

Textile Wastes Crisis in India

Why in news?

Indian textile industry is the cornerstone of the nation's economic and cultural identity, is facing a growing threat due to massive pile up of textile waste crisis.

Status of India's textile waste

- India is the <u>world's second-largest textile and apparel producer</u>, as well as the world's largest cotton textile producer.
- An estimated 900,000 tonnes of textile cutting waste is generated annually in the manufacturing process, of which 60% is cotton.
- India's textile waste accounts for **8.5% of the global share** and only 59% of the textile waste in India finds its way back into the textile industry through reuse and recycling.
- India is the <u>world's second-largest producer of man-made fibers</u> (MMFs), most of the MMFs like polyester, nylon, acrylic and spandex are derived from fossil fuels.
- MMF are also called as synthetic fibres which are difficult to separate, sort and recycle due to their chemical composition and diversity.

What are the challenges with the textile waste generated in India?

- Lack of data- There is a lack of reliable and consistent data on how much textile waste is produced and where it goes in, this makes it difficult to measure its impact.
- Lack of standardization- There is no clear cut segregation between pre-consumer waste (factory scraps) and post-consumer waste (used clothing), **polyester** is seen as the most significant contributor to both pre- and post- consumer textile waste.
- **Unsustainable-** Natural fibres are biodegradable but it can release harmful substances or greenhouse gases during decomposition.

Cotton is one of the most widely used natural fibres, but it also consumes a lot of water, land, and pesticides during cultivation.

- **Informal system of refurbishing** The age-old tradition of reuse and refurbishing is limited and it is insufficient to handle the growing volume of waste generated by the industry's rapid expansion.
- **Uniformity** The absence of a comprehensive classification system for textile waste (Biodegradable, non-biodegradable, recyclable and non-recyclable materials) hinders effective sorting and recycling efforts.
- **Microplastics** Synthetic fibres are non-biodegradable and it utilise chemical treatments leading to landfill accumulation and potential microplastics release.

Over 94% of India's domestic MMF industry is dominated by just two varieties

namely polyester and viscose (rayon).

- **Blended fibre** Synthetic fibres are often mixed with natural fibres such as cotton or wool to create blended fabrics, it is harder to separate and recycle them as different methods are required for different types of fibres.
- **High cost** High sorting and transportation costs, reduce the profitability of textile waste recycling.
- **Limits recycling**-Low resale value of textile waste in the second-hand market, which limits the incentives for upcycling and reuse.
- Lack of technology- Technological limitations and a lack of innovation, which hamper the transformation of blended and printed waste into good quality products.

Around 20-30% of the collected textile waste ends up burnt in energy plants due to contamination

- **Human cost** The workers in the textile waste industry face low wages, poor working conditions, and limited opportunities.
- Lack of specific fund- Ministry of Textiles received 27.6% allocation in the 2024 interim budget but there were no specific policies addressing the waste crisis

What lies ahead?

- <u>Comprehensive data collection</u> can help to monitor and evaluate the performance and impact of waste management initiatives.
- Proper <u>classification of textiles</u> like sorting and recycling infrastructure can help to separate and process different types of textile waste and transform them into new products.
- Initiatives like the "Textile Advisory Group on Man-made Fibre (MMF)" might foster industry engagement, government should ensure proper implementation to address the impact of synthetic fabrics.
- Incentives for sustainable production can motivate the textile industry to adopt *circular and eco-friendly practices*.
- <u>Consumer education</u> can raise awareness and demand for sustainable fashion and textile products.
- A holistic *multi-pronged strategy* can pave way for more sustainable and resilient future for the Indian textile industry.

References

- 1. <u>Down To Earth- Textile waste takes central stage in Parliament</u>
- 2. PIB- Textile Advisory group for MMF

