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The way to get started  
is to quit talking and  
begin doing

*Walt Disney*

# **Important Issues of the Day**

- **Oleum Gas – Prelims**
- **Karbi Anglong Ginger – Prelims**
- **Pakistan's arms sales – Page No. 6, GS 2,3**
- **Safety last – Page No. 6, GS 3**
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- **Centre inks ₹5,000-cr. deal – Page No. 10, GS 3**

## Oleum Gas



- **A major oleum gas leak at Bhageria Industries Ltd in Boisar, Maharashtra, forced the evacuation of over 2,000 residents, including 1,600 students.**
- **Oleum, commonly referred to as fuming sulfuric acid, is a highly corrosive chemical consisting of dissolved sulfur trioxide ( $\text{SO}_3$ ) in concentrated sulfuric acid ( $\text{H}_2\text{SO}_4$ ). It releases dense white fumes when exposed to moist air.**
- **Oleum (Fuming Sulfuric Acid)**
- **Chemical representation:  $\text{H}_2\text{SO}_4 \cdot x\text{SO}_3$**
- **When  $x = 1$ , the compound is Disulfuric Acid ( $\text{H}_2\text{S}_2\text{O}_7$ ), also called Pyrosulfuric Acid**

- **Oleum is produced through the Contact Process, which involves:**
- **Burning sulfur to produce sulfur dioxide ( $\text{SO}_2$ ).**
- **Oxidizing  $\text{SO}_2$  to sulfur trioxide ( $\text{SO}_3$ ).**
- **Absorbing  $\text{SO}_3$  into concentrated sulfuric acid to form oleum.**
- **This method avoids directly dissolving  $\text{SO}_3$  in water, which would create an uncontrollable acid mist.**
  
- **Appearance: It appears as dense, white cloudish smoke when leaked into the air.**
  
- **Freezing Point: Its freezing point varies strongly with concentration; it can be solid at room temperature or remain liquid as low as zero degree.**

## **Impact on Health:**

- **Acute Irritation:** Exposure can cause minor to severe eye irritation.
- **Respiratory Distress:** Hazardous fumes can cause irritation to the respiratory tract; emergency responders use **Self-Contained Breathing Apparatus (SCBA)** to avoid inhalation.
- **Sulfuric Acid Mist:** In large releases, it creates a mist of micrometre-sized sulfuric acid particles that are hazardous over wide areas.

# Karbi Anglong Ginger



- **Assam has marked a major agricultural milestone by flagging off its first-ever trial export consignment of 1.2 metric tonnes of GI-tagged Karbi Anglong Ginger to London.**
- **Karbi Anglong Ginger is a premium variety of ginger known for its distinct aroma, strong pungency, and medicinal properties.**
- **It has received a Geographical Indication (GI) tag, certifying its unique origin and quality attributes.**
- **Grown in the Karbi Anglong district of Assam.**
- **Cultivated mainly in the Singhasan Hills using traditional Jhum (shifting cultivation) and Tila cultivation methods.**

## **Key Characteristics:**

- **Aromatic & Pungent:** Known for a strong, earthy flavour with high essential oil content.
- **Medicinal Value:** Used in traditional medicine for digestive and anti-inflammatory properties.
- **Organic & Traditional Cultivation:** Grown largely using age-old farming practices, enhancing its natural quality.
- **High Market Demand:** Preferred for culinary, pharmaceutical, and processing industries.

- **Geographical Indication (GI) is a name or sign used on certain products corresponding to a specific geographical location or origin. It is a type of Intellectual Property Right (IPR).**
- **India, as a World Trade Organization (WTO) member, enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999.**
- **It is a part of the IPR under the Paris Convention for the Protection of Industrial Property.**
- **Darjeeling tea became the first GI-tagged product in India in 2004–2005.**
- **The Geographical Indication Registry (Chennai) issues these tags under the Department of Industry Promotion and Internal Trade, Ministry of Commerce and Industry.**
- **GIs can be registered for various products, including agricultural products, food products, handicrafts, and manufactured goods.**
- **GI Tag is valid for ten years and can be renewed.**

# Centre inks ₹5,000-cr. deal to strengthen maritime security

Coast Guard to get six ALH Mk-III helicopters from HAL; Russian Shtil missiles to be installed on Navy's frontline warships; acquisitions aim to enhance air defence and generate job opportunities

**Saurabh Trivedi**  
NEW DELHI

**T**he Defence Ministry on Tuesday signed contracts worth ₹5,083 crore for the acquisition of six Advanced Light Helicopters Mk-III (maritime role) for the Indian Coast Guard and Shtil surface-to-air vertical launch missiles for the Indian Navy.

The contract for the six choppers, along with operational role equipment, an engineering support package, and performance-based logistics support, valued at ₹2,901 crore, has been signed with Hindustan Aeronautics Ltd.

## Indigenous push

The purchase comes under the category of indigenously designed, developed, and manufactured products, the Ministry said.

The twin-engine helicopters incorporate state-of-the-art features superior to the airborne platforms



**Winged watch:** The ALH Mk-III choppers will enhance protection of artificial islands and offshore installations. L. BALACHANDAR

currently in operation, and are capable of undertaking a wide spectrum of maritime security missions from shore-based airfields as well as from ships at sea.

Their induction is expected to significantly enhance the Indian Coast Guard's capability to ensure the safety and protection of artificial islands, offshore installations, and fishermen, as well as safeguarding the marine environment, the Ministry

said. The project envisages supply of equipment from more than 200 MSMEs and is expected to generate approximately 65 lakh man-hours of employment.

The contract reinforces the government's commitment to Aatmanirbhar Bharat, or resilient India, and the Make-in-India initiative, while strengthening the country's maritime security architecture, it added.

Separately, the contract

for the procurement of Shtil missiles and associated missile holding frames, valued at ₹2,182 crore, has been signed with JSC Rosoboronexport, a state-run company of the Russian Federation.

The acquisition is aimed at substantially enhancing the air defence capabilities of warships on the front line against a wide spectrum of aerial threats, the Ministry said.

## Rapid reaction

The system will bolster the layered air defence architecture aboard Indian Navy platforms by providing rapid-reaction, all-weather engagement capability and improved survivability in contested maritime environments. The contract underscores the long-standing defence partnership between India and Russia.

The contracts were inked in the presence of Defence Secretary Rajesh Kumar Singh at South Block in New Delhi.

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## Mains Question

India has emphasized strengthening domestic defence manufacturing under initiatives such as 'Atmanirbhar Bharat' and 'Make in India'. Discuss the opportunities and challenges associated with developing a robust indigenous defence industrial base in India.

आत्मनिर्भर भारत' और 'मेक इन इंडिया' जैसी पहलों के तहत भारत ने स्वदेशी रक्षा विनिर्माण को सुदृढ़ करने पर विशेष बल दिया है। भारत में एक मजबूत स्वदेशी रक्षा औद्योगिक आधार के विकास से जुड़े अवसरों और चुनौतियों की चर्चा कीजिए।

# Aligning religious tourism with ecology

Page No.7 , GS 3

India's religious geography is inseparable from its ecological one. Across the country, sacred groves, shrines, caves and pilgrimage routes are located within or adjacent to protected areas, often in ecologically sensitive habitats. For centuries, belief systems helped regulate access and behaviour, enabling coexistence with nature. Today, however, rising visitor numbers and the growing commercialisation of pilgrimage routes are placing unprecedented pressure on forest ecosystems. What were once seasonal, community-embedded rituals have become forms of mass tourism, bringing in infrastructure that fragile ecosystems cannot absorb. The challenge before policymakers now is how this intersection between faith and conservation can be governed without undermining ecological integrity or the rights of forest-dwelling communities.

## Major flashpoint

Recent reporting in *The Hindu* on deliberations of the Standing Committee of the National Board for Wildlife (SCNBWL) regarding religious structures inside sanctuaries has brought this long-standing tension into sharp focus. The immediate case involved a proposal to expand a religious establishment in a sanctuary in Gujarat. Though initially approved, citing the existence of the "establishment of the temples, prior to the settlement of forest rights in the region", it was later withdrawn over concerns that it would be the first instance of protected areas being diverted for a religious institution – potentially setting a precedent for similar demands across the country. The Environment Minister, who chairs the SCNBWL, noted that many sacred caves and religious sites within forests are mentioned in religious texts, and suggested the formulation of a Standard Operating Procedure for proposals involving religious institutions.



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A clear no-expansion principle is recommended – there should be no new constructions or enlargement of existing structures within core forest areas

This restraint is well founded. Under India's legal framework, any construction or expansion on forest land after 1980 is generally treated as encroachment under the Forest (Conservation) Act. The Wildlife (Protection) Act, 1972 and National Tiger Conservation Authority norms permit only limited, carefully justified interventions, primarily to manage existing pressures or mitigate ecological conflict. Unregulated construction fragments habitats, increases human-wildlife conflict, and weakens protected areas.

## The question of rights

Yet conservation cannot be pursued in a cultural or social vacuum. India is home to thousands of sacred natural sites, many of which are living landscapes stewarded by local communities. Sacred groves function as biodiversity refuges precisely because belief systems have restricted extraction and disturbance. The Forest Rights Act, 2006 adds a critical legal dimension. It mandates the recognition of the rights of Scheduled Tribes and other traditional forest dwellers. Any diversion, restriction or regulation affecting traditional access or practices must be preceded by rights recognition. Ignoring this requirement risks marginalising communities that have long protected these forests.

A blanket ban on religious activity inside forests would therefore be neither constitutionally defensible nor culturally sensitive. At the same time, allowing new constructions or expansion under the guise of faith would set a dangerous precedent. The challenge lies in navigating this middle ground with clarity and care.

In 2023, the Ashoka Trust for Ecology and the Environment (ATREE) in collaboration with the World Wildlife Fund (WWF) published a set of guidelines on religious tourism within tiger reserves that offer a

evidence-based pathway and a green pilgrimage model. Drawing on over 15 years of on-ground work in Kalakad-Mundanthurai, Ranthambhore and Corbett, these guidelines demonstrate that religious activities in protected areas are not incompatible with conservation, provided it is managed sustainably.

## A green pilgrimage model

A clear no-expansion principle is recommended – there should be no new constructions or enlargement of existing structures within core forest areas. At the same time, the guidelines allow for the recognition of long-standing sites that pre-date the notification of protected areas, subject to strict, impact-based regulation. It also includes caps on pilgrim numbers, restrictions on transport such as bans on night traffic, and robust controls on waste, water use, and sanitation. Equally important is governance. Multi-stakeholder mechanisms involving forest departments, temple authorities, local governments and communities, and conservation organisations should be encouraged.

In pilot areas, where guidelines have been implemented, measures such as restricting private vehicles, managing waste through temple trusts, and engaging religious leaders have led to measurable reductions in roadkill, plastic pollution and water contamination, without denying access to worshippers or displacing forest-dependent communities. Such guidelines if taken up by the National Board for Wildlife would be beneficial.

India's strength lies in its ability to integrate ecological protection with cultural continuity. A principled approach would involve zero tolerance for new encroachments, rigorous case-by-case evaluation of existing sites, mandatory settlement of forest rights, and adoption of proven green pilgrimage management models backed by continuous monitoring.

- **India's religious geography is inseparable from its ecological one. Across the country, sacred groves, shrines, caves and pilgrimage routes are located within or adjacent to protected areas, often in ecologically sensitive habitats.**
- **For centuries, belief systems helped regulate access and behaviour, enabling coexistence with nature. Today, however, rising visitor numbers and the growing commercialisation of pilgrimage routes are placing unprecedented pressure on forest ecosystems.**
- **What were once seasonal, community-embedded rituals have become forms of mass tourism, bringing in infrastructure that fragile ecosystems cannot absorb.**
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## Mains Question

Sustainable tourism is increasingly being viewed as a tool for balancing economic development with environmental conservation. Discuss the significance of sustainable tourism in India and the challenges associated with its effective implementation.

सतत पर्यटन को आर्थिक विकास और पर्यावरण संरक्षण के बीच संतुलन स्थापित करने के एक महत्वपूर्ण साधन के रूप में देखा जा रहा है। भारत में सतत पर्यटन के महत्व तथा इसके प्रभावी क्रियान्वयन से जुड़ी चुनौतियों की चर्चा कीजिए।

# India's need for a mandatory R&D disclosure standard

Page No.6 , GS 3

George Akerlof's classic 1970 paper, The Market for Lemons, showed that when buyers cannot tell high-quality products from low-quality ones, they discount everything and good products exit the market. The same logic applies to corporate research and development (R&D) today. Corporate R&D intensity in India stagnates at 0.23% of GDP, far below global peers, due not only to firms' risk aversion but also to the lack of information in capital markets to price innovation. When innovation is invisible, it is systematically undervalued. When undervalued, it is underproduced. Worse, in the absence of structured disclosure, there is no mechanism to systematically weed out low-quality, copycat or purely rent-seeking "innovation" projects.

## Fuelling growth

An analysis by Brown and Martinsson (2018, Management Science) shows that when transparency and quality of disclosures improve, R&D intensity rises sharply, by 6%-12% of average R&D intensity in OECD economies and 3%-14% in large cross-country firm samples. This is especially true in equity-dependent, innovation-driven sectors. Crucially, capital expenditures on tangible assets do not rise in the same way, confirming that transparency pushes investment specifically towards risky, uncertain innovation rather than brick-and-mortar assets.

Recent evidence from China makes this point very clear. Mandated disclosures on the Shanghai Stock Exchange spurred higher innovation, especially in non-state, high-tech, and financially constrained firms (Liu, Ye & Liu, 2023, China Journal of Accounting Research). There is also a caveat, especially in cases such as pharma; once firms are required to reveal detailed pipeline information, disclosure becomes a Bayesian signal that prompts industry-wide learning. Companies update their beliefs after observing competitors' project quality, overlap, and timelines; weaker or cash-constrained firms recognise when their projects are dominated and rationally terminate or scale them back. The result is portfolio purification – low-quality, duplicative, or high-risk projects are pruned early, capital shifts toward stronger scientific bets,



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**Aditya Sinha**

writes on  
macroeconomic and  
geopolitical issues

Structured research and development (R&D) reporting will improve transparency, funding and innovation outcomes

and safety improves, though fewer long-shot projects survive because the learning effect outweighs pure competitive pressure. Crucially, this does not weaken the case for R&D disclosures. Transparency reallocates innovation effort toward higher-quality opportunities, enhances investment efficiency, and improves social outcomes.

## The framework

India's R&D ecosystem today operates under the opposite condition. To correct this structural information failure, we propose the Mandatory R&D and Technology Disclosure Standard, under the Securities and Exchange Board of India's Listing Obligations and Disclosure Requirements Regulations, (LODR) 2015. This will not be a mandate on how much firms must invest in R&D, nor will it direct the technological pathways they should pursue. Instead, it will require listed entities to disclose a structured set of innovation metrics across five critical dimensions: first, R&D expenditure (capital and revenue) with segment-level granularity, enabling investors to separate genuine research spending from general operating costs; second, patent activity, including filings, grants, expirations, and maintenance, allowing assessment of IP pipelines; third, technology workforce composition, which signals capability depth; fourth, Technology Readiness Level (TRL) status of major innovation projects, providing a standardised view of pipeline maturity; and fifth, innovation turnover, measured as the percentage of revenue derived from products introduced in the past five years. These disclosures are routine in some geographies but absent in India, leaving analysts and investors to operate in a data-poor environment. Also note, we are not pushing for disclosures of proprietary information.

Before full implementation, the Board should require these disclosures.

The Board should mandate these disclosures before full implementation. This can be made public on a voluntary basis for the first two years, to familiarise firms and build data quality. After this transition period, disclosure should be made mandatory.

The rationale for adopting the R&D standard

rests on five arguments. First, structured disclosure reduces information asymmetry. In simple terms, when investors cannot tell which companies are genuinely innovating and which ones are not, they treat everyone as average. This mispricing discourages firms from investing in technology because they know the market cannot tell the difference.

Second, better disclosure lowers the cost of capital. When companies are more transparent, big investors feel more confident, share prices become more stable, and firms can raise money more cheaply. This matters even more for companies whose value lies in intangibles such as R&D, design, or patents.

## A boost for market discipline

Third, transparency strengthens market discipline. When innovation metrics such as R&D spend, patent counts, or project maturity are visible to investors, firms with weak performance feel pressure from shareholders, boards and competitors to improve. Korea saw this effect clearly after introducing mandatory intangible disclosures under the Korean International Financial Reporting Standards (K-IFRS), companies increased R&D once they knew everyone could see the numbers.

Fourth, disclosure improves innovation productivity and efficiency. According to the OECD's 2021 Intangibles Report, countries that make innovation reporting compulsory get more patents and better commercial outcomes for every rupee, or dollar, spent on R&D, because transparency leads to more efficient allocation of research funds.

Fifth, mandatory disclosure is a non-distortionary policy instrument. It does not force companies to spend more, it does not cost the government money, it does not favour any sector, and it allows firms complete freedom in how they innovate. All it does is to ensure that the market has accurate information, after which investors, not the state, decide how to reward or penalise firms. ' Markets cannot make lemonade from invisible lemons. India should shine a light on R&D. It would definitely ensure that the orchard grows, the juice flows, and innovation flourishes.

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## Mains Question

Research and Development (R&D) plays a crucial role in fostering innovation, technological advancement, and economic competitiveness. Examine the status of R&D in India and discuss the key challenges in strengthening the country's innovation ecosystem.

अनुसंधान एवं विकास (R&D) नवाचार, प्रौद्योगिकीय प्रगति और आर्थिक प्रतिस्पर्धा को बढ़ावा देने में महत्वपूर्ण भूमिका निभाता है। भारत में अनुसंधान एवं विकास की वर्तमान स्थिति का परीक्षण कीजिए तथा देश के नवाचार पारितंत्र को सुदृढ़ करने में प्रमुख चुनौतियों की चर्चा कीजिए।

## Safety last

### Explosives units flout rules for profit, putting workers at risk

**I**ndia's high-risk industries typically have a poor safety record. They operate in the margins, employ poorly paid unskilled workers, are characterised by unsafe working practices, and function under poor regulatory oversight. The explosive handling industry is a glaring example of such a high-risk industry. In October 2025, a devastating explosion at Sri Ganapathi Grand Fireworks in Andhra Pradesh's Konaseema district, which killed 10 people, led authorities to frame new safety norms and standard operating procedures. But it would seem that few of these were followed by Sri Surya Firecrackers at Vetlapalem village in Kakinada district, where an explosion on Saturday killed all 20 people present on the site. Another disturbing fact is that both units were owned by the same person. The Vetlapalem unit had been ordered to cease operations in January and had, in any case, far exceeded its permitted daily quota of explosives and workforce numbers after securing a large temple festival order. Nagpur was conceived as a hub of India's explosives making - with about four major public sector units supplying explosives, detonators and related materials for defence and industrial uses. The area's green cover provided camouflage with good connectivity

provided camouflage with good connectivity with the rest of India. Today, nearly a dozen such private factories function in the Bazargaon area of Nagpur district. Most of the workers are women on low wages. Often drawn from farmlands acquired for factories, the workforce is barely educated and insufficiently trained.

On Sunday, a blast at SBL Energy factory, Nagpur, killed 19 workers, most of them women. More than 20 lives have been lost in the past two years in half a dozen accidents in these units, including two at Solar Explosives, the largest unit, whose owner received the Padma Shri this year. Locals point out that the political connections of factory owners often invite the light hand of law enforcement. Ironically, the Petroleum and Explosives Safety Organisation, the regulator, is headquartered in Nagpur. In an example of lax supervision, several PESO officials faced a CBI inquiry for issuing licences for bribes. Only an overhaul of safety practices, norms and supervisory mechanisms as well as a commitment of business owners to safety can improve the safety record of these units. There is a lesson from Tamil Nadu. Once infamous for child labour in unsafe workplaces, and frequent deadly accidents, Sivakasi's fireworks units have now turned around their safety record. Enhanced safety training and awareness among workers and owners have achieved this though illegal units still report accidents.

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- **The Petroleum and Explosives Safety Organization (PESO), formerly known as Department of Explosives, since its inception on 05/09/1898, has been serving the nation as a nodal agency for regulating safety of hazardous substances such as explosives, compressed gas and petroleum.**
- **PESO's major work is to administer the responsibilities delegated under the Explosives Act 1884 and Petroleum Act 1934 and the Rules made thereunder related to manufacture, import, export, transport, possession, sale and use of Explosives, Petroleum products and Compressed gases.**
- **It operates under the DPIIT, Ministry of Commerce and Industry.**
- **The organisation has provided training to law enforcement, security, and intelligence personnel in handling explosives safely, filling a critical gap in the country's training resources.**

# Pakistan's arms sales drive calls for India's attention

Page No. 6, GS 3

**A**lthough largely ignored by India, a couple of historic benchmarks were created in Rawalpindi on February 2. Pakistani Chief of Defence Forces Asim Munir met with Eastern Libyan State President Khalifa Haftar - believed to be the first meeting between two self-styled Field Marshals. They reportedly finalised a deal to supply Pakistani arms worth \$4.6 billion - the largest such deal ever by Islamabad - to the Benghazi-based Libyan National Army (LNA) headed by the 82-year-old warlord.

Since the overthrow of leader Muammar Qadhafi in 2011, the LNA has been in a sputtering but inconclusive civil war with the Tripoli-based internationally recognised Government of National Unity (GNU).

## An arms push

Haftar regarded his first-ever visit to Pakistan as important enough to send his Prime Minister two days ahead, and bring along Saddam, his son and putative heir. The deal reportedly comprises 16 fully loaded JF-17 fighter jets (built in Pakistan with Chinese assistance, a Russian engine and some Turkish missiles) and 12 Super Mushak trainer aircraft over the next 30 months. As neither the LNA nor the GNU currently has a worthwhile air component, Haftar hopes that the Pakistani game-changing supplies will enable him to win the civil war. Some reports indicate that the deal is being funded by the United Arab Emirates (UAE), which has long supported Haftar.

Pakistan has also been chasing a similar opportunity in Sudan, another Arab country afflicted by civil war for the past three years. It is negotiating to sell \$1.5 billion worth of defence equipment to the Sudan Armed Forces (SAF), currently waging a bloody war against the Rapid Support Forces (RSF). While the initial deal reportedly involves 10 Karakorum-8 light attack aircraft, more than 200 drones, and advanced air defence systems, it may eventually include JF-17 fighter jets, raising the price tag to \$4 billion. There are hints that Saudi Arabia may finance this transfer through the waiver of loans owed to it by Islamabad.

Leveraging recent developments, such as the claimed successes in the May 2025 India-Pakistan conflict, U.S. President Donald Trump's White House welcome for Asim Munir, the signing of the Strategic Mutual Defence Agreement with Saudi Arabia, and the UAE President's visit to Islamabad, Pakistan has turbocharged its defence exports. It claims to have already supplied JF-17s to Azerbaijan, Myanmar and Nigeria, and has offered them to Bangladesh. If Pakistan's claimed and potential deals are cumulated, they reach \$13 billion.

But then, several constraining factors could intervene to dampen the optimism. First, Pakistan's capacity to produce the JF-17 is limited



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Rawalpindi's recent arms deal surge tilts the geopolitics in Pakistan's favour

to about 25 units a year to be shared between domestic requirements and exports. Lacking an industrial base of its own, it largely assembles these fighters from foreign-sourced components, creating dependencies. Second, these transactions are often made to recipients dependent on third-party financing, a pinch point. Third, the deals often pose tricky legal and geopolitical issues - both Libya and Sudan are currently under United Nations arms embargoes, and the two megadeals are buffeted by the Saudi-UAE rivalry, making them an awkward balancing act for Rawalpindi. The possibility of Haftar supplying Pakistani arms to RSF (supported by the UAE) cannot be ruled out, which would put its weapons with both the Sudanese belligerents. Moreover, the hype about the combat-proven success against India may eventually wear out, revealing shoddy, incompetent products, and result in a reversal. Finally, Munir's bromance with Mr. Trump may be a mixed blessing: While Mr. Trump may bless the transactional activities of his favourite Field Marshal, he may disfavour Munir acting as a conduit for the Chinese military hardware to a region that Washington regards as its fiefdom.

In the past, Washington has often found it convenient to subcontract the Gulf security to Pakistan. The current episode seemed different, with the Gulf monarchies using the same subcontractor to fortify their respective regional proxies. In this game, the GHQ Rawalpindi is all trumps: it gets hard cash, earns brownie points from the cash-rich Gulf monarchies and expands its outreach to regional hotspots for future security aggregation. Unlike in the past, Pakistanis are only supplying hardware and training, without putting boots on the ground.

## A growing role

Pakistan's growing role as a net security provider to the Gulf and beyond should concern New Delhi. India has a much stronger economic engagement with the Gulf than Pakistan, which has, hitherto, been seeking handouts. However, Pakistan's success in forging a regional security and defence role would be a force multiplier, enabling it to reclaim parity with India in that region. It may make the country a hub of the military-industrial complex, creating a strategic challenge for India.

The Gulf's growing security dependence on Pakistan also helps Islamabad to wash away the taint of terrorism, dodgy financial practices and drug running, earning it plaudits from Beijing and Washington. All these developments may embolden GHQ Rawalpindi to revive terrorism in India, notwithstanding New Delhi's threat of retaliation, which, if it happens, may afford Pakistan a chance to conflate a fresh false narrative about a military success.

The recent Pakistani defence salesmanship

scoops should prompt us to ask how this neighbour can upstage us in our backyard? While the Pakistani economy and manufacturing are a tenth and a thirteenth of India's, respectively, thanks to extensive joint ventures with China and Türkiye, its annual defence production has reached \$7 billion, compared to India's \$18 billion. Its sales pitch has been sophisticated and multi-pronged - leveraging Islamic solidarity, military-to-military links, and aggressive pricing.

Unlike India, Pakistan's defence exports and military establishment do not work in silos. Last December, Munir personally visited Benghazi to consummate the deal with Saddam Haftar. Similarly, the PAF chief led the negotiations with Saudi Arabia and SAF. Earlier, Islamabad supplied around \$400 million of ammunition to Ukraine. While some may regard these deals as morally and legally questionable, GHQ Rawalpindi has single-mindedly pursued them regardless. Pakistan's gains may not be India's loss in material terms, but these, nevertheless, tilt the geopolitics in its favour.

## Steps for India

While India's defence exports have grown rapidly to stand at \$2.8 billion in 2024-25, Pakistan has shown that an asymptotic surge is achievable with greater endeavour and passion. As a more responsible and self-respecting country adhering to international law, India cannot replicate Pakistani tactics. Yet, India can leverage its indigenous defence industry more effectively for exports. India should prioritise defence exports for their financial and political spin-offs, focusing particularly on its friends in the neighbourhood and the Global South. As the world's third-largest crude importer, India can leverage its buying power to persuade its oil suppliers to redress the huge trade imbalance by procuring Indian weapon systems.

Similarly, India has sizable aid programmes and credit lines with several countries, which could be utilised to lubricate such arms deals. It could create a dedicated, nimble defence export promotion organisation embedded with the stakeholders concerned, such as the public and private defence producers, relevant experts, including those from IT and Artificial Intelligence, pertinent Ministries and funding institutions.

Such an organisation should aggressively market its defence products at various international exhibitions and bilateral events and should be empowered to negotiate and conclude deals autonomously with minimum bureaucratic controls. Only then would India have a fighting chance to tilt the current highly skewed balance of defence trade. India is currently the world's second-largest arms importer and ranks low among the top 25 defence exporters. The difference between the two ranks needs to be bridged.

- **Pakistani Chief of Defence Forces Asim Munir met with Eastern Libyan State President Khalifa Haftar – believed to be the first meeting between two self-styled Field Marshals.**
- **They reportedly finalised a deal to supply Pakistani arms worth \$4.6 billion – the largest such deal ever by Islamabad – to the Benghazi-based Libyan National Army (LNA) headed by the 82-year-old warlord.**
- **Pakistan has also been chasing a similar opportunity in Sudan, another Arab country afflicted by civil war for the past three years.**
- **It claims to have already supplied JF-17s to Azerbaijan, Myanmar and Nigeria, and has offered them to Bangladesh.**

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Thank You!

