

National Technical Textiles Mission (NTTM)

1.Introduction

The National Technical Textiles Mission (NTTM) is a flagship initiative of the Ministry of Textiles, launched to boost India's technical textiles sector. Technical textiles are functional textiles (not for fashion) used in areas like agriculture, healthcare, defence, construction, infrastructure, automotive, and environmental protection. The mission aims to make India a global leader in this high-value sector.

2. Mission Duration & Budget

- Period: 2020-21 to 2025-26
- Total Outlay: ₹1,480 crore
- Implemented through four focused components to enhance R&D, manufacturing, exports, and skills.

3. Key Components

(A) Research, Innovation & Development

- Supports development of new fibres, smart textiles, geotextiles, medical textiles, agro-textiles, defence textiles, and advanced materials.
- Encourages indigenous machinery development, testing and certification.

(B) Promotion & Market Development

- Increases adoption of technical textiles in government projects—roads, railways, agriculture schemes, healthcare, etc.
- Awareness programmes, industry outreach, and integration with national missions.

(C) Export Promotion

- Targets global markets by improving compliance, quality standards, and export competitiveness.
- Development of export clusters and international collaborations.

(D) Education, Training & Skill Development

- Introduces technical-textile courses in universities and technical institutes.
- Supports internships, training, and industry–academia partnerships.

4. Progress & Achievements (Latest 2025 Updates)

- 168 research projects approved (worth over ₹500 crore).
- Over ₹390 crore utilized for R&D, training, and market development.

- Growth seen in geotextiles, medical textiles, protective textiles, agro-textiles and specialty materials.
- Increased usage of geotextiles in national highway and railway projects.
- Skill development programmes initiated for technicians, engineers, and industry workers.

5. Importance & Expected Impact

- Enhances durability, efficiency and safety across sectors (healthcare, roads, agriculture, defence).
- Reduces dependency on imported high-performance technical fabrics.
- Improves India's position in global markets; supports Make in India.
- Strengthens innovation ecosystem and generates high-skill jobs.
- Boosts export potential of high-value technical textile products.