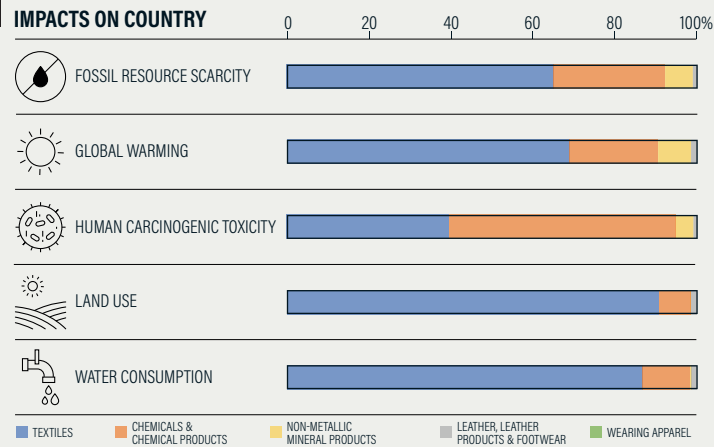


Bangladesh exported USD 47 billion of manufactured products in 2019. This production oriented by foreign markets causes significant pollution impacts at source. A lifecycle analysis of selected manufacturing exports from Bangladesh reveals various effects on the environmental and human health.

The analysis shows the importance of the textile sector in all the impact categories, considering the cradle-to-gate and the gate-to-gate system boundary. The textile industry has been considered one of the most polluting sources in the world. The impact is mainly related to the use of harmful chemicals, high consumption of water and energy, and the generation of large amounts of solid and gaseous wastes.

Textile sector is selected based on the economic relevance, LCA impacts and available data.

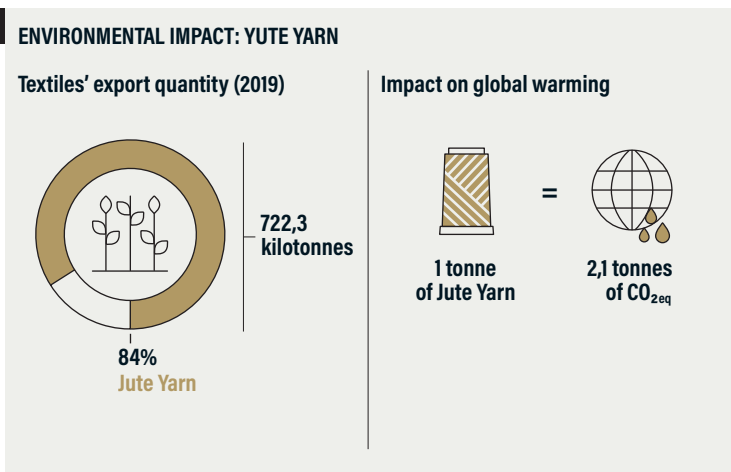


PUBLIC GOVERNANCE : formal and informal arrangements that determine how public decisions are made and how public actions are carried out

Challenges	Achievements	Improvements
<ul style="list-style-type: none"> – Lack of accountability and continuity in public governance. – Informal power plays or vested interests may negatively affect law implementation and effectiveness. – Lack of human, technical and financial resources. – Limited public participation and justice access. 	<ul style="list-style-type: none"> – The Article 18A incorporated the constitutional obligation to protect, preserve, safeguard, and improve natural resources. – The Water Act sets rights and duties on different water bodies, and preferential uses in water stress. – The New National Environment Policy highlights the importance of achieving the SDGs. 	<ul style="list-style-type: none"> – Strengthening institutional capacities for law enforcement, and enhance local infrastructure and financial resources for environmental regulation. – Developing governance mechanisms to deal informal activities. – Design of RTAs and BTAs with provisions that create legal bridges with national environmental law and technical cooperation.

PRIVATE GOVERNANCE : social mores that determine acceptable market behaviour, professional standards and codes of conduct

Challenges	Achievements	Improvements
<ul style="list-style-type: none"> – Lack of labour standards compliance, fair labour practices, working conditions, health and safety issues, child labour, forced labour, and right to free association. – Legislation compliance failure results from lacking political will, standards compliance, investment in new technologies, absence of monitoring systems, lack of enforcement, human resources with skills to enforce the laws, and weak agencies. 	<ul style="list-style-type: none"> – The Circular Fashion Partnership aims to achieve a long-term transition to a circular fashion system. – LEED certification. – The Partnership for Cleaner Textiles supports the textile value chain to achieve sustainable production. – “Go Human, Go Green” programme helps the sector align with the SDGs. 	<ul style="list-style-type: none"> – Bangladesh shall move from command and control, to pollution prevention. – Investment in capacity building, regulation, policies fostering circular economy, industrial symbiosis and Eco-industrial parks. – Adoption of Green manufacturing guidelines, considering local environmental regulations, sector specificities, international treaties, and local technologies.



Yute yarn is the most exported product in the Textile sector in Bangladesh.

A process-based LCA identified that Jute fibre production is the stage that mainly contributes to local environmental impacts. Particularly, the impacts on land use and marine ecotoxicity from fertilizer and pesticide use during jute plant cultivation. Moreover, the production also causes a negative impact on human non-carcinogenic toxicity due to the withdrawal of heavy metals from the soil or water by plants.

Sizing represents the largest single group of chemicals used in the textile industry, and most of them are responsible for environmental impacts related to human non-carcinogenic toxicity. Size recovery, therefore, presents one of the most significant opportunities for operational cost and toxicity levels reductions.

