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Strategic Analysis to Mitigate the Tariff Risks in E-Commerce Industries in Context to Indian Economy

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Abstract

In today's volatile trade environment, global tariff risk mitigation is a critical priority for businesses engaged in international commerce. Recent developments, such as the United States imposing a 10% universal tariff on imports and imposing higher rates on major trading partners, have introduced significant market uncertainty and supply chain disruptions. Companies must deal with a complex web of tariffs, with some Chinese goods facing rates as high as 145%. Effective global tariff risk mitigation strategies are essential to protect profit margins, maintain competitive pricing, and ensure supply chain resilience in this challenging landscape. The United States Trade Representative (USTR) source indicates that although the Indian government has pursued ongoing economic reform efforts, US exporters continue to face significant tariff and non-tariff barriers that hinder imports of US products into India. The World Trade Organization estimates that the most favored nation import duty imposed on India is 13.8 percent, the highest among any major economy.

Introduction

This paper provides a brief study on analysis to mitigate tariff risk in e-commerce industries in India. Before analyzing how to mitigate tariff risks, we must understand what a tariff is.

“ A tariff is a tax imposed by a government on imported goods and services, which acts as a trade barrier to increase the cost of foreign products. Used primarily to protect domestic industries from foreign competition, generate government revenue, and manage the trade balance, they often raise prices for consumers ”.

For example, to discourage companies from selling strategically important products to foreign buyers. The tariff is calculated as a percentage of the value of goods and hence, it is known as an ad valorem tax.

Tariffs imposed by countries around the world to protect domestic industries and respond to unfair foreign trade practices create challenges for any company doing business across international borders. Those businesses may have to raise domestic prices because tariffs increase the cost of imported raw materials, parts and finished goods, and export sales may be affected if foreign countries impose retaliatory tariffs of their own.

Through this research, we study all the technicalities and discussions on how to manage the tariff risk so that there is no significant impact on the e-commerce industries and the Indian economy.

However, by using effective tariff mitigation strategies, businesses engaged in international trade can continue to produce distinctive, high-quality products, develop new markets, and potentially increase their profits. Previous research has primarily highlighted manufacturing exports and large multinational corporations. Few studies have investigated e-commerce platforms, small and medium-sized enterprises (SMEs), and cross-border online sellers. There is a lack of thorough analysis regarding how frequent revisions of tariffs, customs regulations, and trade policies contribute to uncertainty for e-commerce businesses. Additionally, there are limited recommendations for policy-driven strategies aimed at risk mitigation.

The Indian e-commerce industry, projected to reach a market valuation of over $200 billion by 2026, stands at a crossroads. While the sector has thrived under a "tariff-free" digital environment, the expiration of the WTO Moratorium on Customs Duties on Electronic Transmissions (scheduled for March 31, 2026) introduces a paradigm shift. For a developing country like India, which is both a massive consumer of digital imports and an emerging exporter of digital services, the reintroduction of tariffs poses a double-edged risk to operational costs and global competitiveness.

The majority of studies focus on tariff risks associated with traditional trade, rather than specifically addressing those within e-commerce industries. There is a limited amount of research that presents that combines tariff risks with strategic management approaches in the realm of digital commerce. Current studies predominantly concentrate on developed economies. There is a notable absence of India-specific empirical research that tackles tariff risks in e-commerce from the perspective of a developing country.

The America First Trade Policy memorandum calls for a comprehensive review of U.S. trade policy, trade practices, and trade imbalances. The memorandum outlines trade and economic policy recommendations to address priority areas of trade, several of which may have important implications for companies and their supply chains. However, the full impacts of the tariff plan and

global trade policy remain to be seen. While some policy changes have already taken effect, U.S. trade policy and the economic landscape will continue to see developments. Businesses must be prepared to act quickly and align business strategies as policies update and evolve. Our global trade and supply chain management experts are monitoring developments to offer tailored guidance and scenario planning for organizations across industries. Let us help you stay informed and navigate the evolving trade, policy, and economic landscape. Track the latest and stay ahead with insights, alerts, webinars, and guidance from our experts.

Risk Identification: The "Tariff Shock" of 2026

Tariff risks in India's e-commerce landscape are categorized into three primary dimensions:

Digital Transmission Duties: The potential end of the WTO moratorium allows member nations to impose duties on "bits and bytes"—digitally delivered software, music, movies, and AI models.

Reciprocal Trade Barriers: As India explores digital taxes (like the Equalization Levy), trading partners (notably the U.S.) have responded with reciprocal tariffs on Indian physical exports (textiles, gems, and electronics), affecting e-commerce sellers who export via "E-commerce Export Hubs."

De Minimis Threshold Changes: Global shifts to lower de minimis values (duty-free limits for small parcels) threaten the "drop shipping" and cross-border B2C models that many Indian MSMEs rely on.

Literature Review

Prasad (2025) says that US tariffs on Indian goods present a meaningful risk to certain export-oriented sectors and pose challenges for job-rich manufacturing segments; the aggregate macroeconomic impact for India is likely to remain manageable in the short term—with GDP growth drag estimated at somewhere between ~ 0.1 and ~ 0.6 percentage points based on current studies. India's relatively modest export share to the US, large domestic market orientation, and export diversification potential serve as buffers. Nevertheless, the real concern lies in the medium to long term: persistent tariffs can erode competitiveness, shift global supply chains away from India, inflict structural damage in labor-intensive sectors, and raise the stakes for export policy. The policy response thus becomes pivotal—timely exporter support, market diversification, value-addition, and domestic demand strengthening will determine whether India turns this challenge into an impetus for upgrading its manufacturing and export ecosystem.

Gupta (2025) says that tariff wars, particularly those initiated by the US on countries, especially China and other countries like Canada, Mexico, the EU, and India, have highly affected the global trade landscape. It led to disrupted supply chains, inflationary pressures, and strategic trade realignments. While these tensions created economic challenges, they also opened long-term opportunities for emerging economies like India. Due to its developing manufacturing capacity and demographic advantage, India stands as a strategic junction in global supply chain diversification. However, to exploit the opportunities, India must address its structural weakness and promote self-reliance in key sectors. Hence, a strong policy framework, investment in infrastructure development, and skilled professionals like CAs are essential to navigate these global uncertainties.

According to Pal and Ajmani (2025), India and the United States share a strong bilateral trade relationship. The United States is one of few countries with which India has a positive trade balance. Therefore, any shift in US tariff policy will significantly impact the Indian economy. In this note, we presented results from a single-country economy-wide model that was used to assess the impact of bilateral tariff policy on the Indian economy. The following policy insights emerged.

Goldar (2005) said that Indian industry has been impacted by India's commitments on tariffs and quantitative restrictions under the WTO. It has been argued that while a large reduction has been made in the level of tariff between 1991 and 2004, this cannot be considered an outcome of India's commitments under the WTO since the tariff reforms have been largely independent of India's commitments. The tariff reform did have a significant effect on Indian industry, but these effects cannot be attributed to India's commitments.

Objectives

- To analyze the tariff-related risks encountered by e-commerce industries in India and to assess strategic measures for alleviating their effects on industry performance.
- To examine the role of technical and compliance strategies in minimizing tariff-related uncertainties.
- To propose a strategic framework for mitigating tariff risks within the Indian e-commerce sector.

Conceptual framework Model:

Research Design

The researcher adopted a descriptive research design. This design is most suitable because the main goal is to describe the existing strategies and observed impacts of the trade shifts in 2025-26 without necessarily establishing a causal link. The researcher adopted two approaches, i.e,

Approach: A mixed-methods approach, combining quantitative data (trade volumes, tariff rates) with qualitative insights (expert interviews, strategic frameworks).

Time Horizon: Cross-sectional, focusing specifically on the period starting October 2025 through the current fiscal year (2026).

Data Collection Methods

To capture the rapid changes in the Indian e-commerce sector, the study will utilize secondary data sources.

Government Reports: Analyzing the Union Budget 2026 (which introduced customs duty reliefs for D2C exporters) and reports from the Directorate General of Foreign Trade (DGFT).

Trade Databases: Sourcing data from the Ministry of Commerce & Industry's Export-Import Data Bank to track shifts in export destinations (e.g., pivot from the US to EFTA or UAE).

Industry Whitepapers: Utilizing reports from logistics firms (e.g., I Think Logistics, Shiprocket) and consulting firms (EY, Deloitte) regarding "Delivered Duty Paid" (DDP) adoption and "Tariff Engineering."

SWOT Analysis in Indian economy

Strength	**Weakness**
• Competitive IT, Pharma, Textiles and Service sector. **• Strategic trade location and young workforce.** **• Growing manufacturing base due to schemes like make in India, Aatmanirbhar Bharat, Vikshit Bharat etc.** **• Increase in FDI due to China + 1 strategy.**	**• Dependency on imports for electronics and industrial components.** **• Logistics and infrastructure challenges as compared to China.** **• Trade Deficits with US and China.**
Opportunities	**Threats**
• Potential substitute to China for low cost manufacturing. • Multinational companies are attracted which are seeking diversification. • Skill development and diversification in exports. • Bilateral Foreign Trade Agreements with EU, UK and Southeast Asia.	• U.S. tariffs on Indian goods may make it uncompetitive in the US markets. • Inflation due to costlier raw material imports • Increase in cost of producing due to global tariff on raw materials and spare parts. • Shipping and export routes affected due to geopolitical tensions.
Source Author's own work	

Result & Discussion

The research focuses on the assessment on developing economies and its impact in India.

Impact Assessment on Developing Economies (India Focus)

Sector	Nature of Risk	Impact Severity
SaaS& Software	Increased cost of imported enterprise tools.	High
B2C Retail (Cross-border)	Reduced price competitiveness in U.S./EU markets.	Medium-High
Entertainment/Media	Higher licensing costs for streaming and gaming.	Medium
Logistics/Last-Mile	Increased compliance and "red tape" costs at customs.	High
Source Author's own work		

US Tariff Impact in Indian Economy

As per the 1999 guidelines of the Organization for Economic Cooperation and Development (OECD), e-commerce encompasses online business activities, which include communications such as advertising and marketing, as well as transactions that involve ordering, invoicing, and payments (OECD, 2000).

The US has imposed tariffs of up to 50% on Indian goods, negatively impacting India's exports. Export growth rates, particularly in traditional sectors such as textiles, gems and jewelry, and leather goods, have declined significantly.

Key Points

- India's exports to the US fell by 15% in September 2025, compared to 20% in April-August 2025.
- Textiles and readymade garments exports recorded an annual decline of 10.1%.
- Cotton yarn and fabric exports declined by 11.7%.
- Gems and jewelry growth slowed to a mere 0.4%.
- In contrast, electronic goods exports grew by 50.5%, particularly sharply in smartphone exports.
- Trump's tariff policy has begun to impact shrimp prices in the US market, with prices rising by 15–20%.
- India's share of supplies in the US shrimp market is approximately 45%, worth approximately $6 billion annually.

Current Tariff rates imposed by US

The data is given in table below;

Country	Reciprocal tariff rate announced April 2, 2025	Status of reciprocal tariff	Current tariff rate
Australia	10%	Active as of April 5, 2025	10%
Bangladesh	37%	Lowered to 20%	20%
Cambodia	49%	Lowered to 19%	19%
Canada	25% for most goods; 10% for energy and potash; 0% for USMCA-compliant goods	25% tariff increased to 35% on August 1, 2025	35% (Read our blog for updates and details on Canada tariffs)
China	34%, increased to 84% then 125%, then decreased to 10%	10%; set to increase on November 10, 2026	30%+ (Read our blog for updates and details on China tariffs)
EU	20%	Lowered to 15%	15%
India	26%	Lowered to 25%; increased to 50% on August 27, 2025	50%
Indonesia	32%	Lowered to 19%	19%
Israel	17%	Lowered to 15%	15%
Japan	24%	Lowered to 15%	15%
Mexico	25% for most goods; 10% for energy and potash; 0% for USMCA-compliant goods	Set to increase to 30% in October 2025	25%
Pakistan	29%	Lowered to 19%	19%
South Korea	25%	Lowered to 15%	15%
Switzerland	31%	Increased to 39%	39%
Taiwan	32%	Lowered to 20%	20%
Thailand	36%	Lowered to 19%	19%
UK	10%	Active as of April 5, 2025	10%
Vietnam	46%	Lowered to 20%	20%
Source Ministry of Commerce			

Current tariff rates imposed by US

The 50% Tariff Structure on Indian Goods

The US tariff on India now totals 50% on most Indian exports, combining a 10% baseline duty, a 25% reciprocal tariff (announced on April 2, 2025), and an additional 25% tariff effective August 27, 2025. Unlike the China (30%) or Vietnam and the Philippines (20%), India and Brazil face the highest tariff rate among major US trade partners.

Exempted Sectors

Certain high-priority sectors remain exempt to safeguard US supply chains, including:

- Pharmaceuticals
- Semiconductors
- Energy resources (crude oil, natural gas)
- Critical minerals

This exemption protects India's strategic exports, especially its generic drug industry, which supplies nearly 50% of the US pharmaceutical market.

Sectors Most Affected

The following industries face the greatest exposure under the new 50% tariff regime:

- Textiles and apparel
- Gems and jewelry
- Leather and footwear
- Marine products
- Chemicals
- Automobile components

Collectively, these sectors make up over 55% of India's exports to the US, placing them at high risk from the tariff hike.

List of Indian Products Impacted by US Tariff Rates

Product Category	Tariff Rate (August 7, 2025)	Tariff Rate (August 27, 2025)
Textiles & Apparel	25%	50%
Gems & Jewelry	25%	50%
Leather & Footwear	25%(20.8–29.51% for footwear)	50% (45.8–54.51% for footwear)
Marine Products	33.26% (25% + 2.49% anti-dumping + 5.77% countervailing)	58.26% (50% + 2.49% + 5.77%)
Chemicals (Organic)	25%	50%
Automobiles & Auto Parts	25%	50%
Iron, Steel, Aluminum	25% (5–12.5% for industrial goods)	50% (30–37.5% for industrial goods)
Agricultural Products	25% (e.g., onions at 25.54%)	50% (e.g., onions at 50.54%)
Machinery & Engineering Goods	25%	50%
Ceramic, Glass, Stone	25%	50%
Rubber Items	25%	50%
Paper & Wood Products	25%	50%
Furniture	25%	50%
Dairy Products	56.46% (buttermilk, fermented milk); 30.84% (milk powder)	81.46%; 55.84%
Pharmaceuticals	0%	0%
Electronics & Semiconductors	0%	0%
Energy Products	0%	0%
Critical Minerals	0%	0%
Source Ministry of Commerce		

Source Ministry of Commerce

Impact on the Indian Economy

The tariffs threaten India's USD 434 billion export engine, with USD 87 billion directed to the US, equivalent to 2.5% of India's GDP.

- Industry estimates suggest a USD 4–5 billion drop in engineering exports alone.
- Overall GDP growth could decline by 0.2–0.5%, with forecasts revised from 6.5% to as low as 6%.

- The sectors like Small and medium enterprises (MSMEs), which dominate textiles and leather, face reduced competitiveness against rivals in Vietnam and Bangladesh, where tariffs are lower.
- The Indian rupee has weakened in offshore markets, raising concerns about imported inflation and increased borrowing costs for foreign debt-laden companies.

Challenges

Dependence on the US market: India's exports are still highly dependent on the US.

Complexity of the global supply chain: Lower production costs in countries like China could weaken India's competitiveness.

Domestic policy gaps: There are still many shortcomings in export promotion and logistics improvements.

Currency fluctuations: The rupee's volatility against the dollar also impacts exports.

To navigate these risks, Indian e-commerce stakeholders must adopt a multi-tiered strategy:

Strategic Mitigation Framework

Source Author's own work

A. Operational Adaptability

Decentralized Sourcing: Moving from a "Single Source" (e.g., China) to a "China + 1" or "Domestic First" strategy to avoid country-specific reciprocal tariffs.

Dynamic Pricing Engines: Implementing AI-driven pricing that can automatically adjust for real-time tariff fluctuations at the checkout stage, maintaining margin transparency.

B. Technical & Compliance Strategy

Landed Cost Transparency: E-commerce platforms should integrate "Total Landed Cost" calculators. Showing duties as a separate line item preserves brand trust by explaining price hikes as regulatory rather than profit-driven.

Rules of OriginAutomation: Leveraging blockchain or advanced ERPs to prove the "Indian Origin" of goods to benefit from India's existing Free Trade Agreements (FTAs) with the UAE, Australia, and potentially the UK.

C. Policy Advocacy and Structural Shifts

Transition to GST over Tariffs: India has argued that Goods and Services Tax (GST) is a more efficient way to collect revenue from digital imports than traditional customs duties. Transitioning to a consumption-based tax model mitigates the risk of "double taxation" and trade wars.

E-commerce Export Hubs (EEH): Utilizing government-backed hubs to consolidate small shipments, reducing the per-unit cost of customs compliance.

Tariff Mitigation Strategies for Indian Industries

Businesses can often reduce, delay, or avoid tariffs. Here are 11 ways businesses can mitigate their exposure to tariffs.

Tariff Mitigation Strategies for Businesses			
1	**2**	**3**	**4**
Reclassification and valuation	Supply chain optimization	Bonded warehouses and FTZs	First sale rule
5	**6**	**7**	**8**
Free trade agreements	Supplier management	Temporary import bonds	Price adjustments and cost absorption
9	**10**	**11**	
Local manufacturing and assembly	Tariff engineering	Duty drawback programs	
Source Author's own work			

Major impacts on Indian economy:

- Decline in exports and increase in costs: Due to higher the US tariffs, Indian engineering goods exports are expected to decline by $4 – 5 billion, which will directly impact small and medium enterprises (MSMEs).
- • Pressure on trade balance: The trade balance with the US may deteriorate as the demand for Indian products may decrease in the US market due to higher costs.
- Sectoral impact: Labour-intensive sectors like textiles, leather, gems and jewelry may take a big hit, affecting millions of jobs.
- Uncertainty over investment and growth: Frequent changes in tariffs increase uncertainty, which could slow down investment and hiring by Indian companies and could lead to a potential decline of 0.2 – 0.5% in GDP.
- Looking for alternative markets: Indian exporters are now turning to alternative markets like China, UAE, Spain and Bangladesh instead of the US, which can open new avenues for Indian exports.

Scope of the Study

The breadth of this research is extensive yet concentrated, addressing various aspects of tariff risks in Indian e-commerce. The US tariff situation may be challenging for the Indian economy in the short term, but in the long term it may push India to become more self-reliant and diversify its exports into the global supply chain because success in 2026 is not just in selling products, but in developing "Tariff Resilience". Indian e-commerce brands should look to new FTA partners (like the EU) while reducing their dependence on the US and take advantage of government reforms to strengthen the domestic market.

Conclusion

The researcher found that that change in US tariff rates, especially higher tariffs; pose a mixed challenge to the Indian economy, impacting export-led sectors. This has put pressure on approximately $87 billion worth of exports to the US, which could reduce competitiveness and negatively impact jobs in industries such as engineering, textiles and gems. However, some other reports have also observed that India may be in a better situation than other Asian countries.

Declarations

Clinical Trail Number

Not Applicable

Funding Declaration

Not applicable because the author does not apply for funding in any agencies.

Ethics, Consent to Participate, and Consent to publish declarations

Ethics statement

The study was conducted in accordance with established ethical guidelines for research involving business integrity, and socio-economic responsibility. As the Indian e-commerce landscape is deeply intertwined with national economic policies, international trade dynamics, and the livelihoods of millions of domestic stakeholders, this analysis adheres strictly to the highest ethical standards in its methodology, data handling, and strategic recommendations. The collected data were used exclusively for academic and research purposes.

Consent to participant

The research shows how the Indian e-commerce industries are building their leverage after the imposition of tariffs so that they can minimize the impact on them as well as on the Indian economy so that the GDP of the Indian economy does not fall down.

Consent to Publish

All authors have given mutual consent for publishing the paper.

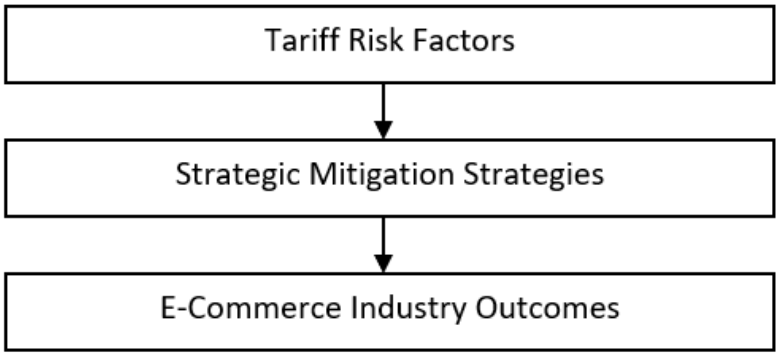
Data availability Statement

The datasets generated by the survey research during and analyzed during the current study are available in the Dataverse repository, https://zenodo.org/records/18844343.

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Figures



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Figure 1

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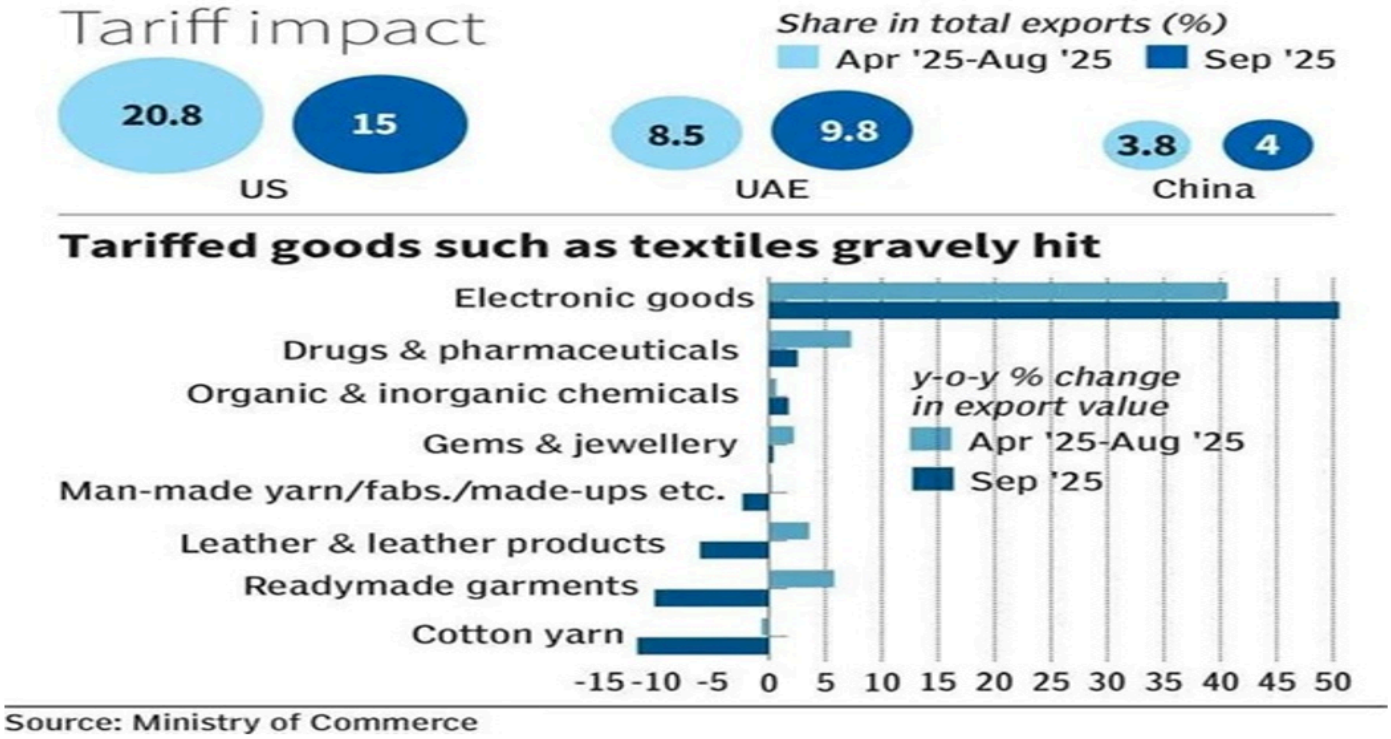
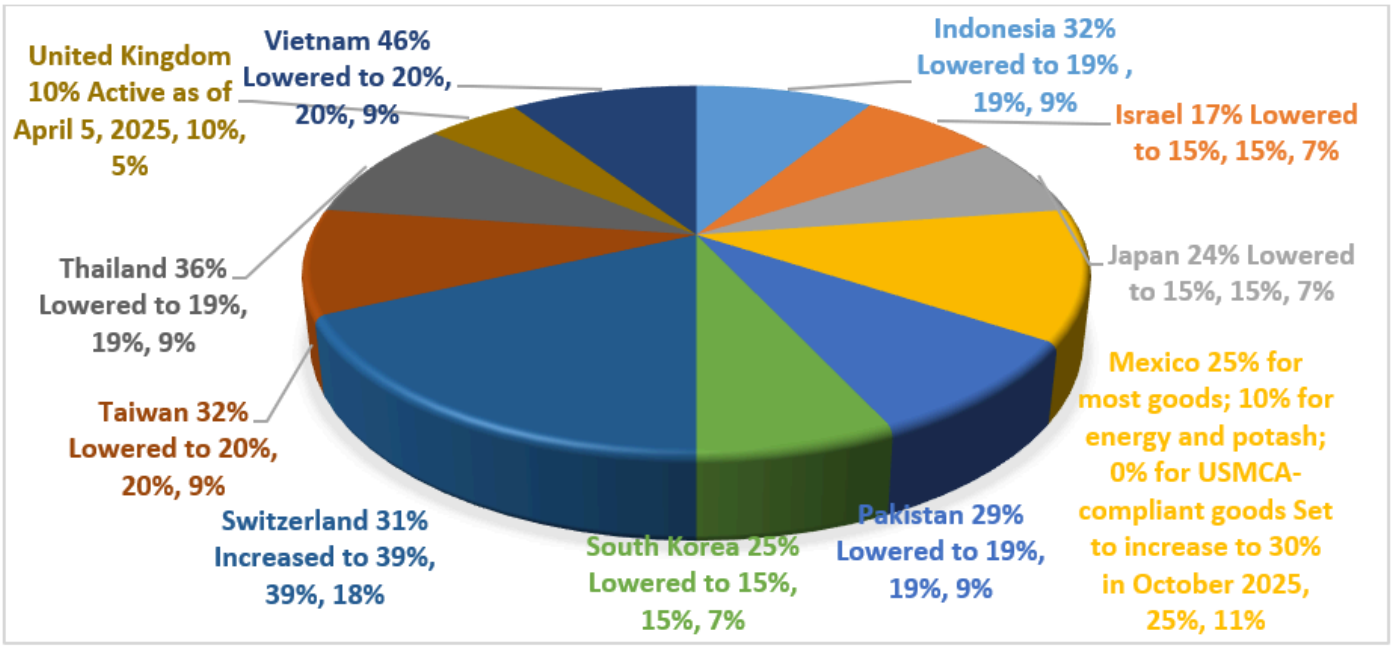


Figure 2

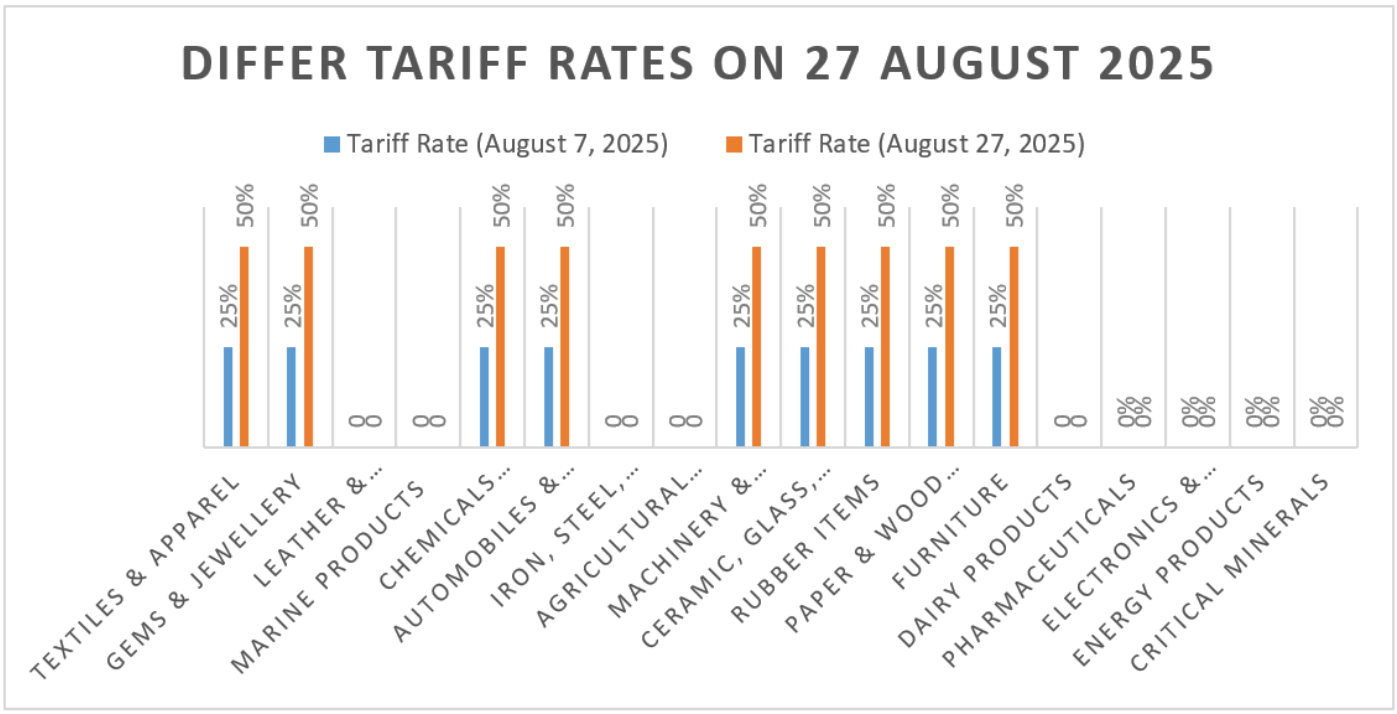
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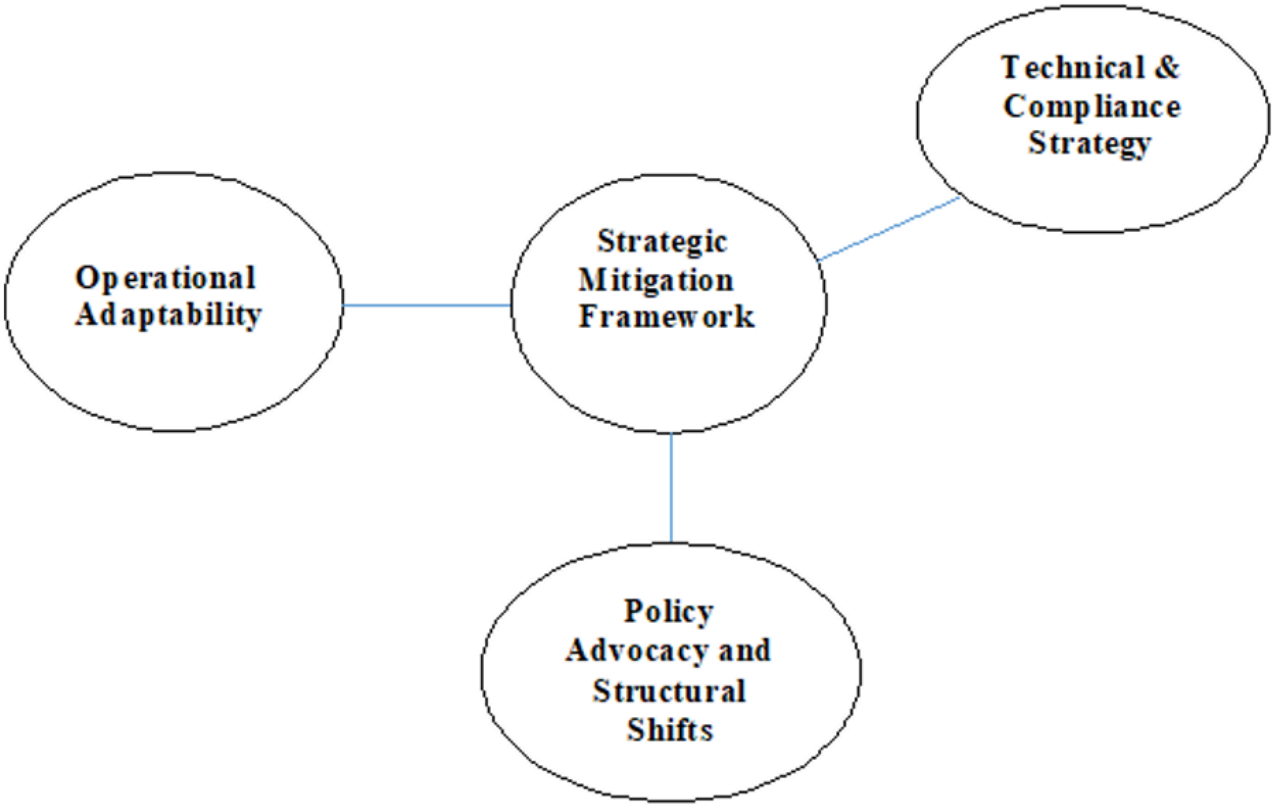


Figure 5

Strategic Mitigation Framework

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