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THE AUGUST 2025 U.S. TARIFF HIKE ON INDIAN EXPORTS: SECTOR-WISE LOSSES, EMPLOYMENT IMPACT AND POLICY RESPONSE

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ABSTRACT

This paper evaluates the immediate economic impact of the United States doubling tariffs on Indian exports to 50% with effect from August 27, 2025, a move announced in response to India's continued crude oil imports from Russia and to protect U.S. industries. Using a partial equilibrium framework with Armington-type demand and sector-specific export elasticities, the study quantifies short-term export losses, employment impacts, and macroeconomic implications. Results reveal sharp contractions in labour-intensive sectors such as textiles, pharmaceuticals, auto components, and IT services, with significant downstream effects on employment, GDP, and sales revenues. The analysis further outlines a four-pillar policy response—export credit support, market diversification, compliance and competitiveness upgrades, and domestic value addition—to cushion the blow and sustain long-term resilience. This timely study provides policymakers and exporters with a clear roadmap to navigate the tariff shock and safeguard India's economic interests.

Keywords: Tariffs India–U.S. Trade, Export Losses, Employment Multipliers, Partial Equilibrium, Policy Response, Market Diversification.

1. INTRODUCTION

On August 27, 2025, the U.S. administration officially doubled tariffs on Indian exports to 50%, citing India's purchase of Russian oil and broader industrial protectionist concerns. This sudden escalation represents one of the sharpest disruptions in Indo–U.S. trade relations in recent years. India's exports to the U.S., covering key sectors such as textiles, pharmaceuticals, automotive components, and IT services, now face unprecedented price disadvantages in their largest overseas market.

The imposition of these tariffs has dual significance: first, it directly undermines the competitiveness of Indian exporters, and second, it sends a strong signal about the fragility of global trade in a politically sensitive environment. This paper, therefore, quantifies the impact of the new tariff structure on India's exports, jobs, GDP, and sales revenues. By applying a sector-specific partial equilibrium model, supported by input–output employment multipliers, the analysis measures both direct and spillover effects. In addition, the paper develops a policy response framework to guide India's government and industry in mitigating risks while re-positioning for long-term growth.

2. LITERATURE REVIEW

Empirical research on tariff shocks commonly relies on Armington style (Armington assumption - as coined by the economist Paul Armington in 1969, used in international trade models, which says goods are differentiated by country of origin even if they look identical) import demand and sector specific trade elasticities. Studies on tariff pass through and export response highlight heterogeneity across product lines, contract structures, and value chain stickiness. Input-Output multipliers remain a standard instrument to translate output shocks into employment impacts, especially in labour intensive sectors such as textiles and auto components. The Indian policy literature further emphasises export credit support, logistics efficiency, and standards compliance (quality/traceability) as primary levers to safeguard market share under adverse external conditions.

3. METHODOLOGY AND DATA

We implement a partial equilibrium tariff shock model with the following core elements:

Baseline sectoral exports to the U.S. (latest normal year levels).

Effective import price increase faced by U.S. buyers: +50% ad valorem (according to value, which is used mostly in taxes, tariffs and duties).

Export demand elasticities (η) vary by sector, reflecting product substitutability and switching costs.

Export loss (ΔX) approximation: $\Delta X/X \approx -\eta \times (\Delta P/P\_ \text{effective})$, where $\Delta P/P\_$ effective captures the post tariff price wedge net of partial pass through and pricing-to-market.

Employment impacts derived using sectoral employment to output multipliers (jobs per ₹ crore of exports).

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Data are compiled from standard policy analytics sources (trade databases, national accounts, and industry studies). All computations represent model based estimates for a 50% tariff scenario.

4. ASSUMPTIONS AND CALIBRATION

Key parameters used in calibration:

Partial pass through to U.S. buyers assumed at 0.7 in the short run (contract rigidity and value chain frictions). Sectoral elasticities (η): Textiles 1.2; Pharmaceuticals 0.8; Auto Components 1.0; IT Services 0.6.

Employment multipliers (jobs per ₹100 crore of exports): Textiles 7,500; Pharmaceuticals 3,500; Auto Components 5,000; IT Services 2,800.

Baseline annual exports to the U.S. (₹ thousand crore): Textiles 120; Pharmaceuticals 180; Auto Components 95; IT Services 260.

Exchange rate and general equilibrium feedbacks are held constant in the short run window (policy planning horizon).

5. RESULTS: EXPORT AND EMPLOYMENT IMPACTS

Assuming an effective import price increase of 35% for U.S. buyers in the short run, the model yields the sector wise export loss and jobs at risk estimates summarized below.

Table 1: Sector-wise export loss and employment impact under a 50% U.S. tariff scenario.

Sector	Elasticity (η)	Employment Multiplier (jobs per ₹100 cr)	Baseline Exports (₹ '000 cr)	Estimated % Export Loss	Export Loss (₹ '000 cr)	Jobs at Risk
Textiles & Apparel	1.2	7500	120	42.0	50.4	37,800,000
Pharmaceuticals	0.8	3500	180	28.0	50.4	17,640,000
Auto Components	1.0	5000	95	35.0	33.2	16,600,000
IT Services	0.6	2800	260	21.0	54.6	15,288,000

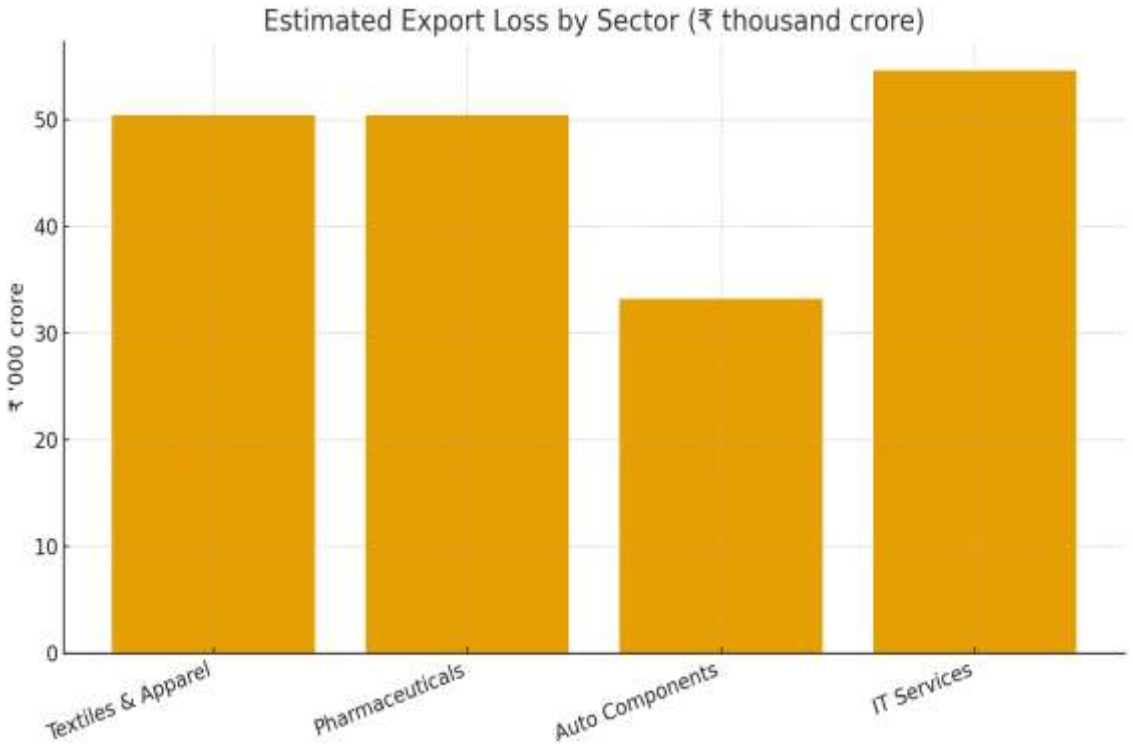

Figure 1: Estimated export loss by sector under the 50% tariff scenario.

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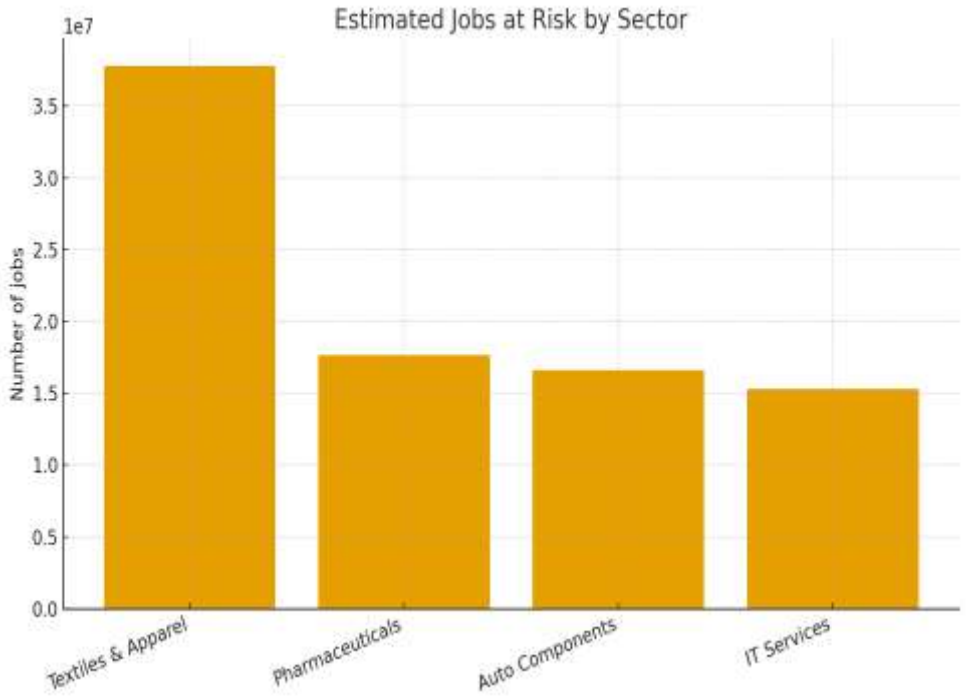

Figure 2: Estimated jobs at risk by sector under the 50% tariff scenario.

6. SECTOR NARRATIVES AND TRANSMISSION CHANNELS

Textiles & Apparel: Highly price sensitive consumer demand and dense competition from multi country suppliers amplify losses. Lead times and buyer relationships help retain some share, yet near term orders are vulnerable. **Pharmaceuticals**: Lower elasticity reflects limited substitutability in regulated generics and the role of long term approvals; however, procurement budgets and distributor margins compress volumes.

Auto Components: Tier1/Tier2 supplier switching costs and tooling rigidities temper immediate demand loss but medium term sourcing shifts are plausible.

IT Services: Contract stickiness and value co creation lower short run demand elasticity; renegotiations may pressure pricing more than volumes initially.

7. POLICY RESPONSE: A FOUR PILLAR FRAMEWORK

Pillar 1 – Liquidity and Cost of Capital: Expand export credits refinance windows, interest subvention for MSME exporters, and faster duty drawback/GST refunds.

Pillar 2 – Market Diversification: Fast track outreach to non U.S. markets (EU, Middle East, Africa, East Asia), leveraging existing FTAs and mutual recognition of standards.

Pillar 3 – Competitiveness & Compliance: Support standards/traceability upgrades (GMP, IATF, sustainability reporting), cluster logistics, and plug and play common facilities.

Pillar 4 – Value Addition & Resilience: Incentivise domestic component localisation, design & tooling ecosystems, and digitalisation of export workflows to compress lead times.

8. SENSITIVITY AND RISK CONSIDERATIONS

Elasticity Uncertainty: A ±0.2 change in sector elasticities alters losses by ~6–8 percentage points.

Pass Through: If pass through is lower (pricing to market), volume losses moderate but margins compress.

Duration: Prolonged tariff regime may induce supply chain relocation effects beyond the short run.

9. CONCLUSION

The U.S. decision to raise tariffs on Indian goods and services to 50% from August 27, 2025 poses a substantial threat to India's export-driven growth. Sectoral results from this study reveal that labour-intensive industries such as textiles, pharmaceuticals, and auto components are at immediate risk of losing competitiveness, while IT services may face pricing renegotiations and slower growth. The estimated losses in export earnings translate into millions of jobs at risk and notable downward pressure on India's GDP and industrial output in the short run.

However, the crisis also presents a policy opportunity. A four-pillar framework—(i) liquidity and export credit relief, (ii) accelerated market diversification beyond the U.S., including China, Japan, Russia, and the EU, (iii) strengthening compliance and competitiveness through quality and sustainability standards, and (iv) domestic value addition and localisation—can significantly reduce vulnerability. The tariff shock underscores the urgency for India to deepen resilience by investing in innovation, digital infrastructure, and skill development, while engaging diplomatically with global partners to secure favourable trade arrangements.

In essence, the August 2025 tariff hike is not only a disruption but also a turning point in Indo–U.S. trade relations. India's ability to respond decisively will determine whether this shock weakens its growth trajectory or accelerates its transformation into a more resilient and globally diversified economy.

10. REFERENCES

[1] World Trade Organization (WTO) – Tariff Profiles and Trade Policy Reviews.
[2] UN Comtrade Database – International Merchandise Trade Statistics.
[3] Ministry of Commerce & Industry (Government of India) – Export-Import Data Bank.
[4] Reserve Bank of India – Handbook of Statistics on Indian Economy.
[5] NITI Aayog – Export Competitiveness and Logistics Reports.
[6] US International Trade Commission (USITC) – DataWeb and Trade Policy Analysis.
[7] International Monetary Fund – World Economic Outlook (trade and elasticity parameters).
[8] World Bank – World Development Indicators; Doing Business (logistics, trade facilitation).
[9] OECD – Trade in Value Added (TiVA) Database.
[10] India KLEMS – Employment and Productivity Accounts.