





**CONFEDERATION OF INDIAN TEXTILE INDUSTRY** 





"STRATEGIES FOR BALANCING SUSTAINABILITY & PROFITABILITY IN TEXTILE VALUE CHAIN"







# NATURAL ORIGIN FABRICS FROM LIVAL



LOOK FOR THE LIVA TAG IN AUTELIA | VV | & BIBA | lifestyle | Allen Solly | MAX | pantaloons | Rangriti | MARIGOLD | VAN HEUSEN | OTRENDS





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riends, I welcome everyone to the 3rd edition of Global Textile Conclave (GTC) at Jaipur, Rajasthan as part of its trade promotion initiatives. This mega event, spread over three days – 15th,16th and 17th March 2023 will witness convergence of textile and apparel industry stalwarts to deliberate on the future of the global textile value chain. The three day Conclave aims to capture all the topical issues of the entire value chain and provide a vibrant platform for the industry to network and ideate on challenges and opportunities that the sector has before it today.



Keeping pace with the growing consciousness and consumer demand for sustainability, circularity, traceability and recyclability of textile products and the resultant need for better knowledge and understanding of the avenues, opportunities, costs and challenges

of implementing them, the 3rd GTC revolves around the theme "Strategies for Balancing Sustainability & Profitability in the Textile Value Chain". CITI being an apex industry chamber of the Indian textile and clothing industry, is and will continue to work towards promoting sustainability in the various segments of the textile value chain.

The event will witness two firsts – one is the maiden edition of the sustainability-linked CITI Textile Sustainability Award series to acknowledge and promote the green steps that textile value chain have taken to tread towards a greener future with both planet and people at the centre of all the activities. The second is the maiden edition of the International Textile and Apparel Fair (ITAF). The Awards mirror the GTC's theme of recognising initiatives towards sustainable production as a way of enhancing competitiveness responsibly while ITAF is aimed to showcase India's strength in the various segments.

The Union Budget this year was a continuation of the cautious but consistent steps being taken towards laying a strong foundation for India @100! It is expected that our economic growth, this year, would be around 7 per cent which is being considered the highest among all the major economies of the world. It is also heartening to note that our economy today stands at the 5th position among its peers.

CITI welcomes various initiatives of the Government like Green Growth for reducing carbon footprints, Digital Public Infrastructure for Agriculture, Agriculture Accelerator Fund, Enhancing Productivity of Cotton Crop, Cooperative-based Economic Development Model, Vivad se Vishwas I & II (relief for MSMEs and settling contractual disputes), Pradhan Mantri Kaushal Vikas Yojana 4.0, setting up of the developing storage and warehousing capacity for farmers, etc. I thank the Government for higher budgetary allocations for schemes promoting capacity building and investments like National Technical textiles Mission (NTTM), PM-MITRA, and Textile Development cluster scheme.

I am happy to share that the long rounds of stakeholders consultation for a robust cotton contract culminated into a revised MCX cotton contract which became effective from Feb 13, 2023. The industry arrived at consensus on most of the parameters that needed to be changed to make the contract more conclusive. However, the issue of a) Daily Price Limits (DPL) and commodity categorization; and b) Penal Provision for Default of Delivery & Settlement need further review. I have requested the Hon'ble Minister of Textiles to recommend to SEBI to devise unique contract specifications for cotton and permit cotton to be traded as a sensitive commodity.

The other important developments in the cotton value chain has been the strides being taken towards Traceability and branding of Indian cotton and initiatives to strengthen the organic cotton certifications.

Friends, I look forward to the subject experts, policymakers, observers and participants to use 3rd GTC as a platform for exchanging ideas, holding deliberations on crucial aspects, fostering sustainability, innovations, technology adaptation, regional cooperation, etc. GTC is going to be an annual feature of CITI events that will take place in different parts of the country to integrate the regional issues with the national agendas for the growth of the textile sector.

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e welcome all the delegates to CITI's Annual Mega Textile Conclave - third edition of the Global Textile Conclave (GTC), Jaipur, India, from 15th to 17th March 2023. As the theme of the event "Strategies for Balancing Sustainability & Profitability in Textile Value Chain" suggests, all the discussions and activities being held parallelly with the GTC aim to highlight, understand and optimise the business case for ensuring sustainability in the production processes. At present, fragmented, ad hoc norms and top-down approach of buyers on Sustainability in product, process, certifications etc is making the compliance challenging and diluting the much needed long term vision of wholistic supply chain sustainability as that requires a value chain approach, demonstrated business case for industries and bottom up integration in business processes.



This event aims to provide a platform for global textile and clothing industry players to share their insights and gain a better understanding of the present and future demand of the sector, with a focus on innovative technologies and best practices for sustainable growth in the textile and clothing industry.

The event will have multiple sessions covering key aspects of the global textile value chain, such as trends on the fibber value chain – exports & domestics, investment opportunities in India for the global T&C value chain, sustainable textiles: responsible consumption and production, technology & innovation, and technical textiles. There will also be sessions on regional cooperation through textile trading and a skilled workforce for strong, sustainable, and balanced growth. Knowledge partners for the various sessions include Technopak Consultants, Wazir Advisors, KPMG, GherziTextil, Rajesh Bheda Consulting Pvt. Ltd, etc.

On the side-lines of the event, CITI Birla Awards and Textile Sustainability Awards will be handed out, which aim to encourage companies to have a vision and target-driven roadmap towards achieving excellence in various performance areas.

The first-time introduced CITI Textile Sustainability Award is an opportunity for the companies to showcase their commitment to sustainability and circularity in the textile industry.

The awards are being given in the following categories:

- 1. **Award for Expanding Circularity:** The award recognizes companies that have a recycle, reuse, reduce, and gradually a cradle-to-grave approach. The circularity processes should have a bearing on one or more of the SDGs. The companies should demonstrate the steps taken to go circular.
- 2. Award for Progress Towards Sustainability: The award recognizes companies that have a policy statement that spells out their sustainability roadmap. The companies should ensure responsible production, and scope III emissions should be quantified. The companies' premises should be geared to be sustainable.
- 3. **Award for Recyclers:** The award recognizes companies that have demonstrated excellence in recycling textile waste.

**CITI Birla Awards 2022-23** will be given under two categories: Contribution towards Zero Carbon Mission by the Textile Mills and Achieving Excellence in Water Conservation by the Textile Mills.

The award aims to celebrate and recognize brands, manufacturers, MSMEs, and retailers that promote circularity in their operations. It was also a great opportunity to understand the amount of good work happening, not just by the large business houses, but the smaller units and start-ups. While going through the Sustainability award entries, I realised how well we are embracing circularity and making conscious choices on material management, sustainable inputs, chemicals and technologies. It is also heartening to note the various initiatives being taken by Mistry of textiles, NITI Ayog, Invest India and other agencies to provide platform to this emerging ecosystem of conscious producers who can lead India to be a leader in Responsible Business.

CITI has taken its first step towards contributing to this process, and plans to work from fiber to retail to ensure the entire value chain synergises its efforts towards material optimisation and miniating impact on environment.





# 3rd EDITION OF THE GLOBAL TEXTILE CONCLAVE (GTC) PRE-EVENT REPORT

The Confederation of Indian Textile Industry (CITI) is organizing the 3rd edition of the Global Textile Conclave (GTC) in Jaipur, India on 15th, 16th, and 17th March 2023. The event is part of CITI's ongoing trade promotion initiatives and will have the theme "Strategies for Balancing Sustainability & Profitability in Textile Value Chain."

The three-day event will feature interactions with global textile and clothing businessmen, presentations by international trade experts, buyer-seller meetings, exhibitions, Award functions, and the launch of special publications and reports, and will cover the entire textile value chain from "FARM to FASHION".

The Global Textile Conclave aims to offer participants an opportunity to interact with a select group of 400500 peers from the global textile and clothing industry. Attendees will have the chance to brainstorm, share insights, and gain a better understanding of the present and future of the sector. The event will focus on innovative technologies and best practices for sustainable growth in the textile and clothing industry.

The Global Textile Conclave will feature several sessions covering key aspects of the Indian Textile Value chain: trends on the fiber value chain – exports & domestics, investment opportunities in India for the global T&C value chain, sustainable textiles: responsible consumption and production, technology & innovation, and technical textiles. Additionally, there will be sessions on regional cooperation through textile trading and a skilled workforce for strong, sustainable, and balanced growth.

The event will include separate sessions with "Partner States", "Partner Countries," and senior government officials. The previous editions of the Global Textile Conclave organized by CITI during 2018 and 2021 were highly appreciated for their quality deliberations and attendance of delegates from around the world.

On the sidelines of the event, The CITI Textile Sustainability & BIRLA Awards aimed at encouraging companies to have a vision and target-driven roadmap towards achieving excellence in various performance areas. With a renewed focus on sustainability, all 6 categories of awards look at the critical areas where initiation needs to be encouraged.

CITI Textile Sustainability Award is being organized for the first time. The award aims to celebrate and recognize brands, manufacturers, MSMEs, and retailers that promote circularity in their operations. The award is being organized with Texfash.com as a knowledge partner.

Brands, Manufacturers, MSMEs, and Retailers are eligible to apply for the award. The companies should demonstrate a commitment to sustainability and circularity in their operations. The eligibility criteria for each category are as follows:

### 1. Award for Expanding Circularity:

The award recognizes companies that have a recycle, reuse, reduce, and gradually a cradle-to-grave approach. The circularity processes should have a bearing on one or more of the SDGs. The companies should demonstrate the sateps taken to go circular.

### 2. Award for Progress Towards Sustainability

The award recognizes companies that have a policy statement that spells out their sustainability roadmap. The companies should ensure responsible production, and scope III emissions should be quantified. The companies' premises should be geared to be sustainable.

### 3. Award for Cutting Edge Retail Practices

The award recognizes companies that are developing circular business models like rental, reuse, and repair. The companies should provide traceability to consumers, and their premises/facilities should have a well-defined policy to segregate waste. The companies' employees should be paid according to industry norms.

### 4. Award for Recyclers:

The award recognizes companies that have demonstrated excellence in recycling textile waste.

The CITI Textile Sustainability Award is an opportunity for companies to showcase their commitment to sustainability and circularity in the textile industry. The award recognizes companies that have taken significant steps towards reducing textile waste, ensuring responsible production, and developing circular business models. By participating in the awards, companies can contribute to promoting sustainability and circularity in the textile industry.

The CITI Birla Economic & Textile Research Foundation Awards 2022-23 aims to recognize excellence in the textile industry. The awards are organized by the Confederation of Indian Textile Industry (CITI) and have been recognizing excellence across the textile value chain since 1993-94.

CITI Global Textile Conclave 2023 promises to be an exciting event that will provide a platform for global textile and clothing industry players to come together to discuss innovative ideas and best practices for sustainable growth.

### Brief introduction of each session

**1. TRENDS ON FIBRE VALUE CHAIN – EXPORTS & DOMESTICS – Technopak Advisors:** This session will cover the latest trends in the fibre value chain for both exports and domestic markets. Technopak Advisors, a leading management consulting firm is the knowledge partner for this session, who will share their insights and analysis on the current state of the fibre value chain, including market size, growth potential, and challenges.

2. INVESTMENT OPPORTUNITIES IN INDIA FOR GLOBAL T&C VALUE CHAIN: This session will focus on investment opportunities in India for the global textiles and clothing value chain. KPMG, a global professional services firm, will be the knowledge partner for the session that would provide insights on India's potential as a manufacturing hub, the current investment landscape, and the policy environment.

**3. Sustainable Textiles:** Responsible Consumption and Production - This session will discuss the



importance of sustainable textiles and responsible consumption and production. Rajesh Bheda Consulting Pvt. Ltd, a sustainability consulting firm, will share their expertise on sustainability practices in the textile industry, including circular economy, waste reduction, and ethical sourcing.

**4. TECHNOLOGY & INNOVATION:** This session will cover the latest technological advancements and innovations in the textile industry. Experts from leading textile companies will discuss how new technologies are transforming the textile value chain, including manufacturing processes, materials, and product design.

**5. Regional Cooperation Through Textile Trading:** This session will discuss the importance of regional cooperation in the textile industry through textile trading. Experts from the textile industry and trade organizations will share their insights on how regional cooperation can help promote trade and investment in the textile sector, and enhance competitiveness in global markets.

### 6. Investment Opportunities in India for Global T&C Value Chain

The session on Investment Opportunities in India for Global T&C (Textile and Clothing) Value Chain is aimed at highlighting the investment potential and opportunities that India offers in the textile and clothing industry. The session will be conducted by KPMG, a leading professional services firm, and will provide insights into the regulatory framework, market trends, and investment incentives that make India an attractive destination for global investors in the textile and clothing sector. The session will also cover the challenges faced by investors and strategies for overcoming them. The focus will be on attracting investments in the entire value chain, including spinning, weaving, processing, and garment manufacturing.

Below are Session briefs for each session prepared by respective Knowledge Partners

### SESSION

# TRENDS ON FIBRE VALUE CHAIN EXPORTS & DOMESTICS

 $\begin{array}{c} {\it Knowledge\ Partner}\\ {\sf T\ e\ c\ h\ n\ o\ p\ a\ k} \end{array}$ 



The Global Textile & Apparel trade was reported at USD 849 Bn in 2021 and USD 898 Bn in 2022. The expected growth over the next decade is 5.46%. Over the next 10 years, the Apparel trade is expected to grow at a CAGR of 6%, and the Textile trade is expected to grow at a CAGR of 4.7%.

Indian T&A domestic market was estimated to be USD 86 Bn, and exports were USD 44 Bn in 2022. Domestic market is expected to be USD 216 Bn by 2031 at a CAGR of 12% and exports are expected to be USD 92 Bn by 2031 at CAGR of 8%.

The global synthetic fibers market size accounted for USD 70.02 billion in 2022 and is expected to hit around USD 114.53 billion by 2030, growing at a notable CAGR of 7.96% from 2022 to 2030 whereas the global natural fibers market size grew from \$66.62 billion in 2022 to

\$70.13 billion in 2023 at a compound annual growth rate (CAGR) of 5.3%.

The India Synthetic Fibre Market stood at USD12.4 billion in 2022 and is expected to grow at a steady CAGR of 6.87%.



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### **Growth of Synthetic Fibres**

A significant trend seen is the preference of synthetic over natural materials. With it's pricing and easy availability along with properties like water and stain resistant, synthetic fibres has a rising demand across the globe.

The persistently changing fashion trends, rising ecommerce, and growing demand for activewear and home furnishing products across the globe are expected to be the crucial growth drivers of the synthetic fibres market. Rising technological advancements in production methods have led to the development of advanced mechanical, chemical, and physical properties of synthetic fibre that are not only used in textiles but also extensively used in electronics, food packaging, water purification, air filters, aerospace, and healthcare sectors.

Quick industrialization, rapid urbanization, rising disposable income of consumers, and changing consumer behaviour for fashion is positively impacting the growth of the synthetic fibres market globally.

Increased use of Polyester Fibers across various applications is also major growth factor

Polyester Fibers have advantages, such as their strength, low cost, elasticity, and recyclability, making them a popular choice in heavy-duty industrial applications, like the reinforcement of conveyor belts and automobile tires. These fibers are also used in making car carpets, upholstery, side, roof, floor, and door panels, airbags, fuel filters, safety belts, tires, engine air filters, and insulation materials

### **Concerns:**

Environmental concerns like the non-integrability of synthetic fibres may mess with the growth of the market in the coming future. The increasing focus on achieving sustainability, especially in developed





economies is uplifting the demand for natural and organic alternatives to synthetic fibres. Therefore, the increasing concerns regarding environmental health may decrease the demand for synthetic fibers in the coming years.

### **Natural Fibres**

Natural fibers like cotton and wool are affordable and readily available as compared to Synthetic Fibers. They possess better properties such as being biodegradable and hypoallergenic which makes them a viable option for many applications where Synthetic Fibers are used, thereby limiting the growth of the latter.

Fibre trade on a global level is seeing a growth rate of 5% from 2021-2031. It is recorded to be USD 46 Bn in 2011 and is projected to grow to USD 64 Bn by the year 2031. China and European Union are major Fiber importing nations, followed by India and USA.

Fibre trade on a global level is seeing a growth rate of 5% from 2021-2031. It is recorded to be USD 46 Bn in 2011 and is projected to grow to USD 64 Bn by the year 2031.

China and European Union are major Fiber importing nations, followed by India and USA







# SESSION

# INVESTMENT OPPORTUNITIES IN INDIA FOR GLOBAL T&C VALUE CHAIN



### Synopsis for Textile Sector in India

### **ROBUST DEMAND**

- Cotton production in India is projected to reach 7.2 million tonnes by 2030, driven by increasing demand from consumers.
- India's textile and apparel exports stood at US\$ 44.4 billion in FY22, a 41% increase YoY. Exports of readymade garments including cotton accessories stood at US\$ 6.19 billion in FY22.

### **POLICY SUPPORT**

- 100% FDI (automatic route) is allowed in textiles.
- Production-linked Incentive (PLI) Scheme worth INR 10,683 crore (US\$ 1.44 billion) launched
- The Indian government has notified uniform goods and services tax rate at 12% on man-made fabrics (MMF), MMF yarns and apparel

# India- A manufacturing hub for Textile and Apparel (T&A) sector

India has emerged as the second most sought after manufacturing destination across the world indicating the growing interest shown by manufacturers in India as a preferred manufacturing hub over other countries.

The rising focus on India can be attributed to India's operating conditions and cost competitiveness.

The T&A industry in India contribute 2.3% to the country's GDP, 13% to industrial production and 12% to exports. Around 45 million families are working in the textile business, making this industry a huge employment generation source for India.

The Indian textile and apparel market reached a value of US\$ 151.2 billion in 2021. Looking forward, the market is projected to reach US\$ 344.1 billion by 2027, exhibiting a CAGR of 14.8% during 2022-2027.

### **COMPETITIVE ADVANTAGE**

- India enjoys a comparative advantage in terms of skilled manpower and in cost of production, relative to major textile producers.
- In June 2022, Minister of Textiles, Mr. Piyush Goyal, stated that the Indian government wants to establish 75 textile hubs in the country.

### **INCREASING INVESTMENTS**

- Huge funds in schemes such as Scheme for Integrated Textile Parks (SITP) (US\$ 184.98 million) and Technology Upgradation Fund Scheme (US\$ 961.11 million) released by the Indian Government to encourage more private equity and provide employment

As per the Government authorities, India's growth as a manufacturing hub for T&A will depend on the attractiveness of its domestic market and investments in high-end textile machinery, product in emerging areas like technical textiles and man-made fibre (MMF).

# 1. How India's T&A market is increasing and its growth drivers: Exports and Domestic

India's textiles sector is extremely varied, with handspun and hand-woven textiles sectors at one end of the spectrum, with the capital-intensive sophisticated mills sector at the other end. The Government has also introduced various schemes for training workforce and to encourage private investment in the Indian T&A industry.

Indian T&A market is estimated at \$153 billion, ~70% of which is domestic consumption while exports

constitute the rest 30%. The overall domestic market of India stood at \$110 billion in 2021.

In terms of global ranking, India is ranked 2nd in textile export with 7% share and 6th in apparel export with 3% share. Overall, India holds 4th position with 5% share of global exports.

In FY 2022-23 (until September 2022) exports of readymade garments stood at US\$ 8127.3 million showing a growth of 10.8% over FY 2021-22.

India is expected to achieve higher rank in global T & A business as India is self-sufficient in entire supply chain for textile manufacturing and cost of manufacturing is at a competitive rate

# 2. Foreign Direct Investment ('FDI') inflow in T&A sector in India

The Indian textile sector has huge potential area for foreign investment due to a surge in demand for industrial and technical textiles in the nation. Indian textile industry generates high level of employment opportunities for both skilled and unskilled labour.

FDI in the textiles and clothing industry has reached \$3.75 billion as of March 2021. India's textile and apparel exports are predicted to reach \$65 billion by 2025-26, expanding at an 11 percent CAGR. The highest contributors to FDI in the Textile sector of India (including dyed, printed) from April 2016 to March 2021 are Japan, Mauritius, Italy, and Belgium.

In addition to this, the country has become an attractive destination for FDI in the Indian textile industry because of some of the following foreign direct investment policy:

- 100% FDI is allowed in the textile sector under the automatic route.
- 100% FDI in single-brand retail
- Up to 51% FDI in Multi brand retail

The increasing rate of FDI in Indian textile industries is resulting into numerous advantages to the country and its nationals like Capital formation, advanced technology, employment generation etc.

### 3. Various Schemes offered by Central Government and State Government to boost T & Amanufacturing and exports

Government is implementing various policy initiatives and schemes for supporting the development of textile sector. The Central Government launched various schemes in the textile sector, some of which are mentioned below

- Scheme for Capacity Building in Textile Sector (SAMARTH)
- Amended Technology Up-gradation Fund Scheme (ATUFS)
- National Technical Textile Mission
- Production Linked Incentive (PLI) Scheme
- PM-Mega Integrated Textile Region and Apparel
- Scheme for Integrated Textile Parks (SITP)
- Integrated Processing Development Scheme (IPDS)
- Special Package for Textile and Apparel sector

The State Government is also joining hands with the Central Government and introducing sector specific policies for textile industries. The major states which have introduced the textile policies are as following:

- Tamil Nadu
- Jammu & Kashmir
- Jharkhand
- Bihar
- Karnataka
- Gujarat
- Odisha
- Uttar Pradesh
- •

These states offer attractive incentives for the Companies who are willing to invest in the said states.

### **Road Ahead**

The future of the Indian textiles industry looks promising, buoyed by strong domestic consumption as well as export demand. India is working on various major initiatives to boost its technical textile industry. The Indian Government is supporting the sector through funding and machinery sponsoring.

Top players in the sector are achieving sustainability in their products by manufacturing textiles that use natural recyclable materials. The growth in textiles will be driven by growing household income, increasing population, and increasing demand by other sectors like housing, hospitality, healthcare, etc.

### SESSION

# SUSTAINABLE TEXTILES: RESPONSIBLE CONSUMPTION AND PRODUCTION

Knowledge Partner



The concept of sustainable consumption and production (SCP) aims to use resources and create goods and services in a way that minimizes negative environmental impacts while ensuring social and economic benefits. SCP involves a shift towards a circular economy, where materials are kept in use for as long as possible, waste is minimized, and resources are used efficiently. The fashion industry, which is responsible for large amounts of water consumption, pollution, greenhouse gas emissions, and waste, is an area where SCP practices are increasingly being adopted.

Today the Gen Z and Millennial consumers are willing to pay more for sustainable products, but there may be a perception gap between brands and consumers regarding the importance of sustainability. A 2019 survey by Nielsen found that 73% of consumers worldwide are willing to pay more for sustainable products, compared to 50% in year 2015. However, a 2020 study by IBM found that while 73% of consumers believe it is important for brands to be sustainable, only 45% of executives believe sustainability is important to their customers. This suggests that brands may not be fully aware of the extent to which consumers value sustainability.

To achieve SCP in the fashion industry, companies need to focus on the following areas.

• Sustainable materials such as organic cotton, recycled polyester, and eco-friendly dyes need to be used to reduce the impact of products on the environment.

- Products need to be designed for sustainability by being durable, repairable, and recyclable to extend their lifespan and reduce waste.
- Manufacturing processes need to be made more sustainable by using renewable energy, minimizing waste, and reducing water and energy consumption. The working conditions must be safe.
- Supply chains need to follow sustainable practices, including responsible sourcing of materials, ethical labor practices, and reducing their carbon footprint.
- Sustainable consumption can be promoted by educating consumers about the environmental and social impact of products and encouraging them to buy less, buy second-hand, repair and recycle products.

In recent years, there has been an increase in sustainable fashion initiatives, such as sustainable fashion weeks, circular fashion initiatives, and sustainable clothing collections. However, challenges remain, such as the need to scale up sustainable practices and make them more accessible to a wider audience. Additionally, the fashion industry needs to address labor, gender, and poverty issues that are closely linked to the industry. An estimated 1 in 6 people in the world works in a fashion-related job, and up to 80 percent of the labor force throughout the supply chain are women.

Governments, non-governmental organizations, and the private sector all play important roles in promoting SCP in the fashion industry. Globally, governments are implementing policy measures such as regulations and incentives to encourage sustainable practices. Whereas non-governmental organizations are raising awareness and advocating for sustainable fashion practices. The private sector is also collaborating with stakeholders, including consumers, suppliers, and investors, to develop transparent and traceable supply chains and promote sustainable consumption. Buying practices of leading brands are also under scrutiny and adoption of better buying practices should help in improving SCP objectives.

Today, sustainability reporting frameworks like BRSR, GRI are becoming increasingly important due to a combination of factors, including consumer demand, investor interest, government regulations, company benefits, and stakeholder engagement. As companies continue to prioritize sustainability, reporting on their efforts will become an essential part of their business practices.

Brands like Patagonian have shown how iconic brands can lead by example on the path of sustainability. Retailers like H&M, Tommy Hilfiger and Myntra as well as manufacturers like Aditya Birla and Reliance are working on sustainability-based roadmaps and strategies working on neutralizing social and environmental risks in their supply chain. In India a large number of companies taken several innovative steps to make progress towards SCP and this likely to grow.

While there are several good practice organizations that have made significant progress on SCP, the industry world over still lags in terms concrete and scalable action towards environmental and social standards. This panel discussion session at the Global Textile Conclave aims to demystify the concept SCP, explain what actions are needed, how attract investments for SCP and share the progress made by the leading companies and multistakeholder agencies to make improvement. Thought leaders would share their first-hand experience and interact with audience to discuss strategies for improvement.



### SESSION

# **TECHNOLOGY & INNOVATION**





# Technology and Innovation: The Key Business imperatives

To be successful, the contemporary textile industry requires the espousal of an integrated, systems approach to harmonize several dynamics encompassing resources, design, production, distribution and consumption to be sustainable. Technology and innovation are the two key business imperatives that will enable the transition to the emerging business models.

Mary Hallward-Driemeir and Gaurav Nayyar, authors of "The Future of Manufacturing-led Development" (World Bank Group) argue that more than through the new advanced goods, however, the biggest impact on low- and middle-income countries (LMICs) will likely be through new manufacturing process technologies that affect the production of traditional manufactured goods. These new process technologies, by changing the relative efficiency of countries in producing traditional goods, can have implications for comparative advantage and therefore patterns of globalisation.

"The session on Technology and Innovation: The new business imperatives" will elucidate the dynamics through brainstorming by a distinguished panel of thoughtleaders.

### Digitalization and new technologies

Several disruptive technologies are transforming the textile production chain. Automation in spinning and weaving is already absorbed in the primary textile industry. Additive manufacturing and digital printing and finishing have also joined the mainstream.

Sewing, considered the final frontier in automation, is also witnessing the incursion of robotic manufacturing. Ultrasonic seaming aka no-sew technology with bonded seams and stretch recovery, is being used in typical applications such as protective garments. Rapid advances in additive manufacturing aka 3D printing are also changing the technology landscape. Artificial Intelligence (Ai) and Big Data analytics are being extensively used across the textile value chain ranging from fabric inspection to cutting and analysing consumer behaviour patterns. Digital Twin technology exposed for textile applications by the Swiss startup Side Effects is now increasingly used by machinery manufacturers for demonstrating new models and induction, training and skilling of new employees to fostering digital skills among workforce

### **Digital innovation**

Companies are offering innovative solutions to overcome chronic challenges faced by producers and buyers. New generation of pigment dyes and less waster consuming dyes are a boom. PLM tools like WFX Cloud that are digitally integrated from product development, merchandising, sourcing, inventory, production, and finance functions for needs of designers, brands, and textile manufacturers to ultimately save cost. This can be deployed for induction, training and skilling of new employees and fostering digital skills among workforce. Swiss based Haelixa has established a platform for natural textile fibers (such as cotton, wool, cashmere, silk, etc.) provides users with a reliable tool to trace and identify their products from source to retail, assuring the sustainability and integrity of their products. With India emerging as the No.1 producer of organic cotton (50% market share) in the world, coupled with growing trends towards circularity, the need for traceability technologies holds great potential.

### India's potential

Indian industry has a significant potential to adopt new technologies. The textile industry has been evaluating newer avenues of automation especially in terms of material handling and streamlining internal logistics. Spinning mills have advanced to a considerable extent however in downstream processes viz weaving, finishing and confection remains a significant scope to introduce smart tools. Textile industry is yet to exploit the automation potential of industrial robots unlike other industries (e.g., automotive). Technological upgradation of our production facilities and processes will be a prerequisite to the establishment of an environmentally sustainable textile value chain of the future that can further integrate into the global value chain. There is a need to incentivise new investments in sustainable technologies and processes such as fiber recycling both mechanical and chemical and wet processing technologies that save water and energy. Sectoral development schemes will need to be aligned to encourage investment in sustainable technologies.

### New business models

It is apparent that the textile industry is on the cusp of a step change. The winners and losers will be differentiated by their resilience to adapt to the twin dynamics of sustainability – technology and innovation. It's probable that innovation will be needed in both the social and technological spheres. The industry will have to invest in the human capital to impart digital literacy to the workforce. This will require an alignment with the emerging dynamics about sustainability and circularity, technology upgradation and addressing the constraints faced by India's textile clusters to unlock their potential.



### SESSION

# **TECHNICAL TEXTILES**

Knowledge Partner





Technical textile materials are specifically designed and engineered to provide specific functional properties, such as durability, strength, and resistance to chemicals, heat, and other environmental factors. They are widely used in a variety of industries, including automotive, aerospace, healthcare, construction, and sports.

The global technical textiles market is estimated to be worth US\$ 240 billion in 2021 and is expected to exceed US\$ 292 billion by 2025, growing at a CAGR of approx. 5% with majority of production occurring in China, USA and Europe. The global trade in technical textile categories is in the range of US\$ 100 bn. per annum.

The Indian market consumption is comparatively much smaller, but growing at a healthy growth rate. It is estimated to be US\$ 22 billion (2021-22) that has increased at a CAGR of 7% in the last 10 years. The market size is expected to reach US\$ 54 billion in 2030-31 with a CAGR of 10% over the years. This projected double-digit growth makes the sector lucrative for investors. The growth of the Indian technical textiles industry is driven by various factors, including increasing demand from end-use industries, government initiatives to promote the use of technical textiles, and a growing awareness of the benefits of using these materials. The growth is accelerated particularly by the automotive, construction, and healthcare industries. End-use products like seat covers, airbags, reinforcement and insulation textiles, wound care, surgical gowns, etc. have a huge latent demand and thus promises high future growth.

The Indian government has also launched various schemes and initiatives to encourage the use of technical textiles in the country. National Technical Textiles Mission is the apex initiative of Government to promote the production and use of technical textiles in India. This mission aims to strengthen the entire value chain of technical textiles, from R&D to manufacturing, and provide funding to support technical textiles' production. Another Government Scheme that directly benefits technical textiles is the PLI scheme, which is expected to attract large scale investment in the sector. This scheme comes with the potential for product and technological innovations as well as enhanced capacities in order to meet the growing demand for technical textiles. The Technology Upgradation Fund Scheme (TUFS) (which is currently being revised) provides financial assistance for the modernization of the textile industry, including the technical textiles.

The potential growth supported by market, consumer and regulatory aspects indicates that the present Indian technical textile sector is just the tip of the iceberg. There is a huge untapped potential in this sector that can be harnessed to drive economic growth and create employment opportunities.

Out of the wide horizon of product categories that fall under the purview of technical textiles, agriculture textiles have a huge growth potential. India is an agrarian economy, with the agriculture sector employing nearly half of the country's workforce. However, the sector faces various challenges, including water scarcity, lower yields, pest infestation, and soil erosion. Technical textiles can help address these challenges by providing innovative solutions such as water-saving irrigation systems, crop protection nets, and erosion control blankets.

The healthcare sector also seems very promising in the technical textiles domain. India has a large population with limited access to healthcare facilities, especially in rural areas. Technical textiles can play a crucial role in improving healthcare outcomes by providing innovative solutions such as wound dressings, medical textiles, and protective clothing for healthcare workers.

Technical textiles can also be used in the construction industry to improve the durability and sustainability of buildings. For example, textiles can be used to reinforce concrete structures, provide thermal insulation, and reduce energy consumption.

Furthermore, technical textiles can be used to improve safety in various industries, including automotive, aerospace, and defense. Textiles can be used to manufacture airbags, seat belts, and other safety equipment that can save lives in the event of an accident.

Foreign Direct Investment (FDI) projects or joint projects with global players can fast track technical textiles industry's growth in India. Collaborations and FDIs bring in advanced technologies, market access, capital infusion, and know-how that can enhance the capabilities and competitiveness of Indian technical textile manufacturers. This can help develop innovative and high-value-added products in the country that meet the quality and performance needs of domestic and global customers.

In conclusion, the growth prospects of technical textiles in the Indian context are immense. The industry has the potential to drive economic growth, create employment opportunities, and address various challenges in sectors such as agriculture, healthcare, construction, and safety. However, realizing this potential requires a concerted effort from various stakeholders, including the government, industry players, and academia. With the right policies, investments, and collaborations, India can emerge as a global leader in the technical textiles industry.



### SESSION

# INCREASING ECONOMIC AND SOCIAL OPPORTUNITIES FOR WOMEN IN TEXTILE & APPAREL INDUSTRY

Knowledge Partner





The economic and social development of women relies on having physical access to services and employment opportunities. For the vast majority of the 40.6 crores women living in rural areas, this largely depends on their access to decent work opportunities and other services such as education, healthcare, financial etc. enabling them for their better participation and leadership in the economy and society. The gap is even greater for indigenous women, women with disabilities and older women. Yes, a progress has been made on women's skilling through widespread initiatives of the government-aided and privately-aided entities, but enrollment statistics are not everything. We need to look at actual participation – as well as the quality of outcomes.

There are approximately 4 to 6 crores garment workers in the world and crores more in other parts of the supply chain, in cotton fields and stores. The majority of those workers are women, thus representing the backbone of an industry worth almost \$3 trillion per year. Despite women representing the majority of textile workers, genderbased wage discrimination happens on a wide scale. According to a 2019 report from the International Labor Organization (ILO), who has investigated the garment sector in nine countries in Asia, the average raw gender pay gap is approximately 18%. Another 2019 study on garment factories in Bangladesh showed that men get more promoted than women and thus go up the ladder quicker, resulting in a gender wage gap among workers as women are stuck in entrylevel positions. Moreover, to keep prices low and be able to compete, factories often outsource their production to homeworkers, with as much as 60% of garment production done at home in Asia and Latin America. Homeworkers have even fewer rights and bargaining power than factory workers and earn very little for their work. Here again, the vast majority of homeworkers are women.

Women themselves can be the basis of social change in the supply chain, whether they occupy positions at the top, in the middle or at the bottom. In leadership roles they provide better working conditions, a more positive working environment and they can be an example for future female entrepreneurs. In the middle or at the bottom of the supply chain they are indispensable to form unions, and as a result to effectively stand up for women's and workers' rights. Entrepreneurship is a mechanism for independence and female entrepreneurship is being seen as a great tool for economic empowerment which also leads to bigger social changes. Investing in these women means investing in a more sustainable future, also in the fashion industry. Investments in local craftsmanship for example for fashion purposes can have a big impact on local communities, more especially for the women in those communities.

### India - Knitting the future

India is among the world's largest producers of Textiles and Apparel.

The domestic apparel & textile industry in India contributes approx. 2% to the country's GDP, 7% of industry output in value terms. The share of textile, apparel and handicrafts in India's total exports was 11.4% in 2020-21. India holds 4% share of the global trade in textiles and apparel.

### **Employment Opportunities in Textile Sector**

Currently, India holds a 4% share of the global trade, accounting for 5% of Gross Domestic Product (GDP), and 13% of its export earnings. Textile is the core business of the country, and given its contribution to the economy, it is also the second most employment generating sector after agriculture. Textile Sector in India provides largest source of employment in the country with over 4.5 crore people employed directly and another 6 crores people in allied sector including large number of women and rural population. The textile industry is a source of income for more than 27 million women in India, out of which about 50% are associated with unorganised sectors like handlooms, handicrafts, and sericulture.

Government has taken number of measures/ incentives to boost textile sector and generate employment in the country as a whole. The government has announced 7 Mega Investment Textiles Parks (MITRAs) and Production Linked Incentive (PLI) Scheme in the budget 2021-22, to enable the textile industry to become globally competitive, attract large investments, boost employment generation and exports and contribute to achieve the goal of 5 trillion-dollar economy. Various schemes and public programmes supporting textile industry are: -

- Amended Technology Upgradation Fund Scheme is being implemented to upgrade technology/machineries of textile industry with an outlay of Rs.17,822 crore during 2016-2022 which will attract investment of Rs.1 lakh crore and generate employment in the textile sector by 2022.
- Under the Scheme of Integrated Textile Park (SITP), Government provides 40% subsidy with a ceiling of Rs.40 crore to set up Textile Parks for infrastructure creation and employment generation. 59 sanctioned textiles parks are under various stages of implementation, once fully operational it is expected to house about 5909 textile units and will generate employment for about 3,61,093 persons.
- Under the Scheme for development of Knitting and Knitwear to boost production in knitting and knitwear clusters which provide employment to nearly 24 lakh persons.
- Apart from the aforesaid programmes, Government has been implementing various schemes for promoting investment, production, employment generation in Powerloom Sector, Silk Samagra, North Eastern Region Textile Promotion Scheme (NERTPS), National Handicraft Development Programme (NHDP) and National Handloom Development Programme (NHDP) to provide direct job in rural India.

Under the broad objective of "Skill India" & "Make in India" initiatives, Government is taking many initiatives in addition to the above-mentioned schemes such as:

• SAMARTH- Scheme for Capacity Building in Textile Sector and placement-oriented programme targeting skill development of 10 lakh youth in the entire value chain of textiles, excluding Spinning & Weaving in the organized Sector.

• Under Technical Textiles interventions, it is poised to create high value jobs in the country for textiles sector workers. Employment in the sector is expected to increase to 23 lakhs by 2024 from the present 16 lakhs.

Besides these, Government is also providing training under Handloom and Handicraft sector for upgradation of skills through training to the workers and artisans in weaving, designing, dye and printing through to produce good quality products.

Due to the rise in demand for Man-Made Fiber (MMF), and Technical Textiles globally, the government's PLI scheme for textiles is also promoting the production of high-value MMF fabric, garments and technical textiles in the country. The sector is witnessing fresh investments in these segments to cater to the global need, which is expected to increase in the future and eventually create more job opportunities.

Fortunately, the private sector also has an opportunity to make a real difference – in employee policies, in hiring practices and through the value chain (Design, product development, production, marketing, sales and customer support). And it makes enormous economic sense too, with an overwhelming number of studies showing time and time again that gender equality is good for talent development, culture, innovation, leadership and performance. Following are some interventions adopted by the big brands globally: -

- Progressive policies and practices in the workplaces and supply chain operations;
- Collaborate with businesses and civil society organisations to create opportunities for women supply chain, sales and customer development operations;
- By engaging in partnerships, thought leadership and advocacy to unleash the power of collective action for sustainable, transformational change for society at large;
- Promoting rights and safety, building skills and capabilities.
- 'Unstereotyping' the advertising and portraying diverse images of women and girls, while collaborating with trusted partners to cultivate more positive and supportive social norms.

Here are five ways to promote women's economic and social empowerment in apparel and textile industry to build a more sustainable future for all women and girls, their families, and the world: -

- Access to financial services like savings account and insurance
- Access to social protections like pensions, unemployment benefits, maternity protection, and equal pay.
- Equal access to education, training, new skills, new technologies, management positions, benefits, and entrepreneurship.
- Investment in Grassroots women's organizations and collectives.

There is no single solution to tackling gender inequality. It requires a holistic approach, from equal pay and representation in the workforce to supporting female smallholder farmers in the supply chain. Underpinning these efforts, it's crucial that this process is continued to forge and deepen partnerships that will drive broader systemic change and benefit all women.

Session VI - "Increasing Economic and Social **Opportunities for Women in Textile & Apparel** Industry" of the 3rd Global Textile Conclave is scheduled to be held at Hotel Marriot in Jaipur, Rajasthan from March 15 to March 17, 2023. The three-day global textile industry event will be inaugurated by Shri Piyush Goyal, Hon'ble Union Minister of Textiles, Commerce & Industry, Consumer Affairs and Food & Public Distribution and Smt. Darshana Vikram Jardosh, Hon'ble Minister of State for Textiles & Railways. COOs, CEOs and industry leaders are expected to participate in this event. These are the people who are the change agents in their organization and have achieved breakthrough improvements to enhance the operational business performance by adopting Best Practices.

During this Conclave the speakers will be sharing their practical experiences including the resistance/hurdles faced in their journey towards excellence and will also dwell upon how they successfully overcame the same. This will be unique platform to the participants to understand what needs to be done and how to go about enabling the growth and success of women by offering substantial knowledge on various opportunities and national best practices.



# SKILLED WORKFORCE FOR STRONG, SUSTAINABLE AND BALANCED GROWTH OF T&C SECTOR

Knowledge Partner





Sustainability is the crucial factor of our time. Sustainability is the most discussed topic in academic research area and industrial process in recent years. The textile industry in particular is an important part of the global economy and have a significant impact on the environment. For this reason, pioneers and role models work together to solve environmental and social problems, focusing on sustainable technologies. Over the past decade, textile companies have focused on sustainable production practices in their business policies, disclosing their impacts and contributions to sustainable development.

The globalization of textile markets is accelerating, new occupations are emerging and replacing others in the textile and clothing sector in the sustainable production practice. Within each occupation, required skills and competencies are evolving, as the knowledge content of production processes and services is rising as per the global demand. A major challenge is simultaneously to enhance the responsiveness of education and training systems to these changes in skill requirements and to improve access to training and skills development.

### **Overview of training and skills**

Basic education gives each individual a basis for the development of their performance, laying the foundation for employability. Initial training provides the core work skills, generic knowledge, industry based and professional competencies which will facilitate the transition from education into the work world. The textile skill training is supporting the fresh entrants and re-entrant's for the job, facilitate job search, etc. Special measures are in practice to cover the PwD candidates, members of minority groups, students, retired people and those in a need of second chance, etc.

The various stages of the skill development from a lifecycle perspective can be described as follows:

Children: nurturing important foundation skills through early childhood and initial education, keeping in mind that the benefits of these investments will be reaped in the longer term.

Young people: combined technical skills and gaining important workplace skills for a successful transition from school to work.

Experienced workers: maintaining and upgrading existing skills and gaining new skills while also certifying the skills and competencies acquired in the working life.

### **Benefits of skill training:**

An European study show that a 1 per cent increase in training days leads to a 3 per cent increase in productivity, and overall productivity growth rate is around 16%. The tangible outcomes from the skills trainings listed as follows,

- develop job opportunities
- raises productivity for both candidate and enterprise
- contributes to innovation and technological growth
- attracts investment, job growth
- leads to higher wages
- reduce social inequalities.

### Anticipating future skill needs

It is essential to be able to anticipate skills needs and to align training provision with changing needs in the textile and clothing labour market. This includes the analysis required in the levels of skills needed as well as in occupational and technical areas.

### Participation of social partners

A strong relationship between government, employment providers and workers is an much required factor for an effective and enduring bond between the learning and production/ service sector. In the Textile sector Employers are important providers of training. Young people entering the textile industries for employment acquire both technical skills and insight into the world of work through formal training/ apprenticeship.

### Training quality and relevance

A great deal of effort is being made in the textile skilling ecosystem to deliver the quantity and the quality training with the participation of certified master trainers, domain trainers, assessors; the provision of opportunities for them is being made to them to upgrade their own skills periodically.

### Skill Ecosystem in India

Robust training policies and systems are grounded in India. The current skill policies caters to: anticipate skill needs; engage employers to maintain the quality and relevance of training; make training accessible to all sectors of society and continuously analyse the impact of the skill training.

# Textile Sector Skill Council's role in skilling ecosystem

Textile Sector Skill Council (TSC) is an approved Awarding Body for Textile Sector by National Council for Vocational Education and Training (NCVET) under the aegis of Ministry of Skill Development & Entrepreneurship (MSDE), GOI. TSC is registered as a section 8 company mandated to develop a robust ecosystem and facilitate skilling in the Textile sector. TSC has developed 71 NSQF aligned Qualifications for skilling in the textile sector at machine operators, fitter levels and implementing the same for skilling, assessment & Certification of over 3 lac candidates. In addition, there are 4000+ trainer and 2000+ assessor certifications to conduct training and assessments aligned to the Qualifications developed by TSC. TSC's Qualifications are also an integral part of programs offering class tenth certification through National Institute of Open Schooling (NIOS) and UGC. B.Voc. programs as well as Short Term Training programs by AICTE accredited institutions across the country.



# ECO-ENHANCED SUSTAINABLE & CIRCULAR MMCF FOR TEXTILE & FASHION INDUSTRY

**Mr. Surya P Valluri** Chief Sustainability Officer, Grasim Industries Ltd., India GRASIM

Clothing has become a fashion statement reflecting the wearer's personality and the image a person wants to convey. However, as the fashion industry has expanded so have concerns about the impact that clothing has on environment like from how the fibres – the basic raw material for textiles & clothing – are sourced to what happens to the clothing when the useful life of clothing item is over.

All the stakeholders are now more concerned and are expecting the industry to take responsibility for better management of the complete value chain. Since the value chain starts with fibre suppliers, a lot of onus comes to them for supplying sustainable raw materials. This is where eco-friendly & sustainable fibres have gained attention from the value chain along with an increased market share.

As the Chief Sustainability Officer in the textile and fashion industry, I have witnessed the immense impact that the industry has on the environment. From water pollution to deforestation, the industry's negative environmental impact is alarming. However, with the advent of eco-enhanced sustainable and circular manmade cellulosic fibers (MMCF), we now have an opportunity to mitigate this impact and create a more sustainable future

### Introduction

Fibres are the basic raw material for the production of apparel. Typically, fibres are grouped into two broad categories. Natural fibres include wool, silk, cashmere, cotton and jute. Man-made fibres include polyester, nylons and acrylics. However, there is also a third category that exists between natural and synthetic fibres known as regenerated fibres viz. viscose, modal, lyocell etc. or collectively called as Man-made Cellulosic Fibres (MMCF).

Regenerated cellulose fibres or MMCF are not new to the world of textile fibres but they are probably the most misunderstood of all fibres. Unlike cotton, MMCF



is not grown directly, but it is a natural fibre that is based on wood. MMCF are made by chemically dissolving the wood-based cellulose and then rebuilding it in the form of fibre that can be used for making textile.

Sustainably produced manmade cellulosic fibres (MMCFs) can address many of the above issues as they are based on natural renewable raw material sourced sustainably, manufactured using closed-loop process and biodegradable at the end-of-life. It can also be used to upscale cotton waste into fresh fibers.

Though MMCFs are nearly 6-7% in the global fibre mix, the increased focus on these fibres is a result of their impeccable characteristics. MMCFs are growing at a faster pace compared to other major fibres and the overall industry growth.

The recent advancements in technology have made it possible to create eco-enhanced sustainable MMCFs that are more environmentally friendly. By using closed-loop manufacturing processes, we can minimize water usage and reduce the amount of harmful chemicals released into the environment.

These eco-enhanced sustainable MMCFs are made from renewable sources like wood pulp, agricultural waste, and recycled cotton. These alternative sources reduce the need for deforestation and minimize waste. They also have the potential to be biodegradable and compostable, further reducing waste and the industry's environmental footprint.

Circular MMCFs take sustainability to the next level. They are made from recycled MMCFs and virgin materials and are designed to be recycled and reused multiple times. This reduces the need for virgin materials and minimizes waste, creating a closed-loop system that is more sustainable and eco-friendly.

The benefits of eco-enhanced sustainable and circular MMCFs extend beyond the environmental impact. They also have the potential to improve the social impact of the textile and fashion industry. By using alternative sources for MMCFs, we can reduce the impact on local communities that depend on forests for their livelihoods. Additionally, by reducing the industry's environmental footprint, we can create safer and healthier working conditions for workers in the industry.

### Sustainability Strategy

Birla Cellulose, Grasim Industries Ltd. and part of the Aditya Birla Group, is a leading sustainability focused Man-Made Cellulosic Fibers (MMCF) producer and operates 12 sites that apply environmentally efficient closed loop technologies to recycle raw materials and conserve natural resources. Its five global advanced research centers are equipped with state-of-the-art facilities and pilot plants<sup>TM</sup>. Its sustainable products Liva Reviva, Excel lyocell and Birla Spunshades are designed with superior sustainable credentials. 100% of the wood used in Birla Cellulose process comes from sustainably managed forests and controlled sources.

Our business strategy is focussed on setting new benchmark in sustainable forestry, low environment impact products (closed-loop process), climate actions



### **5** Pillars of Sustainability Strategy

and circularity, thereby providing the fashion industry with an option of more sustainable choices for their products in textile sectors as well as nonwoven industry.

We realized that these cannot be achieved without integrating the sustainability criteria in our day-to-day operations and include these requirements in our business processes. Our sustainability strategy, aligned with Sustainable Development Goals (SDGs) 2030, have five pillars – *Responsible Sourcing*, *Responsible Manufacturing*, *Sustainable Products & Circular Economy*, *Valuable Partnerships and Social Responsibility*.

We are ranked leaders globally in Canopy's Hot Button Report based on our forest conservation practices, transparency and next generation fibres development. Grasim is adapting closed-loop production at all its fiber sites meeting the most stringent EU BAT norms. Next, we have launched a range of eco-enhance and circular products to fulfil the needs of sustainable raw materials.

### **Progressing towards Circularity**

### The initiative

On average, 15-20% of all materials in the supply chain end up as waste before a garment or product even reaches the consumer. This could be cutting waste, unuseable stock due to last-minute design changes, spoilage in transport, or excess stock that is not sold on the retail market and, at times, is landfilled / incinerated.

The challenge however, no technology is available to recycle pre-consumer cellulosic (cotton) waste into reducing their performance during the yarn and fabric production. This makes it challenging to achieve the desired versatility and quality of finished garments using mechanically recycled fibres.

Investing in textile waste recycling has been a key part of Grasim's commitment to contributing to a circular economy. Its R&D efforts towards a circular economy and alternative feedstock has led to several innovations that have shown promising results and are in various stages of development, starting from lab level, to a pilot and some have already reached the commercial level.

### Case Study-Liva Reviva

An example of sustainability as a driver of innovation is the development of Liva Reviva – viscose fibres made partly from textile waste.

**Concept -** A far-reaching consequence of fast fashion is the problem of textile waste generation. A very small fraction of this waste gets reused or recycled, and up to 80% of the total waste is either incinerated, or disposed-off in land-fills. This results in ~100 million tons of textile waste ending up in landfills and water bodies every year. Since cotton is also a cellulosic fibre, theoretically cotton based textile waste could be used as feedstock for making viscose fibres along with wood pulp, thereby achieving Circularity in the value chain. The concept of chemical recycling in MMCF is still at an early stage and there are no start-ups and technology providers to give a solution implementable at commercial scale.

**Innovation** - R&D at pulp and fibre business took this challenge and developed a process in-house to prepare pulp from textile waste as shown in schematic.



fresh fibres. Along with this there is a lack of transparency & traceability due to unstructured, long, complex textile value chain.

Closing the loop in MMCF through textile-to-textile recycling can be done in two main ways – mechanical and chemical recycling. Chemical recycling technologies are best poised to tackle the bulk of textile waste, producing fibres of identical (or in some instances superior) quality. Inherent to the mechanical recycling process is the shortening of the fibres, We could develop the technology and scale it up to commercial scale with in a span of 18 months. The fibre branded as 'Liva Reviva' is available commercially and is made using 30 % recycle content from textile waste along with 70 % wood pulp.

**Impact** - This technological innovation helped to achieve highest ranking to P&F business in Canopy Audit for three consecutive years. Understanding the far-reaching impact of recycling of textile waste, we have not limited ourselves to inhouse development



only but true to the group purpose we are also supporting several innovators in this space to test their textile recycling innovations and products. We are providing them technical inputs to improve and bring in scalable solutions so that textile industry as a whole becomes more circular and sustainable.

We have successfully stabilized production of the Recycled Claimed Standard (RCS) certified product, Liva Reviva which contains 20% & 30% of preconsumer waste and wood pulp from sustainable forests. The quality of the fibre is comparable to the quality of fibre produced using virgin wood-based pulp.

Our current efforts are focussed on developing products made with industrial, post-consumer and alternate feedstock and increase the use of alternate feedstock in the total production and reduce the cost of production of these new fibres, so that in long term they can reduce the dependence on virgin wood-based pulp.

# Case Study- GreenTrack<sup>™</sup> – blockchain based traceability platform

Birla Cellulose understands the importance of traceability & transparency, being a leading supplier of viscose fibre to global textile manufacturers. GreenTrack<sup>™</sup> a pioneering platform based on blockchain technology was developed where the end consumer and Brand owners can track from "forest to garment" by scan of QR code. Registered value chain partners provide real time material movement of product at each stage of textile value chain till it reaches end consumer. The complete end-to-end sustainability journey is visible to consumers and helps them make an informed purchase decision.

Providing top-notch technology solution for better integration of business partners is important for Birla Cellulose and its blockchain traceability platform is a powerful tool for global brands to communicate their sustainability story to end consumers.

### Impact and opportunities

While all Birla Cellulose fibres are produced from wood sourced from sustainably managed forests, the direct positive impact of this initiative is reducing the reliance on wood for making viscose, which in turn will lead to resource conservation. Textile waste, which was otherwise going to the landfill, has the immense potential to be rerouted and used as alternative feedstock for fibre manufacturing.

Liva Reviva has ecological benefits as it has lower water consumption by nearly 65% as compared to generic viscose and lower GHG emissions by about 50% based on Higg MSI tool provided by SAC.

Birla Cellulose established 'reverse logistics' for collecting appropriate waste for the development of this product which in turn created higher value for small scale textile waste recyclers. This has also led to upcycling which otherwise might be lost in waste.

Waste segregation at the source is needed along with training and capability building at all stages. this also led to new jobs creation for waste segregation and processing and a win-win solution for all partners. Circular products reduce environmental impacts in the value chain.

To increase transparency, the business uses GreenTrack<sup>TM</sup> platform to help consumers track the entire journey of the product from plantation, and the reverse journey of the value chain to help garment houses and brands.

Birla Cellulose has emerged as a winner in the first edition of the "National Innovative and Sustainable Supply Chain Awards" by UN Global Compact Network India held in April 2021.

The case study presented by the company– Liva Reviva by Birla Cellulose & Fully Traceable Circular Global Fashion Supply Chains – was awarded for innovation in recycled and circular fibre made with pre-consumer fabric waste and end-to-end 'live' supply chain transparency and traceability through its unique blockchain-based platform GreenTrack<sup>™</sup>.

### Way Forward

Our current efforts are focussed on developing products made with post-consumer waste and increased use of alternate feedstock. The plan is to aggressively scale up the production of 'Liva Reviva' and we endeavour to offer Liva Reviva to a level of 100,000 tons per year by 2024.

# **Rieter Makes** the Difference

www.rieter.com



# Accotex Brácker





SSM



# **SIELES**



# RING AND ROTOR SPINNING OF RECYCLED FIBERS: CHALLENGES AND RECOMMENDATIONS

Barely 1% of garments is recycled in a closed loop system and three quarters of the world's clothing end up in landfill. The textile industry is actively seeking ways to make production patterns more sustainable and pay more attention to the entire life cycle of clothing items. Rieter offers solutions for the integration of recycled raw material into yarn production to help close the textile loop. Both rotor and ring yarns can be produced on a Rieter system with a considerable amount of mechanically recycled fibers for weaving and knitting applications.

In recent years, the textile industry's negative impact on the environment has become more evident. This has led to new legal requirements for more sustainability with a growing need to reuse pre- and post-consumer textiles in the textile value chain. Until now, recycled clothes have been used mainly for lower value applications (e.g. cloths, textile fillings, insulation). Rieter's technology know-how enables the use of these recycled fibers in blends with virgin material to spin ring and rotor yarns for weaving and knitting applications. This means closing the loop by bringing the recycled post-consumer garments back into a comparable application for example, the fibers of a mechanically torn T-shirt are used to produce a new pair of jeans or a sweater.

### **Recycling is here to stay**

Today, legal requirements are the most important driver for recycling. Specific legislation has been introduced over the last years, such as the European Union's "European Green Deal" or the United Nation's

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"Fashion Industry Charter for Climate Action". Broken down to the textile industry, this means promoting the collection of old textiles and the recycling of textile waste. As a result, many brands like Adidas, H&M or Tommy Hilfiger, have launched collection schemes or are exploring solutions so they can use recycled material for their products. This commitment from brands in combination with the changing demands from end users make clear that recycling is not a trend but is here to stay. And of course, these requirements also influence upstream processes in the value chain such as yarn production. The focus on sustainable production and higher demand for recycling yarns can already be noticed and will increase in the coming years.

### Classifying the raw material

When using recycled fibers, spinners can choose from an almost endless variety of different raw material sources. Rieter has established a classification system to help spinning mills navigate this jungle and to find the right raw material for their demands.

Fiber KPI Index	iber KPI Index Short-fiber content		Long fiber 5%
Very good	42%	21 mm	31 mm
Good	55%	14 mm	29 mm
Medium	60%	13 mm	28 mm
Poor	78%	10 mm	22 mm
Cotton as reference	24%	21 mm	34 mm

### **Fiber Key Parameters for Recycling**

By knowing the opening degree and the fiber length distribution of the recycled fibers, spinners can determine the type and amount of virgin material, which is needed to achieve the desired yarn quality and yarn counts on rotor or ring spinning machines.

### Pre- or post-consumer material?

The resulting fiber length of mechanically recycled fibers is determined by many different factors, such as original raw material, fabric construction or dyeing, and the settings during the tearing process. Basically, it can be said that the sooner the material is obtained from the manufacturing process the longer the fibers that can be achieved. Waste from yarns, weaving/ knitting or cutting is much more homogeneous and, as a result, requires far less or no effort to sort. By contrast, recycling of post-consumer material for spinning applications is the most challenging task. It often contains different raw materials, different colors and foreign objects such as zippers or labels. Today, this means that the material must be manually sorted into groups of raw material blends and colors. Zippers and seams often must be cut away which increases efforts and costs. Therefore, recycling of postconsumer material is rarely used today. However, in terms of sustainability and the goal of reducing the amount of clothing going to landfills, this is more effective than using pre-consumer material. The prerequisite for recycling post-consumer material is, on the one hand, simple and efficient sorting. On the other hand, the tearing technology must be further improved in order to achieve a high degree of opening with the best possible preservation of fiber length.

### Defining the optimal spinning process

Various internal Rieter trials as well as close cooperation with customers have led to the following process recommendations for spinning recycled fibers on ring and rotor systems (Fig. 1). Due to the different fiber length distribution of the recycled and virgin fibers, the blending must take place in the blowroom, either as bale blend or preferably on the precision blender UNIblend A 81. Blending the fibers on the draw frame is not an option, as this leads to the formation of short-fiber packages which will affect the yarn quality negatively.



### Process Recommendations for Recycled Material

Fig. 1: To prevent package formation of the short fibers during drafting, the number of draw frame passages should be kept low. PP-ID: 96925

### **Unevenness Ring and Rotor Yarn**

Virgin CO 29.7mm, 4.1 Mic/Tear fibers CO, Ne 20



Fig. 2: The rotor spinning machine is well suited for processing material with a high short-fiber content, which is reflected in better evenness. PP-ID: 96928

For rotor spinning the direct process with the RSB-Module 50 directly attached to the card is recommended for a short-fiber content SFC(n)% of more than 50% and mainly for yarn counts coarser than Ne 20. For more flexibility, finer yarn counts and lower short-fiber content, a process with one autoleveler draw frame delivers the best results. In ring spinning one draw frame passage is recommended with a short-fiber content in the blend of more than 35% to prevent package formation of the short fibers during drafting. If the short-fiber content is below 35% a second draw frame passage can be used.

# Rotor spinning and recycling – already tried and tested

Recycled material has long been processed on rotor spinning machines. Rotor spinning is well suited for processing fibers with a high short-fiber content, which is for example reflected in better evenness (Fig. 2). The additional dissolution in rotor spinning significantly reduces the number of thin and thick places. Depending on the desired yarn quality, spinning yarn up to Ne 20 with a blend of 80% post-consumer material and 20% recycled polyester, is possible. The semi-automatic rotor spinning machine R 37 has made a name for itself in the market for processing recycled



Tenacity Ring and Rotor Yarn Virgin CO 29.7mm, 4.1 Mic/Tear fibers CO, Ne 20

Fig. 3: The ring spinning process achieves significantly higher yarn tenacities than rotor spinning. PP-ID: 96931

material. Customers working with the R 37 benefit from improved waste and trash extraction thanks to the new spinning box and less imperfections (mainly neps). Dedicated components exist for better performance when processing recycled material, such as various nozzles, rotors or opening rollers. For markets where a higher degree of automation is required, the fully automatic rotor spinning machine R 70 is the best choice.

# Ring spinning and recycling – opens new possibilities

The production of ring varn with acceptable quality from heterogenous, recycled raw materials with a high short-fiber content brings new challenges compared to the processing on rotor machines. Thus, ring varns made of recycled cotton can rarely be found on the market up to now. Rieter sets new standards and offers a complete ring spinning system that is designed to process recycled fibers in the best possible way. Due to the better integration of the fibers during ring spinning, ring yarn has a higher tenacity (Fig. 3). This opens a wider range of applications, namely the increased use of these varns in weaving and knitting mills. What must be considered, however, is that ring spinning is more sensitive to the proportion of short fibers which again limits the amount of recycled fibers. One of the reasons for this is that the short fibers tend to form packages during all the drafting stages. Once a package is formed it is impossible to open it up again. As a result, ring yarn shows a rapid increase in unevenness and imperfections (thick places and neps) with a growing proportion of recycled fibers. Therefore, good control of the short fibers in the drafting unit is important. The use of the Rieter compacting units on the ring spinning machine additionally improves running performance and yarn quality.

### Yarn with a special character - a new demand?

Today brands are still looking for a replacement of 100% virgin yarns with – as far as possible – the same quality parameters, while adding recycled fibers. Therefore, the typical amount of post-consumer fibers is around 20% when blended with virgin cotton. Rieter recommends limiting the SFC(n) in the blend to 35% for yarn counts between Ne 12 to 16 and max. 30% for yarn counts up to Ne 24. Technologically it is possible to increase the amount of recycled fibers, but often the resulting yarn quality no longer matches the quality standards. However, if spinners and designers cooperated more closely there would be new possibilities to market these yarns with a special character by finding the right applications.

### Example of a successful recycling journey

Rieter is involved in several initiatives that bring together participants of the entire textile value chain to better understand the requirements of each process stage. Successful examples show that attractive garments can be produced with a high proportion of post-consumer material. One example is the Innosuisse research project "Texcircle" in cooperation with the Lucerne University of Applied Sciences and Arts. In this project used bakers' uniforms from Swiss retailer Coop, which were collected by TEXAID, were processed into varn on Rieter ring spinning machines and knitted into socks by Jacob Rohner AG (Fig. 4). The raw material consisted of 50% post-consumer material (bakers' uniforms) and 50% Lenzing Refibra. The produced yarn did not reach the usual quality standards in terms of imperfections. Still the socks meet all requirements and are an attractive end-product. The question arises whether today's quality requirements are necessary in all cases or whether there is a market for these yarns with a special character whose production was much more sustainable.



Fig. 4: The Rohner socks were made from raw material with 50% post-consumer material. PP-ID: 96932

### New cooperation needed

Coordination and cooperation between the different industrial sectors, from the procurement of raw materials through to the new final product, will be vital. Only then will it be possible to expand and optimize the entire recycling process to help it grow into a larger market. In the next few years, the realistic market potential for the staple fiber industry for recycled raw materials amounts to around 7.9 million tons annually if the current trend continues. Legal requirements and the urgent need for more sustainability in the textile sector drive innovation and new marketing trends. Rieter is participating in this development and offers solutions for the processing of recycled raw materials in staple fiber yarn production.

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# THE SUSTAINABILITY NARRATIVE: ON THE IMPERATIVE CHANGES IN THE TEXTILE INDUSTRY FOR ITS FUTURE

sustainable textile industry would ideally be one which uses environmental resources sparingly and produces non-toxic, high on quality & innovative end products at a good value in terms of consumer benefits and costs.

With the increased and much-needed focus on sustainable practices becoming part of the textile industry, a crucial question has been on the need for such changes and whether these changes will ensure profitability. Well, for starters, the textile industry is time to time held accountable for its environmental impact and greenwashing. However, in light of increased consumer awareness and focus by governments, the industry is actively working to change its dated mechanisms.

Negative social and environmental impacts accompany the conversion of raw materials into textiles and garments; given the increasing production volumes and ever shorter lifespan of the products: clothing production has approximately doubled in the last 15 years, while the number of times a garment is worn before being discarded has decreased 36% compared to 15 years ago, as per Ellen MacArthur Foundation. The rapid growth in textiles has largely been accounted for by synthetic fibers (produced largely from oil), which, over the last few decades, have grown from below 20% of global fiber production to 62% of global fiber production in 2018.

The textile industry is unpopular for its high water consumption and use of chemicals; textile dyeing is the second largest water polluter. Apparel manufacturing uses water extensively; a whopping 10,000 liters of water can be consumed in producing a single pair of jeans. The processes involved in textile production leave wastewater as residue, which is mainly unfit for use. More often than not, it contains unwarranted elements harmful to humans and the environment.

A Quantis report found that the clothing and footwear sectors worldwide were responsible for an estimated 8% of the world's greenhouse gas emissions in 2016. This is significant evidence of the industry's impact on climate change. The fact that, if current patterns continue, the climatic effect will rise by 49% by 2030 is especially alarming.

The mitigation measures are challenging as sustainably improved processes require financial investment, thus increasing product costs. However, with increased awareness about sustainability, already



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tencel.com TENCEL<sup>™</sup> is a trademark of Lenzing AG a fraction of consumers are willing to pay more for environmentally friendly clothing. A new wave of consumer trends can be witnessed, catalysed by, but not limited to, the pandemic. Consumers are increasingly basing their purchasing decisions on whether a company's practices and mission align with their values.

The textile industry hence has to address rising consumer interest in the sustainability agenda as it is a sector responsive to consumer preferences. The system must be viewed as a whole in order to accomplish this successfully and bring about systemic change. In the case of textiles, this entails investigating the underlying business strategies and how textiles are created, where their raw materials come from, how they are made, sold, and used, and what happens to them afterward. The present design, production, sales, and consumption process for textiles, particularly apparel, is virtually totally linear. All stakeholders must take extensive, coordinated action to change the textile value chain into a sustainable, circular system. And with efficient planning and new processes, we can achieve the desired amount of sustainability without impacting profitability.

Lenzing fibers has actively worked on products and processes which meet such criteria and fit well with the future needs of the industry. The invention of LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> specialty viscose fiber has been an ideal example in this regard.

### The issue with viscose.

For those who do not know, Viscose is a fiber derived from the "cellulose" or wood pulp from fast-growing, regenerative trees such as eucalyptus, beech, and pine and plants such as bamboo, soy, and sugar cane. This cellulose material is then dissolved in a chemical solution to produce a pulpy viscous substance, which is then extracted into fibers that can be made into yarns.

Viscose garnered popularity in fashion clothing, home textile, footwear, and accessories. While such versatility makes it very popular, its physical and mechanical properties add value to the textile, like smoothness, absorbency, and breathability. 100% viscose can look similar to silk — it is translucent and glossy. Enhanced absorbency and less weight can make it even more desirable than cotton. It's the most critical artificial cellulosic, having a market share of roughly 80% of all MMCFs and a production volume of around 5.8 million tons in 2021, as per Textile Exchange.

But Viscose, also known as Rayon, isn't all it claims to be. The material has come under scrutiny for its detrimental impact on the planet, notoriously called the "dirty fiber/fabric." Unfortunately, due to the expanding fast fashion industry, a large portion of the viscose sold today is produced at low cost by energy, water, and chemical-intensive procedures that have a terrible effect on the environment and humans alike.

The origin of the wood pulp and the process used to transform it into a fiber are the two key issues with viscose manufacturing.

To create viscose, first of all, wood needs to be sourced, and if it is not from sustainably managed forests, it becomes a problem in the initial stage itself. Approximately half of the wood used for viscose comes from certified sources, leaving another half with a profound environmental impact. The late wood pulp must undergo chemical treatment before being filtered and spun into a fine thread. This is a very polluting procedure that discharges a lot of dangerous chemicals into the air and waterways close to manufacturing facilities. One of the compounds, carbon disulphide, is harmful and has been associated with a number of grave health issues. Also, the manufacturing procedure for dissolving-pulp uses a lot of chemicals and destroys a significant portion of the wood.

Hence, despite finding a good end application that will continue to grow, viscose as a fiber has tremendous manufacturing issues that need to be changed. Various NGOs and environmental bodies have criticized global brands & retailers for using this fiber and expanding their offerings without regard for the planet. This led to a serious reconsideration of this material and created a need for an alternative. The caveat for this alternative was to ensure the same end product features while reducing the environmental impact and ensuring eventual and long-term profitability.

# The invention of LENZING<sup>™</sup> ECOVERO<sup>™</sup> specialty viscose fibers.

Technology-enabled new materials can provide sustainable alternatives to in-demand fibers without costing a bomb to the end consumers – this was the idea behind LENZING<sup>™</sup> ECOVERO<sup>™</sup> specialty viscose fibers which have taken the industry by storm since its launch in India in 2017.

Produced by the global leaders in wood-based specialty fibers, Lenzing group, this innovative fiber is made using wood sourced from sustainably managed forests that are either FSC or PEFC certified. Lenzing assumes responsibility by striving for sustainable procurement based on environmental certificates and responsible and efficient use of valuable resources.

Wood, the pulp derived from it, and water are some of



the most important raw materials for the sustainable production of cellulosic fibers from Lenzing. They are also part of the most important focus areas of the Lenzing Group's sustainability strategy. Lenzing sources wood and dissolving pulp from sustainably managed forests and plantations and not from ancient, protected, or endangered forests. Nearly all the chemicals used during the production of ECOVERO<sup>™</sup> fibers are recovered and reused, causing 50% fewer emissions and taking up half as much energy and water as regular viscose. Lenzing's biorefinery process ensures that 100 percent of wood constituents are used: to produce dissolving wood pulp for fiber production, biorefinery products, and bioenergy. This leaves no space for wastage.

Thanks to these innovative and eco-responsible production practices, LENZING<sup>™</sup> ECOVERO<sup>™</sup> fiber has a much lower environmental impact than generic viscose, as confirmed by various rating agencies and 3rd parties.

LENZING<sup>™</sup> ECOVERO<sup>™</sup> viscose fiber is recognized by EU Ecolabel, a label of environmental stewardship, as having lower levels of environmental impact throughout its lifecycle, from raw material extraction to production, distribution, and end-of-life disposal.

Lenzing has been recognized for leadership in corporate transparency and performance on climate change, forests, and water security by the global environmental non-profit CDP, securing a place on its annual "A List". Lenzing is one of the only 12 companies in the world with the highest AAA rating by CDP. A backbone for transparency in the supply chain, Lenzing's innovative Fiber Identification technology enables LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> fibers to be identifiable in the fabric and the final product, providing brands and consumers with full traceability and protection from counterfeiting.

# LENZING<sup>™</sup> ECOVERO<sup>™</sup> : Initial Challenges & progress

With the innovation of ECOVERO<sup>™</sup> fibers, Lenzing opened gates to new possibilities in textiles with a focus on sustenance. However, much like any other change, the product initially had its own market challenges. The key roadblocks: cost, widespread availability, and product/brand awareness.

The advancement, however, hasn't gone unnoticed, thanks to persistent efforts in the correct direction. When first launched, the LENZING<sup>™</sup> ECOVERO<sup>™</sup> fiber brand had only a selected set of suppliers and brands who started their sustainable viscose journey with us in India. We collaborated with like-minded supply chain partners who saw the long-term value in upgrading to ECOVERO<sup>™</sup> specialty viscose from regular viscose. As the product and retail presence gained a foothold in India and worldwide, all initial concerns and challenges were put at rest.

Five years later, LENZING<sup>™</sup> ECOVERO<sup>™</sup> fibers are now available through hundreds of yarn spinners in all major textile markets and have found their way into countless brand collections. The constant increase has been possible because brands and consumers saw value in the product, and this initial momentum helped scale up the offering to the larger industry.

More and more brands choose LENZING<sup>™</sup> ECOVERO<sup>™</sup> fibers for their strong sustainability credentials in manufacturing and for the traceability and transparency at any stage of the product. As concerns about greenwashing across the value chain continue to grow, it is increasingly important for brands to be able to make their good choices visible confidently.

Today we are celebrating a key milestone as the production of LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> branded viscose fibers reached over 300,000 tons since the brand's inception in 2017.

With production capacity in Austria, China, and soon in Indonesia, LENZING<sup>™</sup> ECOVERO<sup>™</sup> fibers have been expanding their footprint worldwide. This increase in production capacity comes at a timely moment as demand for eco-responsible fibers continues to rise, driven by the growing preference for sustainability from consumers and brands alike.

With the increase in LENZING<sup>™</sup> ECOVERO<sup>™</sup> fiber capacity, value chain partners and brands have been benefitting from better fiber availability to support their sustainability targets at a very competitive cost. Through efficient supply chains and support around the world, brands can keep the additional cost of transitioning from conventional viscose to ecoresponsible viscose within a very trivial range.

India was the first country to launch LENZING<sup>™</sup> ECOVERO<sup>™</sup> fibers in 2018. The product was introduced at the Sustainable Apparel Coalition meeting in Bengaluru. Later, it was presented to a larger audience at Lakme Fashion Week in collaboration with designers Abraham & Thakore for their 'Kurta' collection. By participating in The Lakme Fashion Week (LFW), a bi-annual fashion show held in Mumbai, Maharashtra, India, Lenzing proactively raised awareness about ECOVERO<sup>™</sup> fibers among the larger fashion industry. Eco-conscious collections were launched in conjunction with prominent designers like Ritu Kumar and House of Anita Dongre, which evolved into full-blown retail collections with an emphasis on sustainable fabrics with designer labels and Brands alike; AND, Global Desi, Future Group, Myntra's inhouse brands, including Roadster, Mast and Harbour, Dressberry, and House of Pataudi, to name a few.

Until last year, more than 500 brands worldwide have partnered with LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> fibers to engage with eco-conscious consumers. Renowned brands which have used LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> fibers in their collections include fashion powerhouses like Massimo Dutti, Lacoste, Zara, Mango, American Eagle, Levi's Tommy Hilfiger , Guess, H&M and Myntra to name a few.

Collaboration is an essential step in the sustainable and profitable transformation of the industry; one company alone can't solve the pressing issue of textile waste. It is proactive partnerships with the likes of Levi's, featuring an extensive range of eco-viscose apparel not only in India but also the world over, that enables forward movement and brings about real systemic change. As more brands move away from traditional viscose, the textile industry moves closer to attaining real sustainability with profitability. LENZING<sup>TM</sup> ECOVERO<sup>TM</sup> fibers are becoming even more widely available in major textile markets and working hard to drive the transformation of the textile business model from linear to circular. Further efforts from the entire industry are needed for this transformation.

Lenzing has set an example by highlighting that the global markets, including India, which is considered more price sensitive, are successfully embracing change, motivating more and more players to take inspiration and manufacture other sustainable variants across the supply chain. This sustained growth is a perfect example of how sustainability and profitability can go hand in hand.





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# INDIA-UAE COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT

Mr. Sharad Agarwal CEO – India, Emirates NBD Bank PJSC

The Comprehensive Economic Partnership Agreement (CEPA) signed by the UAE and India will significantly enhance global value chain participation for India and, in turn, boost trade finance opportunities for the UAE's financial service players.

An important transit point for goods and people, the UAE continues to serve as a strategic trade gateway to the wider Middle East, North Africa, central Asia, and sub-Saharan Africa.

The new pact is expected to stimulate Indian exports to Africa, in particular, which is predicted to emerge as a leading market and anticipated to hold a lucrative demand outlook for consumer and capital goods.

The UAE's banking sector plays a key role in the efficient functioning of interconnected value chains and trade finance is a major contributor to the growth of international trade.

Growth in global value chain activity has been one of the most important drivers in deepening trade and investment relationships worldwide and increasing interconnectedness of the global economy.

In fact, World Bank statistics show that global value chains account for about two-thirds of the world trade in goods and services.

However, a 2020 study by the Indian Council for Research on International Economic Relations (ICRIER) noted India's limited participation in global value chains, particularly in the manufacturing sector, and its low rankings on the Global Value Chain (GVC) Index and on various international logistics performance and efficiency indices. This is constraining the US\$3.1 trillion economy's competitiveness in the global market and putting it behind many of its competitors such as China, Thailand, and Vietnam.



The GVC Index, which takes into account both goods and services, displays a country's integration into the global value chain and is the sum of backward (when a country uses inputs from another country for domestic production) and forward (when a country supplies inputs used for production in the other country) linkages, divided by total exports.

India's growth in global value chains is crucial to its economic growth. The CEPA pact will empower businesses across India to expand their exports – most significantly with the potential opening of an 'India Mart' in Dubai – a dedicated trade market for Indian goods that can provide market access to the wider Gulf region and Africa.

Similar to China's Dragon Mart in the UAE, the idea, pitched by Indian Union Commerce and Industry Minister Piyush Goyal, would act as a one-stop shop for both retail and wholesale. It could gather scattered production across India and decrease the cost of supply chains.

If marketplaces are condensed and confined to a particular geography or central location, such as Dubai, which offers seamless aviation connectivity, they have a much better chance of showcasing their products. These marketplaces can become a base for businesses to expand across the Middle East, Africa, and other parts of the world.

Minister Goyal previously said Dubai's India Mart has the potential to become a US\$10 billion opportunity for India and is an opportunity to showcase brand India on the global stage.

The CEPA will help in adding additional \$2billion increase in textile exports over the next five years. Indian textile and apparel industry will benefit hugely as they won't be needed to pay 5% duty on textiles and garments. This is huge advantage for Indian companies.

Emirates NBD caters to textile business community based in India and Middle East covering the North Africa and other business centers of the world.

And, with more Indian companies setting up manufacturing or trading facilities, and offices in the UAE, our banking community will also benefit significantly from working with those clients and traders, extending them working capital or other trade facilities they require to do business in the Middle East, Africa, and Turkey.

The reduction of tariffs to zero duty for 90 percent of products (including engineering goods, pharma products and medicines, and building materials and



agriculture products) exported by India to the UAE will also mean further integration into local manufacturing value chains. This would drive growth across the UAE's pharmaceutical, agriculture, and steel and aluminum sectors.

With the UAE's status as a major global trade hub, our financial services sector continues to facilitate the flow of capital and investment globally.

The CEPA's target to increasing bilateral non-oil trade between India and the UAE from US\$60 billion to US\$100 billion in the next five years infers that as trade flows increase so will the volume and scale of transactions passing through the banking sector, creating a multiplier effect for everyone.

Financial services and access to capital remain integral throughout the life cycles of businesses and within global value chains. And, our sector's deep expertise in facilitating international trade and economic activity alongside the UAE's world-class infrastructure, robust regulatory framework, and advanced logistics capabilities make it well positioned to support the influx of new business.

At Emirates NBD, with three branches presence in India. Gives us an opportunity to serve the Indian business community as an iconic gateway between India and Middle East covering the North Africa and other business centers of the world.

As the UAE–India relationship continues to grow with this progressive agreement, we expect to see greater and growing demand for trade finance and working capital across these three big Indian sub-markets. Our banking community is also supporting the CEPA's trade targets and helping further cement growth between the two nations.





# EXPORTS POTENTIAL OF TEXTILE AND CLOTHING IN THE RECENTLY CONCLUDED FREE TRADE AGREEMENTS BY INDIA



**Dr. Amlan Ray** Assistant Vice President - Academics, Sunstone Education Technologies Pvt. Ltd.



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### Introduction

Textiles & Clothing (T&C) Industry has flourished in India for centuries. T&C is considered to be a prerogative of developing countries due to requirement of low-cost manpower. India has competition from low cost economies like Sri Lanka, Bangladesh, Vietnam, China etc. Textile Industry directly employs more than 4.5 crore people in India. (IBEF, 2020). It is the second largest employers after agriculture. Range of textiles include labour intensive handloom and power loom industries as well as capital-intensive spinning and weaving sector. Large component of Indian exports comprises textiles and clothing. India recently signed two free trade agreements with United Aram Emirates and Australia, which has created expectation for increasing textile and clothing exports to these two countries from India. UAE is the third biggest destination for Indian T &C, Australia being the 14th. Share of T&C in India's exports to UAE and Australia are 11.53 % and 13.17 % respectively (WITS, 2023). India is the second largest T&C exporter in the UAE and third largest in the Australia. In both the countries, China is the top most exporters of textile products. Our study measures India's performance in Textiles & Clothing (T&C) industry with Australia and the UAE and analyse the future potential of the industry in these two destinations with revealed comparative advantage (RCA) index.

Revealed Comparative Advantage (RCA) established by Balassa in 1965 is one of the most accepted method in evaluating comparative advantage. In our study, we have collected RCA for the period of 10 years from World Integrated Trade Solutions (WITS) database to measure the comparative advantage of India into Australia and the UAE. We have also measured growth orientation of various T&C products from India since the year 2011. In the context of India's recent FTAs, it is important to measure the prospect of textile commodities with these new FTA members.

India concluded a comprehensive economic partnership agreement with the UAE in February 2022 with the aim of enhancing bilateral trade to 100 billion USD by 2030 from the present level of 60 Billion (GOI, 2022). Textile industry is expected to have a big booster as the existing duty level of 5 % is removed with this FTA. However, India's apparel exports to the UAE have reduced to US \$ 1.16 billion in January-November '22 period, as compared to US \$ 1.83 billion in the same period of the previous year, down by 36.32 per cent on Y-o-Y basis (Apparel Resources, 2023).

According to FIEO, textiles and garments industry in India would gain immensely, especially made-ups, apparel and garments with the FTA with Australia (The Hindu, 2022). India's exports of textiles and apparel are expected to grow from \$392 million to \$1,100 million in the next 3 years in Australia (Balachandar, 2023). India Ratings and Research (Ind-Ra) predicts a big growth for Indian textile to Australia, which is currently at 5-6 % of Australia's total textile imports against China's share of 60 %. Indian exports will be competitive with the zero customs duty against the present rate of 5 %, which will make it at par with exporters from Vietnam and China in Australian Market (ANI, 2022). 70 per cent of India's textile products and 90 per cent of apparel products, face duty on export to Australia (Soni, 2023). Now, with the elimination of duty, Indian T&C industry will be more competitive in Australia.

In the next section, we have reviewed literature about T&C exports and RCA. In the third section, we have detailed the methodology adopted for our study. In the

next section, we have analysed the results and finally we concluded.

### Literature review

Literature has measured potential of Indian T&C industry in various regions with the index revealed comparative advantage (RCA). In the below paragraphs we have reviewed a few important literature related to textile and some literature that have used RCA for measuring competitiveness of Indian T&C industry.

India T&C industry grew initially, post quota regime but could not sustain the momentum. Study shows that Textiles had a share of 27.8 percent in India's total exports in 1992-93, which went down to 10.8 in 2010-11 (Manoj, 2014). The study identified complexity of supply chain as one of the causes for India' nonperformance as it increases lead-time for exporters.

Based on Ricardo's theory of competitive advantage, Balassa (1965) came out with the concept of revealed comparative advantage. Balassa developed this concept in 1965. The term indicates that countries export those items that they can produce at lower cost in comparison to the other countries. He also suggested that comparative advantages of countries change with time as a country's physical, human capital and trade policy change. There are evidence of various applications of RCA in measuring competitiveness (Lishman et al, 1999; Sanidas and Shin, 2011; Bebek, 2011; French, 2014; Laursen, 2015; Das, Rishi and Dubey, 2016). In the literature, there is evidence of studies measuring the competitiveness of Indian textiles with Revealed Comparative Advantage (RCA) (Dhiman & Sharma, 2017; Kathuria, 2018; Kim, 2019; Rout & Saini, 2021). Compounded Annual Growth Rate (CAGR) or growth orientation also gives an idea about the potential of a product (Gupta & Khan, 2017; Dhiman & Sharma, 2017).

### Methodology

In this study, we have measured competitiveness of Indian T&C with Bilateral RCA and Product Growth Orientation. We have attempted to see the performance of 14 Textile & Clothing Commodity with 2-digit HS code from 50 to 63.

Growth Orientation of Products is an indicator developed by World Bank that evaluates the growth potential for a country's exports by comparing the compound annual growth rate (CAGR) of its primary exports to the worldwide growth rate of those same products. A growth rate above world growth implies an increase in market share (WITS, 2023). Countries with products in high growth industries are expected to grow in future. If a country lags behind world growth that may indicate trade barriers.

Bilateral RCA gives us an indication of how much a given country is exporting to a given market relative to how much the world is exporting to that market. A bilateral RCA above one will tell us that for that particular good that country i have a revealed comparative advantage in country j's market, compared with the rest of the world, which is computed as follows:

$$BRCA = \frac{\frac{Xkij}{Xij}}{\frac{Wkj}{Wj}}$$

Where in Xkij = Export of product k from country i to j

Xij = Total export of country i to country j

Wkj = World export of product k to country j

Wj = Total world export to country j

Bilateral RCA gives an idea about the relative position of a product in the bilateral trade. RCA shows

comparative advantage when a product's export share from a country is more than the country's exports share in total world exports. Bilateral comparative advantage is seen when a product has more weightage in bilateral exports compared to its import from rest of the world. In case of bilateral RCA, a product's competitiveness in bilateral trade is gauged vis a vis the world market. So bilateral RCA can explain the relative comparative advantage of a product in bilateral trade more clearly.

Data: We have collected Growth Orientation of Products for all 14 T&C items (HS Code 50 to 63) for the period of 2011 to 2020 for India into the markets of the UAE and Australia.

We have collected the product wise (HS Code 50 to 63) RCA of India with the UAE and Australia for the period of 2011-2020.

### **Results and Discussion**

We have analysed the exports data of Indian T&C for the product HS codes 50 to 63 to both UAE and Australia market. Item-wise exports value is considered for the years 2011-20 and the average is calculated to see the importance of various T&C items in Indian exports to these two destinations.



Figure 1: Top 5 Textile export items -India to Australia

Source: World Trade Integrated Solution (WITS) database, 2023

Based on the total export values, we short listed five products HS code 56 (non woven and special yarns), 57 (Carpets), 61 (Knitted apparel), 62 (non-knitted apparel), 63 (Other made up textiles). We can see a steady rise in all sectors except HS code 56.



Figure 2: RCA of Indian T&C exports items to Australia

Source: World Trade Integrated Solution (WITS) database, 2023

In all the above 5 categories India has revealed comparative advantage in Australian market, however there is a declining trend in the RCA in categories 63.62 and 56.



Figure 3: Top 5 Textile export items from India to UAE

Source: World Trade Integrated Solution (WITS) database, 2023

UAE is an important market for Indian T &C. Based on the export values; the top five sectors are shortlisted and depicted above. However, we can see growth in all the above items until 2016 and 2017. There is a fall in exports in all the sectors since 2018. India needs to address this on priority and the FTA and resultant duty cut should aid in restoring the growth in T&C exports.



Figure 4: RCA of Indian T&C exports items to UAE

In all the five items revealed comparative advantage is maintained since 2011, however the growth in RCA got arrested since 2017 in all items except HS code 63 ( other made up textiles). In the UAE market, Indian manmade textiles is in demand (Hs code 54 and 55) which is a positive as Government of India is trying to promote manmade fibre and textiles following global trend. In 2011, India had RCA in the UAE only in HS code 54 and 62, out of the above 5. However, this trend is changed and since 2015 until 2020 India has RCA in all the above five items.

	Australia		UAE	
Product Code	Country Growth	World Growth	Country Growth	World Growth
50	-18.7974	-13.3493	-20.842	-12.4018
51	1.4009	-9.5318	-8.8901	-5.3773
52	-7.1094	-6.1917	-7.7692	-7.3385
53	7.8286	5.3448	-3.7207	-11.8059
54	12.2055	-0.3558	-11.8256	-9.0849
55	-5.6375	-5.333	-9.909	-7.6465
56	-0.513	1.7845	-2.1969	1.7788
57	6.8717	-0.4228	0.9122	-4.761
58	2.9506	-3.6557	3.3528	-11.4849
59	5.6655	1.3243	-0.5263	-0.5992
60	6.3806	0.3739	17.0587	-6.8858
61	8.8532	0.384	3.7759	-3.6011
62	4.7019	2.1641	-1.005	-3.0086
63	3.263	7.2519	5.5787	3.3001

### Table 1: Product Growth Orientation of Indian T&C in Australia and the UAE during 2011-2020

Source: World Trade Integrated Solution (WITS) database, 2023

Source: World Trade Integrated Solution (WITS) database, 2023

By analysing the product growth, we find in Australia, Indian products had a growth in HS code no 53, 56, 59, 60, 61, 62 and 63. The growth of Indian products were higher than world growth in Australian market in all T&C products except HS code 50, 52, 55, 56 and 63. In the UAE market, India had growth only in HS code 57, 58, 60, 61 and 63. The growth is more compared to the world growth in the UAE in products with HS code 53, 57, 58, 59, 60, 61, 62, 63. This shows that Indian apparels both knitted and non-knitted could enhance their market shares in Australia and the UAE market. India used to be a big supplier of cotton and has RCA more than 1 in both UAE and Australia; however, its export value has reduced over the period.

### Conclusion

India is the second largest exporter of T&C in the UAE and third largest in the Australia. T&C as a product group has its own importance in the bilateral trade in both the countries. In the case of UAE, India's total value of exports is much higher. Since 2017, we could see a dip in India's exports value in the UAE. The reduced customs duty will bring Indian exporters at a level playing field in the UAE and India should be able to strengthen its market position. Apparels, both knitted and non-knitted remain India's strength in both Australia and the UAE. We could see a constant growth in the textile exports in various items to Australia. In both UAE and Australia, all 14 T&C items exhibit more than one RCA. The product growth orientation shows increase in market share of Indian apparel (HS code 61 and 62) in both Australia and the UAE. The exports will get further momentum with the FTAs.

We can conclude that Indian T&C industry is poised for a big growth in both the UAE and Australia market. The recently concluded economic partnerships are going to play a big role in materialising the expectation of Indian T&C industry. Apparels, both knitted and non-knitted are going to lead in item-wise exports.



# **EXCERPTS OF UNION BUDGET 2023-24**

# CITI ANALYSIS OF DEMAND OF GRANTS FOR TEXTILE SECTOR IN BUDGET 2023-24

- Total Grant for Textiles for year 2023-24 is fixed at Rs 4,389.34 cr which is about 22.6% higher than the Revised Budget Grant for 2022-23.
- In the present budget, Grant of Rs 200 Crore has been kept for PM MITRA Parks while for PLI Scheme the grant is budgeted at Rs 5 crore

Particular	2021-22 (Actual) (Rs Cr)	2022-23 (Budget) (Rs Cr)	2022-23 (Revised) (Rs Cr)	2023-24 (Budget) (Rs Cr)	% Change 2023-24 (Budget) to 2022-23 (Revised)
Total-Establishment Expenditure of the Centre	81.21	337.18	369.58	376.95	2.0%
Central Sector Scheme/Project		·			
Amended Technology Upgradation Fund Scheme (ATUFS)	625.31	650.00	650.00	900.00	38.5%
Procurement of Cotton by Cotton Corporation under Price Support Scheme	8,331.96	9,243.09	780.71	0.01	-100.0%
Total-National Handloom Development Programme	360.93	200.00	156.00	200.00	28.2%
Total-National Handicraft Development Programme	299.73	220	221.11	278.33	25.9%
Total-Integrated Wool Development Programme	6.25	15.00	15.00	27.11	80.7%
Total-Development of Silk Textiles	854.08	875.00	875.00	917.77	4.9%
Total-Development of Jute Industries	86.94	115.00	62.20	142.00	128.3%
Total-Powerloom Promotion Scheme	36.41	-	-	-	
Textile Infrastructure		I			
Integrated Processing Development Scheme	41.26	70.00	31.20	60.00	92.3%
Scheme for Integrated Textile Parks (SITP)	55.00	-	-	-	
Assistant to Textile Committee	25.00	25.00	59.79	-	-100.0%
Total-Textile Infrastructure	121.26	95.00	90.99	60.00	-34.1%

### **EXCERPTS OF UNION BUDGET 2023-24...**

Particular	2021-22 (Actual) (Rs Cr)	2022-23 (Budget) (Rs Cr)	2022-23 (Revised) (Rs Cr)	2023-24 (Budget) (Rs Cr)	% Change 2023-24 (Budget) to 2022-23 (Revised)
Research and Capacity Building					
Integrated Scheme for Skill Development	59.76	100.00	25.00	115.00	360.0%
National Technical Textile Mission	-	100.00	37.00	450.00	1116.2%
PLI Scheme	-	15.00	7.50	5.00	-33.3%
Textile Cluster Development Scheme	-	133.83	88.00	141.54	60.8%
Others- Research & Capacity Building	199.68	130.00	34.10	0.02	-99.9%
Total-Research and Capacity Building	259.44	478.83	191.60	711.56	271.4%
Total-North East Textiles Promotion Scheme	13.60	-	3.90	-	-100.0%
PM-MITRA	-	15.00	3.50	200.00	5614.3%
Raw Material Supply Scheme	-	105.00	130.00	160.00	23.1%
Scheme for Protection of the Handlooms and Implementation of the Handlooms (Reservation of Articles for Production) Act, 1985	-	5.00	5.00	7.00	40.0%
Total Central Sector Scheme/ Project	10,995.91	12,016.92	3,185.01	3,603.78	13.1%
Other Central Sector Expenditure	(17.31)	28.04	25.02	408.61	1533.1%
Total Budget Allocation	11,059.81	12,382.14	3,579.61	4,389.34	22.6%

# ECONOMIC SURVEY 2022-23 HIGHLIGHTS - T&C SECTOR

- India's GDP growth is expected to remain robust in FY24. GDP forecast for FY24 to be in the range of 6-6.8%.
- Indian Rupee performed well compared to other Emerging Market Economies in Apr-Dec2022.
- The credit growth to the MSME sector was over 30.6 per cent on average during Jan-Nov 2022.
- While India's retail inflation rate peaked at 7.8 per cent in April 2022, above the RBI's upper tolerance limit of 6 per cent, the overshoot of inflation above the upper end of the target range in India was however one of the lowest in the world.
- India declared the Net Zero Pledge to achieve net zero emissions goal by 2070.

### **EXCERPTS OF UNION BUDGET 2023-24...**

- MSP for all mandated crops fixed at 1.5 times of all India weighted average cost of production since 2018.
- National Logistics Policy envisions to develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth.

### Highlights Related to Textile Industry in the Economic Survey 2022-23

• Textiles Sector has witnessed a growth in Private Investment.



Figure IX.1: Private Investment gathers momentum

Source: Axis Bank Research, Capitaline

• A few product categories, including textiles, apparel and leather, have been showing tepid growth, as export demand for these products has been mellowing with the slowing of global output and demand.

Table IA.2. GI	Table 14.2. Growth in Manufacturing Sectors (Fer cent, 101)								
<0		3	>0 but <5			>5			
	Weights	Apr- 22	May- 22	Jun- 22	Jul- 22	Aug- 22	Sep- 22	Oct- 22	Nov- 22
Food Products	5.3	3.8	10.1	5.1	-2.6	0.7	4.0	-3.7	9.9
Beverages	1	29.2	130.3	45.7	13.1	6.4	12.3	2.7	8.2
Tobacco Products	0.8	22	21.4	•52.7	-9.1	-12.8	-0.7	-14.3	-5.0
Textiles	3.3	-0.4	5.9	-3.1	-9.0	-12.5	-13.9	-18.7	-9.0
Wearing Apparel	1.3	55.2	69.9	42.6	15.1	-18.3	-21.6	-36.6	-11.7
Leather And Related Products	0.5	5	47.5	1.9	-13.5	-16.0	-17.5	-25.5	-2.0

Table IX.2: Growth in Manufacturing Sectors (Per cent, YoY)

### EXCERPTS OF UNION BUDGET 2023-24...

• Most of the segments within the manufacturing sector except the textile industry witnessed growth in credit offtake in November 2022.

-23	0		65	
Industry		Nov-21	Apr-22	Nov-22
Mining and quarrying (incl. coal)		13.8	10.9	6.3
Food processing		6.1	10.7	7.4
Beverages and tobacco		2.0	4.1	24.4
Textiles		8.6	7.1	3.0
Leather and leather products		-1.7	7.3	5.9
Wood and wood products		6.6	8.4	15.9

Table IX.3: Growth in credit deployed in Industry Subsegments (Per cent, YoY)

• FDI equity inflow in Textiles is yet to recover as shown in table below.

### FDI Inflow in Textile Sector





# **TEXTILE SOURCING ROADSHOW** ORGANISED BY BGMEA, SOWTEX & CITI



(Mr. T. Rajkumar, Chairman, CITI lights the lamp with Mr. Faruque Hassan, President, BGMEA, and Mr. Shahidullah Azim, Vice – President, BGMEA during a Textile Sourcing Roadshow to boost textile trade with Bangladesh held at Hotel Radisson Blu, Mahipalpur, New Delhi)

Confederation of Indian Textile Industry (CITI) collaborated with SOWTEX, a Tech Aggregator B2B Sourcing Platform for Fashion & Textile Materials and Bangladesh Garment Manufactures & Exporters Association (BGMEA) for organising a Textile Sourcing Roadshow at Hotel Radisson Blu, New Delhi which was attended by the representatives of BGMEA, CITI and Indian Textile Industry.

On behalf of CITI, Mr. T. Rajkumar, Chairman, CITI, Mr. Prashant Mohota, Managing Director, Gimatex Industries Pvt. Ltd., Mr. Neelabh Dalmia, Executive Director, GHCL Ltd., Mr. Rajiv Girotra, Vice President (Mktg) – PSF, Indo Rama Synthetics (I) Ltd., Mr. J.P. Jain, Vice President, TT Ltd., Ms. Chandrima Chatterjee, Secretary General, CITI and Mr. Gagandeep Singh, Secretary General, Denim Manufacturers Association.

While BGMEA delegation was led by Mr. Faruque Hasan, President, BGMEA & Chairman of Giant Group, Mr Shahidullah Azim, Vice President, BGMEA & Chairman of Classic Group, Mr. Shovon Islam, Chairman, PR & Publicity & Chairman & MD of Sparrow & Crown Garments, Mr. Kamal Uddin, Chairman - Standing Committee - Trade Fairs & Chairman, Torque Fashion Ltd., Mr Bashir Ahmed Ripon, Chairman, Standing Committee - New Market Development & Director - Classic Shirts Ltd., Mr Sanjay Kumar Naha, Chairman, Standing Committee – Safety & Director - Rose Initimates Ltd., Mr. Emdad Ul Haque Miazi, General Secretary, BGMEA & Management Advisor - Doungi Sourcing Ltd.

The objective behind organising the Textile Sourcing Roadshows on 9th, 10th & 11th February 2023 in New Delhi, Ahmedabad and Surat is to accelerate Bangladesh's export growth of textile products to \$100 Bn by 2030, To achieve this goal, the RMG Sector of Bangladesh is looking for reliable and quality raw materials supply from India. The demand for manmade fiber-based garments is growing all over the world and India is a reliable source of man-made fiber-based fabrics and lots of specialty fashion fabrics.

The representatives of BGMEA held close interactions with the Indian Textile Manufacturers The Textile Sourcing Roadshows between Bangladesh and India will be a major step towards building strategic partnership to provide high quality fabrics & materials to this ambitious export goals and contribute \$15 Billion of raw Material support from India in the next 3-5 years.

# STATE-WISE ESTIMATES OF THE COTTON PRODUCTION FOR COTTON SEASON 2022-23

Name of the State		2021-22 (P)		2022-23 (P)			
	Area (Lakh	Production	Yield	Area (Lakh	Production (170	Yield	
	Hectare)	(170 Kgs Lakh	(Kg/Hc)	Hectare)	Kgs Lakh Bales)	(Kg/Hc)	
		Bales)					
Punjab	2.51	6.46	437.53	2.41	4.54	320.25	
Haryana	6.36	13.16	351.76	6.47	17.20	451.93	
Rajasthan	7.56	24.81	557.90	7.77	25.51	558.13	
NORTHERN ZONE	16.43	44.43	459.71	16.65	47.25	482.43	
Gujarat	22.84	75.09	558.90	25.49	87.12	581.03	
Maharashtra	44.10	82.49	317.99	42.29	81.85	329.03	
Madhya Pradesh	5.60	14.20	431.07	5.99	15.19	431.10	
CENTRAL ZONE	72.54	171.78	402.57	73.77	184.16	424.39	
Telangana	18.89	48.78	438.99	20.24	54.41	457.00	
Andhra Pradesh	5.54	17.08	524.12	6.95	18.85	461.08	
Karnataka	6.74	19.55	493.10	8.97	21.48	407.09	
Tamilnadu	1.48	3.02	346.89	1.56	3.56	387.95	
SOUTHERN ZONE	32.65	88.43	460.43	37.72	98.30	443.03	
Orissa	1.93	6.26	551.40	2.16	7.23	569.03	
Others	0.16	0.27	286.88	0.19	0.29	259.47	
TOTAL	123.71	311.17	427.60	130.49	337.23	439.34	

P – Provisional

As estimated by Committee on Cotton Production and Consumption (COCPC) in its meeting held on 20.02.2023

### Cotton Balance Sheet for Cotton Seasaons 2021-22 & 2022-23

(Cotton Year: October to September)

Particulars	2021-22(P)*		2022-23(P)*			
	(In lakh bales of 170 kg. Each)	(In Thousand Tons)	(In lakh bales of 170 kg. Each)	(In Thousand Tons)		
SUPPLY	·					
Opening Stock	71.84	1221.28	45.25	769.25		
Сгор	311.17	5289.89	337.23	5732.91		
Import	21.13	359.21	10.00	170.00		
TOTAL SUPPLY	404.14	6870.38	392.48	6672.16		
DEMAND						
Mill Consumption	279.57	4752.69	275.00	4675.00		
S.S.I Consumption	21.07	358.19	20.00	340.00		
Non-Textile Consumption	16.00	272.00	16.00	272.00		
Export	42.25	718.25	35.00	595.00		
TOTAL DEMAND	358.89	6101.13	346.00	5882.00		
Closing Stock.	45.25	769.25	46.48	790.16		

# CITI ANALYSIS OF EXPORTS AND IMPORTS OF T&A FOR JANUARY 2023

Monthly Export Updates of Textile and Clothing (Value in USD Mn.)										
Export category	Jan-22	Jan-23	% Change	Apr'21- Jan' 22	Apr'22- Jan' 23	% Change				
Cotton Yarn/Fabs./made-ups, Handloom Products etc.	1,388.94	869.26	-37.42%	12,692.75	9,044.38	-28.74%				
Man-made Yarn/Fabs./made-ups etc.	503.01	396.77	-21.12%	4,606.30	4,075.54	-11.52%				
Jute Mfg. including Floor Covering	46.83	30.85	-34.12%	409.01	372.05	-9.04%				
Carpet	144.59	104.95	-27.42%	1,504.25	1,156.18	-23.14%				
Handicrafts excl. handmade carpet	176.03	161.95	-8.00%	1,754.63	1,450.82	-17.31%				
Sub-Total Textiles	2,259.40	1,563.78	-30.79%	20,966.94	16,098.97	-23.22%				
Apparel	1,546.82	1,492.98	-3.48%	12,673.69	13,335.01	5.22%				
Textile and Clothing	3,806.22	3,056.76	-19.69%	33,640.63	29,433.98	-12.50%				
All Commodity	35,233.01	32,913.63	-6.58%	3,40,276.71	3,69,248.54	8.51%				
% of T&C in Total Exports	10.80%	9.29%		9.89%	7.97%					

Source: Press Information Bureau

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

Import category	Jan-22	Jan-23	% Change	Apr'21- Jan' 22	Apr'22- Jan' 23	% Change
Cotton Raw & Waste	35.81	28.83	-19.49%	450.4	1,348.74	199.45%
Textile yarn fabric, made-ups	204.86	207.68	1.38%	1,712.45	2,268.79	32.49%

Source: Press Information Bureau

# QUICK ESTIMATES OF IIP FOR TEXTILE AND CLOTHING SECTOR (T&C): OCTOBER 2022



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

· · ·	Weights		Index		Cumulative Index			
Sector		Oct-21	Oct- 22	% Change	Apr- Oct 21	Apr- Oct 22	% Change	
General	100	135.0	129.6	-4.0	127.5	134.3	5.3	
Manufacture of textiles	3.2913	125.6	102.3	-18.6	116.6	107.6	-7.7	
Manufacture of wearing apparel	1.3225	163.6	102.9	-37.1	122.9	129.8	5.6	

Source: \* CITI Analysis & Ministry of Statistics Planning & Implementation

- For the month of Oct 2022, the Quick Estimates of Index of Industrial Production (IIP) with base 2011-12 stands at **129.6**
- Cumulative change for April Oct 2022 for textiles was down by (-) **7.7** percent and Wearing Apparel was up by (+) **5.6** percent over the same period of the previous year.



N·S·D·C National Skill Development Corporation



Textile Sector Skill Council (TSC) is the Awarding Body for textile and handloom sector recognised by National Council for Vocational Education and Training (NCVET) since 13th June 2022.

It was established on 24th August 2014 to facilitate the industry to impart right kind of training to workers on state - of - art technologies and is governed by 11 industry associations and 3 export promotion councils.

### **Key Contributions**

- 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, technical textiles, dyeing & printing units.
- established 692 + training centers all across the country which are operated by 3,10,969 + certified trainers.
- prepared 78 Qualification Packs, having 232 Unique National Occupational Standards.
- 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 from Manipur to buyers from Europe.

@TextileSSC

### Textile mills contributing to Skill India mission - Rs. 332 Cr annually

Textile mills invest significantly in training unskilled youth, spending almost Rs. 332 Crore annually to train about 1,23,000 freshers. However, this contribution to Skill India mission is not getting noticed by the policy makers since the training data is not registered on the Gol's Skill India Portal (SIP).



Dr. Vijay Yadav Executive Director, TSC

TSC in the last board meeting decided to make the above facts known to policy makers and directed TSC officials to take necessary steps. As a pilot project, TSC has onboarded the training data of 450 candidates from two mills on SIP, which has been highly appreciated by the Ministry of Skill Development and Entrepreneurship (MoSDE). Therefore, we would like to request all mills to register the training data of their trainees on SIP by reaching out to TSC.

By registering training data on SIP, textile mills will have an opportunity to get a part reimbursement of the skilling cost (Rs 8,000 - 9,000 per candidate) under the PMKVY 4.0, which is set to be launched in the first quarter of FY 23-24.

Additionally, you may also contact TSC to mobilise candidates by arranging textile-specific job fairs.

TSC is always committed to meet the industry's manpower requirements.

For any queries or concerns please write to TSC at info@texskill.in.

# **TEXTILE SECTOR SKILL COUNCIL**

14th Floor, Hansalaya Building, 15 Barakhamba Road New Delhi 110001 Office: +91- 43536355-57 | Email: info@texskill.in | web: www.texskill.in



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. GoI has taken strong initiatives to support skilling of workforce.

### **STRATEGIC HIGHLIGHTS**

- 692 training partners
- 15 assessment agencies
- 261 assessors certified across all sub sectors
- 2,438 trainers certified
- Developed 78 qualification packs
- 3,10,969+ candidates certified across 26 states



# **TEXTILE SECTOR SKILL COUNCIL**

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