

### Enabling Circularity in the Textile Industry

This session focused on advancing Sustainable Development Goal 5 (SDG 5) on gender equality, emphasising the integration of gender-sensitive approaches in health education and communication. Its primary objective was to highlight the importance of gender-sensitive health communication and to inspire participants to adopt equitable practices in their educational and outreach efforts. Approximately 30 participants from Gujarat, Rajasthan, and Delhi, representing diverse organisations and backgrounds, attended the workshop. Their active engagement enriched the discussions and fostered a collaborative learning environment.



#### Presentations and Key Messages

**Shri Kartikeya Sarabhai (Director, Centre for Environment Education)** articulated the connection between circularity and nature, emphasising that it is deeply ingrained in India's cultural and historical DNA. However, he noted the modern shift towards a throwaway culture that has pervaded society, straying from the sustainable ethos that once defined Indian living. Addressing the textile industry, Shri Sarabhai observed that the challenge of circularity extends far beyond fabric alone. It encompasses a myriad of interconnected elements, including water, energy, and other critical resources. He emphasised that achieving true circularity necessitates a holistic approach that seamlessly integrates these sectors. Furthermore, Shri Sarabhai emphasised the need to uplift specific sectors of the industry and stressed the importance of incorporating these segments into the broader framework of circularity, underscoring that a truly sustainable system must be inclusive and comprehensive.

**Mr Punit Lalbhai (Vice Chairman and Executive Director, Arvind Group)** with over a decade of deep involvement in the textile industry and a strong focus on sustainability, responded by affirming that the Indian apparel sector is performing commendably on several fundamental principles, expressing his belief that India is indeed ahead of the global curve in this regard.

Reflecting on the global scenario, Mr Lalbhai underscored two critical crises: climate change and biodiversity loss. He noted with optimism that discussions on sustainability have now transcended the general masses and reached boardrooms, accompanied by significant financial backing for

sustainable initiatives. This shift, he remarked, demonstrates the increasing prioritisation of sustainability in addressing these challenges. He then elaborated on four foundational pillars of sustainability crucial for devising solutions: Spotting Opportunities, which facilitates seamless progress and accounts for the vast majority of sustainable actions; Addressing Mispricing, particularly of undervalued resources like air and water, requiring innovation and creativity to reflect their true worth; Fostering Collaboration, as complex global challenges necessitate collective action; and Tackling Overconsumption, which involves reshaping consumption patterns and leveraging the concept of circularity.

Mr Lalbhai expanded on this, asserting that SMEs represent only one facet of a much larger and more intricate puzzle. He identified the industrial structure itself as the principal barrier to accelerating sustainable action, citing the inherent inequities of the current consumer-centric paradigm. In this framework, the repercussions of unsustainable practices disproportionately affect the least-resourced segments of the supply chain, such as fibre providers and civil society organisations.

Mr Lalbhai cited the creation of the Higg Index by the Sustainable Apparel Coalition as a notable initiative which established a unified language for sustainability, enabling uniform measurement and fostering a “race to the top”. However, he acknowledged a critical paradox: while the industry now clearly understands what needs to be done, the segments of the supply chain responsible for implementing these actions often lack the requisite resources. He illustrated the disproportionate impact of unsustainable practices with the example of jeans production: while the industry's direct “gate-to-gate” water footprint for a pair of jeans might be 40 litres, growing the cotton can require 5,000 litres, with additional consumption during home laundering. This clearly shows that the industry's direct footprint is but a fraction of the overall impact, underscoring the urgency for systemic change and equitable resource distribution across the supply chain.

Mr Lalbhai talked about solutions to the broader challenges of the current scenario, highlighting three key factors. First, Technology, where India is performing exceptionally well and is ahead of the curve, though he emphasised it is the least significant parameter for meaningful change. Second, Collective Action and Equity, noting that while some progress has been made (e.g., the Apparel Impact Institute), more collective effort is needed, with innovative financial instruments and a new approach to risk being vital for impactful solutions. And third, Individual and Spiritual Transformation, underscoring the importance of behavioural change in consumption patterns as determinants of future sustainability efforts.

On the subject of recycling, Mr Lalbhai stressed the importance of establishing a high baseline for circularity, independent of global consumer preferences for sustainable goods. He shared Arvind Limited's achievement of 100% water circularity in its Ahmedabad production processes. Through innovative closed-loop systems, the company minimises fresh water consumption, and this initiative has evolved into a business model, with 300 external installations saving ten times the amount of water Arvind uses, thus providing a competitive edge. He extended the discussion to other areas of circularity, such as raw materials and carbon emissions, noting Arvind's efforts in documenting emission reductions, enabling customers to trace their carbon footprint. He observed that sustainability stories are gaining significance, with purpose-driven brands capturing consumer imagination. On the energy front, he shared that by 2026, Arvind will operate on 85% renewable energy. For thermal energy, a necessity for the industry, the company partners with farmers to

collect farm waste that would otherwise be burned, combusting it in controlled chambers to generate energy, contributing to Arvind's net-zero goals and reducing pollution.

In closing, Mr. Lalbhai emphasised, "Sustainability must be embedded as a business model. We cannot wait for consumer enlightenment or a spiritual revolution to gather momentum. Business innovation, creativity, and collective action must be the levers driving this change." When asked how to bring about a spiritual revolution to curb overconsumption, he mentioned it was his mandate to serve consumers and "hold fort" until such a revolution comes about. Addressing a participant's concern about the Earth's temperature rise of 1.5 degrees Celsius, he offered hope and conviction that humanity has solved unsolvable problems, urging the audience to rally humanity and bring about change "one decision, one person, and one initiative at a time." In conclusion, he added that every action should aim for convergence, focusing on eliminating negatives rather than merely creating isolated models, as energy would be wasted countering myriad disparate approaches. Finally, he emphasised the importance of challenging the perception that cotton produced in Europe and Australia is inherently superior to Indian cotton.

**Dr Naresh Tyagi (Senior Sustainability Officer, ABFRL)** began by reiterating the essence of sustainability, emphasising its holistic nature. He remarked that sustainability is often misconstrued as being solely about the environment, while it fundamentally encompasses social and economic dimensions as well. Sustainability, he emphasised, is not merely about addressing today's needs but also about safeguarding the future. Reflecting on Indian society, he observed that India uniquely embodies sustainability in its cultural and historical ethos.

Dr Tyagi shared his experience of being the sole Asian representative on a global committee tasked with defining circularity. He argued that circularity transcends definitions; it is about creating a closed-loop system. Drawing from his childhood, he illustrated how Indian consumers have historically embraced sustainable practices: a single piece of cloth, he recalled, would transition through multiple stages of utility—from clothing to domestic use, and ultimately to manure, as it was traditionally made from natural fibres rather than synthetic materials. He proposed that a truly sustainable product should meet three essential criteria: durability, the ability to be remade, and being crafted from renewable materials. To these, he added a fourth imperative—innovation and partnership—emphasising that collective action within the industry is crucial for progress.

Dr. Tyagi acknowledged the dual nature of the global textile industry: while it is one of the largest polluters, it also provides significant employment opportunities, especially for grassroots workers and women, resulting in a profound social impact. In discussing solutions, he reflected on how sustainability was once a simpler concept, warning against complicating it with technical terms like Scope 1, 2, 3, and now Scope 4 emissions, which may not resonate with all stakeholders. He proposed two distinct models for sustainability: the first focuses on seamlessly integrating into the global value chain, ensuring sustainable practices across raw materials, production, and logistics to meet the expectations of international brands. The second model emphasizes domestic consumption, leveraging the inherently sustainable habits of Indian consumers.

Dr. Tyagi highlighted the impressive progress made by Indian textile brands, which, despite initial scepticism, have achieved global benchmarks such as the Higg Index in just four years. Dr Tyagi emphasised the importance of reverse logistics in circularity, wherein consumers play an active role in returning materials for reuse and recycling. This aligns with Sustainable Development Goal 12,

which promotes responsible consumption and production. He emphasised the need for government intervention to facilitate these processes, advocating for indigenous policies tailored to India's unique context, rather than merely adopting European standards.

Concluding this dialogue, Mr Tushar Jani reflected on the ongoing conversations about developing indigenous standards, but posed a critical question: how long will it take for these standards to gain recognition and be effectively implemented? Taking a proactive approach, Dr. Tyagi further added that one should "walk the talk," focusing on cost structure, efficiency, and material and resource management to incorporate sustainability. He explained this with an example of a company that invested ₹8 lakh in packaging paper, achieving 78% productivity. By replacing it with recycled paper, the company saved ₹7 lakh and mitigated 1.3 tonnes of carbon emissions equivalent. He also highlighted running a sustainable education programme in 35,000 CBSE schools. From a pragmatic perspective, he mentioned that a 300-gram shirt, which typically had 180 grams of packaging (22 components), has now been reduced to 62 grams by reducing components to six. This significantly lessens the load on landfills and saves capital. He noted that in 2017, they stopped using plastic bags, and today, 80% of their packaging is sustainable. Considering government initiatives like zero-waste landfills, he stressed the importance of examining the entire value chain, as a closed loop cannot be achieved without government involvement. In conclusion, he emphasised that it is crucial to change the perspective that cotton produced in Europe and Australia is inherently superior to Indian cotton.

**Mr Bhavin Parikh (CEO, Global Textiles)**, an expert in production efficiency, shared his insights on the growing awareness of overconsumption and the increasing adoption of sustainable practices. He observed that people have begun to embrace the reuse of items such as PET bottles, clothing, and other products, signalling a shift towards more responsible consumption habits. Mr Parikh noted that products incorporating sustainable practices are now prominently labelled as such, reflecting a growing consumer consciousness. While awareness of sustainability has significantly improved, he acknowledged that there is still a long journey ahead. Education on this subject remains limited, but the advent of social media has emerged as a powerful tool in bridging this gap and accelerating awareness. Building on this, Mr Tushar Jani, highlighting UNEP's perspective, mentioned that UNEP doesn't advocate for recycling in its traditional sense, as it involves transforming polymers from one form to another, merely extending their lifespan rather than addressing the root cause of material consumption. This perspective underscores the need for more innovative approaches to sustainability that go beyond mere recycling.

**Sheera Singer (Art Educator and Textile Artist, USA)** expressed her deep inspiration drawn from the remarkable progress she has witnessed in India concerning circularity. She observed that even young children are engaging with experiences that emphasise sustainability, underscoring the pivotal role of education in nurturing a circular mindset from an early age. She further highlighted the resurgence of traditional dyes, which are gaining popularity not only within India but also internationally. Notably, in the United States, consumers are increasingly willing to pay a premium for sustainable goods, reflecting a growing global appreciation for environmentally conscious products. Singer also remarked on the revival of the reuse culture, emphasising that sustainability has transcended its functional roots to become a fashionable and aspirational lifestyle choice. This shift signifies a promising step towards a more sustainable future.

**Dr Chirag Bhimani (Sustainability and Climate Change Professional)**, drawing on his experience collaborating with the State Pollution Control Board (SPCB) and various industries, shared his insights

into the evolving landscape of sustainability practices. He remarked on the significant transformation in attitudes towards water treatment, noting that while there was initial resistance, government regulations and industrial mandates have now driven widespread adoption of sustainable practices. Industries have implemented secondary sludge treatment, biogas utilisation in boilers, and several other green initiatives. He highlighted the growing role of SMEs (Small and Medium Enterprises) in this shift. Traditionally, sustainability was perceived as the domain of large players, but these practices are now permeating smaller enterprises, also known as SMEs. He observed that while many SMEs are eager to embrace sustainable initiatives, they often face resource constraints that hinder their efforts. Despite these challenges, he noted an encouraging trend: SMEs are increasingly rallying together and actively participating in green projects. Initiatives such as community boilers and other collaborative efforts exemplify their commitment to contributing to a more sustainable future. He added that a viable model used by one industry can be replicated by another, underscoring the importance of documenting best practices. The idea of BRAF, being worldwide, will promote the benchmarking of such models.

**Dr Ashwin Thakkar (Chairman of the Textile Association of India, Ahmedabad chapter)** emphasised the critical importance of Green Management and striving for zero waste as pivotal strategies for a more sustainable industrial future. Dr. Thakkar advocated for a robust content log system. He explained that effective recycling hinges on having detailed, easily accessible information about the materials used in a product at a local level. This would empower both individuals and industries to make informed decisions regarding recycling and waste management. He further highlighted the crucial role of education and capacity building in fostering sustainability. He noted that sustainability programmes are now a mandatory component of the curriculum in institutions under AICTE (All India Council for Technical Education). Additionally, organisations like the Gujarat Chamber of Commerce continue to play a vital role in organising capacity-building programmes to strengthen industry-wide efforts towards sustainability.

**Ms Sakshi Kumari (Founder, Statement Denim)** shared her profound insights on circularity within the textile industry, emphasising the concepts of upcycling, downcycling, and recycling as key pillars of sustainable practice. Reflecting on her journey, she recounted spending considerable time within the industry, deeply analysing waste and emissions while challenging herself to devise strategies for their reduction. She highlighted upcycling as the foremost initiative in achieving circularity, underscoring its critical role in reimagining waste as a resource. Drawing attention to a significant statistic, she noted that textile production traditionally generates 18% waste. Through dedicated efforts and innovative approaches, she has successfully reduced this figure to 8%, marking a remarkable stride towards sustainability.

### Case Study

Arvind Limited has achieved 100% circularity in water usage for its production processes in Ahmedabad. Through innovative solutions, the company recycles water using a closed-loop system, minimising fresh water consumption. This initiative has evolved into a business model, with 300 installations outside Arvind saving ten times the amount of water the company uses.