India's Defence And Economic Reforms Boosting Self-Reliance And Growth

India's aspirations of becoming a USD 5 tn economy is being boosted by a forceful blend of structural reforms, strategic policy revamps and an enhanced emphasis on developing indigenous capabilities. From attaining the world's most cost-effective manufacturing status to radically reforming defence procurement, these transformations are not only catalysing economic growth but also revitalising India's path to self-reliance. Operation Sindoor validated India's technological prowess and use of indigenous systems. This article highlights how these reforms are working in tandem across diverse sectors such as manufacturing, defence, Micro, Small and Medium Enterprises (MSMEs) and start-ups, to bring in a focussed shift from legacy systems to innovation-driven, market-based and export-oriented frameworks.

Becoming the World's Cheapest Manufacturing Destination

In a landmark achievement, India has now overtaken China and Vietnam to emerge as the most cost-effective manufacturing hub globally. According to global rankings compiled by World of Statistics from United States (US) News & World Report data, India is ranked first amongst 89 countries surveyed in terms of manufacturing costs.[1] The healthy Purchase Manager's Index (PMI) figures of 58.2 for manufacturing and 58.7 for services release in 2025, underline India's robust capability and indicate that India's demand is not just affordability, but also strong economic fundamentals.[2]

This milestone will further boost Foreign Direct Investment (FDI), where India is already South Asia's top recipient in 2024, even amid a global FDI drop of 11 per cent.[3] However, some challenges remain as India still combats infrastructure gaps, bureaucratic hurdles and logistical inefficiencies which need to be addressed to sustain and scale this momentum.

Defence Sector Transformation

Enhancing Indigenous Production. India's defence sector has undergone a major transformation in last eleven years. Defence exports have grown 34-fold from INR 686 cr in 2013-14 to INR 23,622 cr in financial year 24-25.[4] India now exports defence products to nearly hundred countries with platforms and weapons varying from drones and artillery to radars and naval vessels. Notably, the private sector contributed INR 15,233 cr of this total, demonstrating its capacity and increasing industrial competitiveness.[5] The government's target of INR 50,000 cr in defence exports by 2029 which earlier seemed ambitious now looks attainable due to backing of reforms under the *Atmanirbhar Bharat* (Self-Reliant India), Make in India and Production-Linked Incentive (PLI) schemes.

Procurement Reforms. Defence procurement which had long lagged due to opaque and slow-moving processes is now improving based on regular reviews by the Ministry

of Defence (MoD). In a landmark shift, the MoD has ended the practice of nominating Defence Public Sector Undertakings (PSUs) by default for high-value projects. It is also in the process of shortening the procurement cycle by 69 weeks.[6] Under fresh set of reforms, it has also introduced competitive tendering across major platforms including the Advanced Medium Combat Aircraft (AMCA) stealth fighter.[7] The initiative will allow private companies like L&T, Tata Advanced Systems, and Adani Defence to bid alongside PSUs, enhancing innovation and cost-efficiency.[8] Defence Secretary Rajesh Kumar Singh has recently emphasised that *Atmanirbharta* (Self- Reliannce) in defence is crucial for strategic autonomy and for achieving the goal of Viksit Bharat 2047.[9] The Defence Acquisition Procedure (DAP) 2020 is also being revised to support this transformation, incorporating digital tools and easing procedures.

Private Sector Inclusion. The transition from PSU dominance to a hybrid public-private industrial model is reshaping India's defence manufacturing base. This not only expands the vendor pool but also encourages greater private investment, enhances efficiency, and ensures quicker turnaround times. The Rafale M88 engine MRO facility inaugurated in Hyderabad by Safran is a clear example of how global partnerships are contributing to domestic capabilities.[10]

Investor Impact. The Nifty India Defence Index climbed over thirty percent in recent months reflecting strong investor confidence. Global partnerships, technology transfers and enhanced exports have contributed to this.

Driving Economic and Social Resilience through MSMEs and Start-Ups

India's MSMEs with over 6.3 crore enterprises, form the backbone of its economy. The sector contributes more than 30 per cent of Gross Domestic Product (GDP) and nearly 50 per cent of India's exports.[11] MSMEs also employ over 120 million people, particularly in rural and semi-urban areas and are increasingly aligned with flagship initiatives like Start-up India, Skill India and Digital India. Recent digital and regulatory initiatives like Udyam Registration, Open Network for Digital Commerce (ONDC) and Zero Defect Zero Effect (ZED) Certification 2.0 have enhanced transparency, formalisation and access to markets. MSMEs are now major players in Information Technology (IT), pharmaceuticals, renewable energy and food processing. With their decentralised nature, they are now enabling equitable development across states.[12] India's start-up scene has seen an explosion of activity, with initiatives like Fund of Funds and Small Industries Development Bank of India (SIDBI) support easing funding.

Boosting Research and Development

Launch of the ADITI scheme at DefConnect 2024. Raksha Mantri Shri Rajnath Singh launched the Acing Development of Innovative Technologies (ADITI) with iDEX at DefConnect 2024 held in March last year. The scheme aims at promoting innovation

in critical defence technologies and has earmarked INR 750 cr under the iDEX framework. The scheme aims to empower start-ups to develop deep-tech solutions aligned with military needs. By offering grants of up to INR 25 cr and integrating a 'Technology Watch Tool', India is aggressively bridging the gap between its defence requirements and indigenous innovation.[13]

National Research Foundation. The government's commitment to long-term scientific progress through the National Research Foundation (NRF) is now backed by an INR 50,000 cr corpus. Targeting both elite research institutions and under-resourced colleges, the NRF assures to democratise Research and Development (R&D), improve Science, Technology, Engineering, Mathematics (STEM) infrastructure and attract private investment.[14]

India's National Quantum Mission. To become a global leader in Quantum Computing (QC), India launched the Indian National Quantum Mission (INQM). The INQM is laying the foundation for quantum computing capabilities, an area critical for next-gen security and computing power.[15] It seeks to bridge gap between India's leadership in classical IT and it's lagging behind in Quantum patents and capabilities. It is also aimed at fostering indigenous development in quantum hardware and software.

Niggling Challenges

Despite these achievements, gaps still do exist. India ranks poorly in critical technologies like semiconductors (score: 0.4) and quantum computing (1.0), compared to leaders like the US and China.[16] Logistics, bureaucratic intricacies and infrastructure bottlenecks are persistent barriers to fully leveraging the manufacturing benefit. Moreover, Indian start-ups despite their scale and scope still face constraints in scaling up deep-tech innovation. Risk-averse capital, regulatory hurdles and lack of industry-academia linkages are the key problematic areas.[17]

Operation Sindoor—New Template for Multi-Domain Warfare

Operation Sindoor showcased India's powerful, tech-driven and self-reliant response[18] to hybrid warfare. It was marked by a calibrated tri-service operation, leveraging the full spectrum of military power and indigenous technology across all domains including space and cyberspace without crossing the threshold. The operation stood out for the seamless integration of battlefield technology, intelligence coordination and indigenous defence platforms under a single operational doctrine setting a new standard for limited but decisive retaliation.

Multi-Domain Operations with Kinetic & Non-Kinetic Fusion. The Indian Army and Air Force demonstrated their capabilities by carrying out pinpoint. During strikes on terror infrastructure in Pakistan, with the Navy deterring Pakistani naval adventurism

through strategic posturing in the Arabian Sea. The operations saw coordinated assaults of cruise missiles, drones, long-range artillery and cyber capabilities, under a unified tri-service command. The Integrated Air Command and Control System (IACCS), C6ISR architecture and electronic warfare units facilitated real-time decision-making, ensuring battlefield transparency and tempo dominance. India's robust air defence grid comprising of Akash, QRSAM, Barak-8, and Russian-origin S-400 systems, successfully intercepted hundreds of drones and missile salvos launched by Pakistan across Indian cities.

Cyber Warfare with Indigenous Capabilities. Along with kinetic operations, India also launched a massive cyber offensive; in response Pakistan and allied groups campaigned to target India's critical infrastructure, government networks and financial systems. India's response was swift, devastating and multifaceted.[19] Cyber units and civilian hacktivist launched retaliatory operations, mostly backed by indigenous capabilities, conducting Distributed Denial Of Service (DDoS) attacks, ransomware deployments and targeted breaches against Pakistani government portals and surveillance networks. Despite the overriding attack volume, Indian cyber defences exposed adversarial vulnerabilities, showcasing homegrown deterrence in the digital domain. The cyber face-off reinforced the emerging reality that cyber warfare is now a central battlefield.

***Aatmanirbhar Bharat* in Action—Strategic Self-Reliance**. Perhaps the most defining element of Operation Sindoor was the vanguard utilisation of indigenous platforms developed under the *Aatmanirbhar Bharat* initiative.[20] Indigenous systems such as the Akash SAMs, loitering munitions, Defence Research and Develpoment Organisation's (DRDO) electronic warfare suites and indigenous drones played a decisive role in real-time surveillance, threat interception and cross-domain coordination. These platforms not only performed effectively under combat conditions but also reduced operational dependence on foreign suppliers during crisis moments.

Analysis and Assessment

India's advent as the world's most cost-effective manufacturing hub is an inflection point in its economic growth. Backed by strong PMI indicators and top rankings in global cost competitiveness, this milestone strengthens India's standing in global supply chains, when most multi-national companies are looking to de-risk from China. The concurrent defence sector transformation is specifically noteworthy. The rising private sector participation and bold procurement reforms signal a break from the old bureaucratic processes. Competitive tendering in high-value platforms like AMCA, along with MoD's efforts to shrink procurement cycles, marks an essential reorientation towards efficiency, innovation and achieving autonomy.

The MSME and start-up ecosystem is further strengthening the manufacturing and innovation thereby contributing to exports, jobs and distributed development,

making India's growth becoming more inclusive and resilient. Initiatives like ADITI, iDEX, and the National Research Foundation are laying a robust R&D foundation, while the National Quantum Mission exhibits foresight in fastening leadership in frontier technologies.

Operation Sindoor has further authenticated India's doctrinal and technological progress by aligning national security imperatives with industrial capacity. If the current momentum is sustained, India would become not only the hub for manufacturing, but also a technology and defence innovation leader by 2047, realising the vision of Viksit Bharat. While Operation Sindoor reflected India's ability to dominate the escalation ladder and showcased its immense capabilities and technological progress, it also highlighted certain critical vulnerabilities like cyber superiority. There's an urgent need for a larger skilled cyber workforce and an offensive cyber doctrine. India can further consolidate its position as the best manufacturing, innovation and defence hub, if it addresses some of the lingering challenges:

- Close the gap in deep-tech realms like semiconductors and quantum computing.
- Streamline regulatory processes to fully realise the cost advantage.
- Linking academia, innovators and industry gaps and simplifying risk capital limitations to facilitate scale-up of innovation.

Conclusion

India's reforms in defence, manufacturing and MSMEs sectors are intensely interconnected and are reshaping its economic and strategic landscape. Together, they signify a recalibration of the country's industrial and defence architecture. With clear policy intent, robust domestic demand, a growing investor base and global supply chain advantages, India's aspirations of self-reliance and global leadership are not just achievable, they are inevitable. While the numbers speak for themselves, challenges from tech gaps and logistics hurdles to innovation bottlenecks need to be addressed:

- 34x growth in defence exports
- World's cheapest manufacturing destination
- 6.3 crore MSMEs contributing 30 per cent of GDP
- INR 1 tn merchandise export goal by 2030
- Over INR 6.81 lakh cr defence budget in financial year 2026

Endnotes

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