

Mains iMPACT - 19/10/2024

TEXTILE INDUSTRY

SYLLABUS:

GS 3 > Economic Development > Indian Economy and issues > Manufacturing sector

REFERENCE NEWS:

India has launched its Textile Policy for 2024, focusing on strengthening the textile sector with a range of financial incentives. The policy highlights two main areas: technical textiles, including clothing and apparel and various manufacturing processes like weaving and dyeing. The policy also includes measures for quality certification, energy and water conservation savings and technology acquisition support.

TEXTILE INDUSTRY OF INDIA:

- Economic Contribution: The textile industry accounts for 2.3% of India's GDP, 13% of industrial production, and 12% of total exports. India is set to achieve \$250 bn textiles production and \$100 bn exports by 2030.
- Employment Generation: The industry provides employment to over 45 million people directly and 100 million indirectly, making it the second-largest employer after agriculture.
 - The handloom sector in Varanasi and Assam supports the livelihood of millions of traditional weavers.
- Export and Foreign Exchange Earnings: India exported USD 44 billion worth of textile and apparel products in 2022-23. Key markets include the USA, European Union, UAE, and Japan. India is the world's second-largest producer of textiles and garments. It is also the sixth-largest exporter of textiles spanning apparel, home, and technical products, having a 4% share of the global trade in textiles and apparel.
 - India is the largest exporter of cotton yarn and the second-largest exporter of handloom products globally.
- Cultural and Heritage Preservation: The industry preserves India's rich cultural heritage through traditional crafts such as Kanchipuram silk, Pashmina shawls, Banarasi sarees, and Khadi fabrics.
 - Traditional textiles are integral to Indian festivals, weddings, and ceremonies, symbolizing cultural pride of which the Ambani wedding rituals is an example where Indian traditional costumes and styles were celebrated.
- o **Promoting Rural and Agricultural Development**: Cotton cultivation, a primary input for the textile industry, supports 6 million farmers. The industry also generates demand for jute, silk, and wool from rural areas.
 - Textile hubs in Punjab, Maharashtra, and West Bengal drive rural economic development through cotton and jute production.

- Boosting Technical and Modern Textiles: India is expanding in the technical textile sector, which includes products used in healthcare, agriculture, defence, and infrastructure.
 - India's rapid production of PPE kits during the COVID-19 pandemic showcased its potential in technical textiles.
- Contribution to Sustainable Development Goals (SDGs): The textile industry plays a role in achieving SDG 8 (Decent Work and Economic Growth) by creating jobs and fostering entrepreneurship. Efforts to promote organic cotton and eco-friendly dyes align with SDG 12 (Responsible Consumption and Production).
 - Initiatives like Khadi and Village Industries promote sustainable livelihoods through eco-friendly production.
- Linkages with Other Industries: The textile sector supports allied industries, including chemicals (dyes), agriculture (cotton), logistics, and fashion retail, creating multiplier effects across the economy.
 - Growth in textile exports stimulates demand for ports, warehouses, and retail outlets across India.

CHALLENGES FACED BY INDIAN TEXTILE INDUSTRY:

- Outdated Technology and Infrastructure: The Indian textile industry, especially the power loom and handloom sectors, suffers from outdated machinery and lack of automation. This results in lower productivity and higher production costs compared to global competitors.
 - According to the Textiles Committee Report (2020), 75% of weaving units are semi-automatic or manual, reducing their efficiency compared to modern textile industries. The World Bank estimated that around 30% of India's looms are technologically obsolete, affecting the quality and volume of production.
- Global Competition and Export Challenges: India faces stiff competition from countries like Bangladesh, Vietnam, and China, which offer cheaper labour and better infrastructure.
 - Bangladesh's textile exports to Europe have grown significantly due to
 preferential trade agreements, reducing India's market share. India's cotton yarn
 exports to China declined by over 30% in 2022, as China increased imports from
 Vietnam at lower prices.
- Volatility in Raw Material Prices: Fluctuations in the prices of cotton, wool, and synthetic fibres affect production costs and profitability.
 - Cotton prices in India increased by 25-30% in 2021, impacting the cost of cotton garments and yarn production. Many small textile units in Gujarat and Maharashtra temporarily closed during the 2022 cotton price surge, leading to job losses
- o **Environmental Issues and Sustainability Concerns:** The textile industry is water-intensive and generates pollution from chemical dyes and untreated wastewater.
 - The industry consumes around 200 litres of water to produce 1 kilogram of fabric, contributing to water stress in major production hubs like Tiruppur, Tamil Nadu. Tiruppur faced severe environmental issues, with over 700 dyeing units being shut down temporarily due to pollution violations in 2011.
- Poor Integration Across the Value Chain: The Indian textile industry is largely fragmented and dominated by small and medium enterprises (SMEs), making it difficult to achieve economies of scale. This reduces their global competitiveness compared to large-scale manufacturers in China and Vietnam.
 - According to the Ministry of Textiles, about 80% of textile units in India are small-scale operations, limiting their ability to integrate and streamline production processes.

- Limited Access to Global Markets and Trade Barriers: Exporters face non-tariff barriers such as stringent environmental regulations in Europe and high duties in key markets like the USA.
 - Indian garments face a 9.6% tariff in the European Union, while Bangladesh enjoys duty-free access under the Generalized System of Preferences (GSP).
- o **Labor Issues and Skill Gaps:** Although the industry provides large-scale employment, informal labour and lack of skilled workers affect productivity and quality.
 - Around 80% of workers in the garment sector are women, but many work without formal contracts, social security, or benefits. The **Textiles Ministry** identified the need for **over 1 million skilled workers** by 2024 to meet the growing demands of the industry
- Policy and Regulatory Challenges: Inconsistent government policies and delays in incentive disbursement under schemes like the Technology Upgradation Fund Scheme (TUFS) hinder growth.
 - Delays in refunding export incentives under the Remission of Duties and Taxes on Exported Products (RoDTEP) scheme affected exporters' working capital in 2021
- o **Inadequate Focus** on **Technical Textiles:** Although technical textiles are emerging as a key segment, India lags in R&D and product development compared to global players.
 - The technical textile sector contributes only 10% to India's total textile output, compared to 40-50% in developed countries.
- Compliance and Labour Standards: India's textile industry often faces challenges
 related to labour rights violations, including low wages, poor working conditions, and
 child labour in certain segments. This affects India's global image and can lead to trade
 restrictions from international buyers.
 - Several global fashion brands have pulled out sourcing contracts from India due to labour violations and non-compliance with international labour standards.
 The Global Slavery Index (2018) reported that India is home to a large number of labourers working in poor conditions, especially in sectors like textiles and garments.

NATIONAL TEXTILE POLICY 2024:

The policy highlights two main areas: technical textiles, including clothing and apparel and various manufacturing processes like weaving and dyeing.

The policy provides financial support mechanisms for businesses including capital subsidies ranging from 10% to 35% of eligible fixed capital investments, capped at Rs. 100 crores based on taluka and activity.

It offers credit linked interest subsidies of 5%-7% for 5-8 years.

It also include measures for quality certification, energy and water conservation and technology acquisition support.

The policy places a strong emphasis on labour intensive units defined as new industrial units that employ at least 4000 registered individuals under EPF scheme with minimum 1000 women.

They additionally provide electricity tariff subsidies, wage assistance and additionally SHGs also receive similar financial support

WAY FORWARD:

- Promote Circular Economy and Waste Management: Adopt Recycling and Upcycling Models by encouraging textile recycling units and waste-to-fibre processes to reduce waste. India generates 1 million tonnes of textile waste annually, highlighting the need for a circular economy.
 - Brands like Adidas have adopted recycled polyester from plastic waste, a model India can replicate extending the current Extended Producer Responsibility (EPR)
- o **Green Manufacturing and Use of Sustainable Fibers:** Encourage farmers to grow organic cotton and adopt non-toxic dyes for textiles.
 - Better Cotton Initiative (BCI) works with Indian farmers to promote sustainable cotton practices. Promote the use low impact fibres like bamboo, jute, hemp, and recycled polyester, which have lower environmental footprints compared to conventional cotton.
- o Implement Energy-Efficient Technologies and Renewable Energy: Introduce Energy-Efficient Machines. Textile hubs can shift to solar and wind energy to reduce dependence on fossil fuels. India's textile sector accounts for 10% of industrial energy consumption.
 - The Tiruppur garment cluster has implemented rooftop solar projects to power textile factories.
- Strengthen Water Conservation Practices like Zero Liquid Discharge (ZLD) Systems to treat and reuse wastewater from dyeing and processing units. Use air-dye technology and digital printing to reduce water consumption during fabric processing.
 - Textile units in Tiruppur, Tamil Nadu, adopted ZLD systems after facing a government-imposed shutdown due to pollution.
- Promote Fair Labour Practices and Skill Development: Encourage companies to obtain Fairtrade certification, ensuring ethical labour practices and improving India's global reputation.
- Strengthen Market Diversification and Export Competitiveness: Explore New Markets and Trade Agreements. Reduce over-reliance on the EU and USA by exploring African, Latin American, and ASEAN markets.
- Promote Technical Textiles: Focus on medical, agro, and defence textiles, which are growing segments globally.
 - India's rapid production of PPE kits during the pandemic showcased the potential of technical textiles.
- Strengthen Compliance and Certification Systems: Adopt Environmental Certifications. Promote compliance with global certifications like OEKO-TEX, GOTS (Global Organic Textile Standard), and Bluesign for sustainable production.
- Encourage Public-Private Partnerships (PPPs): Develop Textile Parks with Sustainability Goals. Establish green textile parks with shared infrastructure for waste treatment, renewable energy, and logistics.
 - The Integrated Textile Parks (SITP) can adopt eco-friendly practices to boost sustainability.
- o **Policy Support and Incentives for Sustainability:** Introduce Green Subsidies and Tax Incentives. Provide subsidies and low-interest loans for textile units adopting sustainable practices and renewable energy.

SCHEMES BY GOVERNMENT TO INCENTIVISE TEXTILE SECTOR:

Pradhan Mantri Mega Integrated Textile Region and Apparel (PM MITRA) Parks Scheme aims to develop world-class infrastructure including plug and play facility with an outlay of Rs. 4445 crores for a period up to 2027-28.

PLI Scheme for Textiles (2021-2030) is intended to promote the production of MMF Apparel & Fabrics and Technical Textiles products in India to enable the textile industry to achieve size and scale and become globally competitive.

The National Technical Textile Mission seeks to enhance domestic technical textile consumption while establishing the nation as a global leader in the field. By 2024, it hopes to increase the size of the domestic market to between \$40 billion and \$50 billion USD.

Amended Technology Upgradation Fund Scheme (ATUFS) to modernize the textile industry's technology, the government approved the "Amended Technology Upgradation Fund Scheme (ATUFS)" in 2015.

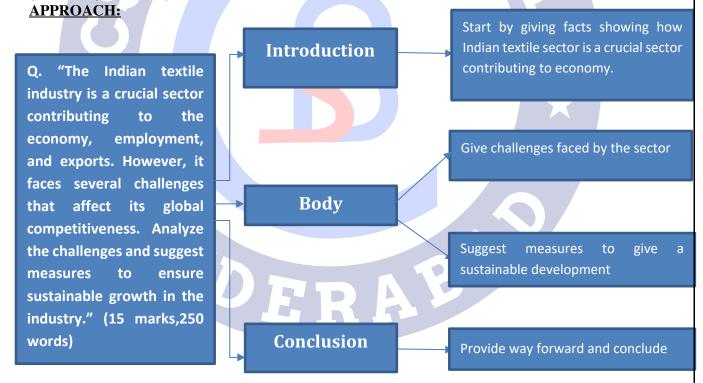
100% FDI (automatic route) is allowed in the textile and apparel sector in India.

The SAMARTH (Scheme for Capacity Building in the Textile Sector) for capacity building in the textile sector to alleviate the scarcity of trained people.

The **North East Region Textile Promotion Scheme** (NERTPS) is a program that supports all areas of the textile industry with infrastructure, capacity building, and marketing assistance. **Power-Tex India** includes innovative power-loom textile research and development, new markets, branding, subsidies, and worker welfare programs.

PRACTICE QUESTION:

Q. "The Indian textile industry is a crucial sector contributing to the economy, employment, and exports. However, it faces several challenges that affect its global competitiveness." Analyze the challenges and suggest measures to ensure sustainable growth in the industry. (15 marks,250 words)



MODEL ANSWER:

The Indian textile industry contributes 2.3% of GDP, 13% of industrial production, and 12% of total exports, providing employment to 45 million people directly and 100 million indirectly. The recently launched National Textile Policy 2024 seeks to address the issues by promoting technical textiles, sustainable practices, and technology upgrades.

CHALLENGES FACED BY INDIAN TEXTILE INDUSTRY:

1. **Outdated Technology and Infrastructure**: The handloom and power loom sectors rely on **obsolete machinery**, reducing productivity and increasing costs.

- 75% of weaving units in India are semi-automatic or manual, making them less efficient than counterparts in Bangladesh and China
- 2. Global Competition and Export Challenges: India faces stiff competition from Bangladesh, Vietnam, and China, which have better infrastructure and cheaper labor.
 - India's textile exports to Europe have declined due to Bangladesh's preferential trade agreements under the GSP scheme
- 3. Volatility in Raw Material Prices: Fluctuations in the prices of cotton, wool, and synthetic fibers impact production and profitability.
 - Cotton prices rose by 25-30% in 2021, leading to temporary shutdowns of units in Gujarat and Maharashtra
- 4. **Environmental and Sustainability Concerns**: The industry is **water-intensive** and generates pollution from untreated chemical waste.
 - Tiruppur's dyeing units were shut down in 2011 for environmental violations.
- 5. Labor Issues and Skill Gaps: The sector relies heavily on informal labor without adequate social security and faces skill shortages.
 - Around 80% of workers in the garment sector are women, but many lack formal contracts or benefits

MEASURES TO ENSURE SUSTAINABLE GROWTH

- Technology Upgradation and Green Manufacturing: Promote energy-efficient machines and introduce capital subsidies under the National Textile Policy 2024 for upgrading looms and machinery.
 - o **Example: Rooftop solar projects** in Tiruppur power textile factories sustainably
- 2. Adopt Circular Economy Practices: Encourage recycling and upcycling to reduce textile waste.
 - Example: Brands like Adidas have adopted recycled polyester from plastic waste—India can replicate similar models
- 3. Diversify Markets and Strengthen Technical Textiles: Explore new markets in Africa, Latin America, and ASEAN to reduce dependence on the EU and USA.
 - o Focus on **technical textiles** for medical, defense, and agricultural sectors.
 - Example: India's rapid production of PPE kits during COVID-19 showcased its potential in technical textiles
- 4. **Strengthen Skill Development Programs**: Launch **skill development programs** for modern textile techniques and **sustainable practices**.
 - Encourage Fairtrade certification to improve labor standards and enhance global reputation.
- 5. Water Conservation and Sustainable Practices: Implement Zero Liquid Discharge (ZLD) systems and adopt air-dye technology to reduce water usage.
 - Example: After environmental violations, textile units in **Tiruppur** adopted ZLD systems, ensuring compliance
- 6. Leverage Policy Support and Public-Private Partnerships (PPP): Develop green textile parks with shared infrastructure for waste management and renewable energy under PPP models.
 - o Introduce **green subsidies** and **tax incentives** to encourage sustainable practices and technology acquisition.

The Indian textile industry holds immense potential for growth, but addressing challenges related to technology, environmental sustainability, labor standards, and global competition is essential for long-term success. By adopting green technologies, promoting technical textiles, and ensuring market diversification, the industry can align with SDG goals and become globally competitive. With proactive policy support and public-private partnerships, India can position itself as a leader in sustainable textile production.