

Shri. T. Rajkumar, Chairman, CITI addressed the august gathering in the Inaugural session and shared his insights on the trade relationship between India and Sri Lanka and how the two countries should move ahead in the future to boost the present trade.

Dr. S.N. Modani, Chairman-RTMA addressed the Technical Session “Future India-Sri Lanka Partnership in Textiles” on 26th August 2021, wherein he shared his views on how Indian Textile & Apparel exporters can increase their share in the Sri Lankan market.



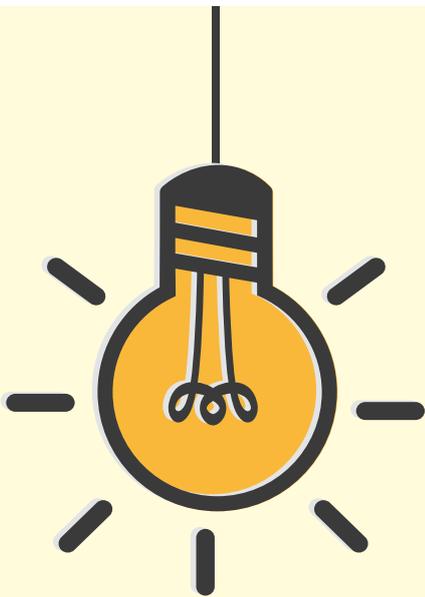
Shri T. Rajkumar, Chairman, CITI Addressing the august gathering in the Inaugural Session of India Tex. in Sri Lanka: “Showcasing Colours of India”



Dr. S.N. Modani, Chairman-RTMA addressing the Technical Session “Future India-Sri Lanka Partnership in Textiles”



Shri Dayasiri Jayasekara, Hon’ble State Minister of Batik, Handloom and Local Apparel Products of Sri Lanka delivering the Keynote Address at India Tex. in Sri Lanka: “Showcasing Colours of India”



Textile INNOVATIONS

.....NEXT BIG THINGS AHEAD.....

Cutting costs by 70% with VSD upgrade

Older hydraulic system lacked the speed and accuracy of control needed.

A new control system featuring an ABB variable speed drive (VSD) is efficiently managing the tension control and changing the size of the fabric reel as it traverses through dyeing processes for DP Dyers, based in Huddersfield, UK.

The VSD's in-built PID (proportional-integral-derivative) loop allows the system to automatically match torque to the requirements of the running fabric based on the thickness and number of wraps

The DP Dyers machine – known as a jigger – comprises a winder that feeds the fabric into the dye and a rewinder that gathers the finished product. The winder and rewinder were previously both controlled by an ageing hydraulic system, the motors of which suffered regular breakdowns. The hydraulics lacked the speed and accuracy of control needed by the winder/rewinder, resulting in uneven dye distribution.

A 5.5 kW ABB industrial drive was recommended by Halcyon Drives, a member of the ABB Value Provider network based in Warrington, UK. The VSD ensures a uniform dyeing or bleaching process by maintaining a constant tension in the wound fabric as the diameter of the reel changes.

The VSD uses its in-built PID loop to calculate the torque needed to manage the tension of the fabric running between the winder and rewinder. Meanwhile, the VSD determines the required speed of winding based on the material thickness and the number of turns of fabric, or wraps, on the lead roller. The system drives the fabric onto a roller and counts the number of wraps. The operator measures from the outside wrap to the core and inputs this to the VSD, which then calculates the fabric thickness based on the outside diameter divided by the number of wraps.

“We are getting a much more consistent product with more even dyeing due to the VSD, which constantly adjusts the web speed and torque to maintain the correct tension,” said Robert Clay, site engineer at DP Dyers. “The control system is now much more user friendly, with the software giving the alarm history of jobs. Now we have much more data, showing a history of temperatures and times of operation.”

Prior to installing the VSD, the machine's weekly energy consumption was typically 597 kWhr costing around £50. Following installation, this reduced to 169 kWhr and £14 respectively – a reduction of around 70%.

By connecting software to its electrification, robotics, automation and motion portfolio, ABB is pushing the boundaries of technology to drive performance to new levels. With a history of excellence stretching back more than 130 years, ABB's success is driven by 105,000 employees in over 100 countries.





INTERACTIVE COTTON WEBINAR

VIRTUAL PLATFORM : THURSDAY , 7TH OCTOBER 2021

Time : 14:15 HRS ONWARDS

KNOW YOUR SPEAKERS

CHIEF GUEST



SHRI PIYUSH GOYAL

Hon'ble Union Minister of Textiles,
Commerce & Industry, Consumer Affairs
and Food & Public Distribution

GUEST OF HONOUR



SMT. DARSHANA VIKRAM JARDOSH

Hon'ble Minister of State for
Textiles and Railways



Ms. Roop Rashi, IA&AS
Textile Commissioner,
Government of India



Shri Upendra Prasad Singh, IAS
Secretary,
Ministry of Textiles



Mr. Pradeep Kumar Agarwal
Chairman & Managing Director,
Cotton Corporation of India (CCI)



Shri S.K. Khandelia
Deputy Chairman,
Confederation of Indian Textile
Industry (CITI)



Shri T. Rajkumar
Chairman,
Confederation of Indian Textile
Industry (CITI)



Shri R.L. Nolkha
Vice Chairman,
Confederation of Indian Textile
Industry (CITI)

THANK YOU SPONSORS



INTERACTIVE COTTON WEBINAR

VIRTUAL PLATFORM : THURSDAY , 7TH OCTOBER 2021

Time : 14:15 HRS ONWARDS

KNOW YOUR SPEAKERS



Mr. J. Thulasidharan
President,
Indian Cotton Federation
(ICF) & Past Chairman, CITI



Shri Prem Malik
Co-Chairman,
CITI CDRA Standing Committee
on Cotton & Past Chairman
Confederation of Indian Textile
Industry (CITI)



Shri P.D. Patodia
Chairman,
Standing Committee on
Cotton of CITI-CDRA



Shri Suresh Kotak
Chairman,
Kotak Ginning & Pressing Co



Dr. K Selvaraju
Secretary General,
The Southern India Mills'
Association (SIMA)



Mr. Manoj Patodia
Chairman,
The Cotton Textiles Export
Promotion Council
(TEXPROCIL)



Mr. Atul Ganatra
President,
Cotton Association
of India (CAI)



Mr. G. Chandrasekhar
Economist & Senior Journalist



Dr. Gary Adams
President and CEO,
National Cotton Council of
America, USA



Mr. Alexandre Schenkel
Vice President,
Abrapa (Brazilian Cotton Growers
Association) Agronomist and Cotton
Farmer in Mato Grosso State in Brazil



Mr. Roger Gilmartin
Special Advisor,
Cotton Council International,
USA



Dr. Terry Townsend
Global Consultant,
Cotton Analytics, USA



Mr. Robert Antoshak
Marketing Consultant and
Columnist Textile Projects, LLC



Ms. Jyoti Narain Kapoor
Country Director,
BetterCotton Initiative – India



Mr. Ganesh Kasekar
South Asia Representative,
Global Organic Textile
Standards GmbH (GOTS)

THANK YOU SPONSORS

Thank You Hon'ble Prime Minister

for
**Removal of Anti-Dumping
Duty on Viscose Staple Fibre (VSF)**
**Providing RoDTEP benefits for
Yarn, Fabrics and Other Products**

**Extending RoSCTL for
Garments and Made-ups**



Shri Narendra Modi
Hon'ble Prime Minister

Indian Textiles & Clothing Industry Profusely Thanks
Hon'ble Prime Minister, Shri Narendra Modi
and

Shri Piyush Goyal

Hon'ble Union Minister of Textiles, Commerce & Industry,
Consumer Affairs and Food & Public Distribution

Smt. Nirmala Sitharaman

Hon'ble Union Minister of Finance and Corporate Affairs

Vision set by the Government of India

Increase textile business size to USD 350 Bn. including USD 150 Bn. exports by 2025

Policy initiatives for the country's second largest employment provider

Raw material structural issues - Pathbreaking policy interventions

- Removal of Anti-Dumping Duty (ADD) on Viscose Staple Fibre (VSF).
- Abolishing ADD on PTA, rejecting the proposed ADD on PSF and VSF spun yarn.
- Launching Indian cotton brand "Kasturi Cotton" with international fibre quality parameters.

Encouraging scale of operations in MMF value chain - The engine of growth

- Allocating Rs.10,683 crores under Production Linked Incentive Scheme.
- Announcement of setting up of seven mega textile parks in three years under MITRA scheme.

Export competitiveness

- Extending RoSCTL scheme upto 31st March 2024 for Garments and Made-ups sectors.
- Announcing WTO compatible RoDTEP rates for yarn, fabric and other products.

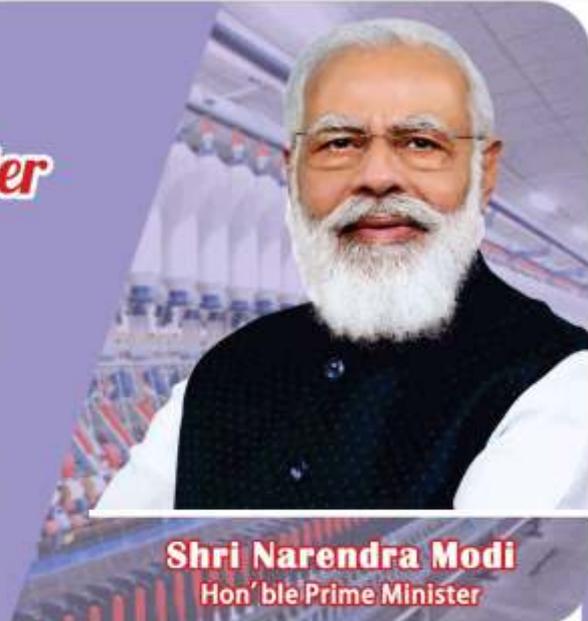
Technical Textiles

- Announcing National Technical Textile Mission with an outlay of Rs.1,480 crores to make India a global leader in technical textile segment.



Thank You Hon'ble Prime Minister

FOR APPROVAL OF
PRODUCTION LINKED INCENTIVE
SCHEME FOR TEXTILES AND
RELEASE OF RS. 56,027 CRORE
FOR EXPORTERS



Shri Narendra Modi
Hon'ble Prime Minister

Vision set by the Government of India

Increase textile business size to USD 350 Bn. including USD 100 Bn. exports by 2025-26

Indian Textile Industry wholeheartedly welcomes approval of Production Linked Incentive Scheme (PLIS) for Man-Made Fibre (MMF) Fabrics & Garments and Technical Textiles.

Production Linked Incentive Scheme (PLIS) for Textiles along with RoSCTL, RoDTEP and other measures of Government in the sector will herald a new age in textiles manufacturing.

The Textile and Apparel exporters also thank Hon'ble Prime Minister for release of Rs. 56,027 crore under important export promotion schemes like ROSCTL, MEIS and RoDTEP.

This will ease working capital requirement of over 45000 exporters, including large number of MSMEs in the T&C industry and achieve the overall export target of USD 400 Bn. by 31st March 2022.

Production Linked Incentive (PLI) Scheme Highlights

- India poised to regain its dominance in **Global Textiles Trade**
- Scheme will help Indian companies to emerge as **Global Champions**
- Scheme will **positively impact** especially States like Gujarat, Uttar Pradesh, Maharashtra, Tamil Nadu, Punjab, Andhra Pradesh, Telangana, Odisha, etc.
- Employment opportunities** to over **7.5 lakh** people directly and several lakhs more for supporting activities
- Greater priority for investment in **Aspirational Districts & Tier 3/4 towns**
- Scheme will empower **women** in the textile sector
- Incentives worth **Rs. 10,683 crore** over five years for manufacturing notified products
- Fresh investment** of more than **Rs 19,000 crore**
- Leveraging economies of scale, additional **production turnover of over Rs.3 lakh crore**
- Another step in fulfillment of PM's vision of building an **Aatmanirbhar Bharat**
- Impetus to **Make in India** as only manufacturing companies registered in India will be eligible



PRESS RELEASES

CITI WELCOMES APPROVAL OF THE PRODUCTION LINKED INCENTIVE SCHEME (PLIS) FOR MMF FABRICS, GARMENTS AND TECHNICAL TEXTILES

New Delhi, Wednesday, 8th September 2021: Chairman, CITI, Shri T Rajkumar welcomed the approval of the Production Linked Incentive Scheme (PLIS) for MMF Fabrics, Garments and Technical Textiles by the Hon'ble Prime Minister, Shri Narendra Modi Ji, Chairman of the Cabinet Committee of Economic Affairs (CCEA). Shri T. Rajkumar said, the Scheme with an outlay of Rs.10,683 crores will provide a major thrust to the MMF Fabrics, Garments and Technical Textiles which are being seen as the growth engine of the next decade and will help the Textiles and Clothing (T&C) industry to achieve its short-term as well as long-term goals set by the Government of India.

CITI Chairman, also thanked the Hon'ble Finance Minister, Smt. Nirmala Sitharaman Ji and Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs & Food & Public Distribution, Shri Piyush Goyal Ji for making the Scheme a reality with a total outlay of INR 1.97 Lakh Crores for 13 key sectors, including Textile & Clothing Industry, to create global champions and generate additional employment opportunities for country's youth especially for poor and illiterate women of the rural areas.

Shri T Rajkumar cited that world over MMF Sector and Technical Textiles are considered as the driving force for the growth of any country's textile industry and the same has also been endorsed and recognised by our Government. Hence, Government has addressed many structural issues in the MMF Sector by removing anti-dumping duty on Purified Terephthalic Acid (PTA) and Viscose Staple Fibre (VSF) and rejected the proposed anti-dumping duties on PSF, MEG, etc. which has made the MMF fibre and yarn cheaply available to the domestic players at internationally competitive prices. The Government has also allocated Rs.1,480 crores under Technology Mission on Technical Textiles for encouraging R&D activities in the sector. He further pointed out that Technical Textiles has a major role to play in the overall development of several sectors of the economy, including infrastructure, water, health and hygiene, defence, security, automobiles, aviation, etc. Thus, the inclusion of both the sectors in PLIS underlines the importance of these segments for enhancing India's trade share in the global textile trade.

CITI Chairman pointed out that through PLI Scheme, the Hon'ble Minister of Textiles wants to scale up the capacity of the T&C Industry by ten times. Considering the growing demand for textile products in the domestic sector as well as across the globe, the PLI Scheme is expected to attract a fresh investment of over Rs.19000 crores, additional production turnover of Rs.3 lakh crore in Five Years and will create additional employment for 7.5 lakh people and would significantly expand the size of the textile sector.

Shri T Rajkumar stated that there are two types of investment possible with different sets of incentive structures, first, where a company willing to invest Rs.300 crores in Plant, Machinery, Equipment and Civil Works (excluding land and administrative building cost) to produce products of Notified lines (MMF Fabrics, Garment) and products of Technical Textiles, shall be eligible to apply for participation in the first part of the scheme. Similarly, in the second part, a company willing to invest Rs.100 crores shall be eligible to apply for participation in this part of the scheme. In addition, priority will be given for investment in Aspirational Districts, Tier 3, Tier 4 towns, and rural areas and due to this priority Industry will be incentivized to move to the backward areas. He further stated that this scheme will positively impact especially States like Gujarat, UP, Maharashtra, Tamilnadu, Punjab, AP, Telangana, Odisha, etc.

CITI Chairman stated that the PLI Scheme and other policy decisions made by the Government of India will not only improve the competitiveness of the Indian textile sector but go a long way in fulfilling the dreams of the Hon'ble Prime Minister of making our T&C Industry AatmaNirbhar in real sense and India a global manufacturing hub for the textile sector. With this, India hopes to regain its dominance in the Global Textiles Trade.

CITI LAUDS LANDMARK ANNOUNCEMENT OF RoDTEP SCHEME FOR THE ENTIRE TEXTILE VALUE CHAIN

New Delhi, Tuesday, 17 August 2021: CITI, Chairman, Shri T. Rajkumar, has expressed his sincere thanks to the Hon'ble Prime Minister, Shri Narendra Modi Ji for announcing the rates of Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme, fulfilling the long-awaited and pending demand of the Indian textile exporters who were not covered under RoSTCL scheme. The scheme is effective from 1st January 2021.

Chairman, CITI also thanked Hon'ble Union Minister of Finance, Smt. Nirmala Sitharaman Ji, Hon'ble Union Minister of Commerce & Industry and Textiles, Shri Piyush Goyal Ji and Hon'ble Union Minister for Woman & Child Development, Smt. Smriti Zubin Irani Ji for putting in all their efforts to make RoDTEP a reality today!

Chairman, CITI pointed out that the export of textiles products has suffered in the last few years due to the non-availability of duty-free access. This has pushed India to the sixth position in the global textile trade from the second position due to the withdrawal of certain export benefits extended for yarns and fabrics and other products such as incremental export incentive, focus product and focus market export incentives, interest subvention, etc. He further stated that the Indian textile industry was attracting embedded taxes to the tune of 6-8% on the cotton yarn and cotton fabrics products and the same were not getting refunded to them at any stage.

Shri T Rajkumar further said that the cotton yarn and fabrics were to date eligible only for duty drawback and from now on, the cotton yarn will get 3.8% RoDTEP with a cap of Rs.11.40 per kilo and woven fabric of 4.3% with a cap of Rs.3.4 per sq. metre. He also stated that the knitted fabric has been given only 1% and requested the Government to review the rate based on modular RoDTEP calculation. He has said that the knitted fabric made out of yarn should get a higher benefit than the yarn which has been taken care of in the case of woven fabric.

Chairman, CITI stated that the scheme will place Indian textile exporters at par with international competitors and allow them to penetrate new markets to increase their market share and make the Indian textile industry AatmNirbhar in all senses.

CITI HAILS THE HISTORIC DECISION OF REMOVAL OF ANTI-DUMPING DUTY ON VISCOSE STAPLE FIBRE

New Delhi, Friday, 13th August 2021: Chairman, CITI, Shri T. Rajkumar welcomed the decision of the Central Government to revoke Anti-Dumping Duty (ADD) on Viscose Staple Fibre (VSF), excluding Bamboo Fibre, falling under tariff item 55041000 of the First Schedule to the said Customs Tariffs Act, originating in or exported from the People's Republic of China and Indonesia. The Department of Revenue, Ministry of Finance has today issued a Notification No.44/2021-Customs (ADD) dated 12th August 2021, in this regard.

PRESS RELEASES...

Chairman, CITI thanked the Hon'ble Prime Minister, Hon'ble Minister of Finance, Hon'ble Minister of Commerce, Industry & Textiles, and also the former Hon'ble Union Minister of Textiles for taking another historic decision of removing anti-dumping duty on VSF. This will make available VSF raw materials at internationally competitive prices in India and facilitate the Indian MMF sector to become globally competitive. This landmark decision will also promote ease of doing business in India and generate investment and employment in the VSF and MMF textile value chain. He further stated that the decision of the Government has boosted the morale of the Indian stakeholders who had been demanding withdrawal of ADD on VSF for quite a long time.

Chairman, CITI recalled the meeting which the Hon'ble Prime Minister had convened on 26th December 2019 at his residence and where the industry delegation, including him, had emphasized the need for addressing raw material structural issues viz., removal of ADD on all MMF raw materials, fibres and filaments. CITI had represented on several government forums for the withdrawal of ADD on VSF to bring Indian MMF stakeholders at par with the international players.

Shri T Rajkumar stated that the VSF value chain was facing a shortage of viscose fibres as the supply was restricted to only around 200 spinning mills while the polyester fibre was made available freely across the segments. He also stated that the viscose staple fibre was not made available for the MSME segment and thus greatly affected the power loom and the MSME garment sectors. He stated that the decision would benefit the MSME segments to a great extent.

Chairman, CITI pointed out that the Government has already announced game-changing schemes like Mega Investment Textiles Parks (MITRA) and Production Linked Incentive (PLI) Scheme for the Textile Sector. Under PLI the Government has identified 42 HS Codes MMF apparels, 14 MMF fabrics and 10 MMF Technical Textiles products. He has stated that as a majority of these products comprise viscose and its blended textiles, the anti-dumping duty removal would facilitate achieving the vision of creating 40 to 50 world champions in the MMF products.

Shri T Rajkumar further stated that the decision of withdrawal of anti-dumping duty on VSF is in line with its long-term policy for the Indian textile and clothing industry to achieve the ambitious target of US\$ 350 bn by 2024-25. The Hon'ble Prime Minister and the Hon'ble Union Minister of Commerce, Industry and Textiles are already urging the Indian Inc to take further risks if they want to dominate the global market and increase their share in the world textile trade.

Chairman, CITI stressed that the global consumption of man-made fibres is increasing very rapidly and India's domestic fibre consumption ratio at present is 65:35 between natural fibres and man-made fibres, however, it is opposite with the rest of the world. The Government's decision will align domestic VSF prices with global prices, which will make the entire Indian VSF textile value chain globally competitive and help boost production and exports.

Shri T Rajkumar stated that the VSF spinning segment has been facing severe challenges due to the duty-free import of VSF spun yarn from the ASEAN countries though it benefited the power loom and the downstream sectors. He has stated that over two lakh power looms in Tamilnadu have migrated to VSF fabric production in recent years and the duty removal would encourage the power looms in Tamilnadu and other parts of the country to achieve an exponential growth rate.

Chairman, CITI concluded by thanking the Government for the announcement of continuation of RoSCTL along with its guidelines for the Garments and Made-ups Segments, however, the rest of the textile value chain is still waiting for the Government's decision for the announcement of the RoDTEP Scheme to enable them to be fully competitive with the rest of the world. Similarly, Indian textile players are also expecting FTAs with the USA, EU, UK and Canada to unleash their real potential to fulfil the vision of our Hon'ble Prime Minister for making the Indian textile industry AatmaNirbhar in real sense!

माननीय प्रधानमंत्री जी

कपड़ा उत्पादन संबंधी प्रोत्साहन
योजना (PLIS) की स्वीकृति और
निर्यातकों के लिए ₹ 56,027 करोड़
जारी करने पर

सादर धन्यवाद



श्री नरेंद्र मोदी
माननीय प्रधानमंत्री जी

भारत सरकार द्वारा निर्धारित संकल्पना

वर्ष 2025-26 तक कपड़ा व्यवसाय का विस्तार USD 350 Bn. जिसमें USD 100 Bn. का निर्यात लक्ष्य निहित

भारतीय कपड़ा उद्योग मानव निर्मित फाइबर आधारित कपड़ा एवं परिधान तथा तकनीकी टेक्सटाइल्स के लिए कपड़ा उत्पादन संबंधी प्रोत्साहन योजना (PLIS) के अनुमोदन का हार्दिक स्वागत करता है।

RoSCTL, RoDTEP और इस क्षेत्र में सरकार के अन्य उपायों के साथ कपड़ा उद्योग के लिए उत्पादन से जुड़ी प्रोत्साहन योजना (PLIS) कपड़ा निर्माण में एक नए युग की शुरुआत करेगी।

कपड़ा एवं वस्त्र निर्यातक समुदाय माननीय प्रधानमंत्री श्री नरेंद्र मोदी जी को विभिन्न निर्यात प्रोत्साहन योजनाओं जैसे ROSCTL, MEIS और RoDTEP के तहत ₹ 56,027 करोड़ निर्यातकों के लिए जारी करने पर सादर धन्यवाद करता है। इस पहल से 45,000 निर्यातकों को, जो कि बड़ी संख्या में सूक्ष्म, लघु और मध्यम उद्यम को कार्यशील पूँजी में मदद मिलेगी, और भारत के कपड़ा एवं वस्त्र उद्योग को 31 मार्च 2022 तक 400 अरब डॉलर के निर्यात लक्ष्य को हासिल करने में मदद करेगा।

उत्पादन संबंधी प्रोत्साहन योजना (PLIS) की मुख्य बातें

- वैश्विक कपड़ा व्यापार में अपना प्रभुत्व पुनः प्राप्त करने के लिए देश है तैयार
- योजना से भारतीय कंपनियों को वैश्विक चैम्पियन के रूप में उभरने में मिलेगी सहायता
- योजना से खास रूप से गुजरात, उत्तर प्रदेश, महाराष्ट्र, तमिलनाडु, पंजाब, आंध्र प्रदेश, तेलंगाना और ओडिशा जैसे राज्यों को होगा लाभ
- 7.5 लाख प्रत्यक्ष रोजगार, तथा सहायक गतिविधियों से कई लाख लोगों को रोजगार के अवसर
- आकांक्षी जिलों, टियर 3 / टियर 4 कस्बों, तथा ग्रामीण क्षेत्रों में निवेश के लिए अधिक प्राथमिकता
- योजना से टेक्सटाइल के क्षेत्र में महिलाये होंगी सशक्त
- नोटिफाइड प्रोडक्ट्स के निर्माण के लिए 5 वर्षों में ₹ 10,683 करोड़ की प्रोत्साहन राशि
- ₹ 19,000 करोड़ से अधिक का नया निवेश
- बड़ी स्केल की अर्थव्यवस्था का मिलेगा लाभ, 3 लाख करोड़ से अधिक का अतिरिक्त प्रोडक्शन टर्नओवर
- आत्मनिर्भर भारत के निर्माण के प्रधानमंत्री के विज़न को पूरा करने की दिशा में एक और कदम
- मेक इन इंडिया को प्रोत्साहन क्योंकि केवल भारत में पंजीकृत विनिर्माण कंपनियां ही पात्र होंगी



EXPORTS

India's Textile and Apparel Exports (In US Million)

Description	July '20	July'21	% change	Apr'20- July'20	Apr'21- July'21	% Change	% share of total Apr'20- July'20	% share of total Apr'21- July'21
Textiles and Made-ups								
Cotton								
COTTON RAW INCLD. WASTE	108	154	42%	267	875	228%	4%	6%
COTTON YARN	255	451	77%	706	1631	131%	11%	12%
COTTON FABRICS, MADEUPS ETC.	536	725	35%	1298	2516	94%	19%	18%
	899	1,329	48%	2,271	5,022	121%	34%	36%
Jute								
JUTE, RAW	1	1	43%	2	4	93%	0%	0%
JUTE YARN	1	1	22%	2	9	495%	0%	0%
JUTE HESSIAN	10	12	15%	19	44	130%	0%	0%
OTHER JUTE MANUFACTURES	14	16	17%	30	56	86%	0%	0%
FLOOR CVRNG OF JUTE	7	10	43%	17	37	113%	0%	0%
	34	41	23%	70	150	114%	1%	1%
Silk								
SILK,RAW	0	0	9147%	0	1	5746%	0%	0%
SILK WASTE	2	5	91%	6	12	99%	0%	0%
NATRL SILK YARN,FABRICS,MADEUP	5	9	89%	11	25	125%	0%	0%
SILK CARPET	1	3	119%	4	8	116%	0%	0%
	8	17	100%	21	46	120%	0%	0%
Wool								
WOOL, RAW	0		-100%	0	0	66%	0%	0%
WOLLEN YARN,FABRICS,MADEUPSETC	11	13	15%	29	48	65%	0%	0%
	11	13	15%	29	48	65%	0%	0%
Manmade								
MANMADE STAPLE FIBRE	37	60	62%	110	253	130%	2%	2%
MANMADE YARN,FABRICS,MADEUPS	307	487	59%	783	1771	126%	12%	13%
	344	546	59%	893	2,024	127%	13%	15%
Others								
CARPET(EXCL. SILK) HANDMADE	125	155	25%	301	562	87%	5%	4%
COIR AND COIR MANUFACTURES	39	48	22%	133	233	76%	2%	2%
HANDCRFS(EXCL.HANDMADE CRPTS)	142	189	33%	309	656	112%	5%	5%
HANDLOOM PRODUCTS	21	24	14%	45	91	100%	1%	1%
OTH TXTL YRN, FBRC MDUP ARTCL	39	54	39%	102	188	83%	2%	1%
	366	470	28%	891	1,730	94%	13%	13%
Total Textiles and Made-ups	1,662	2,417	45%	4,174	9,021	116%	62%	65%
Apparel								
RMG COTTON INCL ACCESSORIES	614	744	21%	1444	2525	75%	22%	18%
RMG MANMADE FIBRES	219	284	29%	548	1075	96%	8%	8%
RMG OF OTHR TEXTLE MATRL	210	331	57%	478	1073	124%	7%	8%
RMG SILK	7	12	68%	20	67	241%	0%	0%
RMG WOOL	12	17	38%	21	54	162%	0%	0%
Total Apparel	1,064	1,388	31%	2,511	4,794	91%	38%	35%
Grand Total	2,726	3,805	40%	6,685	13,815	107%	100%	100%

Data Source: CITI Analysis based on DGCI&S data extracted on 25th September 2021



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IMPORTS

India's Textile and Apparel Imports (In US\$ Million)

Description	July '20	July'21	% change	Apr'20- July'20	Apr'21- July'21	% Change	% share of total Apr'20- July'20	% share of total Apr'21- July'21
Textiles and Made-ups								
Cotton								
COTTON RAW INCLD. WASTE	27	58	115%	131	213	63%	9%	9%
COTTON YARN	2	2	-7%	4	8	95%	0.3%	0.3%
COTTON FABRICS, MADEUPS ETC.	31	36	16%	87	147	69%	6%	6%
	59	95	60%	222	368	66%	16%	16%
Jute								
JUTE, RAW	2	4	132%	2	12	623%	0%	1%
JUTE YARN	8	4	-50%	9	13	41%	1%	1%
JUTE HESSIAN	4	5	13%	9	13	43%	1%	1%
OTHER JUTE MANUFACTURES	10	5	-53%	17	20	22%	1%	1%
FLOOR CVRNG OF JUTE	0	0	76%	1	0	-62%	0%	0%
	24	17	-27%	37	58	57%	3%	2%
Silk								
SILK,RAW	5	9	84%	18	24	40%	1%	1%
SILK WASTE	0		-100%	0	0	-66%	0%	0%
NATRL SILK YARN,FABRICS,MADEUP	2	2	25%	6	8	43%	0%	0%
SILK CARPET			#DIV/0!	0	0	622%	0%	0%
	6.6	11.1	67%	23.5	32.8	39%	2%	1%
Wool								
WOOL, RAW	5	20	316%	42	73	73%	3%	3%
WOLLEN YARN,FABRICS,MADEUPSETC	4	7	54%	16	27	65%	1%	1%
	9	26	192%	58	100	71%	4%	4%
Manmade								
MANMADE STAPLE FIBRE	19	28	51%	88	150	71%	6%	6%
MANMADE YARN,FABRICS,MADEUPS	100	228	128%	358	899	151%	26%	38%
	119	257	116%	446	1,049	135%	32%	44%
Others								
CARPET(EXCL. SILK) HANDMADE	4	5	26%	24	26	5%	2%	1%
COIR AND COIR MANUFACTURES	0	0	370%	0	2	369%	0%	0%
HANDCRFS(EXCL.HANDMADE CRPTS)	45	35	-21%	224	163	-27%	16%	7%
HANDLOOM PRODUCTS	1	0	-77%	1	1	-23%	0%	0%
OTH TXTL YRN, FBRIC MDUP ARTCL	47	76	62%	136	279	104%	10%	12%
	96	117	21%	386	471	22%	28%	20%
Total Textiles and Made-ups	314	523	67%	1,173	2,079	77%	84%	88%
Apparel								
RMG COTTON INCL ACCESSORIES	35	56	59%	59	160	171%	4%	7%
RMG MANMADE FIBRES	17	23	41%	36	68	86%	3%	3%
RMG OF OTHR TEXTLE MATRL	36	14	-61%	124	47	-62%	9%	2%
RMG SILK	0	0	80%	0	1	125%	0%	0%
RMG WOOL	1	1	62%	1	3	168%	0%	0%
Total Apparel	88	95	7%	221	279	26%	16%	12%
Grand Total	402	618	54%	1,394	2,358	69%	100%	100%

Data Source: CITI Analysis based on DGCI&S data extracted on 25th September 2021

CITI ANALYSIS OF EXPORTS AND IMPORTS OF T&A FOR AUGUST 2021

Monthly Export Updates of Textile and Clothing (Value in USD Mn.)

Export category	August-20	August-21	% Change	Cumulative (Apr'20-Aug'20)	Cumulative (Apr'21-Aug'21)	% Change
<i>Cotton Yarn/Fabs./made-ups, Handloom Products etc.</i>	833.95	1,299.67	55.85%	3,095.60	5,977.43	93.09%
<i>Man-made Yarn/Fabs./made-ups etc.</i>	302.77	459.34	51.71%	1,085.41	2,230.11	105.46%
<i>Jute Mfg. including Floor Covering</i>	33.17	41.56	25.29%	101.36	188.11	85.59%
<i>Carpet</i>	134.54	143.86	6.93%	439.42	713.89	62.46%
<i>Handicrafts excl. handmade carpet</i>	146.20	182.26	24.66%	455.42	838.40	84.09%
Sub-Total Textiles	1,450.63	2,126.69	46.60%	5,177.21	9,947.94	92.15%
Apparel	1,083.53	1,236.87	14.15%	3,594.33	6,030.80	67.79%
Textile and Clothing	2,534.16	3,363.56	32.73%	8,771.54	15,978.74	82.17%
All Commodity	22,829.29	33,276.90	45.76%	98,064.65	1,64,096.42	67.33%
% of T&C in Total Exports	11.10%	10.11%		8.94%	9.74%	

Source: Press Information Bureau

Monthly Import Updates of Textile and Clothing (Value in USD Mn.)

Import category	Aug-20	Aug-21	% Change	Cumulative (Apr'20-Aug'20)	Cumulative (Apr'21-Aug'21)	% Change
<i>Cotton Raw & Waste</i>	21.07	39.82	88.99%	151.88	252.86	66.49%
<i>Textile yarn fabric, made-ups</i>	91.41	144.58	58.17%	406.62	728.18	79.08%

Source: Press Information Bureau

QUICK ESTIMATES OF IIP FOR TEXTILE AND CLOTHING SECTOR (T&C): JULY 2021



T&C in Index of Industrial Production (IIP): Growth Rates (% , Y-o-Y)

Sector	Weights	Index			Cumulative Index		
		July-20	July-21	% Change	Apr'20-July'20	Apr'21-July'21	% Change
Manufacture of textiles	3.2913	93.9	117.5	25.1	52.1	112.3	115.5
Manufacture of wearing apparel	1.3225	112.5	115.1	2.3	72.7	107.1	47.3
*Textiles & Clothing	#	#	#	#	#	#	#

Source: *CITI Analysis & Ministry of Statistics Planning & Implementation;
It would be inappropriate to compute and compare T&C sector IIP data owing to Covid scenario

- For the month of July 2021, the Quick Estimates of Index of Industrial Production (IIP) with base 2011-12 stands at **131.4**.
- Cumulative change for April - July 2021 for textiles was up by (+) **115.5** percent and Wearing Apparel was up by (+) **47.3** percent over the same period previous year.

TEXTILE SECTOR SKILL COUNCIL



Indian Textile Industry provides revenue which is 27% of the total foreign exchange, mainly through textile exports. It contributes nearly 14% of the total industrial production of the country. Indian textile industry is also the largest in the country in terms of employment generation and currently generates employment to more than 35 million people.

To remain competitive in the open market, it is essential that the industry gets skill labor. Govt has taken strong initiatives to support skilling of workforce.

STRATEGIC HIGHLIGHTS

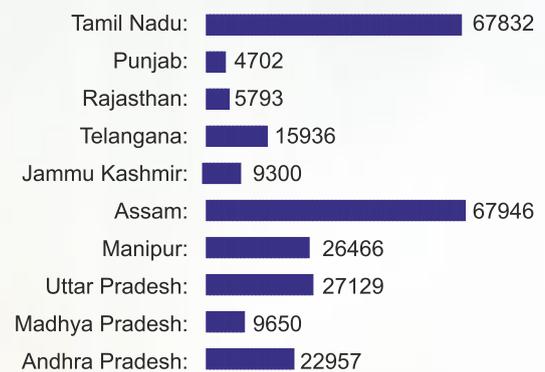
Affiliated 279 training partners. Out of these 195 are from organized mill sectors and 84 are from unorganized sector. To enhance spread of training over number of job roles, qualification packs were developed for 90 job roles.

58 Workshops were organized across India and including North-East.

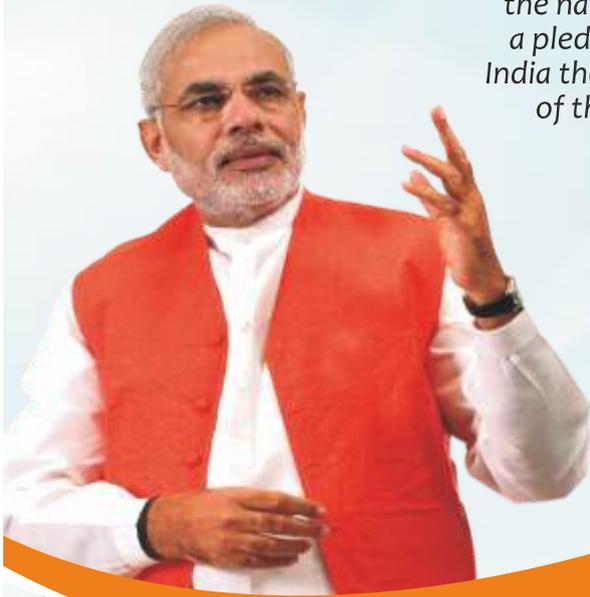
TSC has a strong presence on social media and is now able to connect with remote areas of the country.



Region wise Enrolment :



“ I call upon the nation to take a pledge to make India the Skill Capital of the World.”



TSC's ACHIEVEMENTS

Schemes: PMKVY, APSSDC, NBCFDC, NSFDC, NSKFDC & NCSR



Textile Sector Skill Council (TSC) is a not-for-profit Section 8(1) company established in August 2014 by 17 industry associations and 3 export promotion councils.

Continuously guided and monitored by more than 80 stakeholders representing all sub-sectors of the industry - organized textile mills and MSMEs.

TSC has ...

- ✓ developed a full-fledged skill ecosystem to meet the skill needs of more than 80% of workforce employed both in organized mill sector, as well as, small and medium units of decentralized sectors which include handlooms, power looms and dyeing & printing units.
- ✓ established 430+ training centers all across the country which are operated by 1,350+ certified trainers.
- ✓ developed 90 QPs. Out of these 67 QPs were offered to train more than 56,000 fresh candidates and 2,20,000 RPL candidates across 19 states including NE and J&K.
- ✓ enabled 80% of certified candidates to be employed by industry with salary ranging between Rs. 8,000 and 14,000 (CTC).
- ✓ facilitated 250 RPL certified handloom weavers in availing Pradhan Mantri Mudra Loan to become entrepreneurs.
- ✓ connected 160 certified handloom weavers to buyers from foreign countries.



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TEXTILE SECTOR SKILL COUNCIL

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