

Strategic Assessment of India's Denim Fabric Export Competitiveness in the Evolving Global Textile Market

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Abstract :

This study looks at how competitive India is in exporting denim fabric in today's changing global textile market. It analyses export performance using factors like growth trends, market reach, and comparative advantage based on HS code data. The study also considers the impact of global competition, shifting demand, and trade policies. The findings show that while India has a strong presence in denim exports, there is still scope to improve through better quality, innovation, and exploring new markets. Overall, the study highlights the need for strategic efforts to strengthen India's position in the global denim industry.

Keywords :

Denim Fabric, Export Competitiveness, India, Global Textile Market, HS Codes, Market Diversification, Comparative Advantage, Trade Performance.

Introduction :

The global textile and apparel industry is going through significant changes driven by evolving consumer preferences, growing awareness of sustainability, and continuous technological advancements. Among various textile products, denim fabric continues to play a key role in the global market due to its versatility, durability, and constant demand across different age groups and regions. In recent years, there has been a noticeable shift towards value-added denim such as stretchable, lightweight, recycled, and eco-friendly fabrics, making innovation and environmental compliance more important than ever. India holds a strong position in this industry as one of the

leading producers and exporters of textiles, supported by its large manufacturing capacity, availability of raw materials like cotton, and skilled workforce. The country's denim sector has shown steady growth, with increasing domestic demand influenced by rising incomes, urbanization, and changing fashion trends, especially among younger consumers. At the same time, international markets continue to offer opportunities for expansion. However, with growing global competition and rapidly changing market dynamics, factors such as product quality, technological capability, sustainability practices, and market adaptability have become crucial in determining India's export competitiveness in the denim segment.

Statement of the Problem :

Although India has a strong presence in the global denim export market, its performance has been inconsistent due to rising competition from countries like China, Bangladesh, Vietnam, and Turkey, along with changing global demand and trade conditions. Most existing analyses focus mainly on export growth or production levels, which do not fully capture true competitiveness. Most existing studies have placed either the textile sector in general or specifically the apparel sector, thereby making denim fabric exports relatively under-researched. Therefore, there seems to be a minimal data about consolidated and clear picture available to policymakers, exporters, and industry stakeholders about where India stands competently in denim competitiveness, where markets are resilient or vulnerable, and how the global structural changes impact the export performance.

Review of Literature :

Roshan Paul, (2015) explained denim production processes and highlighted key manufacturing and environmental aspects. **Periyasamy A. and Periyasami S, (2023)** discussed environmental issues in denim and suggested sustainable production techniques. **Manjusha S. M., (2024)** focused on natural dyes and the importance of sustainability in textiles. **Chowdhury N. et al., (2025)** found recycled cotton suitable for denim production, supporting sustainable practices. **Vijaya G. O. and Olekar R. O. (2025)** analysed denim companies' financial performance and found variation in profitability, emphasizing efficient financial management.

Objectives :

- To examine the long-term dynamics and structural trends of India's denim fabric exports in the global market.
- To analyze the export market concentration and diversification pattern of India's denim fabric exports.
- To assess India's export competitiveness in denim fabric relative to major global exporting nations.

Methodology :

The study is based on secondary data to assess India's long-term denim fabric export competitiveness. It uses reliable and officially published sources, ensuring consistent analysis and accurate evaluation of India's global position. Trade data is collected from the WITS website, and company-level data is taken from annual reports of selected textile firms, enhancing the study's credibility. 3-Year Rolling Compound Annual Growth Rate, Herfindahl – Hirschman Index (HHI), Revealed Comparative Advantage (RCA) Index were applied for analyzing the data.

Results and Discussions :**Table 1 : Three – Year Rolling CAGR of India's Denim Exports**

Rolling Period	Rolling CAGR (%)
2014 – 2017	0.11
2015 – 2018	8.20
2016 – 2019	12.20
2017 – 2020	-0.85
2018 – 2021	13.66
2019 – 2022	4.60
2020 – 2023	-5.21
2021 – 2024	-14.58

Source: Computed from Secondary Data

Unlike CAGR, the three-year rolling CAGR shows how growth changes over time, giving a clearer view of short-term ups and downs. It shows steady growth from 2015 to 2019, with strong performance around 2018–2021, but a decline in recent years (2020–2024) due to global market changes. Despite this, India’s denim exports still show resilience and long-term potential.

Table 2 : Ten- Year HHI Trends and Market Concentration Categories (2014 -2024)

Year	HHI (520942)	Concentration Category	HHI (521142)	Concentration Category
2014	3397.055232	High Concentration	1642.075232	Moderate Concentration
2015	3278.850124	High Concentration	2098.680831	Moderate Concentration
2016	3167.713187	High Concentration	2119.11165	Moderate Concentration
2017	3293.676625	High Concentration	2990.546939	High Concentration
2018	3399.965833	High Concentration	2366.439469	Moderate Concentration
2019	2917.054038	High Concentration	1981.964012	Moderate Concentration
2020	2486.315868	Moderate Concentration	1914.801142	Moderate Concentration
2021	2177.550558	Moderate Concentration	1650.35046	Moderate Concentration
2022	1978.843884	Moderate Concentration	1850.984878	Moderate Concentration
2023	2078.885475	Moderate Concentration	1468.277292	Low Concentration
2024	2074.019745	Moderate Concentration	1561.494144	Moderate Concentration

Source: Computed from Secondary Data

The HHI analysis (2014–2024) shows that India’s denim fabric exports have become more diversified and less risky over time. While HS 520942 was highly concentrated in 2018, it improved to a moderate level by 2024, and HS 521142 achieved strong diversification by 2023. Overall, this indicates that India has reduced dependence on a few markets and strengthened its export stability through wider global reach.

Table 3 : Year-wise Revealed Comparative Advantage (RCA) Index (2014 - 2024)

YEAR	RCA INDEX
2014	4.55
2015	4.56
2016	4.43
2017	4.76
2018	5.24
2019	5.83
2020	6.84
2021	7.22
2022	5.88
2023	4.46
2024	-

Source: Computed from Secondary Data

The RCA values remain above 1 throughout 2014–2024, showing India’s strong and consistent advantage in denim exports. Competitiveness was stable until 2016, rose sharply to a peak in 2021, and then declined slightly in recent years. Despite this drop, India still maintains a strong comparative advantage in the global market.

Findings & Recommendations:

The 3-year rolling CAGR shows that India’s denim exports experienced strong growth between 2016 and 2019 due to rising global demand and sourcing shifts, but declined in recent years because of COVID-19 and global market disruptions. It clearly reflects short-term fluctuations in export performance. The HHI analysis indicates that exports were initially concentrated in a few markets but gradually became more diversified over time. This shift reduced dependency on key markets and improved the stability of India’s export performance. The RCA remained above one throughout the period, showing India’s strong comparative advantage in denim exports. Although it declined slightly in recent years due to rising competition, India still maintains a strong position in the global market.

To reduce fluctuations in export growth, Indian denim exporters should diversify their product range by focusing on innovative and sustainable fabrics, while also expanding into new markets and building stable long-term buyer relationships. Since diversification has already improved, exporters should continue exploring emerging markets to reduce dependency on a few countries and ensure stable performance. Additionally, to maintain India's comparative advantage, manufacturers should enhance quality, adopt advanced technologies, and follow sustainable practices to stay competitive in the global market.

Conclusion:

The study concludes that India holds a strong and sustained position in the global denim fabric export market. The analysis shows that although export growth has experienced some fluctuations over time, diversification of markets has improved stability and reduced dependence on a few countries. At the same time, India continues to maintain a strong comparative advantage, supported by its production capabilities and global demand. Overall, despite challenges in the global environment, the denim industry in India remains resilient and shows strong potential for future growth.

Future Scope of the Study :

This study provides a strong base for future research on India's denim fabric export competitiveness. Future studies can extend the analysis by using more recent data or longer time periods to track changing global trends. Comparative studies with countries like Bangladesh, China, and Turkey can also help identify key competitiveness factors. Researchers may further explore the impact of sustainability, technology, and digital supply chains, and include primary data from industry experts to gain deeper insights. Overall, the study can serve as a useful reference for future academic and policy research.

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