

# Self-Reliance in Defence Manufacturing in India – A Step Towards Aatmanirbhartha

SHRIHARI KARANTH<sup>1</sup>, VIDYA BHAT<sup>2</sup>

<sup>1,2</sup> *Research Scholar, Department of Studies in Commerce, Davangere University, Davangere.*

**Abstract-** *Aatmanirbhartha in defence manufacturing is matter of national pride, which showcases county's ability to protect its borders without depending on other nations. The defence budget of India for the fiscal year 2023-24 constitutes 2% of the projected gross domestic product (GDP) of the country. Additionally, it comprises 13% of the total government budget. As a result, India is the 3<sup>rd</sup> largest military spender in the world. Few years back self-reliance in defence sector was distant dream but with the determined efforts of the government, India is slowly improving domestic military production capabilities. The Present study examined how India is marching towards aatmanirbhartha in defence sector and the support of Government to decrease the import of arms and support the domestic procurement.*

**Indexed Terms-** *Aatmanirbhartha, Defence Manufacturing, Self-Reliance*

## I. INTRODUCTION

Ensuring national security requires a country to prioritize defence as a matter of utmost importance. The progress in economic, social, and technological domains hinges upon safeguarding its borders from external adversaries. To achieve this, it is crucial for the country to maintain robust armed forces equipped with advanced weaponry and defence systems of their own. A strong indigenous defence industry can have positive economic impacts. It generates employment opportunities, attracts investment, and promotes the growth of related industries such as manufacturing, engineering, and research. Defence exports can also be a significant source of revenue, contributing to the country's economic well-being.

India traditionally relied heavy on imported arms, ammunition, and defence equipment, including fighter planes and submarines, which raises significant

concerns regarding the nation's ambition to establish self-reliant defence manufacturing capabilities in both the public and private sectors. In recent years, the government has implemented numerous policy initiatives and introduced reforms aimed at fostering the indigenous design, development, and manufacturing of defence equipment. These measures are intended to promote self-reliance in defence manufacturing and technology within the country. focused efforts of government started to give some good result Defence sector is identified as one of the core areas to boost 'Make in India' and under 'Aatmanirbhar Bharath' initiative a separate Rs. 52,000 crore is allotted, specifically for Defence Sector. Prime Minister Shri Narendra Modi also is having a vision of achieving five billion USD (Rs. 35,000 crore) defence related exports and to become net exporter of defence equipment in the next five years.

## II. JOURNEY OF INDIA'S DEFENCE MANUFACTURING

India has long desired self-reliance in its military industry, but efforts haven't produced much results. In the 1960s and 1970s, with support from nations like the Soviet Union and the United Kingdom, India increased its domestic defence industrial capabilities, primarily through manufacture under license (Thokas,2021). India's policy in the early 1990s aimed to attain 70% self-reliance in defence systems by 2005. However, the pursuit of self-reliance took a back seat for more than a decade in post-Kargil India (Narayan, 2010). In the year 1991, India gained economic freedom, but even after 1991 Indian military manufacturing lacked collaborative approach between private and public sectors. Majority of defence production kept exclusively for Ordinance Factory Board and Defence Public Sector Undertakings, which led to the massive and well-established military production infrastructure highly inefficient and

outdated. This resulted in a shortage of contemporary managerial expertise, technological capabilities, and academic research within the established defence production framework.

Further, India’s imports of weapons fell by 11% between 2013–17 and 2018–22 due to India’s slow and complex arms procurement process, efforts to diversify its arms suppliers, and attempts to replace imports with major arms that are designed and produced domestically. (Wezeman et.al., 2023). As a result of government efforts towards aathmanirbhartha in defence manufacturing the proportion of domestic procurement in the overall procurement has shown a consistent upward trend. In the fiscal year 2018-19, domestic procurement accounted for 54% of the total procurement, which increased to 59% in 2019-20. Further the domestic procurement rose to 64% in 2020-21. In the current year, the share of domestic procurement has reached 68%, reflecting a continuous increase in reliance on domestic sourcing. (MOD,2022).

• CURRENT TREND IN INDIA’S MILITARY SPENDING

Indian military outlay is the fourth largest in the world. The India’s total military budget in 2022 is at US\$ 81 billion and is behind USA, China and Russia which has annual defence budget of US\$ 877 billion, 292 billion and 84 billion respectively.

Table 1.1  
Military expenditure India

| Year | Military expenditure (% of GDP) |
|------|---------------------------------|
| 2016 | 2.5                             |
| 2017 | 2.5                             |
| 2018 | 2.4                             |
| 2019 | 2.5                             |
| 2020 | 2.8                             |
| 2021 | 2.5                             |
| 2022 | 2.4                             |

Source: SIPRI reports

India has world’s 2nd largest armed force in term of military personals. More than 14 lakh active persons are serving. Defence expenditure is one of the major expenditures of the government, nearly 2.4 to 2.9 % of the GDP is spent on the military.

Table 1.2

Government Spending on Military expenditure

| Year | Government spending (%) out of total expenditure |
|------|--|
| 2016 | 9.4  |
| 2017 | 9.1  |
| 2018 | 9.1  |
| 2019 | 8.8  |
| 2020 | 7.9  |
| 2021 | 8.3  |

Source: SIPRI reports

Indian military is going through rapid transition. Government is concentrating on modernisation of military equipment, so capital expenditure on purchase of high-tech system is increasing. India spent nearly 8.3% of its total expenditure on defence sector. Indian government is also encouraging development of critical technology and allocating funds for research & development.

• Economic Benefits of Aathmanirartha in the Defence Sector

The development of a robust indigenous defence industry can have wide-ranging positive economic impacts. Primarily, it creates large scale employment opportunities across various skill levels, benefiting the workforce and stimulating economic growth. The establishment of defence manufacturing facilities requires a skilled workforce, from engineers and technicians to assembly line workers, thereby generating jobs at different levels of expertise. Furthermore, a flourishing domestic defence industry attracts domestic and foreign investment. As the sector grows, it needs investments in infrastructure, technology, and research and development. This influx of capital not only strengthens the defence industry but also supports the growth of related sectors, such as manufacturing and engineering.

In addition to domestic consumption, defence exports can be a significant source of revenue for the country. A well-established indigenous defence industry can produce high-quality defence equipment and technology that meets international standards. By exporting defence products to other countries, a nation can generate substantial income, contributing to its economic well-being. Defence exports also enhance

the country's reputation as a reliable and technologically advanced defence supplier, potentially leading to further export opportunities in related industries.

Table 1.3  
Share of India in global arms import

| Year      | Share of global arms import (%) |
|-----------|---------------------------------|
| 2003-2007 | 9%                              |
| 2008-2012 | 11%                             |
| 2013-2017 | 12%                             |
| 2018-2022 | 11%                             |

(Source: SIPRI reports)

The above table demonstrates that India has consistently been one of the largest importers of arms globally, with a share ranging from 9% to 12% over different time periods. This highlights India's continued reliance on foreign defence equipment to meet its national security requirements. India is the largest defence importer from past two decade. Even though arms import of India decreased by 11 per cent between 2013-17 and 2018-22 it retained position of top arms importer in the world.

- Steps taken by government of India to improve self-reliance in defence manufacturing.

In recent years, the government has implemented numerous policy initiatives and introduced reforms aimed at developing the indigenous design, development, and manufacturing of defence equipment. These measures are intended to promote self-reliance in defence manufacturing and technology within the country

- Ministry of defence and the department of military affairs from December 2021 to May 2023 issued four positive indigenization list of military weapons, hardwires, components and sub-systems which will be manufactured domestically.
- Government of India liberalized FDI rules in defence manufacturing to get access to modern technology and manufacturing hi-tech weapons in India. Government allowed 74% FDI through automatic route and 100 % FDI trough government approval in defence manufacturing.
- On 30<sup>th</sup> October 2022 Prime Minister Shri Narendra Modi laid the foundation stone for the

manufacturing facility of the C-295 transport aircraft. This facility, established through collaboration between Tata Advanced Systems Limited and Airbus Defence and Space S.A., Spain, will be responsible for manufacturing 40 C-295 aircraft for the Indian Air Force (IAF). Notably, this groundbreaking project marks the first instance in India where a private company is assigned to manufacturing of a military aircraft. This project is expected to benefit 125, MSMEs and expected to generate 600 highly skilled direct job and 3000 indirect job and 3000 medium skilled jobs in the country.

- Government of India corporatizing 41 ordinance factory bord into 7 defence public sector undertaking to bring in efficacy and quality, so that they can compete in the highly competitive international defence export market.
- To encourage investments in the Aerospace & Defence sector and create a comprehensive defence manufacturing ecosystem, the government has established two Defence Industrial Corridors. These corridors are situated in Uttar Pradesh and Tamil Nadu, designed to attract investments and foster the growth of the defence industry within the country.
- To encourage defence equipment export Government has introduced Open General Export License (OGEL) system for export of Parts and Components, Transfer of Technology, Major Platforms and Equipment. OGEL is one-time export license, which facilitates the defence industry to export specified items to specified destinations.

Table 1.4  
Defence export of India  
(in crore)

| Year    | Defence Export | Year on year change (%) |
|---------|----------------|-------------------------|
| 2013-14 | 1,050          | -                       |
| 2014-15 | 1,682          | 60                      |
| 2015-16 | 2,014          | 20                      |
| 2016-17 | 1,521          | -24                     |

|         |        |     |
|---------|--------|-----|
| 2017-18 | 4,682  | 208 |
| 2018-19 | 10,745 | 129 |
| 2019-20 | 9,115  | -15 |
| 2020-21 | 8,434  | -7  |
| 2021-22 | 12,814 | 52  |
| 2022-23 | 15,920 | 24  |

(Source: MOD reports)

The table demonstrates the fluctuations in India's defence export figures over the years, with notable growth in certain years followed by periods of decline. However, there has been an upward trend in defence exports, with significant growth observed in recent years.

There has been a consistent upward trend in the share of domestic procurement as a portion of the total procurement. In the fiscal year 2018-19, domestic procurement accounted for 54% of the total, which then increased to 59% in 2019-20, and further rose to 64% in 2020-21. The current year has witnessed a rise to 68% for domestic procurement, of this 25% budget has been reserved for procurement from private industry. This indicates the governments focus on indigenization and procurement of defence products from the domestic resources.

### CONCLUSION

The development of a strong indigenous defence industry not only strengthens national security but also has far-reaching economic benefits. It creates jobs, attracts investment, stimulates growth in related industries, and opens avenues for defence exports, all of which contribute to the country's economic prosperity. India, once primarily recognized as an importer of military hardware has transformed into an exporter of significant platforms. These platforms include the Dornier-228, 155 mm Advanced Towed Artillery Guns (ATAGs), Brahmos Missiles, Akash Missile System, Radars, Simulators, Mine Protected Vehicles, Armored Vehicles, PINAKA Rockets & Launchers, Ammunitions, Thermal Imagers, Body

Armors, as well as Systems, Line Replaceable Units, and Parts & components of Avionics and Small Arms.

With sustained government backing, India's domestic procurement of arms has nearly reached the 70% mark. The country is currently engaged in the construction of nuclear submarines, aircraft carriers, lightweight combat aircraft, helicopters, missiles, and unmanned aerial vehicles (UAVs). Moreover, the private sector has displayed remarkable potential in the defence sector, with companies such as Tata, M&M, L&T, and Kalyani Forge involved in the manufacturing and export of arms. Additionally, emerging defence startups are contributing to the production of sensors, drones, and more. These accomplishments, however, are just the beginning, as India has the potential to become a powerhouse in military manufacturing and truly achieve self-reliance and Marching towards Aatmanirbharta in the years ahead.

### REFERENCES

- [1] Pieter D. Wezeman, Justine Gadon and Siemon T. Wezeman. (2023). Trends in International Arms Transfers, 2022. *Stockholm International Peace Research Institute*. <https://www.sipri.org/publications/2023/sipri-fact-sheets/trends-international-arms-transfers-2022>
- [2] Richa Tokas. (2021). Self-Reliance in Defence Sector. *Manohar Parrikar Institute for Defence Studies and Analyses*. <https://www.idsa.in/idsacomments/self-reliance-in-defence-sector-040821>
- [3] Brig (Dr) Ashok Pathak (Retd.). (2022). Indigenization of Defence Production: India's Journey from Vision to Outcomes. *Vivekananda International Foundation*. <https://www.vifindia.org/article/2022/september/19/indigenization-of-defence-production>
- [4] KG Narayanan. (2010). Doctrine of Self Reliance in Defence Technologies: Road to Nowhere or Way to Go?. *Journal of Defence Studies*.