

- Cotton is one of the world's most widely cultivated crops, grown in over 75 countries across five continents by more than 26 million farmers. It plays a crucial role in providing employment to approximately 100 million families worldwide.

- Today, global consumers are increasingly conscious of the origins and processes behind the products they purchase. As a result, companies are not only required to meet regulatory standards but must also align with evolving consumer expectations. This makes Traceability and Transparency critical focus areas throughout the cotton value chain.

- However, a significant gap exists between the different cotton producing economies in terms of their cotton value chain and production practices that deeply impact their capacity to achieving comprehensive traceability and transparency. This disparity is primarily due to differences in the size of farms, the farm holder profiles, access to technology needed for traceability, access to finance and Human Resource needed for this and the national policies enablers.

- For example, the average land holding size in Australia and USA is about 385 ha, while the same in India is just 1.26 ha. Moreover, a majority of the farmers are leaseholders or marginal farmers with small holdings.

While the movement of cotton from farm to ginning unit is seamless in these countries, in India it changes three to four hands between the cotton in the farm and that in the ginning machine.

- Many cotton farmers, particularly those working on leased land, often lack a sense of ownership, which makes them less inclined to adopt traceability practices.

- In India, for example, a large number of farmers lease land and are supported by migrant laborers in cotton production. Additionally, intermediaries and brokers play a significant role in moving cotton from the farm to ginning units, further complicating traceability efforts.

- Such vast differences in landholdings , value chain, procurement system and cotton movement makes it challenging to implement uniform traceability standards across nations and potentially result in differential access to markets requiring traceability.

- India is the 2nd largest cotton-producing nation accounting to about 22% of the global cotton production and has the world's largest cotton acreage which accounts for about 40% of global acreage.

- As one of the largest cotton producers globally, India needs to and intends to play a pivotal role in the shift towards Traceability and Transparency. This is demonstrated in the Of late increased collaboration between Governments, Industry bodies, Global brands, Non-profits, and Local communities for scaling efforts towards the same across the cotton value chain in India
- Today in this 82nd ICAC's Plenary Meeting, cotton stakeholders, Government representatives, industry leaders, researchers, and policymakers from around the world have gathered to discuss the future of the cotton sector.
- I would like to use this platform for a Call for Collaboration to ensure equal access to technologies and capacities that enable cotton economies like that of India, with small farm holders at one end of the dictum and MSMEs at the other end to meet the emerging requirements on traceability and ensure it does not limit their access to global cotton value chains.
- I would like to highlight some of the initiatives being taken by India toward improving Traceability and Transparency as also social sustainability:

1. Kasturi Cotton

- The Government of India has launched the Kasturi Cotton initiative, focusing on improving the quality of Indian cotton, promoting sustainability, and ensuring full traceability. The initiative aims to create a global brand for Indian cotton.
- Key features of the Kasturi Cotton program include:
 - Blockchain Implementation: The Kasturi Cotton program utilizes an indigenous blockchain platform based on the Bulk Segregation model.
 - Transparency from Start to Finished Products: The program tracks cotton from the ginning stage to the manufacturing stage and right through to the consumer product stage, providing complete end-to-end transparency.
 - Consumer Empowerment: By scanning QR codes with their mobiles, consumers can access comprehensive transparency in tracing.
 - The Kasturi Cotton blockchain platform has been built from ground up after an in-depth mapping of the cotton value chain and the various unique nuances of the Indian cotton textiles industry. It is currently operational from the ginning stage – farm data is available with the Kasturi Cotton ginners and can be made available on request. The program is working towards

full traceability from farm to ginner, demonstrating how technology can address the challenges of transparency in the cotton supply chain.

2. Focus on Fundamental Principles and Rights at Work (FPRW)

- Women account to a significant share in the total cotton farmers. Moreover, in many countries not only the land holding size is small but also a large number of migrant labors are also engaged as farmers with leased land in cotton cultivation. Hence this sector is exposed to a number of vulnerabilities. To address the same CITI has entered into an agreement with ILO to create more awareness about Fundamental Principles and Rights at Work (FPRW) among the Indian cotton growing community, with a focus on small and marginal farmers and workers.

- The FPRW initiative focuses on promoting five crucial aspects within the cotton value chain:
- The effective recognition of freedom of association and the right to collective bargaining (FOA & CB)
- The elimination of child labor
- The abolition of forced labor
- The elimination of all forms of discrimination
- The promotion of a safe and healthy working environment among cotton growing community in India.
- This collaboration is aimed at facilitating knowledge sharing and providing technical support to implement policies and programs related to FPRW, enhance access and utilization of social protection schemes/programs, and empower vulnerable families engaged in cotton cultivation.
- Efforts towards the same will also be documented at the institutional level to demonstrate the commitment of Indian Institutes in the cotton value chain toward creating awareness of child and forced labor. Various good practices in this regard will also be uploaded on the website www.ecotton.dac.in, which CITI is developing for the Pilot Project on Cotton being implemented by the Government of India.

3. CITI-CDRA Projects

- Since its inception in 1970, CITI's Cotton Research Arm, Cotton Development and Research Association (CITI - CDRA) is actively working towards enhancing cotton yield and quality through improved agronomics practices.
- Through its Field Level Demonstrations (FLDs) and focussed training sessions, CITI – CDRA is training farmers on advanced production technologies and nutrient management thus contributing to the economic advancement of cotton farmers.

- At present CITI-CDRA is operational in 2 projects
- Collaborative Project on Cotton in partnership with Indian Textile Industry
- Pilot Project on Cotton in partnership with Ministry of Agriculture and Ministry of Textiles
- CITI-CDRA has been able to make a significant impact in yield improvement in its project areas compared to non-project areas. For e.g.

State

Collaborative Project

Pilot Project

Rajasthan

12% 24%

Maharashtra

8% 22.5%

Madhya Pradesh

5% 8%

The best agronomics practices emerging out of the projects are being also uploaded regularly on the web portal “ecotton.dac.gov.in” that CITI has developed for the Pilot Project on Cotton.

4. Focus on Regenerative Agri Practises

- Similarly, a lot has also been going on in the field of Regenerative Agri practices. CITI–CDRA is at the forefront of such initiatives and has started working towards regenerative and sustainable farming solutions, with an aim to enhance agronomic practices, soil and environmental health, farmers' income, and social welfare, and addressing the industry’s need for sourcing better quality regenerative cotton.

5. Bharat Tex

- During 2024, India organized one of the world’s largest Textile Events “Bharat Tex” which was focused on innovation and sustainability, aligning with global trends toward environmentally friendly production practices, circular economy models, and ethical sourcing. The event highlighted India's capabilities in sustainable manufacturing and the adoption of advanced technologies, including Industry 4.0, digitization, and AI-driven solutions in textiles.
- The exhibition showcased the industry's commitment to reducing its carbon footprint, conserving resources, and empowering communities while positioning Indian textiles as leaders in responsible fashion and production. The exhibition covers the entire value chain i.e. from raw

materials like cotton, wool, silk, and synthetic fibers to finished garments, fashion accessories, and home textiles.

- Building on the success of the first edition, the Government is now coming up with an even bigger edition as Bharat Tex 2025 during 14-17 February. It will feature exhibitions, knowledge sessions, thematic discussions, G2G meetings, B2B networks, MoUs, product launches, and interactive pavilions and will be attended by top policymakers, global CEOs, international exhibitors, and buyers. It will have dedicated pavilions for sustainability, circularity, and digitization.

- Through this platform, I invite you all to come and witness India's solid foundation of tradition, innovation, and sustainability.

- I thank ICAC for giving me the honor to share my views during this 82nd ICAC Plenary Meeting.

- I wish them success in their future endeavors.