

May 2025

INDIA'S DEFENCE TRANSFORMATION THROUGH INDIGENOUS INNOVATION

(A Decade of Aatmanirbhar Defence)



Dr. Shakil Bhat

CONTENTS

	EXECUTIVE SUMMARY	3
1.	INTRODUCTION & OBJECTIVES	5
2.	DATA INSIGHTS-KEY DEFENCE SECTOR TRENDS	7
3.	THEMATIC ANALYSIS	20
4.	CASE STUDY: OPERATION SINDOOR – PROVING INDIGENOUS CAPABILITIES	29
5.	MAJOR POLICY REFORMS SINCE 2014	34
6.	COMPARATIVE REGIONAL AND GLOBAL CONTEXT	38
7.	RECOMMENDATIONS	43
8.	CONCLUSION	47
	REFERENCES	49

Executive Summary

India's defence sector has undergone a strategic transformation since 2014, marked by a strong push for indigenous production and self-reliance under the ***Aatmanirbhar Bharat Abhiyan (Self-reliant India Initiative)***. This paper provides a data-driven analysis of trends in defence expenditure, industry performance, and modernization initiatives and outlines recommendations to further bolster India's national security and regional influence. In just over a decade, India has dramatically increased its defence spending and embraced innovation to unprecedented levels. The defence budget has risen **from ₹2.53 lakh crore in 2013-14 to ₹6.81 lakh crore in 2025-26**, reflecting a relentless drive to modernize the armed forces and upgrade military infrastructure. This financial commitment – coupled with strategic reforms and greater private-sector involvement – has fueled a surge in indigenous defence manufacturing. **Annual defence production has more than tripled**, reaching a record **₹1.27 lakh crore in 2023-24**. Defence public-sector units (like Hindustan Aeronautics Limited and Bharat Electronics Limited) are thriving, investor confidence is at an all-time high, and India is rapidly evolving from a buyer to a builder of military hardware. The result is a bold new ecosystem where “Make in India” is not just a slogan but a reality on the battlefield, powering everything from warships and fighter jets to artillery and electronics made at home.

Equally transformative is India's focus on innovation and indigenization. The government has steadily increased Research & Development (R&D) investment – raising the Defence Research and Development Organization (DRDO) budget and funding homegrown tech – while launching initiatives such as Innovation for Defence Excellence (iDEX) and Technological Development Fund (TDF) to incubate defence startups and Micro, Small, and Medium Enterprises (MSMEs). This push for self-reliance (the *Aatmanirbhar Bharat Initiative*) is already yielding cutting-edge systems: **The Integrated Air Command & Control System (IACCS)** and the **Army's Akashteer** air defence network are operational, alongside new indigenously-developed weapons like the **Bhargavastra counter-drone missile**. Indigenization in defence procurement has hit historic highs, with 75% of the 2023–24 acquisition budget earmarked for domestic industry. The Indian Army leads this shift, aided by import bans on over 500 items and a Strategic Partnership model that pairs Indian firms with global Original Equipment Manufacturers (OEMs) for advanced projects. Meanwhile, defence exports have **surged nearly thirty-fold** over the past decade, as advanced Indian-made systems find buyers in more than 100 countries. India today stands on the cusp of becoming a global defence powerhouse – the culmination of an ambitious journey of growth, technological advancement, and strategic vision that promises **lasting benefits** for national security, and elevates India's stature on the world stage.

1. INTRODUCTION & OBJECTIVES

India's security landscape and defence sector have evolved rapidly in the past decade. Since 2014, the government has pursued a strategy to build an *Aatmanirbhar* (Self-reliant) defence ecosystem. The aim is to reduce import dependence and develop indigenous capabilities to safeguard national sovereignty while asserting India's role as a net security provider in the region. This analytical document begins by reviewing recent trends and then lays out key findings and policy recommendations for sustaining this transformation.

This analytical document aims to:

- ➔ **Analyze key trends** in defence expenditures, procurement patterns, industry performance, and military capabilities using data-driven insights. By examining budget allocations, R&D spend, (Defence Public Sector Undertakings) DPSU turnovers, Indigenous vs. Foreign procurement, and export values.
- ➔ **Emphasize the strategic themes** underpinning India's defence posture, including the impact of **Make in India** and **Aatmanirbhar Bharat Initiatives** on defence production, the development and deployment of **indigenous defence technologies**, India's growing *regional dominance in South Asia* and leadership in the

Global South, and the strengthening performance of Indian defence companies.

- ➔ **Review key modernization policies (post-2014)** introduced by the Narendra Modi government – such as new procurement procedures, innovation programs, defence industrial corridors, and institutional reforms – and assess their contributions to defence preparedness and self-reliance.
- ➔ **Showcase a recent indigenous success story** (*Operation Sindoor, 2025*) to illustrate how home-grown capabilities have been battle-tested with real-world impact, and how such successes correlate with increased confidence (e.g., rising defence stock indices, export interest in Indian weaponry).
- ➔ **Provide actionable policy recommendations** that support the narrative of a rising, self-reliant India. These recommendations highlight how indigenous technology benefits national security and regional influence, and propose continuity and enhancements to current policies to achieve future modernization goals.

2. DATA INSIGHTS-KEY DEFENCE SECTOR TRENDS

To ground the analysis in evidence, this section presents **data-driven insights** across several critical dimensions of India's defence sector. Each sub-section corresponds to a key metric, accompanied by an explanation and a visual chart illustrating the trend. All data are drawn from official budget documents, parliamentary reports, and reputable analyses to ensure accuracy and credibility.

- ➔ **Defence Budget: Revenue vs. Capital Expenditure:** *Figure 1* illustrates the growth of the MoD's budget over 15 years and the evolving split between revenue and capital components. Over this period, India's defence budget expanded substantially from approximately ₹1.64 lakh crore in 2011-12 to **₹6.81 lakh crore in 2025-26**, reflecting the nation's commitment to funding its armed forces amidst evolving security challenges. Notably, capital outlay (modernization) allocations have increased in absolute terms – from approximately ₹69,200 crore in 2011-12 to **₹1.80 lakh crore in 2025-26 BE**. The government's focus since 2014 has been to **increase the modernization share** – a trend visible in the steady rise of capital outlay in the 2020s, even as large pension bills (e.g., due to OROP and pay commission arrears) put pressure on resources.

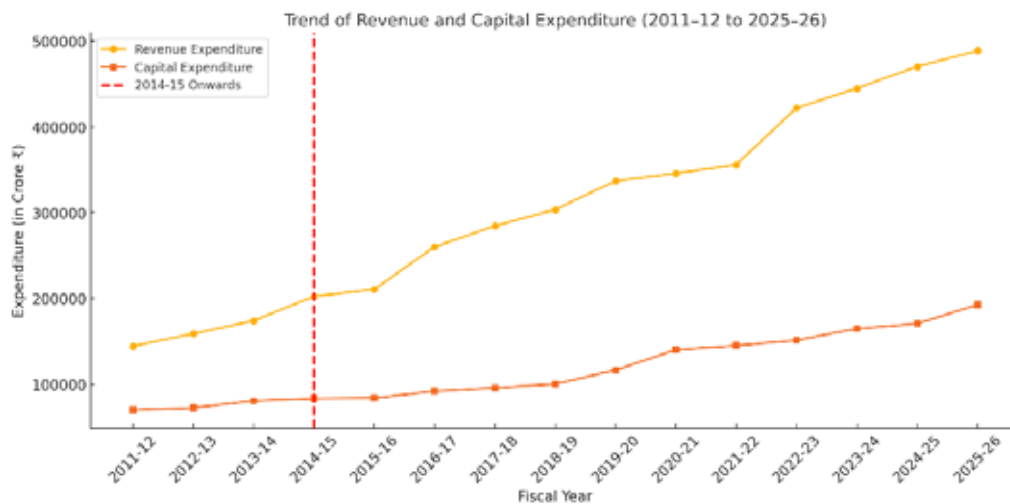


Figure 1: MoD Budget Growth (2011–2026) – Revenue vs Capital Expenditure.

This trend underscores the balance India must strike between sustaining its personnel and investing in new capabilities. The upward trajectory in capital spending in recent budgets indicates improved funding for the acquisition of new platforms, aligning with policy goals to modernize the military. However, it also highlights the fiscal challenge posed by manpower costs, which will need continued management (through measures like the Agnipath scheme) to free up funds for future technology and hardware investments.

➔ **Defence R&D Expenditure:** *Figure 2* depicts India's Research & Development spending over two decades in defence. Defence R&D is primarily driven by the Defence Research and Development Organisation's budget. From the early 2000s to mid-2010s, India's R&D spending

hovered around 5–6% of the defence budget, and in absolute terms grew from only a few thousand crores in 2003–04 to about ₹14,818 crore by 2010–11. Under the current government, R&D allocations have seen steady increases. For instance, **allocation of the Defence Research and Development Organisation (DRDO) rose from ₹9,298 crore in 2013–14 to ₹23,885.6 crore in 2024–25, and further to ₹26,817 crore in 2025–26.** Despite this growth, R&D still accounts for only approximately 2–3% of the total defence budget, which lags behind countries that are leaders in defence technology. Recognizing this, the government launched initiatives to amplify defence R&D impact. The **Technology Development Fund (TDF)** (started in 2016) and **Innovations for Defence Excellence (iDEX)** (launched in 2018) are engaging startups, MSMEs, and academia in defence innovation. Under TDF, **78 development projects** have been sanctioned (₹333 crore committed as of 2024), and under iDEX, around **120 startups** are being funded and mentored to develop niche technologies (drones, AI, robotics, advanced materials, etc.). The DRDO has also opened up hundreds of patents for free civilian use and is partnering with private industry for development-cum-production of certain systems.

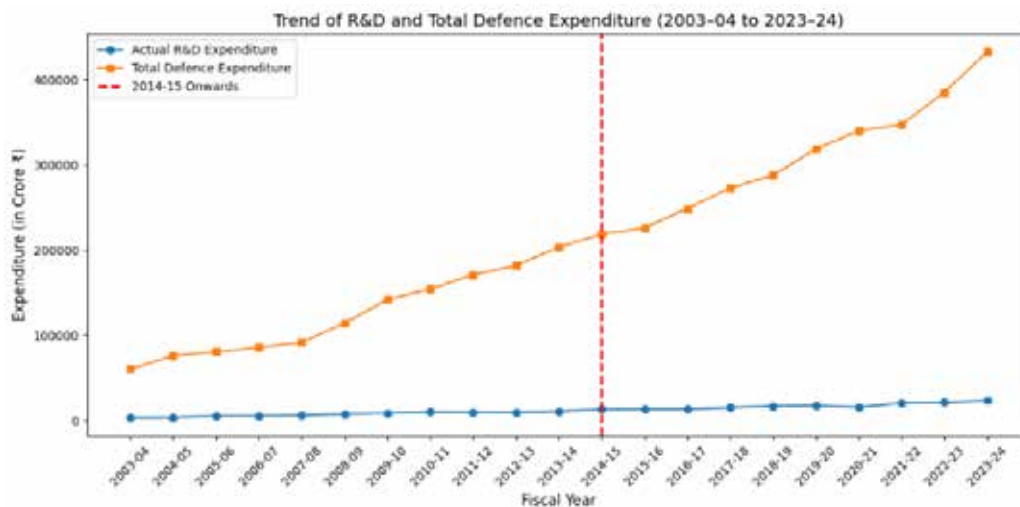


Figure 2: Defence R&D Spending vs. Total Defence Budget (2003–2025).

The data show a clear positive trend in R&D investment, laying the groundwork for indigenous systems, like missiles, fighter aircraft, radar-electronics, and cyber capabilities. This has enabled successes such as the **Agni-V ICBM**, an anti-satellite (A-SAT) weapon test (Mission Shakti), the Astra beyond-visual-range Air-to-Air Missiles (AAM), and a range of UAVs, all of which were developed indigenously. However, to achieve true self-reliance in cutting-edge technologies (jet engines, semiconductor chips, AI-driven systems, quantum technologies, etc.), experts widely recommend **further increasing R&D spending** – moving toward 8–10% of the defence budget – and improving project execution to avoid time and cost overruns. Overall, India is investing in future defence technologies like never before, but continued momentum and structural reforms are needed to translate this investment into world-class capabilities.

➔ **Turnover of Defence PSUs:** India's legacy Defence Public Sector Undertakings (DPSUs) – e.g., Hindustan Aeronautics Ltd (HAL), Bharat Electronics Ltd. (BEL), Bharat Dynamics Ltd. (BDL), Mazagon Dock Shipbuilders Ltd. (MDL), and others – form the backbone of indigenous defence production. The combined turnover of these DPSUs has increased significantly (*Figure 3*). For example, **HAL's annual revenue grew from roughly ₹13,000–15,000 crore in 2009–10 to ₹29,810 crore in FY 2023–24**, its highest ever. Similarly, **BEL's production value rose from around ₹5,000 crore in 2009–10 to ₹19,700 crore in FY 2023–24**, a record high. Other PSUs, such as BDL (which produces missiles) and GRSE (which builds naval vessels), have also expanded output, benefiting from a surge in orders for indigenous systems. The trendline shows moderate growth in the early 2010s, followed by **accelerated growth post-2015**, coinciding with *Make in India* efforts and big-ticket acquisitions (fighter aircraft, warships, air defence systems, etc.) being routed to these DPSUs.

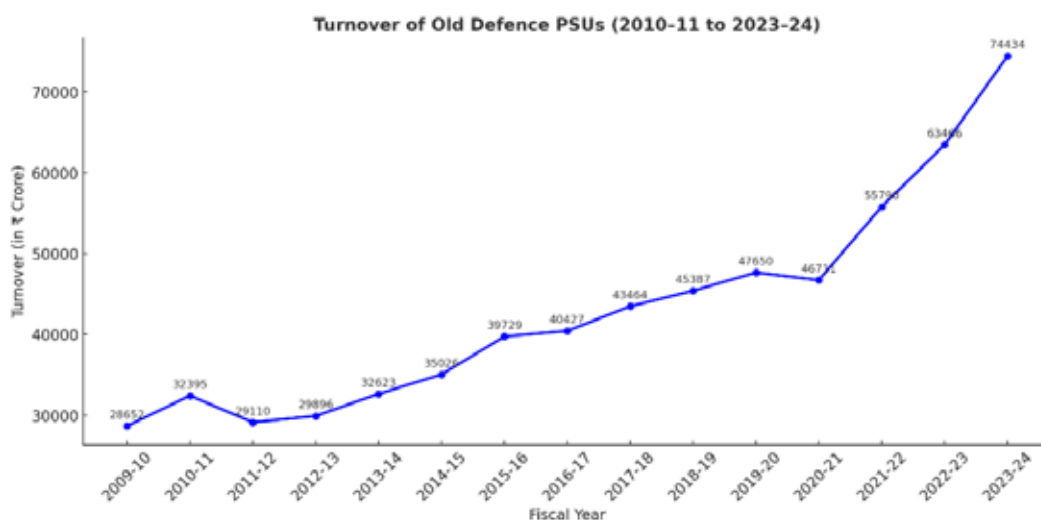


Figure 3: Performance of Key Defence PSUs (2010–2024) – Turnover/ Revenue Growth.

The robust growth of DPSUs has both strategic and economic significance. These companies have benefitted from greater operational autonomy and a mandate to compete globally. Reforms such as the **2021 corporatization of the Ordnance Factory Board (OFB)** – splitting the old OFB into 7 new DPSUs specialized by product – have aimed to improve efficiency and accountability. Early signs are positive: the new corporatized entities are seeking export orders and partnerships, a shift from the earlier insular culture. DPSUs have also been encouraged to raise capital and form joint ventures, and to benchmark against private sector performance. This growth has boosted investor confidence – many DPSU stocks have seen multi-fold

appreciation, with HAL and others attaining *Navratna/Maharatna* status. India's defence PSUs are evolving into globally competitive entities that contribute to military readiness, economic growth (through local manufacturing and jobs), and even exports (HAL and BEL now export to friendly countries). Their performance underscores the success of policies to invigorate public-sector defence manufacturers as engines of self-reliance.

➔ **Service-wise Indigenous vs. Foreign Procurement:** *Figure 4* compares the Indian Army, Navy, and Air Force in terms of their capital procurement from indigenous vs. foreign sources over time. A clear trend is the **increasing indigenization across all services**, though at different paces. In the early 2010s, all three services relied heavily on imports – well over 50% of their capital spending was on foreign-origin equipment. The Indian Air Force (IAF) traditionally had the highest import content (due to big-ticket foreign aircraft and systems), the Navy somewhat lower, and the Army the least import-dependent (many of its guns, vehicles, etc. were license-produced in India or otherwise locally sourced). By **2021–22**, this gap had shifted decisively in favor of indigenous procurement. The **Army sourced about 82.6% of its equipment spending from Indian suppliers** (only approximately 17% on imports), reflecting the successful induction of

indigenous artillery, air defence systems, and tanks, and a relative pause in foreign purchases. The **Navy** also ramped up domestic sourcing to roughly 70% in 2021-22, thanks to the induction of Indian-built vessels (aircraft carrier INS *Vikrant*, destroyers, submarines) and systems like indigenous sonar and missiles. The **Air Force**, while still dependent on foreign fighters and transports, saw indigenous content rise to an estimated 55-60% by value in 2021-22, with the introduction of platforms like the Tejas fighter, Akash surface-to-air missiles, Astra BVRAAMs, etc. These improvements stem from deliberate policy mandates – e.g., the MoD's negative import lists that bar 400+ items from being imported, forcing the services to find or foster domestic alternatives,

and the **Strategic Partnership (SP) model** which encourages big projects (like new submarines and fighter aircraft lines) to be executed in India with foreign technology tie-ups.

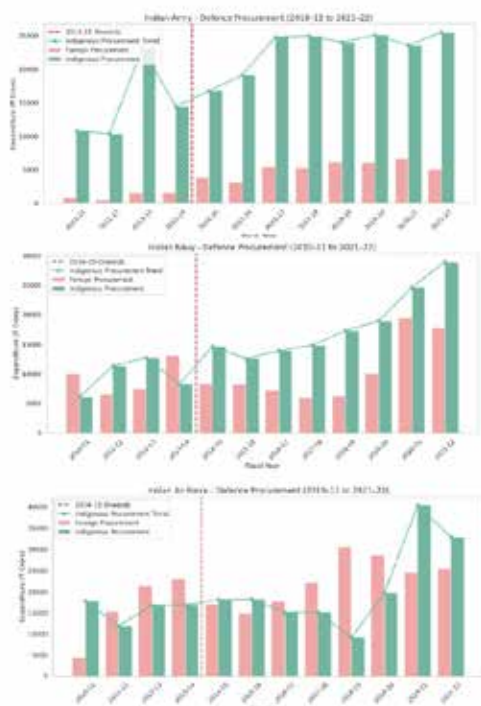


Figure 4: Rising Indigenous Procurement by Service- Army, Navy, Air Force 9 (Trend)

This highlights that **all wings of the Armed Forces are increasingly “buying Indian.”** The Army’s indigenization level is at a historic high, demonstrating self-reliance in various categories (rifles, artillery, armored vehicles, etc.). The Navy’s focus on local shipbuilding – from aircraft carriers to frigates and support vessels – has made it a leader in indigenization (building on decades-old domestic shipyard capabilities). The Air Force faces the toughest challenge, given the cutting-edge nature of combat aviation, but it has made strides with the Tejas program and joint ventures. It is looking ahead to platforms like the fifth-generation Advanced Medium Combat Aircraft (AMCA) fighter. **The overarching takeaway is that Aatmanirbhar Bharat in defence is not just a slogan, but is being internalized by all three services.** To maintain momentum, continued efforts are needed – especially for high-tech areas like jet engines, avionics, and sensors for the IAF, and specific specialized needs of the Navy and Army, where foreign dependence still exists. The progress so far, however, underlines a broad-based shift toward self-reliance across the Army, Navy, and Air Force.



Overall Indigenous vs. Foreign Procurement

Trend: *The procurement trend* indicates the total defence capital procurement split by domestic vs foreign sources over select years (2010-11 to 2023-24), capturing the aggregate shift in India’s sourcing. In 2014–15, about **39.4% of**

India's defence procurement by value was from foreign vendors, meaning roughly 60.6% was indigenous (Figure 5). The foreign share dropped to around 37% by 2015–16, fluctuated around 38–40% in 2016–2018, but then spiked to **48.7% foreign in 2018–19** (due to a few major foreign deals like the Rafale fighter jets and S-400 SAM systems during that period). Since 2019, a marked change is evident: the foreign share fell to approximately 46% in 2019–20 and continued to decline. By 2020–21, the MoD set a goal of **₹52,000 crore domestic procurement** (ultimately achieving approximately ₹51,000 crore, about 58% of that year's capital budget). In 2021–22, as noted, 65.5% of capital procurement was from indigenous sources. For 2022–23, the target was 68%, and for **2023–24, 75% of the ₹1.62 lakh crore capital budget (₹1.22 lakh crore) was earmarked for domestic industry**. These figures show a decisive year-on-year increase in domestic procurement mandated by policy.

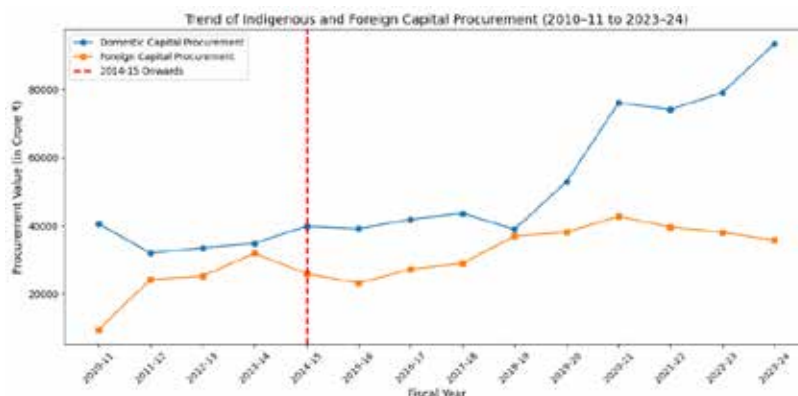


Figure 5: Domestic vs Foreign Capital Procurement (2010–2024 Trend).

The overall trend confirms that India is steadily moving away from import dependency in defence acquisitions. Government mandates and reforms have institutionalized this change – from tweaking procurement categories to favor Indian-made systems, to issuing yearly targets for indigenous content. The benefits are multifold: a larger share of the defence budget now recirculates within India's economy, supporting local industry and employment, and India becomes less vulnerable to external supply disruptions or foreign conditions affecting military supplies. However, achieving over approximately 80% indigenous content will require further strengthening of domestic industrial capacity and quality. It is notable that this indigenization drive has coincided with India's emergence as the world's **top arms importer being curtailed** – while India was still among the largest importers in 2018–22 (accounting for approximately 9.8% of global arms imports), its volume of imports has started to decrease due to local production. If current trends hold, India may soon drop in the global import rankings, a strategic success of the self-reliance policy.

- ➡ **Value of Defence Exports:** India's arms exports were negligible in **2013–14, with export value hovering around ₹686 crore**. With a policy thrust on export promotion (simplifying export controls, extending Lines of Credit to friendly countries to buy Indian arms, and energetic marketing

by DPSUs/private firms at global expos), the numbers climbed sharply in the latter half of the 2010s. By **2017–18, exports crossed ₹4,682 crore** (Figure 6) and continued upward. In FY 2019–20, exports reached approximately **₹9,115 crore**, doubling in just a couple of years. Even the COVID-19 pandemic didn't halt progress – India still exported **₹8,434 crore** in 2020–21 and then **₹12,815 crore in 2021–22**. The real boom came in the last two years: **₹15,920 crore in 2022–23** and a record **₹21,083 crore in 2023–24**, reflecting approximately 32% one-year growth. For 2024–25, the export value has already touched **₹23,622 crore** (about US\$2.8 billion).

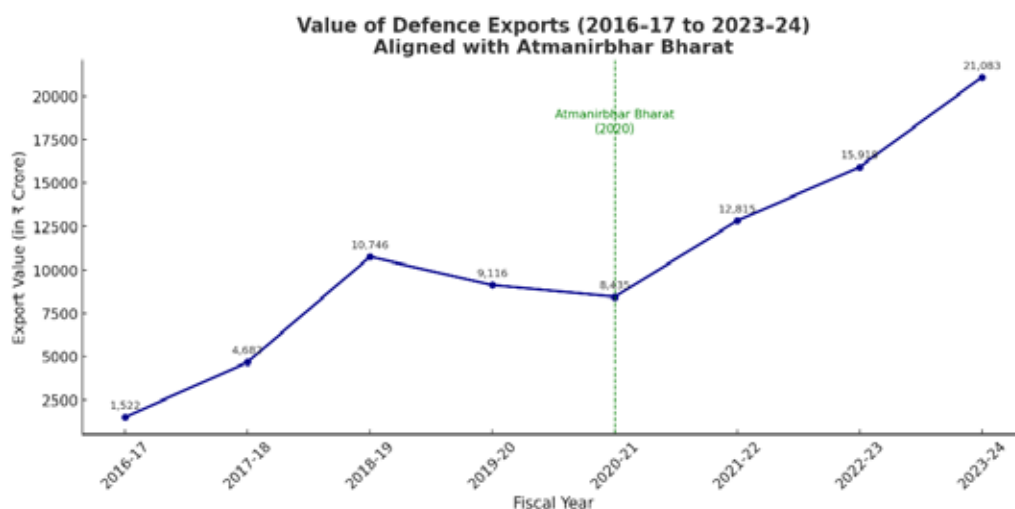


Figure 6: India's Defence Exports Growth (2016–2024).

- ➔ This **30-fold increase** in a decade firmly establishes India as a **rising defence exporter**. The range of export items has diversified – from indigenous patrol vessels, surveillance radars,

and artillery guns to aviation platforms (like Dornier-228 aircraft and ALH helicopters), missile systems (e.g., BrahMos, which is co-developed with Russia and now exported to the Philippines), and personal protective equipment. Notably, many buyers are nations in Asia, Africa, and Latin America – underscoring India's growing role as an arms supplier in the developing world (often providing a more affordable alternative to Western arms). India's defence exports now span **over 100 countries**, enhancing its global credibility. The government's target of ₹35,000–₹40,000 crore in annual exports by 2025 and ₹50,000 crore by 2027 appears ambitious but within reach if the current growth trajectory continues. Defence exports not only earn revenue and foreign exchange, but also strengthen strategic partnerships – every export of Indian defence gear creates long-term supply, training, and maintenance relationships with the buyer nation. In essence, India's emergence as an **arms exporter** complements its strategic narrative of self-reliance, positioning it as a net security provider to friendly countries.

3. THEMATIC ANALYSIS

Building on the data above, this section investigates **key themes** shaping India's defence sector narrative and policy direction. These themes illustrate not just statistics, but the strategic intent and qualitative outcomes of India's defence transformation in recent years.

a. Make in India and Aatmanirbhar Bharat in Defence

One cornerstone theme is the government's "**Make in India**" initiative as applied to defence production, and the broader doctrine of **Aatmanirbhar Bharat** (self-reliant India). Since 2014, there has been a paradigm shift in procurement policy – moving from an importer-first approach to a **domestic industry-first**. Several facets highlight this:

- ➔ **Policy Prioritization:** All recent procurement frameworks – the Defence Procurement Procedure (DPP 2016) and the current **Defence Acquisition Procedure (DAP 2020)** – explicitly prioritize buying Indian-made systems. Under DAP 2020's acquisition categories, the highest preference is given to "**Buy Indian (IDDM)**" – Indigenously Designed, Developed, and Manufactured equipment – which requires more than 50% indigenous content. Other categories

like *Buy and Make (Indian), Make*, etc., similarly encourage involving Indian firms at various stages. Notably, DAP 2020 introduced new avenues, such as the “**Buy (Global – Manufacture in India)**”, which allows procurement of foreign equipment *only if* the foreign vendor sets up local production in India. In essence, the policy framework itself now *tilts the field* toward domestic producers. DAP 2020 also institutionalized innovations like leasing (a cost-effective way to obtain capability without outright purchase) and faster acquisition for critical needs.

Impact: These policy changes have had a direct effect: today, when the services need a new capability, the default consideration is “what can we source or make in India?” The high indigenous share of capital spending in recent budgets is a direct result of these policy priorities. Additionally, by streamlining and clarifying procurement procedures, DAP aims to reduce bureaucratic delays and improve transparency in defence deals – making Indian acquisitions more efficient and less prone to corruption scandals that plagued some earlier purchases.

- ➡ **Domestic Production Mandates:** Beyond just policy language, the government has used mandates to drive local production. For example, specific percentage targets of the capital budget for domestic procurement have been declared

each year (as noted, 75% in 2023–24). Moreover, the MoD has published **negative import lists** (renamed *Positive Indigenisation Lists*) that ban imports of certain weapons/equipment beyond set dates. Three such lists (as of 2023) cover 411 items ranging from small arms and basic trainers to larger systems like artillery, missiles, and ships. This strategy essentially guarantees a future market for Indian industry for those items. The Ministry has also reserved a portion of orders for **domestic private industry and MSMEs** (for instance, of the 75% domestic capital budget in 2023–24, a quarter was earmarked for private sector contracts).

Impact: These mandates send a clear signal to foreign OEMs that if they want access to the Indian market, partnering with Indian firms is necessary. They also reassure Indian companies of sustained demand, encouraging them to invest in capacity and R&D. Over time, such measures are fostering a robust defence industrial base where Indian firms – from large conglomerates to innovative startups – are participating in projects that were once the exclusive domain of DPSUs or foreign suppliers.

- ➔ **Indigenization of Subsystems:** An often less-publicized aspect of Aatmanirbhar Bharat is the drive to indigenize components and subsystems, not just full platforms. The **SRIJAN portal-**

(launched in 2020) is a public database where DPSUs/OFB list components that they currently import, inviting Indian vendors to design or supply them domestically. Over *14,000 imported line items have been indigenized* via SRIJAN as of early 2025, according to the MoD. Similarly, the services have identified spares and consumables for indigenization under programs like the “Indian Naval Indigenisation Plan” and the IAF’s “Maintenance Indigenisation Program”.

Impact: This addresses the dependency on foreign original equipment manufacturers (OEMs) for spares and reduces lifetime costs. It also broadens the base of the defence industry by bringing in smaller manufacturers and tech firms to supply parts. An example outcome: As of 2023, over *3,000 components* on the negative import list had already been indigenized in India, including critical technologies such as night-vision devices, specific avionics, tank parts, etc.

In summary, the Make in India push in defence has fundamentally shifted the ecosystem. Indian companies – both public and private – have been placed at the center of fulfillment for the armed forces’ needs. This is evident in contract data: for instance, in 2021–22, the MoD signed **264 contracts, of which 88% (232 contracts) were with Indian vendors-** (including 118 with private industry). A decade ago, many of those would have been

with foreign suppliers. The transformation is ongoing, but the trajectory is clearly toward an armed forces equipped predominantly with Indian-made weapons in the near future.

b. India's Regional Dominance and Global South Leadership

With growing indigenous capabilities, India's defence posture has translated into greater **regional influence** and a leadership role among developing nations. This theme explores how India's military rise, underpinned by self-reliance, is shaping perceptions and relationships regionally and globally:

- ➔ **South Asia's Predominant Power:** India has long been the largest military power in South Asia, but the gap is now widening as India modernizes rapidly. India's defence budget (\$80 billion) dwarfs those of Pakistan (\$10–12 billion) and others in the neighborhood, and its investment in new technologies (missile defences, cyber, space, etc.) gives it capabilities no neighbor can match. This growing hard power has allowed India to act as a **net security provider** in the region. For example, India has been able to extend naval surveillance support and training to countries such as Bangladesh, Sri Lanka, and the Maldives, helping to protect the Indian Ocean Region (IOR). In Himalayan border crises (such as Doklam 2017

or the more recent Ladakh standoff with China 2020–21), India's improved military logistics and infrastructure, much of it indigenously built (roads, bridges, transports like the C-17 and C-130J acquired in the 2010s, and now C-295s being assembled in India), allowed it to sustain lengthy deployments and check adversaries effectively. Regionally, smaller countries are increasingly viewing India as the principal security anchor – whether for HADR (Humanitarian Assistance and Disaster Relief) operations, counter-terror coordination, or peacekeeping. Under the Modi doctrine, India has also become more willing to conduct **cross-border strikes** in response to terrorism (e.g., the 2016 surgical strikes, the 2019 Balakot strike, and the larger 2025 #Operation Sindoor). These actions, made possible by India's enhanced capabilities, reinforce its image as *the* dominant regional power that can enforce red lines.

- ➡ **Leading Security Partner in the Global South:** India's defence diplomatic outreach has intensified, positioning India as a go-to security partner for many developing nations. India has training programs for military officers from **over 40 African and Asian countries** at its premier institutions (e.g., National Defence Academy, Indian Military Academy, National Defence

College). It conducts joint exercises with almost all major countries, but notably with many small nations who rarely get such opportunities – for instance, **Exercise MILAN** has grown into an extensive naval exercise involving Southeast Asian and African navies, fostering camaraderie. India also regularly **donates or sells equipment on easy terms** to partners: from patrol boats to Mauritius and Seychelles, to helicopters to Afghanistan (in the past), to artillery guns to a few African states. These efforts increase these countries' dependence on and familiarity with India's military, thereby expanding India's influence. India's peacekeeping contributions under the UN (one of the largest troop contributors globally) further cement its role as a security provider – and notably, India equips many of its UN peacekeepers with Indian-made gear, subtly advertising its defence products in conflict zones. All of this aligns with India's narrative of being the voice and armory of the Global South, distinct from great powers who intervene for self-interest.



Defence Exports and Global South Allies:

India's rise as an arms exporter particularly benefits partners in the developing world who seek affordable, reliable alternatives to Western or Chinese arms. By exporting Tejas fighters

(prospectively to countries like Malaysia or Argentina), ALH Dhruv helicopters, BrahMos missiles (to the Philippines, and interest from others), artillery, radars, and coastal patrol craft, India is equipping friendly nations to better handle their security challenges. This not only earns goodwill but also creates interoperability and standardization with Indian systems, which could be strategically useful (e.g., sharing of spare parts, training, and doctrine). For the Global South, India positions itself as a partner who has no strings attached – contrasting with some big powers' conditionalities. Politically, India has used forums like the African Union, ASEAN, and BRICS to champion the idea that a strong, self-reliant India is an asset for developing countries, not a threat. When India showcases indigenous defence achievements (like Operation Sindoor's success using Indian weapons, or the launch of INS Vikrant) to foreign delegations, it is also conveying a message: *we did it, and so can you – and we can help*. This resonates especially in Africa and Latin America, where many countries have been import-dependent and now look to India's model for inspiration.

- ➡ **Counterbalance in Indo-Pacific:** In the wider Indo-Pacific strategic context, India's growing defence capabilities are seen as a stabilizing

factor in the face of China's assertiveness. While India is not part of any formal military alliance, it is a key player in coalitions like the **Quad** (with the US, Japan, and Australia) and has deepened defence ties with powers like France and Israel. India's ability to secure the Indian Ocean – through initiatives like SAGAR (*Security and Growth for All in the Region*) – and contribute to keeping sea lanes open (anti-piracy ops, maritime domain awareness with partners) is welcomed by many nations. Unlike China's military rise, which has unsettled its neighbors, India's military rise is seen by many smaller Asian countries as a positive counterweight. For example, Southeast Asian nations have engaged India in maritime exercises to hedge against Chinese pressure. India's **Information Fusion Centre for the Indian Ocean Region** (IFC-IOR) in Gurgaon shares maritime data with littoral states, enhancing collective security. Thus, India's defence capabilities, increasingly home-grown, are a key element of the emerging balance of power in the Indo-Pacific. The narrative promoted by New Delhi is that *a stronger India contributes to regional stability* – a message that seems to be gaining acceptance.

India's defence transformation is not taking place in isolation; it is already influencing the geopolitical

environment. India is leveraging its military and industrial strength to position itself as a responsible power that can be the first responder in crises, a reliable arms supplier, and a voice for the Global South in global security debates. This integration of defence prowess with diplomatic outreach enhances India's soft power as well, portraying it as a nation that, through self-reliance, is assuming greater responsibility in the international system.

4. CASE STUDY: OPERATION SINDOOR – PROVING INDIGENOUS CAPABILITIES

A defining moment underscoring the convergence of all the above themes is **Operation Sindoor (May 2025)**. This recent military operation serves as a case study in how indigenous capability, when put to the test, can yield strategic success and shape narratives:

Background: On April 22, 2025, a Pakistan-sponsored terrorist attack in Pahalgam (Jammu & Kashmir) killed 26 civilians. In response, India launched **Operation Sindoor** on May 7, 2025. This was a series of coordinated **deep strikes** on terror infrastructure inside Pakistan, including high-value targets in Bahawalpur (Jaish-e-Mohammed headquarters) and Muridke (Lashkar-e-Taiba HQ), as well as multiple launch pads in Pakistan-occupied Kashmir. The operation, which lasted four days, was described by observers as a “near-war” scenario given its scale and

the mobilization on both sides. It involved the Indian Army, Air Force, and Navy in a joint punitive campaign – the first of its kind, showcasing India's preemptive strike doctrine beyond surgical strikes.

Indigenous Weapons in Action: What sets Operation Sindoor apart is the **prominent role of indigenous weapons and systems** in the mission's success. India deployed a mix of arsenal from various origins (legacy Russian, French and Israeli equipment were involved too), but the standout performers were **Indian-made**. The entire operation was orchestrated using the indigenously-built **Integrated Air Command and Control System (IACCS)** – essentially the nerve center for air and missile defence operations across the country. The IACCS linked data from Indian-made ground radars, airborne warning systems, and satellite feeds to provide a real-time picture, enabling swift decision-making. For air defence, the **Akash Surface-to-Air Missile (SAM)** system (developed by DRDO and produced by BEL) proved crucial. During the operation, Pakistan launched several retaliatory drone and missile strikes at Indian targets. The Akash batteries, positioned in forward areas, intercepted and destroyed multiple incoming **Pakistani drones and missiles**, preventing any significant damage to Indian civilian or military areas. This was a landmark: it marked the first combat use of India's indigenous SAMs against live targets, and they performed successfully (90% interception rate). On the offensive front, India's

strikes heavily featured the **BrahMos supersonic cruise missile** – a product of India's joint venture with Russia but built mainly in India. Units of the Army and Navy launched BrahMos missiles against terrorist camps and Pakistani military sites with pinpoint precision and devastating effect. The high speed (Mach 2.8 plus) of BrahMos made it nearly impossible for Pakistani air defences to intercept. In addition, India employed other indigenous systems: the new **Akashteer**, an electronic warfare system to jam Pakistani communications and radar (this system, developed by DRDO, was deployed for the first time and reportedly blinded enemy surveillance in sectors of the LoC); and indigenous armed drones for real-time reconnaissance and even kinetic strikes on smaller targets. In summary, while India used some imported platforms, the backbone of the operation's effectiveness was Indian technology.

Outcome and Significance (proof of concept):

Operation Sindoor achieved its tactical objectives – multiple terror camps were eliminated, and Pakistani forces attempting counter-attacks were decisively repelled. But strategically, it **validated India's indigenous military technology in combat**. As *India Today* reported in an analysis: "*From Akashteer to BrahMos, indigenous weapons platforms proved a super hit. Op Sindoor proved that India's defence industry is battle-ready.*" The operation also exposed the limits of Pakistan's largely foreign-sourced arsenal when faced

with Indian systems – for instance, Pakistan’s much-touted Chinese-made drones were shot down by Akash, and their older F-16 fighters (US-made) struggled to penetrate Indian air defences. Prime Minister Modi, in his address after the operation, highlighted that **India’s modern warfare strength was on full display and that ‘Made in India’ defence equipment had proven itself in battle**. He emphasized India’s dominance in new-age warfare and signaled that it’s time for India to **lead in defence innovation** globally. Internationally, India’s swift and precise action drew mostly support or understanding, even from countries that usually urge restraint. This was helped by India’s diplomatic corps, who, in the aftermath, **formally briefed foreign defence attachés** from various countries about Operation Sindoor’s details, showcasing the precision strikes and indigenous tech performance. This diplomatic outreach served to consolidate international support (portraying the operation as counter-terrorism, which resonated globally), but also effectively acted as marketing for India’s defence products by demonstrating them in action (“battle-tested” label).

Strategic and Market Impact: The success of Operation Sindoor reverberated in multiple spheres. Regionally, it established a new **deterrence equation** – India showed that it can retaliate in a major way inside Pakistan without needing to rely on foreign weapons, thereby undercutting Pakistan’s assumption that outside pressure or lack of

capability would limit India. It also likely forced terrorist groups and their backers to rethink their calculus, at least in the short term. Domestically, the operation boosted public morale and validated years of investment in indigenous R&D. The armed forces gained confidence that in a high-intensity conflict, Indian equipment would not only hold its own but deliver results. In the **financial markets**, as mentioned, defence stocks rallied in the immediate aftermath – an indicator that investors anticipated increased orders and perhaps export inquiries for systems like Akash and BrahMos after their combat debut. Indeed, defence analysts noted that with indigenous systems now proven in combat against a peer adversary, *global interest in Indian weaponry is likely to rise*. Notably, shortly after the operation, several countries in Africa and Southeast Asia formally expressed interest in procuring the Akash SAM system – a direct outcome of seeing its performance. Likewise, BrahMos's successful use is expected to accelerate ongoing negotiations with countries like Indonesia and the UAE that have shown interest.

Operation Sindoor serves as a **microcosm of India's defence transformation**: it combined swift, decisive action with homegrown military technology, yielding both security gains and a powerful narrative of self-reliance. It demonstrated why indigenous capability is strategically valuable – India could execute a complex, multi-domain operation without external assistance or

worrying about depleting imported munitions stockpiles, since it was using Indian-made missiles and systems (with ample reserves and production lines inside India). This autonomy strengthens deterrence, as adversaries realize India's capabilities cannot be easily undercut by third-party pressure or sanctions. The operation's success also reinforces the arguments for continuing the policies that made it possible: sustained R&D investment, support to domestic industry, and political will to use decisive force when provoked.

5. MAJOR POLICY REFORMS SINCE 2014

Under Prime Minister Narendra Modi's administration, a suite of **defence modernization policies and reforms** has been launched since 2014 to overhaul legacy systems and promote indigenization.

- ➔ **Defence Acquisition Procedure (DAP 2020):** Replacing the earlier DPP, DAP 2020 is a comprehensive manual guiding all capital acquisitions. Notable features include: strong **Indigenous Content (IC) mandates** (e.g., a minimum of 50% IC for Buy Indian (IDDM) projects), a ban on importing certain sub-systems if an Indian alternative exists, more weight to "Make" projects, **simplified trial and testing procedures**, and the introduction of the "Buy (Global – Manufacture in India)" category that requires foreign suppliers to set up local

production lines. DAP also institutionalized leasing and encourages fast-track procurements for urgent needs, making acquisitions more responsive.

➔ **Innovations for Defence Excellence (iDEX):**

Launched in 2018, iDEX is a MoD initiative to involve **startups and MSMEs** in developing innovative defence solutions. Through the Defence Innovation Organisation (DIO), it runs Defence India Startup Challenges (DISC) where startups compete to solve specific military problems. Winners get funding (grants up to ₹1.5 crore) and mentorship to build prototypes, with the chance for the Services to induct their product.

➔ **Defence Industrial Corridors (DICs):** Announced in 2018, two industrial corridors were set up in **Uttar Pradesh** and **Tamil Nadu** to create defence manufacturing clusters. Each corridor offers tax and infrastructure incentives to attract companies and has nodes with common facilities (testing ranges, training, and R&D hubs). So far, investments worth several thousand crores have been committed by DPSUs and private firms in these corridors. Examples include a new BrahMos missile manufacturing unit in the Uttar Pradesh corridor and a drone testing center in the Tamil

Nadu corridor.

- ➔ **Corporatization of Ordnance Factory Board (OFB):** Implemented in 2021, this reform converted the monolithic OFB- (which ran 41 ordnance factories under a government department) into seven **government-owned corporate companies** grouped by product segments (munitions & explosives, vehicles, weapons, troop comfort items, etc.). These new DPSUs (e.g., Munitions India Ltd, Armoured Vehicles Nigam Ltd, etc.) now have commercial autonomy and are accountable for profits/losses.
- ➔ **Strategic Partnership Model (SPM):** Introduced in DPP 2016 and reinforced subsequently, the SP model allows Indian private companies to partner with foreign OEMs to build major defence platforms in India. Four key segments were initially identified: submarines, fighter aircraft, helicopters, and armoured vehicles. Under SPM, for example, the Navy's P-75I submarine project will have an Indian shipyard build submarines with technology transfer from a foreign collaborator; similarly, a new fighter jet line in India is envisioned via an Indian private firm and a foreign aerospace company.
- ➔ **DRDO Reforms:** Since 2014, DRDO has been pushed to align more closely with

the self-reliance mission. Initiatives include decentralizing development by involving industry as Development-cum-Production Partners in projects, setting ambitious missions in emerging tech (hypersonic weapons, quantum key distribution, and AI-based systems), and improving internal project monitoring after repeated criticism of delays. In 2020, DRDO took a significant step of identifying **108 systems** that it was developing and deciding to hand them over to industry for production, so that DRDO itself could refocus on *new research*. The government also raised the FDI limit in defence R&D to 74% via the automatic route to attract foreign research centers, and instituted awards and faster career progression to attract and retain top scientists in DRDO.

- ➡ **Miscellaneous Initiatives:** The Modi government also launched numerous supportive policies: the **Defence Production and Export Promotion Policy (DPEPP 2020)** which set targets (like \$5 billion exports by 2025) and laid out a roadmap for domestic production; the creation of the **SRIJAN portal** as mentioned for indigenization of imports (with thousands of items already indigenized by 2023), initiatives on **Artificial Intelligence in Defence** (an AI task force and integration of AI in military) and **Cyber Security**

(setting up a Defence Cyber Agency) to invest in cutting-edge tech; a revamped **Defence Testing Infrastructure Scheme (DTIS)** to set up standard testing facilities for aerospace and defence startups/companies; expansion of the **National Cadet Corps (NCC)** to instill discipline and skills among youth.

Collectively, these policies and reforms since 2014 constitute a **holistic approach to defence modernization** – addressing everything from procurement bottlenecks to production inefficiencies to innovation gaps and talent development. The consistent theme is leveraging India's strengths (skilled manpower, growing economy, IT prowess) to become self-sufficient in defence. The impact, as detailed earlier, is visible in increased indigenous production, reduced imports, and a more dynamic industrial base. The policy landscape also signals to the world that India is serious about shedding the tag of the world's top arms importer and intends to become a **major arms producer and exporter** in the coming decade.

6. COMPARATIVE REGIONAL AND GLOBAL CONTEXT

To put India's defence trajectory in perspective, this section provides a brief comparison with regional and global defence trends:

- ➡ **Global Military Spending Rank:** India consistently ranks among the **top 3-4 defence spenders** in the world, behind the US and China (and rivaling Russia's expenditure). In 2023, India's military spending – around \$81-82 billion – was the **fourth highest globally** and by far the largest in the Indo-Pacific after the US and China.
- ➡ **China and Pakistan Comparisons:** China, India's main strategic competitor, officially spends roughly 3-4 times what India does on defence (though true Chinese expenditures may be higher due to opacity). China also possesses a massive domestic defence industry and is a major arms exporter. This gap in absolute spending and capacity is significant and poses a long-term challenge for India. However, India's focus has been on **niche asymmetry and effective budgeting** to counter this – investing in strategic deterrents (like nuclear submarines, and Agni-V missiles) and leveraging partnerships (e.g., with the US, Japan, and Australia through the Quad, or bilaterally with France, Israel, etc.) to offset China's advantages. For instance, India's acquisition of Rafale fighters and S-400 SAMs added high-end capability relatively quickly to fill gaps, even as indigenous projects like Tejas Mk2 and missile defence mature. With Pakistan, the comparison is different: Pakistan spends far less

in absolute terms (approximately \$10 billion) but a higher share of GDP (approximately 3–4%). It has historically relied on external patrons (the US, China, etc.) for military aid and hardware. India's indigenous push **widens the quality and quantity gap with Pakistan** – today India fields better artillery, air defence, and radar, and is catching up in night-fighting capabilities, where Pakistan once had an edge due to US equipment. During **Operation Sindoor**, one observable outcome was that Indian systems (like Akash and BrahMos) *outmatched* Pakistan's defences and air force, reflecting this growing gap. The key point is that while India may not reach spending parity with China anytime soon, it doesn't need to if it can judiciously build capabilities that deter and complicate any aggression (e.g., potent naval denial capabilities in the Indian Ocean, credible counterforce to China's missile threat, etc.). Against Pakistan, India's current and planned capabilities already ensure a decisive conventional edge, and the focus is on making that edge overwhelm any asymmetric tactics Pakistan might employ.

- ➡ **Arms Imports/Exports:** Traditionally, India was the world's largest arms importer for decades – as of 2018–2022, it still accounted for about 11% of global arms imports, topping the SIPRI

rankings. But as described, this is changing with Aatmanirbhar Bharat: India's import volume has begun decreasing for the first time in many years. If indigenous production continues to grow, India is projected to **drop in the global arms importer ranking** by the late 2020s. **India's rapid export growth is notable**, and countries like South Korea and Turkey offer relevant parallels. Both were heavy importers, built strong domestic industries, and then became significant exporters.

- ➔ **Alliances and Partnerships:** Unlike some countries that have formal alliances (e.g., NATO members), India maintains a posture of **strategic autonomy** with a network of strategic partnerships. This means India is not bound by mutual defence treaties, but it engages in deep defence cooperation with various powers. Notably, India's defence ties with the **United States** have reached unprecedented levels in the past decade – with foundational agreements (LEMOA, COMCASA, BECA) signed to enable logistics sharing and secure communications, and large procurements (P-8I maritime aircraft, Apache helicopters, M777 howitzers, etc.) from the U.S. Co-development projects are also on the table (e.g., air-launched UAVs under the DTTI). Meanwhile, India's old partnership with **Russia** endures but is shifting as India diversifies; still,

Russia supplies critical gear like S-400 systems and helps jointly develop systems like BrahMos. With **France**, India has not only bought Rafales but is in talks for advanced submarines and jet engines with high levels of Make in India, reflecting deep trust. **Israel** has become a key source for drones, precision munitions and upgrades, often working with Indian companies (e.g., joint development of the Barak-8 SAM for the Navy). These partnerships often involve **technology transfer and co-production**, which fits well with India's self-reliance goals – for example, the AK-203 rifles with Russia will be made in UP; a likely deal with GE (US) will see fighter jet engines made in India with 80% tech transfer. So globally, India is increasingly seen not just as a big arms *buyer*, but as a potential co-developer and even co-producer – a significant narrative change.

- ➡ **Contribution to Global Security:** India has always contributed to global security in certain ways (UN peacekeeping, anti-piracy), but now it's leveraging its enhanced capacities to do more. In UN peacekeeping, India remains one of the largest troop contributors, and now **equips many of its peacekeepers with Indian-made gear** – which not only improves their effectiveness but also quietly promotes Indian kit in conflict zones. India's fight against terrorism – from Kashmir to

strikes on terror camps – is recognized as part of global counter-terrorism efforts. The more India can tackle such challenges with its resources, the more credible it becomes as a security provider rather than a consumer. India has articulated concepts like **SAGAR (Security and Growth for All in the Region)** for the Indian Ocean, and espoused a free and open Indo-Pacific in line with global norms. **India's rise is relatively peaceful and stabilizing**, unlike the often aggressive posture of China's rise.

In summary, while India's defence modernization is principally about securing India, its regional and global context shows that **India's rise has broader implications**. It is shaping a more multipolar Asia where power is distributed and not concentrated, and offering an alternate security partnership model for the Global South. India's challenge will be to manage this ascent without provoking arms races or suspicion, and the best way to do this is by remaining transparent, adhering to international law, and continuing to contribute to collective security efforts. So far, the signs indicate that India is largely seen as a **responsible rising power**, and its **self-reliant defence posture** underpins that image by demonstrating that India is taking charge of its own security and is also willing to share the burden of security beyond its borders.

7. RECOMMENDATIONS

Drawing from the analysis above, the following key policy recommendations will consolidate gains, address remaining gaps, and ensure continuity toward a future-ready, self-reliant India:

- ➔ **Increase Defence R&D Allocation to 8–10% of the Budget:** Maintain a technological edge by progressively raising the defence R&D budget (including DRDO and private-sector R&D support) to around 8–10% of the total defence expenditure (up from roughly 4% now). This could be achieved by ring-fencing a dedicated portion of the budget exclusively for research and innovation.
- ➔ **Institutionalize Annual Indigenous Content Targets:** Building on the **2023-24** achievement of earmarking **75%** of the capital budget for domestic procurement, formalize ambitious yearly indigenization targets. For example, aim for **80% indigenous procurement by 2027**, with each Service (Army, Navy, Air Force) assigned specific sub-targets. In parallel, continue expanding the “negative import list” annually to include more items as Indian industry develops alternatives – sending a clear signal about future demand to domestic manufacturers.
- ➔ **Fast-Track Strategic Partnership (SP) Projects:** Expedite the implementation of big-

ticket indigenous production lines for complex platforms under the SP model. The government should cut through procedural delays and **finalize pending SP contracts within the next 1-2 years** so that production (e.g., of submarines, fighter jets) can commence without further lag.

- ➔ **Strengthen the Defence Industrial Base via MSMEs and Startups:** Expand the capacity of the defence sector by empowering small and medium players. This includes scaling up programs like iDEX and TDF – for instance, increasing the target to support **300+ startups over the next 5 years** (up from approximately 120 currently) and raising the funding cap for the most promising projects. Additionally, consider creating a dedicated Defence Innovation Fund to provide scale-up capital for successful prototypes transitioning to mass production.
- ➔ **Optimize DPSUs and Encourage Defence Exports:** Give Defence Public Sector Undertakings (DPSUs) greater autonomy and incentives to become globally competitive. For example, allow DPSUs more freedom to form joint ventures, forge international partnerships, and even access capital markets. The Ministry of Defence should set export targets for each DPSU and align part of their performance incentives to these targets. A specialized Defence Export Promotion body

(in collaboration with Indian embassies) can actively market Indian arms abroad – leveraging successes like Operation Sindoor as proof of the effectiveness of Indian-made weaponry.

- ➔ **Sustain and Deepen Policy Reforms (Continuity):** Maintain the momentum of the past decade by ensuring policy consistency. The government should articulate a clear long-term defence modernization roadmap beyond short-term budgets – for instance, a **Defence Vision 2035** – to guide future planning irrespective of political cycles. This could involve updating the -15year Long Term Integrated Perspective Plan (LTIPP) and publishing a public version to assure stakeholders of continuity in the self-reliance drive.
- ➔ **Leverage Indigenous Successes in Diplomacy:** Incorporate India's defence achievements into its diplomatic outreach. After operations like *Sindoor* or successful indigenous missile tests, proactively brief partner nations on these successes and offer to share relevant expertise. Organize live demonstrations of Indian systems during international defence expos (e.g., DefExpo, Aero India) and bilateral exercises with foreign observers. When top leaders travel abroad, including defence technology on the

agenda, it can turn indigenous capability into a tool of soft power. In effect, this is **“Defence Diplomacy 2.0”** – moving beyond dialogues and training to showcasing and offering Indian hardware as part of strategic partnerships.

These recommendations align with the existing policy thrust – they reinforce and accelerate the current trajectory of defence self-reliance. Implementing these action points will ensure that the investments and progress of the last decade yield lasting dividends in India’s national security and global stature.

8. CONCLUSION

India’s defence sector in 2025 stands at an inflection point. After a decade of concerted policy focus on self-reliance, the results are clearly visible in a stronger military, a thriving defence industry, and an overall safer nation. This paper has outlined how the government’s strategic emphasis since 2014 on “Make in India” and comprehensive modernization has transformed India’s defence capabilities and posture. **The journey from 2014 to 2025 has been one of moving from rhetoric to results** – with a majority of defence procurements now sourced indigenously, frontline units equipped with Indian-made systems, and rising arms exports demonstrating real self-reliance. This transformation has directly enhanced national security and expanded

India's regional influence, enabling quicker retaliation against threats and more confident strategic outreach abroad.

Equally importantly, defence indigenization has yielded economic benefits by spurring high-tech manufacturing, job creation, and innovation, complementing initiatives like *Skill India*. Crucially, consistent policies and long-term planning have secured investor confidence and ensured that modernization gains are irreversible. India is now positioned as an emerging global defence leader, with its defence ecosystem increasingly serving as a model for self-reliance. The story of India's defence transformation circa 2025 is one of resurgence and renewal – a nation reclaiming its strategic autonomy and shaping its own security destiny after decades of import dependence.

- ➡ Going forward, this story is set to continue. India is poised to emerge as a secure, self-reliant, and influential global power, with a military and a defence industrial base that is second to none. Such an outcome bodes well for India's national interest and will also contribute significantly to peace and stability in an uncertain world – fulfilling India's dual responsibility to its own citizens and to the broader global community.

References

1. Ahuja, A. (2022, February 9). *Optimising Capability Building with the Defence Budget* [Policy Brief Vol. VII, Issue 12]. **Delhi Policy Group**. <https://www.delhipolicygroup.org/publication/policy-briefs/optimising-capability-building-with-the-defence-budget-3719.html>
2. Asian News International. (2025, March 25a). **Defence production hit Rs 1.27 lakh crore in FY 2023-24, exports cross Rs 21,000 crore**. *The Economic Times*. <https://economictimes.indiatimes.com/news/defence/defence-production-hit-rs-1-27-lakh-crore-in-fy-2023-24-exports-cross-rs-21000-crore/articleshow/119470110.cms>
3. Asian News International. (2025, March 25b). **Defence production hit Rs 1.27 lakh crore in FY 2023-24, exports cross Rs 21,000 crore**. *The Tribune*. <https://www.tribuneindia.com/news/business/defence-production-hit-rs-1-27-lakh-crore-in-fy-2023-24-exports-cross-rs-21000-crore/>
4. Kumar, M. (2023, June 26). **India's Defense Indigenization: An Emerging Arms Exporter?** *Stimson Center*. <https://www.stimson.org/2023/indias-defense-indigenization-an-emerging-arms-exporter/>

5. Mukul, S. (2025, May 13). **China's ace PL-15 missile shredded; India-made weapons deliver killer punch** (*Operation Sindoor highlights*). *India Today*. <https://www.indiatoday.in/india/story/operation-sindoor-pakistan-china-pl-15-missiles-shredded-india-made-indegenous-brahmos-akashteer-weapons-2724052-2025-05-13>
6. Press Trust of India. (2024, February 2). **Interim Budget: Rs 6.21 lakh crore set aside for defence budget for 2024-25; capital outlay pegged at Rs 1.72 lakh crore**. *The Tribune*. <https://www.tribuneindia.com/news/india/interim-budget-rs-6-21-lakh-crore-set-aside-for-defence-budget-for-2024-25-capital-outlay-pegged-at-rs-1-72-lakh-crore-586364/>
7. PRS Legislative Research. (2022). *Demand for Grants 2022-23 Analysis: Defence*. **PRS India**. <https://prsindia.org/budgets/parliament/demand-for-grants-2022-23-analysis-defence>
8. PRS Legislative Research. (2025). *Demand for Grants 2025-26 Analysis: Defence*. **PRS India**. (Analysis PDF available from PRS India website)
9. Rajiv, S. S. C. (2025, February 17). **Defence Budget 2025-26: Key Highlights** [Issue Brief]. *Manohar Parrikar Institute for Defence Studies and Analyses*. <https://idsa.in/publisher/issuebrief/defence-budget-2025-26-key-highlights>

10. Shukla, A. (2024, April 2). **HAL posts record Rs 29,810 crores revenue for Financial Year 2023-24.** *Business Standard*. (Republished at *Broadsword by Ajai Shukla*: <https://www.ajaiishukla.com/2024/04/hal-posts-record-rs-29810-crores-revenue.html>)
11. Singh, R. (2022, April 20). **India exceeds target of local defence purchases in 2021-22.** *Hindustan Times*. <https://www.hindustantimes.com/india-news/india-exceeds-target-of-local-defence-purchases-in-2021-22-101650478116332.html>
12. Singh, R. (2023, March 17). **India clears defence buys worth ₹70,500 crore.** *Hindustan Times*. <https://www.hindustantimes.com/india-news/india-clears-defence-buys-worth-70-500-crore-101678994269262.html>
13. Sahu, R. P. (2025, May 12). **Defence stocks on growth warpath as order blitz fuels bullish outlook.** *Rediff.com Business*. <https://www.rediff.com/business/report/defence-stocks-on-growth-warpath-as-order-blitz-fuels-bullish-outlook/20250512.htm>
14. Times News Network. (2024, April 2). **BEL posts ₹19,700 crore turnover in FY2023-24.** *The Times of India*. <https://timesofindia.indiatimes.com/city/bengaluru/bel-posts-19700-crore-turnover-in-fy2023-24/articleshow/108955900.cms>

15. Vivekananda International Foundation. (2023, January 2). **Science and Technology Digest (16–31 December 2022), Issue 4** (Defence & Security section). *VIF – S&T Digest*. <https://www.vifindia.org/2023/january/02/science-and-technology-issue-4>