pwc

What's next for the readymade garments (RMG) sector in Bangladesh?

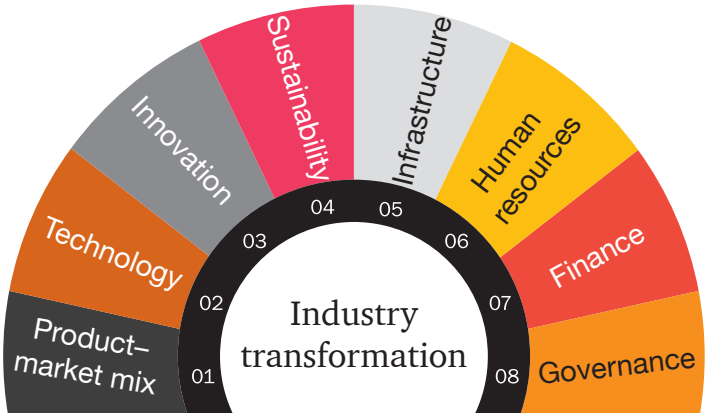
Global disruptions and the necessary transformation

The global textile and RMG industry has been experiencing a series of disruptions since the last five years. The geopolitical tensions between major markets and manufacturing countries, cotton price fluctuations, global geopolitical conflicts and the COVID-19 pandemic have changed the overall trade dynamics.

Other significant developments include a sharp increase in wages and power cost in Bangladesh, the EU–Vietnam Free Trade Agreement and sustainability-related commitments made by the industry at the COP 26 summit.

Therefore, to enable the survival and profitable growth of textile and RMG manufacturing businesses, transformation is required at both the company and country levels. To do so, it is important that the government, manufacturers, buyers, service providers, development agencies, financial institutions and academia work cohesively.

Levers for industry transformation



50% of CEOs in Bangladesh don't think that their companies will be economically viable a decade from now if they continue on their current path.

Source: PwC's 26th Annual Global CEO Survey: Bangladesh Perspective

There are eight major interconnected levers that must be moved in the right direction with precision in order to transform textile and RMG manufacturing businesses. For example, technology will play a major role in determining the environmental and social sustainability of any organisation. It will also support innovation and decide the potential product mix.

Companies need to align their product basket with the global sourcing trends and may like to move towards more value-add products to increase business profitability and competitiveness. Moreover, customised strategies must be followed for each product–market combination for deeper penetration of existing markets, entry into relevant new markets and product diversification.

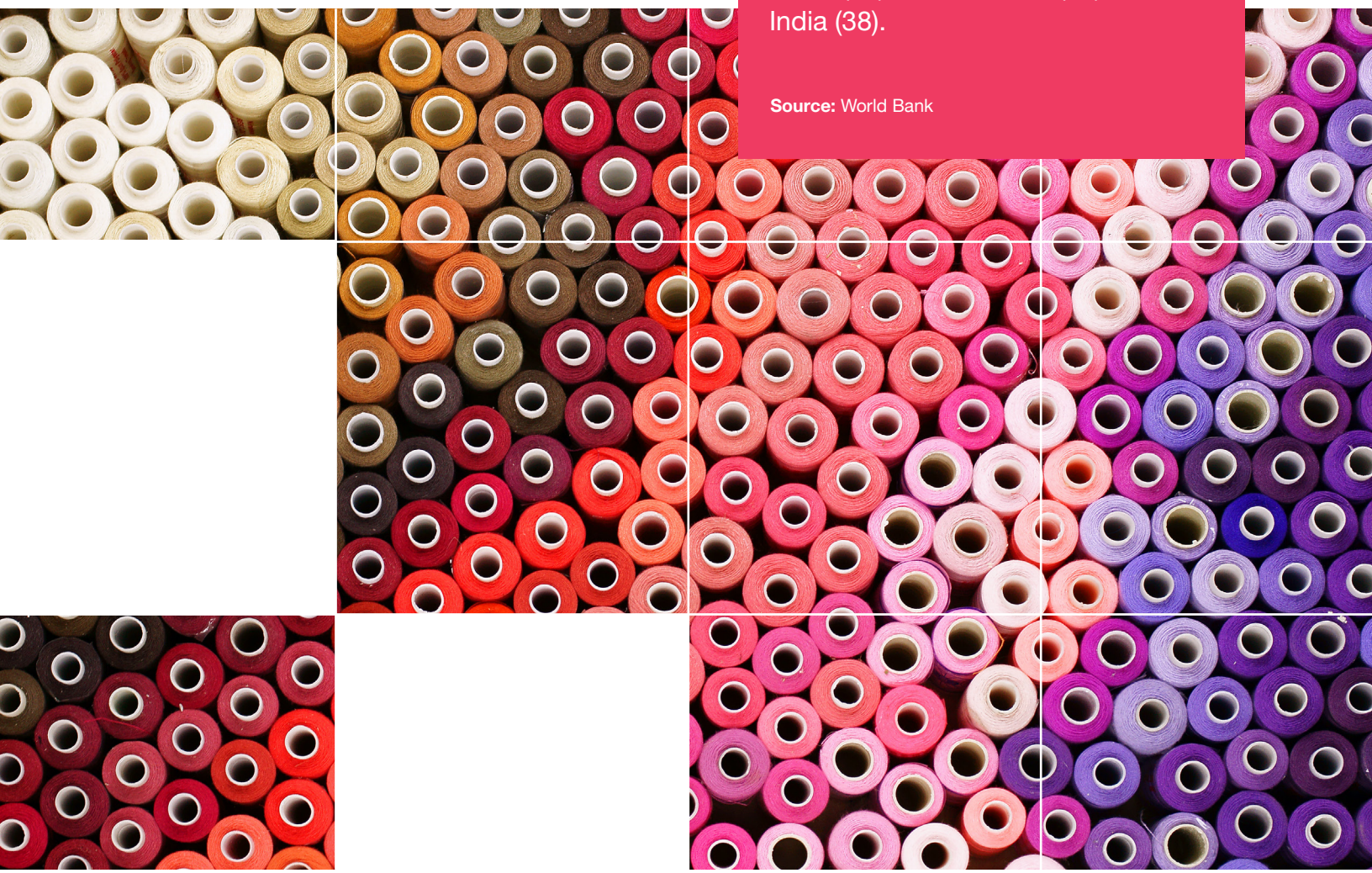
Industrial infrastructure and logistics need to support the efficient functioning of businesses by reducing cost of operations, making operations environment-friendly and safe, and decreasing the response time and overall business risks. Moreover, quality utilities need to be sufficiently available at competitive prices.

In 2021, **43%** of the total RMG trade was based on man-made fibre (MMF). However, India and Bangladesh only have 23% and 22% of MMF-based RMG respectively in their export baskets.

Source: ITC Trade Map

As per the World Bank Logistics Performance Index (2023), Bangladesh scored significantly lower (88) than Vietnam (43) and India (38).

Source: World Bank



Textile and RMG manufacturing is labour-intensive. Thus, availability of a sufficiently skilled workforce at an economic rate is crucial for the success of businesses. Continuous skilling, re-skilling and upskilling of human resources is required for adopting new technologies, developing new products, improving process efficiencies and enabling innovation.

Setting up a textile manufacturing facility is capital-intensive. This is because the industry needs to maintain a high level of inventory as the demand for some products is seasonal, and the availability of natural fibres varies throughout the year. Additionally, continuous technology upgradation is necessary for improving productivity, product diversification, quality improvement and improving cost competitiveness.

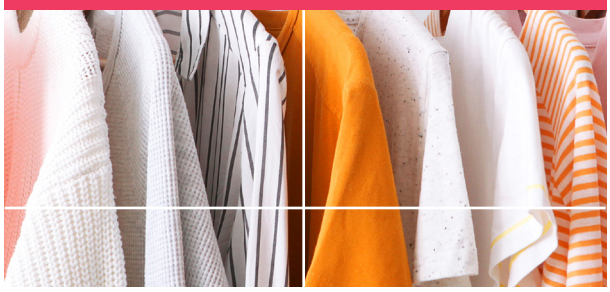
Furthermore, the high potential impact on environment and society makes governance mechanisms essential for textile and RMG manufacturing companies. Policies need to be well-defined and understood by all relevant stakeholders. Also, the decision-making process needs to be transparent and unbiased, as per the defined policies. Moreover, it is important that all actions taken by an organisation are well documented.

A leading global fashion brand has issued a EUR 500 million sustainability-linked bond with a maturity of 8.5 years. Soft loans are being provided by development agencies.

Source: Fashion for Good

Nearly **10%** improvement in productivity to manufacture one pair of trousers can reduce the cost by USD 1.

Source: PwC analysis



Doing business sustainably and profitably

The global textile and RMG manufacturing sector employs close to 91 million people,[1] with more than 60% of them being women. This sector is still working on social agendas like pay parity, ensuring occupational safety and health of the workers, and having a diverse workforce.

In addition to being labour-intensive, the textile and RMG manufacturing sector is one of the most resource-intensive (energy, water and chemicals) sectors. It is the second-largest consumer of water, generating around 20% of the world's wastewater and responsible for up to one-fifth of the industrial water pollution. It is estimated that the fashion industry accounts for around 10% of global greenhouse gas (GHG) emission.[2]

1 https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_835423.pdf
2 https://www.weforum.org/agenda/2020/01/fashion-industry-carbon-unsustainable-environment-pollution/

Considering these factors, this industry can play a pivotal role in environmental and social sustainability.

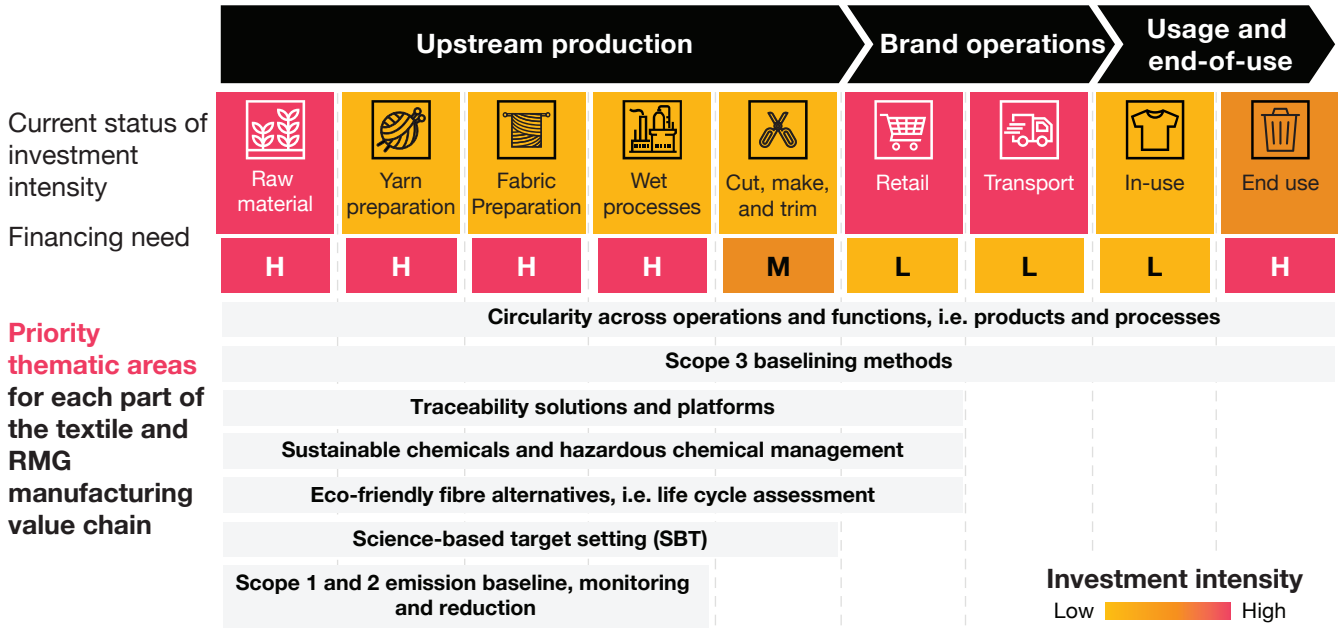
Initially, the industry was more focused on environmental sustainability – mainly, the quality of effluents discharged by garment factories. Additionally, some major accidents that resulted in worker casualties increased the focus on occupational safety and health. Today, however, stakeholders (consumers, investors and governments) are asking manufacturers and companies to achieve challenging targets around GHG emissions, chemical discharge, water usage, solid waste management, worker safety, living wages and inclusive workforce. Sustainability is no more a differentiating factor – it has now become the entry barrier for businesses.

Achieving these targets requires significant investments and a high degree of awareness at all levels of the workforce. Companies need to go about completing the targets judiciously, by considering all limiting factors. Otherwise, the business may not remain viable or become unethical (e.g. greenwashing).

Brands, manufacturers, chemical formulators and technology suppliers are working together to replace the raw materials with sustainable options. In order to do so, they are developing sustainable designs, optimising processes, using renewable sources of energy, employing sustainable chemistry, and enabling efficient inventory and logistics management.

Organisations need to focus on the thematic areas gaining more importance from different stakeholders, which will help in improving competitiveness.

Priority areas to improve competitiveness

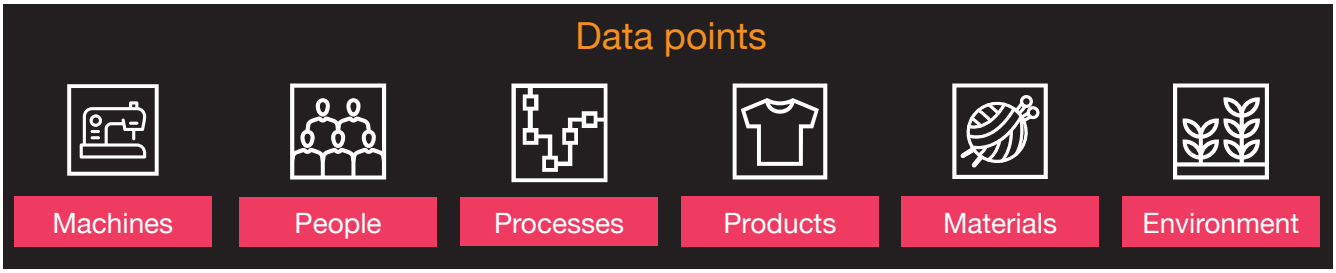


Adopting new technologies to improve competitiveness

Earlier, technological advancements were focused towards increasing productivity, improving quality and product diversification. Post that, automation of specific work steps and activities began to be introduced. Now, technology is being leveraged to support industries to improve sustainability, traceability, reliability, transparency, responsiveness, decision making, data security, service quality, customer satisfaction and worker engagement.

The processes for textile and RMG manufacturing are complex as there is a high degree of variation in raw material properties, process parameters, utility requirements, skill requirements, quality parameters and nature of waste. In addition, varied requirements from different buyers make it even more difficult for the industry to produce products in a sustainable manner. The decision-makers need to analyse data coming from different sources to ensure the right balance between various parameters.

Data points for consideration by decision makers



Some examples of various technologies being used to achieve business objectives have been highlighted below:

- Enterprise resource planning (ERP) collects data from all sources, processes it as per the business requirements and supports entrepreneurs to take informed decisions.
- Business intelligence tools have made it easier to monitor business activities and take preventive actions.
- 3D design and sampling tools have eliminated the requirement of physical samples and reduced the process time significantly.
- Automated production planning and control tools and inventory management tools ensure efficient usage of available capacity.
- Machine learning is enabling the adoption of predictive maintenance and reducing machine downtime to almost zero.
- Image processing techniques help in the automatic detection of fabric faults and improve overall quality.
- Barcodes, RFID and blockchain technology are improving the traceability of supply chains and thus increasing customer confidence in terms of responsible sourcing.
- Use of laser technology in denim finishing has improved productivity and eliminated hazardous exposure of workers to potassium permanganate (PP).
- Nanobubble technology in dyeing is helping to reduce water usage significantly.
- Ozone and enzyme finishing is reducing chemical, water and energy usage significantly.

Way forward for Bangladesh's textile and RMG manufacturing industry

The growth of Bangladesh's garment manufacturing industry has considerably improved the socioeconomic development of the country. In last decade, garment export has more than doubled to touch USD 42.6 billion in 2022 (July 2021 to June 2022).[3] The country has now set an aspirational target of exporting RMG worth USD 50 billion by 2025, and touching USD 100 billion by 2030.[4]

However, the industry is facing many headwinds which may impact its growth in the coming decade. Therefore, it might be useful for the Bangladesh textile and garment manufacturing industry to look at the following levers to be better prepared for achieving its sustainability targets.

Lever	Recommendations
Product–market mix	The country needs to align its export basket with global sourcing trends. Moreover, the share of value-add products must be increased in the overall production.
Technology	Faster adoption of technologies is required to reduce cost of manufacturing and business risks. This will help to improve sustainability, enable data-driven decision-making processes, ensure transparency and traceability, and enhance quality, service and responsiveness.
Innovation	A culture of innovation needs to be introduced for creating differentiating factors around products and processes.
Sustainability	The industry needs to focus on circular economy, sustainable product designing, green chemistry, net zero commitments, measurement and control of scope 2 emissions and baselining of scope 3 emissions, living wages, and clearly defined career progression paths for the workforce.

3 Bangladesh Garment Manufacturers and Exporters Association (BGMEA)
4 Ibid.

Infrastructure	The industry must ensure that there is: • a continuous supply of good quality power at competitive prices • improved efficiency in port, road transport and custom clearance processes, with lesser human interventions • improved occupancy of industrial zones and strengthening of textile manufacturing capacity, especially that of finished woven fabric.
Human resources	An inclusive, motivated and sufficiently skilled workforce will bring in the required changes. The first step would be to perform a skill gap analysis, which will cover both technical and soft skills required in next five years. Moreover, academic and technical and vocational education and training (TVET) institute courses need to be modified as per industry requirements. Industry academia interaction should be increased. Large-scale formal skilling initiatives must be introduced at all levels. Technologies like virtual reality may help in scaling up the skilling initiatives.
Finance	Cost, availability and accessibility to capital needs to be improved. New-age financing tools need to be tested.
Governance	Monitoring and evaluation of the implementation of governance mechanisms is necessary. Policies need to be objectively defined, and relevant stakeholders need to be sufficiently sensitised to accommodate frequent changes.

Contact us

Arijit Chakraborti
Director and Office Managing Partner
PwC Bangladesh
arijit.chakraborti@pwc.com

Mamun Rashid
Managing Director, Clients and Markets Leader
PwC Bangladesh
mamun.r.rashid@pwc.com

Sarah Karim
Associate Director, Clients and Markets
PwC Bangladesh
sarah.s.karim@pwc.com

Ashok Varma
Partner, Management Consulting
PwC
ashok.varma@pwc.com

Arindam Saha
Director, Management Consulting
PwC
arindam.saha@pwc.com

Mohammed Rizwanur Rab
Manager, Management Consulting
PwC Bangladesh
mohammed.rizwanur.rab@pwc.com

About PwC

With offices in 152 countries and almost 328,000 people, we are among the leading professional services networks in the world. We help organisations and individuals create the value they are looking for, by delivering quality in Assurance, Tax and Advisory services. Find out more and tell us what matters to you by visiting us at www.pwc.com.

In Bangladesh, PwC has its office in Dhaka. For more information about PwC Bangladesh visit **pwc.com/bd** and follow us on **LinkedIn** https://www.linkedin.com/company/pwc-bangladesh/.

PwC refers to the PwC International network and/or one or more of its member firms, each of which is a separate, independent, and distinct legal entity in separate lines of service. Please see www.pwc.com/structure for further details.

pwc.com/bd

Data Classification: DC0 (Public)

In this document, PwC refers to PricewaterhouseCoopers Bangladesh Private Limited (a limited liability company in Bangladesh), which is a member firm of PricewaterhouseCoopers International Limited (PwCIL), each member firm of which is a separate legal entity.

This document does not constitute professional advice. The information in this document has been obtained or derived from sources believed by PricewaterhouseCoopers Bangladesh Private Limited (PwC Bangladesh) to be reliable but PwC Bangladesh does not represent that this information is accurate or complete. Any opinions or estimates contained in this document represent the judgment of PwC Bangladesh at this time and are subject to change without notice.

Readers of this publication are advised to seek their own professional advice before taking any course of action or decision, for which they are entirely responsible, based on the contents of this publication. PwC Bangladesh neither accepts or assumes any responsibility or liability to any reader of this publication in respect of the information contained within it or for any decisions readers may take or decide not to or fail to take.

KS/April2023-M&C 27504