

2. Technical Textiles Mission

Prelims Syllabus: Economics -Industries – Textile, E-Commerce, Pharma, Service

Mains Syllabus: GS-III Effects of liberalization on the Economy, Changes in Industrial Policy and their effects on Industrial Growth.

Why in News?

- The Cabinet Committee on Economic Affairs (CCEA) has approved the setting up of a National Technical Textiles Mission at a total outlay of ₹1,480 Crore.



Cabinet Committee on Economic Affairs (CCEA) approves

National Technical Textiles Mission
at an outlay of Rs. 1480 crore

Components:

- Research, Innovation & Development
- Export Promotion
- Promotion & Market Development
- Education, Training, Skill Development

Objectives:

- Encourage technological Start-ups & Innovation
- Provide Skill Training to at least 50,000 people
- Develop higher technological education for technical textiles in higher educational institutes
- Encourage fundamental research in technical textiles (geo-textiles, agro-textiles, medical textiles) used in agriculture, infrastructure, defence equipments, space missions, etc.

Outcome: Indian Technical Textiles Market Size to increase from \$16 billion (2018-19) to \$40 billion by 2023-24. Register export growth of 10% per annum

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Technical Textiles Mission:

- **Objective:** To position India as a global leader in technical textiles and increase the use of technical textiles in the domestic market.
- **Implementation:** For 4 years from 2020-2021.

Components of the National Technical Textiles Mission:

Component -I (Research, Innovation and Development):

- ✓ Will focus on research and development at both, fibre level and application-based in geo, agro, medical, sports and mobile textiles and development of bio-degradable technical textiles.

- ✓ Research activities will also focus on development of indigenous machinery and process equipment.
- ✓ Will have an outlay of ₹1,000 crores.

Component -II (Promotion and Market Development):

- ✓ Will be for promotion and development of market for technical textiles.
- ✓ Will aim at average growth rate of 15-20% per annum taking the level of domestic market size to 40-50 Billion USD by the year 2024.

Component – III (Export Promotion):

- ✓ Will focus on export promotion so that technical textile exports from the country reach from the ₹14,000 crore now to ₹20,000 crores by 2021-2022.
- ✓ Ensure 10% average growth every year till the Mission ends.
- ✓ An export promotion council for technical textiles will be set up.

Component- IV (Education, Training, Skill Development):

- ✓ Will promote technical education at higher engineering and technology levels related to technical textiles and its application areas.

Significance of the Mission:

- The Mission will focus on usage of technical textiles in various flagship missions, including strategic sectors. The use of technical textiles in agriculture, aquaculture, dairy, poultry, etc. JalJivan Mission; Swachh Bharat Mission; Ayushman Bharat will bring an overall improvement in cost economy, water and soil conservation, better agricultural productivity and higher income to farmers per acre of land holding in addition to promotion of manufacturing and exports activities in India.
- The use of geo-textiles in highways, railways and ports will result in robust infrastructure, reduced maintenance cost and higher life cycle of the infrastructure assets.
- Promotion of innovation amongst young engineer will be taken up by the Mission; along with creation of incubation centres and promotion of ‘start-up’ and Ventures’.
- The research output will be repositied with a ‘Trust’ with the Government for easy and assessable proliferation of the knowledge.
- A sub-component of the research will focus on development of bio degradable technical textiles materials, particularly for agro-textiles, geo-textiles and medical textiles.
- It will also develop suitable equipment for environmentally sustainable disposal of used technical textiles, with emphasis on safe disposal of medical and hygiene wastes.

- There is another important sub-component in the research activity aiming at development of indigenous machineries and process equipment for technical textiles, in order to promote 'Make In India' and enable competitiveness of the industry by way of reduced capital costs.

Current scenario of Indian Textiles segment:

- Indian technical textiles segment is estimated at \$16 billion which is approximately 6% of the \$250 billion global technical textiles market.
- The penetration level of technical textiles in India varies between 5% and 10% against the level of 30% to 70% in developed countries.
- Indian textile industry is the 2nd largest manufacturer and exporter in the world, after China. The share of textile and clothing in India's total exports stands at a significant 13 % (2017-18). The textile industry contributes to 7% of industry output in value terms, 2% of India's GDP and to 15% of the country's export earnings.

What are Technical Textiles?

Technical Textiles

- Technical textiles are fibres & fabrics which have been developed for their performance, and functional properties.
- They are often made of microfibrils (synthetic fibres up to 60 times finer than human hair)
- Technical Textiles are all around us.

Uses

Building Industry

Agricultural Industry

Medical Industry

Transport Industry

Armed Forces

Police

Performance Sportswear

- Technical textiles are textiles materials manufactured primarily for technical performance and functional properties rather than aesthetic characteristics.
- Technical Textiles products are divided into 12 broad categories (Agrotech, Buildtech, Clothtech, Geotech, Hometech, Indutech, Mobiltech, Meditech, Protech, Sportstech, Oekotech, Packtech) depending upon their application areas.