

NATIONAL FIBRE MISSION 2030-31

Concept Note

1. Introduction: India's Fibre Landscape

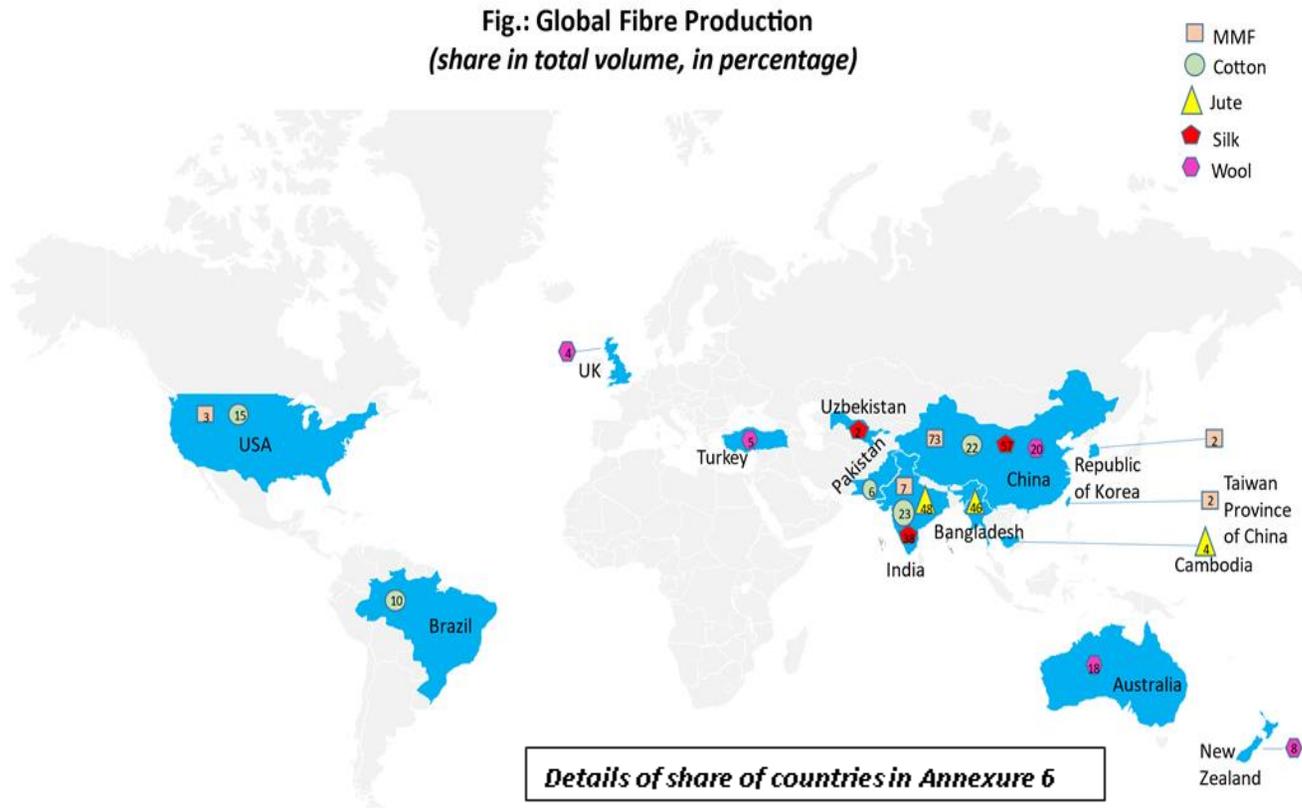
1. India's textile sector has historically been the backbone of the country's manufacturing and employment ecosystem. While cotton has traditionally dominated India's fibre consumption and production, the global market is increasingly shifting towards man-made and sustainable fibres. In line with global climate goals, sustainability has emerged as a key driver for innovation and competitiveness across the textile value chain. Recognising this transition, the Government of India launched the Mission for Cotton Productivity in 2025 to specifically focus on enhancing cotton yields and advancing new-age fibres such as flax, ramie, sisal, and bamboo. This National Fibre Mission, therefore, seeks to address the remaining critical segments: silk, wool, jute, and man-made fibres (MMF).

2. These sectors present significant untapped potential for India to position itself as a global hub for high-quality, and technologically advanced fibres. However, they are currently constrained by structural inefficiencies, low productivity, fragmented value chains, outdated infrastructure, and limited global competitiveness. This Mission proposes a comprehensive, multi-fibre strategy to unlock the potential of these sectors, with focused investments in production enhancement, infrastructure modernisation, skilling, research, and market development.

2. Current Status of Fibres in India

3. India's fibre landscape is inherently diverse but fragmented, encompassing natural, regenerated, and synthetic fibres that collectively sustain millions of livelihoods and contribute significantly to the economy. However, when benchmarked against global leaders, India's positioning is a mix of strength and opportunity. For instance, in jute, India accounts for over 50% of global production, yet countries like Bangladesh dominate global jute exports due to superior fibre quality and processing efficiencies. In silk, India is the second-largest producer globally, but still lags behind China, which accounts for nearly 53% of global silk production and has established unmatched scale and

quality. In the wool sector, India is constrained by the poor quality of indigenous wool and relies heavily on imports of fine Merino wool from Australia and New Zealand, while Italy and Peru command leadership in high-value woollen exports. Meanwhile, in man-made fibres (MMF), India is emerging as a significant player, ranking among the top producers of polyester and viscose, but continues to trail China, which alone contributes over 70% of global MMF output. This global benchmarking highlights India's inherent strengths in fibre diversity and scale but also underscores critical gaps in quality, technology, and market dominance that must be bridged to elevate its status as a global fibre hub.¹



¹ Trend in natural and manmade fibres trade, United Nations, 2023

2.1 Consumption and Production Trends

4. India's fibre consumption and production landscape over the past decade reflects a nuanced interplay between global textile dynamics and domestic policy shifts. A comparative analysis of data from 2010–11, 2017–18, and 2023–24 reveals a clear bifurcation: while cotton remains the bedrock of Indian fibre consumption, growth has stagnated; meanwhile, man-made fibres (MMF) have surged ahead, driven by industrial demand and synthetic versatility. Natural fibres such as silk, jute, and wool show uneven trajectories, and missed diversification opportunities.

5. Cotton, historically the cornerstone of India's textile economy, has maintained a steady consumption trajectory, standing at **5.39 million MT in 2023–24**. Production has moved from **5.61 million MT in 2010–11** to **5.58 million MT in 2017–18**, followed by a marginal dip to **5.53 million MT in 2023-24**. This indicates a mature, supply-aligned market with limited headroom for expansion. The plateau in cotton reflects both structural saturation and competition from synthetics, particularly as global preferences shift toward blended fabrics and functional textiles.²

6. In stark contrast, **man-made fibres (MMF)** have grown exponentially, reshaping India's fibre mix. Consumption has almost doubled—from **1.31 million MT in 2010–11** to **2.41 million MT in 2017–18**, and **4.43 million MT in 2023–24**. This surge is underpinned by affordability, consistency, and growing applicability in technical textiles, home furnishings, and fashion. On the supply side, India's MMF production capacity has dramatically scaled, from **6.25 million MT in 2019–20** to **7.50 million MT in 2023–24**,³ suggesting successful backward integration and policy support. This trend clearly signals India's pivot toward synthetic fibres, aligned with global demand patterns and export ambitions.

² Cotton Corporation of India

³ Textile Committee , ASFI, Industry Research

7. Among natural fibres, **silk** emerges as the most resilient. Consumption increased steadily from **26,230 MT in 2010–11** to **35,618 MT in 2017–18**, and further to **41,563 MT in 2023–24**, indicating sustained domestic demand, particularly in the high-value apparel and ethnic wear segments. Production also improved—from **20,410 MT in 2010–11** to **31,906 MT in 2017–18**, reaching **38,913 MT⁴** in the latest period. Though demand slightly outpaces supply, the narrowing gap reflects strengthened sericulture practices, R&D investments, and a gradual move toward export-oriented silk value chains.

8. Jute, on the other hand, reveals stagnation. Production declined from **1.8 million MT in 2010–11** to **1.37 million MT in 2017–18**, with a marginal recovery to **1.62 million MT in 2023–24⁵**. This mirrors a demand slump, attributable to over-reliance on traditional packaging applications and limited innovation in product diversification. Despite India’s natural comparative advantage in jute cultivation, the fibre remains underleveraged, lacking integration into modern textiles or composites.

9. Wool reflects the sharpest disconnect between demand and domestic supply. Consumption fell from **137,765 MT in 2010–11** to **121,420 MT in 2017–18**, with a slight rise to **126,180 MT in 2023–24**. However, production has continuously declined—from **43,300 MT in 2010–11** to **41,470 MT in 2017–18**, and further to **33,980 MT in 2023–24⁶**. This growing mismatch has led to increased import dependence. India’s wool sector suffers from outdated processing infrastructure, weak value addition, and fragmented production systems—issues yet to be addressed at scale.

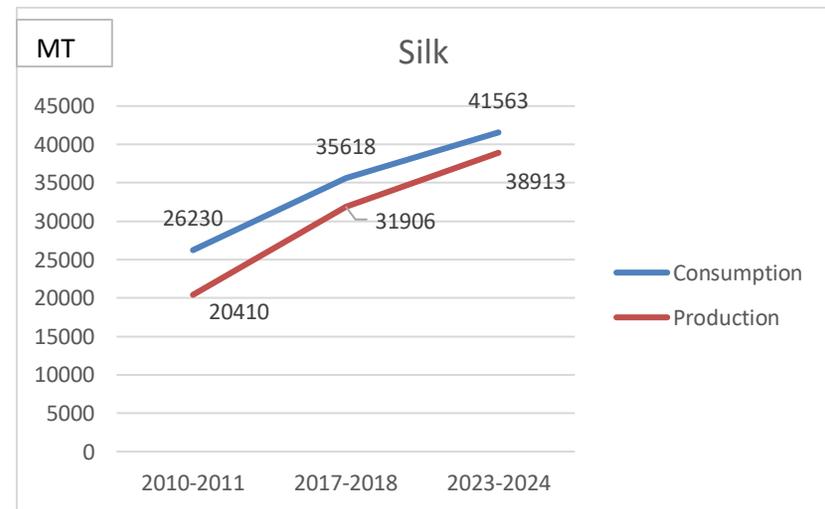
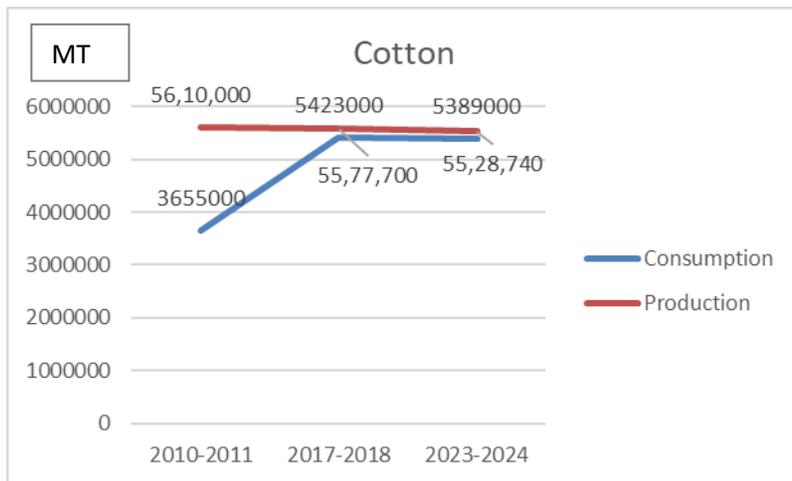
10. Collectively, these figures point to a broader realignment in India’s fibre economy. This realignment is shaped by both **demand evolution** and **fibre typology shifts**. Cotton continues to remain the backbone of India’s fibre economy, sustaining its central role in everyday wear and mass-market consumption. However, the overall fibre basket is diversifying: MMF is increasingly finding applications in technical textiles, sportswear, and fast fashion, while silk is consolidating its position in premium and export-driven categories. Meanwhile, jute and wool,

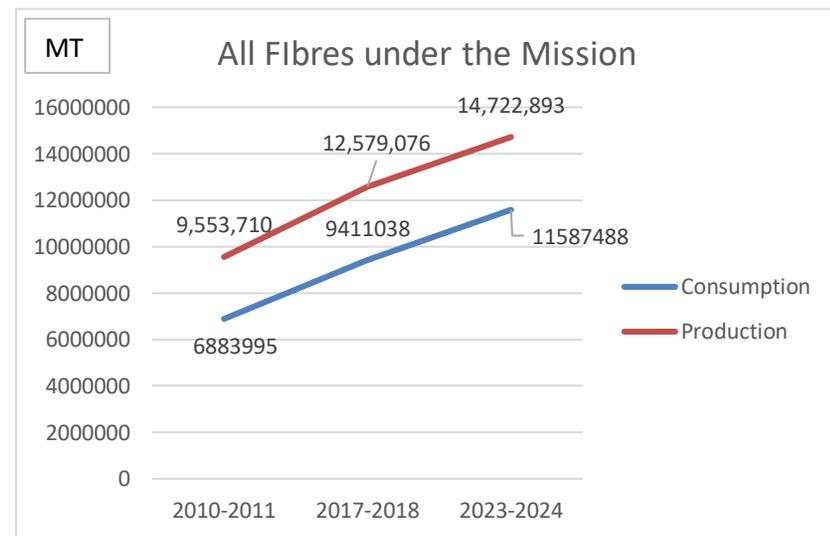
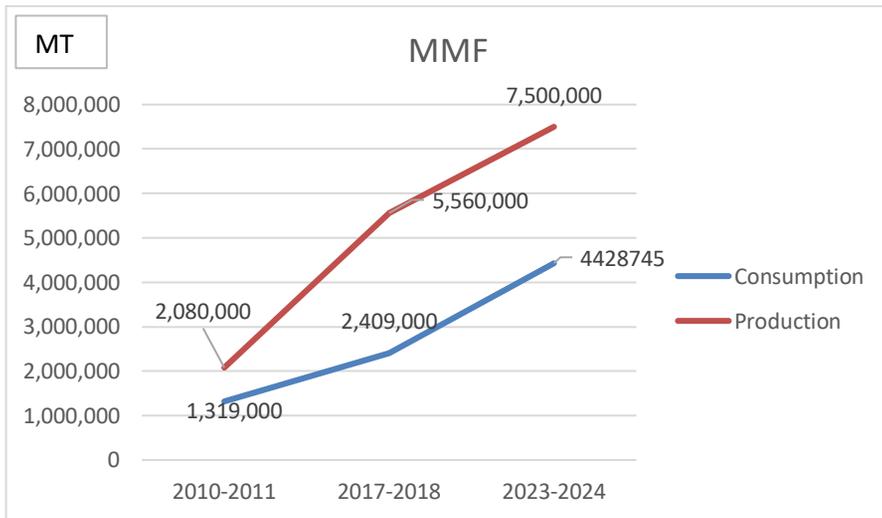
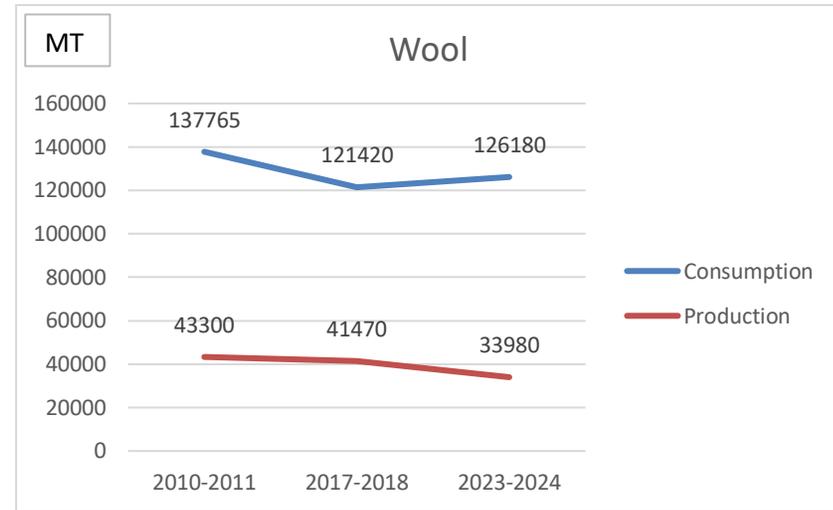
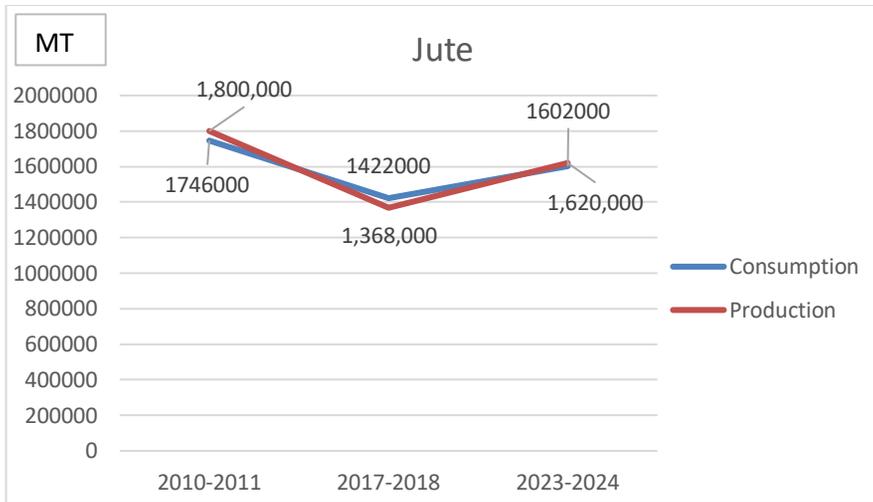
⁴Central Silk Board

⁵ National Jute Board

⁶ Central Wool Development Board, Department of Animal Husbandry and Dairying

though facing demand pressures, hold untapped potential in eco-friendly packaging, furnishings, and niche high-value apparel if backed by innovation and branding. The typology of fibre use is moving from a single-fibre centric model toward a **more balanced, multi-fibre ecosystem**, where complementarities between natural and synthetic fibres can be leveraged to meet both domestic and global demand. The **National Fibre Mission 2030-31** proposes a fibre-neutral approach—promoting efficiency and value addition across all fibre categories. The Mission focuses on three pillars: **modernising cultivation and processing of natural fibres, scaling fibre infrastructure, and building traceability and branding systems to enhance market access**. If effectively implemented, the policy has the potential to revitalise underperforming sectors like wool and jute, while consolidating India’s emerging leadership in MMF and silk. Ultimately, a diversified, innovation-driven fibre strategy will be critical for India to secure a competitive and sustainable position in the global textile value chain.





2.2 Brief overview of all fibre segments

Cotton

11. Cotton remains a cornerstone of India's agriculture and economy, contributing **19% to global production** and **supporting over 6 million farmers**. The textile industry depends heavily on cotton, with a 60:40 cotton-to-non-cotton fibre consumption ratio, significantly higher than the global average of 25:75. India leads the world in cotton acreage, covering **114.47 lakh hectares** (36% of global cotton area). However, 67% of cotton cultivation is rain-fed, impacting yield, which stands at an average of 439kg/hain the last 5 years (i.e. from cotton season 2020-21 to 2024-25) ranking 35th globally. Despite productivity challenges, India remains the **second-largest cotton producer, contributing 5.41 million metric tons (MMT) in the last 5 years and 21.19% of global consumption**. Cotton textile exports are projected to rise at **10.7% CAGR**, increasing from \$11.8 billion to \$24 billion by 2030. A **Mission for Cotton Productivity** has been assigned to Department of Agricultural Research & Education (Lead Department) and Ministry of Textiles for implementation. This five-year mission aims to drive **significant improvements in cotton productivity and sustainability**, with a focus on promoting extra-long staple (ELS) cotton varieties. Farmers will receive cutting-edge scientific and technological support, enabling higher yields, better fibre quality, and improved resilience against climate and pest challenges.

New age Fibres

12. New age Natural fibres, composed primarily of **ligno-cellulosic fibres** such as **Ramie, Milkweed, Sisal and Flax**, are innovative and sustainable materials derived from plants and other natural sources, offering **eco-friendly alternatives to traditional textiles and synthetic materials**. These fibres, often sourced from fast-growing plants, are gaining popularity in industries like fashion, home textiles, technical textiles including composites, due to their unique properties and reduced environmental impact. Natural fibres like ramie, sisal, and flax hold immense economic and ecological value both in India and abroad, offering sustainable alternatives to synthetic fibres across the textiles value chain, composites, and other industrial applications. In India, where rural livelihoods are largely agro-based, the improvement and promotion of these underutilized crops can drive rural employment, income diversification, and agro-industrial development. Despite their eco-friendly

and remunerative nature, **these crops remain apparently underexploited** due to their limited genetic improvement and farmer awareness. **India's New Age Fibre Mission (MM-III)** aims to position the country as a global leader in sustainable, high-quality fibre production by advancing climate-smart cultivation, mechanization, and innovation. The initiative will drive demand for allied natural fibres, fostering their integration into the textile industry and promoting eco-friendly alternatives to synthetic materials. **A critical component of the mission is the optimization of cultivation practices.**

Specialty Fibres

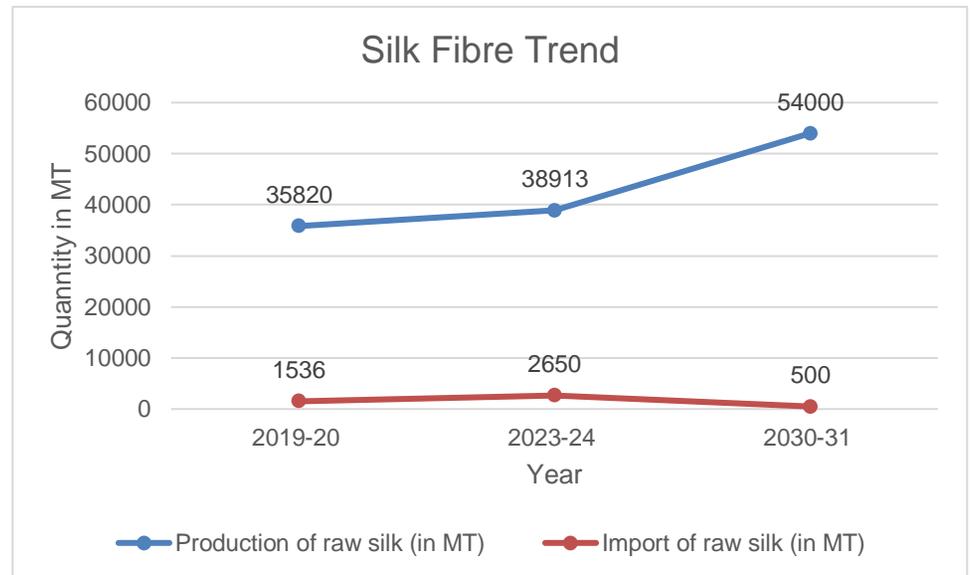
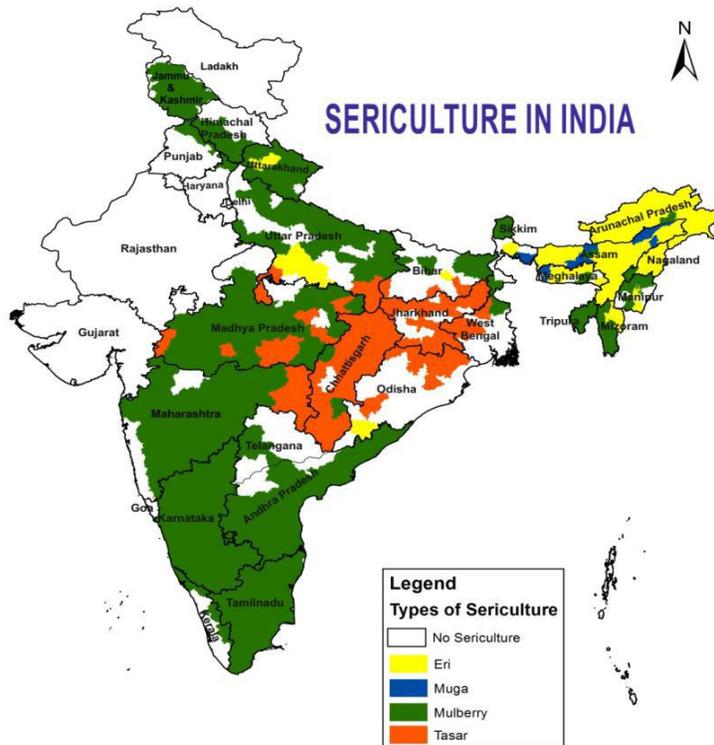
13. **Specialtyfibres** are high-performance materials engineered to provide **superior properties** such as **heat resistance, flame retardancy, high tensile strength, chemical stability**, and other advanced functional capabilities, making them vital for the **technical textiles sector**. These include **aramids, carbon fibre, glass fibre, PBO, PTFE, and antimicrobial fibres**, with applications across **defence, aerospace, automotive, medical, protective clothing, infrastructure, and energy**. Globally, **production of specialityfibres** is concentrated in **advanced economies**, while **India's fibre portfolio** remains dominated by **regular synthetic fibres**, with **very limited indigenous production** of speciality variants. As a result, **most specialityfibres used in India are imported**, creating **dependency and supply chain vulnerabilities**. However, with **rising demand in strategic sectors** such as defence, healthcare, construction, and mobility, there is a strong case for **developing domestic capability** in specialityfibre manufacturing. Recognizing this imperative, the **National Technical Textiles Mission (NTTM)** already provides a **schematic intervention** to support **R&D, commercialization, and scaling** of specialityfibres.

Silk

14. India's raw silk production stood at **35,820 MT in 2019–20** and rose to **38,913 MT by 2023–24**, registering a modest **CAGR of 2.09%**. This growth, while positive, has been relatively slow compared to the rising domestic demand for silk, especially in the high-value ethnic wear, luxury apparel, and export segments. The next phase of growth is more ambitious: by 2030–31, **production is targeted at 54,000 MT, requiring a significantly higher CAGR of 4.8%**. This implies that India must more than double the pace of production growth in the coming years. To achieve this, the sector will require large-scale interventions in quality seed multiplication, expansion of mulberry acreage, improved chawki rearing practices, and disease-resistant silkworm breeds. Additionally, modernising reeling and re-reeling technologies,

expanding cluster-based production systems, and integrating sericulture with farmer skilling and women-led SHGs will be critical. This acceleration is not merely about meeting numbers; it is about aligning India's silk output with global benchmarks, reducing supply gaps, and positioning the country as a global leader in premium silk fibre production.

15. On the import front, India's dependence on raw silk has been rising in recent years. **Imports jumped from 1,536 MT in 2019–20 to 2,650 MT in 2023–24, showing a steep CAGR of 14.61%.** This surge reflects structural weaknesses in domestic capacity to meet both the volume and quality demanded by industry, particularly in bivoltine silk required for high-end apparel. However, the future outlook projects a sharp reversal, with imports expected to fall drastically to 500 MT by 2030–31, marking a negative CAGR of –21%. This trend signals a deliberate policy push towards self-reliance and import substitution, in line with the Atmanirbhar Bharat vision. The National Fibre Mission

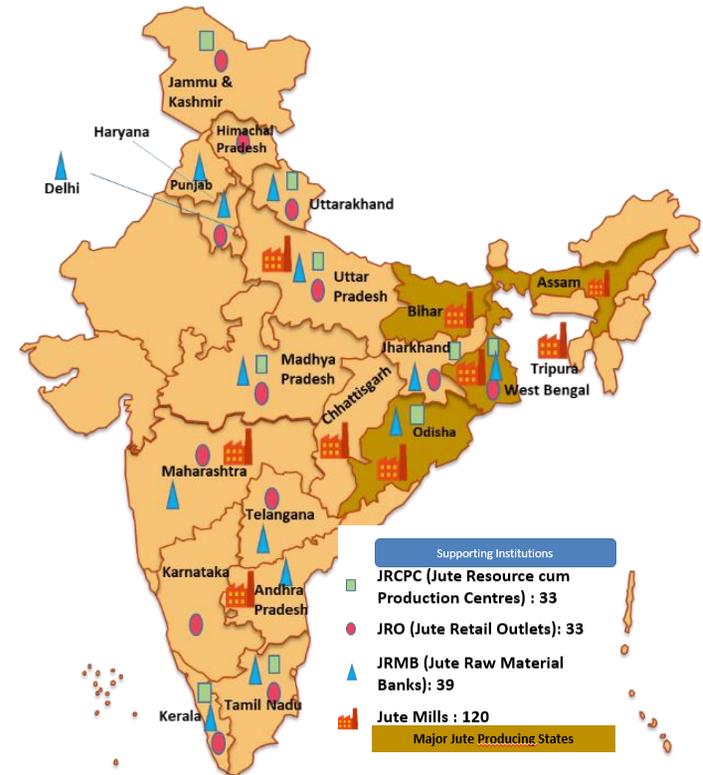
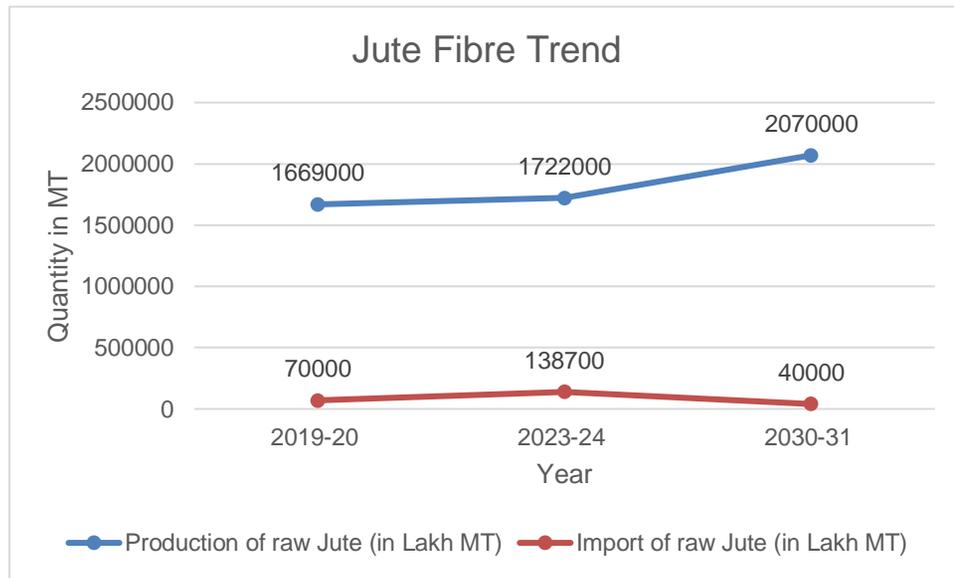


will play a pivotal role in enabling this transformation by fostering domestic production, improving quality certification, and ensuring traceability. By strengthening domestic supply chains and building resilience, India can not only reduce its vulnerability to global price fluctuations but also establish its silk sector as a competitive, self-sustaining, and export-oriented industry.

Jute

16. India's raw jute **production was 16.69 lakh MT in 2019–20 and rose marginally to 17.22 lakh MT in 2023–24**, reflecting a sluggish CAGR of just 0.78%. This near-stagnant growth indicates structural bottlenecks in the sector, including low-yielding seed varieties, limited retting infrastructure, and continued reliance on traditional farming practices. **To achieve the ambitious target of 20.7 lakh MT by 2030–31**, production must grow at 2.66% CAGR—over three times the pace of the last four years. Meeting this trajectory will require interventions in certified seed supply, mechanised sowing and harvesting, improved retting methods, and climate-resilient jute varieties. Moreover, diversification of jute beyond sacking into high-value applications—geo-textiles, agro-textiles, and composites—will be key to enhancing farmer income, improving fibre demand, and sustaining long-term growth. The National Fibre Mission provides an opportunity to revitalise this stagnant sector by aligning production with innovation and market diversification.

17. On the import front, India has seen a worrying rise in raw jute dependency. **Imports increased from 0.7 lakh MT in 2019–20 to 1.387 lakh MT in 2023–24, recording a sharp CAGR of 18%.** This surge highlights challenges in domestic fibre quality and availability, as well as competition from low-cost imports. However, the outlook is designed to reverse this dependence, with imports projected to fall to **0.4 lakh MT by 2030–31**, reflecting a strong negative CAGR of **–16.28%**. This sharp reduction is expected to be achieved through domestic



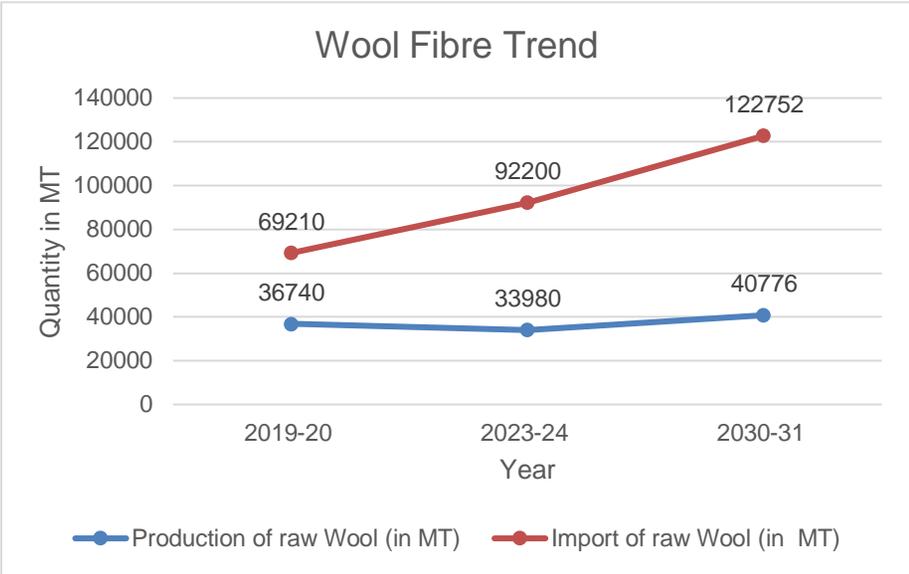
productivity gains, modernised retting infrastructure, and diversification into premium jute products, thereby reducing the need for imports. **For India’s jute industry—valued at around ₹30,000 crore by 2025–26—import substitution is critical to ensure self-reliance and to strengthen India’s leadership in sustainable fibres.** By focusing on quality enhancement and innovation, the Mission can reposition jute as a globally competitive, eco-friendly fibre of the future.

Wool

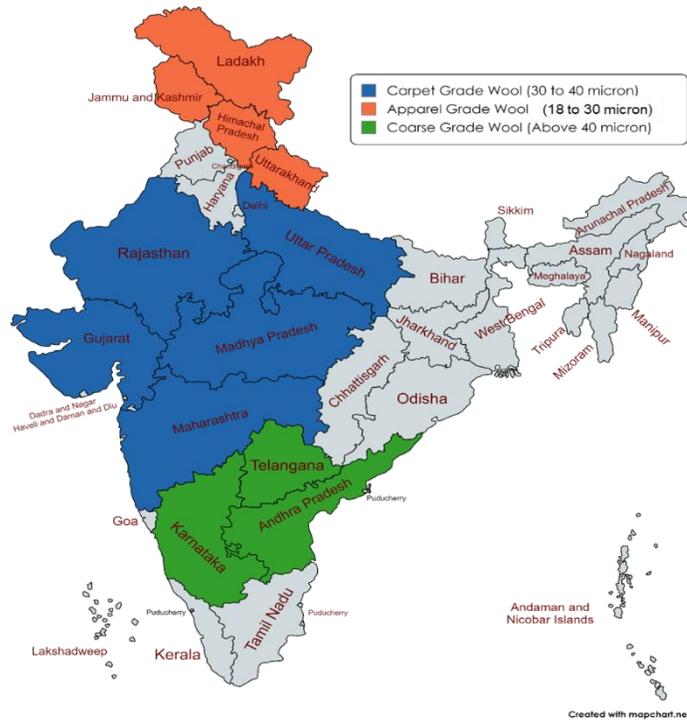
18. India's wool production has been on a consistent decline, **falling from 36,740 MT in 2019–20 to 33,980 MT in 2023–24, recording a negative CAGR of –1.93%**. This decline reflects systemic challenges, including poor indigenous sheep breeds with low wool yield, inadequate fodder resources, outdated shearing practices, and fragmented production systems. The quality of Indian wool is generally coarse, limiting its use to carpets and blankets, while fine apparel-grade wool continues to be imported. **To achieve the target of 40,776 MT by 2030–31, production must grow at a CAGR of 2.64%**, reversing the current downward trajectory. This will require a multi-pronged approach under the National Fibre Mission, including scientific breeding for quality improvement, fodder development, modernised shearing and grading, and convergence with animal husbandry and rural livelihood programmes. Special focus on conserving indigenous breeds such as Magra, Chokla, and Nali, alongside crossbreeding with fine wool varieties, can enhance productivity and fibre quality. Furthermore, cluster modernisation in traditional hubs like Ludhiana, Panipat, and Amritsar with energy-efficient scouring and processing infrastructure will be critical to transforming wool into a competitive sector.

19. India's dependence on imported wool has been steadily increasing to bridge the gap between domestic supply and industrial demand. **Imports rose from 69,210 MT in 2019–20 to 92,200 MT in 2023–24, with a CAGR of 4.18%**, and are **projected to further rise to 1,22,752 MT by 2030–31, continuing at nearly the same CAGR of 4.17%**. A majority of these imports consist of fine Merino wool from Australia and New Zealand, which is critical for the production of high-value apparel exports. This rising dependence highlights India's vulnerability to global market fluctuations, currency risks, and supply chain disruptions. According to the **Standing Committee On Labour, Textiles And Skill Development Briefing Note dated 06.08.2025**, the wool sector in India is hindered by lack of governmental prioritization towards sheep farming, poor animal health, traditional rearing practices, scarcity of pastureland, and weak marketing system affecting raw wool production and fair prices. The processing segment faces outdated and insufficient pre-loom and post-loom facilities, lack of modern design and diversification in woollen products, dearth of skilled labour, and inadequate knowledge transfer. Limited research and development, shortfall in innovative technology, insufficient branding efforts, unavailability of wool in desired quality and quantity, lengthy

chain of intermediaries, and branding deficiencies constrain growth. To mitigate this, the National Fibre Mission seeks to enhance domestic wool availability through indigenous breed improvement, scientific fodder management, and better animal health practices. Additionally, incentivising domestic aggregation and strengthening wool marketing boards can reduce post-harvest losses and increase the share of domestic wool in industrial use. While import substitution may not be fully feasible in the short term due to quality constraints, a gradual reduction in dependency can be achieved by upgrading local wool quality, diversifying product applications, and investing in recycled and blended wool technologies. This strategy will not only reduce external vulnerability but also ensure India's wool sector contributes meaningfully to the country's growing textile economy.



Grade Wise Sheep Wool Production in India

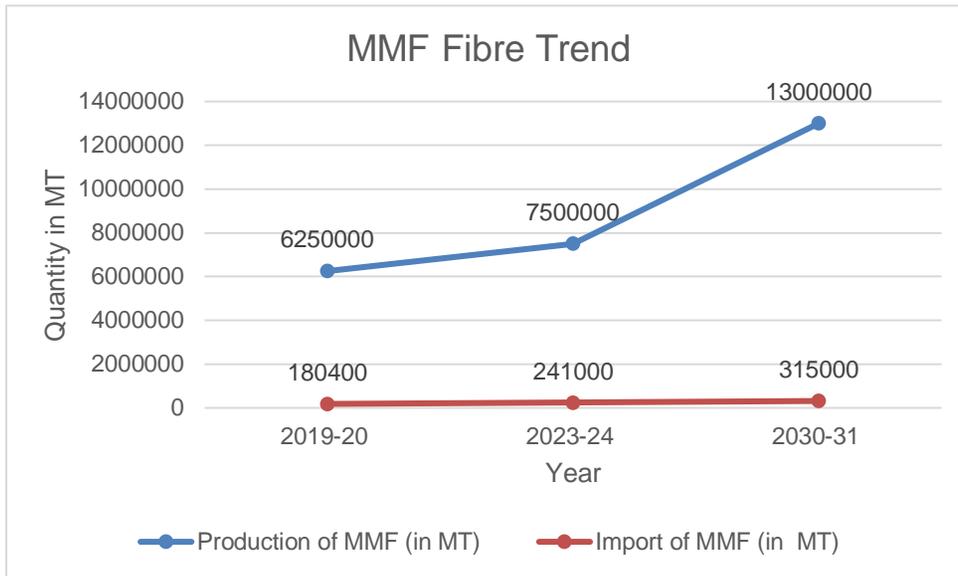


Man-Made Fibres (MMF)

20. The MMF sector is a cornerstone of India's synthetic textile value chain, contributing approximately **₹13,61,300 crore to the economy in 2024-25**. MMFs are critical for high-growth categories such as technical textiles, sportswear, automotive fabrics, and home furnishings, with substantial potential for export expansion. However, downstream manufacturing is often constrained by fragmented value chains, technology gaps in processing, and limited domestic availability of certain specialty fibres.

21. India's raw MMF production has shown consistent growth, rising from **62.5 lakh MT in 2019-20 to 75 lakh MT in 2023-24, reflecting a CAGR of 4.66%**. This growth is projected to accelerate sharply to **130 lakh MT by 2030-31**, with a **CAGR of 8.17%** during the latter period. The proposed National Fibre Mission will play a catalytic role in driving this expansion by promoting raw material diversification, upgrading manufacturing technology, improving energy and water efficiency, and incentivising investment in advanced polymer production. By addressing critical gaps in domestic capability, the mission will strengthen India's competitive position in global MMF markets.

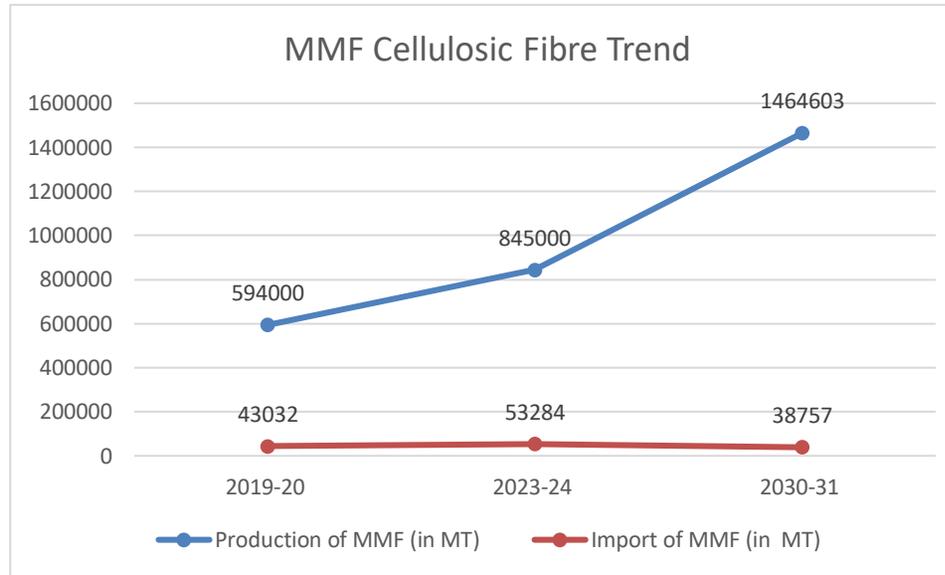
22. India's MMF import dependence has been relatively stable but continues to reflect reliance on specialised fibres not manufactured domestically. Imports increased from **18.04 lakh MT in 2019-20 to 24.1 lakh MT in 2023-24**, growing at a CAGR of 7.51%, and are expected to reach **31.5 lakh MT by 2030-31** at a CAGR of 4.0%. This steady rise underlines the need for targeted interventions to build domestic capacity for high-value MMF variants. **The National Fibre Mission will address this challenge by fostering R&D for advanced fibres, facilitating joint ventures with global producers, and supporting capital investments for backward integration.**



A. MMF Cellulosic

23. India’s cellulosic MMF production has grown steadily, **increasing from 5.94 lakh MT in 2019-20 to 8.45 lakh MT in 2023-24**, reflecting a **CAGR of 7.3%**. This growth is projected to accelerate further, **reaching 14.65 lakh MT by 2030-31 at a CAGR of 9.6%**. The National Fibre Mission is expected to be a key enabler, driving this expansion through technology upgradation, sustainable fibre production, and diversification into newer cellulosic variants. By fostering efficiency in resource utilization and strengthening domestic raw material supply, the mission will enhance India’s global competitiveness in cellulosic fibres.

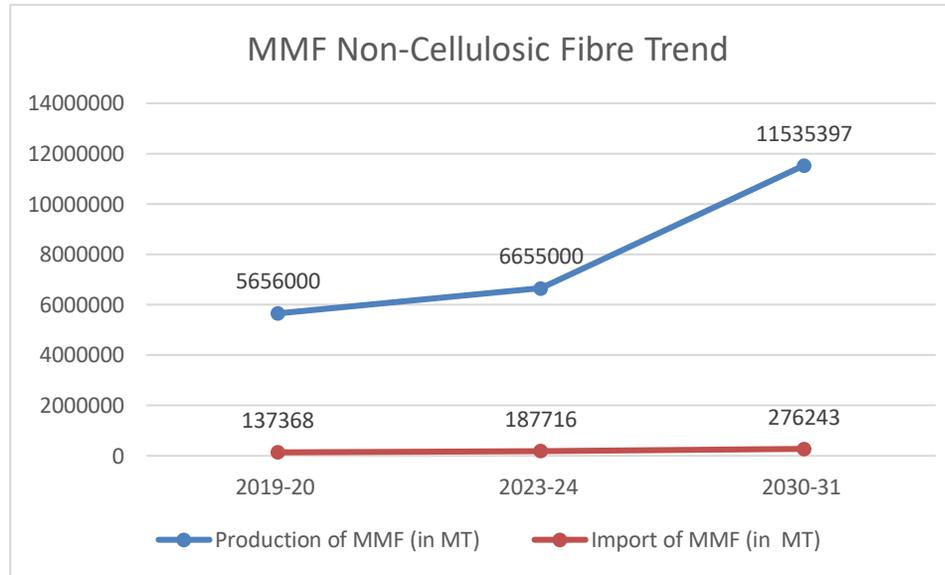
24. Cellulosic MMF imports have shown volatility, **increasing from 0.43 lakh MT in 2019-20 to 0.53 lakh MT in 2023-24, before moderating to 0.39 lakh MT by 2030-31, with an overall negative CAGR of -5.17% in the latter period.** This indicates a strengthening domestic capacity to substitute imports, particularly in staple cellulosic fibre grades. However, selective import dependence for specialised high-value fibres remains, which the mission will address through R&D investments and collaborations with global leaders.



B. MMF Non-Cellulosic

25. India's **non-cellulosic MMF production has risen from 56.56 lakh MT in 2019-20 to 66.55 lakh MT in 2023-24, with a CAGR of 3.31%. Growth** momentum is expected to accelerate significantly, **reaching 115.35 lakh MT by 2030-31, with a strong CAGR of 9.61%.** This surge reflects rising domestic and export demand for polyester, nylon, and technical fibres, which form the backbone of the global synthetic textile market. The National Fibre Mission will catalyse this growth by expanding polymer capacity, promoting recycled MMF production, and incentivising investment in advanced petrochemical value chains.

26. Imports of non-cellulosic MMF have also increased, from 1.37 lakh MT in 2020-21 to 1.88 lakh MT in 2024-25, and are projected to reach 2.76lakh MT by 2030-31, growing at a CAGR of 6.65%. This steady reliance on imports highlights India’s dependence on specialisedfibres and functionalised polymers. The mission will address this through domestic innovation ecosystems, technology partnerships, and fiscal support for high-value fibre manufacturing.



2.3 Existing Schemes for the Fibre Sector

27. Over the last decade, the Ministry of Textiles has undertaken a series of targeted interventions aimed at transforming India’s fibre and textile ecosystem into a more self-reliant, technologically advanced, and globally competitive sector. These efforts span across major fibre

categories—including silk, wool, and jute—through comprehensive schemes that address both supply and demand-side challenges, while supporting sectoral growth and livelihood generation.

Silk

28. In support of the silk sector, the Ministry has implemented several critical schemes aimed at strengthening the entire value chain—from host plant cultivation and silkworm rearing to yarn production and post-cocoon processing. The latest scheme, **Silk Samagra-2** (2021–26) is a continuation and expansion of the earlier Silk Samagra initiative, aiming to enhance the quality and productivity of silk through a comprehensive approach. The ongoing scheme has a broad focus on Research and Development, Training and Capacity Building, Transfer of Technology and IT Initiatives, Strengthening of Seed Organizations, Coordination and Market Development, Quality Certification Systems (QCS) and Export Brand Promotion, and Technology Upgradation across the value chain. A significant thrust of Silk Samagra-2 is the promotion of high-quality Bivoltine silk, developed as an import substitute. This initiative is aimed at reducing India’s dependence on imported raw silk and bolstering domestic silk production through improved productivity, quality, and traceability.

Interventions	Achievements	Lags
Cluster Promotion Programme (CPP)	Organized 51 clusters, increased cocoon productivity, enhanced farmer incomes	Delayed cluster mobilisation, limited reach in remote areas
Soil to Silk Scheme	Expansion of plantation areas, improved seed and cocoon quality	Insufficient monitoring, gaps in irrigation facilities
Seed Sector	Improved bivoltine seed production, established grainages	Shortfalls in quality seed distribution, uneven access to services
R&D & Training	Developed new technologies, conducted farmer trainings	Limited adoption of technologies, weak extension services
ICT Initiatives	Rolled out mobile-based advisory services, improved market information access	Low penetration of ICT in tribal/rural belts
Women Empowerment	Promoted women’s participation in sericulture, SHG formation	Uneven participation across regions, limited leadership roles
Convergence with Schemes	Linked with MGNREGA and other schemes for infrastructure support	Coordination gaps between departments, delays in fund convergence

Challenges: *Inadequate training in modern sericulture and disease control, Low productivity from outdated practices and weak seed quality by private players, Inconsistent silk quality hurting market competitiveness, Infrastructure gaps and limited tech adoption, Unorganized markets and funding delays*

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Jute

29. To revitalise the jute sector and enhance its economic and environmental potential, the Ministry of Textiles is implementing the Jute Development Scheme that addresses productivity, modernization, market access, and social welfare:

Interventions	Achievements	Lags
Jute ICARE (Improved Cultivation and Advanced Retting Exercise)	Expanded area under certified seed, increased productivity, adoption of line sowing and CRIJAF SONA retting technology	Limited coverage across jute farmers, weak extension, adoption gaps in retting tanks
Jute Diversification Scheme (JDP)	Supported over 300 JDP units, promoted diversified jute products like shopping bags, floor coverings, and handicrafts	Technology obsolescence in units, limited design innovation, weak market linkages
Mandatory Packaging in Jute Materials Act (JPMA)	Created assured demand for jute sacking bags, stabilised farmer incomes, reduced import dependency	Over-reliance on sacking segment, weak compliance monitoring, slow diversification
Jute Raw Material Bank (JRMB) Scheme	Provided yarn/cloth at mill gate rates to MSMEs, ensured raw material availability for small producers	Limited geographical spread, inadequate awareness among artisans and MSMEs
Market Promotion & Export Development	Participation in international fairs, buyer-seller meets, branding of Indian jute in select markets	Exports remain stagnant, inadequate brand visibility, limited penetration into premium markets

⁷ Third Party Evaluation of Central Sector Scheme Silk Samagara-II, AFC India Ltd, 2025

Jute Geo-Textiles & Agro-Textiles	Field trials for soil erosion control, road construction, and agro-mulching; demonstrated environmental benefits	Low commercial uptake, lack of standards and specifications, limited policy push
Skill Development & Training	Trained artisans and workers in diversified products, established training centres	Training not linked with sustained employment, low placement rates
Research & Development	Development of new retting, spinning, and weaving technologies, pilot projects on bio-composites	Weak technology transfer to field, inadequate industry adoption

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Challenges: Sub-optimal raw jute quality and supply constraints, Inadequate retting and mechanisation facilities, Outdated machinery and low-tech investment, Gaps in infrastructure and product innovation, High costs, and bulky products,, Cumbersome documentation and compliance processes, Weak branding and limited global coordination, Inconsistent quality and standardisation gaps, Inadequate training and post-support systems

Wool

30. To ensure the holistic development of the wool sector, the Ministry of Textiles is implementing the **Integrated Wool Development Programme (IWDP)** during the **15th Finance Commission period (FY 2021–22 to FY 2025–26)**. The programme is supported by a total financial outlay of **₹126 crore** under a **100% centrally funded model**. The **Central Wool Development Board (CWDB), Jodhpur**, has been designated as the **nodal agency** for implementation across all major wool-producing states.

Interventions	Achievements	Lags
Sheep & Wool Improvement Scheme (SWIS)	Covered large sheep population, health care through deworming & vaccination, some genetic improvement	Limited breed coverage, low conception in AI, inadequate extension
Pashmina Promotion Programme (PPP)	Distributed pashmina dehairing machines, improved raw pashmina availability, supported Changthangi goat rearers	Harsh climate constraints, weak market linkages, limited fodder/feed support

⁸ Mid- Term Evaluation Study of various schemes under NJDP, 2025

Wool Processing & Marketing Scheme (WPMS)	Supported woolen mills and processing units, created market linkages, provided shearing machines	Poor adoption of machines, weak utilisation of funds, limited modernisation
HRD & Capacity Building	Trained shepherds, shearers, and artisans; improved awareness on grading and processing	Trainings not linked to jobs, low participation of women/youth, weak follow-up
R&D and Testing Infrastructure	Set up wool testing labs, introduced grading systems	Labs underutilised, weak enforcement of grading, limited awareness among producers
Support for Tribal/Backward Areas	Provided feed/fodder and healthcare in remote sheep belts	Inadequate supply chain, irregular services, poor monitoring
Breed Conservation Initiatives	Efforts to conserve Magra, Nali, and Chokla breeds	Limited scale, lack of structured breeding policy, weak AI network

Challenges: Agency selection lags, Monitoring gaps, Limited stakeholder outreach and uneven geographic coverage, inadequate post-training support and lack of employment linkages, delayed Revolving Fund rollout and ineffective digital platforms, limited market access, continuity gaps, and need for expanded fodder security and institutionalized marketing.

9

MMF

31. The Ministry of Textiles is implementing the **Production Linked Incentive (PLI) Scheme for Textiles**, with an outlay of ₹10,683 crore, which is providing a **major boost to MMF apparel and fabric production, promoting scale, employment generation, and import substitution**. The scheme enables Indian manufacturers to compete with global leaders by facilitating cost-effective domestic production and strengthening global value chain integration. However, the PLI scheme focuses on downstream MMF fabrics and apparel. The sector's

⁹ Evaluation Report on IWDP- Schemes, Datamation Groups of Company, 2025

growth and global competitiveness will depend on ensuring availability, accessibility, and affordability of MMF through capacity expansion at the fibre and yarn stage, particularly for PET.

2.4 Rationale of the Mission

32. To realise India's Vision 2030 of achieving a \$350 billion textile and apparel industry, ensuring a robust and future-ready raw material base is imperative. Raw fibres are the foundational input for the entire textile value chain, and their availability, quality, and competitiveness will directly determine India's ability to emerge as a global leader. While independent schemes for cotton, silk, jute and wool have existed for decades, they have operated in silos with limited convergence, resulting in fragmented outcomes and underutilised synergies. The Hon'ble Prime Minister has repeatedly underscored the need for a comprehensive, holistic, and globally benchmarked approach for the textile sector that integrates production, innovation, and sustainability across the spectrum. A National Fibre Mission is, therefore, envisaged as a unifying framework to align all fibre segments with global trends, promote high-value and sustainable fibres, modernise infrastructure, drive quantity and quality, and enhanced research and skilling. This Mission will enable India to address structural inefficiencies, bridge quality gaps, and position itself against global leaders like China, Bangladesh, and Italy in raw material preparedness.

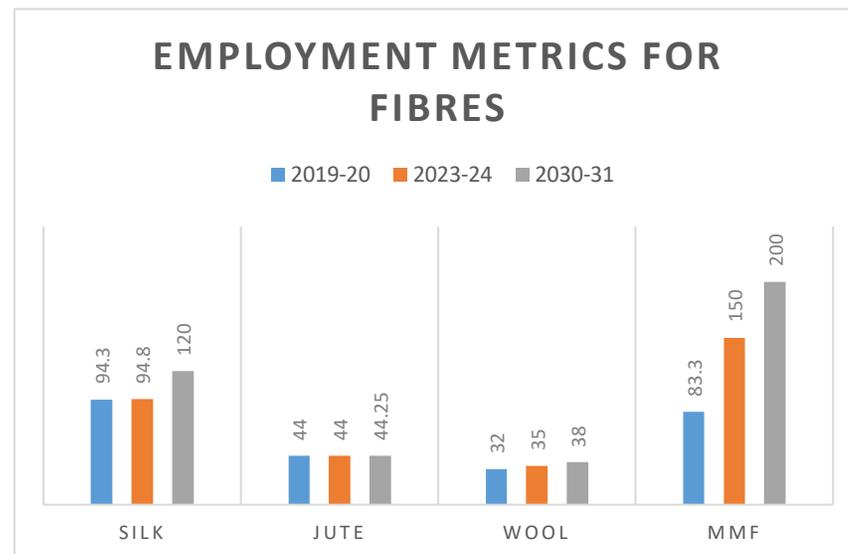
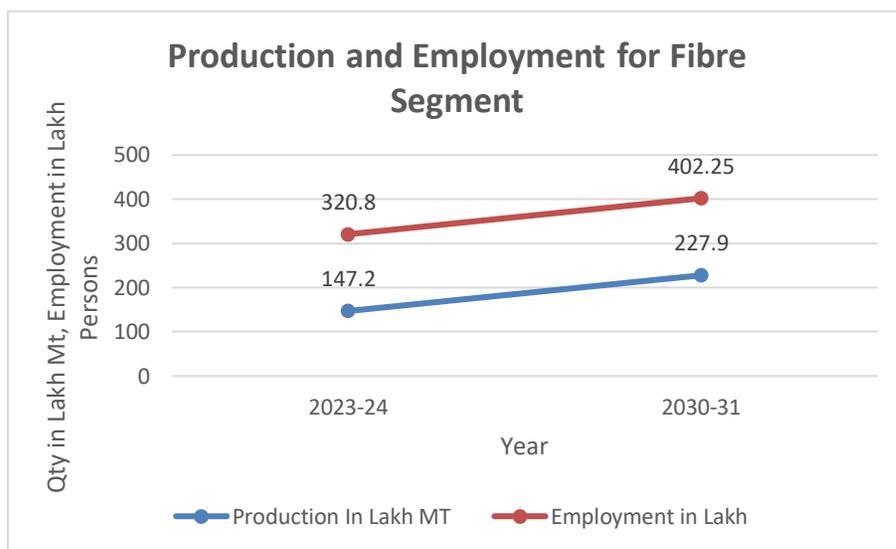
2.4.1 Impact of the Mission on the Employment

33. The National Fibre Mission (NFM) will also have a **transformational impact on employment and employability**. Over the period from 2023-24 to 2030-31, fibre production is expected to rise sharply from **147.2 lakh MT to 228.1 lakh MT**, driven by capacity expansion, technological upgrades, and productivity improvements in both natural and manmade fibres. This substantial increase in output will require a parallel expansion in the workforce, with employment projected to grow from **320.8 lakh to 402.25 lakh—a net addition of over 80 lakh jobs**.

34. The NFM's interventions—such as improving raw material availability, modernizing processing facilities, supporting skill development, and facilitating market access—will ensure that this employment growth is not just in low-skill areas but also in higher-value, technology-

enabled segments. By strengthening the entire fibre value chain, the NFM will serve as a key employment driver, enabling inclusive growth, empowering women and small entrepreneurs, and positioning India as a competitive global supplier of quality fibres and textiles.

35. This combined focus on production expansion, skill enhancement, and industry competitiveness will ensure that employment generation under the NFM is sustainable, geographically widespread, and aligned with future market demands.



2.5 Stakeholder Convergence and Unified Action

36. The National Fibre Mission is not merely a consolidation of schemes, it is a strategic platform to enable convergence across ministries, departments, fibre boards, and implementing agencies. India's fibre sector has historically functioned in silos, with distinct institutions overseeing jute, silk, wool, &MMF, and limited coordination with allied domains such as agriculture, animal husbandry, horticulture, forests, rural development, and skill development. Yet, **fibre ecosystems are deeply interdependent**. For example, silk production relies not only on

sericulture interventions but also on the **horticulture department** for the promotion of host plants like mulberry and on the **forest department** for the protection and sustainable utilisation of forest areas crucial for rearing eri, tasar, and muga silkworms. Similarly, jute productivity depends on improved farming and retting practices supported by the **agriculture department**, and wool sector revival is tied to veterinary services and pastureland governance under **animal husbandry department**. Recognising these interdependencies, the Mission provides a **formal framework for multi-stakeholder collaboration at national and state levels**. By anchoring implementation in project approval committees, the Mission institutionalises mechanisms for cross-sectoral dialogue, joint planning, and coordinated execution. Relevant Line Ministries and departments will be integrated into the Mission’s decision-making ecosystem not as peripheral actors but as co-owners of outcomes. This approach ensures that fibre-specific strategies are harmonised to achieve the scale and sophistication needed for Vision 2030 and broader national goals of climate resilience, Atmanirbhar Bharat, inclusive development, and global export competitiveness—ultimately delivering a cohesive, efficient, and future-ready fibre economy.

37. Notably, the Ministry of Textiles has been implementing focused programmes such as NJDP for Jute, Silk Samagra-II, and IWDP for Wool, yet the evaluation studies highlight that greater inter-ministerial convergence is critical to address sectoral bottlenecks and maximize outcomes.

- Sericulture is highly labour-intensive and regionally concentrated, facing issues of seed quality, disease management, and market volatility. Convergence with **Rural Development (MGNREGS, RKVY)** for plantation and mulberry development, **Science & Technology and ICAR** for R&D in silkworm breeds, and **Skill Development & Entrepreneurship (MSDE)** for training can enhance productivity. The **Commerce Ministry and Export Councils** can support branding and silk export promotion, while the **Environment Ministry** can foster biodiversity-linked interventions, especially for Vanya silks (Tasar, Muga, Eri).
- Convergence with the **Ministry of Fisheries, Animal Husbandry & Dairying** (for breed improvement, fodder and animal health), **Tribal Affairs** (supporting shepherd communities), and **Rural Development** (mobile shearing, pasture development under

MGNREGS) can provide holistic support to the wool sector. **Commerce Ministry** support for branding (e.g., Pashmina mark, KALEEN logo) and **Skill Development Ministry** for training artisans in carpet weaving and processing are equally important.

38. Across fibres, convergence with Agriculture (for input support), Rural Development (for infrastructure and livelihoods), Skill Development (for training), MSME (for modernization), Commerce (for branding and export), and Environment (for sustainability and circularity) emerges as essential. This integrated approach will ensure improved productivity, enhanced value addition, social protection for workers, and stronger global positioning of India’s natural fibres.

3. Vision 2030-31: Comparative Fibre Targets

	Cotton		Silk		Jute		Wool		MMF	
	2023-24	2030-31	2023-24	2030-31	2023-24	2030-31	2023-24	2030-31	2023-24	2030-31
Global Ranking	2	1	2	1	1	1	10	10	2	1
Global Share in Production (%)	24	24	42	45	50	55	3	4	10	14.6
Fibre Production (MT)	55,30,000	76,50,000	38,913	54,000	17,22,000	20,70,000	33,980	40,776	75,00,000	1,30,00,000
Import (MT)	2,11,820	55,000	2,650	500	1,38,700	40,000	92,200	1,22,752	2,41,000	3,15,000

39. The National Fibre Mission envisions a transformed fibre ecosystem by 2030-31, with significant increases in production, productivity, quality, employment, and export competitiveness across all targeted fibres. These ambitious targets reflect India’s vision to scale fibre production, enhance global competitiveness, and achieve leadership in sustainable fibre markets.

4. Key Challenges and Mitigation Strategies

40. India's fibre ecosystem faces a complex web of interconnected challenges that impede its growth, global competitiveness, and long-term sustainability. These challenges span across research and development, infrastructure, fiscal frameworks, quality assurance, environmental sustainability, skill availability, branding, and institutional coordination. Addressing these systemic barriers holistically is critical for



transforming India into a leading hub for sustainable and premium fibre production. NFM seeks to tackle these challenges through targeted, large-scale interventions. The following sections outline each key challenge in detail, followed by comprehensive mitigation strategies.

4.1 Challenges in R&D, Innovation and Technological Development

41. India's fibre sector suffers from limited investment in research and development, particularly in creating high-performance fibres, and sustainable processing technologies. The sector lags in adopting global best practices, innovative blends, and fibre applications beyond traditional uses.

Mitigation Strategies:

- Facilitate long-term public-private R&D collaborations to explore advanced fibres, biodegradable alternatives, and niche technical textiles.
- Provide grants for MSMEs and start-ups focusing on next-generation fibre products, including smart textiles and medical applications.
- Set up dedicated Centres of Excellence for each fibre type to promote continuous innovation in fibre processing, blending, and waste minimisation.

4.2 Fiscal and Regulatory Variations

42. The current fiscal framework disproportionately favours synthetic fibre imports and does not adequately incentivise domestic production and sustainability. Regulatory fragmentation across states also results in uneven enforcement of fibre quality standards and environmental norms.

Mitigation Strategies:

- Rationalise import duties to create a level playing field between natural and synthetic fibres and promote domestic raw material sourcing.
- Develop uniform national fiscal incentives, including production-linked incentives and capital subsidies, to support fibre modernisation and sustainability adoption.

- Introduce fibre labelling regulations and a fibre neutral GST mechanism for all fibres, and promote transparency across the value chain.

4.3 Infrastructure and Investment Constraints

43. The processing infrastructure for wool, silk, and jute is outdated, fragmented, and energy-intensive. MMF clusters lack adequate plug-and-play industrial facilities. Investment in modern, scalable processing hubs remains limited.

Mitigation Strategies:

- Modernise jute mills, silk reeling units, and wool processing clusters with state-of-the-art, energy-efficient machinery supported by targeted capital subsidies.
- Develop integrated fibre parks and plug-and-play processing hubs within PM MITRA parks and other parks, ensuring co-location of key processing activities and modern logistics.
- Establish Common Facility Centres (CFCs) with shared infrastructure for MSMEs in all major fibre clusters to reduce individual capital burdens and improve technology adoption.

4.4 Quality Issues, Contamination and Standardization Gaps

44. India's fibres often suffer from quality inconsistencies, contamination (especially in cotton and jute), and lack of adherence to international standardisation protocols, limiting premium market access.

Mitigation Strategies:

- Upgrade testing and certification laboratories in existing fibre clusters to ensure standardised quality benchmarks.
- Promote blockchain-based fibre traceability systems to ensure end-to-end quality control and reduce contamination risks.
- Promote quality certification for domestic and export fibres to build India's reputation as a source of premium, traceable fibre.

4.5 Import Dependence and Production Vulnerabilities

45. India's wool sector is heavily dependent on imported Merino wool, while raw silk imports, though reducing, still present a vulnerability. MMF feedstock is partially reliant on global suppliers.

Mitigation Strategies:

- Promote indigenous wool varieties through targeted breeding, price support mechanisms, and domestic aggregation platforms.
- Expand bivoltine silk production and strengthen chawki rearing infrastructure to reduce reliance on imported silk.
- Incentivise local MMF feedstock production through sustainable chemical pathways and recycled raw material use.

4.6 Sustainability and Environmental Pressures

46. The fibre sector faces growing global scrutiny regarding its environmental footprint, especially in water-intensive jute retting, chemical-heavy MMF processing, and energy-intensive wool scouring.

Mitigation Strategies:

- Scale up water-efficient jute retting technologies and drought-resistant mulberry and jute varieties.
- Introduce solar-powered wool scouring and processing units to reduce the carbon footprint.
- Incentivise recycled polyester production and bio-based MMF alternatives with fiscal support.
- Provide financial assistance for global sustainability certifications across fibres such as RWS for wool, organic silk protocols, GOTS/Fairtrade for jute, BCI/OCS for cotton, and GRS/OEKO-TEX for MMF to strengthen credibility and market access.

4.7 Lack of Skilling, Capacity Building and Labour

47. There is a shortage of skilled personnel for modern fibre processing, high-performance weaving, and technical textile production. The traditional workforce lacks exposure to global standards and modern equipment.

Mitigation Strategies:

- Establish district-level fibre-specific skilling centres under Skill India, including Centres of Excellence on fibre processing, blending technologies, and high-value applications build deep capabilities across natural and synthetic fibres.
- Deploy mobile training units to rapidly upskill rural women, SHGs, and tribal communities in silk, jute, and wool clusters.
- Incentivise private sector participation in skilling programs through cost-sharing models and certification-driven training schemes..

4.8 Branding, Market Development and Awareness Challenges

48. India's fibres lack strong national brands with international recognition. There is limited global consumer awareness of Bharat Wool, Silk Mark, and Jute Mark India, leading to weak premium pricing power. There is need to draw inspiration from successful brand building success stories across the world. Levi Strauss (USA) turned denim from a workwear fabric into a global fashion statement through branding around authenticity, Americana, youth culture, and durability. The brand of Harris Tweed (United Kingdom) as a reliable wool product was promoted through Orb trademark with surety that only cloth handwoven by islanders in their homes in the Outer Hebrides of Scotland can be sold as Harris Tweed. Similarly Kasturi Cotton from India has created a global recognition for Indian Cotton. Its branding focuses on purity, sustainability, and traceability, ensuring that Indian cotton is recognized worldwide as a premium, trusted product. In similar fashion, dedicated branding and market promotion for all segments of fibre sector is required to be done.

Mitigation Strategies:

- Promote branding campaigns for Bharat Wool, Silk Mark, and Jute Mark India with digital traceability and sustainability assurance.
- Promote Indian fibre products in key global trade fairs, leveraging traceability and sustainability certifications to capture premium markets.

4.9 Data Gaps, Planning and Governance Fragmentation

49. Data collection, fibre inventory tracking, and real-time monitoring are fragmented across states and agencies, hindering national-level planning and policy coherence.

Mitigation Strategies:

- Develop a centralised, digital Fibre Monitoring and Planning Portal with real-time dashboards for production, quality, and market data.
- Standardise fibre data reporting and certification tracking across all states to ensure consistency in policy implementation.

5. National Fibre Mission

50. The National Fibre Mission is a transformative strategy designed to strengthen India's leadership in fibre production and global textile markets through modernisation, innovation, and sustainability. It aims to align India's fibre sector with emerging international trends while ensuring economic growth, employment generation, and sustainability.

5.1 Vision

51. The vision of the National Fibre Mission is to power India's rise as a **global hub** for high quality fibres-rooted in **enhancing productivity** and driven by **innovation**, and **inclusive growth**.

52. Through this mission, the Ministry seeks to achieve the following:

- Establish India as a leader in advanced and high-quality fibre production while meeting global quality standard

- Transform the fibre value chain through comprehensive modernisation, enhanced competitiveness, and a strategic shift towards high-growth, sustainable and environmentally responsible practices
- Enable technology-driven growth, foster world-class infrastructure, and encourage research and innovation in fibres
- Strengthen fibre security
- Catalyse economic growth, large-scale employment, and export excellence in fibre production sector

5.2 Aim

53. The Mission aims to position India as a global leader in fibre production by integrating innovation, modernization, and sustainability across natural fibres, MMF, and speciality textiles. It seeks to enhance self-reliance, competitiveness, and economic growth by strengthening domestic production, reducing import dependency, and fostering industry-wide transformation.

5.3 Objectives

54. To achieve this aim, the Mission will:

- i. Strengthen India's fibre ecosystem by boosting domestic silk, wool, and jute production, reducing imports, and expanding sustainable growth in natural fibres and MMF for global competitiveness.
- ii. Drive R&D-led innovation for fibre production and advanced applications.
- iii. Modernize the textile industry by promoting domestic value addition and investing in advanced technologies.
- iv. Strengthen global branding for Indian fibres, positioning jute, silk, wool, and handloom products as premium sustainable textiles.
- v. Enhance value addition in jute, wool and silk textiles, fostering innovation and premium product development
- vi. Strengthen the raw material value chain for self-reliance and enhance industry competitiveness.

- vii. Diversify fibre applications in fashion, and industrial sectors to expand market reach.
- viii. Expand employment opportunities, empowering artisans, farmers, and textile workers through skill development and financial support.
- ix. Develop a structured supply chain to improve fibre processing, distribution, and industry collaboration.

5.4 Goals

55. The programme will work towards:

- i. Increasing total fibre production to **2,28,14,000 MT by 2030** and achieve **100% adoption** of certified seeds in jute and silk sectors.
- ii. **Doubling fibre exports by 2030** to boost exports and global market outreach, promoting Indian fibres as premium sustainable textiles through branding and trade partnerships.
- iii. Generating **8 million additional jobs** in fibre sector by 2030 to strengthen rural employment and artisan empowerment, ensuring skill development, structured supply chains, and sustainable livelihoods.
- iv. Filing **100+ patents for fibre technologies**.
- v. Promoting ease of adopting global sustainability certifications through awareness and upskilling.
- vi. Improving India's global share in fibre production to **12%** (from 8% currently) to strengthen domestic supply and reduce import dependency..
- vii. Achieving a **balanced 60:40 MMF to natural fibre consumption ratio** aligned with global trends, maintaining India's leadership in natural fibres.

SUGGESTIONS ON THE DRAFT CONCEPT NOTE MAY BE SENT ON THE EMAIL at nfm-textiles@gov.in.