

## Driving Sustainable Transformation: Insights from Bangladesh's Apparel Industry

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**Introduction:** Bangladesh's textile and apparel industry is a significant player in the global market, ranking as the second-largest apparel manufacturing sector worldwide (Mamun et al., 2022). Bangladesh's RMG exports reached US\$ 47.39 billion in 2023, reflecting a 3.67% growth from 2022 and constituting 85.23% of the country's total exports (RMG Bangladesh, 2024). However, this growth is accompanied by environmental challenges, as this industry significantly contributes to pollution and environmental degradation, impacting nearby water bodies and exacerbating global warming (Sakamoto et al., 2019). Additionally, in response to past tragedies such as the Tazreen Fashions factory fire in 2012 and the Rana Plaza building collapse in 2013, global condemnation of the apparel industry urged the manufacturers to introduce safety initiatives aimed at improving working conditions in factories (Akbar & Ahsan, 2021).

Sustainable supply chain management practices have become essential for improving competitive advantage in Bangladesh's apparel manufacturing sector. These initiatives help reduce environmental and social impact and enhance overall firm performance by attracting regular orders and boosting employee satisfaction (Akbar & Ahsan, 2021). Despite having recent success stories, such as achieving 204 green factories in the ready-made garment (RMG) sector as of 2022, which is more than any other country in the world (The Daily Star, 2023), challenges persist in implementing sustainability initiatives. Studies indicate that factors such as government regulatory compliance (Islam et al., 2020), international compliance standards (Akbar & Ahsan, 2021), industry standards (Hoque et al., 2022), integration of advanced technologies (Ahmad et al., 2020), buyer-supplier relationship and collaboration (Akbar & Ahsan, 2021), cultural norms (Li et al., 2014) are crucial to ensure sustainability initiatives in the country's textile and apparel industry. However, the current studies lack a comprehensive exploration of the unique sustainability initiatives, motivations, and barriers that apparel manufacturers encounter when striving to integrate environmental and social sustainability policies and practices into their operations. Therefore, the study aims to get a more in-depth understanding of the specific sustainability practices the Bangladeshi apparel manufacturers adopt to cope with the challenges and meet global sustainability requirements.

**Theoretical Framework:** The study employs institutional theory as its theoretical foundation, which revolves around three foundational pillars: regulative pillar, normative pillar, and cultural cognitive pillar. The regulative pillar concerns formal rules and regulations governing behavior, the normative pillar involves social norms and values shaping conduct, and the cultural-cognitive pillar encompasses shared beliefs and assumptions impacting decision-making within organizations (Scott, 2008). Oliver (1991) posits that organizational norms and beliefs are shaped by the societal values and meanings within their environments, influencing the

organization's structural features. Expanding on this, Prakash (2002) articulates that institutional theory posits environmental elements like regulations and societal pressure that inform a company's green marketing strategies.

**Methodology:** In March 2024, a detailed qualitative study was conducted through semi-structured interviews with six professionals occupying various upper managerial positions in Bangladesh's apparel industry. Participants were chosen through purposive sampling from the author's professional network. Each interview, lasting between 45 and 60 minutes, was held over Zoom, recorded, transcribed, and then analyzed to identify common themes.

**Results and Discussion:** The average experience of the interviewed participants in the manufacturing industry was 21 years. On average, their manufacturing companies commenced operations in Bangladesh 28 years ago, employing approximately 15,000 workers and generating an average annual revenue of \$220 million. The key themes in the regulative pillar were found to be conscious sourcing and manufacturing methods (6 out of 6), integration of modern technology (6 out of 6), sustainability certification (5 out of 6), and compliance with regulations (6 out of 6). Participants emphasized conscious sourcing and production methods as crucial sustainability measures, prioritizing sourcing high-quality materials from internationally certified suppliers. One of the participants stated, "We source organic material..." and "select dyes and chemicals mainly from Europe, certified under ZDHC standards." Another participant highlighted, "... using organic cotton or recycled polyester, minimize cutting wastage, utilize solar energy...", and "operate a fully biological effluent treatment plant with reverse osmosis to minimize environmental impact." Participants underscored modern technology integration as a critical sustainability initiative, citing its role in reducing energy usage and water consumption. One participant noted, "We installed technologically advanced dyeing machines, allowing dyeing with less energy and water." Participants emphasized sustainability certification as a crucial criterion to maintain social and environmental sustainability, noting its significance as a foundation for working with big brands, and mentioned Higg Index certification, NBC Universal, OEKO-TEX, OCS, Fair Trade, and WRAP as the certifications they pursue. Another theme Compliance with regulations emphasized the importance of manufacturers abiding by local and international laws and regulations related to manufacturing operations and human involvement.

Under the Normative Pillar, better working conditions (5 out of 6) and communication with buyers and industry stakeholders (4 out of 6) emerged as key themes. Participants emphasized their commitment to improving working conditions and worker satisfaction through initiatives like Free Friday Clinics, Fair Price Shops, and Day Care Facilities. Furthermore, participants highlighted their collaboration with industry partners, like BGMEA, and buyers to maintain transparency in the supply chain and stay updated with emerging standards. One participant noted, "We set our standards following industry norms and buyer's expectations because no unified standards cover sustainability requirements from all buyers and government agencies."

Under the Cultural-Cognitive Pillar, economic living standards (3 out of 6) and the adoption of emerging trends (4 out of 6) emerged as significant themes. Participants highlighted their intention to spend less and religious views that encourage thoughtful resource usage, creating a

sustainable culture within the organization. A participant stated, "We have a simple living behavior that drives us to use fewer resources, resulting in less wastage." Moreover, participants indicated positive outcomes from adopting emerging trends, from root-level workers to top-level management. They mentioned that this has increased their awareness of reducing wastage and improving productivity by utilizing smart devices and modern communication applications to stay updated about production.

Participants underscored their challenges in making high investments to undertake sustainability initiatives. However, they expressed that despite these challenges, investing in sustainability is worthwhile as it helps them secure regular orders and make their business profitable in the long run. The study's findings have significant implications on worldwide apparel manufacturers, buyers, and other stakeholders. It provides insights into the initiatives, challenges, and motivations of apparel manufacturers, thereby offering valuable lessons for all stakeholders involved in the industry.

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