



# Securing India's Maritime Supply Chains: Lessons from the Strait of Hormuz Disruption

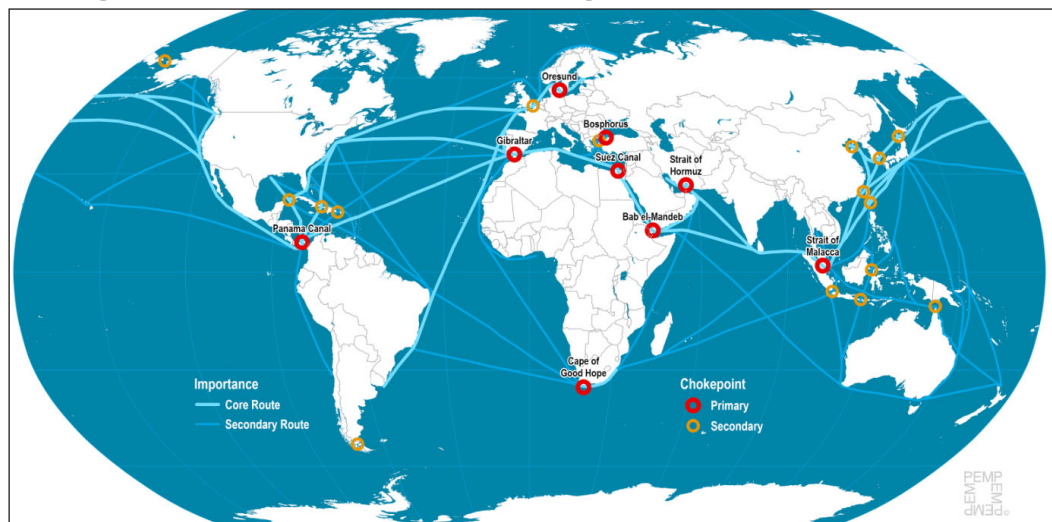
Deeksha Gupta and Harshit Srivastava

## Background

A maritime chokepoint is a strategically significant narrow sea route through which a large amount/volume of global maritime trade transit. They are critical for the movement of commodities, petroleum and other liquids, and

container traffic, any disruption can lead to enormous impact on global supply chains and energy markets. Global maritime chokepoints include Suez Canal, Strait of Malacca, Strait of Hormuz, Panama Canal, and the Bab El-Mandeb Strait. Any blockade of oil

**Figure 1: Main Maritime Shipping Routes and Chokepoints**



*Source:* Port Economics Management<sup>1</sup>

RIS *Policy Briefs* are prepared on specific policy issues for the policymakers.



Deeksha Gupta



Harshit Srivastava

This Policy brief has been prepared by Mr. Harshit Srivastava, Consultant (Maritime Logistics & Supply Chain) at Centre for Maritime Economy and Connectivity (CMEC), RIS, and Ms. Deeksha Gupta who is Research Assistant at CMEC, RIS. Authors sincerely express their gratitude to Dr. Shishir Shrotriya, Coordinator, CMEC at RIS, and Dr. Prabir De, Professor at RIS for their invaluable guidance and continued support. View expressed here are personal. Usual disclaimers apply.



movement through a major chokepoint, even temporarily, can lead to disruption and delays, high shipping costs, and hence high energy prices. These passages collectively facilitate a substantial share of global maritime energy transportation and trade.

Strait of Hormuz is one of the most critical chokepoints in the global energy ecosystem, which links the oil rich Persian Gulf with the Gulf of Oman and Arabian Sea, further connecting the gulf nations to the international markets. Strait of Hormuz managed a substantial share of 20.7 and 20.9 million barrels per day (b/d) of oil flow in 2024 and first half of 2025, respectively.<sup>2</sup> This makes the strait world's most important oil transit point and a critical artery for global energy security. Major energy exporters around the region are Saudi Arabia, Iraq, the UAE, Iran, and Kuwait, which rely heavily on this route to export crude oil and other liquids to key consumers in Asia, Europe, and North America.

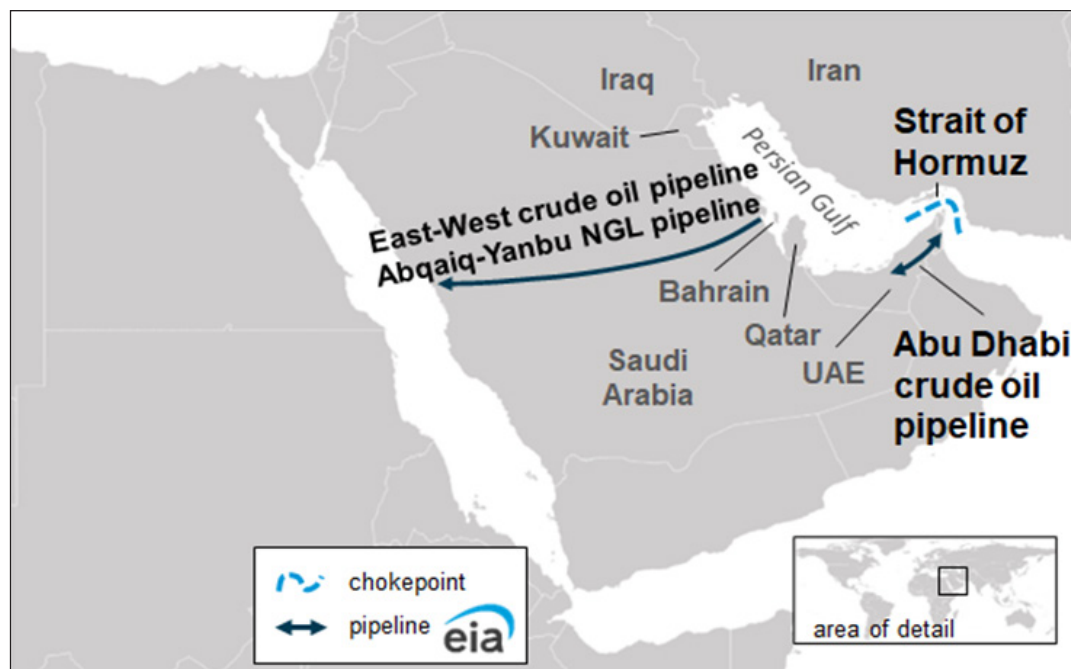
At its narrowest junction, the shipping lane is only about 33 km wide, making maritime traffic highly concentrated and sensitive to disruptions. Any instability in the region, therefore, has an instant effect on global energy supply chains, shipping operations, maritime insurance markets, seafarers' safety and more. Recent geopolitical tensions in the Gulf region have once again highlighted the systemic risks related with over-reliance on this chokepoint.

## Current Disruption

The geopolitical conflict in late February 2026 has triggered a sustained breakdown of normal maritime operations, transforming the Strait of Hormuz from a high volume trade artery into a severely restricted and high-risk zone.

This disruption reflects not merely a decline in traffic but a structural shift in maritime risk conditions. Commercial shipping has largely withdrawn in response to direct kinetic threats, including missile and drone attacks, with at least 16 oil, gas,

**Figure 2: Map of the Strait of Hormuz and the Arabian Peninsula**



Source: U.S. Energy Information Administration (EIA).<sup>3</sup>

<sup>1</sup> <https://portconomics-management.org/pemp/contents/part1/interoceanic-passages/main-maritime-shipping-routes/>

<sup>2</sup> [https://www.eia.gov/international/analysis/special-topics/World\\_Oil\\_Transit\\_Chokepoints](https://www.eia.gov/international/analysis/special-topics/World_Oil_Transit_Chokepoints)

and cargo vessels targeted in the Persian Gulf and adjoining waters since the escalation began. As a result, daily tanker transits through the Strait have collapsed from pre-conflict averages of around 80 oil and gas carriers to, at times, just one or two vessels per day.<sup>4</sup>

Concurrently, GPS and AIS interference has intensified sharply, affecting over 1,600 vessels<sup>5</sup> and further undermining navigational safety. Elevated war-risk exposure and insurance constraints have compounded the situation, creating de facto closure conditions even in the absence of a formal blockade. The crisis has consequently led to a sharp contraction in regional oil exports, declining by up to 60 per cent within weeks, alongside increased reliance on floating storage and attempts to reroute shipments through alternative corridors.

## Implications

From an analytical perspective, the transition from “efficient chokepoint”

to “contested maritime zone” reflects the fragility of concentrated energy routes. The disruption demonstrates how geopolitical conflict can rapidly convert logistical efficiency into systemic vulnerability, with cascading effects across energy markets, shipping, and global supply chains. Let us look at some of the implications due to this disruption.

## Impact on Global Maritime Trade and India

Global maritime trade operates at an immense scale, with global container port throughput reaching approximately 858 million TEUs in 2023,<sup>6</sup> displaying the intensity of containerized trade flows worldwide. This scale is critical given that over 80 per cent of global trade by volume is transported by sea, making maritime routes sensitive to disruptions.

Within this already fragile environment, the disruption in the Strait of Hormuz through which ~20 per cent of global oil trade passes introduce

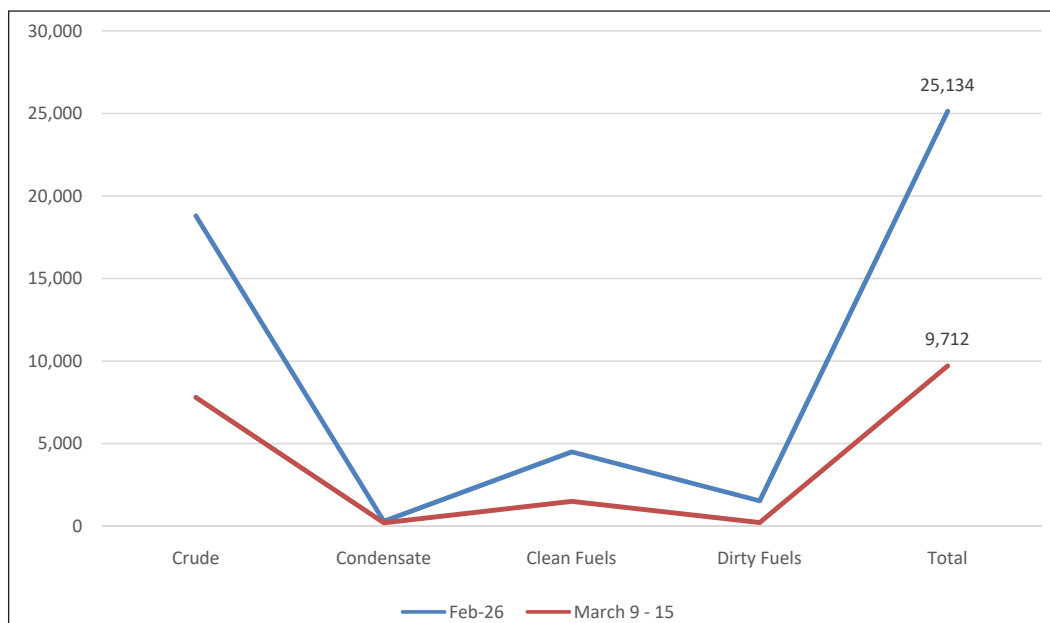
<sup>3</sup> Ibid.

<sup>4</sup> [https://www.business-standard.com/world-news/16-and-counting-oil-cargo-ships-becoming-targets-in-west-asia-conflict-126031300141\\_1.html](https://www.business-standard.com/world-news/16-and-counting-oil-cargo-ships-becoming-targets-in-west-asia-conflict-126031300141_1.html)

<sup>5</sup> <https://windward.ai/blog/march-8-maritime-intelligence-daily>

<sup>6</sup> <https://unctadstat.unctad.org/data-centre/dataviewer/US.ContPortThroughput>

**Figure 3: Middle Eastern Oil Exports for February 2026 and March 2026**



**Source:** Kpler | Ahmad Ghaddar.

**Note:** In thousand barrels per day

<sup>7</sup> <https://unctadstat.unctad.org/CountryProfile/MaritimeProfile/en-GB/356/index.html>

<sup>8</sup> <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2799728-traffic-through-hormuz-remains-minimal>

<sup>9</sup> <https://www.spglobal.com/energy/en/news-research/latest-news/crude-oil/031326-vessel-traffic-through-strait-of-hormuz-fell-to-one-transit-march-12>

additional stress. The impact is not only on energy flows but also on shipping efficiency, as vessels reroute, transit times increase, and port congestion rises. This leads to higher freight rates and delays in container movement, which dampens effective trade flows even if aggregate volumes remain stable.

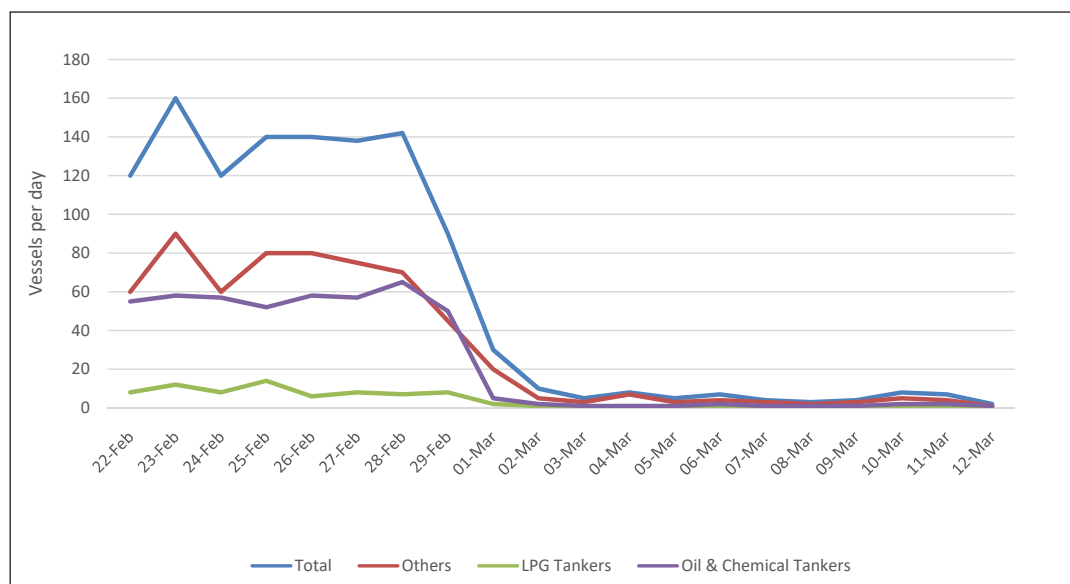
For India, the impact is both direct and structural. India’s container port throughput reached approximately 22.2 million TEUs (UNCTAD 2024)<sup>7</sup>, reflecting its growing integration into global container trade networks. Disruptions in Gulf shipping routes therefore translate into longer transit times, increased logistics costs, and reduced export competitiveness. A significant share of India’s trade both containerized cargo and energy moves through West Asian corridors, the current crisis reinforces the country’s dual vulnerability to energy and trade disruptions, highlighting the need for resilient and diversified maritime supply chains.

## Maritime Traffic Impact

Prior to the crisis, AIS-based tracking indicated that the strait managed over 150 vessel transits per day, with container ships and oil tankers accounting for 88 per cent of total traffic.<sup>8</sup> This reflected a highly optimized corridor supporting continuous energy and trade flows.

The disruption in the Strait of Hormuz has led to a sharp decline in maritime traffic and a breakdown of established shipping patterns. Ship traffic has collapsed to single-digit daily transits, with instances of only 1–5 vessels crossing per day compared to historical averages of over 130,<sup>9</sup> indicating a collapse of over 85–90 per cent in traffic volume, as shown in Figure 4. This sharp fall is not merely cyclical but indicates risk-driven withdrawal by shipping companies, many of which have either suspended operations or delayed transits due to security threats and insurance constraints. Vessels are increasingly being rerouted to longer alternative passages, including routes around the Cape of Good Hope, leading to more

**Figure 4: Strait of Hormuz Vessel Count**



**Source:** S&P Global Market Intelligence Network (MINT)

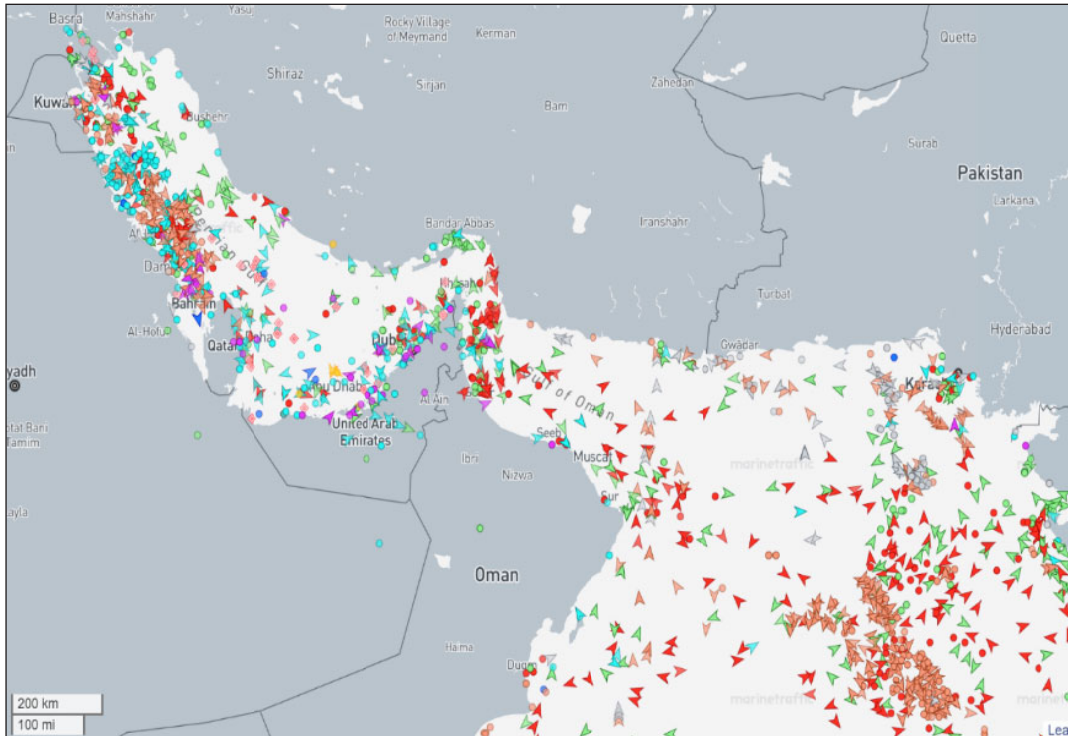
**Notes:** Data as of March 12, 2026.

Counts include transits in both directions through the Strait; each vessel is counted once per day.

fuel consumption, higher transit times, and decreased fleet efficiency. This has contributed to heightened freight costs and delays across global supply chains, particularly for energy shipments.

Additionally, the disruption has resulted in port congestion and logistical bottlenecks in alternative routes, as shipping networks struggle to adjust to sudden route diversification.

**Figure 5: Live Vessel Traffic Density near Strait of Hormuz**



Source: MarineTraffic

### Marine Insurance Impact: Cost Escalation and Coverage Constraints

The disruption across the Strait of Hormuz and adjoining Red Sea corridors has triggered a sharp escalation in marine insurance costs, particularly in war-risk coverage, which is critical for vessels operating in conflict-prone zones. Prior to the crisis, war-risk premiums were typically in the range of 0.2–0.3 per cent of vessel value, reflecting relatively stable security conditions. Following the escalation, premiums have surged dramatically rising by over 1000 per cent in some cases to as high as 3 per cent of vessel value.<sup>10</sup>

This implies that for large tankers, insurance costs have increased from

hundreds of thousands of dollars to several million dollars per voyage, significantly raising the cost of transporting energy. With most tankers valued between US\$ 200 million and US\$ 300 million, the new insurance rate of 3 per cent would imply a hull war risk premium of about US\$ 7.5 million, up from around 0.25 per cent, or US\$ 625,000, before the conflict began.<sup>11</sup>

Major marine insurers, including those in the London market, have either restricted or cancelled war-risk cover for vessels operating in high-risk zones, forcing shipowners to secure prohibitively expensive alternative coverage or suspend operations altogether.

These insurance dynamics have directly translated into higher freight costs across India-linked trade routes.

<sup>10</sup> <https://www.reuters.com/world/middle-east/maritime-insurance-premiums-surge-iran-conflict-widens>

<sup>11</sup> Ibid.

<sup>12</sup> <https://www.whalesbook.com/news/English/transportation/Red-Sea-Tensions-Force-Shipping-Reroutes-Exporters-Face-SoaringCosts/69a59c243d2913aa7c22bc19>

<sup>13</sup> <https://www.iadb.in/2025/01/31/the-price-of-passage-red-sea-tensions-the-ripple-effect/>

<sup>14</sup> <https://www.reuters.com/business/energy/oil-climbs-tankers-are-attacked-iraqi-waters-amid-middle-east-war>

War-risk surcharges, elevated hull and cargo premiums, and increased bunker consumption have collectively pushed up voyage costs for routes traversing or previously dependent on West Asian and Red Sea waters. The diversion of vessels from the Suez Canal to the Cape of Good Hope has further compounded costs, adding up to 10 -12 days to transit times and increasing total voyage costs by around 30 per cent for a typical Asia–Europe route, alongside additional bunker expenses running into several hundred thousand dollars per sailing.

The cumulative effect has been the emergence of a financial choke on maritime activity, where the availability and affordability of insurance, rather than physical navigability alone has become a decisive determinant of vessel movement. Beyond shipping, these cost pressures are transmitting into the broader

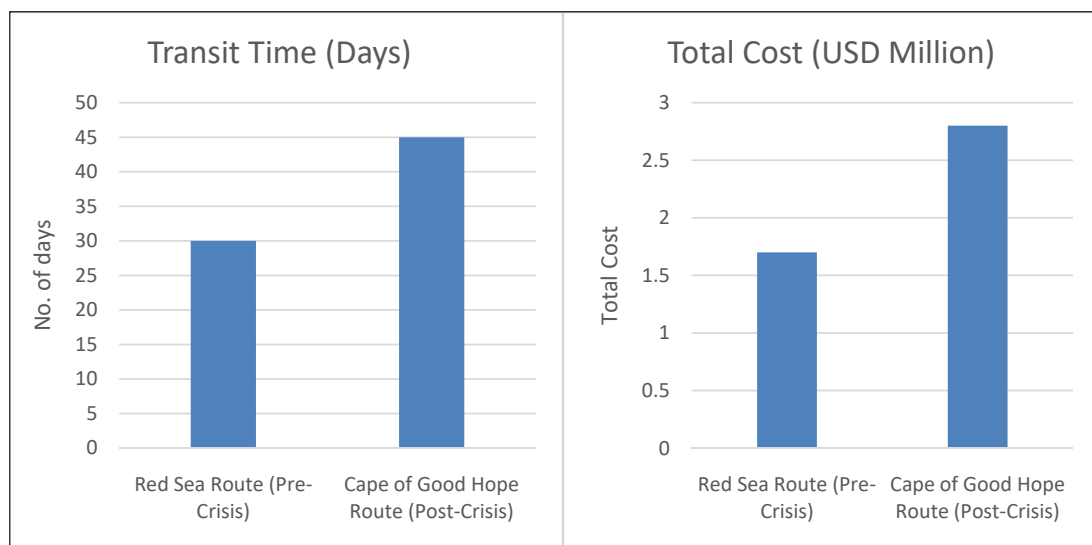
economy. Macroeconomic assessments of Red Sea disruptions suggest that sustained increases in freight rates could add approximately 0.6 percentage points to global consumer price inflation, with corresponding pass-through effects on import costs, industrial inputs, and retail prices in India.<sup>12</sup>

Taken together, the marine insurance response illustrates how financial risk systems amplify geopolitical disruptions, transforming regionally concentrated conflicts into systemic cost shocks across global trade, shipping networks, and energy supply chains.

### Oil Price Volatility

The impact on oil prices has been both immediate and anticipatory, driven by market sentiment as well as emerging supply constraints. In the initial phase of the crisis, Brent crude surged by over 10

**Figures 5 and 6: Red Sea Vs. Cape of Good Hope**



Source: JP Morgan report.<sup>13</sup>

per cent within days, reflecting fears of disruption rather than actual shortages. However, as the conflict deepened and maritime risks intensified, the Brent crude prices crossed US\$ 100 per barrel, underscoring the acute sensitivity of global energy markets to disruptions at

critical chokepoints such as the Strait of Hormuz.<sup>14</sup>

A key structural concern is that even a partial disruption in Hormuz flows can remove millions of barrels per day from global markets, creating tight supply conditions. This is particularly significant

given limited spare capacity in alternative routes and production systems, which amplifies price volatility in response to regional instability.

This vulnerability is further accentuated by India's sourcing pattern. Despite the recent shift towards discounted Russian crude, West Asia remains central to India's energy security architecture. Trade data indicate that in 2025 India imported goods worth approximately US\$ 98.7 billion from West Asia, of which nearly US\$ 70 billion comprised petroleum imports. Within this, crude oil imports from the region stood at about US\$ 50.8 billion, accounting for 48.7 per cent of India's total crude imports. In addition, West Asia supplied around 68.4 per cent of India's LNG imports and 46.9 per cent of LPG imports, highlighting a deep structural dependence on the region.<sup>15</sup>

Although Russian crude accounted for over one-third of India's oil imports, with volumes rising to around 36 per cent by 2024 as shown in Table 1. This diversification does not fully insulate India from disruptions in the Strait of Hormuz. Price spikes, elevated freight

rates, and rising insurance premiums linked to instability in the Gulf affect global oil markets uniformly, transmitting cost pressures across all supply sources.

Estimates suggest that if global crude prices average US\$ 110-115 per barrel in FY27, India's net oil import bill could increase by US\$ 56-64 billion annually, significantly worsening the current account deficit and fuelling inflationary pressures.<sup>17</sup> According to the SBI research, every US\$ 10 per barrel increase in crude prices could raise inflation by 35-40 basis points through higher fuel, transport, and logistics costs.<sup>18</sup> This could push up retail prices and raise pressure on government finances through higher subsidy burdens.

This vulnerability is further increased by India's sourcing pattern. A substantial share of its crude imports ~50-55 per cent, originates from the Middle East, making the country particularly exposed to disruptions affecting Gulf shipping routes and the Strait of Hormuz.<sup>19</sup>

Looking ahead, India may attempt partial rebalancing of its crude sourcing. Expert assessments suggest that if disruptions persist, imports from Russia could rise towards peaks of around 1.5

<sup>15</sup> [https://economictimes.indiatimes.com/news/economy/foreign-trade/india-west-asia-imports-iran-israel-war-united-states-gulf-conflict-oil-lng-fertiliser-diamonds/articleshow/129089516.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/news/economy/foreign-trade/india-west-asia-imports-iran-israel-war-united-states-gulf-conflict-oil-lng-fertiliser-diamonds/articleshow/129089516.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

<sup>16</sup> <https://www.iadb.in/2025/01/31/the-price-of-passage-red-sea-tensions-the-ripple-effect/>

<sup>17</sup> <https://www.business-standard.com/economy/news/crude-115-per-barrel-could-raise-india-oil-import-bill-64-bn>

<sup>18</sup> West Asia conflict may hit India hard; oil spike could raise inflation, slow GDP: SBI Research - Business-Today

<sup>19</sup> <https://www.deccan-chronicle.com/business/for-every-10-hike-in-crude-import-bill-will-go-up-by-14-billion>

**Table 1: Shift in India's Top 5 Oil Suppliers (2015 – 2025)**

(Year-wise share (%) of India's crude oil imports by major supplier countries)

Fiscal Year	Iraq	Saudi Arabia	UAE	Nigeria	Venezuela	Iran	USA	Russia
2015–16	17	20	8	11	10	–	–	–
2016–17	17	19	–	8	10	12	–	–
2017–18	20	18	–	8	8	10	–	–
2018–19	21	17	9	–	7	11	–	–
2019–20	23	19	10	8	6	–	–	–
2020–21	22	18	11	8	–	–	7	–
2021–22	25	17	10	7	–	–	9	–
2022–23	21.40	17	9	–	–	–	5.50	21.50
2023–24	20.80	16.50	6.50	–	–	–	4.40	35.80
2024–25	20	15	8	–	–	–	6	36

Source: Petroleum Planning & Analysis Cell.<sup>16</sup>

'–' indicates negligible or no imports in that year

million barrels per day to offset reduced Middle Eastern supplies.<sup>20</sup> However, such adjustments are neither immediate nor frictionless, as they are constrained by logistical bottlenecks, refining configurations, shipping availability, and geopolitical considerations.

For India, therefore, oil price volatility in the current crisis is not merely a market fluctuation but a structural economic risk, where disruptions at a single maritime chokepoint translate into wide-ranging fiscal, inflationary, and external sector pressures.

## Impact on Seafarers: Human Cost of Maritime Disruptions

The disruption in the Strait of Hormuz highlights a critical yet often overlooked dimension of maritime crises, the vulnerability of seafarers. Over the past decade, India has emerged as one of the world's top suppliers of trained maritime personnel, with its active seafaring workforce more than doubling from approximately 117,000 in 2014 to around 280,000 by 2023; the number of women seafarers has also increased significantly, from about 1,700 to over 10,000 during the same period.<sup>21</sup>

Prior to the crisis, seafarers operating in the Gulf benefited from relatively stable conditions, characterised by predictable voyage cycles, regular crew rotations, and uninterrupted tanker traffic along a critical global energy corridor. The escalation has fundamentally altered this environment. According to the International Maritime Organization (IMO), over 20,000 seafarers remain stranded in the Persian Gulf due to security threats, airspace restrictions, and suspended vessel movements.<sup>22</sup>

India's large global seafaring presence, exceeding 300,000 personnel deployed internationally renders it structurally exposed to such disruptions. Even a limited number of attacks can generate disproportionate psychological and labour market effects, influencing career preferences, wage expectations, and bargaining dynamics with employers. This risk has already materialised, with Indian casualties rising from three in the early phase of the crisis to at least five deaths and one missing as<sup>23</sup> the conflict intensified, alongside cases of stranded crews and vessels unable to exit the region.

Beyond immediate safety concerns, the crisis underscores broader systemic labour risks associated with chokepoint disruptions, including forced contract extensions, heightened mental stress, and prolonged physical insecurity. Reports from global unions and Indian stakeholders further indicate a rise in seafarer abandonment cases in recent years, with India accounting for a significant share of documented cases worldwide,<sup>24</sup> pointing to persistent governance gaps in ensuring timely wages, repatriation, and legal protection.

## Policy Suggestions

The ongoing disruption in the Strait of Hormuz highlights the centrality of maritime supply chains to India's economic stability and energy security. As a trade-dependent economy, India's growth trajectory is closely tied to the efficiency and reliability of these supply chains, which remain vulnerable to geopolitical shocks, chokepoint disruptions, and external dependencies. As a result we should be more proactive to meet these situations.

<sup>20</sup> <https://upstox.com/news/business-news/latest-updates/west-asia-conflict-india-s-russia-oil-purchase-surges-50-but-how-much-can-it-offset-supply-shock/article-190587/>

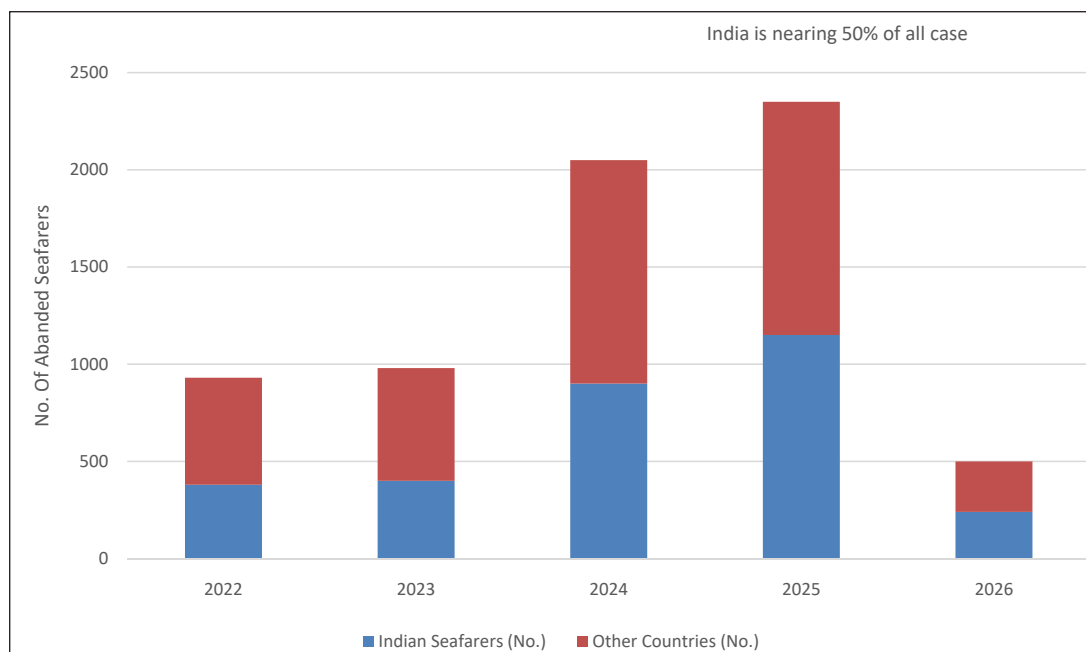
<sup>21</sup> <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2021029>

<sup>22</sup> <https://www.sea-trade-maritime.com/crewing/20-000-seafarers-stranded-in-gulf-imo-secretary-general>

<sup>23</sup> <https://timesofindia.indiatimes.com/india/iran-crisis-mea-says-five-indians-killed-one-missing-in-conflict-two-lpg-vessels-cross-strait-of-hormuz-safely/articleshow/129575205.cms>

<sup>24</sup> [https://www.linkedin.com/posts/fsui-india\\_dg-shipping-must-answer-why-is-india-leading-activity-7432379190164865024-po5A](https://www.linkedin.com/posts/fsui-india_dg-shipping-must-answer-why-is-india-leading-activity-7432379190164865024-po5A)

**Figure 7: Abandonment of Seafarers (Other Countries Vs. India)**



**Source:** Forward Seamen's Union of India.<sup>25</sup>

## Strengthening India's National Shipping Fleet

India's maritime trade remains heavily dependent on foreign shipping, with over 90 per cent of its external trade carried by foreign-flagged vessels, despite having a fleet of only ~1,900 vessels (18.4 million GT).<sup>26</sup> This dependence exposes the country to freight volatility and supply disruptions, as seen in the Strait of Hormuz crisis.

The economic cost is significant, with Indian oil PSUs spending ~US\$ 8 billion over five years on chartering foreign vessels, reflecting lost opportunities for domestic capacity building.<sup>27</sup>

A targeted policy push is needed to expand Indian-flagged tankers, LNG carriers, and bulk vessels through fiscal incentives and long-term chartering frameworks, ensuring strategic control over energy transport. This must be supported by a strong maritime services ecosystem; the India Fleet Telematics Platforms Market size was valued at around US\$ 1.68 billion in 2025 and is

projected to reach US\$ 4 billion by 2032. The estimated CAGR from 2026 to 2032 is around 13.2 per cent, indicating robust growth.<sup>28</sup>

## Establishing a Domestic P&I Insurance Framework

The global marine insurance market is expanding steadily, projected to grow from US\$ 34.19 billion in 2025 to US\$ 36.69 billion in 2026 (CAGR ~7.3 per cent), and expected to grow to 48.8 billion in 2030 with CAGR of 7.4 per cent, reflecting rising risk exposure in maritime trade.<sup>29</sup> However, the sector remains highly concentrated, with ~90 per cent of global merchant shipping insured by the International Group of P&I Clubs, based in Europe.

India's shipping sector is similarly dependent, with around 90 per cent of liability cover placed with foreign P&I insurers, creating a structural vulnerability. During geopolitical disruptions like the Strait of Hormuz crisis, insurers may withdraw war-risk coverage or sharply

<sup>25</sup> Ibid.

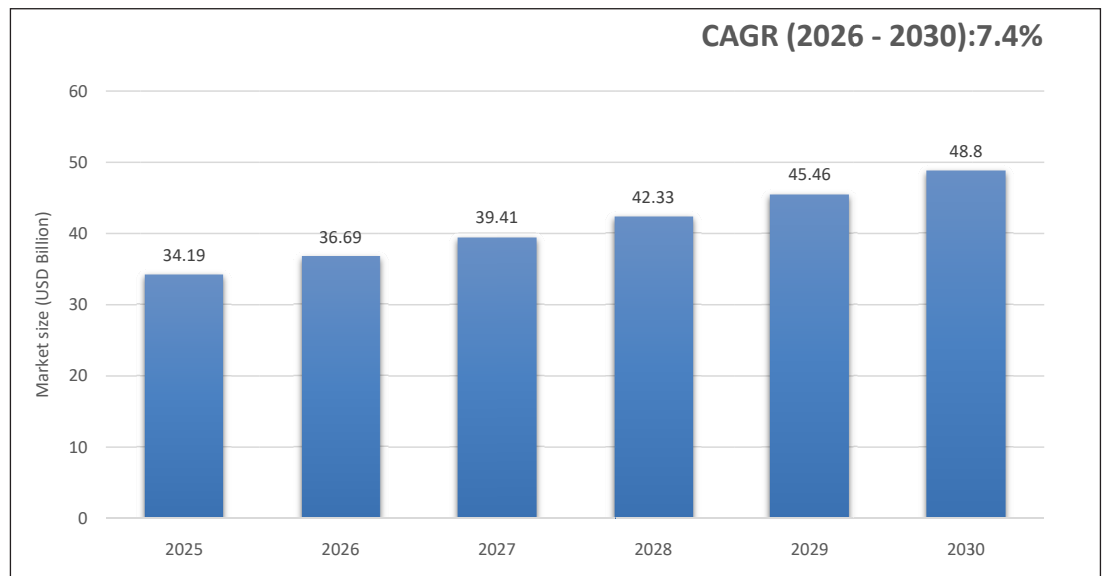
<sup>26</sup> <https://unctadstat.unctad.org/CountryProfile/MaritimeProfile/en-GB/356/index.html>

<sup>27</sup> <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2183703&reg=3&lang=2#:~:text=He%20explained%20that%20the%20freight,over%20the%20past%20eleven%20years>

<sup>28</sup> <https://www.marknetaadvisors.com/research-library/fleet-telematics-platforms-market-india.html#:~:text=India%20Fleet%20Telematics%20Platforms%20Market%20Report%20Key%20aways:13.2%25%2C%20indicating%20strong%20growth>

<sup>29</sup> <https://www.thebusinessresearchcompany.com/report/marine-insurance-global-market:text=%E2%80%A2%20Marine%20Insurance%20market%20size,Comprehensive%20Protection%20In%20Conflict%20Zones>

**Figure 8: Marine Insurance Market Size**



**Source:** Marine Insurance Market Report 2026.

increase premiums, directly affecting vessel movement and trade continuity.

India should establish a domestic Protection & Indemnity (P&I) framework or club to ensure uninterrupted liability coverage for Indian-flagged vessels. This would reduce dependence on external insurance markets, stabilize costs during crises, and strengthen India's overall maritime risk resilience and strategic autonomy.

### **Strengthen Energy Self-Reliance through Alternative Energy (SMRs & Thorium)**

India's energy security remains structurally vulnerable, with 85–88 per cent of its crude oil requirements met through imports, exposing the economy to external supply shocks, particularly disruptions in critical routes such as the Strait of Hormuz.

In response, the government has initiated a Nuclear Energy Mission focused on Small Modular Reactors (SMRs), with an outlay of ₹20,000 crore and a target to operationalize at least five indigenous

SMRs by 2033.<sup>30</sup> Simultaneously, India possesses significant long-term strategic potential in nuclear energy, with one of the world's largest thorium reserves (estimated 457,000–508,000 tonnes) and over 11.93 million tonnes of monazite resources, supporting its three-stage nuclear programme.<sup>31</sup> The government has further set a target to expand nuclear capacity to 100 GW by 2047, indicating a long-term shift toward non-fossil energy sources.

From a policy perspective, accelerating the deployment of SMRs and accelerating the thorium-based fuel cycle research for deployment, should be prioritized as part of a broader energy diversification strategy. This would reduce dependence on imported hydrocarbons, mitigate exposure to maritime disruptions, and enhance India's long-term energy security and strategic resilience.

### **Diversifying Fossil Fuel Supply Chains**

India's crude oil supply remains highly vulnerable, with ~50 per cent of imports transiting through the Strait of Hormuz

<sup>30</sup> <https://www.pib.gov.in/PressReleaseDetailm.x?PRID=2098367&reg=3&la=2>

<sup>31</sup> <https://www.nuclear-business-platform.com/media/insights/thorium-powered-future-key-to-india-nuclear-goal>

(Jan–Feb 2026), up from ~40 per cent in late 2025. Although diversification has begun evident from Russian imports rising to ~1.5 million barrels/day, the supply basket remains concentrated, with Iraq, Saudi Arabia, Russia, and the UAE together accounting for the majority share.<sup>32</sup>

This concentration exposes India to significant risks from geopolitical disruptions and chokepoint constraints.

Policy efforts should focus on expanding long-term sourcing from the US, West Africa, Latin America, and Russia, alongside strengthening Strategic Petroleum Reserves (SPR) to buffer short-term shocks. In parallel, domestic alternatives must be scaled up. The Ethanol Blended Petrol (EBP) Programme, targeting 20 per cent blending, offers a viable pathway to reduce crude dependence.

Similarly, Dimethyl Ether (DME) is a cleaner alternative for Domestic and Commercial LPG. DME can be produced from methanol (derived from coal, agricultural residues/biomass, or captured carbon dioxide).

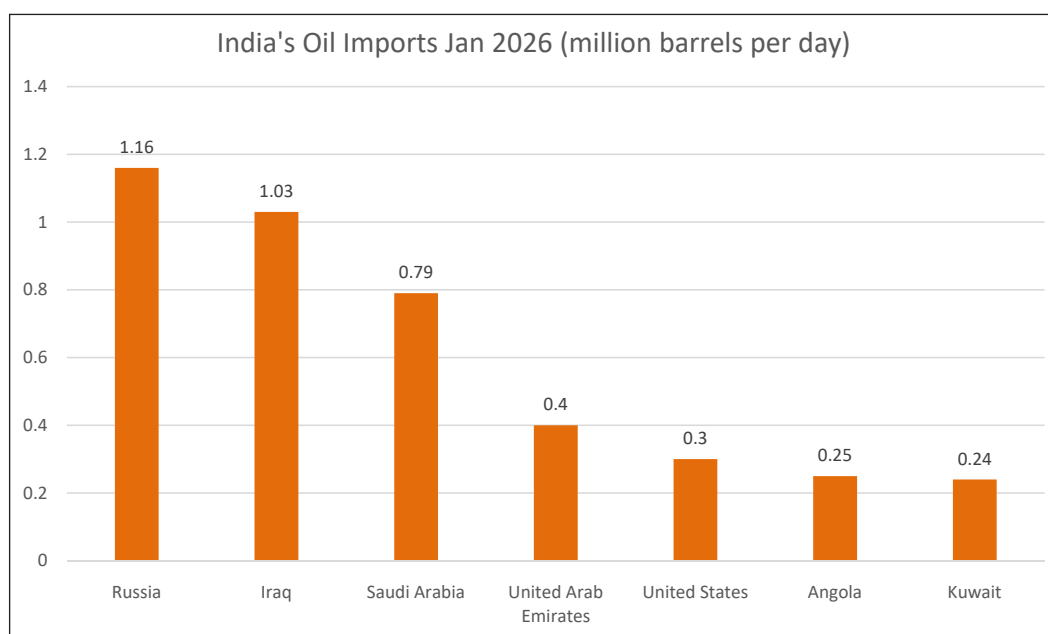
A key advantage highlighted by National Chemical Laboratory (NCL), Pune, is that DME can also be blended with LPG or used directly without needing major changes to existing infrastructure, such as cylinders, regulators, hoses, or burners. Researchers indicate that replacing 8 per cent of LPG with DME could save India approximately ₹9,500 crore in foreign exchange annually.<sup>33</sup>

Therefore, a combined strategy of supply diversification and alternative fuel adoption will enhance India’s resilience to maritime disruptions and external energy shocks.

## Accelerating Domestic Exploration and Production

India’s domestic oil and gas production remains limited relative to its growing demand, with output at approximately 31.8 million tonnes of oil equivalent in the first half of FY2025–26.<sup>34</sup> Over the past decade, stagnant crude production alongside rising consumption has led to increasing import dependence, heightening exposure to external supply shocks and maritime disruptions.

**Figure 9: Major India’s Oil Imports in January 2026**



Source: Kpler Analytics.

<sup>32</sup> <https://timesofindia.indiatimes.com/business/india-business/russia-remains-largest-supplier-of-crude-to-india-in-february-saudi-arabia-close-second/article-show/128956885.cms>

<sup>33</sup> <https://chemindigest.com/indian-scientists-develop-dme-technology-as-lpg-alternative/>

<sup>34</sup> <https://energy.economictimes.indiatimes.com/news/oil-and-gas/indias-oil-production-rises-as-natural-gas-output-grows-energy-demand-77111#:~:text=Indias%20total%20domestic%20oil%20and%20gas%20production,than%2032.5%20MMTOE%20in%20the%20year%2Dago%20period>

To address this structural gap, policy efforts must focus on expanding upstream exploration and production capacity. Strengthening initiatives such as the Open Acreage Licensing Programme (OALP) and increasing investment in domestic oil and gas fields can enhance indigenous output.

A sustained push toward domestic exploration will be critical in reducing import dependence, improving energy security, and mitigating vulnerability to geopolitical and chokepoint disruptions.

### **Strengthening Seafarer Safety and Welfare Frameworks**

Seafarers operating in high-risk regions such as the Strait of Hormuz face heightened exposure to security threats, contract extensions, and restricted mobility during disruptions. Recent crises have underscored gaps in existing protection mechanisms, particularly in conflict scenarios where commercial vessels lack adequate safeguards.

Policy efforts should prioritize a dedicated national framework for standardised norms on seafarer safety in conflict zones, including hazard pay frameworks, evacuation protocols, and clearer allocation of responsibilities among flag, port, and labour supplying states. Strengthening insurance coverage, compensation systems, and mental health support is equally critical to address long-duration deployments under stress.

A more institutionalised approach will enhance workforce security while ensuring the operational continuity and resilience of India's maritime sector during geopolitical disruptions.

### **Managing Supply Chain and Trade Disruptions**

Beyond energy, disruptions require a coordinated logistics response. India should establish a real-time maritime monitoring and advisory cell, in collaboration with shipping lines, terminal operators, and logistics providers, to track disruptions across West Asian and Red Sea routes, assess rerouting implications (including via the Cape of Good Hope), and provide guidance to exporters and importers on optimal routing and scheduling decisions.

Support mechanisms for MSME exporters should be introduced to cushion the impact of freight volatility and delays. These may include time-bound freight support schemes, enhanced export credit facilities, and flexibility in delivery timelines, particularly for shipments bound for Europe and North America.

Simultaneously, India must accelerate the development of alternative transshipment strategies, including greater utilisation of domestic ports and partnerships with friendly third-country hubs. This should be complemented by expanding storage and warehousing capacity to manage longer transit times, cargo bunching, and supply chain disruptions arising from rerouted maritime flows.

### **Strengthening Diplomatic and Multilateral Engagement**

India should adopt a more proactive role in global maritime governance. At platforms such as the IMO and ILO, India may advocate for standardised global norms on seafarer safety in

conflict zones, including hazard pay frameworks, evacuation protocols, and clearer allocation of responsibilities among flag, port, and labour supplying states.

At the regional level, India should work with Indian Ocean and West Asian partners to strengthen maritime domain awareness, real-time information sharing, and coordinated naval patrols, improving response times to attacks and enhancing protection for commercial shipping and crew.

Strategically, India must maintain balanced engagement with major powers in relation to convoy and escort arrangements, while simultaneously deepening bilateral dialogue with Iran and Gulf Cooperation Council (GCC) countries to reduce tensions and ensure the safety of shipping routes. Such engagement is essential to safeguard Indian economic interests and the

welfare of its seafarers amid prolonged geopolitical instability.

## Conclusion

The ongoing crisis demonstrates that supply chain resilience is no longer a logistical concern but a strategic imperative. Disruptions across shipping, energy flows, insurance, and workforce mobility reveal the need for an integrated policy response that strengthens both physical and institutional capacities.

Building resilient maritime supply chains will require a coordinated and forward-looking approach, expanding domestic capabilities, diversifying sourcing, securing critical services, and protecting human capital. Such measures are essential not only to withstand immediate shocks but to ensure long-term economic security, strategic autonomy, and sustained global competitiveness.



## RIS Policy Briefs

- PB#144-2026 *India-Russia Science, Technology and Innovation Cooperation: Past, Present and Future* by S. K. Varshney, Amit Kumar and Sneha Sinha
- PB#143-2026 *Ideas to Reshape Northeast India's Economic Engagements with Southeast Asia* by Prabir De
- PB#142-2026 *Recalibrating Global South-Global North Engagement in WTO for Global Recovery* by S.K. Mohanty, Sabyasachi Saha and Pankhuri Gaur
- PB#141-2026 *WTO Reform and Industrial Policy Space: An Indian Perspective for MC14* by Pritam Banerjee, Zaki Hussain, Amit Randev, Kanika Karwal and Riddhi Lakhiani
- PB#140-2026 *Investment Facilitation for Development: India's Policy Dilemma at MC 14* by Anwar H. Shaikh, Pankaj Vashisht and Vaasu Aggarwal
- PB#139-2026 *Trade and Sustainability: Imperatives for India to consider for MC14* by R V Anuradha, Rajeev Kher, Anshuman Gupta and Lakshmi Swathi Ganti
- PB#138-2026 *Multilateralism Served à la Carte: The Rise of Joint Statement Initiatives at the WTO* by Shailja Singh, Priyadarshi Dash and Pragyan Agarwal
- PB#137-2026 *Public Stockholding for Food Security at the WTO: An Unfinished Agenda* by Sachin Kumar Sharma, Suvayan Neogi, Paavni Mathur and Palkin Ratna



# RIS

Research and Information System  
for Developing Countries

विकासशील देशों की अनुसंधान एवं सूचना प्रणाली

RIS specialises in issues related to international economic development, trade, investment and technology. It is envisioned as a forum for fostering effective policy dialogue and capacity-building among developing countries on global and regional economic issues. The focus of the work programme of RIS is to promote South-South Cooperation and collaborate with developing countries in multilateral negotiations in various forums. Through its following centres/forums, RIS promotes policy dialogue and coherence on regional and international economic issues.



The word “DAKSHIN” (दक्षिण) is of Sanskrit origin, meaning “South.” The Hon’ble Prime Minister of India, Shri Narendra Modi, inaugurated DAKSHIN – Global South Centre of Excellence in November 2023. The initiative was inspired by the deliberations of Global South leaders during the Voice of the Global South Summits. DAKSHIN stands for Development and Knowledge Sharing Initiative. Hosted at the RIS, DAKSHIN has established linkages with leading think tanks and universities across the Global South and is building a dynamic network of scholars working on Global South issues.



AIC at RIS has been working to strengthen India’s strategic partnership with ASEAN in its realisation of the ASEAN Community. AIC at RIS undertakes research, policy advocacy and regular networking activities with relevant organisations and think-tanks in India and ASEAN countries, with the aim of providing policy inputs, up-to-date information, data resources and sustained interaction, for strengthening ASEAN-India partnership.



CMEC has been established at RIS under the aegis of the Ministry of Ports, Shipping and Waterways (MoPS&W), Government of India. CMEC is a collaboration between RIS and Indian Ports Association (IPA). It has been mandated to act as an advisory/technological arm of MoPSW to provide the analytical support on policies and their implementation.



FITM is a joint initiative by the Ministry of Ayush and RIS. It has been established with the objective of undertaking policy research on economy, intellectual property rights (IPRs) trade, sustainability and international cooperation in traditional medicines. FITM provides analytical support to the Ministry of Ayush on policy and strategy responses on emerging national and global developments.



BEF aims to serve as a dedicated platform for fostering dialogue on promoting the concept in the Indian Ocean and other regions. The forum focuses on conducting studies on the potential, prospects and challenges of blue economy; providing regular inputs to practitioners in the government and the private sectors; and promoting advocacy for its smooth adoption in national economic policies.



FIDC, has been engaged in exploring nuances of India’s development cooperation programme, keeping in view the wider perspective of South-South Cooperation in the backdrop of international development cooperation scenario. It is a tripartite initiative of the Development Partnership Administration (DPA) of the Ministry of External Affairs, Government of India, academia and civil society organisations.



FIRD aims to harness the full potential and synergy between science and technology, diplomacy, foreign policy and development cooperation in order to meet India’s development and security needs. It is also engaged in strengthening India’s engagement with the international system and on key global issues involving science and technology.



As part of its work programme, RIS has been deeply involved in strengthening economic integration in the South Asia region. In this context, the role of the South Asia Centre for Policy Studies (SACEPS) is very important. SACEPS is a network organisation engaged in addressing regional issues of common concerns in South Asia.



Knowledge generated endogenously among the Southern partners can help in consolidation of stronger common issues at different global policy fora. The purpose of NeST is to provide a global platform for Southern Think-Tanks for collaboratively generating, systematising, consolidating and sharing knowledge on South South Cooperation approaches for international development.



DST-Satellite Centre for Policy Research on STI Diplomacy at RIS aims to advance policy research at the intersection of science, technology, innovation (STI) and diplomacy, in alignment with India’s developmental priorities and foreign policy objectives.

— Policy research to shape the international development agenda —

Core IV-B, Fourth Floor, India Habitat Centre, Lodhi Road, New Delhi-110 003, India.,

Tel. 91-11-24682177-80, Email: [dgoffice@ris.org.in](mailto:dgoffice@ris.org.in), Website: [www.ris.org.in](http://www.ris.org.in)

Follow us on:



[www.facebook.com/risindia](https://www.facebook.com/risindia)



[@RIS\\_NewDelhi](https://twitter.com/RIS_NewDelhi)



[www.youtube.com/RISNewDelhi](https://www.youtube.com/RISNewDelhi)