

### **Future of Cotton Production in India:**

# Assessing the Effectiveness of Quality-Based Cotton Testing Infrastructure

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#### Introduction

India is one of the largest cotton producers in the world, contributing significantly to global cotton supply. However, the competitiveness of Indian cotton in both domestic and international markets largely depends on its quality. The effectiveness of quality-based cotton testing infrastructure plays a crucial role in ensuring

superior fibre characteristics, consistency, and value addition across the supply chain.

## **Current State of Cotton Testing Infrastructure**

India has a mix of traditional and modern cotton testing facilities. The infrastructure includes High Volume Instrument (HVI) testing

labs, ginning and pressing mills with advanced testing setups, and government-established testing centres under the Bureau of Indian Standards (BIS). However, challenges persist in terms of accessibility, affordability, and uniformity of test results.

## **Key Components of Cotton Testing Infrastructure:**

- 1. High Volume Instrument (HVI) Testing Measures fibre length, strength, micronaire, uniformity, and colour.
- 2. Regional Testing Labs Set up under government initiatives, PPP mode etc., to support small-scale farmers and ginners.
- 3. Private Testing Facilities Run by Textile Associations, export houses, textile mills, and independent testing organizations.

#### **Challenges in Cotton Quality Testing**

- 1. Inconsistent Testing Standards Lack of uniformity in testing procedures leads to discrepancies in quality assessment.
- 2. Limited Accessibility Many small and medium farmers do not have access to highend testing infrastructure.
- 3. Cost of Testing The cost of testing, however small, making it difficult for smaller stakeholders to benefit from them.
- 4. Delayed Results The infrastructure gets overwhelmed during season period.
- 5. Need for Standardized Data Collection A centralized database for cotton quality parameters is lacking, affecting traceability and transparency. The Kasturi Bharat initiative is giant step in this direction. The Kasturi Bharat program needs to be expanded and promoted.

### **Strengthening Cotton Testing Infrastructure for the Future**

To ensure India remains a competitive player in the global cotton market, strengthening its quality testing infrastructure is imperative. Some potential strategies include:

1. Upgrading Testing Facilities - Expanding access to HVI labs, promoting digitized testing, and integrating AI-driven analysis.

- 2. Farmer Awareness Programs Educating farmers on quality parameters and the benefits of testing to improve their market returns.
- 3. Blockchain and Digital Traceability Implementing blockchain for real-time quality tracking and transparency in cotton trade.
- 4. Collaboration with Research Institutes/Testing Laboratories Strengthening partnerships with CIRCOT, Cotton Association of India, etc. and other research bodies for continuous improvements in testing technologies.
- 5. Mandating Quality-Based Procurement Encouraging cotton procurement based on objective quality parameters rather than traditional bulk pricing methods.
- 6. Kasturi Cotton Bharat: The Kasturi Cotton Bharat initiative is a government-led branding effort aimed at establishing Indian cotton as a premium product in global and domestic markets. Launched by the Ministry of Textiles in collaboration with the Cotton Corporation of India (CCI), this initiative seeks to standardize, certify, and promote Indian cotton under a unified national identity.

#### Conclusion

The future of India's cotton industry hinges on the effectiveness of its quality-based cotton testing infrastructure. The six strategic areas outlined—ranging from upgrading testing facilities to promoting the Kasturi Cotton Bharat initiative—collectively form a robust framework for ensuring consistency, transparency, and global competitiveness.

By enhancing farmer awareness, embracing digital traceability through blockchain, strengthening collaborations with research institutes, and mandating objective quality-based procurement, India can shift from volume-based to value-driven cotton trade. The Kasturi Cotton Bharat initiative, in particular, serves as a national quality symbol, capable of elevating India's cotton brand globally. Together, these measures will not only improve the income and confidence of cotton farmers but also reinforce India's reputation as a reliable supplier of premium-quality cotton in the global market.

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

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## CIRCOT Training Group of Cotton Corporation of India

The training program conducted by the CIRCOT for the Trainees of the Cotton Corporation of India (CCI) at the Cotton Association of India (CAI) proved to be a highly informative and collaborative initiative. "Roles of CAI in Assisting the Cotton Sector" by Shri P.D. Mepani, Director, CAI, he provided a detailed overview of CAI's multifaceted role in strengthening India's cotton sector. Key highlights included CAI's efforts in market intelligence, quality improvement, daily cotton price dissemination, and structured dispute resolution mechanisms.

The participants gained insights into how CAI functions through various statutory and nonstatutory committees to safeguard stakeholder interests, promote transparency in trade, and ensure data-driven decision-making across the cotton value chain.

Particular emphasis was placed on CAI's role in promoting Indian cotton globally, which aim to establish Indian cotton as a premium, sustainable brand in international markets. Additionally, participants appreciated CAI's contributions to price benchmarking, arbitration services, and grassroots-level farmer engagement programs. The interactive session fostered knowledge sharing and strengthened the collective vision of aligning trade practices with global standards. This training was not only a platform for technical learning but also a meaningful step towards greater coordination between research, trade bodies, and government institutions in the pursuit of excellence in the cotton industry.

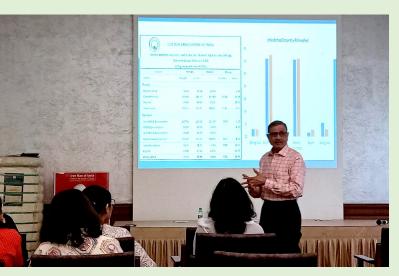








4 • 29<sup>th</sup> July, 2025

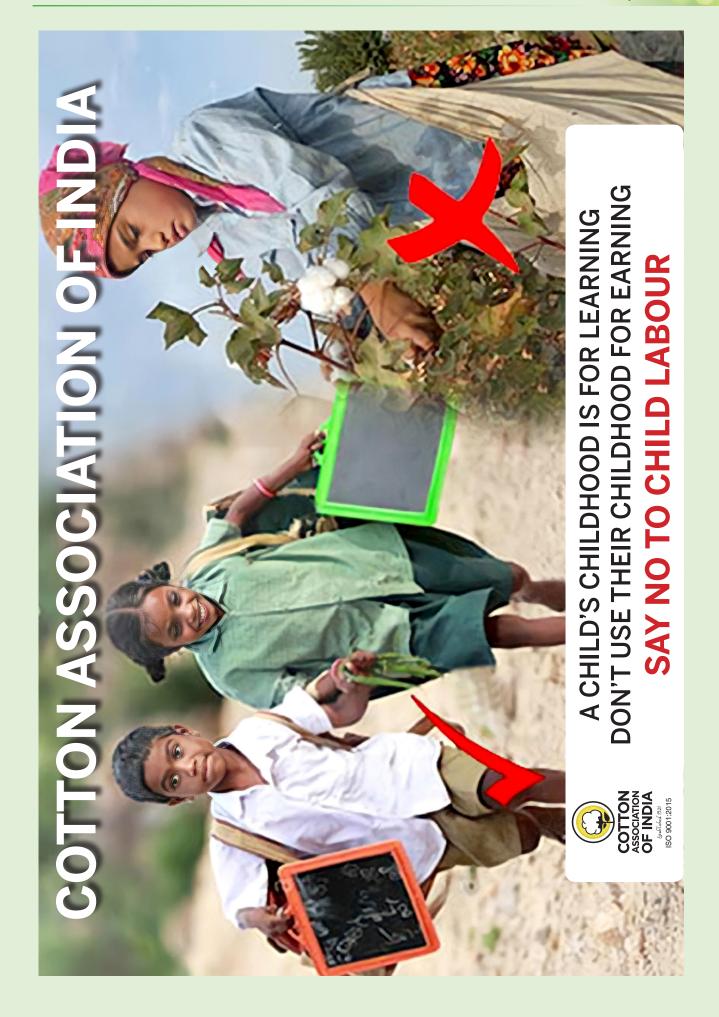








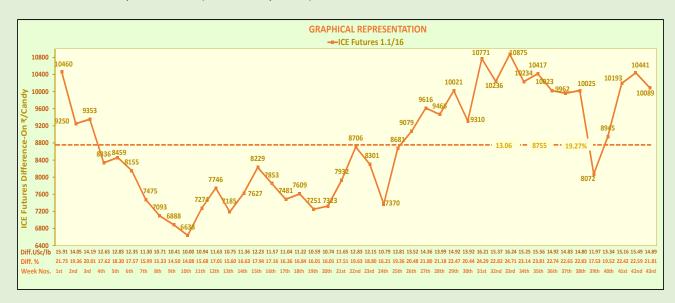




## Basis Comparison of ICS 105 with ICE Futures – 28th July 2025

#### **SEASON 2024-2025** Comparison M/M(P) ICS-105, Grade Fine, Staple 29mm, Mic. 3.7-4.9, Trash 3.5%, Str./GPT 28 with ICE Futures **CAI Price for July Compared with ICE December Settlement Futures ICE Settlement Difference-ON/OFF ICE Futures** Conversion CAI Futures 1.1/16" CAI (USc/Ib.) **Date** Rate Front Mth. Dec.'25 (₹/Candy) (US\$ = ₹) USc/Ib. ₹ /Candy % (USc/lb.) Ε В C Α D G н F Cotton Year Week No-43<sup>rd</sup> 21<sup>st</sup> Jul 56700 83.80 68.10 86.30 15.70 10622 23.05 22<sup>nd</sup> Jul 56600 86.37 83.59 68.25 15.34 10387 22.48 23<sup>rd</sup> Jul 68.24 10068 56300 86.42 83.10 14.86 21.78 24<sup>th</sup> Jul 56100 86.41 82.81 68.71 14.10 9552 20.52 25<sup>th</sup> Jul 56100 86.52 82.70 68.23 14.47 9815 21.21 Weekly Avg. 56360 86.40 83.20 68.31 14.89 10089 21.81 67.95 Total Avg. From 1st Oct 2024 54313 85.55 81.00 13.06 8755 19.27

Note:- Weeks taken as per Cotton Year (October To September).

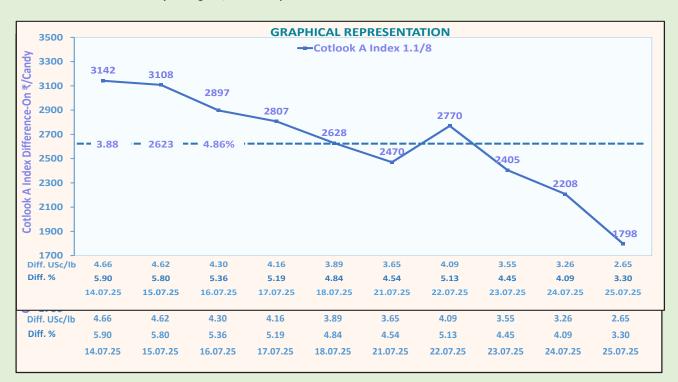


### Basis Comparison of ICS 105 with Cotlook A Index – 28th July 2025

		SI	EASON 2024-20	025				
Comparison	M/M(P) ICS-1	=	ne, Staple 29m th Cotlook A Ir	m, Mic. 3.7-4.9, idex	Trash 3.5%	s, Str./GPT	28	
	CAI	Conversion Rate (US\$ = ₹)	*CAI (USc/lb.)	Cotlook A Index M-1.1/8" (Forward Mth.) C & F FE Ports	Difference-ON/OFF Cotlook A Index			
Date	(₹ /Candy)				USc/Ib.	₹/Candy	%	
А	В	С	D	E	F	G	Н	
		Cot	ton Year Week N	o-43 <sup>rd</sup>				
21 <sup>st</sup> July 2025	56700	86.30	84.00	80.35	3.65	2470	4.54	
22 <sup>nd</sup> July 2025	56600	86.37	83.79	79.70	4.09	2770	5.13	
23 <sup>rd</sup> July 2025	56300	86.42	83.30	79.75	3.55	2405	4.45	
24 <sup>th</sup> July 2025	56100	86.41	83.01	79.75	3.26	2208	4.09	
25 <sup>th</sup> July 2025	56100	86.52	82.90	80.25	2.65	1798	3.30	
Weekly Avg.	56360	86.40	83.40	79.96	3.44	2330	4.30	
		Cott	ton Year Week N	o-42 <sup>nd</sup>				
14 <sup>th</sup> July 2025	56300	85.99	83.71	79.05	4.66	3142	5.90	
15 <sup>th</sup> July 2025	56600	85.82	84.32	79.70	4.62	3108	5.80	
16 <sup>th</sup> July 2025	56800	85.94	84.50	80.20	4.30	2897	5.36	
17 <sup>th</sup> July 2025	56800	86.08	84.36	80.20	4.16	2807	5.19	
18 <sup>th</sup> July 2025	56800	86.16	84.29	80.40	3.89	2628	4.84	
Weekly Avg.	56660	86.00	84.24	79.91	4.33	2916	5.42	
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Total Avg. Daily Basis	56510	86.20	83.82	79.94	3.88	2623	4.86	

Note:- Weeks taken as per Cotton Year (October To September).

<sup>\*</sup>Converted to C & F FE Ports by adding 20c/lb. to CAI spot rates.



-					UPCOU	NTRY SP	JI KAI	F2				(R	s./Q
Standard Descriptions with Basic Grade & Staple in Millimeters based on Upper Half Mean Length As per CAI By-laws							Spot Rate (Upcountry) 2024-25 Crop July 2025						
. No	o. Growth	Grade Standard	Grade	Staple	Micronaire	Gravimetric Trash	Strength /GPT	21st	22nd	23th	24th	25th	26t
1	P/H/R	ICS-101	Fine	Below 22mm	5.0 - 7.0	4%	15	13891 (49400)	13891 (49400)	13891 (49400)	13835 (49200)	13835 (49200)	
2	GUJ	ICS-102	Fine	22mm	4.0 - 6.0	13%	20	11079 (39400)	11079 (39400)	11051 (39300)	11051 (39300)	11051 (39300)	Н
3	M/M (P)	ICS-104	Fine	23mm	4.5 - 7.0	4%	22	13469 (47900)	13469 (47900)	13441 (47800)	13441 (47800)	13441 (47800)	
4	P/H/R (U)	ICS-202 (SG)	Fine	27mm	3.5 - 4.9	4.5%	26	15325 (54500)	15325 (54500)	15325 (54500)	15325 (54500)	15325 (54500)	
5	P/H/R(U)	ICS-105	Fine	27mm	3.5 - 4.9	4%	26	15494 (55100)	15494 (55100)	15494 (55100)	15494 (55100)	15494 (55100)	0
6	M/M(P)/ SA/TL/G	ICS-105	Fine	27mm	3.0 - 3.4	4%	25	13357 (47500)	13329 (47400)	13273 (47200)	13244 (47100)	13244 (47100)	
7	M/M(P)/ SA/TL	ICS-105	Fine	27mm	3.5 - 4.9	3.5%	26	15382 (54700)	15382 (54700)	15325 (54500)	15297 (54400)	15297 (54400)	
3	P/H/R(U)	ICS-105	Fine	28mm	3.5 - 4.9	4%	27	15972 (56800)	15972 (56800)	15944 (56700)	15944 (56700)	15944 (56700)	
9	M/M(P)	ICS-105	Fine	28mm	3.7 - 4.9	3.5%	27	15635 (55600)	15607 (55500)	15607 (55500)	15607 (55500)	15635 (55600)	L
.0	SA/TL/K	ICS-105	Fine	28mm	3.7 - 4.9	3.5%	27	15410	15382	15382	15382	15410	
1	GUJ	ICS-105	Fine	28mm	3.7 - 4.9	3%	27	(54800) 15916 (56600)	(54700) 15888 (56500)	(54700) 15888 (56500)	(54700) 15888 (56500)	(54800) 15916 (56600)	
12	R(L)	ICS-105	Fine	28mm	3.7 - 4.9	3.5%	27	15775 (56100)	(56500) 15775 (56100)	(56500) 15775 (56100)	(56500) 15775 (56100)	(56600) 15775 (56100)	I
13	R(L)	ICS-105	Fine	29mm	3.7 - 4.9	3.5%	28	15916	(56100) 15916 (56600)	(56100) 15916 (56600)	(56100) 15916 (56600)	(56100) 15916 (56600)	1
14	M/M(P)	ICS-105	Fine	29mm	3.7 - 4.9	3.5%	28	(56600) 15944 (56700)	(56600) 15916	(56600) 15832 (56200)	(56600) 15775 (56100)	(56600) 15775 (56100)	
15	SA/TL/K	ICS-105	Fine	29mm	3.7 - 4.9	3%	28	(56700) 15747 (56000)	(56600) 15719	(56300) 15635 (55600)	(56100) 15578 (55400)	(56100) 15578 (55400)	
.6	GUJ	ICS-105	Fine	29mm	3.7 - 4.9	3%	28	16197	(55900) 16169 (57500)	16113	16056	(55400) 16056 (57100)	D
7	M/M(P)	ICS-105	Fine	30mm	3.7 - 4.9	3%	29	(57600) 16225 (57700)	(57500) 16197	(57300) 16141 (57400)	(57100) 16113 (57200)	(57100) 16113 (57200)	
.8	SA/TL/K/O	ICS-105	Fine	30mm	3.7 - 4.9	3%	29	(57700) 15972 (56800)	(57600) 15944 (56700)	15888	(57300) 15860 (56400)	(57300) 15860 (56400)	
9	M/M(P)	ICS-105	Fine	31mm	3.7 - 4.9	3%	30	(56800) 16366 (58200)	(56700) 16338 (58100)	(56500) 16310 (58000)	(56400) 16281 (57900)	(56400) 16281 (57900)	A
20	SA/TL/K/ TN/O	ICS-105	Fine	31mm	3.7 - 4.9	3%	30	16310 (58000)	16281 (57900)	16253 (57800)	16225 (57700)	16225 (57700)	Λ
21		ICS-106	Fine	32mm	3.5 - 4.9	3%	31	N.A. (N.A.)	N.A. (N.A.)	N.A. (N.A.)	N.A. (N.A.)	N.A. (N.A.)	
22	M/M(P)	ICS-107	Fine	34mm	2.8 - 3.7	4%	33	21259 (75600)	21259 (75600)	21259 (75600)	21259 (75600)	21259 (75600)	
23	K/TN	ICS-107	Fine	34mm	2.8 - 3.7	3.5%	34	22355 (79500)	22355 (79500)	22355 (79500)	22355 (79500)	22355 (79500)	Y
24	M/M(P)	ICS-107	Fine	35mm	2.8 - 3.7	4%	35	21793 (77500)	21793 (77500)	21793 (77500)	21793 (77500)	21793 (77500)	
25	K/TN	ICS-107	Fine	35mm	2.8 - 3.7	3.5%	35	23199	23199	23199	23199	23199	

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