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NITI Aayog

TRADE WATCH

QUARTERLY

THEMATIC ANALYSIS:

PHARMACEUTICAL TRADE

Jan-Mar (Q4) FY'2025-26

TRADE WATCH QUARTERLY, Quarterly Report for the FY'2025-26

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NITI Aayog
Government of India
Sansad Marg, New Delhi-110001, India

TRADE WATCH

QUARTERLY

Jan-Mar (Q4) FY'2025-26

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FOREWORD

The global economy continues to operate in an environment characterized by heightened uncertainty and increasing fragmentation. Geopolitical tensions, shifts in trade and industrial policies, supply-chain realignments, and the growing prevalence of tariff and non-tariff measures have altered patterns of international commerce and investment. Simultaneously, technological advances and evolving production networks are reshaping global value chains, prompting countries to place greater emphasis on resilience, diversification, and strategic competitiveness. Against this backdrop, geo-economic considerations and the reconfiguration of supply chains are creating new opportunities for economies capable of combining scale, reliability, and innovation.

Amid these developments, India's trade sector has demonstrated considerable resilience and adaptability. During FY 2025–26, India's total merchandise and services trade reached approximately US$1.84 trillion, reflecting the country's expanding integration with global markets and the increasing sophistication of its export basket. As India progresses towards its long-term development aspirations, enhancing export competitiveness, raising domestic value addition, and deepening participation in value chains will remain critical to sustaining high and inclusive growth.

Trade Watch Quarterly seeks to provide timely analysis of India's trade performance and identify emerging opportunities and challenges across strategically important sectors. The thematic focus of this edition is the pharmaceutical sector, one of India's most globally competitive industries. India is the world's leading supplier of generic medicines and a major provider of vaccines and essential therapeutics, making an important contribution to global health security. However, changing demand patterns, tighter regulatory standards, and evolving supply chains are reshaping the industry. While India has established strong capabilities in formulations and generics, expanding into high-value segments and leveraging the ongoing diversification of global supply chains present significant opportunities to strengthen its position as a global pharmaceutical and innovation hub.

I commend the team for its rigorous analysis and continued efforts in producing timely and evidence-based assessments. I am confident that the insights and recommendations presented in this edition will contribute meaningfully to policy deliberations aimed at strengthening India's trade competitiveness and enhancing economic resilience. As trade increasingly shapes the contours of economic security and development, such analytical efforts will remain important in informing India's strategy towards realizing the vision of *Viksit Bharat@2047*.

Date : 18th June 2026
Place : New Delhi

(Ashok Lahiri)

स्वच्छ भारत
एक कदम स्वच्छता की ओर

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FOREWORD

The global trade landscape is experiencing a convergence of geopolitical realignments, supply-chain restructuring, climate-related imperatives, and evolving industrial policies, which are reshaping patterns of production, investment, and trade across the world. Amid these developments, India's external sector has remained broadly stable.

2. During FY 2025–26, India's merchandise and services exports have continued to remain resilient. While merchandise trade faced headwinds from softer external demand and heightened uncertainty in major economies, services exports continued to perform strongly, reinforcing India's position as a leading global provider of digital, business and knowledge-based services.

3. This quarter's thematic focus on the pharmaceutical sector is particularly significant, given its strategic importance at the intersection of economic growth, technological advancement, public health, and national resilience. The sector contributes approximately 1.7% to India's GDP, and supports nearly 2.7 million livelihoods across its value chain.

4. India's growing willingness to conclude ambitious trade agreements with advanced economies signals a more outward-oriented approach aimed at securing market access, attracting investment, facilitating technology transfer, and integrating more deeply into global value chains. For sectors such as pharmaceuticals, these agreements have the potential to unlock new opportunities in innovation, manufacturing and exports while helping Indian firms compete in increasingly sophisticated global markets. As India advances towards its long-term development aspirations, adapting to the changing contours of global trade and leveraging these emerging partnerships will be essential for achieving sustainable and innovation-led growth.

5. I commend the team for their rigorous analysis and dedicated efforts. I am confident that this edition will provide valuable insights for strengthening India's trade competitiveness and economic resilience.

Dated: 18th June, 2026

[Nidhi Chhibber]

डॉ. प्रभाकर साहू
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Foreword

Despite a challenging global trade environment in FY2025-26 marked by geopolitical disruptions and growing trade policy uncertainty, India maintained a resilient external sector performance. Merchandise and services trade continued to expand, supported by robust services exports, diversified trade linkages, and sustained domestic demand.

This edition of the TWQ focuses on the global pharmaceutical market, which accounted for approximately $1.3 trillion in global demand in 2025. It examines the leading products, their decadal trends, India's position in formulations and active pharmaceutical ingredients (APIs), key market access challenges, and policy priorities to enhance competitiveness. The report aims to contribute to discussions on strengthening India's pharmaceutical exports and advancing its role in supporting trade growth and the country's development aspirations towards 2047.

India has established itself as a leading supplier of affordable and quality-assured medicines, supported by a strong manufacturing base, a large pool of scientific talent, and extensive global market reach. As the world's largest supplier of generic medicines and a critical contributor to global healthcare access, India occupies a unique position in international pharmaceutical value chains. The growing global demand for biologics and immunological products presents a significant opportunity for India. Initiatives such as Mission BioPharma are moving the sector in the right direction; however, sustained investments in R&D, regulatory capabilities, and advanced manufacturing will be essential to establish a stronger presence in these segments.

The analyses presented in this report seek to contribute to evidence-based policymaking by examining evolving trade patterns and emerging structural developments in pharmaceuticals. I would like to express my sincere gratitude to Shri Ashok Lahiri, Vice Chairman, NITI Aayog, for his valuable guidance and encouragement. I am thankful to Ms. Nidhi Chhibber, CEO of NITI Aayog, for her continued guidance and support. I am deeply grateful to Shri BVR Subrahmanyam, former CEO of NITI Aayog, for his invaluable guidance during his tenure and for the vision and leadership that led to the inception of the Trade Watch Quarterly. I also extend my appreciation to the members of the Advisory Board for their insightful comments. Finally, I acknowledge the efforts of the Economic & Finance Team at NITI Aayog, whose analytical rigour, commitment, and teamwork made this edition of the *Trade Watch Quarterly* possible.

New Delhi
19 June, 2026

Pravakar Sahoo
(Pravakar Sahoo)

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EXECUTIVE SUMMARY

Global trade conditions have been challenging in recent quarters with continued uncertainty surrounding trade policies, investment flows, and supply chains weighing on economic activity. Amidst this, India's trade remained broadly stable, with total merchandise and services trade expanding by 5.4% during April–March FY'2025-26 to reach $1.84 trillion. In Q4 FY'2025–26, the composition of India's top exports remained largely unchanged, led by electrical machinery, mineral fuels, and machinery and boilers. On the import side, the basket was also broadly stable, with fertilisers replacing aircraft and parts among the leading imported commodities.

Trade patterns reflected a growing orientation towards Asia, with export growth concentrated in Hong Kong, Singapore, and China, while shipments to key traditional markets such as the United States, UAE, and the United Kingdom moderated. On the import side, strong growth was also recorded from Switzerland and Hong Kong, driven by rising imports of precious metals, electronics, and industrial inputs.

India's services exports have grown at a CAGR of 10.3% over the past decade, substantially outpacing the global growth of leading countries. This has increased India's share in world services exports to 4.3% in 2025. A closer look at India's software and IT-enabled services exports shows that they continue to be dominated by business process outsourcing (BPO) and support services, which accounted for 63.5% of software services exports in 2024-25. Geographically, advanced economies remain the principal markets, with North America accounting for over half of India's exports, though its share has been moderating over time. Europe's share has increased to 33%, indicating greater diversification of demand for Indian digital, consulting, and enterprise support services.

The thematic focus of this quarter's edition is India's API and pharmaceutical trade. Global pharmaceutical and API import demand is valued at approximately $1.3 trillion (tn), including $261.2 billion (bn) in Active Pharmaceutical Ingredients (APIs) for 2025. India's pharmaceutical sector has emerged as a strategic pillar of the economy, supported by a strong manufacturing base, global competitiveness in generic medicines, and growing integration into international healthcare supply chains. The industry contributes over 1.7% to India's GDP[1], 7.2% of manufacturing GVA[2], supports approximately 2.7 million(mn) livelihoods, and exported pharmaceutical and API products worth nearly $35.8 bn. While India remains one of the world's largest suppliers of generic medicines and a major provider of vaccines and essential drugs[3], its global export share in pharmaceuticals and API remains modest at 2.8%, indicating scope for expansion amid rising global demand for medicines, biologics, and speciality therapeutics.

India's comparative advantage remains concentrated in formulations, particularly retail medicaments and generic drugs, where it remains highly competitive even in regulated markets such as the United States and Europe. However, the global pharmaceutical landscape has increasingly shifted towards high-value segments such as biologics, vaccines, immunologicals, and advanced therapeutics, where India's export presence

1 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2250771&reg=48&lang=2
2 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2161192&reg=3&lang=2
3 https://www.pib.gov.in/PressReleasePage.aspx?PRID=1932026&reg=48&lang=2

remains limited. Despite being a leading vaccine manufacturer by volume, India captures only a small share of global value in biologics and immunological products, reflecting gaps in innovation capabilities, R&D intensity, and advanced manufacturing infrastructure.

In Active Pharmaceutical Ingredients (APIs), India has strengthened its position in several specialised chemical intermediates and antibiotics, but continues to face dependence on imported raw materials and intermediates, particularly from China. Although the sector's growing participation in global value chains is evident from rising domestic value addition. While India has successfully moved up the value chain through formulations, complex generics, and speciality products, strengthening domestic capabilities in critical APIs, key starting materials, and biotechnology inputs remains essential to improving supply chain resilience and reducing import dependence.

Telangana, Gujarat, and Maharashtra have emerged as the key pillars of India's pharmaceutical industry, driving a significant share of the country's production, exports, and integration into global value chains. Their success is rooted in strong manufacturing ecosystems, cluster-based development, globally competitive firms, and supportive policy frameworks. Telangana has developed as a major life sciences and vaccine hub, Gujarat has leveraged its strong chemical-pharmaceutical base and export orientation, while Maharashtra combines large-scale manufacturing with strong R&D capabilities. Together, these states illustrate how industrial clusters, leading firms, and proactive policy support can enhance pharmaceutical competitiveness and export growth.

Looking ahead, the sustained expansion of India's pharmaceutical sector will pivot decisively upon scaling up strategic investments in frontier research and development (R&D), complex biologics, and advanced therapeutics. International precedent from advanced economies such as Germany, Switzerland, and China underscores the critical imperative to foster integrated innovation ecosystems, specialised industrial clusters, and agile regulatory frameworks. As global market dynamics rapidly shift toward high-value, knowledge-intensive biopharmaceuticals, India must complement its traditional manufacturing scale with deep-tech innovation and collaborative research to systematically graduate from the 'Pharmacy of the World' to an undisputed global capital for pharmaceutical innovation.

HIGHLIGHTS

1. India's total merchandise and services trade grew steadily at 5.4% year-on-year (y-o-y) during April–March FY'2025-26. Trade reached $1.84 trillion (tn), with exports growing 4.2% and imports 6.5% during the same period.
2. Merchandise exports during Q4 FY'2025-26 declined by 2.8%, reaching $112.03 bn, while imports rose by 11.9% to $195.5 bn. Services exports increased by 9% to $111.1 bn, and imports rose by 4.1% to $50.7 bn.
3. Export composition remained unchanged as compared to Q3 FY'2025-26. Import composition was stable, with fertilisers replaced by aircraft, spacecraft, and their parts. Directionally, Hong Kong entered the top 10 export destinations, with the strongest growth of 54%, while Switzerland recorded the sharpest import growth of 48.1%, driven by high imports of gold and medical and scientific instruments.
4. India remained the world's eighth-largest services exporter in 2025. Services exports registered a CAGR of 10.3% from 2015 to 2025, higher than the global average growth rate of 6.6%. "Other services" emerged as the largest component of India's services exports, while Telecom and IT services remained the second-largest category in 2025.
5. The global pharmaceutical and APIs world demand collectively accounts for $1.3 tn, of which formulations represent the larger segment at $961.8 bn (~75%), followed by APIs accounting for $261.2 bn.
6. Retail medicaments and formulated drugs (HS 3004), the leading product under formulations accounted for 55.6% of global pharmaceutical imports valued at $571.5 bn. India's export value was $22.6 bn in this category, capturing a 4.0% share in global import demand.
7. The second-largest under the formulations category, blood products, vaccines, and immunologicals (HS 3002), emerged as the fastest-growing product globally, with imports reaching $390.2 bn to which India's exports remained limited at $2.2 bn, corresponding to a global export share of 0.6%.
8. India's exports were at $10.0 bn translating to a share of 3.8% in the global demand for API. Hormones and Analogues (HS 2937) account for 37.5% of global API demand, with global imports reaching $97.8 bn in 2025, while India's share in global imports remains at 0.3%.
9. SPS measures, TBTs, and licensing and quality-control requirements account for 95% of non-tariff measures in developed markets, while TBTs, export-related measures, and SPS measures constitute 80% of measures in developing markets for pharmaceutical exports from India to the selected leading destinations.
10. India's life sciences innovation ecosystem is strengthening rapidly, with patent filings rising eightfold from 440 in 2013 to 3,576 in 2023, placing India among the world's top ten patent filers in medical technology, biotechnology, and pharmaceuticals.
11. India's limited R&D intensity and innovation ecosystem are constraining its entry into high-value pharmaceutical segments such as biologics, biosimilars, and advanced therapies. R&D spending by Indian pharmaceutical firms remains

around 7% of sales compared to 15–20% globally, while weak industry-academia linkages, and prolonged patent approvals continue to impede the development and commercialisation of research-intensive products.

12. Market access remains a key constraint for India's pharmaceutical exports in developed markets. Lengthy product registration processes, duplicative inspections, stringent documentation requirements, and limited recognition of foreign regulatory approvals increase compliance costs and delay market entry. These challenges are further compounded by rising environmental compliance obligations and the limited incorporation of enforceable pharmaceutical market-access provisions in trade agreements.
13. Accelerate pharmaceutical innovation by improving transparency in the regulatory framework and introduce time-bound patent opposition and grant procedures. This may improve monitoring of competing applications, enhance IP certainty, and strengthen India's competitiveness in biologics, biosimilars, and other innovation-driven pharmaceutical segments.
14. The top five API categories account for 84% of imports and China supplies 66–86% of these products even in 2025, strengthening fermentation-based manufacturing, KSM production, and other upstream capabilities should be complemented by efforts to diversify India's import sourcing.
15. Develop a model pharmaceutical chapter for future FTAs that may serve as a blueprint for bilateral and multilateral trade negotiations. The chapter should incorporate provisions on regulatory reliance, GMP inspection, product registration, standards harmonisation, and transparent dispute-resolution mechanisms to reduce compliance costs and enhance regulatory predictability across key export markets.
16. Shift environmental compliance from a firm-level burden to a shared infrastructure model through increased number of bulk drug parks integrating common effluent treatment, zero liquid discharge, and solvent recovery systems that may reduce costs, improve scale efficiencies, and enable Indian pharmaceutical manufacturers to meet evolving global sustainability requirements.

CONTENTS

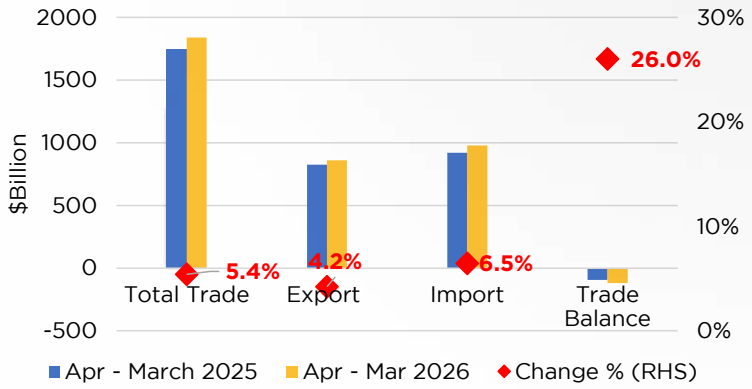
A.
INDIA'S TRADE ANALYSIS

A. India's Trade Analysis

Amid evolving global challenges, trade policy uncertainty has emerged as a key source of risk. Global growth is expected to slow in 2026 due to continued rising uncertainty in trade, investment, and supply chains. UNCTAD projects the world merchandise trade growth rate to fall from 4.7% in 2025 to between 1.5% and 2.5% for 2026[4].

Against this challenging external environment, India's total trade (merchandise and services) performance recorded a 5.4% y-o-y increase during April–March FY'2025-26, supported by growth in both exports and imports. During this period, total trade reached $1.84 tn, compared with $1.74 tn in the same period last year. India's total exports witnessed a growth of 4.2%, reaching $860.1 bn, while imports grew by 6.5%, reaching $979.4 bn between April–March FY'2025-26 (Fig 1).

Fig 1: Total Trade performance between Apr-Mar FY'2025-26



Source: Department of Commerce, MoC&I, GOI

1. Merchandise and Services Analysis

In March 2026, both merchandise exports and imports recorded declines. Merchandise exports declined by 7.4%, reaching $38.9 bn, while imports fell by 6.0%, reaching $59.9 bn (Fig 2). For the full quarter, merchandise exports declined by 2.8% y-o-y to $112.03 bn, while imports rose by 11.9%, reaching $195.5 bn (Fig 3). This resulted in a merchandise trade deficit of $83.53 bn for the quarter.

Fig 2: Merchandise Trade (Monthly)

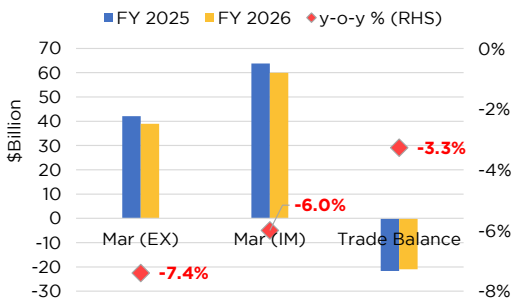
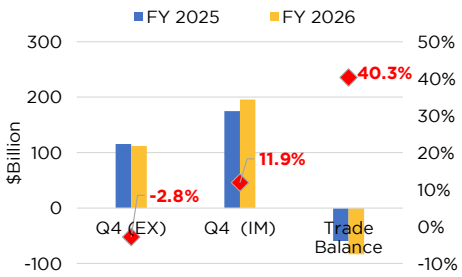


Fig 3: Merchandise Trade (Quarterly)



Source: Department of Commerce, MoC&I, GOI

4 https://unctad.org/publication/trade-and-development-foresights-2026-global-economy-faces-geopolitical-challenge

India's services exports for March 2026 stood at $38.2 bn, registering a y-o-y growth of 7.3%, while services imports declined by 1.5% reaching $17.2 bn (Fig 4). During Q4 FY'2025-26, services exports witnessed a robust y-o-y expansion of 9%, reaching $111.1 bn, and services imports rose moderately by 4.1% to $50.7 bn, resulting in a services trade surplus of $60.4 bn (Fig 5). The combined balance of trade in goods and services recorded a deficit of $23.1 bn for this quarter, the second lowest deficit for the financial year FY'2025-26.

Figure 4: Services Trade (Monthly)

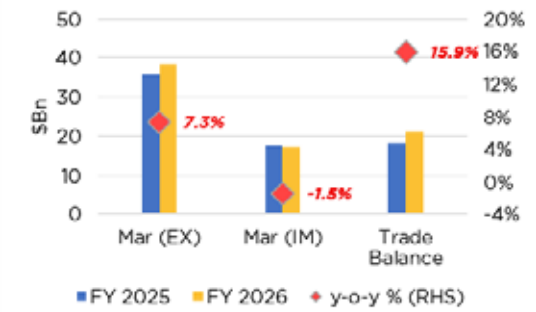
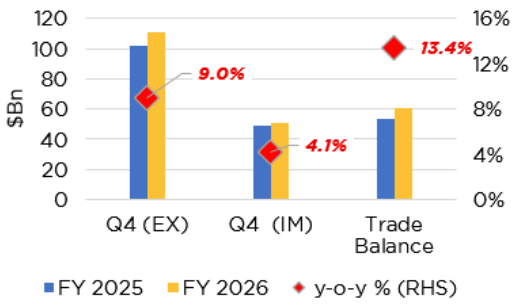


Figure 5: Services Trade (Quarterly)



Source: Department of Commerce, MoC&I, GOI

2. Compositional Analysis

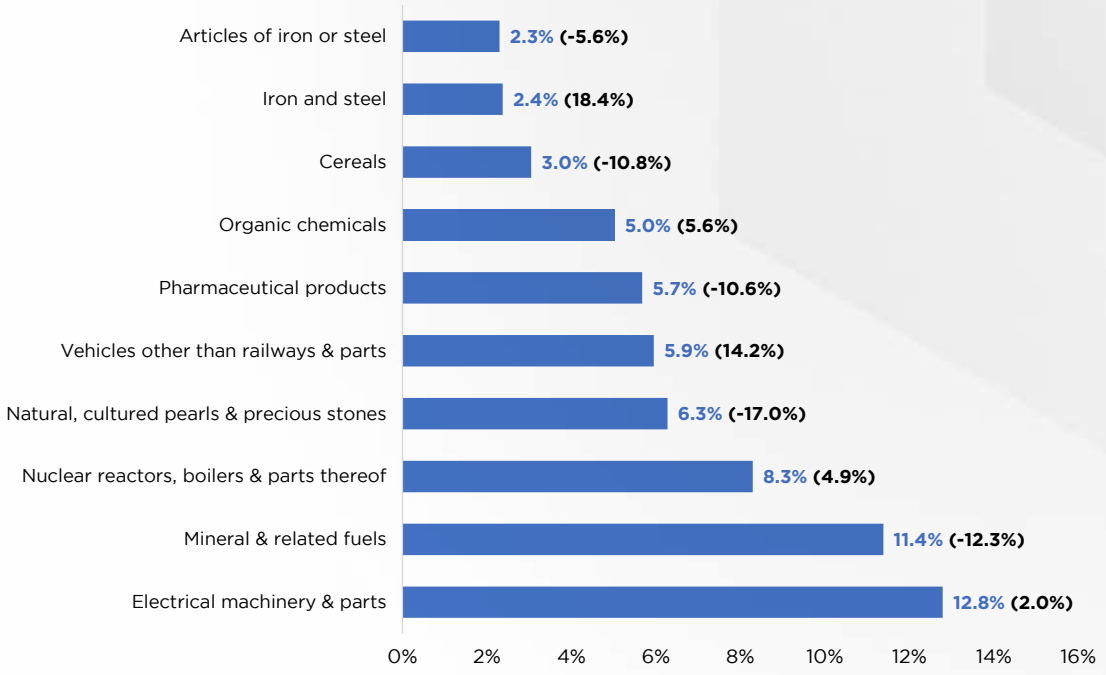
2.1 Merchandise Exports

In Q4 FY'2025-26, the leading[5] products of exports amounted to $70.6 bn, marking a y-o-y decline of 3%. The top 3 commodities remained electrical machinery and parts (12.8% share), mineral and related fuels (11.4%), and nuclear reactors (8.3%). The leading commodities remained the same as the previous quarter, with five commodities recording a positive y-o-y growth in Q4 FY'2025-26 (Fig 6).

Among the leading commodities, iron and steel and vehicle and their parts recorded particularly strong y-o-y growth rates. Vehicle exports increased, driven by higher shipments of motor cars whereas iron and steel exports grew by 18.4% on account of increased demand for ferro-alloys. In contrast, exports of mineral fuels declined, with export volumes falling from 4,909 metric tonnes in January to 4,472 metric tonnes in March, as reported by the Petroleum Planning and Analysis Cell[6]. Exports of natural and cultured pearls also declined, primarily due to lower exports of cut and polished diamonds and gold jewellery. This contraction was likely due to subdued demand in the US and disruptions arising from the West Asia conflict, both of which are key markets for India's gems and jewellery industry.

5 Leading commodities are the top ten commodities with the highest value share in exports in the current quarter.
6 https://ppac.gov.in/import-export

Fig 6: Composition and Growth of Exports



Note: Y-o-y growth of the commodity in India's export for this quarter is mentioned in parenthesis
Source: Department of Commerce, MoC&I, GOI

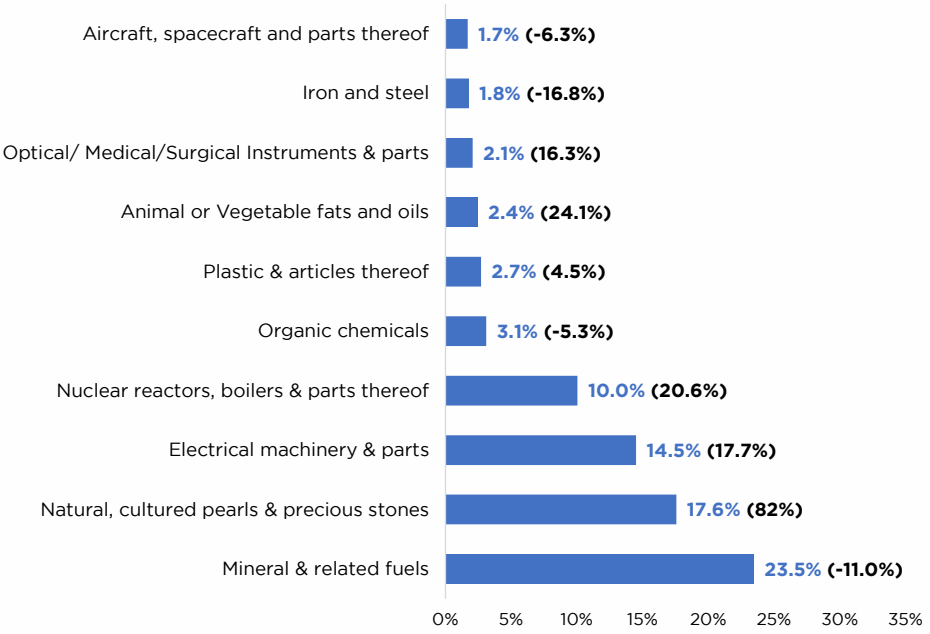
2.2 Merchandise Imports

In Q4 FY'2025-26, the leading[7] products of imports amounted to $155.2 bn, marking a y-o-y increase of 13.0%. Imports continue to be led by mineral fuels (23.5% share), natural and cultured pearls (17.6%), electrical machinery (14.5%), and nuclear reactors (10.0%). Compared with the previous quarter, the composition largely remains the same, with only fertilisers replacing aircraft, spacecraft, and their parts in the current quarter. In terms of growth, six products recorded a positive y-o-y growth among the leading commodities in the quarter (Fig 7).

Imports of natural and cultured pearls increased sharply by 82% y-o-y, rising from $18.8 bn to $34.3 bn, driven by strong demand for gold and silver as investment demand outpaced domestic jewellery demand. India continued to remain a key driver of gold demand for both consumption and investment purposes, ranking second globally in both jewellery and investment segments[8]. Imports of animal and vegetable fats recorded a y-o-y growth of 24%, supported by higher demand for crude palm oil.

7 Leading commodities are the top ten commodities with the highest value share in imports in the current quarter.
8 https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026

Fig 7: Composition and Growth of Imports



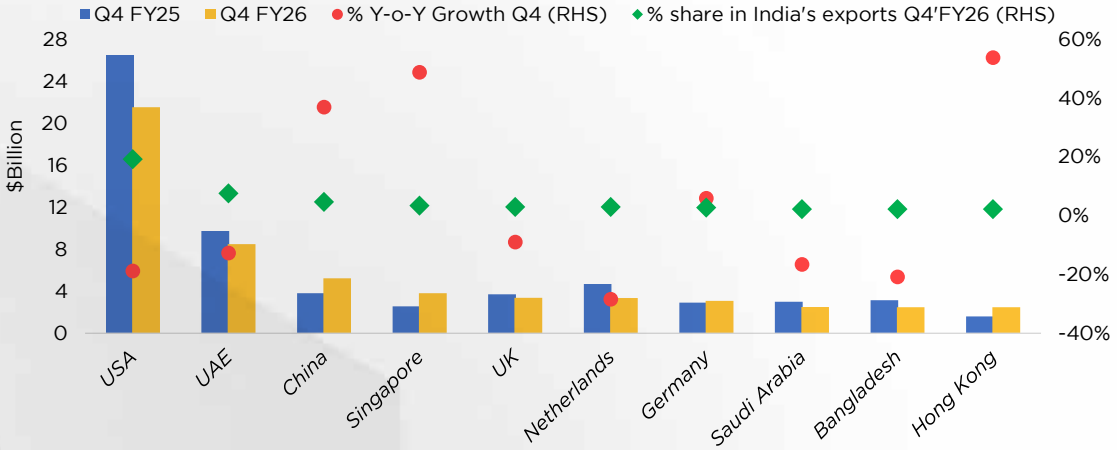
Note: y-o-y growth of the commodity in India's imports for this quarter is mentioned in parentheses
Source: Department of Commerce, MoC&I, GOI

3. Trade Direction

3.1 Merchandise Exports

India's exports to its leading[9] markets contributed to 50.3% of total exports in Q4 FY'2025-26, amounting to $56.4bn. Hong Kong entered the top ten export destinations during the quarter, replacing Spain in the previous quarter; the remaining destinations remain the same as the previous quarter.

Fig 8: India's exports to major destinations



Source: Department of Commerce, MoC&I, GOI

Among the top ten export destinations, India recorded positive y-o-y growth in Q4 FY'2025-26 across four markets, with the strongest y-o-y export growth observed in

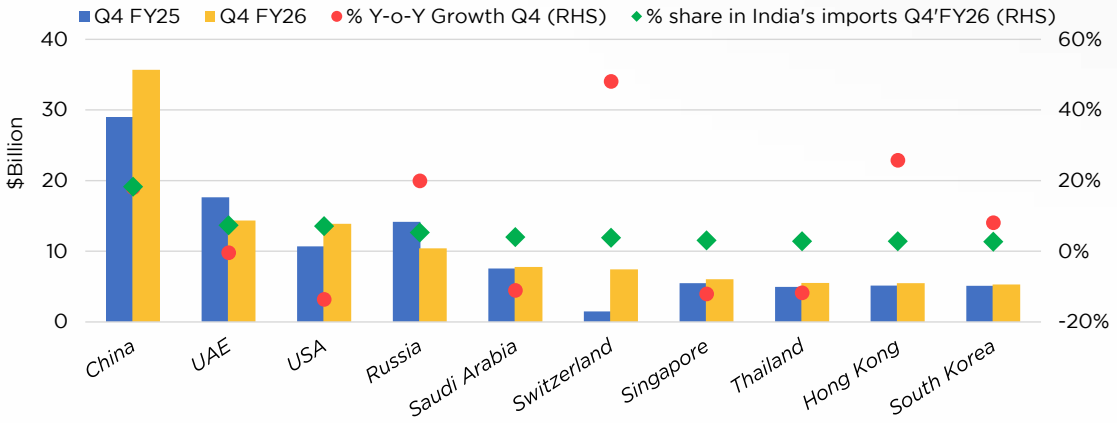
9 Leading markets are the top ten markets with the highest value share in exports in the current quarter.

Hong Kong (54%), although exports to the destination remain modest at $1.61 bn. Export growth to Hong Kong was driven by strong demand, particularly for silver jewellery, electronics, and processed stones. Other destinations posting strong growth include Singapore, where exports expanded by 48.8%, driven by higher exports of petroleum products, electric machinery and equipment, and ships, boats, and floating structures[10]. Exports to China during the quarter were driven by higher shipments of petroleum products, engineering goods, minerals, cereals, and handicrafts[11]. The sharpest declines in exports were to the Netherlands and Bangladesh, at 28% and 21%, respectively. Meanwhile, the USA, UAE, UK, and Saudi Arabia recorded declines of 18.7%, 12.7%, 8.9%, and 16.5%, respectively. The decline in exports to the Netherlands was primarily driven by a sharp drop in petroleum products, along with global logistics costs, shipping rerouting challenges, and cautious European demand weighing heavily on shipments[12] (Fig 8).

3.2 Merchandise Imports

India's share of imports from its leading[13] markets accounted for around 57.2% of total imports in Q4 FY'2025-26, amounting to $111.8 bn. China, UAE and USA continue to remain the major markets, with Switzerland recording the sharpest y-o-y import growth of 48.1%, followed by Hong Kong of 25.8% and China with 18%.

Fig 9: India's imports from major sources



Source: Department of Commerce, MoC&I, GOI

Thailand and Hong Kong entered the top ten import markets during the quarter replacing Iraq and Japan in the previous quarter. Rising imports from Hong Kong were primarily driven by a surge in demand for precious stones and metals, whereas the increase in imports from Switzerland was mainly driven by higher imports of gold, medical and scientific instruments, and engineering items[14] (Fig 9).

10 https://oec.world/en/profile/bilateral-country/ind/partner/sgp
11 https://www.china-briefing.com/china-outbound-news/india-export-import-trade-data-fy-2025-26
12 https://dea.gov.in/files/monthly_economic_report_documents/File_MER%20March%202026.pdf
13 Leading markets are the top ten markets with the highest value share in imports in the current quarter.
14 https://oec.world/en/profile/bilateral-country/ind/partner/che

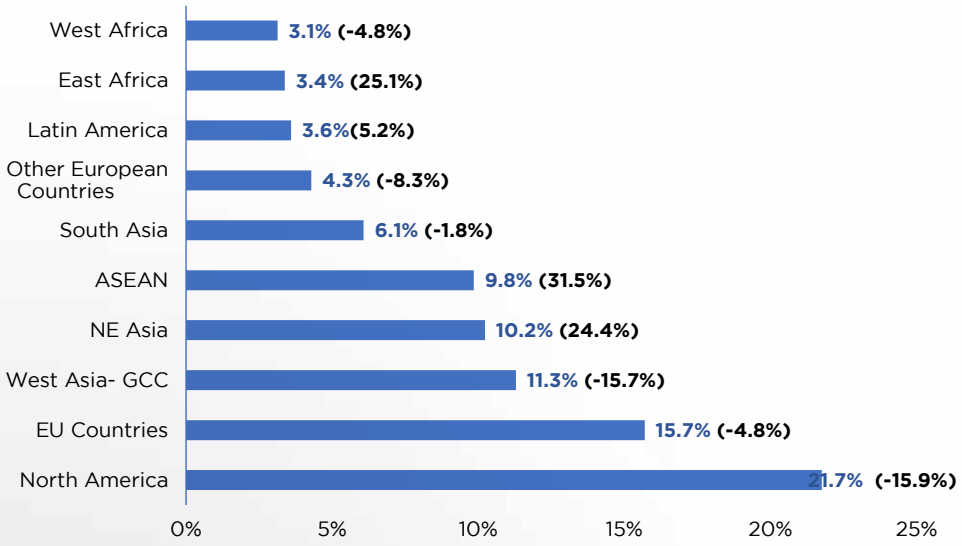
4. Regional Analysis

4.1 Merchandise Exports

India's exports to its top 10 leading[15] export regions accounted for nearly 89.3% of total exports in Q4 FY'2025-26. Among these, positive growth was recorded in four regions, with ASEAN and East Africa emerging as the fastest-growing regions during the quarter. Exports to ASEAN grew by 31.6%, while East Africa grew by 25.1%. Northeast Asia also recorded strong growth of 24.4%, supported largely by higher exports to China and Hong Kong. The increase in exports to these regions was driven by stronger shipments of petroleum products, electrical machinery, copper, pearls, and cotton.

Latin America also witnessed moderate growth of 5.2%, indicating expanding trade engagement with emerging markets. The sharpest y-o-y decline in growth was recorded in North America, where exports fell by 16%, followed by West Asia-GCC (-15.7%) and EU countries (-4.9%). Exports to Other European Countries and West Africa also declined during the quarter. The fall in exports to North America and West Asia-GCC was primarily linked to weaker petroleum product shipments and softer demand for key sectors such as gems and jewellery, textiles, and engineering goods (Fig 10).

Fig 10: Region-Wise Export Composition and Growth



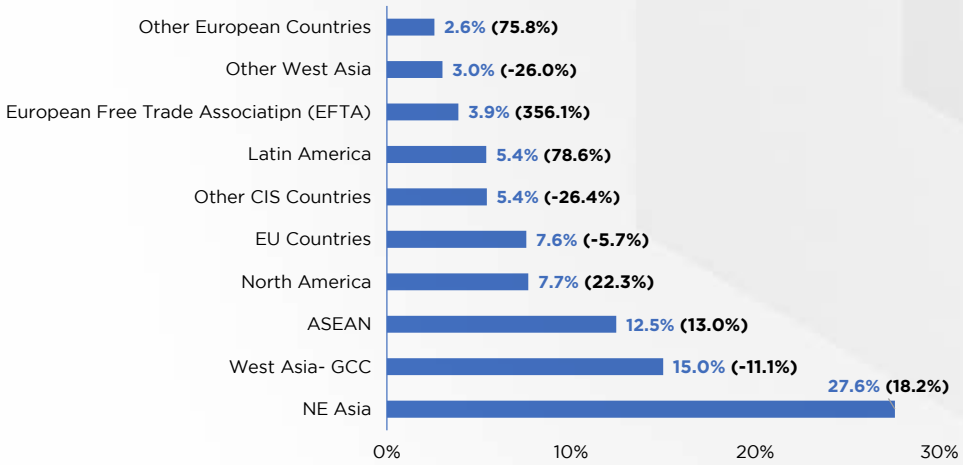
Note: y-o-y growth of the region in India's exports for this quarter is mentioned in parentheses
Source: Department of Commerce, MoC&I, GOI

4.2 Merchandise Imports

India's imports from its leading[16] regions accounted for nearly 91% of total imports in Q4 FY'2025-26. Among these, six regions recorded positive y-o-y growth during the quarter. Northeast (NE) Asia remained India's largest import source, accounting for around 28% of total imports, with imports rising by 18.2% during the quarter. The increase was driven by higher imports of electronics, machinery, chemicals, and intermediate goods. ASEAN also registered strong growth of 13%, supported by increased imports of electronic components, machinery, and industrial inputs.

15 Leading regions are the top ten regions with the highest value share in exports in the current quarter.
16 Leading regions are the top ten regions with the highest value share in imports in the current quarter.

Fig 11: Region-Wise Import Composition and Growth



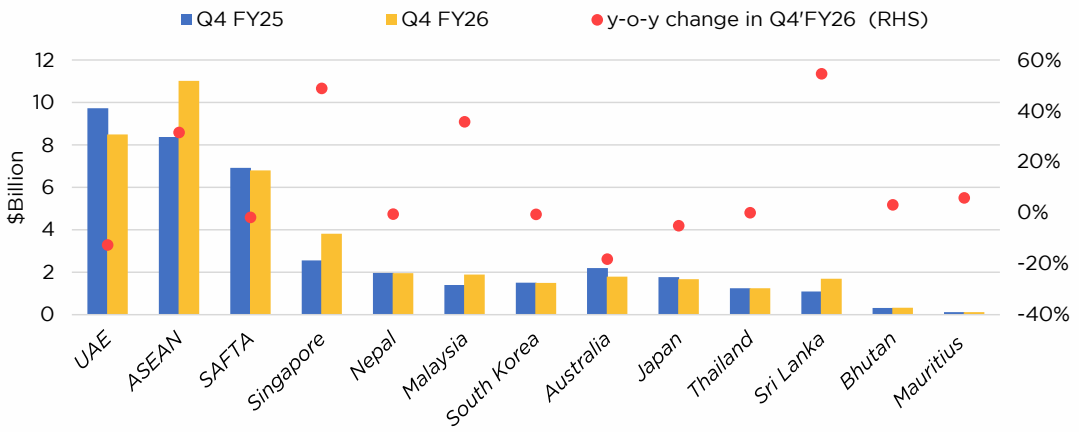
Note: y-o-y growth of the region in India's imports for this quarter is mentioned in parentheses
Source: Department of Commerce, MoC&I, GOI

The strongest growth was observed in the European Free Trade Association (EFTA) region, where imports surged by over 356% surging from $1.66 bn to $7.58 bn followed by Latin America by 78.6%, from $5.91 bn to $7.58 bn and Other European Countries by 75.1%, from $2.88 bn to $5.05 bn, during the same quarter in the previous year. The sharp rise in imports from EFTA was largely driven by higher gold imports, particularly from Switzerland, as well as increased imports of precision instruments and engineering products. Similarly, the growth in imports from Latin America was supported by stronger shipments of crude oil, minerals, and precious stones. In contrast, contractions were recorded across four regions. Imports from Other CIS Countries and Other West Asian countries declined sharply by around 26% each, while West Asia-GCC and EU Countries also witnessed moderation during the quarter. The decline in imports from West Asia-GCC was largely driven by supply-side disruptions in regional energy markets, including shipping and logistical constraints, which affected crude oil and petroleum inflows amid easing global energy prices (Fig 11).

5. Merchandise Trade with FTA Partners

India's trade with its Free Trade Agreement (FTA) partner countries remained strong in Q4 FY'2025-26, with exports rising from $39.2 bn to $42.4 bn, reflecting 8% y-o-y growth. Imports from FTA partners also increased by 4%, reaching $70.9 bn during the quarter. ASEAN and the UAE remained India's largest FTA trade partners, together accounting for a substantial share of both exports and imports.

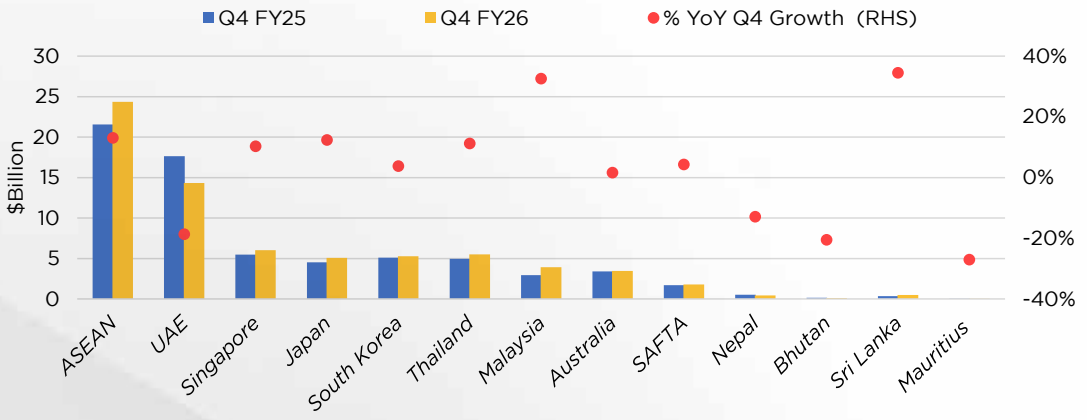
Fig 12: Exports- FTA Partners



Source: Department of Commerce, MoC&I, GOI

On the export side, strong growth was recorded in Singapore (48.8%), Sri Lanka (54.6%), Malaysia (35.7%), and ASEAN as a bloc (31.6%). The increase was largely driven by higher exports of petroleum products, electronics, engineering goods, and agricultural products. Exports to Thailand remained broadly stable, while Mauritius and Bhutan also recorded moderate growth. In contrast, exports contracted to the UAE (-12.7%), Australia (-18.2%), Japan (-5.1%), South Korea (-0.7%), and Nepal (-0.5%). The decline in exports to the UAE and Australia was primarily linked to weaker petroleum product shipments and softer demand in sectors such as gems and jewellery, as well as engineering goods (Fig 12).

Fig 13: Imports- FTA Partners



Source: Department of Commerce, MoC&I, GOI

On the import side, imports from ASEAN grew by 13%, supported by stronger inflows of electronics, machinery, and intermediate goods. Imports from Malaysia (32.6%), Sri Lanka (34.5%), Japan (12.4%), Thailand (11.2%), and Singapore (10.3%) also recorded healthy growth, indicating deepening regional supply-chain integration. Imports from the UAE declined by 18.7%, largely reflecting lower crude oil and petroleum imports during the quarter. India's FTAs continue to support trade integration, particularly with Asian economies (Fig 13).

6. India's Trade Dynamics and Market Diversification in FY'2025-26

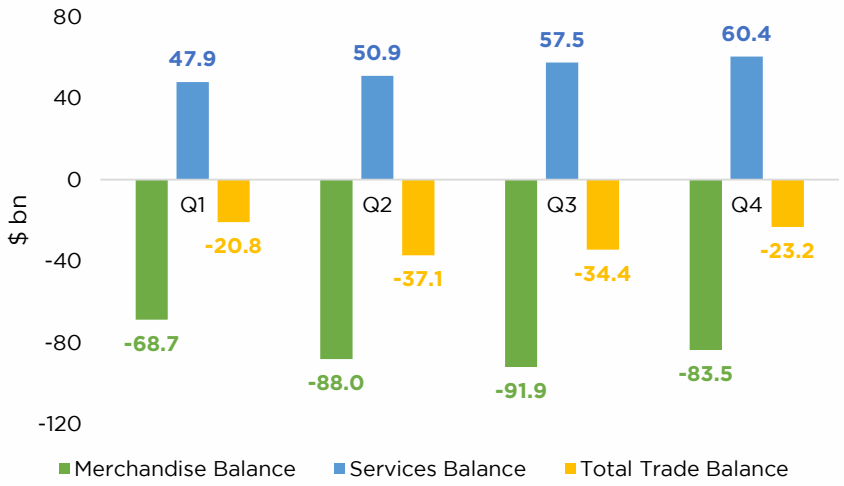
As FY'2025-26 was marked by elevated geopolitical risks, disruptions in global shipping routes, and increasing trade policy uncertainty, it is important to assess not only the overall performance of India's external sector but also the evolving composition and direction of its trade flows. An examination of India's trade dynamics provides insights into the resilience of exports and imports, the role of services in supporting external stability, and the extent of India's trade diversification amid a challenging global environment.

The current account remained broadly stable, supported by robust services exports, modest merchandise exports, diversified trade linkages, and buoyant remittance inflows. While the capital account experienced bouts of volatility, reflected in portfolio outflows and currency pressures amid tightening global financial conditions, these shocks were effectively absorbed through adequate foreign exchange reserves and prudent macroeconomic management. Consequently, the balance of payments remained manageable, underscoring the economy's ability to withstand external shocks.

India's trade balance remained in deficit throughout FY'2025-26, driven by a persistently large merchandise trade deficit, although a strong and steadily expanding services surplus provided significant support to the external sector. India's merchandise trade deficit, while elevated, demonstrated a meaningful correction in Q4, narrowing from $91.8 bn in Q3 to $83.5 bn reflecting the economy's growing absorptive capacity for energy, electronics, and capital goods imports that underpin India's expanding industrial and infrastructure base. The improvement in Q4 underscores the resilience of India's export engine in navigating global headwinds, including elevated energy prices and freight cost pressures arising from Middle East-linked shipping disruptions. Additionally, heightened trade policy uncertainty and broader protectionist trends created headwinds for global trade and export growth.

In contrast, the services trade surplus increased consistently from $47.9 bn in Q1 to $60.4 bn in Q4, reflecting robust performance in IT, business and professional services exports. India's trade deficit demonstrated resilience throughout the year, narrowing from a peak of $37.1 bn in Q2 to $23.2 bn in Q4, reflecting a strong second-half export recovery and improving trade-balance dynamics. Strong combined exports of goods and services helped maintain the resilience of India's external sector, underscoring the increasingly important role of services exports in cushioning the merchandise trade deficit and supporting overall external stability (Fig 14).

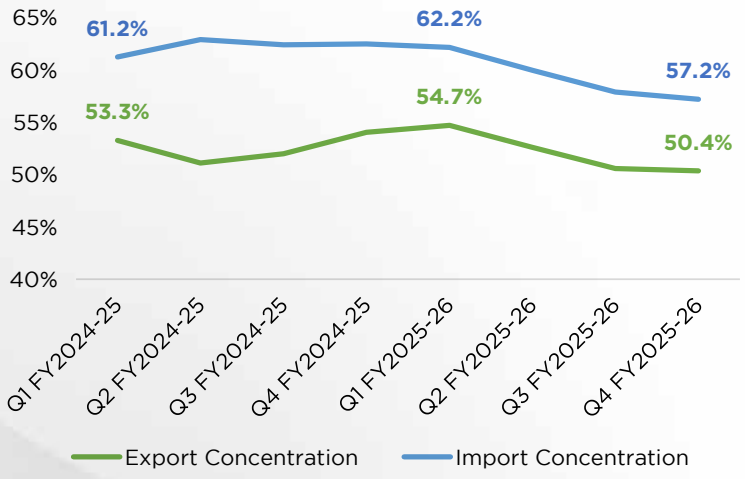
Fig 14: India's Trade Balance in FY 2025-26



Source: Department of Commerce, MoC&I, GOI

India's trade concentration with its leading destinations declined over the past two years, despite remaining relatively high. On the export side, the share of exports to the leading destinations fell from 53.3% ($58.6 bn) in Q1 of FY'2024-25 to 50.4% ($56 bn) in Q4 of FY'2025-26, a decline of 2.9%. Similarly, import concentration decreased more sharply by 4%, from 61.2% ($106.2 bn) in Q1 of FY'2024-25 to 55.2% ($111.8) in Q4 FY'2025-26. The decline in concentration suggests that India's trade has been diversified over the course of the year (Fig 15).

Fig 15: India's Market Concentration on the Leading (Top 10) Partners



Source: Department of Commerce, MoC&I, GOI
Note: This includes merchandise exports and imports only

India's trade policy response in FY'2025-26 encompassed several initiatives aimed at navigating a challenging global trade environment characterised by rising protectionism and supply-chain realignments. Among the key measures were the acceleration of trade negotiations and conclusion of agreements with partners such as the UK, Oman, and New Zealand, which expanded market access for sectors including

textiles, pharmaceuticals, engineering goods, and gems and jewellery[17].

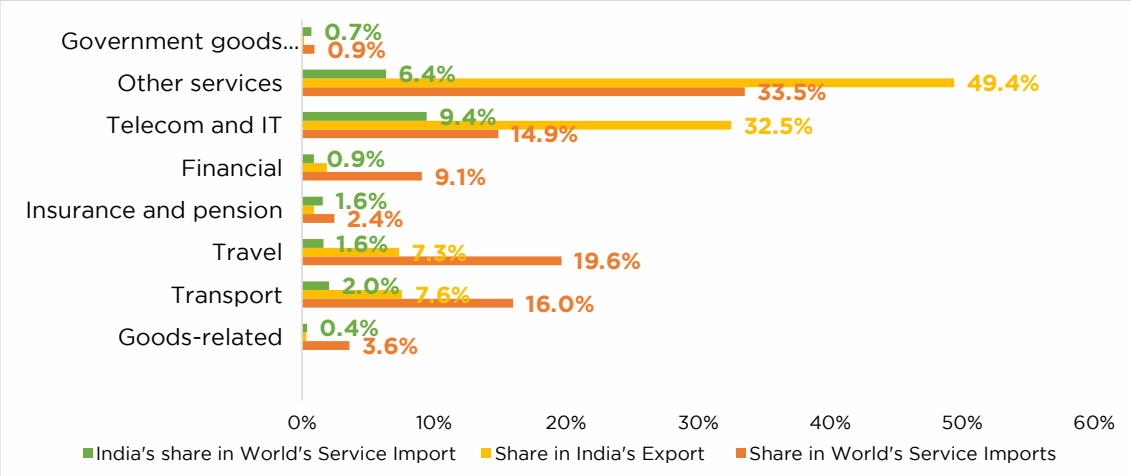
The government also strengthened export competitiveness through measures such as the Export Promotion Mission (EPM) and the liberalisation of duty-free import schemes for export-oriented industries. These initiatives sought to reduce input costs, support market diversification, and help exporters adapt to evolving tariff and non-tariff barriers. Together, these efforts reflect India's strategy of combining external market access with domestic competitiveness enhancement to strengthen export resilience and position itself as an alternative manufacturing and sourcing destination in a reconfiguring global trade landscape[18].

Alongside the strengthening of merchandise export competitiveness, services trade has emerged as an increasingly important driver of India's external sector performance. Services export growth across a range of sectors has improved India's global presence, increased its share in world services trade, and provided an important source of external sector strength.

7. Services Export Performance

India remained the world's eighth-largest services exporter in 2025, retaining this position since 2015, while also recording the fastest growth rates among major global exporters. The services export growth rate has consistently outpaced that of merchandise exports[19]. India's services exports reached $421.2 bn in FY 2025-26, nearly matching merchandise exports of $442.1 bn. This underscores the growing importance of services as a key driver of India's export earnings, external sector resilience, and overall economic growth. India's services exports increased from $156 bn in 2015 to $416 bn in 2025, registering a CAGR of 10.3%, higher than the global average growth of 6.6% and ahead of leading exporters such as the United States (4.8%), United Kingdom (6.5%) and Germany (7.0%). Consequently, India's share in global services exports rose from 3.1% in 2015 to 4.3% in 2025, reflecting increasing integration into global services trade.

Fig 16: Composition of Services Exports, 2025



Source: UNCTAD

17 https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=2233417&lang=2&reg=3
18 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2232079&reg=3&lang=1
19 https://www.epw.in/journal/2026/22/commentary/indias-services-exports.html

Over the decade, traditional services such as transport and travel continued to account for a large share of world services imports, together constituting nearly 36% in 2025, although their relative importance moderated compared to 2015. At the same time, digitally deliverable and knowledge-intensive services expanded rapidly. Telecom and IT services increased their share in world services imports from 9.5% in 2015 to 14.9% in 2025, while "other services," comprising professional, business, technical, personal and recreational, and management services, remained the single largest category globally, accounting for one-third of world services imports (Fig 16). The high share of Other Services underscores India's transition to a global GCC hub, providing high-value services in areas such as R&D, engineering design, analytics, finance, and professional services.

Table 1: Comparison of Global Services Imports and India's Export Performance for 2015 and 2025

	2025				2015			
Services Sub-category	**World Service Imports ($bn)**	**Share in World's Service Imports**	**India's Exports ($bn)**	**Share in India's Export**	**World Service Imports ($bn)**	**Share in World's Service Imports**	**India's Exports ($bn)**	**Share in India's Export**
Total Services	9645.29		416.07		5084.00		156.28	
Goods-related	345.49	3.6%	1.29	0.3%	167.52	3.3%	0.32	0.2%
Transport	1540.84	16.0%	31.47	7.6%	904.91	17.8%	14.32	9.2%
Travel	1893.96	19.6%	30.55	7.3%	1223.82	24.1%	21.01	13.4%
Insurance and pension	235.17	2.4%	3.67	0.9%	121.93	2.4%	1.99	1.3%
Financial	873.50	9.1%	7.75	1.9%	463.50	9.1%	5.65	3.6%
Telecom and IT	1433.34	14.9%	135.21	32.5%	484.54	9.5%	55.19	35.3%
Other services	3233.07	33.5%	205.51	49.4%	1642.57	32.3%	57.24	36.6%
Government goods and services	89.92	0.9%	0.63	0.2%	75.22	1.5%	0.56	0.4%

Source: UNCTAD

Over the past decade, global demand for services expanded substantially, with world services imports increasing from $5.1 tn in 2015 to $9.6 tn in 2025. While other services, travel and transport continued to account for almost three-fourths of global demand, the composition of services trade shifted towards more knowledge-intensive activities. In contrast, the share of travel services in global imports declined from 24.1% to 19.6%, reflecting a gradual reorientation of global demand towards digitally deliverable and business-oriented services (Table 1).

India's services export basket evolved broadly in line with these global trends. Services exports increased from $156 bn in 2015 to $416 bn in 2025, with growth concentrated in telecommunications and IT services, as well as other services. Exports of telecommunications and IT services more than doubled from $55 bn to $135 bn, while exports of other services increased nearly fourfold from $57 bn to $206 bn. Together, these two categories accounted for over 80% of India's services exports in 2025, compared with around 72% in 2015, highlighting a growing specialisation in knowledge-intensive and business services.

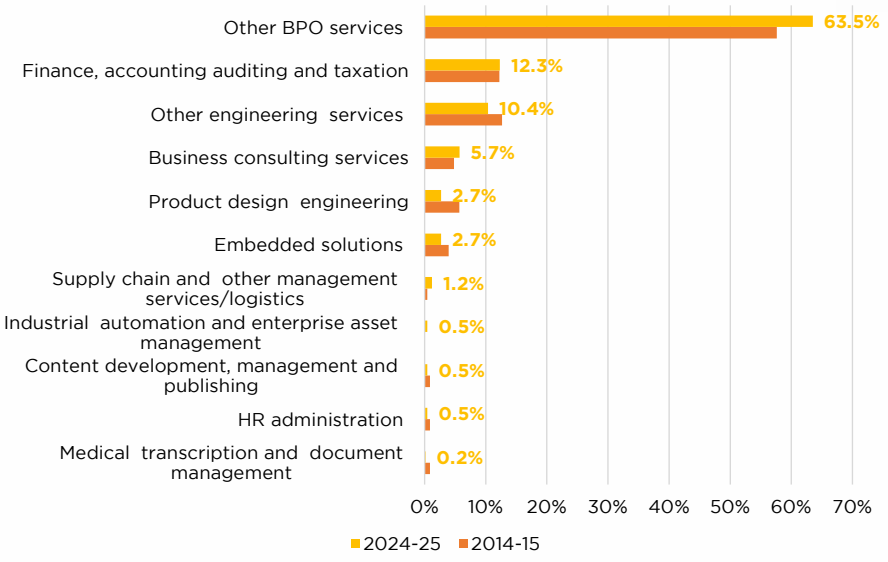
At the same time, the relative importance of traditional services exports declined. Travel services accounted for 13.4% of India's services exports in 2015 but only 7.3% in 2025, while the share of transport services fell from 9.2% to 7.6%. This suggests that India's export growth has increasingly been driven by sectors aligned with the changing structure of global demand, particularly digitally deliverable and high-value commercial services.

As the second-largest component of India's services exports, software and IT-enabled services (ITES) play a pivotal role in the country's external sector and overall economic performance. In this regard, the Reserve Bank of India (RBI) conducts an annual survey of Indian enterprises that export computer software and Information Technology Enabled Services (ITES/BPO) to assess the sector's performance and composition.

Within the composition of the software services exports, the traditional back-office and support functions continue to dominate, with "other BPO[20] services" increasing their share to 63.5% in 2024-25. Finance, accounting, auditing and taxation services remained relatively stable at around 12%, indicating sustained global demand for specialised financial process management services. Conversely, relatively standardised, lower-value-added activities such as medical transcription, document management, content development and HR administration witnessed a decline in their export shares over the decade.

Within engineering services exports, the composition also shifted. The shares of embedded solutions and product design engineering moderated between 2014-15 and 2024-25, while industrial automation and enterprise asset management services emerged as a growing segment (Fig 17).

Fig 17: Composition of Software Services Exports of India, 2014-15 and 2024-25



Source: RBI, Annual Survey

India's export basket mirrored this structural transformation toward high-value services. While transport and travel together accounted for over 22% of India's services exports in 2015, their combined share moderated to around 15% in 2025. In contrast,

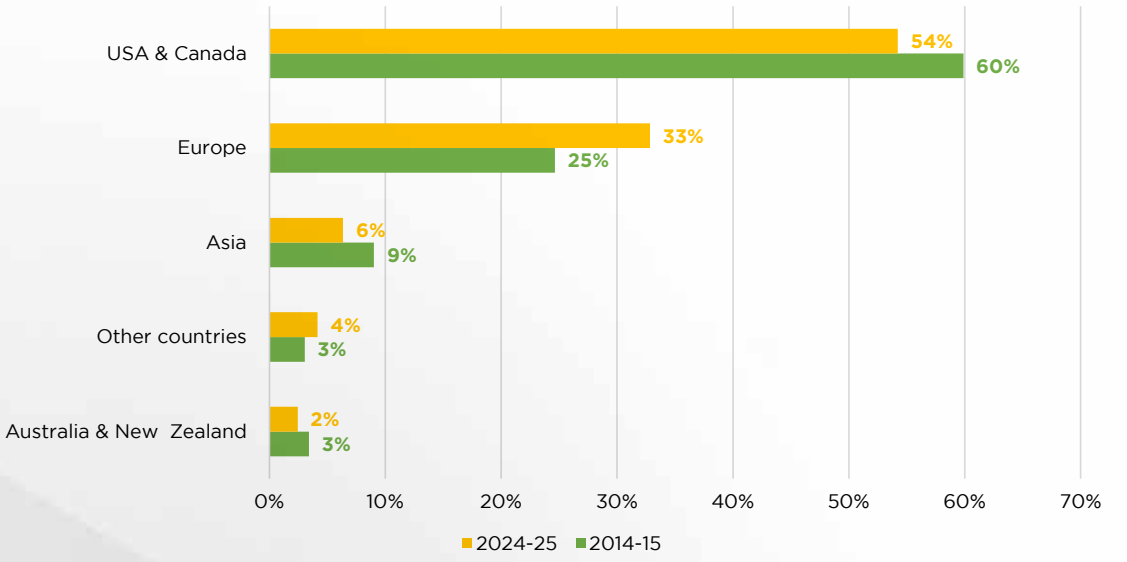
20 Business Process Outsourcing services which include services such as animation and gaming, legal services, market research, pharmaceutical and biotech etc

digitally deliverable and knowledge-intensive categories gained prominence. "Other services" emerged as the largest component of India's services exports, increasing from 36.6% of exports in 2015 to 49.4% in 2025, with India capturing 6.4% of world imports in this segment. Telecom and IT services remained the second-largest category, accounting for 32.5% of India's services exports in 2025. Although its share in India's exports moderated marginally from 35.3% in 2015, India continued to maintain a strong global position in the segment, supplying 9.4% of world telecom and IT services imports.

The geographical distribution of India's software and IT-enabled services exports also reflects gradual diversification over the past decade, although advanced economies continue to remain the dominant destination markets, particularly the USA and Canada. Their share moderated to 54% in 2024-25, indicating a relative reduction in concentration despite continuing to account for more than half of India's IT and ITES exports.

In contrast, Europe's share increased significantly from 25% to 33% during the same period, suggesting expanding demand for Indian digital, consulting and enterprise support services across European economies. The rise also reflects greater diversification by global firms, increasing digital adoption, and the growing role of Global Capability Centres and cross-border professional services.

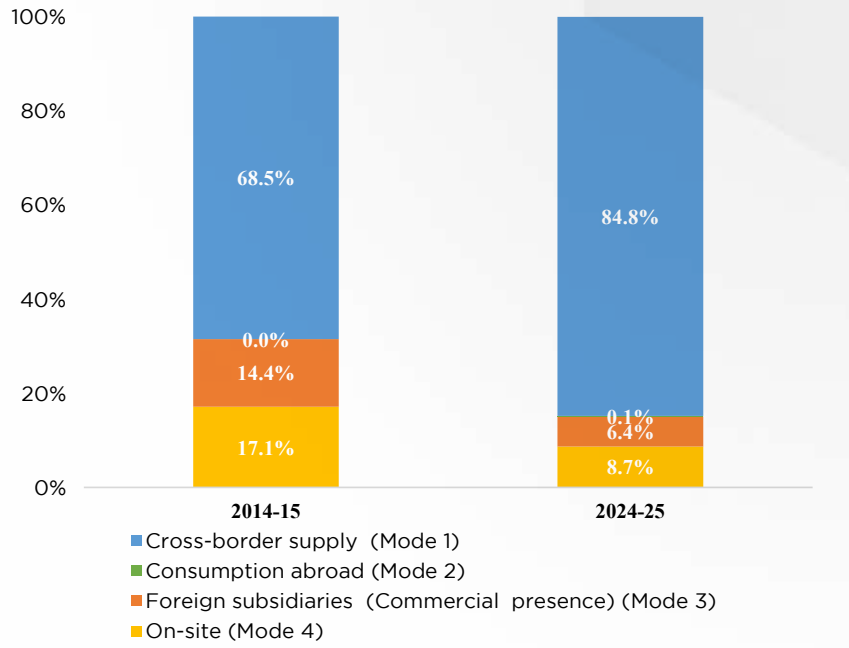
Fig 18: Major Destinations of Software Services Exports from India, 2014-15 and 2024-25



Source: RBI, Annual Survey

Meanwhile, Asia's share declined from 9% to 6%, while Australia and New Zealand together accounted for a relatively small and declining share of exports. The changing regional composition suggests that India's IT and ITES exports remain closely linked to demand from advanced economies, although the export markets have become somewhat more geographically diversified over time (Fig 18).

Fig 19: Major Modes of Software Services Exports from India, 2014-15 and 2024-25



Source: RBI, Annual Survey.

Services are traded through four principal modes[21], outlined under the General Agreement on Trade in Services (GATS) by the World Trade Organisation (WTO).

While globally, Mode 3 is the dominant mode of service exports in the world, Mode 1 dominates for India.[22] The composition of India's software services exports has shifted markedly towards cross-border digital delivery over the past decade. There is a decline across Mode 2 and Mode 4, which has been compensated by an increase in Mode 1.

The share of exports delivered through cross-border supply (Mode 1) increased the most, by 16.3%, in 2024–25, reflecting firms' growing ability to provide services remotely via digital networks. Taken together, these trends point to a gradual broadening of India's services export base, with cross-border digital delivery emerging as the dominant mode of supply (Fig 19).

21 Mode 1 refers to services provided from the territory of one member into the territory of any other member, Mode 2 refers to services provided in the territory of one member to the service consumer of any other member, Mode 3 refers to services provided by a service supplier of one Member, through commercial presence, in the territory of any other Member and Mode 4 refers to services provided by a service supplier of one Member, through the presence of natural persons of a Member in the territory of any other Member

22 https://www.epw.in/journal/2026/22/commentary/indias-services-exports.html

B.
THEMATIC ANALYSIS: PHARMACEUTICAL TRADE

B. Thematic Analysis: Pharmaceutical Trade

1. Overview

As India advances towards its aspiration of becoming a $30 tn economy by 2047, the pharmaceutical sector is expected to emerge as a key pillar of economic growth, technological advancement, and global health leadership. Over the years, India has established itself as a reliable and cost-competitive supplier of quality-assured medicines, supported by a strong manufacturing ecosystem, skilled human capital, and growing research capabilities. Reflecting this momentum, India's pharmaceutical exports excluding API reached ~$25.8 bn in 2025, while the domestic pharmaceutical market, currently estimated at around $60 bn, is projected to expand to nearly $130 bn by 2030[23].

The Indian pharmaceutical industry is currently the third largest by volume with more than 3,000 companies and 10,500 manufacturing units[24]. Pharmaceuticals, Medicinal Chemical and Botanical Products made up 7.2% of the total manufacturing GVA in 2023-24, making it the fifth largest contributor[25]. The pharmaceutical sector also contributes 1.7% to India's GDP[26]. The industry is also known as the 'Pharmacy of the World' due to its role in supplying vaccines, essential medicines, and medical supplies during the pandemic[27]. For India, pharmaceutical products (HS 30) are the fifth largest exported item in 2025. It also supports 2.7 million livelihoods, either directly or indirectly[28]. That success is underpinned by India's ability to produce high-quality, low-cost medicines.

Globally spending on medicines is estimated to increase in the upcoming years at a CAGR of 5-6% until 2028, with improved access to medicines, improved patient access to innovative therapies in key markets and the surging demand for novel speciality drugs[29]. Among the globally demanded products, pharmaceutical products (HS 30) are the sixth largest demanded product, accounting for 6% of India's total merchandise exports by value in 2025. Indian pharmaceutical products are exported to over 200 countries, with a significant share reaching highly regulated markets such as the United States and Europe, which together account for more than half of India's pharmaceutical exports. This global footprint underscores India's growing integration into international healthcare supply chains and its strategic importance in ensuring affordable access to medicines worldwide.

India is the largest supplier of generic drugs, accounting for about 20% of the global supply. It has the highest number of United States Food and Drug Administration (USFDA) compliant pharmaceutical plants outside of the United States of America (USA)[30]. It also contributes significantly to ensuring affordable medicines globally by supplying over 50% of Africa's requirement for generics, nearly 40% of generic demand in the US, and approximately 25% of all medicines in the UK. India is the world's largest supplier of antiretroviral drugs, providing over 70% of the global supply and ensuring affordable access to the global south[31].

23 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2205547&reg=3&lang=2
24 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2243248&reg=3&lang=2
25 Annual Survey of Industries (ASI) for FY 2023–24
26 https://www.ibef.org/industry/pharmaceutical-india
27 https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=152038&reg=3&lang=2
28 https://www.bain.com/insights/healing-the-world-a-roadmap-for-making-india-a-global-pharma-exports-hub/
29 https://www.iqvia.com/-/media/iqvia/pdfs/china/viewpoints/iqvia-institute-general-use-of-medicines-2024-for-print.pdf
30 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2243248&reg=3&lang=2
31 https://pharma-dept.gov.in/sites/default/files/Annual%20Report%202025-26.pdf

2. Mapping the Global Trade Profile in Pharmaceutical Products

Pharmaceutical products under HS 30 can be further classified under three categories comprising formulations, bulk drugs, and others[32]. The global demand for this segment reached $1.02 trillion in 2025. India's exports in this segment stood at $25.8 bn, accounting for 2.5% of global demand. The sector continued to generate a trade surplus, with net exports amounting to $22.4 bn in 2025. Over the past decade, global pharmaceutical demand expanded at a CAGR of 7.3%, while India's pharmaceutical exports grew marginally higher at 7.5%.

Table 2: Comparison of India's Trade Profile for Pharmaceuticals, 2025

Code	Product Category	Product label	World Import ($bn)	Product Share in World Demand	India's Export ($bn)	India's export share in World demand	India's Import ($bn)	India's RCA	Top Exporter and Value ($bn)	Top Exporter's RCA
'3004	Formulations	Retail medicaments / formulated drugs	571.5	55.6%	22.6	4.0%	1.48	1.6	Germany (72.5)	0.02
'3002	Formulations	Blood products, vaccines & immunologicals	390.2	38.0%	2.2	0.6%	1.57	0.2	Switzerland (69.6)	1.5
'3006	Others	Other pharmaceutical preparations	26.1	2.5%	0.3	1.2%	0.18	0.5	Germany (3.8)	0.03
'3003	Bulk Medicines	Bulk mixed medicaments	24.7	2.4%	0.4	1.4%	0.11	0.6	Ireland (7.7)	3.3
'3005	Others	Medical dressings & bandages	11.7	1.1%	0.1	0.7%	0.05	0.3	China (2.3)	14.3
'3001	Others	Organo-therapeutic substances & extracts	3.1	0.3%	0.2	7.3%	0.07	2.9	USA (0.6)	2.2
		Total (Segment)	**1027.5**		**25.8**	**2.5%**	**3.5**			

Note: Product categorisation is based on the methodology outlined in the ISID Working Paper, India's Trade in Pharmaceutical Products: A Method for the Classification of Pharmaceutical Products and Recent Trends (2022).
Source: ITC Trade Map

Within formulations, retail medicaments and formulated drugs (HS 3004) which include a wide range of medicaments containing steroids, vitamins, alkaloids and their derivatives constituted the largest pharmaceutical segment in 2025, accounting for 55.6% of global pharmaceutical imports valued at $571.5 bn. India exported $22.6 bn

32 The categorizations are based on the methodology outlined in the ISID working paper, India's Trade in Pharmaceutical Products: *A Method for the Classification of Pharmaceutical Products and Recent Trends (2022).*

in this category, capturing a 4.0% share in global exports with a Revealed Comparative Advantage (RCA)[33] of 1.6, indicating a strong comparative advantage. Over the past decade, India's exports in this segment expanded at a CAGR of 7.3%, exceeding the global import demand growth of 5.0%. The performance reflects India's well-established generic pharmaceutical manufacturing base, scale economies, cost competitiveness, and strong integration with regulated export markets. Germany remained the leading exporter, with exports of $72.5 bn, due to its strengths in patented formulations, high-value therapeutics, and brand-driven pharmaceutical products.

The second-largest formulations category, blood products, vaccines, and immunologicals (HS 3002), which comprises vaccines, cell therapy products and immunological products, emerged as the fastest-growing pharmaceutical segment globally, with imports reaching $390.2 bn and recording a CAGR of 12.3%. Despite the rapid expansion of global demand, India's exports in this category remained limited at $2.2 bn, corresponding to a global export share of 0.6% and an RCA of 1.5. Switzerland dominated the segment with exports of $69.6 bn, reflecting the concentration of biologics, advanced therapeutics, and patented immunological products within multinational pharmaceutical firms located in advanced economies. The biologics segment is characterised by high capital intensity, long development timelines, stringent regulatory requirements, and significant research and development costs. Even for vaccines, sustained public-sector support and long-term R&D investment remain critical due to relatively low commercial returns and high production risks. Consequently, the global vaccine and biologics ecosystem continues to be concentrated in high-income economies that maintain strong public funding, procurement systems, and innovation support frameworks[34].

Bulk mixed medicaments (HS 3003) are chemical formulations supplied in bulk to hospitals, distributors, or manufacturers for further processing and packaging. India's competitiveness remains modest. Ireland emerged as the dominant exporter with a global export share of approximately one-third along with an RCA of 3.37. This is the result of favourable policies, including financial incentives, tax concessions, a highly educated workforce, and its geographic location providing access to European and North American markets.[35] The decline in India's share also reflects the shift away from bulk medicaments towards ready-to-use formulations and advanced dosage forms.

Medical dressings and bandages (HS 3005) remained a low-growth, highly competitive segment, with global imports totalling $11.7 bn. India maintained only a 0.7% share with RCA of 14.3, while China dominated the category through scale-based manufacturing advantages and integrated medical supplies production networks.

A notable exception was organo-therapeutic substances and extracts (HS 3001), where India's exports increased strongly to $0.2 bn and export share rose to 7.3%, with RCA of 2.9. Although the segment is small globally at $3.1 bn, India's export CAGR of 18.1% significantly exceeded the contraction in global demand. India is the third-largest pharmaceutical producer globally by volume, after the United States and China, supported by cost advantages and the availability of skilled human

33 A country is said to have a revealed comparative advantage (RCA) in a given product i when its ratio of exports of product i to its total exports of all products exceeds the same ratio for the world as a whole. If RCA takes a value greater than unity, the country has a revealed comparative advantage in that product

34 https://isid.org.in/wp-content/uploads/2023/01/WP258.pdf

35 https://kpmg.com/ie/en/insights/life-sciences/ireland-natural-home-global-pharma.html

resources. However, around 65% of domestic pharmaceutical production is absorbed by the domestic market, with only about 35% directed toward exports[36]. Overall, this indicates that India's pharmaceutical strength remains in generic formulations and cost-efficient manufacturing, with innovation-intensive segments such as biologics, immunologicals, and specialised therapeutics continuing to be dominated by countries with stronger R&D ecosystems and intellectual property ownership (Table 2).

3. Mapping the Global Trade Profile in Active Pharmaceutical Ingredients (API), 2025

Active Pharmaceutical Ingredients (APIs) are the core chemical substances that confer a medicine's therapeutic effect, making them the most critical input in pharmaceutical manufacturing. A country's ability to secure a reliable API supply chain directly determines the affordability, availability, and self-sufficiency of its pharmaceutical sector. In 2025, the global API market stood at $261.2 bn in imports, with the top ten products collectively amounting to $258.4 bn. India's API exports were at $10.0 bn, which translates to a share of 3.8% in the global demand. India is also a net exporter in this segment, with imports at $7.4 bn.

Table 3: Comparison of India's Trade Profile for Active Pharmaceutical Ingredients, 2025

Code	Product label	World Import ($bn)	Product Share in World Demand	India's Export ($bn)	India's export share in World demand	India's Import ($bn)	India's RCA	Top Exporter and Value ($bn)	Top Expo-rter's RCA
'2937	Hormones & Analogues	97.8	37.5%	0.3	0.3%	0.40	0.04	Ireland (61.0)	1.93
'2933	Nitrogen Heterocyclic Compounds	96.5	36.9%	4.3	4.4%	2.35	0.49	Switzer-land (35.6)	1.89
'2922	Amino Compounds	15.7	6.0%	0.7	4.5%	0.84	0.50	China (5.7)	1.12
'2941	Antibiotics	11.4	4.3%	0.9	8.2%	1.92	0.92	China (4.3)	1.16
'2918	Oxygenated Carboxylic Acids	10.3	4.0%	0.7	6.7%	0.54	0.75	China (3.3)	0.98
'2936	Vitamins & Provitamins	10.0	3.8%	0.3	3.2%	0.24	0.35	China (3.7)	1.14
'2924	Carboxyamides & Amides	9.4	3.6%	0.8	9.0%	0.32	1.00	China (2.9)	0.95
'2923	Ammonium & Phospholipid Compounds	2.9	1.1%	0.2	6.4%	0.09	0.72	China (0.6)	0.69
'2939	Alkaloids	2.8	1.1%	0.4	13.2%	0.14	1.48	China (0.4)	0.44
'2940	Specialty Sugars & Derivatives	1.7	0.6%	0.0	1.9%	0.06	0.22	Germany (0.3)	0.62
	Total (Top 10)	**258.4**		**8.7**	**3.35%**	**6.9**	**0.4**		
	Total (Segment)	**261.2**		**10.0**	**3.83%**	**7.4**			

Note: Product categorisation as API is based on the methodology outlined in the ISID Working Paper, India's Trade in Pharmaceutical Products: A Method for the Classification of Pharmaceutical Products and Recent Trends (2022).Source: ITC Trade Map

Hormones and Analogues (HS 2937) comprise 37.5% of global demand with a global import of $97.8 bn in 2025, with India's global share at 0.3% and RCA at 0.04. Ireland is the leading exporter with an approximately two-third market share.

36 https://www.icra.in/Media/GetNewsFile/24508

Nitrogen heterocyclic compounds (HS 2933) are the second largest product accounting for the largest product in terms of volume of India's API exports in 2025, at $4.3 bn, with India's global export share at 4.4%. HS 2922 (amino compounds) recorded exports of $0.7 bn and a global share of 4.5% in 2025. This segment is used in drug synthesis. HS 2941 (antibiotics) recorded exports of $0.9 bn in 2025. HS 2936 (vitamins and provitamins) recorded exports of $ 0.3 bn, with India's share at 3.2%. Production is concentrated in China and Germany due to economies of scale in fermentation and chemical synthesis. HS 2939 (alkaloids) shows exports of $0.4 bn and RCA of 1.48, indicating specialisation in a narrow set of products within this category. HS 2940 remains marginal in global trade, with limited participation by Indian exporters (Table 3).

Globally, there is an acute concentration of the input supply chains with China stated to account for approximately 40% of global API demand[37]. For specific antibiotics, including cephalosporins, azithromycin, and penicillin, China's dominance is even greater, accounting for 90-95% of worldwide production[38].

4. Change in share in Pharmaceutical Exports over the years (2015-25)

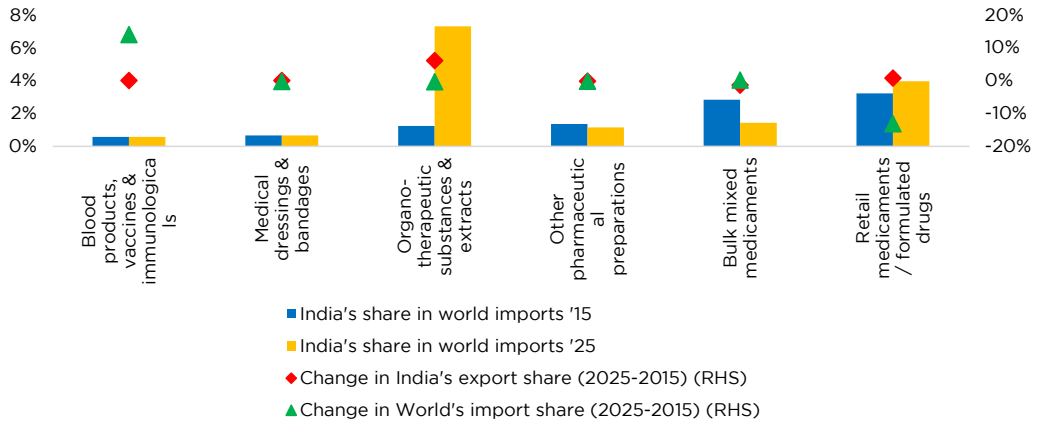
The global pharmaceutical and organic chemicals market expanded significantly between 2015 and 2025, particularly in high-value pharmaceutical formulations, vaccines, and specialised chemical intermediates.

In pharmaceuticals (HS 30), global demand became increasingly concentrated in vaccines, immunological, and retail formulations. World imports of blood products, vaccines, and immunologicals increased from $122 bn in 2015 to $390 bn in 2025, because of a clear combination of pandemic-related demand[39], rapid expansion of biologic medicines, and the growing globalisation of vaccine supply chains, thus increasing their share in the global pharmaceutical import basket from 24.1% to 38.0%. At the same time, the share of retail medicaments and formulated drugs declined from 68.8% to 55.6%, although they remained the largest pharmaceutical category globally. Imports also increased in bulk medicaments, medical dressings, and other pharmaceutical preparations, though these categories continued to account for a relatively small share of global demand.

India's export performance in pharmaceuticals remained strongest in formulated drugs and selected niche therapeutic segments. India's global export share in retail medicaments increased from 3.2% to 4.0%, reinforcing its position as a major supplier of generic formulations. Significant gains were also observed in organo-therapeutic substances and extracts, where India's export share rose from 1.2% to 7.3%. While India accounts for roughly 60% of the world's vaccine manufacturing volume, its share in global dollar-value exports of "vaccines and immunological" remains low at about 0.6%, despite this segment emerging as the fastest-growing component of global pharmaceutical trade. This disconnect stems from producing primarily low-cost, conventional vaccines (like DPT and BCG)[40] rather than higher-value patented therapies[41]. India also recorded declines in bulk mixed medicaments and other pharmaceutical preparations, while medical dressings remained unchanged (Fig 20).

37 https://www.pharmanow.live/knowledge-hub/market-trends/india-china-pharma-supply-chain-dominance
38 https://www.icra.in/Media/GetNewsFile/24508
39 https://www.wto.org/english/blogs_e/data_blog_e/blog_dta_23may23_e.html
40 India is the global leader in the supply of Diphtheria, Tetanus, and Pertussis (DPT), Bacillus Calmette-Guerin (BCG), and measles vaccines
41 https://isid.org.in/wp-content/uploads/2023/01/WP258.pdf

Fig 20: India's Changing Share in Global Demand for Pharmaceutical Exports (2025-15)

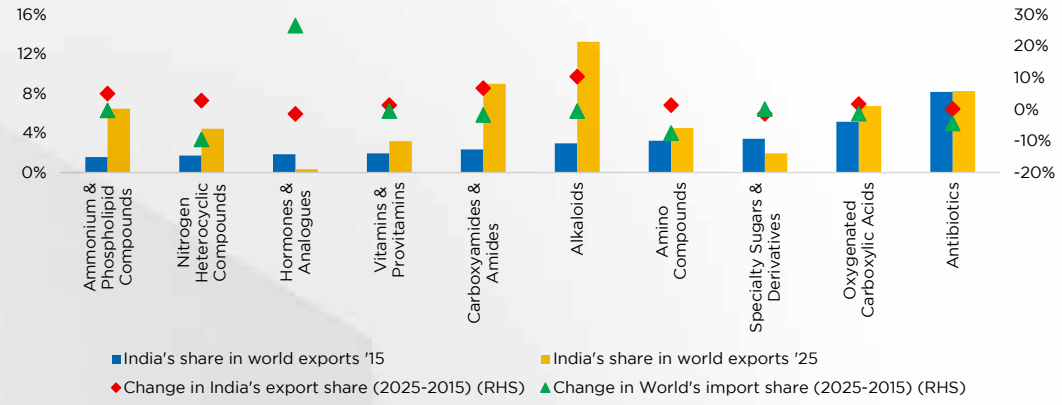


Source: ITC Trade Map

5. Change in share in Active Pharmaceutical Ingredients Exports over the years (2015-25)

The composition of global imports within APIs changed substantially over the decade. Nitrogen heterocyclic compounds dominated global imports in 2015, accounting for 46.9% of world demand, but their share declined to 37.3% by 2025. In contrast, hormones and analogues recorded a sharp rise in global importance, with their share in world imports increasing from 11.5% to 37.9%, making them the largest traded category by 2025. The sharp increase in the share of hormones and analogues in global pharmaceutical imports was driven by the rapid expansion of high-value peptide-based and hormone-related therapies, particularly GLP-1 receptor agonists such as semaglutide and tirzepatide, used in the treatment of diabetes and obesity. Demand for GLP-1 medicines surged globally during 2021–25, while rising diabetes prevalence and obesity rates further boosted demand for hormone-based therapeutics[42]. Other product groups, such as amino compounds, antibiotics, oxygenated carboxylic acids, and vitamins, witnessed either stagnant or declining shares in the global import basket despite moderate growth in absolute trade values.

Fig 21: India's Changing Share in Global Demand for Active Pharmaceutical Ingredients Exports (2025-15)



Source: ITC Trade Map

India's export performance across these products was mixed but showed clear gains in several specialised chemical segments. India's global export share in nitrogen heterocyclic compounds increased sharply from 1.7% to 4.4%, while significant gains

42 https://annualreport.novonordisk.com/2024/strategic-aspirations/commercial-execution.html

were also recorded in carboxyamides and amides (2.3% to 9.0%), alkaloids (2.9% to 13.2%), ammonium and phospholipid compounds (1.6% to 6.4%), oxygenated carboxylic acids (5.1% to 6.7%), and vitamins and provitamins (1.9% to 3.2%). India also retained a strong position in antibiotics, with export share remaining broadly stable at above 8%. However, India's position weakened considerably in hormones and analogues, where its export share declined from 1.8% to 0.3%, despite the category emerging as the single largest segment in global trade. India's exports are relatively low because the domestic pharmaceutical industry has historically prioritised volume-driven generic formulations over complex, high-barrier biotech products. The sector remains heavily constrained by raw material dependencies[43], strict international regulatory requirements, and high specialised manufacturing costs. A decline was also observed in speciality sugars and derivatives. India strengthened its competitiveness in several specialised and intermediate chemical products, and needs to expand its presence in the rapidly expanding high-value hormones segment (Fig 21).

India's Active Pharmaceutical Ingredients (API) Import Dependence

India's API imports in 2025 were valued at $7.4 bn, with the top five product categories alone contributing $6.2 bn, or nearly 84% of total demand in the segment. Across these products, the top import sources to India also account for nearly 80% of its demand for each product. The top five supplying countries accounted for over four-fifths of imports across the leading API categories, with China serving as the principal source and a small group of countries, including Italy, Germany, the United States, Austria, and Singapore, occupying secondary positions. This concentration highlights the critical role the leading API suppliers play in India's pharmaceutical supply chain.

Table 4: India's Import Dependence on Top 5 API Products on Leading Import Sources, 2025

S.No	HS Code	Product label	Imported value in 2025 ($bn)	Share of the product in India's total API Imports	Top Importing Sources	Share	Combined share of top 5 countries
	'TOTAL	**Total API Imports**	**7.4**	**84%**			
1	2933	Nitrogen Heterocyclic Compounds	2.3	31.9%	China	76.4%	85.9%
					Italy	3.3%	
					Singapore	2.7%	
					USA	2.1%	
					Japan	1.4%	
2	2941	Antibiotics	1.9	26.1%	China	86.1%	93.0%
					Austria	2.1%	
					Italy	1.8%	
					Germany	1.6%	
					Spain	1.4%	

43 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3906479

S.No	HS Code	Product label	Imported value in 2025 ($bn)	Share of the product in India's total API Imports	Top Importing Sources	Share	Combined share of top 5 countries
3	2922	Amino Compounds	0.8	11.5%	China	73.1%	85.6%
					Germany	3.9%	
					Italy	3.2%	
					Malaysia	3.2%	
					USA	2.2%	
4	2918	Oxygenated Carboxylic Acids	0.5	7.4%	China	65.9%	86.9%
					Italy	8.3%	
					Brazil	6.0%	
					Germany	4.0%	
					France	2.7%	
5	2932	Heterocyclic compounds with oxygen	0.5	7.3%	China	72.6%	86.8%
					USA	7.9%	
					Switzerland	2.5%	
					Saudi Arabia	2.0%	
					Poland	1.8%	

Source: ITC Trade Map

At the product level, nitrogen heterocyclic compounds emerged as the largest import category with imports of $2.3 bn, accounting for 31.9% of total API imports, followed by antibiotics at $1.9 bn (26.1%). Amino compounds contributed 11.5%, while oxygenated carboxylic acids and heterocyclic compounds with oxygen accounted for around 7% each. Together, the top two categories constituted nearly 58% of India's API import basket, indicating concentration in a narrow range of pharmaceutical inputs.

China accounted for over three-fourths of imports in nitrogen heterocyclic compounds (76.4%) and antibiotics (86.1%), while its share remained above 65% in the other leading product groups. This dominance reflects China's established scale advantages, integrated chemical manufacturing ecosystem, and cost competitiveness in bulk pharmaceutical ingredients.

Although China's share in India's API imports has moderated marginally since 2010, dependence remains significant, with several APIs sourced predominantly from China. The cost competitiveness of Chinese API manufacturers has contributed to this reliance. Large-scale production facilities, favourable climatic conditions that lower energy requirements during certain stages of production, and government support through subsidised utilities and industrial infrastructure have enabled Chinese firms to achieve lower production costs. As a result, APIs imported from China are estimated to be 35–40% cheaper than domestically produced alternatives, affecting the commercial viability of API manufacturing in India and contributing to the closure of some domestic production facilities[44].

The high degree of product and supplier concentration underscores continued external dependence in critical pharmaceutical inputs and highlights the importance of ongoing efforts to strengthen domestic API manufacturing capacity and diversify sourcing channels.

44 https://isid.org.in/pdf/WP239.pdf

6. Mapping Global Demand and India's Export Footprint in Key Pharmaceutical Exports

The composition of India's pharmaceutical exports highlights a strong concentration in formulations, particularly retail medicaments and formulated drugs (HS 3004), in which India has gained significant market share in large regulated markets. The United States alone accounted for 41% of India's exports in this category. Indian medicines are stated to reach over 200 markets worldwide, with the majority of its exports going to stringent regulatory destinations[45]. Globally, exports in HS 3004 remain dominated by European economies such as Germany, Italy, and Switzerland, reflecting their leadership in patented drugs, speciality therapeutics, and high-value branded pharmaceuticals.

In contrast, India's export profile in blood products, vaccines, and immunologicals (HS 3002) reveals that India's competitiveness in vaccines and biologicals is concentrated in low-cost and developing-country markets. The top importers globally are the United States, Germany, and Belgium, while India's principal export markets are developing economies such as Nigeria and Bangladesh. India also supplies close to 50% of Africa's requirement and 40% of the US requirements of generics and approximately 25% of all kinds of medicines to the UK[46].

Table 5: Mapping Global Demand and India's Export Footprint in Key Pharmaceutical Exports

HS Code	Product	World Imports ($bn)	India's Top Export Destinations (% share)	Major Global Exporters (Share in World Exports %)	Top Importers (%)
'3004	Retail medicaments / formulated drugs	571.5	USA (41%), UK (3.3%), South Africa (2.8%)	Germany (13.5%), Italy (10.2%), Switzerland (9.3%)	USA (16.5%), Switzerland (9.7%), Germany (7.4%)
'3002	Blood products, vaccines & immunologicals	390.2	Nigeria (7.3%), Bangladesh (4.7%), Pakistan (4.5%)	Switzerland (18.2%), USA (15%), Ireland (13.7%)	USA (28.1%), Germany (8.9%), Belgium (8.9%)
'3006	Other pharmaceutical preparations	26.1	USA (21.6%), Spain (7.3%), Russia (6%)	Germany (17.2%), USA (12.2%), Netherlands (11.9%)	USA (20%), Netherlands (12.6%), Germany (7.5%)
'3003	Bulk mixed medicaments	24.7	USA (18.5%), Germany (13.8%), Belgium (8.7%)	Ireland (33.6%), Portugal (16.6%). Belgium (5.4%)	Belgium (34.6%), Saudi Arabia (12.1%), USA (10%)
'3005	Medical dressings & bandages	11.7	USA (25.4%), Germany (11.2%), Nepal (6.2%)	China (19.4%), USA (11.4%), Germany (8.9%)	USA (16.8%), Germany (10.8%), Netherlands (6.6%)
'3001	Organo-therapeutic substances & extracts	3.1	USA (91.7%), Philippines (1.2%), Saudi Arabia (0.6%)	USA (20.2%), China (18.5%), Singapore (10.3%)	USA (15.2%), France (11.7%), Singapore (7.6%)

Source: ITC Trade Map

45 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2205547&reg=3&lang=2

46 https://blogs.pib.gov.in/blogsdescr.aspx?feaaid=68

A similar pattern is visible across other pharmaceutical categories. In other pharmaceutical preparations (HS 3006) and medical dressings and bandages (HS 3005), India has achieved stronger penetration in the United States market, indicating competitiveness in relatively standardised and cost-sensitive product segments. Global exports in this category are heavily concentrated in Ireland and Portugal, reflecting the role of tax-efficient pharmaceutical manufacturing hubs and contract manufacturing networks integrated with multinational firms.

The export concentration of organo-therapeutic substances and extracts (HS 3001) is particularly striking, with over 90% of India's exports directed toward the United States. This indicates strong market linkages and access to one of the world's leading consumer markets. India also has a strong pharma network with over 650 US-FDA compliant labs[47], the largest outside the USA, making it one of the leading exporters to the US for pharmaceutical products (Table 5).

7. Mapping Global Demand and India's Export Footprint in Key Active Pharmaceutical Ingredients (API) Exports

India's export footprint in API-based products reveals a presence across American, European, and Asian markets. India has achieved greater market penetration in the United States across several API categories, particularly amino compounds (HS 2922) and oxygenated carboxylic acids (HS 2918). The US is also the leading importer across the majority of the key API products.

In hormones and analogues (HS 2937), global trade remains highly concentrated, with Ireland alone accounting for over two-thirds of world exports. Although the United States is the largest global importer with nearly 60% of global imports, India's exports to the United States account for 13.9% of India's shipments of these products. A similar pattern is evident in nitrogen heterocyclic compounds (HS 2933), wherein India exports to advanced pharmaceutical markets such as the United States, Switzerland, and the Netherlands, global exports are overwhelmingly dominated by Switzerland and Ireland. These segments continue to be dominated by selective economies.

Table 6: Mapping Global Demand and India's Export Footprint in Key Active Pharmaceutical Ingredients Exports

HS Code	Product	World Imports ($bn)	India's Top Export Destinations (% share)	Major Global Exporters (Share in World Exports %)	Top Importers (%)
'2937	Hormones & Analogues	97.8	USA (13.9%), Egypt (8%), Netherlands (6.4%)	Ireland (66.4%), USA (20.8%), Denmark (4.3%)	USA (59.9%), Italy (25.3%), China (25.3%)
'2933	Nitrogen Heterocyclic Compounds	96.5	USA (8.3%), Switzerland (7.3%), Netherlands (4.8%)	Switzerland (38.4%), Ireland (14.2%), China (12%)	Slovenia (19.5%), Germany (13%), Italy (9.9%)

47 https://www.bain.com/insights/healing-the-world-a-roadmap-for-making-india-a-global-pharma-exports-hub/

HS Code	Product	World Imports ($bn)	India's Top Export Destinations (% share)	Major Global Exporters (Share in World Exports %)	Top Importers (%)
'2922	Amino Compounds	15.7	USA (19.8%), China (10.3%), Netherlands (8.7%)	China (40.4%), USA (7%), Germany (6.8%)	USA (9.6%), Germany (6.9%), India (5.4%)
'2941	Antibiotics	11.4	Bangladesh (8.8%), Viet Nam (5.9%), China (5.6%)	China (43.3%), India (9.3%), Switzerland (8.7%)	India (16.9%), Italy (10.9%), USA (6.9%)
'2918	Oxygenated Carboxylic Acids	10.3	USA (22.1%), Singapore (12.9%), Italy (11.8%)	China (37.4%), India (7.8%), Germany (7.7%)	USA (14.9%), Germany (7.8%), India (5.3%)

Source: ITC Trade Map

In the remaining three product categories, i.e., amino compounds (HS 2922), antibiotics (HS 2941), and oxygenated carboxylic acids (HS 2918), China remains the major global exporter, meeting almost two-fifths of global demand for these products. India demonstrates a comparatively stronger position in antibiotics (HS 2941), accounting for 9.3% of global exports and ranking among the leading suppliers globally after China. India has emerged as the second largest supplier for these products, particularly to regulated markets such as the United States and Europe. The presence of India itself among the leading exporters and importers in two of the major API categories also reflects its inclusion in pharmaceutical value chains as an intermediary (Table 6).

Global Pharmaceuticals Success Stories (Germany, Switzerland, China)

Leading pharmaceutical exporters such as Germany, Switzerland, and China have built globally competitive pharmaceutical industries through sustained investments in research and development, strong manufacturing capabilities, supportive policy frameworks, and the growth of globally competitive firms. Germany's success is rooted in an integrated industrial ecosystem linking its chemical and pharmaceutical sectors, while Switzerland has leveraged a strong innovation ecosystem, robust intellectual property protections, and world-class research institutions, with pharmaceutical sector exports over 98% of its production[48] and contributes nearly 22% of total merchandise exports[49]. Pharmaceutical growth in these countries has also been driven by the emergence of large domestic firms, such as Bayer, Merck, and Boehringer Ingelheim in Germany, and Roche and Novartis in Switzerland, which have invested heavily in innovation and global expansion. These experiences highlight the importance of innovation, domestic capabilities, and competitive firms in sustaining pharmaceutical export success.

- **Building on Existing Chemical and Manufacturing Capabilities**: Germany, Switzerland and China all built their pharmaceutical industries on strong chemical manufacturing foundations. Germany and Switzerland transitioned

48 https://www.accurity.ch/2021/06/27/pharmaceutical-sector-growth-in-switzerland-pandemic-score-card/

49 https://www.swissinfo.ch/eng/healthcare-innovation/six-charts-show-challenges-facing-swiss-pharmaceutical-industry/91593819

from advanced chemical and dye industries into pharmaceutical innovation, while China leveraged large-scale API, KSM and chemical manufacturing capabilities to develop industrial expertise, integrate into global supply chains and support its move into higher-value pharmaceutical production.

- **Investing Heavily in Research and Development**: Germany, Switzerland, and China all supported pharmaceutical competitiveness through sustained R&D spending. Germany's firms invested heavily in research and clinical trials, Switzerland became one of the world's most R&D-intensive economies, and China significantly expanded investment in biotechnology, biologics, and innovative drug development. China's national R&D expenditure rose to over 2.8% of GDP, while pharmaceutical and biotechnology firms sharply increased spending on drug discovery, cell and gene therapies, precision medicine, and biologics, supporting the country's transition from generic and API production to innovative drug development.
- **Developing Pharmaceutical and Biotechnology Clusters:** Germany, Switzerland, and China concentrated pharmaceutical activities in innovation hubs that facilitated collaboration and commercialisation. Germany's BioRegio programme promoted regional biotechnology clusters centred around universities and research institutes. Switzerland developed a globally competitive life sciences ecosystem around Basel. China established major pharmaceutical and biotechnology clusters in cities such as Shanghai, Beijing, Suzhou, and Shenzhen, bringing together firms, research institutions, hospitals, investors, and service providers.
- **Using Industrial Policy to Accelerate Pharmaceutical Upgrading:** China's pharmaceutical development was strongly supported by long-term industrial policy. Initiatives such as the National Medium- and Long-Term Science and Technology Development Plan, the Twelfth and Thirteenth Five-Year Plans, and subsequent industrial modernisation strategies identified biotechnology and innovative medicines as strategic sectors. These policies were backed by public R&D funding, tax incentives, innovation infrastructure, and targeted support for pharmaceutical and biotechnology enterprises, enabling China to transition from a producer of APIs and generic medicines to an emerging centre for pharmaceutical innovation.

8. Non-tariff measures in Pharmaceutical Trade faced by India

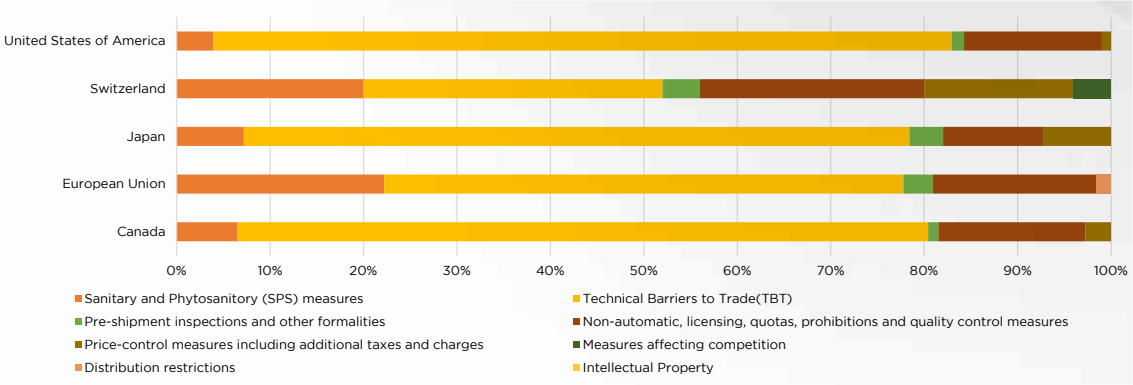
India's pharmaceutical exports are primarily directed towards developed markets such as the United States, the United Kingdom, France, and Canada. Among developing economies, South Africa, Nigeria, and Brazil remain important export destinations. An assessment of non-tariff measures (NTMs) across key developed and developing markets is essential to map the regulatory and market-access constraints that shape India's pharmaceutical export competitiveness and prospects for further expansion in global markets.

Non-tariff measures (NTMs) have become increasingly restrictive than tariffs, raising compliance costs and serving as key barriers to global trade through complex standards, certifications, and regulatory requirements. According to UNCTAD, least developed countries have lost nearly 10% of their export potential to G20 markets due to their

inability to comply with these stringent requirements, with developing economies bearing the highest adjustment costs[50]. These measures are critical because the sector is directly linked to public health, patient safety, quality assurance, intellectual property protection, and regulatory compliance. Consequently, the pharmaceutical trade is subject to extensive regulatory oversight relating to manufacturing standards, labelling, testing, certification, licensing, and product approvals.

Given the importance of developed markets in India's pharmaceutical exports, the analysis focuses on NTMs imposed by major developed economies, including the United States, European Union, Canada, Japan and Switzerland. India faced a total of 716 non-tariff measures across these markets under the category 'Medicines for Human Use'.

Fig 22: Non-tariff measures faced by India in select Developed Countries



Source: UNCTAD TRAINS

Note: These are the leading measures under the product group medicines for human use

Among these, Sanitary and Phytosanitary (SPS) measures[51], Technical Barriers to Trade (TBT)[52] and non-automatic licensing, quotas, prohibitions and quality control measures together accounted for 678 measures, which equate to 95% of non-tariff measures faced in these economies.

Technical Barriers to Trade (TBT) measures constitute the largest category of NTMs across most developed markets, particularly in the United States, Canada and Japan. Sanitary and Phytosanitary (SPS) measures are also important in several jurisdictions, while non-automatic licensing, quotas, prohibitions, and quality control measures remain relevant in specific countries. 305 NTMs have been recorded in the US followed by 184 in Canada, 146 in Australia, 139 in Japan, 63 in European Union and 25 in Switzerland. TBT measures account for nearly 79% of recorded NTMs in the United States, 74% in Canada and 71% in Japan. SPS measures are relatively more prominent in Switzerland and the European Union. Measures relating to non-automatic licensing and quality controls are also observed across all major markets, specifically in Switzerland, European Union, and Canada, though with a much lower incidence relative to TBT measures. The concentration of measures in these categories reflects the highly regulated nature of pharmaceutical trade, where market access is increasingly determined by conformity assessment procedures, technical standards, and regulatory approvals (Fig 22).

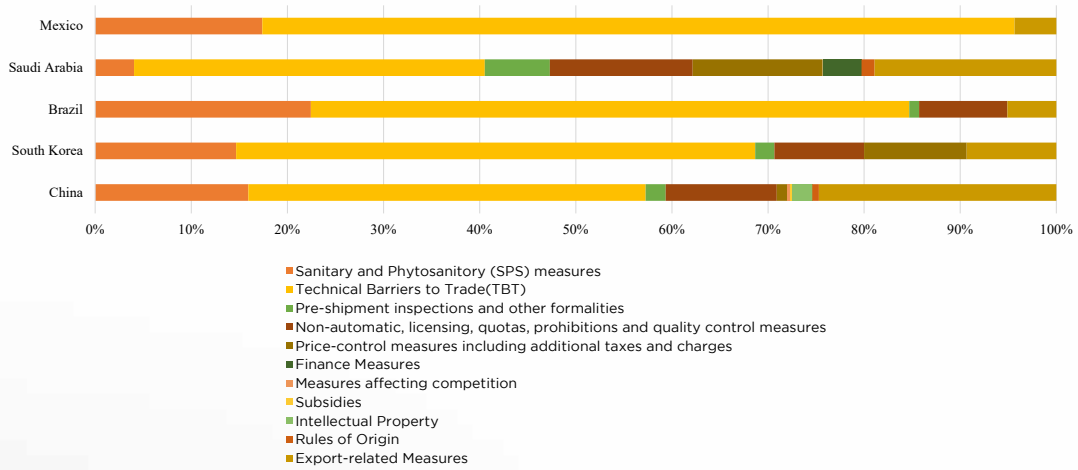
50 https://unctad.org/publication/global-trade-update-may-2026-invisible-barriers-costs-non-tariff-measures

51 SPS measures include food and feed processing requirements, geographical restrictions on eligibility, inspection and storage, traceability requirements among others.

52 TBT measures consist of labelling, product quality and safety, testing, packaging and certification procedures among others.

Several emerging and developing economies, such as China, South Korea, Brazil, Saudi Arabia and Mexico, also represent important markets for the expansion of India's pharmaceutical exports. A total of 778 measures have been observed across these markets with Technical Barriers to Trade (TBT), Export-related measures, and Sanitary and Phytosanitary (SPS) measures constituting of 627 or 80% of the total measures imposed. TBT constitute the most dominant category of regulatory measures across all countries, accounting for almost half of all measures in South Korea and Brazil, and nearly four-fifths in Mexico. Sanitary and Phytosanitary (SPS) measures also remain significant, particularly in Brazil and China, reflecting stringent regulatory and quality compliance requirements in pharmaceutical trade. Export-related measures[53] are high, particularly in China (Fig 23).

Fig 23: Non-tariff measures faced by India in select Developing Countries



Note: These are the leading measures under the product group medicines for human use
Source: UNCTAD TRAINS

India's Presence in Pharmaceutical Import Demand of Leading Developing Countries

The global pharmaceutical market (HS Chapter 30) is valued at approximately $1.02 trillion in import demand. Of this, developing countries account for $159.3 bn. The table below presents the ten largest pharmaceutical importers in terms of their share in developing economies, highlighting the key markets that drive pharmaceutical demand.

India's pharmaceutical exports to developing markets increased from $5.5 bn in 2015 to $9.7 bn in 2025, implying a CAGR of 5.8%, marginally outpacing the growth in aggregate import demand of these markets (5.4%). Consequently, India's market share in developing-country pharmaceutical imports increased to 6.1% in 2025. To the leading ten import markets of the developing countries, India exports $2.13 bn. However, India's export footprint is disproportionately anchored in smaller, price-sensitive markets across Sub-Saharan Africa and South and Southeast Asia, while its presence remains marginal in the ten largest developing-country pharmaceutical importers listed above, markets that collectively account for over $159.3 bn in import demand for 2025. In China, Taipei, and Argentina, alone, representing a combined import demand of approximately $50 bn in 2025, India's average market share stands below 1%, pointing to a structural

53 Export-related measures include licensing, export quotas, pricing among others

gap between India's global export scale and its penetration in high-value developing markets. In contrast, Mexico represents India's most dynamic growth story among major developing-country markets, with Indian pharmaceutical exports registering a CAGR of 24.2% over 2015–2025, far outpacing Mexico's overall pharmaceutical import demand growth of 7.7%. This expansion has been facilitated in part by Mexico's health regulator COFEPRIS (now CONASA) recognising approvals from stringent regulatory authorities, including the USFDA and EMA[54], thereby reducing duplicative review requirements for Indian manufacturers holding such approvals. This regulatory equivalence mechanism has materially lowered market entry costs and timelines for Indian exporters and represents a replicable model for bilateral regulatory engagement with other developing-country partners (Table 7).

Table 7: India's Export Footprint in Leading Developing Pharmaceutical Markets

Country	Imported value in 2015 ($bn)	Imported value in 2025 ($bn)	Share of Country in World Demand, 2025	India's exports 2015 ($bn)	India's exports 2025 ($bn)	India's share in Country's Import Demand, 2025	CAGR (2015-25) Import Demand	CAGR (2015-25) India's Exports
Developing Markets (Aggregate excl India)	**94.3**	**159.3**	**16%**	**5.5**	**9.7**	**6.1%**	**5.4%**	**5.8%**
China	19.2	40.4	3.9%	0.02	0.08	0.2%	7.7%	12.6%
Brazil	6.5	14.5	1.4%	0.22	0.60	4.1%	8.4%	10.6%
Russia	8.4	14.1	1.4%	0.36	0.47	3.3%	5.4%	2.7%
Mexico	4.8	10.1	1.0%	0.03	0.29	2.8%	7.7%	24.2%
Türkiye	4.3	6.5	0.6%	0.05	0.12	1.9%	4.2%	9.0%
Taipei, Chinese	2.8	5.9	0.6%	0.01	0.03	0.5%	7.7%	14.5%
Colombia	2.3	4.3	0.4%	0.05	0.15	3.6%	6.3%	13.0%
Viet Nam	2.5	3.5	0.3%	0.14	0.17	4.8%	3.5%	1.6%
Thailand	2.0	3.4	0.3%	0.09	0.20	5.8%	5.2%	8.3%
Argentina	2.4	3.0	0.3%	0.01	0.02	0.8%	2.2%	10.9%

Note: Values denoted for HS 30
Source: ITC Trade Map

Entry barriers vary across countries and encompass complex regulatory frameworks, lengthy product approval processes, language requirements, localisation norms, procurement restrictions, and price-control mechanisms. In China, for instance, the National Volume-Based Procurement (NVBP) programme seeks to reduce healthcare expenditure through centralised bulk procurement[55]. Under this system, pharmaceutical suppliers compete primarily on price[56], with successful bidders

54 https://globalregulatorypartners.com/cofepris-introduces-abbreviated-regulatory-pathway-reliance-to-accelerate-health-product-approvals-in-mexico/
55 https://www.sciencedirect.com/science/article/pii/S2950266725000254
56 NVBP legally binds 60%–80% market share to price reductions through contractual obligations

securing a substantial share of the market through long-term procurement contracts. China is the world's largest producer of Active Pharmaceutical Ingredients (APIs), serving as a primary upstream supplier of inputs to India's formulations industry. In this context, China's vertically integrated domestic manufacturers retain decisive cost and scale advantages that constrain the market space available to foreign generic suppliers including India. In addition, Indian pharmaceutical firms have historically encountered challenges related to regulatory approvals, including lengthy registration procedures and limited transparency in certain approval processes[57].

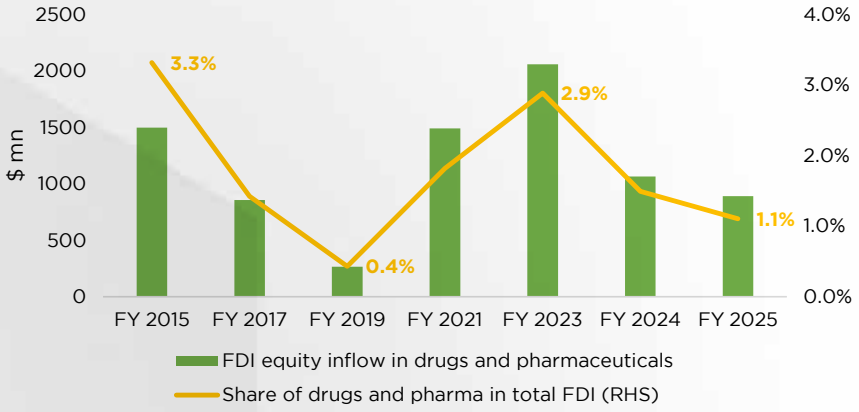
Brazil, India's third-largest pharmaceutical export destination among developing economies, presents a different set of challenges. While India has established a relatively strong market position, accounting for 4.1% of Brazil's pharmaceutical imports, further expansion is constrained by the country's stringent regulatory environment. Brazil's health regulator, ANVISA, maintains rigorous quality, safety and compliance requirements, often resulting in lengthy approval timelines and significant compliance costs.

India's export performance is shaped as much by regulatory and institutional factors as by underlying cost competitiveness. India's strongest competitive differentiator, its large base of USFDA and EMA-approved manufacturing facilities, is an underutilised asset in developing-country markets, many of which extend regulatory recognition to approvals from stringent authorities. Leveraging this quality credential through bilateral regulatory cooperation agreements, mutual recognition frameworks, and coordinated diplomatic engagement could materially accelerate India's market share gains in high-potential markets, while also addressing the structural barriers that have historically constrained growth in larger markets such as China and Russia.

9. Assessing Foreign Investment[58] Trends in Drugs and Pharmaceutical Sector

FDI inflows into India's drugs and pharmaceuticals sector have remained volatile over the past decade. The sector witnessed strong inflows of $1.5 bn in FY'2015, accounting for 3.3% of India's total FDI inflows. However, inflows declined sharply over the following years, falling to $857 mn in FY'2017 and further to $266 mn in FY'2019, when the sector's share in total FDI dropped to just 0.4% and bounced back to 891 mn or 1.1% of total inflows in FY'2025.

Fig 24: Foreign Direct Investment Flows in Drugs and Pharmaceutical Sector



Source: DPIIT

57 https://www.orfonline.org/expert-speak/why-india-remains-unable-to-sell-at-scale-in-china

58 Foreign Direct Investment comprises of the sum of Equity Inflow, Reinvested Earnings and Other Capital, we have analyzed only FDI Equity Inflow. FDI Equity Inflow forms the major component and have been plotted here.

The sector recorded a strong recovery during FY'2021 and FY'2023, with FDI inflows rising to $1.5 bn and $2.1 bn, respectively. The share of pharmaceuticals in total FDI also increased to 1.8% in FY'2021 and further to 2.9% in FY'2023. The recovery was supported by growing global demand for pharmaceuticals during and after the pandemic, supply chain diversification away from excessive dependence on China, and policy initiatives such as the Production Linked Incentive (PLI) scheme for pharmaceuticals and bulk drugs. However, inflows moderated again from $1.1 bn in FY'2024 to $891 mn in FY'2025, with the sector's share in total FDI declining from 1.5% to 1.1%, respectively. While India continues to remain a major global supplier of generic medicines and vaccines, the fluctuating pattern and relatively limited share of FDI inflows indicate that the sector's investment potential remains underutilised, particularly in high-value segments such as biologics, advanced APIs, and pharmaceutical R&D (Fig 24).

India's pharmaceutical sector is one of the largest beneficiaries of the Production Linked Incentive (PLI) programme, with three dedicated schemes targeting distinct objectives: promoting high-value pharmaceutical manufacturing, reducing dependence on imports of critical bulk drugs, and strengthening the domestic medical devices ecosystem. The three pharmaceutical PLI schemes have a combined approved outlay of ₹25,360 crore. In comparison, the large-scale electronics manufacturing sector has received the highest allocation under the PLI programme, with an approved outlay of ₹40,951 crore[59].

The PLI Scheme for Pharmaceuticals seeks to enhance India's presence in advanced products such as biopharmaceuticals, complex generics and orphan drugs, while the Bulk Drugs PLI focuses on domestic production of critical APIs, KSMs and drug intermediates. They have also supported the domestic manufacture of several products for the first time and created capacity for critical bulk drugs, contributing to import substitution and supply-chain resilience. Together, the schemes form a key pillar of India's pharmaceutical industrial strategy aimed at improving competitiveness, reducing external dependence and moving up the global value chain._

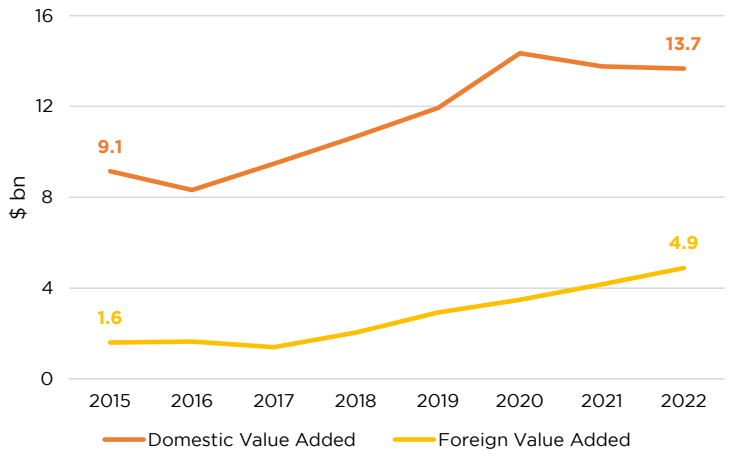
10. India's Participation in Value Chains for Pharmaceutical Exports

India's strengthening position in the global pharmaceutical value chains reveals a gradual rise in imported content in recent years. Domestic value addition in pharmaceutical exports increased significantly from $7.4 bn in 2012 to $13.7 bn in 2022, reflecting a strong expansion in India's pharmaceutical manufacturing capabilities. Domestic value-added content consistently remained the dominant component of exports, accounting for 74–87% of total export value during the period. The share of domestic value addition peaked at 87% in 2017, then moderated to 74% by 2022.

Foreign value-added content, although relatively smaller than domestic value-added content, more than doubled from $2.0 bn in 2012 to $4.9 bn in 2022. Its share in exports initially declined from 21% in 2012 to a low of 13% in 2017, indicating increased domestic sourcing and greater self-sufficiency in pharmaceutical production. However, after 2017, the foreign value-added share began rising steadily, reaching 26% in 2022. This suggests that while India strengthened its domestic pharmaceutical base, the sector simultaneously became more integrated into global production networks, particularly through imported intermediates, active pharmaceutical ingredients (APIs), speciality chemicals, and advanced inputs.

59 https://sansad.in/getFile/loksabhaquestions/annex/187/AU601_tMrlXC.pdf?source=pqals

Fig 25: India's GVC Integration in the Manufacturing of basic pharmaceutical products and preparations



Source: OECD TiVa

The data indicate two distinct phases in India's pharmaceutical value chain evolution. Between 2012 and 2017, the sector achieved increasing domestic value addition alongside declining import dependence, reflecting expansion in domestic manufacturing capabilities and greater localisation of production processes. During this phase, India's pharmaceutical industry consolidated its position as a leading global supplier of generic medicines and formulations, supported by cost competitiveness, strong manufacturing infrastructure, and regulatory approvals in major export markets. India's dominance in formulations exports is evident in the fact that formulations account for nearly 79% of India's pharmaceutical exports, highlighting the sector's comparative strength in higher-value-added finished products rather than bulk raw materials (Fig 25).

In contrast, the post-2017 period reflects a rise in foreign value-added intensity despite continued growth in domestic value addition. This trend points towards deeper participation in complex global value chains, where higher-value pharmaceutical products increasingly rely on imported specialised intermediates, biotechnology inputs, and advanced chemicals. The simultaneous rise in both domestic and foreign value-added components suggests that India's pharmaceutical exports have become more sophisticated and integrated with international supply chains rather than simply import-dependent. At the same time, import dependence on pharmaceutical intermediates remains significant, particularly for APIs and key starting materials (KSMs), with China accounting for 70–75% of India's imports in several product categories[60]. The dominance of domestic value addition throughout the period nevertheless demonstrates that pharmaceutical exports continue to generate substantial value within India through formulation manufacturing, processing, packaging, research and development, and regulatory compliance activities. Formulations remain the key strength of India's pharmaceutical sector, contributing to significantly higher domestic value addition than bulk drug or API exports. This aligns with India's strong competitiveness in generic medicines and finished dosage formulations, which involve greater technological capabilities and higher value

60 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2237414&lang=1&reg=3

capture within the domestic economy. The growing shift towards complex generics, injectables, biosimilars, and speciality formulations further indicates movement up the pharmaceutical value chain[61].

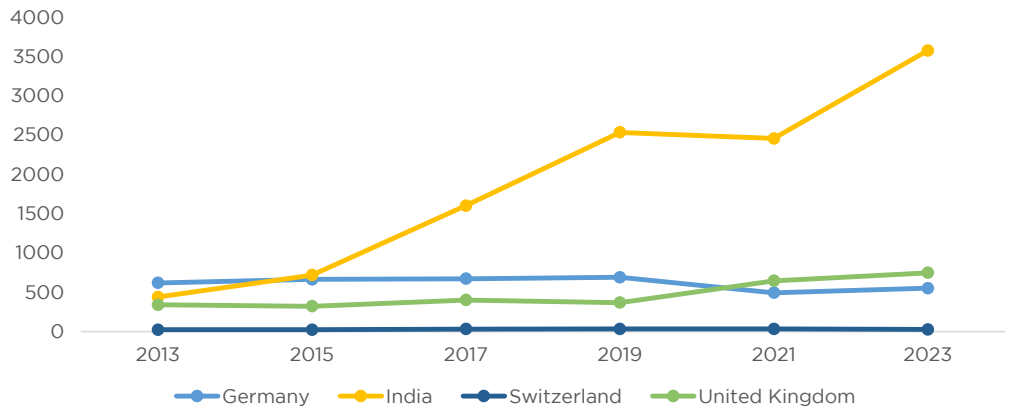
At the same time, the rising foreign value-added share after 2017 highlights India's continued dependence on imported APIs, speciality chemicals, and advanced pharmaceutical intermediates, particularly from China, which remains the dominant supplier of key bulk drugs and raw materials. This suggests that while India has strengthened its position in high-value formulation manufacturing, backward integration in critical intermediates and fermentation-based APIs remains limited. The trend underscores the importance of expanding domestic capacities in bulk drugs and advanced chemical inputs through initiatives such as Production Linked Incentive (PLI) schemes, bulk drug parks, and technology upgradation programs. Strengthening these segments would enhance domestic value addition, improve supply chain resilience, and reduce vulnerability to external disruptions within global pharmaceutical production networks.

11. Innovation and Research and Development (R&D) in the Pharmaceutical Sector

India's pharmaceutical R&D ecosystem has expanded steadily over the past decade, driven by rising private-sector investment, stronger intellectual property frameworks, and deeper integration into global value chains through complex generics, biosimilars, and biopharmaceutical development. However, India's overall R&D intensity remains low. Gross Expenditure on R&D (GERD) as a share of GDP has stagnated at 0.6–0.7%, significantly below that of innovation-intensive economies such as China, South Korea, and the United States. A key constraint behind this gap is the limited role of the private sector, which contributes only about 36% of total R&D expenditure in India, compared to nearly 70% in advanced economies, indicating that innovation remains less firm-driven and more dependent on public institutions[62].

Patent filings in life sciences, which cover innovations including new drugs, medical devices, diagnostic methods, genetic engineering techniques, and biotechnological processes, have risen sharply in India over the past decade, indicating a gradual strengthening of domestic research and innovation capabilities.

Fig 26: Life science patents granted by filing office (excluding the US and China)



Note: Patents include those filed under medical technology, biotechnology, and pharmaceuticals
Source: Our World in Data

61 https://www.bain.com/insights/healing-the-world-a-roadmap-for-making-india-a-global-pharma-exports-hub/
62 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2153547&reg=3&lang=2

For India, patent filings have increased from 440 in 2013 to 3,576 in 2023, significantly outpacing traditional pharmaceutical innovation hubs such as Germany and Switzerland in terms of growth momentum. The US and China particularly stand out, with 31,977 and 61,617 filings in 2023. However, India is among the top ten countries globally, in seventh position. In comparison, Germany's filings remained relatively stable, fluctuating between 495 and 691 during the period, while Switzerland recorded far fewer filings throughout. India's filings reflect increasing R&D activity.

A closer look at overall patent applications reveals that non-resident applications increased from 32,362 in 2013 to 35,306 in 2021, whereas resident applications rose from 10,669 to 26,267 during the same period, indicating a growing contribution of domestic applicants to overall patenting activity and suggesting an expansion in local innovation efforts.[63]

Unlike other sectors, R&D in pharmaceuticals is risky, time-consuming (10-15 years), and capital-intensive, warranting the need for public sector participation. The probability of obtaining market approval for a drug entering phase I clinical trials ranges from 7% to 45%, depending on the type of drug and the approval process[64]. In the API segment, most producers are small and medium enterprises, which limits their ability to achieve economies of scale. Therefore, achieving viable production levels is also contingent on economies of scale (Fig 26).

At the micro level, this industrial R&D strength is anchored by large pharmaceutical firms and an increasingly sophisticated network of Contract Research and Development Manufacturing Organisations (CRDMOs). These firms have evolved from being primarily regional suppliers of APIs and generic formulations into globally integrated partners spanning the full pharmaceutical value chain from early-stage development and process optimisation to scale-up manufacturing, and commercial production. This transformation reflects India's growing role not in breakthrough drug discovery, but in high-efficiency drug development and execution within global pharmaceutical pipelines.

India's Leading Pharmaceutical States

India's pharmaceutical growth story is heavily concentrated in a few states that have built deep specialisation over time. Among them, Telangana, Gujarat, and Maharashtra have emerged as the most prominent centres, shaping the country's production capacity, export performance, and integration with global pharmaceutical value chains. [65,66,67,68]

- **Strong Manufacturing Base and Industrial Ecosystems:** Telangana, Gujarat, and Maharashtra have built large-scale pharmaceutical manufacturing ecosystems supported by dense industrial clusters. Telangana accounts for nearly 40% of India's pharma production with over 2,000 life sciences companies and 269+ USFDA-approved facilities. Gujarat contributes around 33–40% of production with 3,000+ units, while Maharashtra accounts for ~14% of production with over 3,800 units.

63 Data reported on WDI Indicators and include all patent applications
64 https://www.oecd.org/en/publications/pharmaceutical-innovation-and-access-to-medicines_9789264307391-en.html
65 https://invest.telangana.gov.in/pharma
66 https://btm.gujarat.gov.in/pharma-health-care-biotechnology.htm
67 https://www.assocham.org/uploads/files/Knowledge%20Report%202024%20(new)%20Final.pdf
68 https://maitri.maharashtra.gov.in/chemical-pharma/

- **Export Strength and Global Competitiveness:** The states are strongly export-oriented. Telangana is a major global vaccine hub, Gujarat contributes 17–28% of India's pharma exports with strong port access, and Maharashtra accounts for 20–25% of exports with a high number of globally compliant manufacturing facilities.
- **Cluster-Led Growth and Innovation Hubs:** Cluster development has been central to growth. Telangana's Genome Valley has created a leading life sciences and biotech hub bringing together firms, research institutions, and startups. Maharashtra's pharma clusters across Mumbai–Pune corridor[69] and other cities have strengthened manufacturing and R&D linkages. Gujarat's chemical and pharma clusters in Ankleshwar, Vapi, Dahej, and others provide strong backward linkages, reducing costs and improving efficiency.
- **Presence of Leading Firms and Global Integration:** All three states host major domestic and multinational firms that anchor their ecosystems. Telangana includes Bharat Biotech, Dr. Reddy's, and Aurobindo Pharma; Maharashtra hosts Sun Pharma, Cipla, Glenmark, Pfizer India, and GSK; while Gujarat benefits from a dense manufacturing base serving global supply chains. These firms have driven innovation, scale, and export integration.
- **Proactive Policy Support and Investment Promotion:** Government policy has played a key role. Telangana's TS-iPASS and new Life Sciences Policy 2026–30, Gujarat's Vibrant Gujarat Global Summit[70], and Maharashtra's established industrial framework have collectively improved ease of doing business and attracted large-scale investments.

12. Recent Developments in India's Trade Policies: Key Updates for the Pharmaceutical Sector

The Government has adopted a comprehensive policy framework to strengthen India's pharmaceutical sector by enhancing supply chain resilience, manufacturing competitiveness, promoting innovation, and improving healthcare access. The policy approach has focused on reducing import dependence in critical Key Starting Materials (KSMs), Drug Intermediates (DIs), and Active Pharmaceutical Ingredients (APIs) through targeted incentives and infrastructure support, while simultaneously encouraging investment in high-value pharmaceutical products, medical devices, and advanced therapeutics. In parallel, the Government has increasingly emphasised research, innovation, and industry-academia collaboration to support the development of complex generics, biologics, and next-generation healthcare technologies. On the demand side, the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) has expanded access to affordable medicines through a nationwide network of Jan Aushadhi Kendras. Some of the recent developments in the pharmaceutical policies are as follows:

- **PLI Scheme for Bulk Drugs (KSMs/DIs/APIs)[71]:** Launched in March 2020, to reduce dependence on imports of critical APIs, KSMs, and DIs**.** It has a financial outlay of ₹6,940 crore (FY 2020–21 to FY 2029–30). The scheme aims to

69 https://deccancentre.org/pages/NDg,

70 https://cdn.vibrantgujarat.com/event/document/1704603587433--y8TNgp86E2dGwF46lshYAut5ZUmFfdP.pdf

71 https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=154206&reg=48&lang=2

promote domestic manufacturing of 41 critical KSMs, DIs, and APIs to address high import dependence. A total of 48 projects has been selected involving 33 APIs/DIs/KSMs, of which 34[72] have been commissioned as of December 2024. Realised investment of ₹4,253.92 crore has already surpassed the initially committed ₹3,938.57 crore.

- **PLI Scheme for Pharmaceuticals[73,74]:** The scheme aims to promote domestic manufacturing of high-value pharmaceutical products, including complex generics, biopharmaceuticals, patented drugs, cell-based and gene therapy products, and key drug intermediates. Incentives are linked to incremental sales of eligible products over the scheme period. Approved by the Union Cabinet with a financial outlay of ₹15,000 crore for the production tenure FY 2022-23 to FY 2027-28, the scheme supports technology upgradation, quality improvement, common facilities, cluster development, and market access initiatives. It provides performance-linked incentives to 55 selected applicants, including 20 MSMEs for manufacturing high-value products under three categories: (i) biopharmaceuticals, complex generics, gene therapy and orphan drugs; (ii) APIs, KSMs and drug intermediates; and (iii) anti-cancer, autoimmune, cardiovascular, anti-diabetic, and in-vitro diagnostic (IVD) products. The scheme aims to create global-scale champions capable of penetrating international value chains.
- **PLI Scheme for Medical Devices[75]:** Recognising Medical devices as a sunrise sector, the Government launched dedicated initiatives to promote domestic manufacturing and reduce import dependence. Launched with a total outlay of ₹3,420 crore (FY 2020-21 to FY 2027-28), the scheme supports domestic manufacturing of high-end medical equipment in segments such as radiology, imaging, cancer care, and implants, at an incentive rate of 5% of incremental sales for five years. The initiative seeks to establish India as a global manufacturing destination for medical technology products and strengthen the healthcare manufacturing ecosystem. As of October 2024, total realised investment under the scheme stood at ₹33,534 crore, nearly double the originally projected ₹17,275 crore, with incentive disbursements of ₹3,215 crore released to 45 companies. Medical device exports grew from $ 2.5 bn in FY 2020-21 to $ 4.1 bn in FY 2024–25[76].
- **Strengthening of Pharmaceutical Industry (SPI) Scheme[77]**: The Department of Pharmaceuticals launched the Strengthening of Pharmaceutical Industry (SPI) Scheme to enhance the competitiveness and productivity of Micro, Small and Medium Enterprises (MSMEs) in the pharmaceutical sector. As a Central Sector Scheme with an outlay of ₹500 crore (FY 2021–22 to FY 2025–26), the SPI scheme upgrades existing pharmaceutical clusters and MSMEs to meet WHO-GMP and Schedule-M standards through three sub-schemes: (i) API-CF, which funds common facilities such as R&D labs, testing labs, and effluent treatment

72 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2081491
73 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2081491; https://www.pib.gov.in/PressReleasePage.aspx?
74 PRID=2121425; https://www.pib.gov.in/PressNoteDetails.aspx; https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=155082
75 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2081491; https://www.pib.gov.in/PressNoteDetails.aspx
76 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2221080; https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=157614&id=157614
77 https://www.pib.gov.in/PressNoteDetails.aspx

plants for pharma clusters; (ii) PTUAS, which provides interest subvention of up to 5–6% or a credit-linked capital subsidy of 10% for MSME pharma units on loans up to ₹10 crore; and (iii) PPDS, which supports pharmaceutical promotion and development. Eight MSME cluster projects have been approved under the API-CF sub-scheme, with three projects under implementation involving investments of approximately ₹54.7 crore[78].

- **Promotion of Research and Innovation in Pharma MedTech Sector (PRIP) Scheme[79] :** Notified in August 2023 with a financial outlay of ₹5,000 crore, the PRIP scheme aims to transition the Indian pharma-medtech sector from cost-based to innovation-based growth. Under Component A, seven Centres of Excellence (CoEs) have been established, one at each of the seven National Institutes of Pharmaceutical Education and Research (NIPERs) at Mohali, Ahmedabad, Guwahati, Kolkata, Raebareli, Hajipur, and Hyderabad, with a budgetary outlay of ₹700 crore for specialised research in anti-viral/ anti-bacterial drug discovery, medical devices, bulk drugs, flow chemistry, and novel drug delivery. Under Component B, grants are provided to industry, MSMEs, and start-ups for R&D in six priority areas, with assistance of up to 50% (capped at ₹100 crore) for Strategic Priority Innovation areas such as rare diseases, antimicrobial resistance, and pandemic-causing pathogens. As of July 2025, 106[80] research projects have been approved under the CoEs and a call for industry proposals of approximately ₹11,000[81] crore has been issued.

13. Industry Insights[82] on Key Constraints Impacting India's Pharmaceutical Trade Performance

- **Transitioning to High-Value Pharmaceutical Segments**: India's pharmaceutical exports remain concentrated in volume-based generic formulations and retail medicaments, while participation in high-growth segments such as biologics, biosimilars, vaccines, advanced therapies, hormones, and analogues remains limited. These biomanufacturing facilities require high capital expenditure which often acts as a challenge for companies to invest in the long term.
- **Limited investment in R&D ecosystem**: Investing in the research and development for pharmaceuticals is high-risk and requires long gestation periods, making it a risky decision. Globally, pharmaceuticals rank as the second-largest R&D-investing industry. On average, it takes 10–15 years to formulate a drug[83]. Indian pharma companies invest approximately 7% of net sales in R&D, compared to the 15–20% spent by global companies[84]. There is a need for long-term incentives and funding mechanisms to develop new products and technologies.

78 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1906357
79 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2121425
80 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2158120
81 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2173970
82 A stakeholder knowledge-sharing session was held to gather industry insights on challenges and strategies for boosting India's global competitiveness in the drugs and pharmaceutical sector.
83 https://www.cbo.gov/publication/57126
84 https://invest.up.gov.in/hi/wp-content/uploads/2023/05/thrust-on_020523.pdf

- **Limited Technology Transfer and Industry-Academia Linkages**: Commercialisation of research remains limited due to inadequate collaboration among industry, academia, public research institutions, and startups, as well as inadequate technology transfer mechanisms.
- **Delays in Patent Grants Due to Pre-Grant Opposition Proceedings:** Repeated and sequential filing of pre-grant oppositions, coupled with the delays in judicial processes, absence of clearly defined timelines for assessing admissibility and disposing of oppositions, leads to significant delays in patent grants, creating uncertainty for innovators and discouraging long-term investments in pharmaceutical R&D. Sustained growth in IPR filings was underpinned by strategic policy and administrative reforms, including the Patents (Amendment) Rules, 2024, which simplified patent prosecution by reducing the frequency of filing working statements and streamlining the pre-grant opposition process.
- **High Dependence on China for APIs and Intermediates**: Despite having a sizeable API industry, India continues to rely heavily on imports, especially for fermentation-based APIs, particularly from China, due to the pricing advantage for critical APIs, KSMs, and intermediates[85]. The majority of these API manufacturers are part of the PLI scheme, which, however, would take time to scale up domestic capacity.
- **Non-Tariff Barriers and Regulatory Compliance Burden**: Tariffs are often not the main binding constraint, especially in developed markets. Non-tariff barriers include issues with product registration timelines, duplicative inspections, documentation requirements, limited reliance on approvals from stringent regulators, access to public procurement, pricing and reimbursement procedures, and the absence of predictable escalation channels. This is particularly burdensome for MSME exporters with limited capacity. While these measures are framed as consumer or environmental safeguards, their cumulative effect functions as a trade barrier.
- **Environmental Compliance Costs in API Manufacturing**: Globally, the need for the pharmaceutical sector to focus on environmental compliance is critical. Concerns around waste disposal, emissions, and resource management remain necessary for the sector. Stricter CPCB norms, Zero Liquid Discharge (ZLD) requirements, and effluent treatment obligations have increased environmental compliance costs for Indian manufacturers. This is especially critical at the research and development stage, where effluent treatment is estimated to account for 35-40% of R&D costs.
- **Inadequate Integration of Trade Policy with Pharmaceuticals**: Several existing FTAs contain pharmaceutical-related provisions, but the benefits on the ground are mixed because many provisions remain cooperative in nature. The recently concluded India-EU FTA has incorporated pharmaceutical-specific regulatory cooperation clauses, which is a step in the right direction, but it needs to be widely included across the several FTAs that India is in the process of ratifying.

85 https://www.biospectrumindia.com/features/73/25074/can-india-reclaim-api-throne-from-china.html

14. Way Forward

The analysis highlights that while India's pharmaceutical sector has strong foundational advantages in generic manufacturing, scale, and regulatory compliance, its global competitiveness remains constrained by limited presence in high-value segments. With global pharmaceutical demand shifting towards biologics, biosimilars, and precision therapies, aligning India's pharmaceutical ecosystem with these evolving market trends will be critical to enhancing its global market share and moving decisively up the value chain. The following actions are recommended:

- **Promote Diversification into High-Value Pharmaceutical Segments:** The Mission Biopharma SHAKTI scheme, launched in 2026-27, marks an important step in promoting biologics and biosimilars manufacturing. However, a comprehensive long-term policy framework would be necessary to support sustained investment, technology development, and scale-up in these high-value pharmaceutical segments.
- **Strengthen the Pharmaceutical Innovation and R&D Ecosystem:** Expanding innovation-linked incentives, public-private research partnerships, and dedicated pharmaceutical innovation funds, particularly for innovative drugs, advanced therapies, and biopharmaceuticals, may help address the long gestation periods and high risks associated with drug discovery and development. There is a need for greater transparency in the regulatory framework on aspects such as non-commercial information submitted to CDSCO and State/UT FDAs, which remains inaccessible. This needs to be transparent to aid the monitoring of competing applications and enable timely legal redressal, thereby strengthening the overall innovation ecosystem
- **Time-Bound Patent Opposition and Grant Process:** Restrict pre-grant oppositions to a defined period (e.g., 6–12 months from publication) and prescribe clear timelines for admissibility decisions and disposal of oppositions. This would reduce delays in patent grants, improve predictability in the IP regime, strengthen investor confidence, and encourage long-term R&D investments in innovative drugs and biologics.
- **Build Stronger Industry–Academia and Technology Transfer Mechanisms:** Bridging the gap between research and commercialisation requires institutional mechanisms that facilitate collaboration among industry, academia, and public research organisations. Establishing technology transfer offices, promoting collaborative research centres, incentivising joint intellectual property development, and strengthening start-up incubation ecosystems may improve the commercialisation of scientific research and accelerate innovation-led growth.
- **Address Non-Tariff Barriers and Strengthen Regulatory Cooperation:** As tariffs become less significant in pharmaceutical trade, regulatory barriers increasingly influence market access. India should prioritise pharmaceutical-specific regulatory cooperation in trade negotiations, including mutual recognition and reliance mechanisms, streamlined product registration processes, faster approval timelines, and greater transparency in procurement and reimbursement systems. Dedicated regulatory support mechanisms for

MSME exporters may further improve their ability to comply with complex international requirements.

- **Develop a Model Pharmaceutical Chapter for FTA Negotiations**: A standardised pharmaceutical chapter that may serve as a template across FTA negotiations may be drafted with acute focus on regulatory predictability, mutual recognition and reliance mechanisms, GMP inspections, product registration, standards harmonisation, intellectual property cooperation, and dispute-resolution frameworks. A model chapter would help ensure greater consistency in negotiations, strengthen market access outcomes, and systematically address non-tariff barriers affecting pharmaceutical trade.
- **Promote Sustainable and Environmentally Compliant Manufacturing:** Strengthening environmental sustainability will be critical for maintaining global competitiveness. Support for green manufacturing technologies, common effluent treatment facilities, resource-efficient production processes, and environmental compliance infrastructure may help reduce the cost burden on firms while ensuring adherence to increasingly stringent domestic and international standards. The bulk drug parts setup by the government must incorporate world-class common effluent treatment, Zero Liquid Discharge, and solvent recovery systems as standard, converting individual compliance burdens into shared infrastructure advantages. Cluster-based environmental infrastructure would be particularly beneficial for MSMEs and R&D-intensive units.

C.
POLICY AND GEOPOLITICAL HIGHLIGHTS

C. Policy and Geopolitical Highlights

1. Global Trade–Related Policy Updates

- **US Court of International Trade Strikes Down Section 122 Tariffs:** Early May, the US Court of International Trade (CIT) ruled in a 2-1 decision that the 10% global tariffs imposed by the Trump administration in late February 2026 under Section 122 of the Trade Act of 1974 are unlawful, concluding the statutory conditions to invoke the authority were not satisfied.[86] The Trump Administration appealed the decision to the US Court of Appeals for the Federal Circuit (CAFC), which on May 12, 2026, entered an administrative stay suspending the CIT's order while the appeal proceeds[87].
- **Establishment of US-China Boards of Trade and Investments:** From May 13 to 15, 2026, President Trump made a state visit to China, his first trip to the country since 2017. As the cornerstone of agreements reached, the president chartered two new institutions: the US-China Board of Trade and the US-China Board of Investment for managing bilateral trade across non-sensitive goods and a forum to deliberate investment-related issues[88].
- **WTO 14th Ministerial Conference (MC) [89]:** The WTO's 14th MC was held in Yaoundé, Cameroon, from March 26–30, 2026, closed without an overall ministerial declaration and without agreement on its core priorities. Key discussions covered fisheries subsidies, investment facilitation, digital trade, agriculture, and WTO reform, against a backdrop of a weakened dispute settlement system and stalemate in multilateral negotiations. The inability to reach consensus reflects deepening divisions between major trading blocs and signals continued erosion of the rules-based multilateral system. For developing economies, including India, this underscores the growing importance of bilateral and regional trade agreements as primary instruments of market access.

2. India's Trade Policy Developments

- **India–New Zealand FTA Signed:** India and New Zealand signed a Free Trade Agreement on April 27, 2026, at Bharat Mandapam, New Delhi. Negotiations officially started in March 2025, and after five formal rounds of negotiations and several intersessions, the agreement was concluded in a record 9 months, making it the fastest-concluded free trade agreement. Under the new terms, India has offered market access in 70.03% of the tariff lines while keeping 29.97 % tariff lines in exclusion, which covers 95% of New Zealand's Bilateral Trade[90]. A key feature of the agreement is New Zealand's commitment to provide 100% duty-free access across all tariff lines for Indian exports, significantly enhancing market opportunities for Indian goods.

86 https://newsonair.gov.in/us-court-of-international-trade-declares-trump-administrations-10-universal-tariff-levied-on-imports-from-india-other-countries-illegal/

87 https://www.thehindu.com/news/international/us-appeals-court-halts-order-declaring-trumps-global-10-tariff-illegal/article70973205.ece

88 https://www.whitehouse.gov/fact-sheets/2026/05/fact-sheet-president-donald-j-trump-secures-historic-deals-with-china-delivering-for-american-workers-farmers-and-industry/

89 https://www.weforum.org/stories/2026/04/mc14-yaounde-wto-trade/

90 https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=158370&ModuleId=3&reg=3&lang=2

- **India and South Africa Bilateral Cooperation:** India and South Africa agreed to deepen cooperation in a range of future-oriented technology sectors, with particular emphasis on artificial intelligence, digital infrastructure, advanced manufacturing, and innovation-led research. The discussions highlighted opportunities in biotechnology, genomics, vaccine development, health technologies, and pandemic preparedness, while South Africa expressed interest in collaborating on renewable energy, hydrogen technologies, and skills development. The partnership will focus on translating research into commercially viable and socially impactful solutions through stronger linkages among research institutions, startups, industry, and innovation ecosystems[91].
- **Exporter Relief Package [92,93]:** The DGFT released a new set of foreign trade policy measures effective April 1, 2026, aimed at supporting exporters amid global geopolitical disruptions. Key measures include an automatic extension of export obligations under Advance Authorisation and EPCG cases expiring between March 1 and May 31, 2026, until August 31, 2026; the removal of the ₹10 lakh per consignment cap for courier exports to encourage small exporters and cross-border e-commerce; and a special one-time relief measure allowing SEZ manufacturing units to sell goods in the Domestic Tariff Area at concessional customs duty from April 1, 2026, to March 31, 2027. These measures collectively aim to ease compliance burdens, support MSME exporters, and maintain liquidity for export-oriented firms navigating an elevated-risk operating environment.

3. Commodity Price Trends

Global commodity prices strengthened considerably through FY'2025–26, with the overall commodity index rising sharply towards the end of the fiscal year. The increase was driven primarily by a surge in crude oil, metals, coal, and precious metals prices, reflecting tightening supply conditions, geopolitical uncertainties, and resilient global demand in selected sectors.

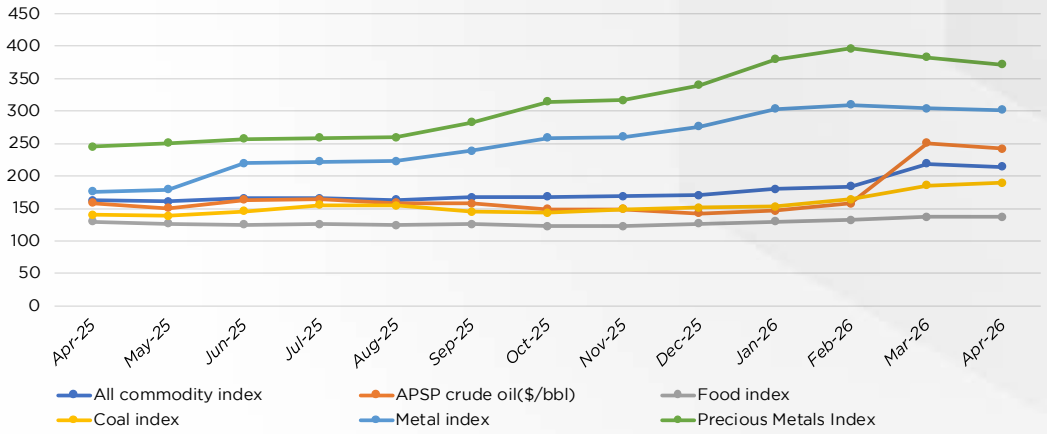
Crude oil prices remained volatile throughout the year but spiked sharply in the final quarter, with the APSP crude oil index rising significantly in March and April 2026. The increase was likely supported by renewed geopolitical tensions, supply-side disruptions, and concerns over tighter global energy markets. Coal prices also trended upward during the latter half of the year, reflecting stronger energy demand and supply constraints across major exporting economies. Food prices remained relatively stable compared to other commodity groups, recording only gradual increases during the year. Stable global agricultural production and easing supply-chain pressures helped contain sharp food inflation despite periodic weather-related disruptions.

91 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2268311&reg=3&lang=2#:~:text=India%20and%20South%20Africa%20today,next%20phase%20of%20bilateral%20engagement.

92 https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2236414&reg=3&lang=2

93 https://www.pib.gov.in/PressReleasePage.aspx?PRID=2247313&reg=3&lang=2

Fig 27: Price indices across key commodity indices



Source: World Bank

Industrial metals prices remained strong throughout the year, with the metals index rising steadily from mid-2025 onward. Strong demand linked to infrastructure spending, renewable energy expansion, and electric-vehicle supply chains supported prices of key industrial metals. Precious metals outperformed most commodity groups during the period, with gold and silver prices rising sharply amid heightened geopolitical uncertainty[94], financial market volatility, and strong safe-haven demand. Continued central-bank purchases and investor hedging activity further supported precious metals prices through the final quarter of FY'2025–26 (Fig 27).

94 https://economictimes.indiatimes.com/markets/commodities/news/gold-silver-rise-to-near-record-highs-on-lingering-safe-haven-demand/articleshow/127590401.cms

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