

India's Silk Moment

Filling the 120,000 MT Gap China Left Behind

Employment, Economics, and the Rural Opportunity in a Shifting Global Market

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ABSTRACT

India stands today at a rare convergence of global need and domestic readiness. As China steadily pulls back from silk production, a structural retreat driven by labour shortages, rising wages and tightening environmental norms a **120,000 MT production vacuum** has quietly opened up in the world's most important fibre market. This article examines whether India has what it takes to step into that space meaningfully with fresh data through FY2025, a revised farmer income analysis and a clear eyed look at the employment math.

1. China's Quiet Retreat and India's Emerging Opportunity

For decades, China wrote the global silk story. At its peak around 2015, it produced close to 1,70,000 metric tonnes of raw silk, roughly 80% of the world's supply. What followed wasn't a crash but something more telling: a slow deliberate withdrawal.

China's raw silk exports have fallen sharply. In 2015, China exported nearly 6,700 MT of raw silk. By 2024, that figure had dropped to approximately 2,700 MT, a contraction of over 60% in less than a decade. The country's overall silk export earnings declined 14% in 2023 alone. This isn't cyclical fluctuation, it reflects a fundamental shift. Chinese labour costs have risen steeply, workers have migrated to higher paying urban industries and stringent environmental regulations have made traditional sericulture economics difficult at scale.

The global silk market currently produces around 177,000 metric tonnes annually. With China retrenching & demand nowhere near collapsing, the gap between supply and want is widening. India as the world's second largest producer and its largest consumer is the most natural candidate to close that gap, at least partially.

2. India's Manufacturing Rise Beyond the Headlines

When the original version of this piece was written in late 2023, India's silk production stood at 33,770 MT (2019-20). In the roughly 18 months since, the numbers have moved meaningfully.

India produced **38,913 MT of raw silk in FY2023-24** and the figure rose further to **41,121 MT in FY2024-25**, a 55% increase over the past decade according to IBEF and the Ministry of Textiles. Mulberry plantation area grew from 2.23 lakh hectares in 2017-18 to 2.63 lakh hectares in 2023-24. Productivity has improved too from 96 kg per hectare a decade ago to 112 kg per hectare today, a 16.75% gain.

Equally important: the quality of silk being produced is improving. The deployment of 109 Automatic Reeling Machines (ARMS) across the country has increased production of international grade 3A and 4A quality silk, the kind that commands premium pricing in global markets and actually competes with Chinese output on a fibre quality basis.

Table 1: Key Indicator Comparison

Indicator	2023	2024-25	Change
India Silk Production	33,770 MT (2019-20)	41,121 MT (FY25)	+21.8%
Employment in Silk Sector	9.52 million (2019-20)	9.76 million (FY25)	+2.5%
Silk Exports	~₹1,649 cr (2017-18 base)	₹2,027.56 cr (2023-24)	+23%
Mulberry Plantation Area	~2.23 lakh ha	2.63 lakh ha (2023-24)	+18%
China's Raw Silk Exports	~6,700 MT peak (2015)	~2,700 MT (2024)	-60%

Sources: Ministry of Textiles, IBEF, DD News, IndexBox — see Data Sources section

3. Employment Numbers and the Reality They Reveal

Raw silk is not a machine industry. It is by design and necessity, a people industry and the employment math reflects this better than almost any other agro based sector in India.

The sector employs approximately **9.76 million people** in rural and semi urban areas as of FY25, spread across 52,500 villages. Of this, the Ministry of Textiles' 2025 estimate puts **direct employment at 71.2 lakh persons** and indirect employment at 9.7 lakh, totalling **80.9 lakh persons** when projected from current production levels through January 2025.

The foundational employment ratio has not changed: 11 person days of work per kilogram of raw silk produced across farm and off farm activities. This single number is what makes sericulture so compelling as a rural employment policy instrument. No comparable agro industry generates employment at this intensity, particularly in rain fed and semi arid districts where other crops struggle.

Women are not just participants, they are the industry's backbone. **Over 60% of downstream activity** in sericulture like mulberry harvesting, silkworm rearing, reeling is carried out by women. Many Self Help Groups (SHGs) now manage entire rearing operations, bringing both income and financial agency to rural households.

If India were to capture just one third of the production gap left by China's decline, roughly 40,000 additional MT, the employment creation would run into several million new livelihoods, mostly rural, mostly women led.

4. The Farmer's Balance Sheet: Is Sericulture Really Profitable?

Here is where the original article's numbers needed the most significant updating. The profitability of sericulture has improved noticeably, driven by better cocoon prices, improved productivity from better silkworm breeds and government support through schemes like Silk Samagra 2.

Table 2: Farmer Income Analysis — Per Acre, Irrigated Land

Scenario	~2023	2025
Investment per acre (irrigated, excl. land)	₹12,000–₹15,000	₹15,000–₹20,000 (est.)
Gross Income per acre/year	₹35,000–₹75,000	₹80,000–₹1,00,000
Net Profit per acre/year	₹20,000–₹60,000	₹60,000–₹80,000
Net Profit-to-Investment Ratio	1.3x – 4.0x	3.0x – 5.3x

Scenario	~2023	2025
Employment generated per kg raw silk	11 person-days	11 person-days (unchanged)

Note: Net Profit = Gross Income minus Investment cost. Estimates based on 4–5 annual crops. Updated figures reflect market prices circa 2024-25.

Sources: Central Silk Board, Andhra Pradesh Sericulture Department, Farmers Rathna (2025), field reports.

A farmer with one irrigated acre can now reasonably target **₹80,000–₹1,00,000 in gross income** annually against an investment of ₹15,000–₹20,000. The **net profit-to-investment ratio of 3x to 5x** is exceptional by any agri sector benchmark. For context: comparable income from paddy on the same acre would typically yield a net of ₹20,000–₹30,000. The financial case for sericulture doesn't need heavy subsidy to work, it just needs stable access to silkworm seed (DFLs), chawki (young larvae) and a functioning cocoon market.

What's changed most is the floor. Government intervention through **Silk Samagra 2** (outlay: ₹4,679.85 crore for 2021-26) has raised the base case income by providing free/subsidised planting material, training and market linkage support. Over 78,000 stakeholders have already benefited from Silk Samagra 2 disbursements.

5. Exports: India's Least Discussed Growth Story

India's silk export earnings crossed **₹2,027 crore in 2023-24**, up from ₹1,649 crore in 2017-18 — a 23% rise over six years. The UAE is currently India's largest silk export destination (\$22.1 million in 2024), followed by the UK (\$8.1 million).

The more interesting signal is in quality rather than quantity. With international grade silk output increasing via ARM technology, Indian silk is beginning to command pricing that wasn't accessible before. The average export price stood at \$33,853 per tonne in 2024. Compare this to China's retrenching export posture, its raw silk exports fell 27% year on year in 2024 and India's window becomes clear.

There is a strategic irony here worth noting: India currently imports significant quantities of raw silk (largely from Vietnam and China) to feed its weaving and garment industry. The domestic production-to-consumption gap has historically required imports. Bridging this gap through expanded sericulture is both an import substitution strategy and an export opportunity.

6. What Must Happen Next

The opportunity is real. The constraints are equally real and glossing over them won't serve the industry.

First, disease control remains sericulture's Achilles heel. Pebrine and flacherie can devastate a crop with little warning. Consistent supply of disease certified DFLs and better chawki centres particularly in newer growing regions, remain work in progress.

Second the reeling sector is fragmented and undercapitalised. Much of India's cocoon production still goes through traditional basin reeling, which produces lower grade silk unsuitable for international markets. Scaling up ARMs across more states is not optional, it is the single biggest determinant of whether India can compete globally, not just produce more.

Third, market access for farmers is uneven. In Karnataka's Ramanagara, Asia's largest silk cocoon market price discovery works reasonably well. In Assam's Eri belts or Bihar's Tasar regions, farmers often sell at distressed prices due to thin local markets. Digital marketing platforms and ISEPC linked aggregation can partially solve this but the last mile gap persists.

None of these constraints are insurmountable. They are precisely the kinds of problems that focused policy, verified investment and farmer-centric extension services can solve and have been solving, slowly but verifiably over the past decade.

7. Pulling the Thread Forward

China's retreat from silk production is not a moment of crisis, it is an opening that comes once in a generation for any competing country. India has used the last ten years well: production is up 55%, quality is improving, exports are rising and the government has backed the sector with meaningful capital.

The 120,000 MT gap will not be filled overnight or perhaps ever entirely. But capturing even a fraction of it mean 30,000 to 40,000 additional MT over the next decade, would translate into millions of rural livelihoods, billions in export earnings and the quiet economic empowerment of women across India's semi arid hinterlands.

That is not a textile story. That is a development story — and it deserves to be told that way.

Data Sources

The following sources were used in preparing this updated article. All data cited corresponds to the most recent available figures at the time of writing (June 2025).

- India Brand Equity Foundation (IBEF) — Silk Textile Industry in India — FY25 production (41,121 MT), employment (9.76 million). ibef.org/exports/indian-silk-industry
- Ministry of Textiles, Government of India / DD News — Production figures 2017-18 to 2023-24; Mulberry plantation area; Silk exports (₹2,027.56 crore, 2023-24). ddnews.gov.in
- Press Information Bureau (PIB) / Tribune India (ANI) — Parliamentary reply by MoS Pabitra Margherita (March 2025): employment 80.9 lakh, production 34,042 MT through Jan 2025. tribuneindia.com
- IndexBox — China Raw Silk Market Overview 2024 — China raw silk exports fell 27.1% in 2024 to 2,700 MT; China silk export earnings \$184M. indexbox.io
- Mordor Intelligence — Global Silk Market Report — China's 2023 export decline (14%); Silk Samagra mulberry acreage 263,352 ha (2024). mordorintelligence.com
- Central Silk Board (CSB), Government of India — Employment ratio (11 person-days/kg), investment benchmarks, women participation (60%). csb.gov.in
- Andhra Pradesh Sericulture Department / SPSNELLORE.AP.GOV.IN — Farmer gross income: ₹80,000–₹1,00,000 per acre/year (4 crops).
- FarmersRathna.com (2025) — Net profit range ₹40,000–₹70,000 per acre per annum (scientific management). farmersrathna.com
- Textile Exchange — Material Report Dec 2023 — Global fibre market shares: synthetic 65%, cotton 22%, silk 0.08%.
- DeepBeez / UN COMTRADE — India silk scarf exports \$48.8M (2024); UAE largest destination \$22.1M (2024). deepbeez.com
- Statista — Karnataka: leading raw silk producer, >12,000 MT (FY2024). statista.com
- Frontiers in Sustainable Food Systems (2025) — Analysis of China's silk trade decline 2013–2022. DOI: 10.3389/fsufs.2025.1521229

Abbreviations and Acronyms

The following abbreviations and acronyms are used throughout this article:

Abbreviation	Full Form / Meaning
ARM	Automatic Reeling Machine
CSB	Central Silk Board
DFL	Disease-Free Laying (silkworm egg card)
FY	Financial Year (April–March, India)
IBEF	India Brand Equity Foundation
ISEPC	Indian Silk Export Promotion Council
MT	Metric Tonnes
MoS	Minister of State
PIB	Press Information Bureau
SHG	Self Help Group
UAE	United Arab Emirates
UN COMTRADE	United Nations Commodity Trade Statistics Database