Critical Evaluation of Textile Industry of Pakistan and Way Forward

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Citation:

Nasir, S., Ali, M., Irshad, M., Arshadullah, & Wazir, S. & Islam, M. U. (2025). Critical evaluation of the textile industry of Pakistan and way forward. Khyber Journal of Public Policy, 4(1), (Special).

Article Info:

Received: 10-02-2025 Revised: 21/02/2025 Accepted: 24/02/2025 Published:28/02/2025

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Abstract:

The textile industry plays a significant role in Pakistan's economy, contributing over 60% to the country's exports and 8.5% to its GDP. Despite its potential, the sector faces numerous challenges, including outdated machinery, high energy costs, limited diversification into man-made fibers (MMF), and competition from regional players. The sector's reliance on cotton-based products limits its ability to capitalize on global shifts toward MMF products. Additionally, infrastructure deficits, inadequate logistics and testing facilities, hinder growth. The paper explores the historical evolution of Pakistan's textile industry, from its early growth to its current state, highlighting key issues such as high tariffs, inefficient energy systems, and liquidity The study concludes with several shortages. recommendations, including technological upgrades, energy efficiency measures, diversification into MMF, regulatory reforms, workforce skill development, and market diversification. These strategies aim to enhance the sector's global competitiveness and sustainable growth.

Key words:

Textile Industry, Pakistan, Man-Made Fibers, Energy Efficiency, Export Diversification.

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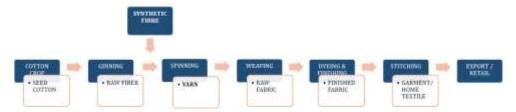
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Introduction

The textile sector is playing a critical role in the economic development of many countries. It covers a broad range of activities starting from raw material procurement such as cotton, wool, and synthetic fibers to manufacturing, distribution, and retailing of textile products. Textiles serve not only as essential consumer goods, but also as key industrial products used in various sectors, including automotive, healthcare, construction, and defense. The textile industry is divided into two primary categories: natural fibers like cotton, wool, and silk, and man-made fibers such as polyester, nylon, and acrylic. The rise of synthetic fibers has revolutionized the textile landscape, driven by innovations in material science and the demand for versatile, durable, and cost-effective alternatives to natural fibers. The textile cluster has a relatively large value chain with multiple distinct sectors. The following flow chart depicts the major processes along with the output of textile value chain.



The global textile market is characterized by significant geographical dispersion, with production concentrated in countries like China, India, Bangladesh, Pakistan, and Vietnam, which benefit from large labor forces and growing industrial infrastructure. The sector has seen continuous growth due to rising global population, increasing urbanization, and the growing demand for fashion and home textiles in both developed and developing markets.

The global textile market is estimated at \$1.79 trillion in 2024, accounting for 1.63% of the world's GDP. The size of the global textile market is projected to reach \$2.0 trillion by 2028. It employed around 430 million people out of the total global workforce of 3.62 billion people. Some of the biggest textile markets of the world include USA, China, India, Japan, UK and Germany with combined market value of around \$1.1 trillion. Further, the global textile market is heavily dominated by women textile products, which valued at \$930 billion or 52 percent of the total global textile market. The share of men's and children's apparel market is valued at \$588 billion and \$274 billion respectively in 2024.—

Textiles are a dominant component of Pakistan's exports, constituting over **60**% of total export revenues and contributing around 8.5% to the country's GDP. (PBS, Pakistan Bureau of Statistics, 2022) Pakistan is the 12th largest exporter of textile having export value of \$16.69 billion in FY 2024. It is 4th largest producer and 3rd largest consumer of cotton. It comprises of 46% of

the total manufacturing sector and provides employment to 40 percent of the labor force that comes to 4.672 million approximately. There are 408 textile units (40 Composite and 368 Spinning units). The textile industry of Pakistan has a total established spinning capacity of 1550 million kgs of yarn, weaving capacity of 4,368 million square meters of fabric, finishing capacity of 4000 million square meters and apparel of over one billion pieces (estimated). Textile Business in Pakistan is concentrated in and around Karachi, Lahore and Faisalabad wherein cotton yarn, woven fabric, knitwear, bedding and garments dominate the domestic production. The main export markets for Pakistan are the US, EU, UK, Turkey, and UAE, wherein Pakistan is supplying cotton fabrics, knitwear, bed linen, towels, and ready-made garments to global brands such as Zara, H&M, Adidas, John Lewis, Target and Macy's. (Survey, 2023-24)

Evaluation and Development of Textile Sector in Pakistan

(1940s-1950s: Foundation and Early Growth) During this period, the textile sector in Pakistan began its journey shortly after independence in 1947, with the establishment of basic infrastructure to support cotton production. The government prioritized the development of this sector due to its potential for economic growth and employment. By the 1950s, Pakistan had established its first textile mills, laying the groundwork for a burgeoning industry.

(1960s: Industrial Expansion) The 1960s marked a period of rapid industrialization in Pakistan, with significant growth in the textile sector. Government policies encouraged private investment, leading to the establishment of new spinning and weaving units. During this decade, Pakistan emerged as a major exporter of cotton yarn and fabrics, solidifying its position in global markets.

(1970s: Nationalization) The 1970s were characterized by the nationalization of key industries, including textiles, under government-led economic reforms. While this move aimed to streamline operations and promote equitable growth, it led to inefficiencies and stagnation in the textile sector. The industry faced challenges such as outdated technology and reduced competitiveness.

(1980s: Privatization and Revival) In the 1980s, the government reversed its nationalization policies, initiating a wave of privatization that revitalized the textile industry. Investments in modern machinery and technologies began to flow, leading to increased productivity. Exports of finished textiles, such as garments and knitwear, gained momentum, marking a shift toward value-added products.

(1990s: Global Integration) The 1990s saw Pakistan's textile sector becoming more integrated into global trade. The country benefited from international trade agreements and preferential market access, which boosted exports. However, infrastructural challenges and inconsistent policies limited the industry's full potential. This period also witnessed a growing focus on

ready-made garments and home textiles.

(2000s: Value Addition and Modernization) In the 2000s, the sector experienced significant advancements in value addition and modernization. Export-oriented policies and investments in state-of-the-art facilities allowed Pakistan to cater to global demand for high-quality products. The textile industry expanded its portfolio to include bed linens, towels, and branded apparel. However, energy shortages and regional competition began to pose challenges.

(2010s: Sustainability and Competitiveness) The 2010s brought a renewed emphasis on sustainability and global competitiveness. Pakistan's textile industry adopted eco-friendly practices and compliance with international standards to meet the demands of global buyers. Despite persistent challenges such as energy crises and high production costs, the sector remained a significant contributor to national exports, with major global brands sourcing from Pakistan.

(2020s: Innovation and Strategic Focus) The 2020s have been marked by a focus on innovation, digitalization, and diversification. The industry has embraced advancements in textile technology and sustainable practices, positioning itself as a competitive player in the global market. Strategic export relationships, particularly with the US, EU, and China, alongside efforts to enhance value-added production, have been key drivers of growth. However, competition from regional players and the need for continued investment in infrastructure and human capital remain pressing concerns

Despite its inherent advantages, Pakistan's textile sector facing multiple challenges that hindering its global competitiveness and sustainable growth. Key issues include high energy prices, reliance on outdated machinery, fluctuating cotton supply & prices, and intensified competition from regional players, particularly Bangladesh, India, and Vietnam. To address these constraints and shift the industry's focus toward value-added products such as apparel and fashion garments, both private-sector initiatives and government interventions are crucial.

Problem Statement

The textile sector of Pakistan is a major contributor to the country's export economy. However, once a strong export earning industry for Pakistan and a major player in the global market, it is facing significant challenges which are threatening its sustainability. The situation warrants critical analysis of situation surrounding textile sector of Pakistan in order to identify key issues and challenges and to suggest actionable recommendations for policy interventions and strategic initiatives to revitalize the sector, enhance export performance, and ensure long-term sustainability.

Scope of the Study

The study aims to critically evaluate the textile sector of Pakistan, focusing on its historical development and current structure. It will assess the sector's contribution to the economy, employment, and exports while identifying key challenges. The research will analyze government policies, technological advancements, and sustainability practices to provide strategic recommendations for enhancing productivity and competitiveness.

Research Methodology

A Mix methods approach has been used, using both quantitative and qualitative data wherever possible. Most of the sources have been consulted online and data from different primary and secondary sources including Ministry of Commerce and & Textile, TDAP, Ministry of Finance, PBS, APTMA, Board of Investment and experts' opinion have been used in the study. Besides, analysis tools including Situational Analysis, Legal, Policy and Institutional Framework Analysis, Comparative Analysis, Blavatnik's OIPA and SWOT-EEETH Analysis have been used.

ANALYSIS

Situation Analysis

The textiles and apparel sector are the single largest contributor to the economy's export earnings, and constitutes about 50 to 60 percent of total exports. The industry has an installed capacity of achieving approximately \$25 billion/year of exports but the same has not been materialized. The past two years have been among the most challenging for Pakistan's textiles and apparel sector. Between 2020 and 2022, the sector experienced a remarkable growth of 54% in exports, driven by favorable macroeconomic conditions and export facilitation measures. However, the momentum was disrupted during the 2022-23 economic crisis, compounded by the withdrawal of key support policies, including zero-rating for export-oriented industries and regionally competitive energy tariffs (RCET). As a result, textiles and apparel exports declined to \$16.5 billion in FY23 and 16.65 in FY24. (Inam, APTMA, 2025)

Pakistan's textiles sector is predominantly cotton-based, relying heavily on the country's domestic cotton supply; Pakistan is the fourth largest producer of cotton and produced around 10.2 million bales in FY 24. Cotton production in Pakistan is affected by pests like pink bollworm and whitefly, water scarcity due to Indus River shortages, and climate change causing erratic weather and flooding. Low-quality seeds, outdated farming practices, soil degradation, reliance on manual labor, and limited research and development further reduce yields and quality, undermining the industry's potential. Approximately 84% of Pakistan's apparel exports are cotton-based, significantly higher than the global average of 46%. The global market has been shifting toward synthetic materials, which are increasingly

preferred for high-quality/performance apparel. Further, the cotton produced in the country is of low quality and thus cannot be used for manufacturing high quality apparel/products. (Survey, 2023-24)

The ginning sector in Pakistan is a critical component of the cotton value chain, but it faces significant challenges that affect the quality and efficiency of its output. With over 1,200 ginning units primarily located in Punjab and Sindh, many operate below optimal capacity due to outdated technology, fluctuating cotton production, inefficient machinery leading to high contamination levels during the ginning process which reduces the quality of cotton and its competitiveness in international markets. Issues such as manual handling, inconsistent quality standards, and energy shortages further exacerbate the situation. Additionally, limited investment and poor seed cotton quality contribute to inefficiencies in the sector. (PBS, 2025)

The spinning sector in Pakistan comprises approximately 408 textile units, including 40 composite units and 368 spinning units, with an installed capacity of around 13.4 million spindles and 198,800 rotors. However, operational capacity utilization rates for spindles and rotors stood at 72.3% and 63.7%, respectively, during FY24. One of the primary issues in spinning sector is the high cost of energy, which constitutes approximately 35-40% of the total production expenses for spinning mills. In Pakistan, electricity rates are around 13 cents per kilowatt-hour, whereas regional competitors like China, Bangladesh, Vietnam, and India enjoy lower rates of 7.5, 9, 8, and 8 cents per kilowatt-hour, respectively. Further, the sector struggles with outdated technology and limited access to credit, particularly among small spinning units, fluctuating and low-quality local cotton supply leading to reliance on imported cotton and limited value addition as it predominantly focuses on spinning raw cotton without diversification into synthetic fibers or advanced blends. (PACRA, 2024).

The weaving sector in Pakistan is a critical part of its textile industry, with the majority of its capacity concentrated in the unorganized sector, accounting for nearly 89% of total production. The organized sector around 44 registered weaving mills, equipped comprises approximately 9,084 installed looms, of which 6,398 were utilized during FY2024. Despite this infrastructure, the sector has been underperforming, with its total fabric production reaching approximately 7.9 billion square meters in FY2024. The organized segment contributed only 870 million square meters, reflecting challenges such as outdated technology, energy inefficiencies, and limited modernization. The weaving sector in Pakistan faces significant challenges, including high energy costs, reliance on imported raw materials, outdated machinery, and limited technological investment. Elevated borrowing costs and regulatory burdens further strain financial resources, while the dominance of unorganized, lower-quality production hampers competitiveness. The sector's focus on low-value products and insufficient modernization adds to its struggles against regional competitors. (PACRA, 2024).

Pakistan's export destinations and export products are not much diversified thus limiting the potential of textile exports. Major imported of Pakistani textile products include USA (26.29%), UK (9.95%), Spain (7.69%), Germany (7.6%), Netherlands (7.4%), Italy (4.21%) etc. Major products include cotton men's suits, jackets & trousers, towels, pullovers/cardigans, Denim fabric of cotton, cotton bed sheets/linen (Window, 2025). Pakistan has not been able to utilize its optimal potential of exports thus resulting in unrealized export potential of USD 7.8 billion. Major categories where Pakistan could not achieve its growth potential include apparel (USD 3.3 billion) and home textile (USD 2.3 billion) (ITC, 2024). Pakistan's global export of textile products for the last five years is as follows:

Pakistan Global Exports of Textile Products

Year	Billion USD
(1)	(2)
FY 2019-20	13.04
FY 2020-21	15.50
FY 2021-22	19.64
FY 2022-23	16.84
FY 2023-24	16.86
FY 2024-25	6.20*

*FY 2024-25 data is for July 2024 to October 2024 (Window, 2025)

Pakistan's Top Fifteen Textile Imported Products (% of Total Imports)

Product Description	FY	FY	FY	FY	FY	FY
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
6309.0000: Worn clothing	11.79	13.39	8.86	10.58	20.43	21.52
5201.0090: Cotton, Other	28.5	29.47	33.31	41.48	14.21	19.63
5402.3300: Polyester Filament Yarn (DTY)	5.95	5.72	6.73	5.97	8.83	7.41
5504.1000: Staple Fiber of viscose rayon	7.88	7.72	8.38	6.15	9.41	3.99
6001.9290: Pile knitted or crocheted fabric, Other	1.54	2.24	2.27	1.72	3.89	3.97
5503.2010: Polyester Staple Fiber	3.62	3.42	2.56	2.02	2.12	3.20
5402.4700: Polyester Filament Yarn (FDY)	2.85	2.52	3.13	3.56	4.8	3.08
5504.9000: Artificial Staple Fibers of Viscose; Other	1.22	1.33	1.83	2.37	2.51	2.99
5403.3100: Yarn of viscose rayon	3.15	2.78	2.38	2.25	2.92	2.36

5208.5100: Plain weighing cotton fabric	0.05	0.08	0.36	0.13	0.65	1.72
5205.2800: Cotton yarn; measuring less than 83.3dt	0.78	0.64	0.76	0.88	1.02	1.43
5407.5200: Woven Fabric; Dyed	0.21	0.26	0.28	0.22	0.6	1.20
5205.2700: Cotton yarn; measuring less than106.38dt	0.68	0.58	0.44	0.41	0.31	1.18
5402.4410: Elastomeric yarn	1.48	1.33	2.33	1.15	1.12	1.07
5804.1000: Tulles and Other net Fabrics	0.19	0.17	0.52	0.66	0.92	1.00
Total	69.89	71.65	74.14	79.55	73.74	75.75

*FY 2024-25 data is for July 2024 to October 2024 (Window, 2025)

Pakistan is a major player in the global textile industry, primarily as an exporter, but it also imports a considerable volume of textile products to meet its domestic and industrial needs. Pakistan's textile imports largely include cotton (24.77% of total textile imports FY 25 till October, 2025) manmade filaments (19.97%), man-made staple fibers (13.81%). These imports are essential to support Pakistan's vast textile and apparel sector, which relies on blending local cotton with imported materials to produce high-quality goods (Window, 2025). Following tables explain trends in Pakistan's textile imports over the last five years:

Pakistan's Global Textile Imports

Year/Period	Value (Billion USD)
(1)	(2)
FY 2019-20	2.76
FY 2020-21	4.14
FY 2021-22	4.82
FY 2022-23	3.86
FY 2023-24	2.82
FY 2024-25	1.21*

^{*} Data is for July 2024 to October 2024 (Window, 2025)

Pakistan's Top Fifteen Textile Imported Products (% of total imports)

Product Description	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
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5804.1000: Tulles and Other net Fabrics	0.19	0.17	0.52	0.66	0.92	1.00
Total	69.89	71.65	74.14	79.55	73.74	75.75

*FY 2024-25 data is for July 2024 to October 2024 (Window, 2025)

Business Environment Analysis: Ease of Doing Business:

• Regulatory Barriers

Pakistan's low ranking of 147 out of 190 countries in the World Bank's Ease of Doing Business Index underscores significant regulatory hurdles. Excessive red tape, cumbersome licensing processes, and complex legal frameworks make establishing and operating a business a daunting task. Investors face delays in obtaining permits, navigating taxation policies, and meeting compliance requirements. These inefficiencies not only increase operational costs but also discourage new market entrants.

The regulatory framework of textile sector is further weakened by inconsistent enforcement of policies. Frequent changes in tax regimes, electricity and LNG price hike and inconsistent application of laws create an unpredictable business environment. To attract investment, Pakistan must streamline its regulatory processes, simplify licensing, and establish consistency in policy enforcement.

Corruption

Ranked 133 out of 180 countries in Transparency International's 2024 Corruption Perceptions Index, corruption is a pervasive issue in Pakistan's public and private sectors (Transparency International, 2023). Bribery, embezzlement, and favoritism undermine investor confidence and distort market dynamics. Foreign investors often encounter demands for kickbacks in exchange for approvals or permits, leading to higher operational costs and ethical dilemmas. Corruption erodes trust in institutions and discourages long-term investment. Addressing this issue requires robust anti-corruption frameworks, enhanced accountability, and digitization of processes to minimize human intervention.

• Bureaucracy and Administrative Inefficiencies

Dealing with Pakistan's bureaucratic machinery can be costly and time-consuming. Investors often struggle with prolonged delays in obtaining approvals, negotiating contracts, and resolving administrative issues. Government officials, at times, lack the technical expertise required to facilitate foreign investments efficiently.

Despite recent improvements in logistics, poor trade facilitation and infrastructure continue to inhibit export competitiveness and trade growth in Pakistan. For example, the typical container dwell time at ports in Karachi (95 percent of Pakistan's international trade goes through one of the two ports in Karachi) is seven days, three times longer than that of developed countries and East Asia. As of 2018, border and documentary compliance to import into Pakistan takes 263 hours, compared to 11.9 hours in OECD countries.

These inefficiencies discourage investors seeking a streamlined and predictable investment process. Introducing capacity-building programs for government officials, establishing one-stop investment facilitation centers, and reducing bureaucratic layers can significantly improve the investment climate.

Cost of Doing Business

• Low-Quality Cotton Production

Cotton, the backbone of Pakistan's textile industry, suffers from poor quality due to suboptimal farming practices, outdated seed technology, and insufficient pest control measures. Pakistani cotton often lacks the desired length, strength, and fineness required for high-quality textile products. Consequently, manufacturers are compelled to import superior-grade cotton from countries like Egypt and the USA, significantly increasing production costs.

The reliance on imported cotton not only raises raw material expenses but also exposes the industry to exchange rate fluctuations and international market volatility. To reduce dependency on imports, Pakistan must invest in research and development (R&D) for better seed varieties, modernize farming techniques, and implement stringent quality control measures in cotton production.

• Cotton production fluctuations and import duties further raised costs, affecting the downstream value chain. Crucially, the lack of a robust implementation framework and over-reliance on government financial commitments undermined policy effectiveness. Comprehensive reforms in execution, energy access, and value-chain integration are critical for future policy success.

• Outdated Machinery and Obsolete Production Methods

The textile sector in Pakistan relies heavily on outdated machinery and traditional methods of production, which undermine efficiency and product quality. Many factories operate with machinery that is decades old, leading to frequent breakdowns, higher maintenance costs, and increased energy consumption. The inability to produce innovative and high-value-added textile products limits the industry's ability to compete with technologically advanced countries like China, India, and Bangladesh (Lodhi, 2023).

Modernizing the machinery and adopting advanced technologies such as automated looms and computer-aided design (CAD) systems can significantly enhance productivity and reduce operational costs. Government incentives, such as low-interest loans and subsidies for machinery upgrades, can encourage the adoption of modern technologies (Ahmad M. , 2015).

• Labor-Intensive Production

Due to the lack of technological advancements, Pakistan's textile sector remains labor-intensive, relying heavily on manual processes. While this provides employment opportunities, it also reduces efficiency and increases production costs. Labor-intensive production often leads to inconsistent product quality, delays in meeting international orders, and higher operational expenses.

To address this issue, the sector must focus on automation and process innovation. Introducing robotic systems, artificial intelligence (AI), and data-driven production methods can optimize efficiency and reduce dependence on manual labor. Moreover, technology-driven production can help meet global quality standards, enhancing the competitiveness of Pakistani textiles in international markets.

Unskilled Labor Force

Pakistan's textile industry is burdened with a largely unskilled and semi-skilled workforce, which contributes to low productivity and inconsistent product quality. Many workers lack the technical expertise required to operate modern machinery or adhere to international quality standards. This skill gap results in high wastage, rework, and lower profit margins (The Express Tribune, 2011).

Investing in workforce training and development is essential to overcoming this challenge. Establishing technical and vocational training institutes specializing in textile production and collaborating with international organizations for skill enhancement programs can equip workers with the necessary skills. Additionally, government and industry stakeholders should prioritize on-the-job training and certification programs to improve labor productivity.

• Global transformation from Cotton to Man Made Fiber (MMF)

Pakistan's textile sector, heavily reliant on natural fibers like cotton and wool, is grappling with escalating production costs and diminishing competitiveness in the global market. While these fibers have traditionally been the backbone of textile production, the global industry has undergone a significant transformation, shifting towards man-made fibers (MMFs) due to their economic and sustainable advantages. MMFs now dominate over 70% of the global textile market, leaving natural fiber-based producers like Pakistan struggling to keep pace. Key barriers include a lack of production capacity for MMF and economic distortions, such as high import duties on polyester staple fiber (PSF) and purified terephthalic acid (PTA), which make MMF production uncompetitive. These duties, coupled with anti-dumping measures, have led to inflated domestic prices, significantly higher than those in countries like China and India. Furthermore, Pakistan's outdated PTA plant and restricted market conditions, including limited access to import LCs for the spinning industry, hinder growth. This protectionist approach benefits a few domestic manufacturers but harms the broader textile export market, with the cost disparity impacting competitiveness. To revive the sector, the government must reconsider import duties and anti-dumping policies, making MMF production more viable and competitive, thus driving textile exports and supporting economic recovery. Reducing these barriers would foster greater production, job creation, and diversification of export markets (Mubasal, 2024).

• Energy and Infrastructure Issues:

One of the most significant challenges faced by the textile sector is the erratic energy supply. Frequent power outages and high electricity costs not only increase the operational costs for textile mills but also lead to production delays, hampering timely deliveries (Inam, Beyond the Billionaires Bash: Pakistan's Real Crisis, 2024). Poor infrastructure, including outdated roads and inadequate transportation networks, further exacerbates the sector's logistical challenges.

 Delayed or unpaid facilitation scheme funds and inadequate allocation for infrastructure, training, and compliance programs hindered progress. Energy shortages during the first policy period and uncompetitive energy pricing during the second further restricted growth. High international commodity prices, volatile markups, and

- liquidity challenges from inconsistent tax refund mechanisms compounded the sector's struggles. The withdrawal and intermittent restoration of the zero-rating regime aggravated liquidity issues for exporters.
- **Tariff Structure** The current tariff structure poses several challenges for the manufacturing sector, especially export-oriented industries. High tariffs on imported raw materials, intermediate goods, and machinery significantly increased production costs, undermining competitiveness. Sustained tariff protection has also resulted in inefficiencies, leaving domestic manufacturers unable to maintain their market share or compete globally. Moreover, elevated tariffs have created an anti-export bias, as producers find the protected domestic market more attractive than international markets. Domestic consumers ultimately bear the cost, as protected items are priced higher than their international counterparts. The complexity of the tariff structure characterized by multiple duty slabs, concessionary SROs, and regulatory duties-further compounds these issues. Additionally, the high tariffs have encouraged smuggling, under-invoicing, and misdeclaration of goods. SMEs, in particular, face discrimination due to differing tariffs for industrial and commercial importers, as they often rely on commercial channels for raw materials. Frequent regulatory duty changes have made the tariff environment unpredictable, deterring investment. Lastly, replacing the zero-percent duty slab on raw materials and machinery with higher tariffs has further weakened the competitiveness of the manufacturing sector.
- Technology Up-gradation Fund (TUF) initiatives failed due to limited disbursement and funding shortages, stalling investment in modern machinery. Similarly, the Drawback of Local Taxes and Levies (DLTL) scheme faced delays, limiting its intended impact. No significant infrastructure or skill development initiatives materialized, and major projects like Pakistan Textile City Limited were liquidated.:

Legal and Policy Analysis

Following are the **Existing Laws and Regulations** governing the Textile Sector:

Legal Framework

• Labour Laws and Worker Protection: The legal framework governing labor in Pakistan's textile sector includes several labor laws designed to ensure worker welfare, protect rights, and regulate working conditions. However, there are gaps in enforcement, and the sector faces challenges related to child labor, low wages, and poor working conditions. The key labor laws include:

- a) The Factories Act, 1934: Regulates working conditions in factories, including provisions for worker safety, wages, and hours of work.
- b) The Industrial Relations Act, 2012: Governs industrial relations and the rights of workers to form trade unions, address grievances, and resolve disputes.
- c) The Employment of Children Act, 1991: Aimed at prohibiting child labor in the industrial sector, although its implementation remains weak, particularly in the textile industry. Despite these laws, enforcement remains a significant issue due to weak regulatory bodies, corruption, and lack of awareness. Consequently, the legal framework's failure to fully protect workers contributes to inefficiencies in production and diminished reputation in global markets that prioritize labor rights.
- d) Intellectual Property Rights (IPR): The textile sector, particularly in high-end fashion and design, benefits from intellectual property protections. Pakistan is a signatory to international treaties like the World Trade Organization's Trade-Related Aspects of Intellectual Property Rights (TRIPS). However, Pakistan struggles with enforcing intellectual property laws, especially in the textile sector, where counterfeiting and unauthorized copying of designs are prevalent. Effective intellectual property enforcement is crucial to ensuring innovation, brand protection, and market competitiveness, particularly in the global fashion and textile markets.

• Environmental Laws

The textile sector is a significant contributor to pollution and environmental degradation, yet environmental regulations remain underdeveloped. Pakistan has laws like:

- a) The Pakistan Environmental Protection Act, 1997: Provides a framework for environmental protection, but the textile industry often fails to comply with waste management and pollution control measures.
- b) The National Environmental Quality Standards (NEQS): These include guidelines for air, water, and noise pollution, but enforcement is inconsistent, and compliance remains a major challenge for textile manufacturers.

The lack of strong environmental regulations and enforcement results in unsustainable production practices that not only harm the environment but also hinder Pakistan's access to ecoconscious global markets.

Policy Framework

- The Strategic Trade Policy Framework (STPF) 2020-25 outlines key objectives, including geographical and product diversification, cost reduction via tariff rationalization, and the pursuit of regional connectivity. The policy emphasized increasing competitiveness by supporting export-oriented industries with incentives such as preferential taxation, access to credit, and infrastructure development. The STPF aimed to achieve an export target of \$31.2 billion for the fiscal year 2021-22, with projections of \$37.38 billion in 2022-23, \$45.81 billion in 2023-24, and \$57.03 billion by 2024-25. However, the targets set by the policy could not be achieved due to inconsistent implementation, and inadequate support mechanisms for smaller firms
- Textile Policy 2009-2014: Pakistan's first comprehensive Textile Policy aimed to increase exports, improve productivity, and diversify the sector's product range. The policy focused on:
 - a) Upgrading technology in the textile sector.
 - b) Creating incentives for export growth.
 - c) Enhancing value-added textile products.
 - d) Developing a competitive edge in the international market.

However, implementation was slow, and the policy failed to achieve its key targets due to a lack of political will, inconsistent implementation, and inadequate support mechanisms for smaller firms.

- The Textile Policy 2014-2019 aimed to enhance Pakistan's textile sector's global competitiveness, increase exports, and generate employment. It focused on value addition, technology upgradation, and skill development while addressing challenges like energy shortages and high production costs. Key initiatives included a Rs. 64.15 billion package offering incentives such as duty drawbacks, technology support, and subsidized loans. The policy targeted doubling textile exports to \$26 billion by 2019, fostering investment, and promoting diversification into man-made fibers and technical textiles. However, implementation challenges, energy crises, and insufficient funding hindered achieving its ambitious goals.
- The Textile Policy 2020-2025 focuses on enhancing the textile industry's competitiveness and aims to bring about reforms in several key areas. Its goals include:
 - a) Targeting \$26 billion in textile exports by 2025.
 - b) Providing fiscal incentives, including rebates on taxes and duties for textile manufacturers.
 - c) Promoting value-added products such as garments and technical textiles
 - d) Encouraging technology adoption and skill development.

While the policy demonstrates a forward-looking approach, its success

depends heavily on timely implementation and resolving the structural inefficiencies that continue to plague the sector. The policy is also vulnerable to shifting political priorities, which may hinder its long-term effectiveness.

• National Tariff Policy: Pakistan's tariff policy imposes duties of 5% on purified terephthalic acid (PTA) and 7% on polyester staple fiber (PSF), alongside anti-dumping duties of up to 12%. These high tariffs increase costs for manufacturers and hinder investment in man-made fiber (MMF) production, which dominates global demand. Consequently, Pakistan's textile exports remain overly reliant on cotton-based products, limiting diversification and reducing competitiveness in the international market.

Import tariffs on industrial machinery, spare parts, and raw materials significantly increase production costs. While global competitors have eliminated such tariffs to promote industrial growth, Pakistan's manufacturers bear excessive financial burdens, reducing the price competitiveness of their exports in international markets.

Exporters face persistent delays in receiving duty drawback payments, which are meant to refund duties and taxes on raw materials used in export goods. Rates for these drawbacks have not been revised in years, further diminishing their value. These delays exacerbate liquidity crises for exporters, undermining their financial stability.

• Free Trade Agreements (FTAs):

Pakistan has entered into several FTAs which can provide reduced tariffs and easier access to partner countries. For example, the FTA with China and preferential access granted under the Generalized System of Preferences (GSP) by the European Union enables enhanced export opportunities for Pakistani textiles.

- i. China-Pakistan Free Trade Agreement-II (CPFTA-II): China-Pakistan Free Trade Agreement (CPFTA), implemented in 2006, has facilitated increased textile exports to China by reducing tariffs on key products. However, this has also led to a significant rise in imports from China, contributing to a trade imbalance.
- ii. Pakistan-Sri Lanka Free Trade Agreement (PSFTA), signed in 2005 offers preferential tariffs on textile exports to Sri Lanka. Pakistan-Sri Lanka Free Trade Agreement (PSFTA) has provided Pakistani textile products with preferential access to Sri Lankan markets. Despite these opportunities, Pakistan's textile exports to it have not reached its full potential, often due to competition from other exporting nations and non-tariff barriers.
- iii. Pakistan-Malaysia Free Trade Agreement formally known as the Malaysia-Pakistan Closer Economic Partnership Agreement (MPCEPA), was signed in 2007 and implemented in 2008. This comprehensive agreement aimed to enhance bilateral trade by reducing tariffs on various products, including textiles. Despite the

- FTA's provisions, Pakistan's textile exports to Malaysia have experienced only marginal growth as many high-potential textile items are either excluded from Malaysia's concession list or face higher tariffs compared to those offered to other trading partners of Malaysia like China and India.
- iv. Indonesia-Pakistan Preferential Trade Agreement (IP-PTA), signed in 2012 and implemented in September 2013, has had a notable impact on the textile trade between the two nations. Indonesia lowered import tariffs on Pakistani textiles, including cotton yarn and fabrics, facilitating increased exports from Pakistan. This preferential treatment provided Pakistani textile exporters with a competitive edge in the Indonesian market.
- v. The European Union's Generalized Scheme of Preferences Plus (GSP +) has significantly influenced Pakistan's textile trade with Europe. Implemented in January 2014, GSP+ grants Pakistan duty-free access to the EU market for approximately 66% of tariff lines, predominantly benefiting the textile and garment sectors, which constitute over half of the country's exports. Despite these gains, challenges persist. Pakistan's export portfolio remains concentrated in textiles, indicating a need for diversification to fully leverage GSP+ benefits. Moreover, compliance with the 27 international conventions tied to GSP+ status, covering human rights, labor standards, environmental protection, and good governance, is imperative. The EU has raised concerns regarding Pakistan's implementation of these conventions, suggesting that future trade privileges may be contingent upon tangible progress in these areas. (Rafique, 2023)

Institutional Framework Analysis

The institutional framework governing this sector encompasses institutional mechanisms aimed at fostering growth and ensuring sustainability. Ministry of Commerce and Textile is the main ministry that governs textile sector. A specialized Textile Wing in the ministry deals with matters of textile and is headed by DG Textile who reports to Executive Director general (EDG). EDG report to Special Secretary & Secretary Commerce Division. (Commerce, 2025) The Ministry of Commerce and Textile is responsible to formulate trade policies including textile sector. Its functions also include (TDAP/Trade Promotion Officers Abroad), Agreements (FTAs, PTAs etc.), Market Development (trade fairs, expos, marketing campaigns), Regulatory Framework (Tariff policy, anti-dumping duties, countervailing duties, licensing etc.), Capacity Building/Skill Development, Research & Development (R&D) and Sustainability & Compliance with domestic laws & international standards). (Commerce, 2025)

Trade Development Authority of Pakistan (TDAP), operating under the administrative control of the Ministry of Commerce, is involved in national policy making for maximizing exports of goods and services from Pakistan. It is headed by CEO who is appointed from a private sector and assisted by Secretary TDAP. There are 10 Directorate Generals under Secretary TDAP one of which delas with textile and leather goods. It also organizes exhibitions, trade fairs, and delegations to and from Pakistan aiming to enhance the country's export potential in conjunction with Trade Missions. Abroad. (TDAP, 2025)

The role of a Pakistani Trade Officers stationed abroad is to increase the foreign exchange earnings of Pakistan through promoting and facilitating the expansion of Pakistan's visible and invisible exports to the territory to which he is assigned. A Trade Officer posted to a diplomatic mission works under direct administrative supervision of the Permanent Head of the Mission. They however are substantively controlled by Ministry of Commerce which manages them in consultation with TDAP. The Trade Officer assists the Ministry of Commerce in formulation of national trade policy and export development strategy and reports on development taking place in the host country having a bearing on Pakistan's trade, commerce and economic relations with the said country/territory. Currently 65 trade missions in different parts of the world are working for the purpose. (Commerce, 2025)

The National Tariff Commission (NTC) is an autonomous body established under the NTC Act of 2015. It is operating under the administrative control of the Ministry of Commerce. Its primary role is to advise the federal government on tariff-related matters and implement trade defense laws to protect domestic industries from unfair trade practices. The commission is composed of Chairman and the three members. It is assisted by three Directorate General and a Secretary NTC. (NTC, 2025)

The Ministry of Commerce and Textile in Pakistan faces significant challenges in policy implementation, with comprehensive plans often failing to achieve their targets due to bureaucratic inefficiencies and lack of follow-through. Small and Medium Enterprises (SMEs) in the textile sector struggle to access financing, modern technologies, and export markets, limiting their growth potential. The industry's reliance on outdated machinery and insufficient investment in research and development (R&D) has hindered its global competitiveness. Additionally, many manufacturers, particularly SMEs, face difficulties meeting international labor environmental standards, affecting market access to regions like the EU and the US. The sector's dependence on cotton as the primary raw material makes it vulnerable to production and price

fluctuations, while limited diversification into synthetic fibers and technical textiles restricts growth. Frequent changes in taxation and export rebate policies create uncertainty, further discouraging long-term investments. Despite being a major textile exporter, Pakistan's share in the global textile trade has declined, losing ground to competitors like Bangladesh, Vietnam, and India, which benefit from better policy support and infrastructure. Structural weaknesses, including institutional overlaps among entities like the Ministry of Commerce, FBR, and TDAP, poor infrastructure, and weak international marketing efforts, exacerbate these challenges, reducing the sector's competitiveness and market reach.

The Federal Board of Revenue (FBR) is Pakistan's apex tax authority, operating under the Ministry of Finance. Its responsibilities encompass tax administration, revenue collection, and enforcement of fiscal policies. Key responsibilities include collection of taxes including income tax, sales tax, customs duties, excise duties, and federal levies; maximizing revenue generation to meet national financial needs and development objectives; drafting and implementing tax policies to promote economic stability and growth; managing imports and exports through Pakistan Customs; ensuring compliance with trade regulations and preventing smuggling and illegal trade activities. (FBR, 2025)

Pakistan Customs is organized under FBR. A dedicated Customs Wing headed by Member Customs, who report directly to Chairman oversees working of Custom Collectorates. Custom Collectorates are field formations divided on the basis of geographical locations and nature of duties. It includes: Model Customs Collectorates (MCCs) which handle major customs import/export operations, including clearance; Preventive Collectorates with focus on anti-smuggling and enforcement of customs laws; Appraisement Collectorates dealing with the assessment and valuation of goods for duty purposes and Enforcement Collectorates focusing on compliance and enforcement of customs regulations. Besides, Regional and Sub-Regional offices have also been established in major cities and key trade zones to facilitate operations at the local level. Customs Stations and Checkpoints are also located at international borders, airports, seaports, and dry ports. (FBR, 2025)

One of the main contributors to an industry-wide liquidity crisis in the textiles and apparel sector is the dysfunctional taxation regime. Refunds of Income Tax, Sales Tax, Provincial Sales Tax and payment of Custom Duty Drawback are paid after a delay of months and are even blocked unnecessarily sometimes causing liquidity crisis. Further, all custom administrations across the globe are making all out efforts to minimize dwell time at ports which have been reduced

to only a few hours in the modern world. In Pakistan it still spreads to days and weeks adding to the cost of inputs and making exports uncompetitive in the international market.

Gap Analysis

The textile sector of Pakistan, while being a cornerstone of the country's economy, faces significant gaps that hinder its global competitiveness and growth potential.

- Policy and Regulatory Environment: Pakistan's textile industry faces challenges due to frequent policy changes, weak implementation, and a lack of stakeholder involvement in policy formulation. In contrast, countries with stable and investor-friendly policies, such as Vietnam, attract higher foreign investment, fostering industry growth. The gap in Pakistan lies in inconsistent energy pricing, delayed tax refunds, and overregulation, which hamper the sector's ability to thrive and attract both domestic and foreign investment. Institutional and governance gaps persist, with fragmented roles, overlapping jurisdictions, and lack of coordination among stakeholders. Transparency in subsidy allocation and limited accountability mechanisms aggravate inefficiencies (Board of Investment, 2022).
- Product Diversification, Value Addition and Branding: Pakistan's textile industry faces a significant challenge due to its heavy reliance on cotton-based products, which account for over 97% of textile exports, while synthetic and woolen textiles contribute less than 3%. Globally, markets are shifting towards synthetic fibers and woolbased products, leaving Pakistan behind competitors like Vietnam, which has successfully focused on value-added products. The gap lies in the country's lack of capacity to produce synthetic textiles and diversify its product line, which limits growth and competitiveness in international markets (APTMA, 2024).
- Innovation and Technology: Pakistan's textile industry struggles with insufficient investment in research and development (R&D) and outdated production technologies, resulting in limited adoption of technical textiles and e-textiles. In contrast, leading exporters like China and Vietnam have successfully integrated advanced technology and innovation into their value chains, enhancing their competitiveness. The key gap in Pakistan lies in the absence of policy-driven support for innovation and technology upgradation, which hampers the industry's ability to modernize and remain competitive in the global market (Ministry of Commerce, 2022).
- Market Diversification: Pakistan's textile exports are heavily concentrated in a few markets, primarily the USA, EU, and China, resulting in missed opportunities in emerging markets like Japan, Canada, and the Middle East. In contrast, competitors like Vietnam and Bangladesh have successfully expanded their export footprints

- globally. The gap lies in Pakistan's limited exploration of untapped markets and the lack of robust marketing strategies, hindering the diversification and growth of its textile export base (APTMA, 2024).
- Infrastructure and Cost of Doing Business: Pakistan's textile industry struggles with inadequate infrastructure, including unreliable energy supply, poor logistics, and outdated machinery, which, combined with high production costs and limited access to finance, significantly hinder its competitiveness. In contrast, global competitors offer efficient infrastructure and regionally competitive energy rates. The key gap in Pakistan is the lack of investment in infrastructure development, such as textile parks and Special Economic Zones (SEZs), which could support industry growth and reduce operational challenges (Bhutta, 2024).
- Workforce Development: Pakistan's textile industry faces the issue of limited vocational training programs and low female participation in the workforce, which restricts its ability to meet the demands of modern production technologies. In contrast, countries like China and Turkey prioritize workforce upskilling, ensuring a skilled labor force that aligns with industry advancements. The gap in Pakistan lies in the lack of focus on skill development and a low emphasis on gender inclusion, preventing the industry from fully capitalizing on its potential human resources (Board of Investment, 2022).

Comparative Analysis of Pakistan with India and Italy

The textile sector in Pakistan, despite its significant contribution to the national economy, has faced a series of challenges, particularly in comparison to global textile powerhouses like India and Italy. A comparative analysis with these countries reveals key areas where Pakistan's textile sector could benefit from adopting best practices.

• Policy Framework, Infrastructure, Technology and Value Addition Comparison

India has consistently demonstrated robust growth in its textile industry, driven by a combination of strategic policies, technological advancements, and a large, skilled labor force. India's government has implemented the National Textile Policy with a clear focus on modernization, value addition, and environmental sustainability. For instance, the Technological Upgradation Fund Scheme (TUFS) has been pivotal in incentivizing the adoption of advanced machinery and technology in Indian textile mills. This has allowed India to improve its product quality, efficiency, and competitiveness globally. Additionally, India's efforts to focus on value-added textiles, such as garments and technical textiles, have increased its global export share. Pakistan, in contrast, remains overly reliant on raw material exports, such as cotton and yarn, failing to capitalize on the higher value added by finished goods. Pakistan's textile policy lacks a coherent

strategy to drive technological innovation and create value-added products that could elevate its position in the international market.

Italy, on the other hand, is renowned for its high-end textile and fashion industry, which thrives on innovation, branding, and sustainable practices. Italy's focus is on luxury fashion and design, supported by world-class craftsmanship and a high degree of industry specialization. Italian textile companies are known for their integration of design, quality control, and environmental sustainability, which has allowed them to command premium prices for their products in the international market. Moreover, Italy's emphasis on research and development (R&D) in textile manufacturing, especially in creating eco-friendly fabrics and high-performance materials, has set a global benchmark. Pakistan's textile industry, however, struggles with outdated technology, inefficient production processes, and a lack of investment in R&D, which hinders its ability to innovate or compete in premium markets.

• Labor Market and Human Resource Development

Another stark contrast is **labor management**. India has made significant strides in improving working conditions, skill development, and labor laws, even though it still faces challenges in these areas. Pakistan, on the other hand, grapples with child labor issues, poor working conditions, and insufficient labor training programs. While India has initiated skill development programs to enhance workforce productivity, Pakistan's textile labor force remains largely unskilled and underpaid, contributing to inefficiencies in production and lowering the industry's global appeal.

Sustainability

Moreover, **sustainability practices** in India and Italy are far more advanced compared to Pakistan. Italy's textile sector has a strong focus on **eco-friendly production** techniques, including water and energy efficiency, and certifications like OEKO-TEX and GOTS, ensuring that products meet international environmental and social responsibility standards. In contrast, Pakistan's textile mills contribute significantly to environmental degradation, with limited enforcement of environmental regulations and a lack of incentive for adopting sustainable practices.

In conclusion, while Pakistan's textile sector holds enormous potential due to its large cotton production base and low labor costs, it faces significant challenges when compared to the best practices observed in India and Italy. To elevate its global standing, Pakistan must adopt a more forward-thinking approach focused on technological innovation, value addition, sustainability, skill development, and market diversification. Drawing inspiration from India's policy frameworks and Italy's emphasis on design, quality, and sustainability could guide Pakistan toward a more competitive and resilient textile industry.

Blavatnik (OIPA) Framework for Analysis

Pakistan ranks at 90 with a 0.41 index score in the Blavatnik School of Government's Oxford Index of Public Administration 2024 (OIPA). Country's performance in data availability is even more deplorable with the lowest ranking in category D. The textile sector, a cornerstone of Pakistan's economy, accounting for over 60% of export earnings, was analyzed across four domains of OIPA—Strategy and Leadership, Public Policy, National Delivery, and People and Processes.

1. Strategy and Leadership

Pakistan Ranking: 102/120

Strategic Capacity: Frequent changes in textile policies, lack of a long-term vision, and minimal alignment with global trends like sustainability and digitization undermine the sector's competitiveness.

Cross-Government Collaboration: Poor coordination between key stakeholders, including the Ministry of Commerce, Ministry of Industries, FBR, and Trade Development Authority of Pakistan (TDAP), hinders coherent policy implementation.

Openness and Communication: Policy formulation lacks stakeholder consultation, particularly with small and medium enterprises (SMEs), workers' unions, and industry experts, leading to unrealistic policy objectives.

Integrity: Corruption in subsidies, tax refunds, and regulatory authorities undermines trust and efficiency, favoring larger players at the expense of SMEs.

Innovation: Limited investment in research and development (R&D) restricts innovation in textiles, especially in value-added segments. Dependency on low-value exports such as raw cotton and yarn persists.

2. Public Policy Domain

Pakistan Ranking: 78/120

Policy Making: Textile policies lack consistency, with frequent shifts in export subsidies, energy pricing, and taxation. Unrealized commitments like establishing textile parks reflect weak implementation.

Financial Management: Tariff adjustments and energy pricing policies benefit larger exporters but increase operational costs for SMEs. Access to credit remains constrained due to high-interest rates.

Regulation: Regulatory inefficiencies, combined with complex tax regimes, discourage new entrants and SMEs from scaling operations. The lack of enforcement of quality standards undermines competitiveness.

Crisis and Risk Management: Textile supply chains remain vulnerable to energy shortages, exchange rate volatility, and global economic shifts. The government lacks a proactive risk management strategy, evident during COVID-19 and global trade disruptions.

Use of Data: Data-driven policymaking is non-existent. The absence of centralized databases for production, exports, and labor force hampers evidence-based decision-making.

3. National Delivery

Pakistan Ranking: 95/120

System Oversight: Regulatory bodies like TDAP and Pakistan Standards and Quality Control Authority (PSQCA) lack autonomy and technical capacity. Political interference further erodes their effectiveness.

Digital Services: While some progress is visible in digitalizing customs and export documentation, the sector lacks a comprehensive digital ecosystem for textile stakeholders.

Tax Administration: High dependency on refunds through the zero-rated regime leads to liquidity issues for exporters. Tax evasion and under-invoicing are widespread.

Border Services: Inefficient customs operations and non-tariff barriers at borders delay shipments, increasing costs and affecting competitiveness.

Social Security: Textile workers, particularly in informal segments, lack social security coverage, access to healthcare, and opportunities for skills development.

4. People and Processes Domain

Pakistan Ranking: 87/120

Employees Engagement: The sector employs over 15 million workers, yet labor laws remain poorly implemented. Weak unions and exploitative practices lead to low productivity and morale.

Diversity and Inclusion: The workforce is male-dominated, with minimal representation of women and marginalized groups in managerial or technical roles.

HR Management: SMEs and informal players lack structured HR policies. Formal contracts are rare, and skill enhancement programs for modern textile technologies, such as automation, are insufficient.

Procurement: Heavy reliance on imported machinery and raw materials persists due to inadequate local manufacturing capabilities. Corruption in procurement inflates costs.

Technology and Workplaces: Modern technologies are primarily adopted by larger exporters, leaving SMEs reliant on outdated machinery. Workplace safety standards are often ignored, particularly in small-scale units.

SWOT-EETH Analysis SWOT

Strengths

- i. **Raw Material Base**: Pakistan benefits from being the fourth-largest cotton producer globally. This provides a steady supply of raw material for the textile industry, giving it a significant cost advantage in the production of cotton-based products.
- ii. **Labor Availability:** The country has a large and affordable labor force, which helps keep production costs low. This is a significant advantage for industries that rely on manual labor, such as weaving, spinning, and garment manufacturing.
- iii. **Established Infrastructure:** Pakistan's textile sector benefits from well-established infrastructure, including textile mills, factories, and related industries. The textile clusters in Faisalabad, Lahore, Karachi, and Multan have a long history and expertise in production.
- iv. **Global Market Access**: Pakistan enjoys preferential access to the European Union market under the GSP+ arrangement, which allows duty-free and quota-free access for many of its textile products.
- v. Complete Value Chain: Pakistan has a well-established textile value chain, from cotton production to ginning, spinning, fabric production, dyeing, and garment manufacturing.
- vi. **Government Support:** The government offers various incentives and policies to support the textile industry.
- vii. **Large Domestic Market:** The presence of large domestic market added with a protectionist regime is another Strength of Pakistan's Textile Sector.

Weaknesses

- i. Outdated Technology and Machinery: A major issue in Pakistan's textile sector is the outdated machinery and lack of technological modernization. The sector continues to rely on old production methods, resulting in lower productivity, poor product quality, and an inability to compete in high-value markets.
- ii. Low Value Addition: Pakistan's textile industry remains heavily focused on raw material exports such as cotton yarn and fabric. There is minimal focus on adding value through finished products like garments and specialized textiles. This results in lower export earnings compared to competitors who focus on high-value products.

- iii. **Cost of Doing Business**: Though Pakistan has come out of its energy crises, still the high cost of utilities, tariffs on imports of fabric and finished and high operational costs for textile manufacturers is a serious weakness of Energy Sector.
- iv. **Labor Issues**: Although labor costs are low, Pakistan's textile industry faces challenges in terms of worker skill development, working conditions, and compliance with labor laws. This affects productivity and the ability to meet international labor standards.
- v. **Environmental and Sustainability Challenges**: The textile sector in Pakistan is heavily criticized for its poor environmental practices, including water wastage, air pollution, and a lack of adherence to international sustainability standards. This not only affects the environment but also limits market access to ecoconscious global buyers.
- vi. **Dependence on Cotton:** Heavy reliance on cotton makes the industry vulnerable to fluctuations in cotton prices and crop yields.

Opportunities

- i. **Export Diversification**: There is a growing opportunity to diversify export markets, particularly into emerging economies in Africa, Central Asia, and the Middle East. These markets show increasing demand for affordable textiles and garments.
- ii. **Shift Towards Value-Added Products**: By focusing on value-added products such as garments, technical textiles, and home textiles, Pakistan can increase its export earnings. This shift requires investment in new machinery, design capabilities, and branding.
- iii. **Technological Advancement**: The adoption of modern technology and automation in the textile industry can significantly improve productivity and quality. Investment in **textile machinery modernization** and **Industry 4.0 technologies** such as artificial intelligence (AI) and robotics could enable the sector to compete in global markets with higher value products.
- iv. **Sustainability and Green Practices**: As global demand for sustainable products grows, Pakistan's textile sector has the opportunity to improve its environmental practices. Adoption of eco-friendly technologies and certifications like OEKO-TEX and GOTS could help open new markets and enhance the reputation of Pakistani textiles.
- v. **Government Support and Policies**: The government has started taking measures to boost the textile industry, including textile

policies and incentives for export growth. If effectively implemented, these measures could lead to increased investment, better infrastructure, and a more competitive industry.

Threats

- i. Competition from Global Rivals: Countries like China, India, and Bangladesh offer lower production costs and more advanced technology, creating significant competition for Pakistan's textile exports. Bangladesh, for example, has overtaken Pakistan in garment exports due to its competitive labor costs, better infrastructure, and efficient supply chains.
- ii. **Political Instability and Security Concerns**: Pakistan's textile sector is often affected by political instability, policy changes, and security concerns, which can disrupt manufacturing, exports, and supply chains. This uncertainty can deter foreign investment and affect long-term growth prospects.
- iii. **Global Trade Barriers**: Despite the GSP+ status, Pakistan faces trade barriers, especially in terms of stringent quality standards and non-tariff barriers in international markets. Many countries have moved towards stricter environmental and labor regulations, which could limit Pakistan's access to premium global markets.
- iv. Climate Change and Cotton Supply Risks: Pakistan's reliance on cotton as a primary raw material makes the industry vulnerable to climate change, particularly water scarcity, droughts, and pests that affect cotton production. These environmental risks can disrupt the supply chain and raise raw material costs.

EETH

Enhancement of Strengths

- i. Complete Value Chain: Encourage vertical integration within the textile sector to ensure better control over the entire value chain, from raw material production to finished products. Invest in advanced technologies and automation to streamline processes across the value chain, improving efficiency and reducing costs. This shall result in Improved product quality and consistency and enhanced operational efficiency and cost savings.
- ii. GSP+: Leverage existing trade agreements like GSP+ and negotiate new ones to secure preferential access to more international markets and by ensuring compliance with international standards and regulations to maintain preferential access and avoid trade barriers, Increased market access and competitiveness along with sustained and potentially expanded benefits from trade agreements can be obtained.

- iii. **Employment Generation:** Implement training and development programs to enhance the skills of the workforce, ensuring they are equipped to handle modern technologies and production techniques. Promote job creation initiatives, especially in rural areas, to provide employment opportunities and reduce urban migration. This shall result in higher productivity and efficiency due to a skilled workforce and improved socio-economic conditions and reduced unemployment rates.
- iv. **Abundant Raw Materials:** Promote sustainable cotton farming practices to ensure a steady and environmentally friendly supply of raw materials. Encourage the use of alternative raw materials like synthetic fibers and blended fabrics to reduce dependency on cotton resulting in ensured long-term availability of raw materials and enhanced environmental sustainability and resilience against fluctuations in cotton supply.
- v. Cheap Labor: Improve wages and working conditions to attract and retain skilled labor, while maintaining competitive production costs and implement automation in labor-intensive processes to enhance productivity and reduce reliance on cheap labor resulting in higher job satisfaction and lower turnover rates and increased productivity and competitiveness.
- vi. Government Support: Engage in advocacy to influence government policies that further support the textile sector, such as tax incentives, subsidies, and infrastructure development and foster partnerships between the government and private sector to implement initiatives that benefit the textile industry resulting in strengthened policy framework and increased government support and enhanced collaboration and resource allocation for sector development.
- vii. Large Domestic Market: Develop strong local brands to capture a larger share of the domestic market. Conduct awareness campaigns to promote locally manufactured textile products, highlighting their quality and affordability which shall result in increased domestic sales and market share and enhanced consumer loyalty and preference for local products.

Elimination of weaknesses

- i. **Hurdles in Doing Business:** Simplifying regulatory procedures and reducing bureaucratic red tape can make it easier for businesses to operate. This could lead to increased investment and efficiency in the textile sector. Implementing one-window operations for business registrations and approvals can save time and reduce frustration for entrepreneurs, promoting growth and innovation.
- ii. **Cost of Doing Business:** Providing subsidies and incentives can lower operational costs for textile manufacturers, making them more

- competitive in the global market. Implementing tax reforms to lower the tax burden on businesses can increase profitability and encourage further investment in the sector.
- iii. **Infrastructure Issues:** Investing in improving transportation, logistics, and communication infrastructure can ensure timely delivery of goods, enhancing the sector's reliability and competitiveness. Encouraging public-private partnerships to develop and maintain infrastructure can lead to more efficient and sustainable infrastructure projects.
- iv. **High Tariffs:** Negotiating favorable trade agreements can reduce tariffs on imports of fabric and finished goods, making it easier to access necessary materials and expand market reach. Implementing policy reforms to lower tariffs can promote trade and increase the competitiveness of the textile sector.
- v. Dependence on Cotton: Encouraging the diversification of raw materials by promoting the use of synthetic fibers and blended fabrics can reduce vulnerability to fluctuations in cotton prices and crop yields. Investing in research and development to improve cotton yields and develop alternative materials can enhance the sector's resilience and innovation.

Taking advantage of opportunities

- i. Diversification: Diversify the product range by including non-traditional textile products, high-value-added items, and blended fabrics. Target different market segments with specialized products, such as technical textiles, fashion textiles, and home textiles. Reduced dependency on traditional cotton products, Increased market opportunities and customer base and higher profitability through value-added products shall be the outcome.
- ii. **Technological Advancements:** Invest in R&D to develop innovative products, improve processes, and stay ahead of industry trends. Adopt digital technologies such as ERP systems, IoT, and data analytics to enhance operational efficiency. This should result in continuous innovation and improvement in product offerings, streamlined operations and better decision-making through data-driven insights and stronger competitiveness in the global market.
- iii. **Sustainability:** Invest in green technologies, renewable energy sources, and waste management systems to minimize environmental impact. Educate consumers about the benefits of sustainable textiles and promote eco-friendly products, which should result in positive environmental impact and compliance with international regulations and attraction of environmentally conscious consumers and markets.

Hedging against threats

- i. Energy Shortages: Develop and invest in renewable energy sources such as solar, wind, and hydroelectric power to reduce dependence on the national grid. Implement programs to improve energy efficiency in textile manufacturing processes, such as energy-saving machinery and practices. Invest in reliable backup power solutions, such as generators and UPS systems, to mitigate the impact of power outages.
 - i. **Competition:** Develop strategies to maintain competitive pricing without compromising quality, such as improving production efficiency and reducing waste. Invest in quality control and assurance to enhance the quality of textile products and meet international standards. Explore new markets and diversify the product range to reduce reliance on traditional markets.
 - ii. **Environmental Impact:** Adopt sustainable practices such as ecofriendly dyeing and finishing processes, waste reduction, and recycling. Ensure compliance with local and international environmental regulations to avoid penalties and enhance the industry's reputation. Obtain green certifications (e.g., GOTS) to attract environmentally conscious customers and markets.
 - iii. **International Competition:** Focus on innovation and product differentiation to stand out in the global market. This can include unique designs, high-quality materials, and value-added services. Form strategic partnerships and alliances with international companies to enhance market access and competitiveness. Leverage favorable trade agreements to reduce tariffs and increase market access.

ISSUES AND CHALLENGES

i. External obligation and challenges in export markets: The European Union introduced the Corporate Sustainability Due Diligence Directive (CSDDD) in April 2024. Rooted in the United Nations Guiding Principles on Business and Human Rights, CSDDD enforces mandatory human rights and environmental standards for large corporations, extending compliance requirements to their global supply chains. Though Pakistani textile exporters are not directly targeted, their role in European supply chains necessitates adherence to these regulations, set to phase in from 2027. This directive will significantly affect Pakistani textile businesses, compelling them to prioritize sustainable practices and align with global compliance norms to remain competitive.

The new regulations/strategies/directives related to the textile industry introduced in the Green Deal (EU) Strategy on Sustainable and Circular

- Textiles, Corporate Sustainability Due Diligence Directive (CS3D) and Carbon Border Adjustment Mechanism (CBAM)) provide detailed guidelines regarding the upcoming requirements from the manufactures/producers. For Pakistan to ensure compliance with the GSP+ obligations for its continuation as well as gain a competitive position in the global export market, it must fully own and fulfill the requirements of the Green Deal and related legislations and directives.
- ii. Rising energy prices and external shocks: Textiles, a key economic pillar employing millions and generating significant foreign exchange, face sustainability concerns amid rising energy costs. The IMF's insistence on ending subsidies and aligning energy prices with market rates, as part of its \$7 billion EFF, threatens the sector's competitiveness. A structural benchmark under the program mandates gas disconnections to captive power plants (CPPs) by January 2025, a prerequisite for the \$1 billion tranche in March. Additionally, a proposed Rs 1,700-1,800/mmBtu levy further pressures the industry. Energy costs, a major expense for textile units, already strain margins as Pakistan competes with Bangladesh, Vietnam, and India. Inconsistent and costly energy risks production delays and export commitments, jeopardizing revenue and reserves (Editorial, 2025).
- iii. Low-Quality Cotton Production: The inconsistent quality of locally produced cotton, due to outdated farming practices, climate condition and poor pest management, reduces productivity and necessitates costly imports of higher-quality cotton. Pakistan's cotton yield suffers from severe quality issues, with contamination rates over seven times the international standard. Outdated manual picking methods introduce high trash content, leading to significant ginning losses and lower yarn quality. Contamination from plastic strings, due to storage in fertilizer bags, further exacerbates the problem, often becoming apparent only in later processing stages (Ahmad I., 2020).
- iv. **Outdated Machinery and Technology:** The textile sector in Pakistan struggles with outdated technology and high energy costs, severely impacting its competitiveness against regional players like India and Bangladesh, which have modernized their industries. For example, a Pakistani mill with 25,000 spindles employs 500 workers and consumes 2.6 MW of power, while advanced Indian mills produce more yarn with only 200 workers and 1.5 MW (Ahmad M. , 2015). Lack of investment in capacity expansion and outdated machinery is pushing productivity down, with 50% of textile spindles set to be scrapped.
- v. **High Energy Costs and Shortages:** Frequent power outages, inconsistent gas supply, and high energy tariffs significantly raise production costs, disrupt operations, and undermine the industry's global competitiveness. Textile sector is burdened with high costs and uncertainty over utility prices, harming Pakistan's competitiveness compared to countries like India and Bangladesh, which offer better support to their textile industries (The Nation, 2023).

- vi. Lack of Diversification: The industry remains heavily reliant on natural fibers like cotton, with limited focus on man-made fibers (MMFs), which dominate global markets. This limits product innovation and reduces the sector's appeal to international buyers. Pakistan's textile sector, heavily reliant on cotton, is missing a significant growth opportunity in the global shift toward man-made fibres (MMF), which now constitute about 70% of global textile trade. MMF exports in Pakistan account for just 12%, leaving the country sidelined in this expanding market (Mubasal, 2024). Additionally, monopolistic pricing of polyester staple fiber (PSF) limits production and export diversification, further increasing vulnerability to supply shocks.
- vii. **Unskilled Workforce:** A lack of technical training and skill development results in low productivity and inconsistent product quality, affecting the industry's ability to compete with countries like Bangladesh and Vietnam (The Express Tribune, 2011).
- viii. High Cost of Doing Business: Complex regulatory processes, high taxes, and delays in tax refunds create financial strain, reducing profitability and discouraging investment in the sector. The stagnation is attributed to rising input costs, particularly electricity and gas prices, which have made exports uncompetitive. Energy tariffs for textile firms have increased from 9 cents/kWh in FY22 to over 14 cents/kWh, further pushing up production costs. Power tariffs have recently been raised again to 17.5 cents/kWh, more than double that of regional competitors like Bangladesh, India, and Vietnam. With gas prices also surging 223% since January 2023, the industry is struggling to maintain production viability. Textile millers warn of further export declines unless the government adopts policies like the Competitive Trading Bilateral Contracts Market (CTBCM) model, which would allow access to cheaper green energy. Energy costs, accounting for 12-18% of textile input costs, are inflated by cross-subsidies, making Pakistan's power tariffs nearly double those of regional competitors. Additionally, the industry calls for increasing the solar net-metering ceiling from 1MW to 5MW for industrial consumers to support the transition to net-zero emissions and boost energy supply (Bhutta, 2024).
- ix. Competition from Regional Players: Countries like China, India, and Bangladesh offer lower production costs, better infrastructure, and greater policy support, making them more attractive to global buyers. Pakistan's textile export sector is struggling due to high energy costs, liquidity crises, and poor policy decisions, making it difficult to compete internationally. Bangladesh, for example, has exported more in ready-made garments (\$15.7 billion) in first quarter of 2024 than Pakistan's total exports (\$13.3 billion) (Ali, 2023).

Conclusion:

The textile and apparel industry in Pakistan, a cornerstone of the economy, faces multiple challenges despite its potential to significantly boost export earnings and economic growth. The sector accounts for 50-60% of the nation's exports, but its capacity to contribute further is constrained by several structural and policy-related issues.

Firstly, Pakistan's textile exports are heavily reliant on cotton-based products, comprising over two-thirds of total exports. This focus limits the country's ability to capitalize on the growing demand for man-made fiber (MMF) products globally. Investments in MMF manufacturing are hindered by high import duties on critical inputs like purified terephthalic acid (PTA) and polyester staple fiber (PSF), along with anti-dumping duties, which disincentivize production and export diversification. The lack of growth in MMF exports leaves Pakistan competing for a shrinking market share as global demand for cotton-based products decreases.

The industry also suffers from high energy costs, with power tariffs for industrial consumers being nearly double those in competing regional economies. This issue, coupled with unreliable gas supplies and inadequate renewable energy adoption, significantly raises production costs, rendering exports uncompetitive internationally. Additionally, the withdrawal of regionally competitive energy tariffs (RCET) has further strained the sector. Liquidity shortages are another critical concern. Persistent delays in tax refunds, exacerbated by the inefficient FASTER system, trap substantial funds that could otherwise be used for operations and investments. Furthermore, the imposition of high sales tax rates and turnover taxes disproportionately affects smaller firms and those involved in upstream processes, deepening financial distress across the sector.

Infrastructure deficits, such as insufficient transport logistics and outdated testing facilities, also impede growth. Lengthy port dwell times, inefficient transport systems, and a lack of domestic testing centers increase costs and delays, making Pakistan's products less competitive. Additionally, inadequate traceability in the supply chain and a limited adherence to international labor and environmental standards pose significant barriers to accessing and retaining key markets, particularly in Europe.

Pakistan's high tariffs and protectionist trade policies have constrained the growth and diversification of its textile industry. By maintaining elevated duties on essential raw materials and imposing complex import procedures, the country has limited its participation in the burgeoning global market for synthetic textiles. To foster a more competitive and export-oriented textile sector, Pakistan may need to reconsider its trade policies, focusing on reducing tariffs, streamlining import processes, and enhancing regional trade cooperation.

RECOMMENDATIONS

Technology Upgradation and Modernization

- Introduce low-interest financing schemes for SMEs to upgrade machinery.
- Implement incentives for the adoption of automation and advanced manufacturing technologies.
- Establish R&D collaboration between universities and textile industry stakeholders.

Energy Efficiency and Cost Reduction

- Introduce regionally competitive energy tariffs for textile industries.
- Encourage the use of renewable energy sources like solar and wind.
- Upgrade infrastructure to reduce power outages and improve reliability.

Diversification into Man-Made Fibers (MMF)

- Reduce import duties on MMF raw materials like polyester staple fiber and purified terephthalic acid.
- Encourage local production of synthetic fibers through publicprivate partnerships.
- Conduct training programs to facilitate the transition to MMF production.

Improved Regulatory and Taxation Framework

- Simplify the taxation process and introduce one-window operations for exporters.
- Expedite tax refund processes to improve liquidity.
- Enhance transparency and accountability in regulatory procedures.

Workforce Skill Development

- Establish technical training institutes with modern textile-related courses.
- Collaborate with international training organizations for workforce capacity building.
- Introduce mandatory vocational training for workers.

Market Diversification and Export Promotion

- Target new markets in Africa, Central Asia, and the Middle East.
- Conduct branding and marketing campaigns to promote Pakistani textiles globally.
- Utilize trade agreements such as GSP+ and CPFTA to expand market access.

Sustainability and Compliance

- Implement environmental regulations with strict enforcement to meet international standards.
- Provide incentives for adopting eco-friendly practices.
- Develop wastewater treatment and energy-efficient production processes.

Institutional Strengthening and Governance

- Strengthen the coordination between TDAP, APTMA, and other relevant institutions.
- Improve the operational efficiency of customs and trade facilitation bodies.
- Introduce digitization to minimize bureaucratic inefficiencies.

LOG-FRAME MATRIX

Recommendations	Responsibility	Time Frame	Financial Implication
Technology upgradation and modernization	Ministry of Commerce, APTMA, Private Sector	1-3 years	High
Energy efficiency and cost reduction	Ministry of Energy, Textile Manufacturers	1-2 years	Medium
Diversification into MMF	Ministry of Commerce, FBR	1-2 years	Medium
Improved regulatory framework	FBR, Ministry of Finance, Ministry of Commerce	6-12 months	Low
Workforce skill development	TEVTA, NAVTTC, Textile Associations	2-3 years	Medium
Market diversification and export promotion	TDAP, Trade Missions Abroad	1-2 years	Medium to High
Sustainability and compliance	Environmental Protection Agency, APTMA	1-3 years	High
Institutional strengthening and governance	Ministry of Commerce, FBR, TDAP	Ongoing	Medium

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