

# BJYM

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*The Modi Era of Defence Modernization*

# FORTIFYING FRONTIERS







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# Speech of Prime Minister Shri Narendra Modi at the first Swavlamban Seminar

**M**y colleagues in the Union Cabinet Shri Rajnath Singh Ji, Shri Ajay Bhatt Ji, Chief of Naval Staff, Vice Chief of Naval Staff, Defence Secretary, President of SIDM, all colleagues associated with industry and academia, other dignitaries, ladies and gentlemen!

The goal of self-reliance in the Indian armed forces is very essential for the India of the 21st century. I think this is a very important step to organize the first 'Swavlamban' seminar for a self-reliant navy, and for this I congratulate all of you very much and I wish you all the best.

Friends,

Joint exercises in military preparedness, especially in the Navy, play a major role. This seminar is also a kind of joint exercise. In this joint exercise for self-reliance, every stakeholder, including the Navy, Industry, MSMEs, academies, i.e. people from across the world and

representatives of the government, are contemplating about the goal of coming together. The goal of this joint exercise is maximum exposure for all the participants, greater understanding towards each other and adoption of the best practices. Therefore, the goal of this joint exercise is very important. The resolution to develop 75 indigenous technologies for the Navy by August 15 next year is a huge step in itself, and your efforts, experiences and knowledge will definitely help in realising it. Today, when India is celebrating 75 years of its independence through the Amrit Mahotsav, the achievement of such goals will provide further impetus to our goal of self-reliance. By the way, I would also say that the development of 75 indigenous technologies is, in a way a first step. We have to keep working to increase this number continuously. Your goal should be that the Navy should be at an unprecedented height when India celebrates 100 years of its independence.

Friends,

Our seas and coastal borders are great custodians of our economic self-reliance and also provide impetus to





it. Therefore, the role of the Indian Navy is continuously increasing. Hence, it is very important for the Navy to be self-supporting not only for itself but also for the growing needs of the country. I am sure the essence of this seminar will go a long way in making our forces self-reliant.

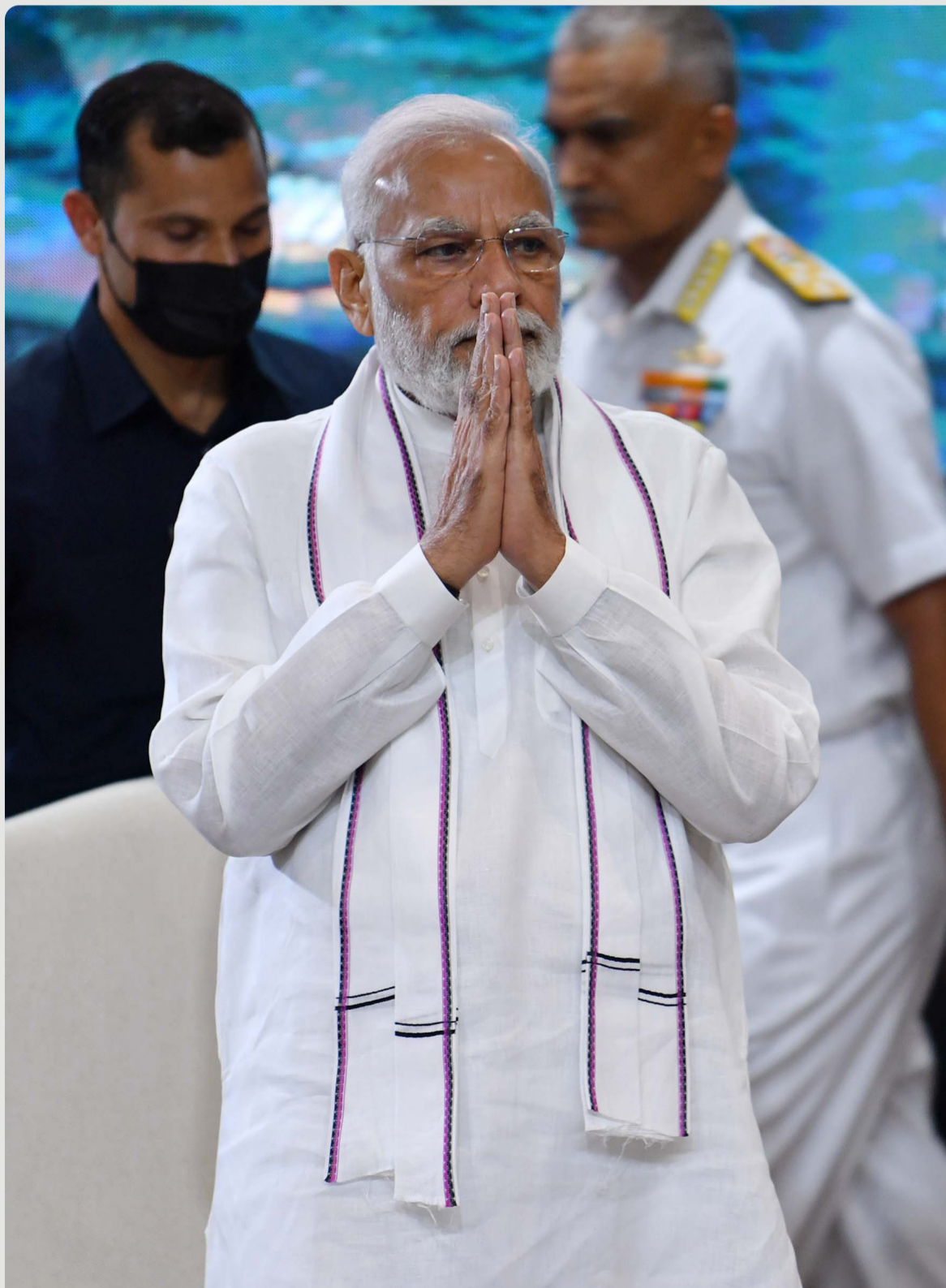
Friends,

At a time when we are discussing a self-reliant future in the defence sector, it is also necessary that we learn lessons from what happened in the past decades. This will help us in paving the way for the future. When we look back, we find we had a rich maritime heritage. India's rich trade route has been a part of this legacy. Our ancestors were able to dominate the ocean because they had very good knowledge about the direction of the wind and space sciences. The knowledge of our ancestors regarding the direction of the wind during different seasons, and how to get to the destination by utilising the wind's direction was a great strength.

A lot of people in the country are not aware that the defence sector of India used to be very strong, even before independence. At the time of independence, there were 18 ordnance factories in the country where different types of military equipment including artillery guns were made. We were an important defence equipment supplier during World War II. Our Howitzers and machine guns made at the Ishapore Rifle Factory were considered the best at that time. We used to export a lot. But what led us to become the world's biggest importer in this field? If we look back, the First and the Second World War caused a lot of destruction. Major countries of the world were hit by many crises, but they tried to turn those crises into opportunities. To capture a huge global market, they found a way in the manufacture of armaments as an approach towards the wars. They became manufacturers and big suppliers in the world of defence. Even though they suffered in the wars, but they found a new way out. We also faced a huge crisis during the Corona period. We were at the bottom as far as arrangements were concerned. We did not have PPE kits, vaccines were a far-fetched dream. But exactly like the countries that created an opportunity from the First and Second World War and paved a way towards becoming major defence powers, India also did everything which never happened before, like developing vaccines and other equipment during the Corona period. I am giving you an example because it is not that we don't have potential or talent. It is also not wise to equip our soldiers with the same weapons which soldiers of ten other countries have. Maybe they have better talent, they have good training, or they make better use of those weapons. But for how long will I keep taking the risk? Why would my young soldier carry the same weapons? He must have the weapons which he had not even imagined. This temperament is not just to prepare soldiers, but it also depends on what kinds of weapons are given to him. And that's why Aatma Nirbhar Bharat is not just an economic activity; we need to change it completely.

Friends,

In the first one and a half decades after independence, we did not build new ordnance factories. In fact, old factories also lost their capabilities. After the 1962 war, there were some changes in the policies under compulsion and work began on augmenting ordnance factories. But research, innovation and development were not emphasised while setting up these factories. The world at that time was relying on the private sector for new technology and innovations, but unfortunately, the defence sector in our country was kept under the government domain. I come from Gujarat and I have spent a long time in Ahmedabad. Many of you must have worked on the coasts of Gujarat at one point. There were huge chimneys and mills all around Ahmedabad. Ahmedabad used to be dubbed as the Manchester of India because of its textiles. But what happened? There was no innovation, technology was not upgraded and there was no technology transfer. As a result, huge chimneys came crashing down. We have seen all this in front of our eyes. It is not so that if it happens in one place, it will not happen in another place. And therefore, innovation is a must and that too indigenous innovation. There can be no innovation from imported goods. There are many opportunities for our youth in foreign countries, but at that time there were limited opportunities for them in the country. As a result, the





Indian Army, once the world's leading military power, had to depend on foreign countries for even a simple weapon like a rifle. And gradually, it became a habit. If one is used to a mobile phone of a foreign make, he will prefer that to a better mobile phone irrespective of the availability in the country. It becomes a habit and we need to organize a psychological seminar to come out of that mindset. The root of the problem is psychological. Hold a seminar of psychologists to find out how Indians can get rid of foreign products. As drug addicts need training sessions to get rid of drugs, we need similar training across the board. If we have self-confidence in ourselves, we can enhance the potential of weapons in our hands.

Friends,

There was another problem as most of the defence deals became questionable. There are so many lobbies in this field. If one lobby is preferred, then other lobbies would gear up against that deal, and abusing politicians is very common in our country. As a result, the deals would get stuck for two to four years and our armed forces were made to wait for decades for modern weapons and equipment.

Friends,

Dependence on foreign countries for every small need related to defence is not just a serious threat to our country's self-respect but also strategically, besides causing economic loss. After 2014, we started work on mission mode to get the country out of this situation. Learning from the approach of the past decades, today we are developing a new defence ecosystem with the efforts of all. Today defence R&D has been opened to the private sector, academia, MSMEs and start-ups. We have strengthened our public sector defence companies by organizing them in different sectors. Today we are also ensuring how to link our premier institutions like IITs with defence research and innovation. The problem in our country is that no defence related courses are taught in our technical universities or technical or engineering colleges. Whenever there is

a need, it is provided from outside. Where is the need to study here? That is, the scope was very limited. We have constantly tried to bring changes in this regard. Efforts are being made to give maximum opportunities to our youth and start-ups by providing them with the cutting edge facilities of DRDO and ISRO. We removed the silos to accelerate the development of missile systems, submarines, Tejas fighter jets, etc which were running many years behind their targets. I am happy that the wait for the commissioning of the country's first indigenously built aircraft carrier is also going to end very soon. Be it Naval Innovation and Indigenization Organization, iDEX or TDAC, all these are going to give impetus to colossal resolutions of self-reliance.

Friends,

In the last eight years, we have not only increased the defence budget, we have also ensured that this budget is used in the development of the defence manufacturing ecosystem in the country itself. Today, a major part of the budget earmarked for the purchase of defence equipment is being spent in procurement from Indian companies. And we must realize this as you are a family man and understand the importance of a family. If you don't give love and respect to your child at home, how can you expect your neighbours to love them? If you keep calling him useless every day, how can you expect your neighbour to call him good? If we do not respect our indigenous weapons, then how can we expect the world to respect our weapons? It is not possible. We have to start with ourselves. And BrahMos is an example of this indigenous technology. India developed BrahMos and today the world is in a queue to embrace BrahMos, friends. We should be proud of everything that we develop. And I would congratulate the Indian armed forces for preparing a list of more than 300 weapons and equipment which will be made in India and will not be imported. I congratulate all the comrades of the three services for this decision.

Friends,

The results of such efforts are now visible. In the last 4-5





years, our defence imports have come down by about 21 percent. In such a short time, we have not only saved money, but created an alternative. Today we are moving fast from the biggest defence importer to a major exporter. Though no comparison can be made between apples and other fruits, I want to share the potential of the people of India. I had touched upon a small topic during the Corona period. At that time, I did not want to talk about issues which could burden the country. Therefore, I questioned the decision to import toys. It was a small issue. Why don't we buy our own toys? Why can't we sell our toys abroad? Our toy makers have a cultural tradition. It was a small issue. I organized a few seminars and virtual conferences and encouraged them a little. You will be surprised to see the results in such a short time. Look at the strength and self-respect of my country and the desire of common citizens. Children used to call their friends to know if they had any foreign toys in their house. This feeling was developed in them when there were so many challenges during the Corona period. One child was calling another to check whether he was keeping foreign-made toys or not. Such was the result that the import of toys came down by 70 percent within two years. Look at the temperament of society and the potential of our toy makers of the country. The exports of our toys grew by 70% that is a difference of 114%. Such a huge difference! What I mean to say is that toys can't be compared. Therefore, I said earlier that apples can't be compared with other fruits. I am comparing the power of the common human being of India and that can be useful for our toy makers. And that same power can also be useful for the military power of my country. We should have this trust in our countrymen. Our defence exports have grown 7 times in the last eight years. Not long ago, every countryman became proud when he came to know that we exported defence equipment worth Rs 13,000 crores last year. And importantly, the private sector's stake is 70 percent in this regard.

Friends,

In the 21st century, it is necessary to pay attention to another aspect along with the modernization of the armed forces and self-reliance in defence equipment. You are aware that now the threats to national security have become widespread and the methods of warfare are also changing. Earlier the defence meant land, sea and sky. Now this scope is moving towards space, cyber space, economic and social space. Today every system is being converted into a weapon. Be it rare earth or crude oil, everything is being weaponised. The attitude of the entire world is changing. Now more than one-on-one fights, wars are becoming invisible, more deadly. Now we cannot formulate our defence policies and strategies keeping the past in mind. Now we have to move forward by anticipating the future challenges. We have to change ourselves according to what is happening around us, the new changes and our new fronts in the future. And this goal of self-reliance is also going to help the country a lot.



Friends,

We have to pay attention to another important aspect for the protection of our country. We also have to intensify our war against forces challenging India's self-confidence and self-reliance. As India is establishing itself on the global stage, there are constant attacks through misinformation, disinformation, etc. Information has also been made a weapon. Keeping faith in ourselves, we have to thwart every effort of the forces that are harming India's interests, be it in the country or abroad. National defence is no longer limited to borders, but is much broader. Therefore, it is equally necessary to make every citizen aware of it. वयं राष्ट्रे जागृत्याम (we should be alert in the interest of the nation) -- this assertion should reach the masses. It is also necessary. Just as we are moving forward with the whole of the government approach for 'Aatma Nirbhar Bharat', similarly the whole of the nation approach is the need of the hour for the defence of the nation. This collective national consciousness of the people of India is the strong basis of security and prosperity. Once again, I congratulate the Ministry of Defence, our defence forces, their leadership for this initiative and their efforts to move forward. When I was visiting some stalls, it felt good that our retired navy colleagues have also put in their time, experience and energy in these innovations so that our Navy and defence forces could become strong. I think this is a great effort and I especially congratulate those who have worked in mission mode even after their retirement. You are being honored for your efforts and deserve to be congratulated. Thanks a lot! Many congratulations!



# Salient points of speech of Shri J.P. Nadda at Kargil Vijay Diwas Samman Samaroh

**T**he victory of our brave soldiers in Kargil despite adverse circumstances is a golden chapter in the glorious history of our armed forces. Our brave soldiers sacrificed their lives while defending our Motherland and did not allow our enemies to set foot on our Motherland.

\*\*\*\*\*

I on behalf of crores of the Bharatiya Janata Party workers pay my deep respect to the martyrs of Kargil who laid down their lives to protect our Motherland and our honour.

\*\*\*\*\*

Today under the leadership of our Honourable Prime Minister Shri Narendra Modi ji the hardware and

software of our armed forces is strong. Our soldiers are the most courageous and most efficient in the world today.

\*\*\*\*\*

We have the bravest of soldiers who are ready to sacrifice their everything for their Motherland, and that why India will always be victorious in every war.

\*\*\*\*\*

We all need to understand the importance of decisive, dynamic and strong leadership in our nation's safety and security. First it was our Honourable Prime Minister Shri Atal Bihari Vajpayee ji and now our Honourable Prime Minister Shri Narendra Modi ji who linked 'Pride' and 'Proud' from leadership to our brave soldiers. This is the real contribution to the Bharatiya

Janata Party and its Prime Ministers to our armed forces.

\*\*\*\*\*

Till 2014 our armed forces were 20 years behind in terms of technology, ammunition, fighter planes and infrastructure, and it was because for 10 long years the Congress led UPA government did nothing for the modernisation of our armed forces and also failed miserably in upgrading our infrastructure on our borders.

\*\*\*\*\*

The defence minister of the Congress led UPA government once said his government was not improving infrastructure on our borders along China because he feared that it could anger China. Another defence of the Congress led UPA government said his government would not go for modernisation of our armed forces and would not do defence deals as





it did not want to take any risk.

\*\*\*\*\*

During the Congress led UPA government “scandals and scams” had become the second name of defence deals. In every defence deal during the Congress party led UPA government there are startling stories of scams and corruption to tell.

\*\*\*\*\*

Today we have a full squadron of Rafael, we have fighter Apache, Chinook, we have surface to air missiles, deadly Howitzers, Vajra artillery guns, while we have started exporting bullet proof jackets. We are developing state of the art missile tracking system.

\*\*\*\*\*

In previous governments our brave soldiers under attack had to wait for

Minister Nawaz Sharif despite request from the American President. This is the sterling quality of the decisive leadership.

\*\*\*\*\*

After Uri and Pulwama our brave soldiers gave terrorists reply in the form of surgical strikes and air strikes. But the Opposition parties raised doubts over the sacrifices and valour of our brave soldiers by asking for



The Narendra Modi Government has modernised all the three wings of our armed forces, strengthened our borders and ensured rapid development of defence infrastructure and also of infrastructure along our borders. The construction of border roads, strategic bridges and communication infrastructure development is going on in fast pace under the leadership and guidance of our Honourable Prime Minister Shri Narendra Modi ji.

\*\*\*\*\*

Delhi's permission to fire even one bullet. Delhi used to advise them of 'Wait and Watch'. Today our Army swiftly responds to any attack on our borders and later submits report in Delhi. This is the real change which has been brought by the change in government and leadership.

\*\*\*\*\*

During the Kargil war the then Honourable Prime Minister Shri Atal Bihari Vajpayee ji during his US visit had flatly refused to meet and holds talks with the then Pakistani Prime

proof of these cross-border surgical strikes. It is very unfortunate that the opposition parties tried to lower the morale and tried to shame our brave soldiers.

\*\*\*\*\*

The concept of the National War Memorial was pending since 1960. The Congress party governments did nothing for this. It was after Honourable Prime Minister Shri Narendra Modi ji formed the Bharatiya Janata Party government in 2014 work on our National War Memorial started, its



design was made, budget was released and in 2019 our National War Memorial was built. This is what is called commitment of our Honourable Prime Minister Shri Narendra Modi ji.

\*\*\*\*\*

For every member of the Bharatiya Janata Party it is 'Nation First'. On behalf of the Bharatiya Janata Party government I want to assure every soldier that our Honourable Prime Minister Shri Narendra Modi ji is and will always stand like a rock for them.

\*\*\*\*\*

Every Diwali our Honourable Prime Minister Shri Narendra Modi ji spends time with our soldiers posted on our borders. We all know that we all able to celebrate Diwali peacefully at our homes because we know that our brave soldiers are guarding our borders round the clock.

## **J P Nadda**

President  
Bharatiya Janata Party

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# Message from the BJYM President Shri Tejasvi Surya

Namaskar!

As we march into an era of unparalleled growth and security, it is pertinent to reflect on the monumental strides our nation has taken under the aegis of Prime Minister Shri Narendra Modi's visionary leadership, particularly in the realm of defence. The axiomatic principle guiding our defence policy has been the trinity of Modernization, Self-Reliance, and Indigenization, which dovetails the nation towards an impregnable security apparatus.

**T**

he Modi government has tirelessly worked towards modernizing our armed forces to ensure they remain steps ahead on the global stage. Implementation of long-pending defence procurement proposals, induction of cutting-edge technology and state-of-the-art weaponry like Rafale fighter jets have exponentially augmented our defence capabilities.

Self-reliance, a cornerstone of PM Modi's vision, is impeccably mirrored in the defence sector. The 'Atmanirbhar Bharat' initiative has invigorated the domestic defence industry, nurturing indigenous manufacturing and reducing dependency on foreign nations. Numerous policies have been promulgated to bolster the defence manufacturing ecosystem, thereby channelling a significant portion of the defence budget towards indigenous procurement.

Indigenization, the third pillar, has fostered innovation and catalyzed economic growth. Witnessing the burgeoning partnerships between the government, private sector, and academia is heartening, propelling a self-sustaining defence industry. The DRDO's successful endeavours, whether it be the development of the Akash missile system or the Light Combat Aircraft Tejas, epitomize the indomitable spirit of self-reliance and indigenous development.

Moreover, the Modi government's emphasis on transparency and accountability in defence procurement is a revolutionary step towards eradicating the shadows of yesteryear's malfeasance. Our defence narrative under PM Modi's leadership is not merely about military might but reflects good governance, foresight, and a relentless pursuit of securing India's peaceful and prosperous future.

Under PM Modi's stewardship, the seamless integration of these three pillars has been instrumental in ushering in an era of robust defence infrastructure, safeguarding our sovereignty while contributing significantly to the nation's economic fabric. The resurgence of India's defence sector is a testament to the harmonious confluence of political will, military acumen, and the spirit of innovation.

The journey ahead is full of promise. With a resolute government at the helm and the indomitable spirit of our armed forces, the horizon is not just a boundary but a beckoning. As one nation, we shall continue striving for a secure, self-reliant and prosperous India.

Vande Mataram

**Tejasvi Surya**

National President  
Bharatiya Janata Yuva Morcha



# Editorial

**I**n the annals of the defence sector of India, the era under Prime Minister Shri Narendra Modi's leadership shall be chronicled as a period of transformative change. The trinity of Modernization, Self-Reliance, and Indigenization has been the guiding light towards crafting

a robust, resilient defence architecture that reflects India's growing stature on the global stage.

The juggernaut of modernization has been set in motion with a slew of measures that have significantly augmented our defence capabilities. The Modi government has fast-tracked long-pending defence procurement proposals, ensuring our armed forces are equipped with state-of-the-art weaponry and technology. The induction of Rafale fighter jets, a game-changer in aerial warfare, exemplifies the government's commitment towards modernizing our

military apparatus.

Self-Reliance, the cornerstone of PM Modi's vision, finds its most profound expression in the defence sector. The clarion call of 'Atmanirbhar Bharat' has resonated through the corridors of defence manufacturing, nurturing an ecosystem conducive to indigenous production. The shift towards domestic procurement is not merely a policy directive but a substantial move towards reducing our dependency on foreign nations for critical defence equipment.

Indigenization, the third pillar, has unlocked a plethora of opportunities for innovation and economic growth. The synergies between the government, private sector, and academia have spawned a self-sustaining defence industry. The commendable strides by the Defence Research and Development Organisation (DRDO) in developing indigenous defence systems like the Akash missile system and the Light Combat

**India is a land of diverse languages and dialects, so every region has unique literary treasures and festivities. By backing regional literary fests, promoting translations, and supporting vernacular education, the Modi government is ensuring that regional identities are preserved and celebrated. In a rapidly globalised world, such initiatives keep the multicultural essence of India alive.**





Aircraft Tejas underscore the potential of homegrown technology.

The government has accorded priority to the Navy's modernization, evidenced by the commissioning of indigenously built warships, submarines, and the enhancement of naval air capabilities. The push for self-reliance has invigorated the naval defence manufacturing sector, epitomized by projects like the construction of the INS Vikrant, India's first indigenously built aircraft carrier, and the development of the naval version of the Light Combat Aircraft (LCA) Tejas. These projects augment our maritime defence capabilities and underscore the potential of indigenous defence manufacturing, fostering a self-reliant and modern naval force ready to safeguard our maritime interests.

The burgeoning military-industrial complex, with an emphasis on private sector participation, has emerged as a linchpin in the Modi government's defence modernization strategy. The government has created a conducive ecosystem for private sector involvement through policy reforms, including the Strategic Partnership Model, which seeks to foster long-term partnerships between Indian private sector companies and global defence majors. This model aims to galvanize the private sector's capabilities in defence manufacturing, thereby catalyzing innovation, job creation, and technology transfer.

The Modi government's defence diplomacy is a judicious blend of fortitude and foresight. Strengthening defence ties with global powers has enriched our military capabilities and positioned India as a reliable partner in the global defence ecosystem. The strategic dialogues and joint military exercises have fostered a mutual trust and cooperation climate, contributing towards a more secure and stable regional and global security architecture.

Furthermore, transparency and accountability have been the hallmark of defence procurement under the Modi government. The revamped defence procurement procedure is a giant leap towards expediting acquisitions, promoting indigenous manufacturing, and ensuring utmost transparency. This significant policy overhaul is a testament to the government's resolve to cleanse the system of erstwhile malfeasance and instil a culture of integrity.

The defence story under PM Modi's stewardship is an embodiment of a nation coming of age. As we reflect on the monumental strides, the journey ahead is replete with promise. The roadmap is clear - to further the agenda of modernization, nurture self-reliance, and foster indigenization. The era of the Modi government is a defining chapter in India's defence saga, crafting a legacy of a stronger, self-reliant, and modern defence apparatus that shall safeguard our nation's interests and ensure a peaceful and prosperous future for India.

The story of defence modernization, self-reliance, and indigenization is not merely a policy shift but a reflection of a nation's resolve to protect its sovereignty and contribute constructively to global peace and security. Our journey in the comity of nations, with a fortified defence, is a saga of resilience, resolve, and resurgence, epitomizing the New India envisioned by Prime Minister Shri Narendra Modi.





# Agniveer: Fostering a Tech-Savvy Military for a Resilient India

- Ram Satpute, MLA, Maharashtra and National Vice-President BJYM

**T**he Agniveer initiative, launched by the Indian Government in 2022, is a transformative step to bolster the nation's military strength and readiness. This innovative recruitment scheme serves as a conduit to usher young and dynamic individuals into the Indian Army, augmenting its operational and technical prowess. The necessity for the Agniveer initiative stemmed from a confluence of factors, including the urgent need to modernize the Indian Army, address personnel shortages, and foster a tech-savvy military force capable of navigating the complexities of modern warfare. In recent years, the rapid advancement of technology has significantly altered the dynamics of military engagements globally. Concurrently, India has grappled with a persistent shortfall in military personnel, threatening its operational readiness.

**Agniveer aims to infuse new vigor, innovation, and enhanced operational capabilities into the military framework by facilitating the induction of young, technically inclined individuals into the army.**

Additionally, the evolving nature of threats necessitated a shift towards a more technologically adept force capable of leveraging cutting-edge tools and technologies for national defence. Against this backdrop, the Agniveer initiative emerged as a timely and strategic response. Agniveer aims to infuse new vigor, innovation, and enhanced operational capabilities into the military framework by facilitating the induction of young, technically inclined individuals into the army. Furthermore, early engagement with potential recruits channels the youth's energy and aspirations towards constructive and nationally significant pursuits. Hence, Agniveer was not merely an answer to prevailing challenges but a visionary step towards redefining and fortifying India's military prowess in alignment with contemporary needs and future exigencies.

## **Recruitment and Training:**

Agniveer is a recruitment scheme that navigates candidates through a 4-year program encompassing physical, medical, and written tests. The recruitment drive

welcomes applications from citizens of India and Nepal. Upon completing their service tenure, the recruits, termed Agniveers, are remunerated with a "Seva Nidhi" payment.



## **Technical Advancement:**

The initiative has played a significant role in elevating the Indian Army's technical capabilities and modernization efforts. It's about recruiting individuals and infusing new technical skills and knowledge into the army.

## **Future Readiness:**

The projection is that by 2030-2032, Agniveers will constitute half of the 12-lakh-strong army, aligning with the vision of achieving an optimal balance of youth and experience to



effectively combat future wars.

#### **Early Stage Development:**

Agniveer, under the Agnipath scheme, targets students from class 10th-12th, providing them with an early-stage platform to hone their skills and serve the nation. Post-recruitment, these candidates undergo rigorous training for a period of six months, preparing them for the challenges ahead.

#### **Addressing Personnel Shortage:**

In the wake of personnel shortages experienced in recent years, the Agniveer initiative aims to induct approximately 40,000 soldiers in its initial phase, thereby significantly alleviating the shortfall and enhancing the army's operational readiness.

#### **Enhanced Operational Efficiency:**

The structured training and early induction of individuals

acumen brought in by the new recruits could lead to increased collaboration with domestic defence industries, fostering innovation and reducing dependency on foreign military technology.

#### **Community Engagement:**

By reaching out to the youth at an early stage, the initiative also aids in cultivating a sense of patriotism and duty towards the nation. The community engagement aspect of Agniveer helps in creating a positive perception of the military, which is crucial for nurturing a supportive environment for defence endeavours.

#### **Long-term Strategic Advantages:**

The long-term vision encapsulated in the Agniveer initiative could yield strategic advantages. A technically adept, well-trained force is indispensable for asserting national interests and maintaining a deterrent posture in a geopolitically tense neighbourhood.

#### **Holistic Development:**

Agniveer doesn't just aim at military enhancement but also focuses on the holistic development of recruits. The rigorous training regimen, coupled with exposure to advanced military technology and strategic doctrines, contributes to the individuals' overall personal and professional growth, preparing them for a range of responsibilities within and beyond the military framework.

In the broader spectrum, the Agniveer initiative aligns with the nation's strategic objectives of self-reliance and indigenous capacity building in defence. The influx of fresh, tech-savvy minds into the military under this scheme is expected to foster a culture of innovation and adaptation,



**Agniveer, under the Agnipath scheme, targets students from class 10th-12th, providing them with an early-stage platform to hone their skills and serve the nation.**

through Agniveer contribute to enhancing the operational efficiency of the Indian Army. By having a cadre of well-trained, physically fit, and mentally agile soldiers, the army is better positioned to respond to various national security threats and challenges.

#### **Indigenous Capability Building:**

Agniveer could potentially serve as a catalyst for promoting indigenous defence technology development. The technical

vital for staying ahead in the modern warfare landscape. The Agniveer initiative is a well-thought-out strategy aimed at revolutionizing India's military framework. By opening the gates to young, technically adept individuals, it seeks to modernize the army, ensuring India's preparedness for future conflicts. Its unique approach towards recruitment and training, coupled with its emphasis on technical enhancement, positions Agniveer as a crucial pillar in fortifying India's military prowess and national security. In sum, the multi-faceted benefits emanating from the Agniveer initiative underscore its significance in advancing India's military capabilities and fostering a robust defence infrastructure. Agniveer embodies a forward-looking approach to securing India's defence interests in the contemporary era through a blend of recruitment, training, and community engagement.



# Cyber Resilience and Digital Warfare: Navigating India's Security in the Digital Domain

- Tajinder Pal Singh Bagga, National Secretary BJYM

**T**he importance of robust cybersecurity measures and digital warfare capabilities cannot be overemphasized in the rapidly evolving digital landscape. Under the stewardship of Prime Minister Narendra Modi, India has witnessed a concerted effort towards bolstering its cyber and digital security infrastructure. This article delves into various initiatives and measures the Modi government undertook to enhance India's cybersecurity and digital warfare capabilities.

The significance of robust cyber and digital security measures cannot be overstated in the digital age. Nations across the globe are witnessing an exponential rise in cyber threats and digital espionage that seeks to undermine not only their military operations but also their critical infrastructure. The battlefield has extended beyond the physical realm into the cyber domain, where state and non-state actors exploit vulnerabilities in digital systems to gain a strategic advantage. For India, with its burgeoning digital economy and an increasing reliance on digital technologies across various sectors, enhancing cyber and digital security is imperative to safeguard national interests. Moreover, as geopolitical tensions simmer in the region, a fortified cyber defence mechanism is crucial to ensure the integrity and confidentiality of sensitive military and government data.

Developing digital warfare capabilities is a strategic necessity in concert with bolstering cyber defences. Digital warfare encompasses a range of activities, including, but not limited to, cyber reconnaissance, electronic warfare, and offensive cyber operations. A proficient digital warfare capability enables a

nation to thwart potential cyber threats, ensure the resilience of its communication networks, and, if necessary, respond to adversaries effectively in the cyber domain. For the Indian armed forces, integrating digital warfare capabilities with traditional military operations is pivotal for achieving operational excellence and ensuring a comprehensive national defence posture. The development of digital



warfare strategies also aligns with the broader objective of modernizing the military to meet the evolving nature of threats in the 21st century. Hence, the twin goals of enhancing cyber and digital security and advancing digital warfare capabilities are paramount for India as it navigates the digital era's complex and evolving security landscape.



The Indian government, under the leadership of Prime Minister Shri Narendra Modi, has undertaken several initiatives to strengthen the cyber security and digital warfare capabilities of India.

• **National Cyber Security Policy:**

The Modi government has been proactive in updating and implementing the National Cyber Security Policy, with a focus on creating a secure cyber ecosystem, ensuring compliance with global security standards and strengthening the regulatory framework.

• **National Cyber Coordination Centre (NCCC):**

Established to facilitate real-time threat assessment and response, the NCCC plays a pivotal role in identifying and mitigating cyber threats.

• **Cybersecurity Skill Development Initiatives:**

Recognizing the importance of skilled manpower in combating cyber threats, various skill development programs have been initiated to nurture a pool of proficient cybersecurity professionals.

• **Cyber Warfare Units:**

The establishment of dedicated cyber warfare units within the armed forces is a testament to the government's commitment to safeguarding the nation's digital frontier.

• **Bilateral and Multilateral Cybersecurity Agreements:**

Engaging with global counterparts through bilateral and multilateral agreements, the Modi government has sought to foster a collaborative approach towards cybersecurity and digital warfare.

• **Collaboration with Industry:**

By fostering partnerships with the private sector, the government has managed to leverage the expertise and resources of the industry in combating cyber threats and enhancing digital security.

• **Cybersecurity Awareness Campaigns:**

Through various awareness campaigns, the government has aimed to educate the public and private entities about the importance of cybersecurity and the best practices to adhere to.

• **Strengthening of Legal Framework:**

The government has taken steps to strengthen the legal and regulatory framework to ensure strict enforcement of cybersecurity laws and regulations.

• **Indian Computer Emergency Response Team (CERT-In):**

Strengthening the role of CERT-In in managing cybersecurity incidents is another key focus area of the Modi government, ensuring a swift and effective response to cyber threats.

• **Investment in R&D:**

Promoting research and development in cybersecurity technologies is a crucial aspect of the government's strategy to stay ahead of the evolving cyber threat landscape.

In conclusion, the various measures and initiatives undertaken by the Modi government underscore its commitment to securing India's digital frontier against the burgeoning threat of cyber-attacks and digital warfare. By investing in advanced technologies, nurturing

skilled manpower, and fostering international and industry collaborations, the Modi government has laid a solid foundation for a robust cybersecurity infrastructure, positioning India well to tackle the challenges of the digital age.



• **Investment in Advanced Technologies:**

The government has invested in cutting-edge technologies such as Artificial Intelligence, Blockchain, and Machine Learning to bolster cybersecurity measures and digital warfare capabilities.



# Uncertainty-Resistance, Disruptive Multi-Vector Posturing and Perception Management: Evolving Military Doctrine of Bharat

- Dr. Mrittunjoy Guha Majumdar, Assistant Professor in Quantum Technology, UPES and Editorial Board Member of the BJYM Magazine



**T**he Indian Integrated Defence Staff (IDS), one of the world's largest military forces, stands as a formidable institution with a rich history and a vital role in safeguarding the nation's sovereignty. With its diverse and skilled personnel, the army is equipped to operate in various terrains, from the harsh mountains of the Himalayas to the arid deserts of the Thar. Over the years, it has adapted to contemporary challenges, modernising its equipment and fostering strategic partnerships. Bharat's military doctrine and operational readiness have seen significant development in recent years under the leadership of Prime Minister Shri Narendra Modi, driven by the changing geopolitical landscape, evolving security threats, and the need to ensure the nation's security and stability. It is pertinent to assess the transformations in Bharat's military doctrine, focusing on its response to the two-front threat and the modernisation of its armed forces, with a view to look towards the future.

In this, invariably, we have the growing stature of Bharat's military diplomacy that has enhanced international defence cooperation and the integration of technology to bolster our security posture. In 2017, Bharat unveiled its latest Joint Armed Forces Doctrine, which brought about several noteworthy changes in the country's strategic posture. One significant shift was the explicit inclusion of "surgical strikes" as a formal part of Bharat's response to "terror provocations." The doctrine also marked the transition from "credible minimum deterrence" (CMD) to "credible deterrence" (CD), indicating a shift in the language used to describe Bharat's nuclear posture. Of particular interest was a sentence in the doctrine that emphasised resolving conflicts through a combination of credible deterrence,

coercive diplomacy, and, notably, "punitive destruction, disruption, and constraint in a nuclear environment across the Spectrum of Conflict." The term "disruption" was further defined in the document as a strategy to impair an adversary's military cohesion, potentially by targeting critical elements like command-and-control systems. The doctrine also underscored Bharat's increasing focus on expeditionary and overseas operations, emphasising the need for full interoperability with large and small countries, indicating a growing interest in collaboration with a wide range of nations, including the United States, Japan, Australia, and Southeast Asian partners.

In recent years, Bharat's military doctrine has undergone a series of changes in response to emerging threats, especially the two-front challenge posed by China and Pakistan. Previously, most of its forces were oriented towards the western front facing Pakistan, with only a few divisions facing China. However, the situation became precarious in Eastern Ladakh, where just one division was responsible for defending the 1,140 km-km border. To address this imbalance, the Indian Army undertook a comprehensive approach involving relocation, redeployment, and reorientation. Some armoured regiments, initially earmarked for the western front, were sent to Ladakh. In addition, the Counter Insurgency Force-



Uniform (CIF-U) and its associated sectors were relocated to Eastern Ladakh. These moves allowed for the creation of a more robust defence against potential Chinese incursions. One of the major achievements of the army has been the establishment of dual-tasked formations (DTFs) capable of addressing threats on both fronts.

As part of this strategic realignment, one of the Strike Corps underwent a significant shift in its primary role. It transitioned from its western focus to a primary orientation towards the northern front without changing location. This corps was officially incorporated into the Order of Battle (ORBAT) of the Northern Command. This new dual-tasked capacity allocated two divisions, one infantry and one mountain division, to serve as a reserve force for the critical northern Ladakh region. Additionally, its armoured division, the 33rd division, has been designated as a reserve force under the direct command of the army headquarters. This reorganisation represents a shift from the previous Mountain Strike Corps, which had to oversee the entire northern front while coordinating with three distinct command headquarters. The Mountain Strike Corps is exclusively aligned with the Eastern Command, having received reinforcements as an additional division and reserve artillery brigade.

These strategic manoeuvres have consolidated two strike corps to directly face the China border, contrasting with the previous situation where 17 mountain strike corps were only partially raised. In the central sector, formerly managed by independent brigades reporting directly to the command headquarters, an added division, the 14 RAPID Division, has been deployed to bolster security. This division, originally intended for operations against Pakistan, is currently being transformed into a mountain division to respond to potential Chinese aggression in the middle sector effectively. To enhance command and control, there are plans to establish intermediary corps headquarters in key sectors. These intermediary structures will streamline decision-making processes and improve the army's readiness to respond effectively to threats.

Bharat has made notable strides in improving internal security, particularly in the Northeast. Many militant groups have either suspended operations or signed ceasefire agreements with the government. It allowed for a planned drawdown of forces engaged in counterinsurgency and counterterrorism (CI/CT) operations, enabling them to focus exclusively on their primary role of conventional operations on the northern front. These forces remain readily available for CI/CT operations if the need arises. As part of the transformation of the Indian Army, there is a shift toward creating Integrated Battle Groups (IBGs) by amalgamating brigades and divisions. IBGs are leaner, more agile formations tailored to specific terrains, tasks, and threats. They have comprehensive capabilities capable of quick mobilisation in developing situations.

Additionally, the restructuring of combat and logistics support elements has occurred, with these units permanently

put on the order of battle (ORBAT) of brigades. This optimisation leads to operational efficiency and significant savings in personnel and resources. To reduce the “tooth-to-tail” ratio, Bharat is leveraging modern technology and reducing personnel-intensive tasks. For example, introducing drones and all-terrain vehicles (ATVs) has led to reconsidering animal transport (AT) units. Automation and using artificial intelligence (AI) and machine learning are becoming essential for improving operational efficiency. But most important are the meta-mechanics of the empirical deployment.

Bharat has witnessed significant developments in its military doctrines and reform-oriented military literature in recent years. These documents and writings are crucial in shaping the country's defence strategies, even at the forefront of modern military strategies. For instance, the Tri-Service Doctrine (2017) and the Land Warfare Doctrine (2018) marked a significant shift in Indian military doctrine. They emphasised the integration of national policy objectives with

**One of the major achievements of the army has been the establishment of dual-tasked formations (DTFs) capable of addressing threats on both fronts.**

military strategy, highlighting the critical linkage between national security and nation-building. These doctrines introduced military power as a deterrent, reflecting a proactive approach and advocating for coercive

diplomacy, surgical strikes, and punitive actions when necessary. Moreover, they recognised the significance of ensuring the security of the internal environment and promoting constructive engagement with other nations. Additionally, they highlighted the importance of joint operations and tri-service synergy.

Military diplomacy plays a crucial role in Bharat's broader security architecture. Bharat actively engages with various countries to expand international defence cooperation. The Indian Navy and Air Force are at the forefront of these efforts due to their broader reach and commonality of platforms. Through bilateral and multilateral exercises, Bharat is building capabilities for interoperability and strengthening relationships. Examples include the Malabar naval exercise with the US and Japan and the Veer Guardian 2023 exercise between the Indian and Japanese air forces. These exercises focus on building relationships without forming military alliances. Bharat's strategic posture, embodied in the concept of “security and growth for all in the region” (SAGAR), seeks peace and prosperity. By adjusting its military doctrine, Bharat aims to lower force levels on the Western front to promote diplomatic dialogue and assure Pakistan of its peaceful intentions. Simultaneously, Bharat's enhanced military capabilities on the northern front serve as a deterrent to any adventurism and encourage discussions on resolving long-standing border disputes with China.

In the future, Bharat must formulate a comprehensive doctrine encompassing the three phases of multidomain operations: competition, crisis, and armed conflict. This doctrine should address the complex challenge posed by peer competitors who employ layered capabilities from a standoff range to deter adversaries. This approach necessitates that Bharat and its partners and allies possess



redundant land-based capabilities capable of neutralising or disrupting threat-networked intelligence, surveillance, reconnaissance, and long-range fires. Countries such as China, the United States, and Russia have the potential to achieve their objectives without direct military engagement, primarily by influencing the narrative and controlling facts on the ground.

In response, the Indian Army must establish a narrative to counteract this strategy during the operations' competition and crisis phases. Advanced integration of these aspects is pivotal. Perception management, which is all about relations and information activities used to influence the attitudes, opinions, and behaviour of various target audiences, is highly important. The primary objective of PsyOps is to shape the perceptions of these audiences by conveying accurate and credible information that fosters confidence in one's military forces and operations. Real-time projection of activities and truthful narratives are key aspects of successful Psy Ops. In addition to these operational aspects, it is crucial to leverage various media channels, including 24x7 news coverage and the production of documentaries by respected filmmakers, to continuously showcase the positive and supportive role played by the

**Bharat's military doctrine has undergone a series of changes in response to emerging threats, especially the two-front challenge posed by China and Pakistan.**

armed forces. It helps in building trust and a sense of unity among the population.

Warfare operates within a realm of extremes, one of which is the ceaseless quest for information. The planning process initiates a reciprocal interaction between planners and intelligence personnel. Planners perpetually thirst for more information, while their intelligence, surveillance, and reconnaissance resources endeavour to provide what they can, though never to the planner's contentment. This insatiable demand for information fuels the development of novel systems and technologies to bridge the gap. These innovations engender an information-rich environment, creating a new standard for the minimum informational requirements for military operations. However, the two constraints of uncertainty and unpredictability obstruct the realisation of absolute knowledge.

Uncertainty arises from an imperfect understanding of the operating environment, while unpredictability stems from the inability to predict action outcomes. These limiting factors keep military operations situated in a state of partial comprehension. By recognising the structure of uncertainty and unpredictability, military forces can harness them as planning factors rather than mere sources of friction. Viewing states as complex adaptive systems allows for a more comprehensive understanding of the modern nature of war, where relationships between actors shape system performance, leading to qualitatively similar emergent behaviour. Characteristics of complex adaptive systems, including non-linearity, sensitive dependence on initial

conditions, catastrophe theory, and lateral relationships, contribute to the unpredictability intrinsic to modern warfare.

Military leaders must emphasise adaptability and responsiveness over information dominance to thrive in such an unpredictable environment, fostering a culture that encourages challenging assumptions. While adaptability is crucial for change, it should not lead to unwarranted fluctuations in campaign planning, which may become counterproductive. By approaching the inherent unpredictability of warfare with an open mindset and a model that accounts for this unpredictability, the military can leverage adaptability and responsiveness to succeed in an ever-changing conflict landscape. A practical approach involves a sincere effort to analyse and navigate future challenges, cutting through the complexities of uncertainty. This analysis aims to transform the unknown unknowns into known unknowns, essentially converting uncertainty into a manageable level of risk.

A parallel can be drawn to the financial world, where market uncertainty is addressed through hedging. Hedging diversifies options, ensuring that a potential gain in another can balance a potential loss in one sector. It involves expanding the range of options, considering diverse perspectives, and accommodating counter viewpoints. Scenario building, a technique commonly employed in diplomacy, management, and certain military planning aspects, is a way of hedging bets against uncertainty. Another emerging approach in these uncertain times is "red teaming" in decision-making. Red teams, comprised of qualified personnel, are tasked with continuously evaluating organisational decisions from the viewpoint of adversaries or competitors, identifying vulnerabilities and deficiencies in the decisions. Red teams have proven effective in simulating the nuances of real-world uncertainty.

At the operational level, Bharat is closely following technological advancements, including quantum technologies, blockchain, AI, and machine learning, to incorporate them into its warfighting capabilities. Collaborations with academic institutions and industry partners have yielded technological innovations, such as an integrated mobile camouflage system. Bharat has embarked on a journey to modernise its military by incorporating AI technologies to adapt to evolving security challenges. This shift was initiated in 2018 when a multi-stakeholder task force was formed to develop an AI strategy and framework for national security and defence needs. The Defence Artificial Intelligence Council (DAIC) and Defence AI Project Agency (DAIPA) were subsequently established to promote AI research, development, and deployment in the defence sector.

In recent years, Bharat has introduced various AI-based defence products and technologies, including AI-powered drones, cognitive radars, uncrewed vehicles, and more. These advancements showcase Bharat's commitment to leverage AI in bolstering its defence capabilities. To ensure responsible AI integration, Bharat should conduct comprehensive Type 3 (user trials) and Type 4 (operational environment-specific evaluation) testing of military AI systems. These evaluations should include considerations of ethical and accountable AI usage and ensure that AI



systems perform ethically in different battlefield scenarios. In the previous year, the Ministry of Defence (MoD) made an official announcement regarding the Indian Army's commencement of the procurement process for Quantum Key Distribution (QKD) systems. This was initiated through the issuance of a commercial Request for Proposal (RFP), with plans for subsequent deployment. To drive advancements in quantum research and innovation, the Indian Army, in collaboration with the National Security Council Secretariat (NSCS), has established the Quantum Lab at the Military College of Telecommunication Engineering, located in Mhow (MCTE).

Furthermore, the utilisation of quantum technology is not confined to the Indian Army alone. The Indian Navy is actively exploring the potential applications of this technology. In a noteworthy development, the Raman Research Institute (RRI), an autonomous institution under the Department of Science and Technology (DST), has entered a Memorandum of Understanding (MoU) with the Indian Navy's Research and Development unit, known as Weapons and Electronics Systems Engineering Establishment (WESEE). This collaboration aims to lead research efforts directed at the development of Quantum Key Distribution (QKD) techniques that the Indian Navy could harness to enhance the security of free space communications within the nation. The Indian Army has taken the lead in contracting four Innovation for Defence Excellence (iDEX) projects worth approximately Rs.70 crores.

Additionally, it oversees two of the three contracted Make II projects, totalling around Rs.180 crores. In the latest round, 49 schemes, with a total value of Rs.7600 crores, have been initiated, covering a wide range of areas, such as mobility and energy solutions, communication frameworks, drones, protective gear, armaments, drones and the latest simulators. The emphasis is on specialised technologies such as UAV-launched Precision Guided missiles, Loiter Munitions and more. To achieve self-sufficiency through indigenisation, the Army Design Bureau (ADB) is playing a pivotal role by engineering fully indigenous solutions in collaboration with central and state industrial bodies, MSMEs, startups, and more. The innovative Light Tank is designed for high-altitude engagements in hilly and mountainous regions, while the Terminal End Secrecy Device focuses on secure communication during operations. An impressive list of 45 Make II projects with a total value of Rs.30,000 crores is in progress, with contracts already signed for projects like Upgraded Assault Track Way. These projects span various technologies, including Counter-Drone Systems, Armoured Fighting Vehicle Protection, Multirole Precision Kill Systems, Terminal Guidance Munitions and Directed Energy Weapon.

Bharat's evolving military doctrine responds to the changing security environment and the need to maintain peace and stability in the region. By addressing the two-front threat, improving internal security, embracing technology, and engaging in military diplomacy, Bharat strives to bolster its defence capabilities while promoting diplomatic solutions to long-standing regional conflicts. In a rapidly changing world, Bharat's military doctrine and diplomacy are crucial components of its national security strategy.





# Forge to Frontier: Indian Defense Manufacturing and Modernization

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**U**nder the visionary leadership of Prime Minister Narendra Modi, the “Make in India” initiative has heralded a transformative era in the Indian defence sector. Since its inception in 2014, this ambitious programme has been a linchpin in reshaping India's defence manufacturing capabilities and promoting self-reliance. Recognising the immense potential of India's industrial infrastructure and the need for indigenous defence production, the Modi government has methodically prioritised and incentivised the domestic manufacturing of defence equipment. It boosts India's strategic autonomy and elevates its position in the global defence trade ecosystem. The government has seamlessly integrated India into the global defence supply chain by fostering collaborations between domestic and international entities, enhancing Foreign Direct Investment (FDI) caps, and introducing progressive policies. Moreover, the emphasis on harnessing local talent and technology underscores the commitment to realising a robust, self-sustaining defence industry. Through “Make in India,” the Modi government has manifested its dedication to fortifying India's borders with home-grown prowess, transforming the nation from a defence importer to a potential exporter, and setting the stage for a safer, stronger future.

## Defence Procurement Procedure (DPP) 2016

The Defence Procurement Procedure (DPP) 2016, an initiative of the Indian government, is a landmark reform to overhaul India's defence acquisition process. It strongly underscores the 'Make in India' campaign, aiming to boost indigenous defence manufacturing substantially. DPP 2016 streamlines the acquisition procedures, emphasises transparency, and encourages greater private sector involvement. Notably, it introduces new procurement categories and prioritises domestically produced defence goods. The strategic partnership model under DPP 2016 facilitates deeper cooperation between Indian defence companies and global industry giants, aiming to reduce the country's dependency on foreign arms imports. The DPP was revised to encourage domestic defence manufacturing by

prioritising the 'Buy (Indian-IDDMM)' category, emphasising products designed and manufactured in India.

## Foreign Direct Investment (FDI) Relaxation

With government approval, the FDI cap in the defence sector was raised from 26% to 49% under the automatic route and beyond 49%, leading to increased foreign investments, especially when the investment would bring in state-of-the-art technology. This pivotal move aimed to attract international defence manufacturers to set up production bases in India, thus promoting domestic manufacturing, technology transfer, and job creation. The relaxation enhances self-reliance in defence production and positions India as a major player in the global defence manufacturing arena. For instance, Lockheed Martin has shown interest in shifting its F-16 production line to India.

## Defence Industrial Corridors

The “Make in India” initiative by the Modi government has significantly prioritised the defence sector. One of the key strategies to bolster domestic defence manufacturing has

**The “Atmanirbhar Bharat” initiative, translating to “Self-reliant India”, dovetails with the “Make in India” campaign, aiming to stimulate indigenous production and diminish import reliance.**

been the establishment of Defence Industrial Corridors (DICs). Two such corridors have been proposed, one in Uttar Pradesh and another in Tamil Nadu. These corridors aim to ensure a well-connected network of defence manufacturing units. They will house numerous public and private sector defence manufacturing companies, offering a platform for foreign and domestic investors. The move ensures self-reliance in defence production, substantial employment opportunities, and regional development.



### Strategic Partnership Model

Under the “Make in India” umbrella, the Strategic Partnership Model enhances indigenous defence manufacturing through collaborations between Indian firms and global giants.

It allows Indian private companies to form partnerships with foreign defence manufacturers. An example is the collaboration between the Adani Group and the Swedish firm Saab to manufacture Gripen fighter jets in India. Also, the selection of Larsen & Toubro, in partnership with France's MBDA, to develop and produce missile systems.

### Dhanush Artillery Gun:

Often dubbed as the “Desi Bofors”, the Dhanush artillery gun is an upgraded version of the Bofors gun, and its successful induction and deployment highlight the strides made under “Make in India” in the defence sector.

### Boosting MSMEs in Defence

The “Make in India” initiative has been instrumental in fortifying the Micro, Small, and Medium Enterprises (MSMEs) within India's defence sector. Recognising the pivotal role of MSMEs in bolstering local manufacturing and fostering innovation, the government has facilitated their enhanced participation in defence production. Key policies have been revised to prioritise domestic manufacturers in procurement processes. For instance, the Defence Procurement Policy now includes a clause favouring local suppliers. Furthermore, Defence Industrial Corridors have been established in states like Uttar Pradesh and Tamil Nadu, offering a thriving ecosystem for MSMEs to scale up operations, partner with major defence manufacturers, and access state-of-the-art infrastructure.

### Akash Missile System

The Akash Missile System, a product of India's Defense Research and Development Organization (DRDO), epitomises the success of the “Make in India” initiative in the defence sector. As a medium-range surface-to-air missile with multi-target engagement capability, Akash is a testament to India's indigenous technological and manufacturing prowess. Under the Modi government's push for self-reliance, the Akash system has not only been inducted into the Indian Armed Forces but also seen export potential, marking a significant stride towards India's vision of becoming a key player in the global defence industry.

### Atmanirbhar Bharat Initiatives:

The “Atmanirbhar Bharat” initiative, translating to “Self-reliant India”, dovetails with the “Make in India” campaign, aiming to stimulate indigenous production and diminish import reliance. A notable example is the electronics sector,

which has witnessed a resurgence in local manufacturing, with firms like Lava and Micromax launching new products. The indigenously developed Tejas fighter jets in the defence realm stand testament to India's self-reliant goals. Furthermore, the emphasis on local artisans through the promotion of handicrafts and handlooms showcases the program's breadth, promoting large industries and grass-roots-level production.

### Advanced Towed Artillery Gun System (ATAGS)

The Advanced Towed Artillery Gun System (ATAGS) is a testament to the “Make in India” initiative in the defence sector. Developed indigenously, ATAGS is one of the world's most powerful 155mm/52-calibre towed artillery guns. This project showcases India's strides in defence manufacturing capabilities, reducing reliance on imports and bolstering the nation's defence artillery lineup with cutting-edge, home-grown technology.

The Modi government's strategic integration of the “Make in India” initiative into the defence sector marks a transformative chapter in India's national security preparedness. Through policies like the Defence Procurement Procedure and the establishment of Defence Industrial Corridors, the government has fortified the nation's defence infrastructure and catalysed indigenous innovation. Such initiatives pave the way for India's transition from being a significant defence importer to a formidable defence exporter in the future. The investments and partnerships cultivated now are poised to yield robust technological advancements, solidifying India's position on the global defence stage.





# Revolutionizing Defence of Bharat: The Make in India Initiative

- Gourav Lama, Assistant Professor, Presidency University, Kolkata & Vice-President, BJYM, West Bengal

**B**harat's "Make in India" initiative, under Prime Minister Shri Narendra Modi's visionary leadership, is a pivotal transformational force in the nation's defence sector. Launched in September 2014, this ambitious campaign was designed to reduce India's reliance on foreign defence imports, enhance indigenous production capabilities, and bolster the country's self-sufficiency in defence manufacturing. The "Make In India" initiative is far from a mere policy shift; it represents a comprehensive strategy encompassing a wide range of measures to revitalise and modernise Bharat's defence industry. Through a combination of policy reforms, incentives, and collaborations, the initiative seeks to not only revamp the country's defence manufacturing landscape but also empower it to compete on a global scale.

One of the primary goals of the "Make in India" initiative in the defence sector was to reduce India's dependency on foreign arms and equipment. Historically, Bharat had been one of the world's largest importers of defence hardware,

establishment of joint ventures, technology transfer agreements, and increased indigenisation of defence production. As a result, Bharat's reliance on imports has gradually decreased.

The "Make in India" initiative has been instrumental in boosting indigenous defence production. It has encouraged public and private sector companies to invest in research and development, modernise their facilities, and adopt cutting-edge technologies. It has led to the development of a wide range of defence equipment and enhanced the quality and capabilities of Indian-made products.

**PM Modi's visionary "Make in India" initiative has undeniably left an indelible mark on Bharat's defence sector, ushering in a new era of self-reliance and innovation. Under his leadership, India's defence industry has undergone a profound transformation, with far-reaching implications for the nation's security, economy, and global standing. PM Modi's unwavering commitment to boosting indigenous manufacturing has breathed life into 'Atmanirbhar Bharat' or 'Self-Reliant India.'**

which drained significant foreign exchange and made Bharat vulnerable to supply chain disruptions and geopolitical pressures.

Under the initiative, efforts were made to promote indigenous production and encourage collaborations between Indian and foreign defence companies. It led to the es-

The Defence Research and Development Organisation (DRDO) has been at the forefront of indigenous defence research, successfully developing a variety of systems, including ballistic missiles, radar systems, and advanced weapon-





ry. The Tejas fighter jet is a notable product of this initiative. The Tejas is an indigenous multi-role fighter aircraft developed by the Bharatiya aerospace company Hindustan Aeronautics Limited (HAL). The Tejas is designed to serve the Bharatiya Air Force and Navy, and it is a significant achievement in Bharat's aerospace industry.

These achievements have bolstered Bharat's security and positioned it as a competitive player in the global defence market.

The "Make in India" initiative has been pivotal for the defence sector and contributed significantly to job creation and economic growth.

The growth of the domestic defence industry has generated employment

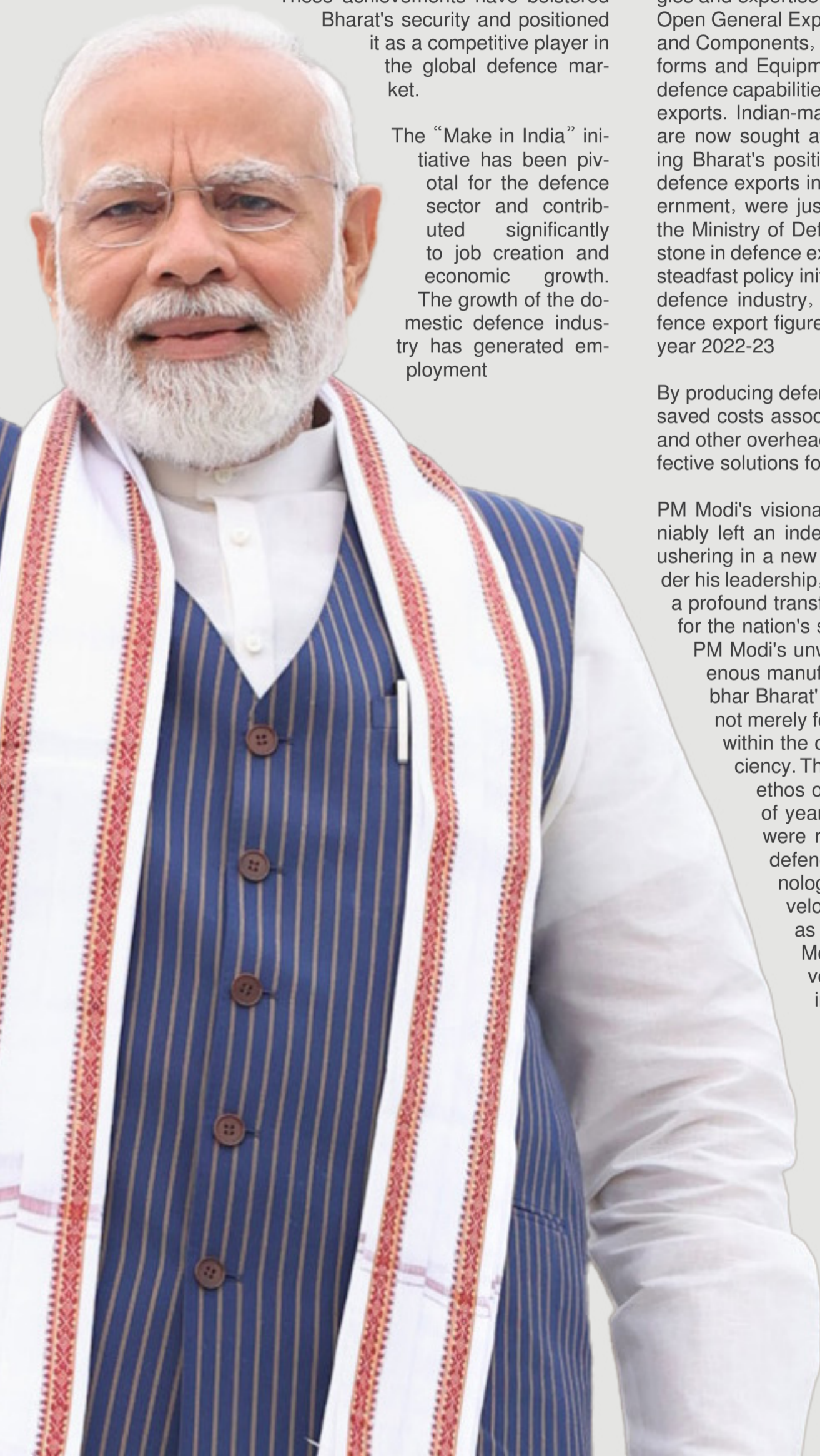
opportunities for skilled and semi-skilled workers across the country. Moreover, it has attracted foreign direct investment, increasing economic activity.

Bharat's collaboration with foreign defence companies has expanded, facilitating the transfer of advanced technologies and expertise. The Government has also issued three Open General Export Licenses (OGEL) for exporting Parts and Components, Transfer of Technology, and Major Platforms and Equipment. It has not only enhanced Bharat's defence capabilities but has also opened doors for defence exports. Indian-made defence equipment and technology are now sought after by several nations, further bolstering Bharat's position as a defence exporter. India's total defence exports in 2014-15, the first year of the Modi government, were just Rs 1,940.64 crore. In April this year, the Ministry of Defence achieved an unprecedented milestone in defence exports. Thanks to the Modi government's steadfast policy initiatives and the remarkable efforts of the defence industry, India witnessed a record-breaking defence export figure of around Rs 16,000 crore in the fiscal year 2022-23

By producing defence equipment domestically, Bharat has saved costs associated with import duties, transportation, and other overheads. It has the potential to lead to cost-effective solutions for the armed forces.

PM Modi's visionary "Make in India" initiative has undeniably left an indelible mark on Bharat's defence sector, ushering in a new era of self-reliance and innovation. Under his leadership, India's defence industry has undergone a profound transformation, with far-reaching implications for the nation's security, economy, and global standing.

PM Modi's unwavering commitment to boosting indigenous manufacturing has breathed life into 'Atmanirbhar Bharat' or 'Self-Reliant India.' This initiative has not merely focused on assembling military hardware within the country but has aimed for true self-sufficiency. This vision aligns with the ancient Bharatiya ethos of 'Make in India' dating back thousands of years, where innovation and craftsmanship were revered. Under his leadership, Bharat's defence industry has made remarkable technological advancements. The successful development of critical defence systems such as the Tejas fighter aircraft, Agni and BrahMos missile systems, and advanced naval vessels showcases the nation's prowess in cutting-edge technology.







# Modi's Twin Pillars: Atmanirbhar Bharat and Defense Modernization

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- N S Phalguni Bhat, Assistant Professor  
Participant & Mentor, Youth Can Lead

**T**

he nationalistic India is willing to do more with the world, not less. From the history of India to the present day, our nation's tradition is to reflect on both the goals and the nature of the process towards it. After 2014, defence sector experienced a drastic elevation in its power by greater emphasis on indigenous manufacturing, linkage between acquisitions and transfer of technology to manufacturing entities and research & developments.

India has one of the world's largest military forces, with a strength of over 14.4 lakh (1.44 million) active personnel. It has the world's largest volunteer military of over 51 lakh (5.1 million) personnel. To this largest military force, bullet-proof jackets are a common and basic need, which wasn't adequately provided before 2014. The Indian Army received 50,000 bullet-proof jackets in 2016 during the tenure of former defence minister Sri Manohar Parikkar. During 2018, there was the fulfilment of procurement of 1.86 'Boron Carbide Ceramic' bullet-proof jackets, which weren't imported. PM Modi-led government believes in the 'Make in India'. SMPP Pvt Ltd, a Delhi-based company, mass-produced these jackets.

Any sector of the country works well when it is exhilarated morally and financially by the administration. Likewise, the defence sector's allocation to meet expenditures is the most significant component of the government. The years span between the FY 2008-09 to 2013-14 had the graph range of 12-14% of the defence sector budget and a steep increase along with the rise of expenditure marked to 16% in FY 2016-17 and staying that level upto 2019-20. It peaked at 17.46% in FY 2018-19. Nevertheless, India in 2023

has 13% of budget allocation for defence in the latest FY 2023-24 Budget.

India is now the fourth country, after France, Egypt and Qatar, to fly the Rafale from May 2020. The government recognised the Rafale's necessity, as it is categorised as a 4.5 generation aircraft for its radar-evading stealth profile, a game changer for the Indian Air Force (IAF). Rafale uses the modern technology of the 4+ generation that could be used in numerous roles, including Air dominance, interdiction, aerial recce, and precision long-range strikes including in the maritime environment. This aircraft is strengthened by its ability to fight enemy aircraft from a range of more than 100 km.

Prime Minister Shri Narendra Modi said, Today, here on the shores of Kerala, every Indian is witnessing the dawn of a new future. It is a testimony to India's hard work, talent, influence and commitment to the 21st century. If the goals are distant, the journeys long, the oceans and the challenges infinite, then India's answer is Vikrant." Vikrant is the first indigenous aircraft carrier warship 'Make in India' gift to the country. Past governments ignored the security concerns in the Indo-Pacific region and the Indian Ocean. Still, the present-day NDA government never takes a chance in depriving the priority of defence. The prerequisite of INS Vikrant came into the picture, representing the current pinnacle of India's surface ship manufacturing sector.

With the military standoff between India and China entering its fourth year, the Indian Army is continuously adding newer weapons and capabilities in the Eastern Ladakh sector to tackle emergencies as well as carry out conventional operations. The made-in-India Dhanush howitzer, which has





been developed based on the Transfer of Technology for the Bofors howitzers, M4 Quick Reaction Force Vehicle, which can move 10 combat-ready armed troops to the forward locations around 60-80 Km per hour even in the harsh terrain of Ladakh sector along the Line of Actual Control, are introduced in eastern part of Ladakh. The new surveillance equipment-Tata Rajak system, has been inducted into the force, which can observe or detect humans from more than 15 Km and vehicles from more than 25 Km.

The new equipment is helping the forces to keep an eye on the movement of the adversaries across the LAC. A true leader always prepares and bestows another leader. PM Narendra Modi took the historic decision to reinforce the coordination between the Navy, Army and Airforce by appointing a Chief of defence staff. Just not the appointment, but the liberty is granted to headquarters to procure spare parts and ammunition up to Rs. 300 crores in emergency. In addition, The Ministry of Defense also no longer needs cabinet approval for defence deals worth Rs 2,000 crore.

Captain Abhilasha Barak became the first woman combat aviator. Captain Bhawna Kasturi imprinted her name in history by leading the Army Service Corps in the 2019 Republic Day parade. Five women officers got promoted to the rank of colonel, 557 women officers received permanent commissions in the Army, and 83 women jawans were appointed in the Military Police Corps of the Army. Last but not the least, the government opened the doors to recruit women in NDA.

India today is well prepared and consistently preparing enough to secure the country's citizens 24/7 and make the nation more potent by inhibiting external extortions. The collusive threat from China and Pakistan has always been in the minds of Indian Military Planners. The IAF is continuously upgrading its war capabilities by procuring Tejas Mk1A jets from Hindustan Aeronautic Ltd. It will enhance aerial combat practices and operational readiness, promote interoperability and create synergy amongst the time-tested allies. The Army also plans to induct the Made in India (L&T group) K-9 Vajra self-propelled artillery guns in the eastern Ladakh sector.

More numbers of third-generation missiles from the Make in India route are expected in the near future. Lastly, self-reliant products are not kept with us but have led to 23 fold increase in defence exports by selling major defence systems and artillery guns to almost 85 friendly countries.

Under the leadership of Prime Minister Shri Narendra Modi the defense sector is the best illustration of Atma-Nirbhartha and infusion of modern technology in all areas.



# Modi Government Propelling Defence Sector to New Heights

- Vrinda Kalher, State Executive Committee Member, BJYM, Haryana

**A**ny country should prioritise the defence sector since it enables national security and protection of sovereignty. India continually seeks ways to enhance defence in light of its various security imperatives and the demand for modernisation. Since the BJP government came to power in 2014, it has introduced various measures to strengthen India's defence. The Modi government has boosted the defence sector through the 'Make in India' initiative and modernisation efforts. The "Make in India" program is a major element of the Modi government's approach to enhancing the defence sector. It was launched in September 2014, targeting domestic manufacturing within various industries such as defence, reducing India's dependence on imports of defence items. The Modi government has been promoting indigenous production and modernising the armed forces as the security environment is changing all the time.

## Collaboration with Foreign Defence Firms:

India has collaborated with foreign defence companies to boost its military power and promote domestic production. Partnerships in this regard include technology transfer, joint ventures, and offset agreements, which seek to minimise dependence on imports. Examples of such ventures include contracts with European and Russian manufacturers of military equipment, French Dassault Aviation in developing the Rafale fighter jet, and cooperation with Israeli defence firms in the field of missiles. Though such initiatives have boosted India's defence industry, issues like technology protection and political concerns remain in place. However, these partnerships are vital to modernise the Indian armed forces, encourage innovation and foster self-reliance in defence production.

## Simplified Procurement Process:

India has instituted measures such as DPP, fast-track procurement mechanisms, and the Strategic Partnership Model to simplify its defence procurement process. The "Make in India" initiative aims to improve efficiency, reduce red tape, and promote domestic production. The offset policy promotes technology transfer and local production. In addition, online portals and single-window clearance systems are facilitating smooth transactions. These steps have im-

proved procurement; however, continuous efforts are still needed for transparency, standardisation, timely procurement, and acquisition of critical defence equipment to ensure that India is prepared and self-sufficient in defence.

## Strategic Partnerships:

The emergence of strategic partnerships is pivotal in India's quest for self-reliance, technology upgrades and secure defence. Some notable partnerships include the deal with the French Dassault concerning the Rafale, the BrahMos missile project with Russia, and associations with Israeli defence companies. Such collaborations facilitate technology transfer, co-development, and co-production, which strengthen Indian firms and diminish dependence on imports. To them, they bring in foreign investment, help in economic growth and boost diplomatic ties. Still, issues of patenting and the arduous process of negotiations are continuing. Finally, strategic defence partnerships are essential in modernising the Indian armed forces, supporting indigenous development, and advancing the Make in India policy.

## Advanced Weaponry and Equipment:

India's search for advanced weaponry and gears is an important step towards the country's defence modernisation.

**India's Defence Export initiative has gained momentum. The high-ranked exports include the BrahMos missile system, Dhruv helicopters, Varunastra torpedoes, and small arms.**

This commitment ranges from acquiring modern assets such as Rafale fighter jets, INS Vikramaditya aircraft carrier, and BrahMos missiles to indigenous developments like the Tejas aircraft that are vital in ensuring the country's security and technology. These assets provide India with increased capabilities in all areas, including air, sea, and land, resulting in a more robust deterrence capability. Also, they include investments in surveillance, reconnaissance, communication, and possible future procurements that highlight the country's preparedness for meeting the



new security challenges. It clearly shows India's intention to have robust defence systems to maintain its independence and territorial integrity.

### Defence Budget Allocation:

Expenses can be met with a larger budget allocation, enabling modern military equipment and technology purchases. There is a need to properly finance the armed forces to guarantee their modernisation and readiness. Since the Modi government came into power, the defence budget has constantly risen. The Union Budget for financial year 2023-24 envisages a total outlay of Rs 45,03,097 crore. Ministry of Defence has been allocated a total Budget of Rs 5, 93,537.64 crore, which is 13.18 % of the total budget. Modi Government's seriousness towards defence is shown in the data, as the defence budget for the Financial Year 2014-15 amounted to Rs. 2,29,000 crore (\$38.5 billion).

### Export of Defence Equipment:

India's Defence Export initiative has gained momentum. The high-ranked exports include the BrahMos missile system, Dhruv helicopters, Varunastra torpedoes, and small arms. Indeed, these initiatives correspond with India's "Make in India" policy focused on making the country self-sufficient in defence production. While promoting cooperation with friend states, Indian policy is cautious, and it abides by non-proliferation norms of international law and ensures that defence exports are geared towards their national interests. The country's growing presence in the global defence market indicates that it is serious about improving its potential and adding to international security concerns.

### Research and Development:

India's defence research and development is fundamental to its national security strategy. Organisations like DRDO have played a crucial role in India's development of indigenous defence technologies such as missiles, aircraft, and electronic systems. The effort is also supported by cooperation with foreign partners, strategic partnerships, and the "Make in India" initiative. India's willingness to invest in crucial battlefield assets, like missile defence and artificial intelligence, signifies its readiness for future wars. These technologies also have a dual use that can benefit the civilian sectors. Defence R&D holds the key for India, providing autonomy, adding an edge to military capabilities and leading to being technology leaders globally.

Overall, the "Make in India" initiative and modernisation efforts undertaken by the Modi government to boost India's defence sector have been critical. The above initiatives have reduced India's dependence on defence imports while promoting local defence production, creating jobs and building up the country's defences. India is moving towards greater self-reliance in defence production and improved national security. It has increased its defence budget and invested in R&D. Together, these measures help India to preserve its sovereignty and provide appropriate solutions to emerging protection-related problems.





# 'Sashakt' Indian Navy

**INCREDIBLE INDIAN NAVY** myGov मेरी सरकार



**MADE IN INDIA FOR 'AATMANIRBHAR BHARAT'**

Out of 43 ships on order, 41 are being built indigenously\*

Developed 23 major equipment/systems till date

Built over 4500 sub-assemblies/components indigenously for IN Ships & Submarines

Commenced commercial supply of indigenously built Sonar Dome for IN ships

\*Data as on July 2020

**INCREDIBLE INDIAN NAVY** myGov मेरी सरकार



**HUMANITARIAN ASSISTANCE & DISASTER RELIEF OVERSEAS**

**Mission SAGAR and SAGAR-II**

INS Kesari (May-June 2020) deployed to provide medicine stores & medical kits to Maldives, Mauritius, Madagascar, Comoros and Seychelles

INS Airavat deliver 270 MT of humanitarian aid to Djibouti, Massawa (Eritrea), Port Sudan and Mombasa, Kenya (October-November 2020)

Domier deployed at Sri Lanka & at the Maldives for undertaking training and surveillance missions

**INCREDIBLE INDIAN NAVY** myGov मेरी सरकार



**COMMISSIONING OF INS VISAKHAPATNAM & INS VELA**

The two platforms are a part of Project 15B stealth guided-missile destroyer & fourth Project-75

The ship & submarine feature is designed with advanced technology for naval combats

To enhance India's maritime prowess

INS Visakhapatnam has a significant indigenous content of over 75% contributing towards AatmaNirbhar Bharat

# 'Sashakt' Indian Airforce

**Sashakt Bharat!** myGov मेरी सरकार

**Made in India Agni-4 Lights up the Defence Sector**

**Intermediate Range Ballistic Missile Successfully Tested**

Reaffirms India's policy of 'Credible Minimum Deterrence' Capability



**Sashakt Bharat!** myGov मेरी सरकार

**INDIAN NAVY COMMISSIONS MADE-IN-INDIA INAS 325 AIRCRAFT**

The helicopter will be used for-

- Long range SAR\*
- Maritime Reconnaissance
- Humanitarian Assistance

Administrative support in Andaman & Nicobar Islands

\*SAR - Synthetic-aperture radar



**AIR FORCE DAY** myGov मेरी सरकार

**TOWARDS AATMANIRBHAR IN DEFENCE**

Strategic Partnership Model introduced for private sector participation in **defence manufacturing**

Set up Defence Investor Cell in the **Department of Defence Production**

Defence Procurement Procedure (DPP) amended to introduce **Buy Indian - IDDM\***

\*Indigenously Designed, Developed and Manufactured



# 'Sashakt' Indian Army

**INDIA OF 21st CENTURY** myGov मेरी सरकार

**SEVA SAMARPAN SANRAKSHAN**

**Unleashing New Growth Potential in Defence Sector**

- OFB converted into 7 Defence companies
- Defence companies are 100% government-owned entities
- The step ensures enhanced functional autonomy and efficiency
- Improves self-reliance in defence preparedness

\*OFB- Ordnance Factory Board Source- Gol



**INDIA OF 21st CENTURY** myGov मेरी सरकार

**SEVA SAMARPAN SANRAKSHAN**

**Transformative Defence Reform Agnipath Scheme**

- Tenure of four years including the training period.
- Armed Forces profile to be youthful and dynamic.
- Attractive financial package for the Agniveers.
- Opportunity for Agniveers to train in the best institutions and enhance their skills & qualifications.
- Adequate re-employment opportunities.

Source- Gol



**SEVA SAMARPAN SANRAKSHAN** myGov मेरी सरकार

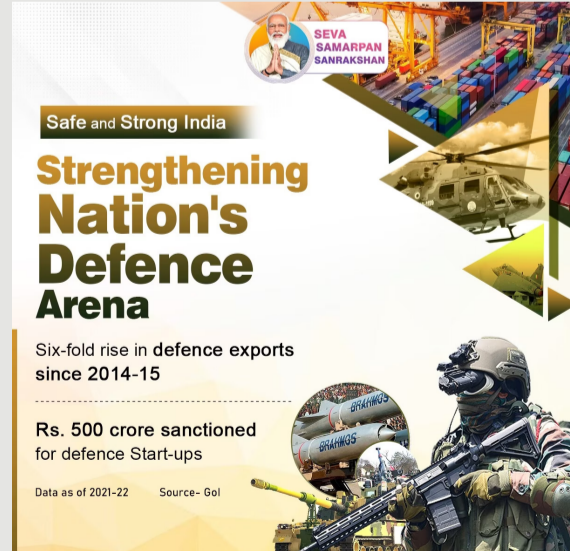
**Safe and Strong India**

**Strengthening Nation's Defence Arena**

Six-fold rise in defence exports since 2014-15

Rs. 500 crore sanctioned for defence Start-ups

Data as of 2021-22 Source- Gol







# India of 21st Century

**INDIA OF 21<sup>st</sup> CENTURY**

SEVA SAMARPAN SANRAKSHAN

**FDI IN DEFENCE SECTOR**


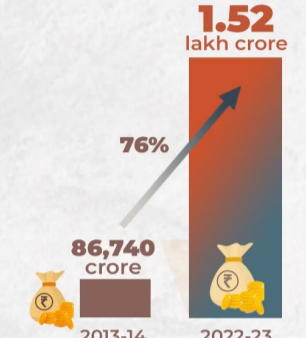
FDI in Defence Sector enhanced up to **74%** through Automatic Route

A higher automatic route limit facilitates ease of doing business

Total FDI inflow reported till May, 2022\* **Rs 494 Crores**

\*Since the notification of revised FDI policy  
Source- GoI

**IMPETUS TO ARMED FORCES MODERNISATION**

**1.52** lakh crore

**76%**

**86,740** crore

2013-14      2022-23

Total allocation under **Capital Outlay of the Defence Services**



**INDIA OF 21<sup>st</sup> CENTURY**

SEVA SAMARPAN SANRAKSHAN

**AN ICON OF INDIA'S PRIDE & POWER**



**INS VIKRANT**



- India's first indigenous aircraft carrier
- Electricity generated can power 5,000 houses
- Flight deck as big as 2 football grounds

Source- GoI

**INDIA OF 21<sup>st</sup> CENTURY**

SEVA SAMARPAN SANRAKSHAN

**ONE RANK, ONE PENSION (OROP)**

Fulfilled demand for OROP pending for **40 years**

Implemented with effect from **July 2014**

**Rs 10,795.40 crore** disbursed as arrears for implementation

Source- GoI






# Defence Reforms making defence sector Aatmanirbhar

MINISTRY OF DEFENCE  
GOVERNMENT OF INDIA


**Defence Reforms**  
Making Defence Sector  
AatmaNirbhar

myGov  
मेरे सर्वर



**FDI IN DEFENCE**  
FDI allowed up to 74% through automatic route & beyond 74% to be permitted through government (approval) route

**GLOBAL MANUFACTURING HUB**  
Of the total acquisition proposals of the Indian Army, Navy & Air Force, 87% of them will be Make in India



MINISTRY OF DEFENCE  
GOVERNMENT OF INDIA

**Defence Reforms**  
Making Defence Sector  
AatmaNirbhar

myGov  
मेरे सर्वर



**LANDMARK ACHIEVEMENTS**

- India gets its first Chief of Defence Staff to increase efficiency and coordination
- Import of 101 defence equipment items stopped



MINISTRY OF DEFENCE  
GOVERNMENT OF INDIA

**Defence Reforms**  
Making Defence Sector  
AatmaNirbhar

myGov  
मेरे सर्वर



**STREE SHAKTI IN ARMED FORCES**



- Introduction of women pilots in the Indian Navy
- 3 women pilots were included in the combat-ready squadron
- 10 streams of Indian Army opened up for women officers
- National Defence Academy to open up its door to women

MINISTRY OF DEFENCE  
GOVERNMENT OF INDIA

**Defence Reforms**  
Making Defence Sector  
AatmaNirbhar

myGov  
मेरे सर्वर



**BRINGING AATMANIRBHARTA TO DEFENCE**

**POLICY INITIATIVES**

- New Defense Acquisition Procedure (DAP 2020) approved
- Promoting Indigenous product in defence & aerospace
- Ushering era of greater efficiency & productivity in Ordnance Factory Board (OFB)
- Separate Budgetary Allocation for Domestic capital Acquisition
- Transfer of technology (TOT) for materials through offset



MINISTRY OF DEFENCE  
GOVERNMENT OF INDIA

**Defence Reforms**  
Making Defence Sector  
AatmaNirbhar

myGov  
मेरे सर्वर



**BOOST FOR STARTUPS**



- Provision for procurement from startup as Buy India-IDDM\*
- Legal recognition of iDEX\*\* process


\*Indian-Indigenously Designed, Developed and Manufactured



Towards AatmaNirbhar Defence

**Boosting Indigenous Capabilities in Defence Production**

- Setting up of two Defence Production corridors, one each in Uttar Pradesh (UP) & Tamil Nadu
- Setting up of 11 industrial corridors under PM GatiShakti
- Induction of 36 Rafale jets by 2022




Towards AatmaNirbhar Defence

**Ordnance Factory Board (OFB) Corporatisation to Boost Efficiency & Competitiveness**

Corporatisation of OFB to bring

- Functional autonomy
- Efficiency
- Reduce procedures
- Accountability
- Cost consciousness
- Competition



Towards AatmaNirbhar Defence

**Indian Armed Forces to procure 14 items worth over ₹380 crore from Indian startups/MSMEs**

- Defence Acquisition Council (DAC) cleared the procurement
- New simplified procedure to fast-track procurement
- To reduce time taken from prototype development to contract signing
- To foster innovation & incorporate cutting-edge technologies


Source: Ministry of Defence



Towards AatmaNirbhar Defence

**Make In India Boosting Defence Capabilities**

- Light Combat Aircraft (LCA) Tejas
- Arjun MK - 1A Tank
- Automatic Flight Control System (AFCS)
- Pinaka Rocket
- Akash (Surface to Air Missile)
- Sukhoi Su-30MKI
- Next-Gen BrahMos Missile
- Aircraft Carrier INS Vikrant
- Nuclear-powered submarine INS Arihant




Towards AatmaNirbhar Defence

#ParliamentMonsoonSession

**TOWARDS AATMANIRBHAR IN DEFENCE**

Three Positive Indigenisation Lists of 310 items to be procured from domestic sources

- Design & development by domestic industry only
- Foster growth of private industry, MSMEs and Start-ups
- Expenditure on defence purchases from foreign sources reduced from 46% to 36% in the last 4 years

DATED 6 AUGUST 2022



भारत सरकार  
MINISTRY OF DEFENCE

**Boost to AatmaNirbharta in Defence & Aerospace**

Defence Ministry Approves ₹498.8 Crore Budgetary Support for Innovation

- Budgetary support to Innovations for Defence Excellence (IDEX) - Defence Innovation Organisation (DIO) for the next 5 years
- Will provide financial support to nearly 300 start-ups/MSMEs/individual innovators & 20 partner incubators under the DIO framework
- This will facilitate rapid development of new, indigenised & innovative technologies in shorter timelines
- Will create a culture of engagement with innovative start-ups to encourage co-creation for defence and aerospace

**IDEX** Innovations for Defence Excellence



Towards AatmaNirbhar Defence

**INDIAN AIR FORCE**

modernisation plan begins with an acquisition worth ₹2,236 crore

Induction of **GSAT-7C Satellite** & ground hubs for software-defined radios (SDRs)

Enhance the communication ability of our Armed Forces beyond Line of Sight (LoS)

To help revamp the operational needs, including design & development



Towards AatmaNirbhar Defence

**Make-in-India Shoots Ahead: India clears AK-203 rifle deal with Russia**

- A ₹5,100 crore deal to manufacture 7 lakh AK-203 assault rifles
- AK-203 is the latest & the most advanced version of the AK 47 rifle
- To be manufactured in Amethi, Uttar Pradesh

NOTE: IMAGE IS REPRESENTATIVE





# Indigenisation as a Strategic Turnaround for India

- Athreya T Hebbar  
Cohort of Youth Can Lead Program

**T**he Modi government has attempted to bring in many radical changes pertaining to the defence sector. The theaterisation of the Indian armed forces and the creation of a new office of the Chief of Defense Staff (CDS) to promote jointness and cooperation is one such development. The other important initiative started was the 'Make in India' campaign to make India a self-reliant nation. This campaign has focused on indigenisation with the presence of more Indian companies and giving cost advantages. Policies of this kind have helped modernise the Indian defence sector.

The trend of making heavy investments in the military has been escalating in recent times, accounting for the tensions in geopolitics. The military is considered a source of national power and helps better position a nation internationally. Countries worldwide are importing military equipment and technology from tech-savvy military countries such as the United States, Russia, France, etc. India, one of the world's leading arms importers, has now decided to change its designation from an importer to a manufacturing hub. Through its ambitious 'Make in India' campaign, India is trying to become a manufacturing hub and a destination to do business. There are a lot of challenges and opportunities lying ahead on the road to achieving self-reliance. The campaign has the potential to transform the country into a manufacturing hub, and the world is witnessing it. Due credit should be given to the Modi-led government, which has been formulating policies through its long-term visioning and making the country experience the fruits of it directly or tacitly.

The indigenisation of the military will bring in more demand for domestic companies as they are the ones designing and engineering, manufacturing and providing service. The Indian companies can collaborate with foreign companies to develop technology which can benefit both parties. One such domestic company, Hindustan Aeronautics Ltd (HAL Ltd), is involved in producing aircraft and other military equipment. The company reported Rs 26500 crore revenue during the financial year 2022-23, hailed as unprecedented by PM Modi. The Chairman of HAL, Shri Ananthakrishnan, said that the renewed focus on indigenisation with the available inventory could account for the company's achievement. With the signing of the MOU by





the Indian government with General Electric, HAL will be manufacturing fighter jet engines in India. Further, the cash flow has improved over the years due to the expansion of the order book, and these collaborations can continue the rally to make the campaign successful. Likewise, other joint ventures such as Tata and Boeing, Rafael Advanced Systems Ltd and Kalyani Group are significant players in the defence supply.

Research and development should be given equal importance in the process. Technology-based warfare has gained huge importance in recent times. So, there is pressure to indulge in more technological innovations and produce high-end technology equipment within the country at lesser costs. Welcoming foreign companies to set up their branches in India will help reduce import costs and increase foreign direct investments. Foreign investments are crucial as the defence sector demands huge investments and helps balance budgetary constraints. The permissions for foreign investments have been increased from 26% to 49% to promote more investments from abroad.

The inclusion of the private sector in undertaking the defence projects will have a huge impact. Small and medium-scale enterprises can build companies related to the defence sector and facilitate capacity building. They can not only indulge in production but also provide services. The SMEs have the potential to create employment opportunities and contribute to the country's GDP. The Shri Narendra Modi government has created a conducive environment for startups, and the number of startups has increased 300 times since 2014. Currently, more than 90000 thousand startups are eligible for tax exemptions from the government. The private sector in defence is in its nascent stage, but proper government support can take it a long way. The mistrust over the private players has placed them in a difficult position to undertake defence projects.

The 'Make in India' campaign has delivered many milestones in the defence sector. Once a major importer of military equipment, India is now exporting the same to over 75 countries. The exports grew by 334% in the last five years.

Further, Defense Acquisition Procedure 2020, formulated by the Ministry of Defense through the Make in India initiative to empower domestic industry, lays down an order of preference for procurements. This framework encompasses attracting foreign investments to establish manufacturing hubs. On the onset of 'Amrit Kaal', the budget for 2023-24 allocated Rs 5.94 lakh crore for the defence sector. 75% of the budget for the defence capital procurement was earmarked for the domestic industry. There have been increasing partnerships with foreign companies, accounting for Rs 80,000 crore. Similarly, there are numerous other achievements due to the Make in India initiative.

**The 'Make in India' initiative shows the unwavering commitment to making India a global manufacturing hub globally.**

The goal towards achieving self-reliance has to face several challenges in the process. Capacity constraint is a huge challenge as the government has laid down impossible requirements by insisting on technology only foreign manufacturers can provide. The SMEs will lose the demand in the market due to this issue. Secondly, a high-powered institution is absent to monitor, set targets and lay down a road map for the defence sector. It cannot help in the sectoral development in the long run. Another bigger challenge accounts for lower education and skills among the people. Finally, the defence industry demands highly skilled labourers.

The 'Make in India' initiative shows the unwavering commitment to making India a global manufacturing hub globally. The export growth rate of military equipment is exuberant. The attempts to attract foreign investments through various frameworks are delivering positive results. India strongly believes in the doctrine of 'Make in India, Make for the World', which proves to be mutually beneficial for all participatory countries.





# From Local to Global: The Surge of India's Defense Exports

- Aman Srivastava

**T**he Indian defence industry, which supports the world's second-largest armed force, is going through a revolution. The Government of India (GoI), under the leadership of PM Shri Narendra Modi, has identified the 'Defence and Aerospace sector as a focus area for the 'Aatmanirbhar Bharat', with a formidable push on the establishment of indigenous manufacturing infrastructure supported by a requisite research and development ecosystem.

A shift from importing defence products to domestic production was imperative to strengthen India's global position. Starting the revolution in September 2014, the Modi administration introduced the 'Make in India' initiative. This move towards self-reliance recognised the manufacturing industry as the backbone of promoting economic growth and greatly enhancing employment opportunities. The government also streamlined the export process with end-to-end online export authorisation, reducing delays and enhancing business-friendliness. Furthermore, the government issued three Open General Export Licenses (OGEL) for major platforms and equipment, technology transfer, and parts and components. These licenses allow indus-

tries to export listed items to specific countries without requiring additional authorisation. Additionally, eight positive indigenisation lists were issued -- four by the Department of Military Affairs comprising 410 weapons and platforms for the armed forces and four others of 4,666 items by the Department of Defence Production. Moreover, foreign investment in the defence sector has been liberalised, with FDI increased to 74% through the Automatic Route and 100% through the Government Route.

The Modi government's commitment to defence manufacturing is further exemplified by the announcement of two dedicated Defence Industrial Corridors in Tamil Nadu and Uttar Pradesh. These corridors serve as hubs for defence manufacturing, capitalising on existing infrastructure and human capital. The government has introduced supportive schemes such as iDEX (Innovations for Defence Excellence) and DTIS (Defence Testing Infrastructure Scheme) to foster innovation within the Defence and aerospace ecosystem. The government has also converted 41 Ordnance Factories into seven Defence Public Sector Units (DPSUs), 100% Government-owned corporate entities, aiming to increase functional autonomy & efficiency and release new growth potential and innovation in Ordnance Factories.





**A report by the Indian Chamber of Commerce (ICC) estimates that the 'Make in India' initiative has created over 50,000 jobs in the defence sector since 2014. Further, the Ministry of Defence (MoD) achieved an extraordinary milestone in April 2023 when India's defence exports reached a record-breaking figure of approximately Rs.16,000 crore in FY 2022-23.**

Complementing these efforts, the Defence Research and Development Organisation (DRDO) actively shares its cutting-edge technologies with commercial entities. In addition, industries can now gain free access to DRDO patents. DRDO collaborates with industries through Niche Technology Demonstrations to enable self-testing and product evaluation under realistic field conditions. This engagement also provides valuable user input for product enhancements. Additionally, MoD facilities are now available for industries to conduct testing, further facilitating progress in defence technology and product development through DRDO-industry collaboration.

Under the UPA regime, defence goods were never given the attention they deserved, and their export potential was never fully realised. The fact that India only exported a total of Rs.686 Crore in defence in FY 2013-14 demonstrates this. However, the Modi government's relentless efforts have yielded remarkable results in recent times.

As of April 2023, 606 Industrial Licenses had been issued to 369 companies operating in the Defence Sector, demonstrating the sector's rapid expansion and growth. A report by the Indian Chamber of Commerce (ICC) estimates that the 'Make in India' initiative has created over 50,000 jobs in the defence sector since 2014. Further, the Ministry of Defence (MoD) achieved an extraordinary milestone in April 2023 when India's defence exports reached a record-breaking figure of approximately Rs.16,000 crore in FY 2022-23. This achievement represented a substantial increase of nearly Rs.3,000 crore compared to the previous year and signifies a remarkable rise of 23 times since FY 2013-14. India's defence exports now reach more than 85 countries, showcasing the na-

tion's technological and creative prowess in exporting strength on the global stage. These results are a direct result of PM Modi's forward-thinking approach, which prioritised the development of this sector of the economy. To quote him: "India's talent and enthusiasm towards Make in India is clearly manifested in the success of India's defence exports."

India has made a remarkable transition from a defence importer to an exporter. Current major platforms exported by India include the Dornier-228, 155 mm ATAGs, Brahmos Missiles, Akash Missile System, Radars, Simulators, Mine Protected Vehicles, Armoured Vehicles, PINAKA Rockets and launchers, Ammunition, Thermal Imagers, Body Armours and Systems, Line Replaceable Units and Parts & components of Avionics and Small Arms. The LCA-Tejas, Light Combat Helicopters, Aircraft Carrier, and MRO activities are just some of the Indian exports that are seeing rising demand worldwide. It is evidence of India's increasing prestige and acceptance in the international defence industry.

India's future trajectory encompasses the manufacturing and exporting of cutting-edge fighter jets, top-tier missile defence systems, and advanced aircraft carriers. While these goals may require time and effort, they are indeed attainable. With the right focus, dedication, and strategic planning, India stands poised with the determination and potential to lead the way forward.





# A New Sunrise in the Defence Sector

- Animesh Upadhyay & Bhakti Avasthy  
The Authors are practising Advocates at the  
Supreme Court of India

**J**ohn Adams said, “The National defence is one of the cardinal duties of a statesman.” Defence and Foreign Policy remain crucial accomplishments of Prime Minister Shri Narendra Modi-led BJP government in the present times. In previous regimes, the primary focus of Indian leadership was on maintaining peace while adopting a defensive approach. Prime Minister Modi has demonstrated a more assertive approach to sensitive international issues. Unprecedented reforms, courageous steps, innovative policies, etc., have been beneficial for the entire nation over the years. India has seen steadfast growth in every sector over the last 9 years, with each sector progressing as the year passes, be it agriculture, transport, railways, or industries. Initiatives like Atmanirbhar Bharat and Make in India have ignited the zeal for self-sufficiency in India.

The Make in India programme, a key measure to promote economic growth, has sparked fervour for independence and self-reliance in the defence industry. The opposing political parties did not welcome it; however, it created opportunities for employment and empowered the nation to move towards the era of self-sufficiency. The 'Make in India' scheme was introduced in September 2014. Since then, the focus has shifted from importing the defence products to manufacturing them indigenously.

The Modi Government has taken various policy initiatives to strengthen the defence exports. Export procedures have been streamlined and made more industry-friendly with the introduction of end-to-end online export authorization. It has significantly reduced delays and improved the ease of doing business in this sector. Production-linked incentives (PLIs) have been introduced for industries with issues such as speciality steel, semiconductors, etc. Converting 41 Ordnance Factory Boards into seven public sector entities (PSUs) has strengthened the business ecosystem and supported reforms in the defence industry. Over the last 4 years, India has imposed a phased ban on 411 different types of weapons and platforms, including lightweight tanks,



artillery guns, missiles, destroyers, naval utility helicopters, light transport aircraft, basic trainer aircraft, multi-barrel rocket launchers, etc., in the push for self-reliance agenda. Recently, the defence minister, Shri Rajnath Singh, during a seminar on 'Swavlamban 2.0' released the positive indigenization list vide which India imposed a ban on 98 weapons and systems, including shipborne unmanned aerial systems, a variety of ammunition, radars, equipment for fighter jets and sensors, etc. This step by the government sends a loud message that Atmanirbhar Bharat is no longer just an economic necessity but a strategic one.

## Key Actions for Promoting Defense Export-

1. The government has allocated a separate budget to purchase locally made military hardware, increased foreign direct investment from 49% to 74%, and improved business efficiency. India has set its target to a turnover of Rs. 1.75 Lakh Crores in defence manufacturing by 2024-25. It is only because of the steps taken by the Modi Government that India has seen a significant drop in imports and an unprecedented rise in defence exports.
2. India's defence exports have grown 23 times between 2013-14 and 2022-23, i.e. from Rs. 686 Crore to Rs. 16,000 Crore. At the same time, the data in defence reveals that imported systems and weapons dropped from 46% of the total expenditure in 2018-19 to 36.7% in December 2022.
3. India under PM Modi is consistently moving forward to attain a Defense Export Ecosystem, including different spheres of defence exports ranging from signing a memorandum of undertaking to delivering export defence prod-



ucts. This initiative will aid India in creating job opportunities in the manufacturing sector, high-value export, and development of a research and development base and will provide strategic diplomatic leverage due to rising defence exports.

4. Under the Make in India initiative, the PM Modi-led government aims to promote the defence industry. Two defence industrial corridors are being set up in Uttar Pradesh and Tamil Nadu.

5. India has adopted the recourse of Strategic Defense Partnership, meaning that Indian companies that do not have much expertise in defence manufacturing are partnering with established defence companies in other countries. For instance, India's Kalyan Group has partnered with the Israeli Rafael Advanced Systems. The government earmarked 25% of the defence research budget for the private sector in 2022-2023.

6. At the inauguration of Aero-India 2023, Prime Minister Narendra Modi set a target of USD 5 Billion in defence exports by 2024-25, which, after considering the steps taken by the current regime, does not seem to be an arduous task.

Though much has been done, more has to be achieved, which is only possible under Prime Minister Modi's guidance, mentorship and visionary leadership. The export potential of MSMEs and startups can be utilized through Production Linked Incentives (PLIs). It should be encouraged for major defence sector firms to establish manufacturing facilities in India. Infrastructure for Quality Assurance and Testing will raise the standard of our export goods, increasing demand. A specialized Export Promotion Council (EPC) needs to be established comprising export pro-

motion officers knowledgeable with the policy frameworks of India and other nations that produce and export defence products. The Indian defence industry must be aware of trade shows, buyer-seller meetings (BSM), reverse BSMs, incubation opportunities with partner nations, and knowledge sharing.





# Industrial Corridors: Strengthening Self-Reliance and Fostering Global Manufacturing Excellence

- Divyanshu Kumar Shukla, Founder, PapSwap - Policies Over Politics

**I**s one of the top five military spenders in the world, India's commitment to enhancing its defence capabilities is unwavering. In a strategic move, the Modi government has introduced two significant initiatives - the Defence Industrial Corridor in Uttar Pradesh (UP) and the Tamil Nadu Defence Corridor. These corridors, resonating with the spirit of 'Make in India', are set to revolutionize the nation's defence manufacturing landscape and propel it towards self-sufficiency.

India's Defence Industrial Corridors are poised to be a game-changer. Their establishment stems from a strategic vision of fostering indigenous production of defense and aerospace-related items. By reducing dependency on imports and boosting exports of these items, India aims to not only strengthen its security apparatus but also bolster its economic standing on the global stage. This monumental move aligns with the nation's aspiration to be a formidable force, both in terms of defense capabilities and industrial prowess.

## **Uttar Pradesh Defence Industrial Corridor: Nurturing Innovation and Expertise**

With unwavering determination, Uttar Pradesh is at the forefront of this transformative journey. The Uttar Pradesh Defence Industrial Corridor, skillfully curated by the Uttar Pradesh Expressways Industrial Development Authority (UPEIDA), encompasses six strategically located nodal points: Agra, Aligarh, Chitrakoot, Jhansi, Kanpur, and Lucknow. These centers of innovation and manufacturing excellence are poised to drive the state's defense industry to unparalleled heights.

The corridor's Plug and Play support infrastructure will be a cornerstone of its success. Assured water supply, uninterrupted electricity, and cutting-edge connectivity via expressways lay the foundation for a thriving manufacturing ecosystem. The single-window approval system ensures

streamlined processes for Defence and Aerospace (D&A) manufacturing units, while flexible employment conditions enhance the prospects for skilled labor. With an emphasis on ease of doing business, the corridor's simplified regulatory regime paves the way for incentives and subsidies to stimulate growth.

**India's Defence Industrial Corridors are poised to be a game-changer. Their establishment stems from a strategic vision of fostering indigenous production of defense and aerospace-related items.**

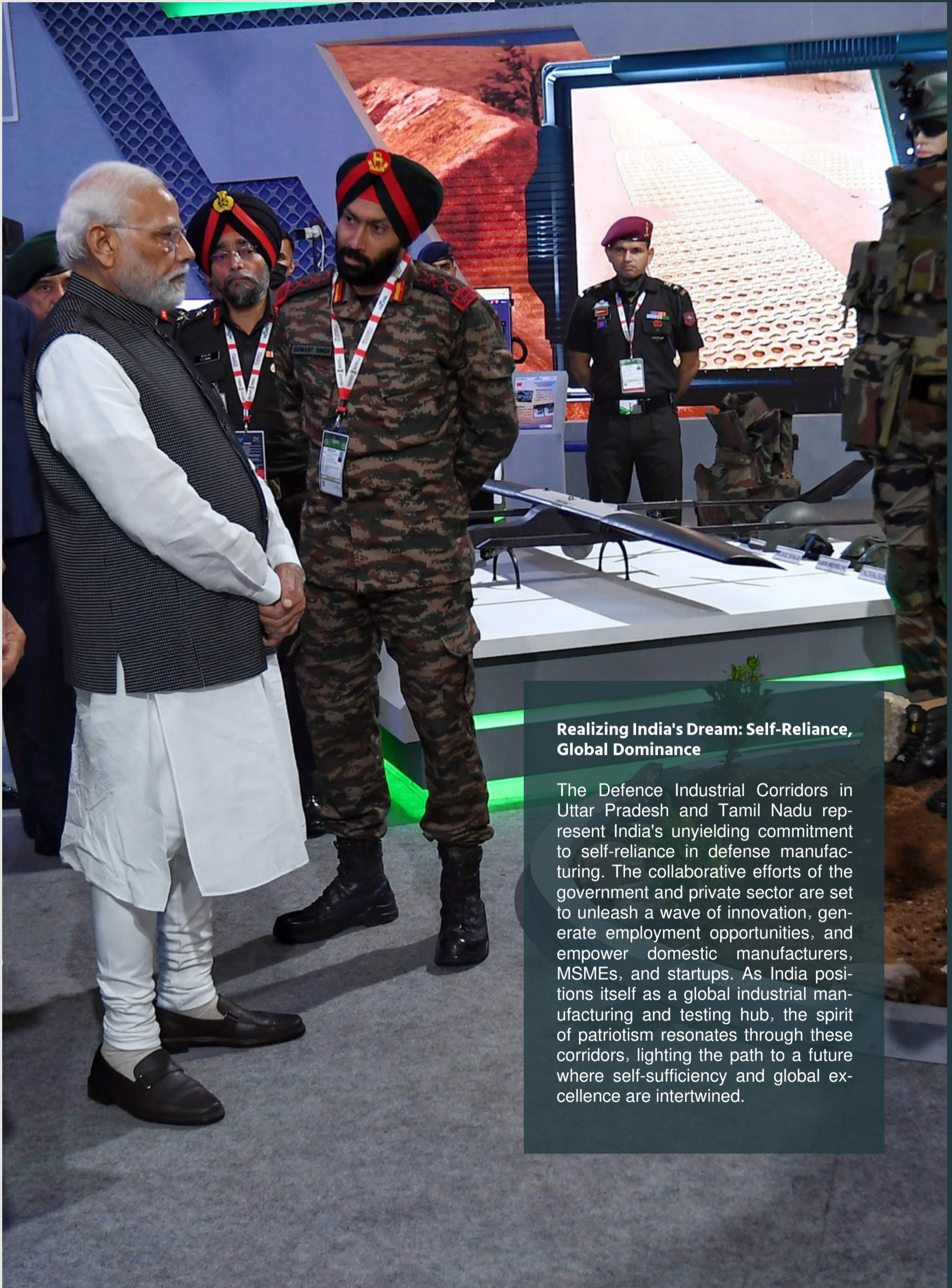
## **Tamil Nadu Defence Corridor: A Triumph of Vision and Resources**

Not to be outdone, the Tamil Nadu Defence Corridor stands as a testament to innovation and strategic advantage. Anchored by the government of Tamil Nadu, this corridor is strategically poised at five nodal points: Chennai, Coimbatore, Hosur, Salem, and Tiruchirappalli. These hubs of excellence are supported by an array of factors that make Tamil Nadu a global manufacturing nucleus.

Tamil Nadu's extensive coastline, dotted with seaports, ensures seamless logistics, while its array of international and domestic airports propels the state's connectivity. A power-surplus state with a substantial renewable energy capacity, Tamil Nadu's readiness to support manufacturing is second to none. The state's connectivity to the world through submarine cables adds a digital dimension to its strategic advantages.

Korean investors' preference for Tamil Nadu underscores its attractiveness as an investment destination, and the state's position as the largest recipient of Korean Foreign Direct Investment (FDI) to India speaks volumes about its potential.





### **Realizing India's Dream: Self-Reliance, Global Dominance**

The Defence Industrial Corridors in Uttar Pradesh and Tamil Nadu represent India's unyielding commitment to self-reliance in defense manufacturing. The collaborative efforts of the government and private sector are set to unleash a wave of innovation, generate employment opportunities, and empower domestic manufacturers, MSMEs, and startups. As India positions itself as a global industrial manufacturing and testing hub, the spirit of patriotism resonates through these corridors, lighting the path to a future where self-sufficiency and global excellence are intertwined.



# From Import to Indigenization: Navigating India's Defense Transformation

- Meghan Rao P N, Cohort of Youth Can Lead Program

**T**he Indian defence sector has long been a crucial component of the nation's security infrastructure. In recent years, the Modi government has undertaken significant financial initiatives to bolster the defence sector through its 'Make in India' campaign and a modernisation drive. This article critically evaluates the financial steps taken by the Modi government to strengthen India's defence sector, exploring the impact of the 'Make in India' program and the modernisation efforts while also considering the challenges and opportunities presented by these initiatives. India's defence sector has always been pivotal in safeguarding the nation's sovereignty and security. The Modi government, since coming into power, has adopted a multi-faceted approach to enhance the defence sector. Two key elements of this strategy are the 'Make in India' campaign and a comprehensive modernisation program. This article delves into the financial steps undertaken by the government to fortify the defence sector while analysing the implications of these measures on India's national security apparatus.

## 1. The 'Make in India' Campaign: A Financial Game Changer

### FDI in the Defence Sector-

One of the primary financial initiatives to bolster the defence sector under the Modi government is the liberalisation of foreign direct investment (FDI) policies. The increase in the cap for FDI in the defence sector from 26% to 49% and, in some cases, 74% in specific circumstances has attracted foreign companies to invest in India's defence industry. This policy shift has infused much-needed capital into the sector and facilitated the transfer of advanced technology.

### Promoting Indigenous Manufacturing-

Under the 'Make in India' campaign, the government has actively encouraged domestic defence production. Financial incentives, tax breaks, and defence corridors in Uttar Pradesh and Tamil Nadu have stimulated investment in the sector. It boosts self-reliance and generates employment opportunities, contributing to economic growth.

## 2. Modernisation of the Defence Forces: A Fiscal Imperative

### Defence Budget Allocation-

The government has consistently increased the defence budget year-on-year, emphasising the importance of modernisation. This financial commitment is critical in ensuring the armed forces have the necessary resources to update their capabilities. The emphasis on modernisation is reflected in the allocation of a separate budget for capital acquisition, which facilitates the procurement of state-of-the-art equipment.

### Defence Procurement Policies-

The introduction of the Defence Procurement Procedure (DPP) and the Defence Acquisition Procedure (DAP) has streamlined the procurement process, making it more transparent and efficient. These measures not only save costs but also expedite the acquisition of essential defence hardware. Financially, this approach ensures that the allocated budget is used effectively.

## 3. Challenges and Opportunities

### Economic Constraints-

While notable financial initiatives exist, India's defence sector still faces economic constraints. The allocation of funds, while increasing, may not be sufficient to meet all the modernisation requirements. Balancing the needs of the defence sector with other vital sectors, such as healthcare and education, remains challenging.

### Overreliance on Imports-

Despite efforts to promote indigenous production, the defence sector continues to rely on imports for critical equipment and technology. This dependence on foreign suppliers poses a potential security risk and impacts India's balance of payments. Addressing this issue necessitates further financial investments in research and development.

### Geopolitical Implications-

The financial steps taken to strengthen the defence sector have geopolitical implications. India's growing defence capabilities could influence its strategic position in the region. Balancing this newfound strength with regional sensitivities is an intricate task that requires careful financial planning.

The Modi government's financial steps to strengthen India's defence sector through 'Make in India' and moderni-



sation initiatives have brought about significant changes. The liberalisation of FDI, emphasis on indigenous production, increased budget allocations, and streamlined procurement processes have provided a much-needed boost to the sector. However, challenges such as economic constraints, overreliance on imports, and geopolitical considerations must be addressed to sustain and enhance these efforts. The defence sector is a matter of national security and a financial challenge that necessitates prudent management and a delicate balancing act between strengthening the sector and maintaining fiscal stability. The outcomes of these initiatives will significantly shape India's defence posture and role in the global geopolitical landscape.





# Fostering Self-Reliance: The Modi Government's Tryst with 'Make in India' and Military Modernization

- Parsha Jyoti Bora, President, BJYM Jorhat District, Assam



In recent years, the Modi government in India has embarked on a transformative journey to bolster the country's defence capabilities. At the heart of this effort lies the "Make in India" initiative, a visionary campaign to foster indigenous manufacturing across sectors, including defence. This paradigm shift in approach has reduced dependency on foreign arms and infused the defence sector with innovation, self-reliance, and job creation.

The "Make in India" initiative was launched in 2014 to make India a global manufacturing hub. It translates to a concerted effort to produce a significant portion of the military hardware domestically in the defence sector. The impact has been substantial, with increased production capacities, reduced costs, and a diversified defence industrial base.

However, the journey towards self-reliance is not without challenges. The defence industry requires significant investment in research and development, infrastructure, and skilled manpower. The government's commitment to addressing these challenges is evident in its policies and strategic partnerships with private sector entities.

The "Make in India" initiative in the defence sector departs from historical practices, where a substantial portion of India's military hardware was imported. This reliance on foreign suppliers posed challenges in terms of timely deliveries and technological dependencies and had economic implications. The outflow of significant funds to purchase arms and equipment from abroad strained the national ex-

chequer and limited the scope for indigenous development.

Under the visionary leadership of Prime Minister Narendra Modi, the "Make in India" initiative seeks to address these challenges by fostering a culture of innovation and self-reliance within the Indian defence industry. The emphasis is not merely on assembling components but on the entire design, development, and production spectrum. This holistic approach ensures that the armed forces are equipped with state-of-the-art technology and lays the foundation for a vibrant and competitive defence industrial base.

The success stories of indigenous production are manifold. The Tejas light combat aircraft, developed by the Defence Research and Development Organisation (DRDO) and produced by Hindustan Aeronautics Limited (HAL), stands out as a shining example. It is not just an aircraft but a symbol of technological prowess and self-sufficiency. The Tejas program showcases India's ability to design and manufacture a complex piece of machinery, meeting the stringent requirements of the Indian Air Force.

Moreover, the "Make in India" initiative is not confined to the realm of high-profile aircraft. It extends to diverse military hardware, from small arms and ammunition to naval vessels. The production of Akash surface-to-air missile systems, Pinaka multi-barrel rocket launchers, and Arjun main battle tanks exemplifies the multifaceted nature of this initiative. These achievements underscore the shift from dependence on external suppliers to developing a robust ecosystem of domestic manufacturers capable of meeting the varied needs of the armed forces.





The benefits of indigenous production are not limited to the strategic realm. The defence industry has emerged as a significant contributor to economic growth. The development of a domestic manufacturing ecosystem generates employment, stimulates technological innovation, and fosters a culture of research and development. It creates a multiplier effect, with ancillary industries and suppliers flourishing in tandem with the growth of the defence sector.

In essence, the “Make in India” initiative in defence is not just a policy but a transformative journey that redefines India's role in the global security landscape. It is a testament to the country's determination to chart its course, free from the constraints of external dependencies. As the Indian defence industry continues to evolve and mature, the impact of “Make in India” will reverberate within the nation's borders and resonate on the global stage, positioning India as a key player in the design, development, and production of cutting-edge military technology.

### **Modernisation of Defence Forces**

Parallel to the “Make in India” initiative, the Modi government has been unwavering in its commitment to modernise the armed forces. Recognising the evolving nature of security threats, this modernisation drive aims to equip India's defence forces with state-of-the-art technology, enhancing their operational capabilities and readiness. The modernisation efforts span across all branches of the military. In the Army, the induction of advanced weaponry and communication systems has been a priority. The acquisition of artil-

lery systems, armoured vehicles, and modernised infantry equipment has significantly enhanced the Army's firepower and mobility.

With its vast maritime interests, the Navy has seen substantial advancements in naval platforms and capabilities. The commissioning of INS Vikramaditya, the aircraft carrier, and the ongoing construction of indigenous aircraft carriers highlight the government's commitment to strengthening India's naval prowess. Additionally, the development of advanced submarines and surface vessels adds a layer of strategic depth to India's maritime capabilities.

The Air Force, crucial in maintaining air superiority, has witnessed a paradigm shift with the induction of modern fighter aircraft. The acquisition of Rafale jets from France exemplifies the government's focus on enhancing the Air Force's combat capabilities. These state-of-the-art aircraft bring advanced avionics, radar systems, and weapon platforms, bolstering India's aerial dominance. The modernisation efforts also extend to cyber-security and space capabilities. As the nature of warfare evolves, securing the cyber domain becomes increasingly critical. The establishment of dedicated organisations and initiatives to strengthen India's cyber capabilities showcases a forward-looking approach.

In conclusion, the confluence of “Make in India” and the modernisation drive under the leadership of the Modi government has heralded a new era for India's defence sector. The transformation is not merely about acquiring sophisticated weaponry; it signifies a paradigm shift towards self-reliance, innovation, and strategic autonomy. The success of “Make in India” in defence is evident in the production of indigenous platforms like the Tejas aircraft, showcasing India's capability to design and manufacture cutting-edge military technology. The ripple effect extends beyond the defence sector, contributing to economic growth, job creation, and technological advancement.

Simultaneously, the modernisation efforts underscore a proactive approach to addressing contemporary security challenges. The armed forces are not just being equipped but empowered with state-of-the-art technology and capabilities. The acquisition of advanced aircraft, naval vessels, and cyber and space capabilities positions India as a formidable player on the global security stage. However, challenges persist, and the journey towards complete self-reliance and military modernisation is ongoing. The need for sustained investment in research and development, infrastructure, and skilled manpower cannot be overstated. International collaborations and partnerships in technology transfer and joint ventures will play a crucial role in overcoming these challenges.

The regional and global implications are significant as India strengthens its defence capabilities. A self-reliant and modernised Indian defence sector contributes to regional stability and elevates India's stature as a responsible global player. It enhances the country's ability to contribute to international peacekeeping efforts and provides a stabilising force in an increasingly complex geopolitical landscape.





# Transforming Defense Procurement: The 'Make in India' Success Story

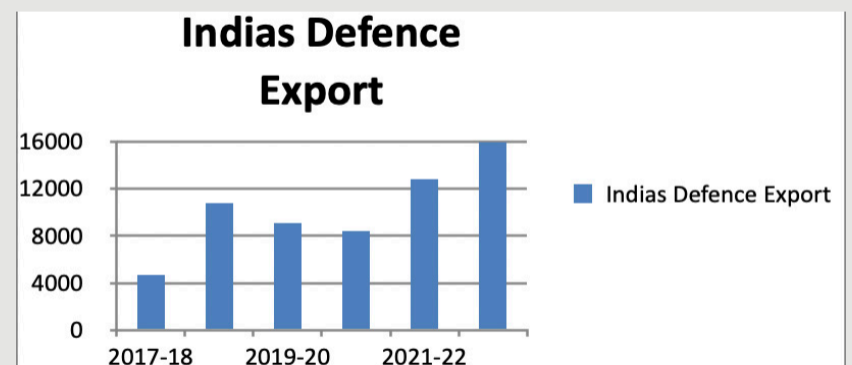
- Pranjal Chaturvedi and Aishwarya,  
Aishwarya and Pranjal are Advocates practicing at Patna and Allahabad High Court

**T**he Second Largest army in the world is at the cusp of revolution. Today, the Indian army is moving forward to be a self-resilient armed force, as in geopolitics, the power is always backed by hard power. Defence procurement plays a pivotal role in safeguarding national security, and many nations worldwide are striving to bolster their self-reliant defence industries. In the case of India, a country with a rich history of military prowess and a burgeoning economy, the **'Make in India'** initiative has been a revolutionary measure and transformative force in reshaping India's defense procurement landscape.

'Make in India' is an ambitious endeavour, introduced by Prime Minister Shri Narendra Modi in September 2014, aimed at positioning India as a global manufacturing hub, with a focus on job creation, innovation promotion, and economic growth. The campaign's impact has extended across various industries, including defense procurement.

The defense sector was singled out as a priority due to its strategic significance and the imperative to reduce India's reliance on foreign arms imports. Between 2012 - 16 and 2017- 21, India's arms imports fell by 21%. On the contrary, India's defense export has grown tenfold in the last Six years. In the fiscal year 2022 - 23, a surge of 23% can be seen from the immediate previous year 2021-22. For many years, India had been one of the world's foremost

arms importers, and the 'Make in India' initiative sought to reverse this trend by nurturing domestic defense manufacturing capabilities.



The Key Achievements of Make in India in the Indian Defense Sector are as:

**Enhanced Self-Reliance:** The defence industry's most notable accomplishment of "Made in India" has been the country's steady shift from being a significant arms importer to more self-sufficient. Due to its strategic importance and unfavorable neighbors, i.e. China and Pakistan, India is a major arms importer into the world today. The country produces a wide range of defence equipment, including drones, artillery guns, ammunition, naval vessels, and more, all previously imported. It helps India transform its reputation as an arms importer into a self-reliant military force.



**Indigenous Design and Development:** The effort has accelerated the development of domestic defence design and development capabilities. The Defence Research and Development Organisation (DRDO) and other research organisations have achieved significant progress in creating cutting-edge technologies and systems. Prominent instances of this advancement are the indigenous defence products, i.e. Tejas fighter jet, Pralay, Nirbhay, Prithvi I and II, and Arjun main battle tank, etc.

**Collaborative Ventures:** “Made in India” has encouraged collaborations between foreign and Indian defence firms, facilitating knowledge transfer and strengthening the defence industry. Partnerships with nations like Russia and corporations like Dassault, Boeing, and Saab have enabled the country to produce cutting-edge military hardware like BrahMos on its soil.

**Export Potential:** The increasing ability of India to sell defence equipment proves that 'Make in India' is a success. Defence gear manufactured in India, including navy vessels, radar systems, and artillery systems, is exported to several nations, bringing in significant foreign money and enhancing India's standing as a dependable defence exporter.

**Job Creation:** The defence manufacturing industry has become a noteworthy employer of choice for workers with a range of skills and abilities. “Made in India” has improved the skill set of the Indian labour force in addition to creating more jobs, which has helped to grow human capital.

While 'Make in India' in the defense sector has made commendable progress, several challenges persist: The defense procurement process in India is still marred by bureaucratic complexities and time-consuming procedures, making the streamlining and simplification of these processes an ongoing challenge. Ensuring the quality and reliability of indigenously produced defense equipment remains a persistent challenge. Striking a balance between high standards and competitive costs is crucial.

While India has made strides in defense research and development, it still lags in some critical areas. Sustained investment in innovation and technology is essential. Developing a robust defense manufacturing infrastructure and a

reliable supply chain is pivotal for maintaining consistent production and timely delivery. The defense manufacturing sector requires a highly skilled workforce. India needs to address skill shortages in specialised areas to meet the demands of a rapidly evolving industry.

The 'Make in India' initiative has undoubtedly transformed India's defense manufacturing sector, but its success story is far from complete. The Indian government and defense industry stakeholders must continue to work collaboratively to overcome the remaining challenges and ensure sustainable growth.

There must be a persistent emphasis on domestic research and development to develop state-of-the-art defence technology and lessen dependency on imports. Funding and persistent support are required for innovation from the DRDO and private sector companies. India should keep looking into ways to export its defence products. It promotes diplomatic relations with importing nations and strengthens the home defence sector. Investments in skill development programmes are essential to close the skills gap in the defence manufacturing industry.

Industry and educational institutions working together can create a skilled labour pipeline. Fostering collaborations between public and private sector organisations can improve production capacities and facilitate the transfer of technologies. Additionally, it can help small and medium-sized defence companies grow. Reducing bureaucracy, increasing transparency, and streamlining the defence procurement process can all help make India an even more desirable destination for defence production.

India's defence procurement industry has seen significant transformation thanks to the 'Make in India' initiative. It has decreased the nation's dependency on weapons imports from outside while simultaneously fostering a thriving defence manufacturing sector that has increased employment possibilities and self-sufficiency. India's defence industry has come a long way despite the obstacles, and with sustained attention and investment, it may lead the world in defence manufacturing. The success of 'Make in India' is a testament to the country's determination to protect its sovereignty and contribute to global peace and security.





# Alliances and Armaments: The Dual Track of India's Defense Diplomacy and Exports

- Rahul Singh Rajput, MA (Buddhist studies), University of Calcutta

**P** rime Minister Shri Narendra Modi has taken various innovative steps in transforming Bharat's defence sector, catapulting the country into the league of major arms exporters. His government's relentless efforts to unblock Bharat's defence export potential have strengthened the country's economy and elevated its power and influence on the global front. This article aims to delve into Prime Minister Modi's defence diplomacy, particularly his efforts in promoting defence exports, and highlight the successful Defence Days organized between Bharat-Armenia, Bharat-Philippines, Bharat-Vietnam, African countries, Latin America and other countries. India's emerging stature as a defence exporter is a testament to

the transformative leadership of Prime Minister Modi and his government's commitment to making Bharat self-reliant in defence production.

## • Unleashing Bharat's Defence Export Potential

With his visionary approach, Prime Minister Modi recognized the untapped potential of Bharat's defence sector and embarked on a journey to unleash its true capabilities. In 2014, he launched the "Make in India" initiative, a clarion call for domestic industries to participate in defence manufacturing actively. This initiative aimed to promote indigenous defence production, reduce import dependence, and position Bharat as a global manufacturing hub. Under this campaign, the government announced several reforms, including liberalizing foreign direct investment (FDI) in the defence sector and streamlining the procurement process. These events provided a platform for countries like Armenia, the Philippines, Vietnam, and others to witness Bharat's advanced defence technologies, engage in bilateral defence cooperation, and explore joint ventures or procurement opportunities. The Defence Deals showcased Bharat's strength in aerospace, naval systems, land systems, and cyber security, positioning the country as a reliable defence partner globally.

## Bharat-Armenia Defence Deal

Bharat and Armenia share a long history of friendship and mutual respect. Bharat-Armenia Defence Deal, signed by the two countries, facilitated the exchange of defence technologies, expertise, and cooperation. During the ongoing Armenia-Azerbaijan conflict, Bharat has been actively engaged in providing defence equipment and assistance to Armenia. The conflict erupted in September 2020 and has witnessed intense fighting between Armenia and Azerbaijan over the disputed region of Nagorno-Karabakh. Bharat's indigenously developed systems, such as the Arjun Main Battle Tank, BrahMos cruise missile, Aakash air defence system and Advanced Light Helicopter (ALH), were provided to Armenia to protect their land and sovereignty, which also highlights Bharat's prowess in defence manufacturing. This Defence Deal during the time of crisis laid the foundation for future collaborations and joint ventures between Bharat and Armenia, paving the way for enhanced defence





cooperation.

The defence deal between Bharat and Armenia highlights the importance of strategic partnerships and the need for countries to support each other during times of crisis. Bharat's assistance to Armenia in the defence sector demonstrates its commitment to peace in the region and strengthens bilateral ties between the two countries.

### **Bharat-Philippines Defence Deal**

With their shared commitment to regional security and stability, Bharat and the Philippines organized the Bharat-Philippines Defence Day to explore avenues of defence cooperation and technological partnerships. Bharat's cutting-edge defence technologies, including the Tejas Light Combat Aircraft (LCA), Dhruv Advanced Light Helicopter (ALH), and Akash Surface-to-Air Missile System, were showcased during the event. The Defence Day not only bolstered bilateral defence ties but also allowed the Philippines to diversify its defence procurement sources.

### **Bharat-Vietnam Defence Deal**

Bharat's defence cooperation with Vietnam has witnessed significant growth in recent years, with both countries driven by their shared priorities of maritime security and countering common security challenges. The Bharat-Vietnam Defence Deal, an important milestone in their defence partnership, demonstrated Bharat's advanced naval systems, including the INS Sahyadri (a stealth guided-missile frigate) and the indigenously built Varunastra Torpedoes. This Defence Deal acted as a catalyst in strengthening maritime security cooperation between Bharat and Vietnam and showcased Bharat's growing capabilities as a defence exporter. This defence deal will also play a key role in protecting the sovereignty of Vietnam and its Maritime border in the South-China Sea from the aggression of the Chinese navy.

### **The potential of defence exports in Africa and Latin America**

Looking ahead, the future of defence exports in Africa and Latin America holds great potential. These regions have witnessed increased security challenges and conflicts in recent years, leading to a growing demand for defence equipment and technology. African and Latin American countries are increasingly investing in their defence capabilities to ensure national security and protect their interests.

With its advanced defence technology and expertise, Bharat can play a significant role in meeting this demand. It has already established defence cooperation programs with countries in Africa and Latin America, providing training, support, and defence equipment. These partnerships enhance recipient countries' defence capabilities and open up avenues for trade and economic cooperation. As Africa and Latin America continue to develop and modernize their defence sectors, there will be increased opportunities for defence exports from countries like Bharat. The future of defence exports in these regions will be driven by the mutual benefits of cooperation, economic partnerships, and the need to enhance national security.

### **• Bharat's Defence Diplomacy and Global Influence**

Prime Minister Modi's government's focus on unblocking Bharat's defence export potential aligns with its broader vision of promoting strategic autonomy and positioning Bharat as a global power. By actively engaging with countries through the Defence Deal and promoting defence exports, Bharat is expanding its defence industry and enhancing its soft power and global influence. This proactive defence diplomacy by Bharat ensures strategic partnerships, strengthens regional security, and contributes to the country's economic growth.

Under Prime Minister Modi, India has succeeded in unblocking its defence export potential, gradually transforming itself from a defence importer to an exporter. Bharat's defence deal with Armenia during the ongoing Armenia-Azerbaijan conflict highlights the importance of strategic partnerships and support during times of crisis. The Defence exports between Bharat, Armenia, The Philippines, Vietnam, Africa and other countries have played a pivotal role in showcasing Bharat's defence capabilities, fostering bilateral defence cooperation, and boosting Bharat's global influence. The future of defence exports in Africa and Latin America holds great potential, with increasing demand for defence equipment and technology. The "Make in India" initiative and its efforts to streamline defence procurement processes and encourage foreign direct investment have created a conducive environment for defence manufacturing and export promotion. As Bharat continues to position itself as a reliable defence partner globally, it is poised to contribute significantly to the global defence industry while consolidating its strategic autonomy and national security.





# From Theatrics to Theatrisation: Transition to Theater Command for Cohesive Military Operations

- Rajarshi Roychowdhury, BJYM West Bengal



**F**rom the expansive nothingness of the Rann of Kutch to the snowy ridges of Neuve Chapelle, from the icy peaks of the Siachen glacier in the far north to the unforgiving river valleys of Arunachal in the extreme east, the Indian soldier has stood as an epitome of courage, commitment & conviction. The Indian soldier has given his all & asked for almost nothing in return. On ceremonial occasions & days otherwise, as the buglers pay the last post in war memorials across India, a grateful nation remembers the old adage of the unknown soldier: 'When you go home, tell them we gave our today for your tomorrow'.

This vital institution of national importance was neglected, overlooked & given step-motherly treatment by the Congress party & its leadership, which turned our armed forces into an arena for theatrics & petty politics. Soon after Independence, the then commander in chief General Rob Lockhart went with Pandit Nehru with a formal defence paper & he was shooed away since Nehru didn't believe in the need for an army. Nehru played favourites & humiliated Lt Gen SPP Thorat (who had the foresight to predict the Chinese would eventually engage in a misadventure across our northern borders) by promoting Lt Gen BN Kaul, a relatively junior officer who also happened to be Nehru's cousin. Nehru used his incompetent defence minister Krishna Menon to humiliate the then Chief General Thimayya, which ul-



timately forced the illustrious General to put in his papers. With his pathological hatred toward the security establishment, the left-leaning Krishna Menon got his job as India's defence minister only due to his proximity to Nehru.

During our ill-fated campaign in '62, our boys were ill-equipped to face the enemy due to years of underspending & neglect. Even then, for reasons unknown, Nehru refused to use our airforce in offensive operations against the invading Chinese forces. Only after Lal Bahadur Shastri became prime minister did we keep our heads above the water in '65 & redeem our honour in '71. India has also witnessed how the first family of the Congress party treated our armed forces as their fiefdom, with India's first aircraft carrier, the mighty INS Vikrant, turned into a floating cruise ship for the Gandhi family. At the same time, the people of India were left to the vagaries of fate. The Rafale deal was called into question despite no proof and even after orders to this effect by the Supreme Court to satisfy the need for petty political point-scoring of the Gandhi family to win an election. The theatrics of the Gandhi family had tarnished the reputation of India's most trusted institution.

The BJP-led NDA government came to office in 2014 during a very challenging time in general & in particular for the armed forces. Veterans were protesting for years in the hope of an early resolution of their demand for OROP (One Rank One Pay), i.e. officers retiring at the same rank would be eligible for the same pension irrespective of their year of retirement. Pakistani border action teams were entering Indian territory with impunity and beheading our jawans while the congress-led UPA government watched on helplessly. The TSD (Technical Support Division) raised post 26/11 to undertake covert ops, thanks to the farsighted leadership of the army chief of the day, was disbanded due to pressure from the left & liberal ecosystem. Our WWR (War Waste Reserves) or essential ammunition & spares needed to fight a high-intensity war were at their lowest.

At this juncture, Prime Minister Modi and erstwhile defence minister Manohar Parrikar took urgent steps by rising to the occasion & tackling these challenges head-on, with the foremost being the urgent need for theatrisation. The Kargil Review Committee in '99 & the Shekatkar Committee in '16 recommended the Chief of Defence staff position as the single point advisor to the Raksha Mantri & the creation of integrated theatre commands, respectively. In its 10 years in office, the UPA government didn't set the ball rolling on integration & jointness.

Finally, under the astute leadership of Prime Minister Modi, the clear-eyed vision of NSA Ajit Donal & General Bipin Rawat, the Chief of Defence Staff, became a reality, with General Rawat himself being the first incumbent. The newly created Department of Military Affairs, with the CDS acting as its secretary, has its mandate for the day-to-day operational aspects of the military. India shares borders with hostile nuclear-armed neighbours. Any potential conflict under a nuclear overhang would be short, swift & decisive. Integration & jointmanship would be critical in executing a decisive outcome in our favour. It is where the theatre commands come into play, wherein a single military commander would command the entire spectrum of forces across

all services in a given theatre of war. We have 17 single service commands across our 3 services.

It gives an impetus to working in silos which is not conducive in this day & age. One can't execute a war in the 21st century with tactics & strategies of the 20th century. There has been some uneasiness from certain quarters about the

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sharing of assets between the theatres, which leads one to remember the epochal words of Captain AH Liddell Hart, who remarked, "The only thing more difficult than getting a new idea into a military mind is getting an old one out". Most, if not all the major militaries in the world have adopted theatre commands well before we have for instance the United States did so in 1986 with the adoption of the Goldwater-Nichols act, wherein the chain of command runs from the President through the defence secretary directly to the theatre commanders. The role of the service chiefs in this structure is to raise, train & sustain their troops in battle with no direct command authority.

Our northern neighbour China reorganised the Peoples Liberation Army into five theatres with only one, the western theatre command commanding all its troops from Aksai Chin to Arunachal. The same is envisaged in India with the stated aim of having roughly three theatre commands, i.e. Western, Eastern & maritime. The Government has taken sure-footed steps to achieve the same by passing the Inter-services Command Control & organisation bill by parliament. The army, navy & the airforce have three different acts governing their personnel; however, this would be cumbersome to enforce in tri-service organisations. This bill would ensure the commanding officers use their parent service act to deal with HR issues. Cross-posting of officers has also helped services better understand each other while at the same time building trust to ensure a joint future.

From being an arena of theatrics in the past to a future of theatrisation our armed forces stand on the cusp of leapfrogging into the future with pathbreaking changes to give it the necessary teeth to execute India's future wars & conflicts. The make-in-India move has contributed to a much more indigenised armed forces, with defence exports rising to over Rs 10,000 crores. The agniveers will create a younger & leaner force while also helping build society. The Rafales, Vikrants & Arjuns are a nightmare to our enemies, but the bigger nightmare is those men & women manning these machines. Time & time again, the Indian armed forces have won against a better-equipped enemy, proving it is not the machine but the woman or man behind it is the game changer. Theatrisation will better equip our armed forces to be proud of our achievements while looking into the future as a self-assured organisation with the nation's absolute trust bestowed upon it.



# Decade of Defense: India's Military Metamorphosis over Nine Years

- Jayamohan CS

Indian Defence Forces are considered one of the best in the world, and our forces are ready to fight and protect our borders and beyond in any adverse conditions, be it the snow-covered Ladakh in the Himalayan Mountains or an uninhabited island in Lakshadweep. However, the Defence Forces require the most modern weapons, sensors, and support of a domestic defence industry to maintain the cutting edge and protect our country in modern-day warfare.

Indian Defence sector went through policy paralysis from 2004 to 2014, primarily due to large-scale corruption in defence dealings and a lack of interest by the government. Defence contracts were controversial, and the defence forces faced unprecedented depletion of modern fighter jets, warships, and other equipment. Mainly our defence budget was spent on the purchase of defence equipment from

abroad without much effort to develop a domestic defence industry base. However, the BJP government led by Prime Minister Shri Narendra Modi identified the importance of the Indian Defence sector. It implemented various policies and programs for the development and transformation of the sector. The government also implemented key Defence Forces reforms to transform it into a most modern Force.

One of the major recommendations of the Kargil review committee was the appointment of a Chief of Defence Staff (CDS) for coordination among the Army, Navy, and Air Force. The government led by PM Modi identified its importance and relevance and appointed the country's first CDS in 2020 to increase synergy among Defence Forces and strengthen our country's national security apparatus. The government also initiated steps to establish combined Theatre Commands in place of existing individual command structures followed by the Army, Navy, and Air Force. Theatre commands will have operational control over all assets





(currently separately controlled by the Army, Navy, and Air Force). They can utilise the assets (Weapons/ Sensors/ Ships/ Aircraft) as required and avoid duplication of efforts.

Trained and motivated men and women in uniform are the most important asset of a country's Defence Forces. They continue to contribute towards the development of the nation even after retirement. One Rank One Pension (OROP) was a long pending demand from Defence pensioners. The BJP government implemented OROP in 2015 after nearly 45 years of agitation by defence pensioners. The policy benefits more than 25 Lakhs defence pensioners, and about 57000Cr has been spent in the last eight years to implement the same. Agniveer Scheme is another transformative policy implemented by the government which will help aspiring Indian youth to be a part of the Defence Forces for 4 years and get absorbed into the government or private sector on completion of the engagement period. At the same time, the willing and topmost talent (25%) will be absorbed into the permanent defence cadre. Along with these policies, the government recognised the importance of 'Naree Shakthi' in defence forces, and the policy changes opened avenues for women in areas where it was not allowed earlier. Now, women are even appointed as commanding officers of units by the Army, fly fighter jets and are appointed onboard warships.

Coming to the defence industry, the "Make in India" scheme largely benefitted the domestic defence manufacturing sector, and our defence exports increased over 10 times since 2016-17 and reached an all-time high of approximately Rs 16000 Cr in FY 2022-23. Currently, India exports defence equipment to over 85 countries. India has also moved away from outright purchase of defence equipment to concentrate on technology transfer, domestic manufacturing, and manufacturing in India using offset clauses in contracts.

Some of the achievements under 'Make in India' for defence equipment are the manufacturing of Indigenous Aircraft Carrier (IAC)-INS Vikrant by CSL, the design and manufacturing of Light Compact Aircraft (LCA) by HAL, and the manufacturing of Warships by HSL Ltd/ MDL Ltd. Supporting defence industry environment helped the start-ups in the sector. Currently, India is home to about 194 start-ups in the defence sector.

The government's policy changes and reforms in the last nine years under PM Modi transformed India's Defence Sector and Defence Forces. We became home to a thriving defence industry base and start-up ecosystem. We also became an exporter of complex defence equipment from an outright importer. With continued positive policy changes and transformation of the defence Sector, the country will be able to achieve the vision of Atamnirbhar Bharat.





# Atmanirbhar Arsenal: Fostering Self-Reliance in Defense Procurement

- Hrishikesh B M, Youth Can Lead Cohort 4 Participant, Bengaluru

In 2013, India was the 9th largest economy, with a GDP of \$1.86 trillion and a growth rate of 4.6%. The data from the government suggests that the Indian Economy was still heavily reliant on the agricultural and service sectors, and the contributions by the manufacturing sector were lacking. It can perhaps be attributed to the government's lack of incentives for production and innovation in the manufacturing sector before 2014.

However, since 2014, there has been a tectonic shift in the functioning of the Indian economy. Under the leadership of our Prime Minister, Shri Narendra Modi, our nation's economy has scaled new heights. It is the 5th largest economy currently, with a GDP of more than \$3 trillion and aspires to be a \$5 trillion economy soon. It is important to note that the government not only aspires to make India a five trillion economy but also make it self-reliant, which will increase opportunities for our local producers and suppliers. It will also improve India's standing in the global sphere.

To bring this into action, the government has implemented the "Make In India" scheme to boost local production, which has achieved tremendous results. The defence sector is one of the many sectors where indigenous production was abysmal but significantly improved after implementing this scheme. In the financial year of 2022-23, the revenue

earned from the export of defence products was 16,000 crore compared to 1,522 crore in 2016-17, which is almost a tenfold rise. It clearly shows the strides made in the field of defence production. There are 85 countries currently that buy India's exports, including countries like Maldives, Mauritius and the Philippines.

Procedure 2020. Under this, the Department of Defence Production has earmarked 46 items under the Public Procurement order, and these items will be procured only from local sellers, irrespective of their purchase value. It bridges the financial asymmetry between local sellers with a limited market share and big multinational sellers with a greater market power. Similarly, the government has also introduced incentives for investment in technology and innovation by offering greater incentives. It will play an essential role in the production of weapons which cater to the evolving needs of the armed forces since there will be better innovation, and there will also be an increase in production and usage efficiency due to technology usage. Apart from this, DRDO, the primary source of defence production and innovation, has developed a new patent policy where the procedure for the production of patented products is readily available. It has also started providing financial incentives to private enterprises. Specific sectors have been identified by DRDO where it will refrain from indulging in production and only encourage private players to produce. They have also announced that they will rope in the private sector for the development of certain products and co-develop. It will lead to better utilisation of resources and sharing of technology and best practices.

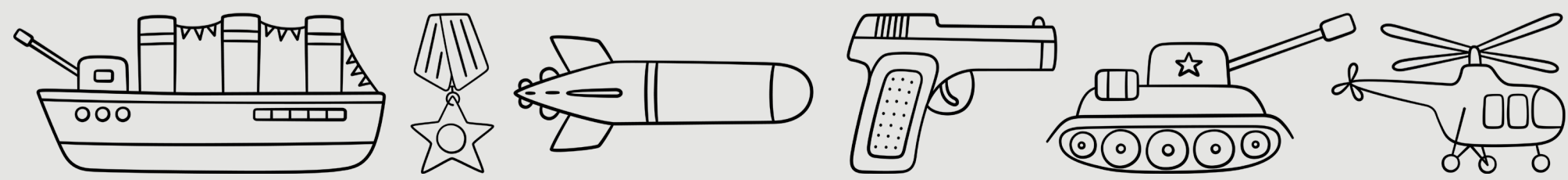
Another major factor for the increase in defence manufacturing has been the re-shaping of foreign investment policy. The cap on investments through the automatic route has been increased to 74% from the previously existing 49%, and entities need to just declare in case there is a change in the distribution of equity below 49%, unlike previous times when they had to get approval from the government. It has led to a massive spike in foreign investments from 1320 crores before 2014 to 2871 crores post-2014.

Establishing defence corridors in Tamil Nadu and Uttar Pradesh has greatly added to this. Currently, the investments received in UP stand at 1135 crore and in Tamil Nadu, it stands at 966 crore within 2 years. It has also employed many locals in these areas.

There has been a systematic approach to increase defence production and encourage indigenisation under the dynamic leadership of Prime Minister Modi. India seeks to achieve defence production worth \$5 billion very soon, and efforts are being made in this direction.

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The reforms undertaken to boost indigenous production have been clearly outlined in the Defence Acquisition







# Empowering Bharat's Defense: A Strategic Evolution

- Prasanna Kumar S, RSS Prachar Toli, Varthuru Nagara, Bengaluru, and delegate at Youth Can Lead

**B**harat's defence stands at its peak strength, displaying unmatched vigour and valour in safeguarding the nation. This heightened state of readiness prompts us to think twice before engaging with any potential threat, all credit to the resolute leadership of the Modi Government. Bharat's Defence expenditure has surged from 3.17 lakh crore in 2014-15 to an impressive 6.23 lakh crore in 2023-24, underscoring the gravity and preparedness of the current administration in addressing future challenges. In the fiscal year 2021-22, the country achieved an unprecedented milestone in defence exports, totalling Rs. 12815 Cr. This marks an extraordinary eight-fold increase from the Rs. 1522 Cr recorded in 2016-17.

The Government has implemented a range of measures, including delicensing, deregulation, export promotion, and liberalization of foreign investment in the defence sector. These steps prioritize the safety of the citizens and the nation's integrity over political considerations.

## Major Reforms and a call for Atma Nirbharta in the Defence sector:

The Ministry of Defence (MoD) periodically releases updates on the negative import list of Defence Systems, a strategic move aimed at progressively restricting the importation of Defence weapon systems and platforms. This policy shift serves as a catalyst for the local Defence industry, fostering an environment of innovation and growth.

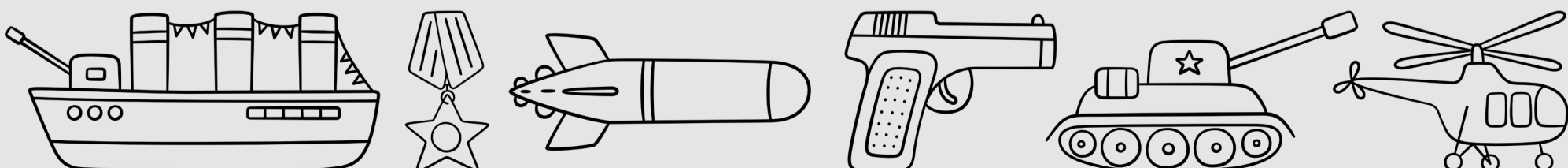
Over the past few years, the number of export authorizations issued has surged by more than fourfold since 2016. This increase is complemented by the seamless transition to an online authorization process, characterized by complete transparency and accountability. Such a streamlined system empowers the domestic Defence industry to proactively cater to the evolving needs of the Armed forces. This surge in indigenous Defence manufacturing not only curtails the import expenditure but also opens doors for domestic players to not only compete locally but also on

the global stage. Projections conservatively estimate contracts worth Rs 3.5 lakh crore to be channelled into the domestic industry within the upcoming years, a testament to the nation's stride toward self-reliance - Atma Nirbaratha. The robust financial performance of major Public Sector Undertakings (PSUs) like HAL, BEML, and BEL is a testament to the sound product base, innovative practices, and skilled human capital. Their year-on-year profit growth underscores their pivotal role in the nation's Defence sector.

The AGNIPATH initiative, a bold and transformative scheme launched by the Modi Government, beckons the youth of the nation to step forward in service to their country, instilling a profound sense of nationalism from an early age. This program offers young individuals a unique opportunity to serve in the armed forces and fulfil their dreams of contributing to the nation's well-being. The achievements of our Defence services are notable on a global scale. We stand as the second-largest Armed Forces in the world, rank as the third-largest military spender, and hold the fourth position in terms of military strength, among other commendable distinctions and the Agnipath scheme will only complement our Armed Forces in accomplishing more achievements in the future while also providing our youth with more opportunities.

In a significant stride towards modernization and efficiency, the present Government has implemented crucial reforms in the Armed Forces. The establishment of the post of Chief of Defence, a long-pending recommendation, promises to enhance military counsel to our leadership, ensuring timely decision-making. Additionally, the creation of the Department of Military Affairs spearheads groundbreaking reforms, bringing together 41 Ordnance Factories under the umbrella of seven Defence Public Sector Undertakings (DPSUs), symbolizing the newfound self-confidence of a resurgent India.

When the Modi Government assumed power, India held the unenviable position of being the second-largest defence importer globally. This reliance imposed a significant strain on our defence budget, leaving us vulnerable to the





terms set by foreign companies. Such a dependence could prove perilous in times of crisis, potentially compromising the integrity of our defence systems. Recognizing this vulnerability, the Modi government embarked on a transformative journey, championing the 'Make In India' initiative to firmly establish defence manufacturing as an internal affair, thus nurturing the seeds of self-reliance.

A pivotal shift in defence policy emerged, rectifying a long-standing inertia in bolstering our military preparedness. Prime Minister Narendra Modi affirmed the NDA government's commitment to forging partnerships with defence industries guided by the highest standards of integrity and probity. This pronouncement marked a watershed moment in our approach to national defence. In a groundbreaking move, an array of 98 crucial Defence Items valued at over Rs.1,40,000 Cr will now be sourced from indigenous channels. This encompasses intricate systems, sensors, weaponry, and ammunition, presenting a golden opportunity for startups and MSMEs. This initiative is poised to catalyse their growth, culminating in the establishment of a world-class defence industrial ecosystem within the nation's borders. To alleviate funding constraints for these enterprises, the Government of India has established a Rs.10,000 Cr 'Fund of Funds'. Furthermore, the Department of Defence Production (DDP) has set an ambitious export target of Rs 20,000 Cr for the fiscal year 2023-24.

The ministry entrusted with safeguarding our nation's integrity and sovereignty was, regrettably, marred by a history of scams and financial impropriety under previous administrations. From the Submarine scandal to the Bofors debacle and Jeep procurement irregularities, a transformation was

imperative. The institution of a well-defined Defence Acquisition Procedure emerged as a linchpin in cultivating a robust defence manufacturing capacity. The DAP prioritizes self-reliance and streamlines business operations, exemplified by the liberalization of FDI up to 74% through an automatic route. Currently, two operational defence corridors, located in Uttar Pradesh and Tamil Nadu, offer tailored incentive packages and concessions to attract investments. Uttar Pradesh has already garnered Rs.1135 Cr investment in the UP-Defence Corridor, with an additional Rs.966 Cr in the Tamil Nadu Defence Corridor, a testament to the policy's efficacy. Moreover, the policy places a distinct emphasis on sourcing from Indian-IDDM (Indigenously Designed Developed and Manufactured) vendors, fostering a culture of innovation and self-sufficiency. The ongoing modernization of our mechanized forces is pivotal, integrating tanks and infantry transport vehicles to bolster their operational prowess, mobility, and overall effectiveness.

Under the Modi Government's strategic direction, the management, operations, and maintenance of 41 production units under the Ministry of Defence have been transitioned to wholly Government-owned companies. This corporatization of the Ordnance Factory Board (OFB) aims to trim overhead costs, a significant portion of the defence budget, and elevate defence production capabilities. The move is poised to invigorate decision-making processes, affording the OFB greater autonomy and adaptability in its transformation.

Ensuring our defence forces are equipped with cutting-edge systems is of paramount importance. Prime Minister Modi's government inked a monumental Rs.59,000 crore agree-







ment with France for the procurement of 36 Rafale twin-engine fighter jets, bolstering the nation's military might in the long run. Numerous crucial agreements languished during the UPA regime, plagued by controversies, and these acquisitions are pivotal in reestablishing Bharat's dominance on the Asian continent.

Further strengthening our defence arsenal, the Modi Government secured a USD 3 Billion deal with the United States to acquire 24 MH-60R Romeo Helicopters for the Indian Navy. Simultaneously, the Indian Air Force made a pact with Russia to procure the air-to-air missile R-27 at a cost of Rs.1500 crore. Additionally, a Rs.880 crore defence agreement with Israel for the acquisition of 16,000 machine guns highlights the multifaceted approach towards fortifying our defence capabilities. Aero India, the largest aero show in Asia, serves as a powerful testament to the vision of 'Make In India', exemplifying Bharat's pursuit of self-reliance.

The Ministry of Defence is proactively adapting to the dynamic and intricate geopolitical landscape through a dedicated focus on continuous innovation and the integration of cutting-edge technologies. The establishment of the Defence AI Council (DAIC) underscores this commitment, enabling policy-level shifts and the widespread adoption of Artificial Intelligence. Honourable Prime Minister Narendra Modi's call to "Make Artificial Intelligence in India and Make Artificial Intelligence work for India" resonates with foresight and purpose.

In the era of intricate geopolitics, cyber warfare, surveil-

lance states, and psychological warfare, preparedness is paramount. The MoD's strides in Artificial Intelligence are commendable, with around 75 products in development and implementation, ranging from various Machine Learning models to advanced human behavioural analysis systems. These innovations promise to be invaluable assets in counter-terrorism efforts, safeguarding soldiers, and fortifying national security. It is evident that AI is poised to revolutionize the Indian Military in the days ahead.

In conclusion, the Modi Government's resolute commitment to fortifying Bharat's defence capabilities marks a paradigm shift in the nation's strategic outlook. The decisive steps taken, from modernizing mechanized forces to corporatizing production units, demonstrate a dedication to self-reliance and operational excellence. Noteworthy acquisitions, such as the Rafale fighter jets and strategic defence deals, underscore the government's resolve to equip our forces

with cutting-edge technology. Additionally, the integration of Artificial Intelligence showcases a forward-thinking approach in adapting to a rapidly evolving global landscape. With a renewed focus on innovation, transparency, and self-sufficiency, Bharat's defence forces are poised to not only protect the nation but also secure its position on the global stage.

This transformative journey towards a stronger, self-reliant defence establishment is emblematic of Bharat's steadfast commitment to safeguarding its citizens and upholding its sovereignty.

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**BHARATIYA JANATA YUVA MORCHA**