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Atmanirbhar Bharat and Military Modernisation: Assessing India's Defence Industrial Reforms

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Abstract

India's defence sector has long faced structural and technological challenges. Over the years, international defence supplies have played a significant role in supporting India's defence capabilities, addressing inefficiencies and reducing external dependency. This paper examines whether the reforms introduced under the Atmanirbhar Bharat framework have solved the problems facing the defence sector and successfully handled enduring issues with defence procurement, innovation, and production. The Atmanirbhar Bharat project is a crucial part of the defence reforms, and the Indian defence sector is still striving to increase resilience. Ensuring that the defence sector meets the nation's defence needs is a goal of the Indian government. According to official government data, policy analysis, and scholarly literature, the changes have improved defence exports, enhanced private-sector participation, and raised domestic output. Nonetheless, significant obstacles persist across crucial domains, including defence research, defence technologies, procurement, and institutional concerns. The study argues that while the Atmanirbhar Bharat project is a noteworthy step by the Indian government to establish an independent defence industry, further reforms are necessary to build a robust defence industry capable of supporting military modernisation.

Keywords- Atmanirbhar Bharat, Military Modernisation, Defence Industrial Reforms, Indigenous Defence Production, Strategic Autonomy, Defence Exports.

Introduction

India's past experiences shape its defence industry. India's defence industrial development has been shaped by its evolving security environment and historical experiences since independence. The Indian defence industry has evolved in a distinctive manner, shaped by both historical development and contemporary strategic realities. It has expanded within the technological, institutional, and economic constraints of each period. Ensuring India's security and safety has been the primary goal of the country's defence industry since independence. India has consistently sought greater strategic autonomy in defence decision-making. The problem is that India's defence industry has not been doing its part. In a region rife with conflict, India's defence industry has had to be strong to prevent the nation from being at a disadvantage amid neighbouring nations seeking an edge. India has primarily relied on foreign

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sources to obtain vital weapons, equipment, and systems to support and underpin its defence and security requirements since gaining independence, despite having a high defence budget and a prominent military (Basrur et al., 2014).

India's reliance on foreign nations for defence production is a result of historical occurrences and patterns. India lacked industries and was not very good at creating defence-related equipment on its own when it gained independence. India had to rely on its own resources; thus, the government decided to use government-owned research facilities and factories to manufacture defence-related equipment. In this manner, India can achieve its goal of obtaining defence-related equipment. As a result, there would be little competition, few new ideas, and defence equipment would be produced inefficiently. India's defence system was ineffective. It was unable to create innovative and effective defence-related equipment. India signed a license-production and technology-transfer agreement with other nations (Panda, 2020).

The way we purchase defence gear has a significant impact on the development of the defence sector. Numerous individuals have examined defence purchases, emphasising the time required to complete tasks, the difficulties posed by high expenditures, and the lack of collaboration among the army, industry, and researchers. Consequently, it is difficult to obtain the items we require. Purchasing defence equipment, for example, is a highly complex procedure, as many people point out when discussing acquisitions meant to create new things. While some believe it is crucial to make things in our own nation, Others think that we should be ready to fight at that specific moment. Getting the most essential items we require takes time, which affects our fighting capacity. In our nation, the defence sector and its procurement procedures are of great importance. There are still several issues with defence procurement procedures.

Since 2020, as tensions along India's borders have increased, we have become increasingly aware of the problems with our defence system. Furthermore, emerging industries such as space and cybersecurity are gaining significance. Therefore, it makes clear to us how dangerous the situation could be if we rely too much on other nations for our military needs. According to experts, depending on foreign countries for several military needs, like the acquisition of firearms and their parts, is restricting India's autonomy, particularly during difficult times. India's defence system relies heavily on other nations for a variety of supplies, including firearms, ammunition, and other items (Kumar & Ganguly, 2024). Our independence faces constant threats; numerous connections exist between India's military requirements and its defence system (Sinha, 2023).

Over the past ten years, India's defence industry has undergone several transformations. Reducing India's reliance on other nations to meet its defence requirements is the primary goal of these reforms. It is precisely what the Atmanirbhar Bharat initiative aims to achieve. The Indian government has implemented several policy measures to encourage domestic companies to participate in defence manufacturing and expand India's defence export potential. These initiatives seek to encourage Indian companies to produce defence equipment domestically while strengthening the country's presence in the global defence market. However, the government is also eager to work with private companies to produce defence hardware. The

goal is to ensure the country is capable of supporting itself and strong enough to do so. The most recent statistics show that India is manufacturing and exporting defence equipment. It is a clear sign that India is heading in the right direction toward building a robust defence industry (Chakravarty & Roy, 2024). However, there are technical challenges, particularly in propulsion systems, sophisticated electronics, sensors, and integration, as well as a relative lack of funding for defence Research and Development (Kotha et al., 2025; Singh, 2025).

The Atmanirbhar Bharat defence reforms, which are intended to strengthen the country's defence and increase its sovereignty, mark a paradigm shift for the Indian government. Although these reforms have the potential to be transformative, their capacity to effect change is still limited. This is due to the Indian government's continued reliance on foreign technology and its inadequate R&D spending. Structural problems also hamper progress in the Indian defence industry.

This study aims to bridge the gap between one central question to answer:

How effectively have recent reforms under the "Atmanirbhar Bharat" framework addressed historical weaknesses in the nation's defence production, innovation, and acquisition?

The qualitative basis for the analysis also includes data on defence, policy, and the existing literature, which provides scope for judging the contextual continuity and change provided in the data.

We must begin with the current discussions on defence self-reliance, indigenisation, and modernisation if we are to comprehend India's defence transformation route. To identify the gaps in the literature that this research on India's defence self-reliance, indigenisation, and modernisation seeks to address, we shall review significant books and papers on the topic in the following section.

Literature Review

2.1 Defence Self-Reliance and Indigenisation

Defence self-reliance has been a long-standing objective of India's strategic and industrial policy. It has consistently been the goal of India's strategy and defence. Over time, its level of self-reliance has fluctuated. For the past few decades, state-owned businesses and research institutes have dominated key positions in India's defence sector, which has historically been under state control. State-owned businesses and academic institutions make up the majority of the Indian defence sector. The Indian defence sector includes the government agencies, weapon manufacturing facilities, and government research institutes. Government agencies, ordnance factories, and defence PSUs are all essential to India's defence goods manufacturing. India has gained knowledge in producing and repairing defence equipment as a result of this approach. India's defence sector has yet to learn how to develop its own technology or defence equipment designs (Basrur et al., 2014). India's defence industry, comprising research organisations, ordnance manufacturers, and defence public sector undertakings, must do so in these two areas. As a result, India had to rely on imports for cutting-edge machinery and technology.

During the Cold War, nations mainly manufactured goods made by others rather than developing original ideas. It indicated that these nations have long relied on human labour for technology. It also meant that the military, those who produced goods for the country, and those who carried out research for the country did not work together (Basrur et al., 2014). As a result, the government found it challenging to establish a system that could continue to operate in defence-related fields (Panda, 2020). We want to discuss the defence industrial environment here. It is not very powerful. A nation requires industries like the defence industry and its ecosystem to survive; it is essential to emphasise the defence industrial ecosystem in this context. The fact that India continues to rank among the world's top defence importers despite rising defence spending is another indication of these fundamental flaws (Singh, 2021).

Since the middle of the 2010s, the Indian government has been debating and preparing to make the nation defence self-sufficient. They want India to produce its own defence system equipment rather than relying on other nations. The Atmanirbhar Bharat project is where this idea originated. According to some analysts, the government has changed things to help the country become self-sufficient. For instance, the Indian government requires that certain goods be produced in India.

Additionally, they have prioritised Indian companies in the procurement of defence equipment. They have enabled private businesses to participate and improved the country's investment climate for international companies (Panda, 2020; Chakravarty & Roy, 2024). The government has said all of this. Actually, the idea of defence self-reliance has been incorporated into the Atmanirbhar Bharat concept. Domestic defence production has increased, driven by expanded manufacturing capacity and procurement reforms (Defence Ministry, 2023).

The government claims that the rise in domestic production is reflected in defence exports. India is currently exporting more defence items than previously, as other nations are gradually recognising the value of the defence products we manufacture and our ability to supply them, indicating a sense of order (PIB, 2024). There have been rumours that even though we are producing more defence products than we used to, this does not imply that we are now making them independently. Regarding our reliance on high-tech fields such as propulsion, sensors, and, most importantly, electronics, some conclusions are predetermined (Kotha et al., 2025).

2.2 Military Modernisation

The primary focus of India's defence strategy has been modernisation of its armed forces, fuelled by shifting perceptions of threats and changes in the regional security landscape. Actually, most academics agree that Indian modernisation initiatives have typically encountered limited indigenous technological capability, cost overruns, and procurement delays (Basrur et al., 2014). Procurement processes are a significant barrier to modernisation, according to research on defence acquisition. “The complexity of procurement procedures, the frequent changes in procurement procedures, and the cautious approach to procurement decisions have plagued modernisation attempts in the context of our national security” (Singh, 2021). Analyses of acquisition process case studies show that rigidity and the simultaneous

pursuit of immediate operationalisation and indigenisation are impediments to modernisation, the rigidity of acquisition processes and the balance between the two goals.

Since 2020, modernising our military has become imperative. This is because new domains like cyber and space wars are becoming increasingly prominent, and there are issues at the frontiers right now. We need to consider systems as well. Modernising the military will become increasingly important (Kumar & Ganguly, 2024). Many argue against our reliance on other nations for essential military hardware and replacement parts. This is because an issue may restrict our options. We will be unable to decide on our own (Sinha, 2023). We should be concerned about the modernisation of the military and the dependence on foreign nations for weaponry as significant issues, and that funds allocated to defence research and development are still included in total defence expenditure. It indicates that the Ministry of Defence is not developing new concepts or products at a rapid pace (MOD, 2023).

Comparative research highlights the consequences of this imbalance. The development of indigenous capabilities is impacted by a lack of investment, according to studies comparing.

India's defence research, development, and investment are comparable to those of other major military powers, particularly China. According to these studies, manufacturing and purchasing procedures are streamlined, but the technology update process remains uneven.

2.3 Literature Gap

In light of border disputes and the growing significance of the cyber and space domains, substantial research since 2020 has argued that India must modernise its military capabilities. India's autonomy in times of crisis is thought to be limited by its reliance on foreign sources for defence purchases (Sinha, 2023). To promote the growth of India's defence manufacturing industry, the Atmanirbhar Bharat program also includes several laws and reforms. By involving Indian businesses, the goal is to boost domestic defence production and lessen the demand for defence technology imports.

The government has acknowledged these problems in reports, emphasising the need for higher defence R&D expenditures. However, India's ability to improve its military capabilities in line with requirements is limited because it spends much less on defence research than other global powers, including China (MoD, 2023). The recent defence sector reforms under "Atmanirbhar Bharat" have not been as well discussed as the problems in defence research.

Atmanirbhar Bharat and Defence Industrial Reforms

3.1 Policy and Institutional Reforms

The objectives of Atmanirbhar Bharat are to address the long-standing issues that have hindered defence indigenisation. Because the military, defence companies, and research institutions did not collaborate effectively, the preceding policies did not function properly. The absence of a mechanism to further unite everyone, according to some, led to significant delays and wasted resources (Singh, 2021). Currently, they are working to put things right by bringing all the various factions together and making sure that the military receives the necessary supplies from Atmanirbhar Bharat, the people who create our nation. The attempt to change

the defence strategy from short-term acquisition to long-term capability building has been another significant institutional change. Prior procurement choices led to imports that did not support the development of the domestic sector. However, under Atmanirbhar Bharat, the focus of the offset strategy is gradually moving toward the development of indigenous capabilities, even if this means temporary delays or expenditures.

Government policy increasingly supports domestic defence firms through procurement commitments and industrial incentives; it is making an effort to let these businesses know they will receive orders for a specific period. Companies can plan and make decisions in this way. Indian businesses will be more inclined to invest in machinery, hire qualified personnel, and develop new technologies if they are sure they will receive orders (MOD, 2023). According to some analysts, Indian defence companies will not invest in sophisticated equipment until they are sure they will be ordered. Indian defence companies must evaluate their chances of securing orders before investing and taking on risk. By giving orders to defence companies, the government hopes to increase confidence.

Additionally, institutional reforms have sought to strike a balance between selective international cooperation and self-reliance. Atmanirbhar Bharat emphasises homegrown manufacturing, yet it does not entirely disapprove of global participation. In actuality, policies promote technology collaborations that facilitate knowledge transfer and domestic production. Such a calibrated approach, for example, represents the recognition that full-blown technological autonomy may be challenging in the near future, according to some research. Nonetheless, long-term skill creation might be aided by controlled cooperation (Chakravarty & Roy, 2024).

India has been trying to boost defence exports to bolster its industry. To help Indian defence companies sell their products abroad, the government has set a goal. To assist Indian defence companies in their efforts to sell their products abroad, for example, they have established organisations (PIB, 2024). However, some scholars contend that Indian defence companies must guarantee that their goods are of superior quality and meet the requirements of other nations when they sell them. Consequently, they are compelled to manufacture exceptional products, which facilitates their success (Chakravarty & Roy, 2024). India's defence companies must contend with global competition. They must therefore be the finest versions of themselves. According to several government reports, acquisition procedures could be simplified, especially for contract finalisation, certification, and testing (MOD, 2023).

The body of research on the subject shows significant changes in institutions and policy reforms under the Atmanirbhar Bharat initiative. This measure, unlike previous indigenisation initiatives in the nation, combines export promotion, private-sector engagement, institutional reforms, and procurement reforms. However, political commitment to attaining realistic defence self-reliance will remain lacking unless such reforms are implemented through institutional learning.

3.2 Role of the Private Sector and Innovation

Through the Atmanirbhar initiative, the private sector has emerged as a significant player in India's defence industry. In the past, public sector initiatives dominated the Indian

defence industry, while private sector businesses contributed only modest amounts to defence establishments and had minimal involvement in other defence projects. Several academics claim that this has impeded technological and operational advancement in the Indian defence industry (Panda, 2020). The government has been attempting to change how things are conducted. They favour greater private-sector participation in the manufacture of military hardware. Therefore, they established specific regulations that facilitated the entry and competition of private enterprises with government-owned enterprises. The involvement of private companies results in new operational methods, quicker decision-making, and the use of the latest technology (Singh, 2021). A growing proportion of domestic defence production is now coming from private companies, a clear indication of a slow transition to a more balanced industrial structure (MoD).

One area that has significantly improved is innovation, which is a result of private companies' involvement. As we can see, a large portion of the work in special defence parts, communications equipment, defence electronics and systems, and more has been taken on by private companies. They contend that private businesses are more likely to innovate and produce superior goods when they compete with one another and sell to the general public (Chakravarty & Roy, 2024). The majority of defence export material in recent years has been handled by private companies, according to data provided by the Press Information Bureau (PIB, 2024).

The private sector can collaborate with other businesses to accomplish all of this. It has collaborated with companies and public entities to advance technology and learn how to manufacture goods. Numerous companies have used it to produce goods and acquire new technology. Some academics contend that private companies should collaborate only if they can successfully understand the latest technology available to them (Panda, 2020). The independent operations of the private companies are beneficial. The private sector also requires individuals who can think and generate new ideas. Despite the partial success of this endeavour, several problems continue to hinder private sector innovation in the defence industry. Private sector innovation in the defence industry is hampered, for example, by limited access to research funding, the need to comply with complex regulations, and the unpredictability of government long-term procurement commitments. According to several government reports, the defence industry spends relatively little on research and development, which affects innovation in both the public and private sectors (MOD, 2023).

Literature claims that private sector companies have aided in the “slow development of ideas” and strengthened India's defence sector. To successfully modernise the military, the government must continue to provide the necessary support through robust policies, generate long-term demand for these products, and help private-sector companies collaborate closely with institutions (Singh, 2021; Kotha et al., 2025). With the proper backing, private-sector companies can help modernise the Indian military. For India’s defence industry to continue to flourish, private-sector companies remain essential. The question still stands even though Atmanirbhar Bharat has created new chances for private companies to support India’s technical independence.

India is taking a significant step with its military reform initiative. Instead of purchasing military equipment, the reform movement aims to produce it in India. India's military will get stronger as a result of the reform movement. If India can manufacture its own military equipment rather than purchasing it, the reform movement will be successful. The main goal of the reform movement is to alter the equipment used by India's armed forces.

Implications for Military Modernisation

4.1 Indigenous Platforms and Capability Development

The platforms' development is necessary to ensure we can continue expanding our capabilities. Our military forces will not have to rely on foreign nations to make adjustments or repairs if we build our platforms domestically. For some, this is a bargain given the world's constant changes, which require our own adaptation. However, these local platforms offer a way to make adaptable adjustments and enhancements. This implies we can respond to any circumstance that arises, a significant benefit of keeping our military up to date with the latest tactics and technologies. Native platforms are advantageous for this reason.

The second benefit activates the defence community's learning and knowledge retention. The nation's engineers, scientists, and defence strategists can acquire significant expertise in system design and development, enabling them to design and produce weapons in-house. Studies have demonstrated the significance of this learning in the shift from assembly-based manufacturing to innovation or system integration (Panda, 2020). The development of technological capacities follows, which is essential for the long-term military modernisation process.

Indigenisation promotes integration and interoperability throughout the military forces. It is simpler to integrate platforms across services and modify them to fit joint operational doctrines when systems are developed domestically. Reliance on a variety of foreign suppliers often leads to incompatibilities, making joint operations more difficult and increasing maintenance costs (Singh, 2021). By enabling coordinated capabilities planning and uniform standards, indigenisation could solve these issues.

According to government data, indigenous systems are now positively impacting operational readiness levels. According to the Ministry of Defence, keeping domestic systems in place has improved serviceability levels for several types by lowering servicing delays. It is possible to deduce the consequences for force readiness levels, particularly during extended operations. However, the literature points out the following problems: despite the advancements in indigenous platform development across several technological disciplines, "the development of aero-engines, sophisticated sensors, and certain electronic warfare systems" continues to rely on external technology. This is because, especially in a high-intensity combat scenario, indigenous platforms will not be able to match the performance of even the most sophisticated foreign systems (Kotha et al., 2025).

Finally, it has been emphasised that ongoing investments in R&D, testing, and skilled human resources are necessary to support the growth of indigenous platforms. While the government's "Atmanirbhar Bharat" programs have created a favourable policy climate,

experts assert that the initiatives must be implemented consistently (MOD, 2023; Kotha et al., 2025). However, technological development is crucial, even though domestic platforms have increased India's potential to modernise its military capabilities.

4.2 Strategic and Operational Implications

The Atmanirbhar Bharat program extends beyond developments in the technology and industry sectors. Additionally, it also affects the readiness of the Indian military and the country's security. This is due to the scheme's impact on numerous aspects of national security, underscoring the necessity of military readiness. India's military modernisation depends on adopting the Atmanirbhar Bharat approach to defence self-reliance. India benefits from this since it does not depend on other nations to meet its defence requirements. Before making judgments on its own defence, India does not need to consider the opinions of other nations. Over the years, India has obtained equipment from several countries to satisfy its defence needs. In times of crisis or emergency, this has led to numerous issues for India. Other nations occasionally fell short of what India needed. This would make it more challenging to develop action plans. India is making progress thanks to the Atmanirbhar Bharat strategy. India's defence requirements depend heavily on military upgrading under the Atmanirbhar Bharat strategy.

Domestically manufactured defence has operational advantages, enhancing sustainability and preparedness. Domestically produced platforms increase serviceability rates, reduce equipment downtime, and improve access to maintenance, repair, and overhaul facilities. Local production has simplified supply chains and improved the availability of vital replacement parts during long deployments or high-tempo operations, thereby helping maintain the fighting force's performance. The development of indigenous capabilities also improves long-term force planning and adaptation. Instead of being at the whim of foreign vendors, domestically developed platforms can have upgrade and modification programs added as operating requirements change. This adaptability is crucial in a rapidly evolving security environment driven by technological advancements and emerging sectors such as cyber, space, and unmanned systems, as academics have noted (Singh, 2021). As a result, indigenous platforms facilitate a modernisation process that is more flexible and responsive.

Defence self-reliance plays an important role in national security, enhancing strategic autonomy and reducing dependence on external suppliers, particularly during periods of conflict or geopolitical uncertainty. This is because it deters foreign nations from attacking by sending the impression that the nation can manufacture its own military hardware. A nation can battle for a long time if it has industries that make military gear. As a result, other nations will reconsider attacking it. Since it will allow the nation to produce its own military hardware, Atmanirbhar Bharat is a realistic possibility. This is important because it will strengthen the nation. Since the nation manufactures its own military hardware, it will inspire other nations to acknowledge its strength. It follows that Atmanirbhar Bharat is about more than just producing military hardware in India; it is also about sending a strong statement to other nations. For India, defence independence is essential. The reason for this is that it keeps the government safe.

The government claims that there are benefits to producing our own defence gear. It takes time to reap these benefits. It takes time for them to appear. Manufacturing domestically allowed us to have more accessible products and even export some to other nations. However, we must continue to invest in training and ensure that everyone agrees if we want to make everything work in an integrated way (PIB, 2024). Some experts believe that cooperation among various organisations and the capacity for creative problem-solving are essential for our defence assets to be genuinely successful. This will help us improve our defence gear and make better use of it in battle.

Establishing the defence self-reliance is essential. The ability to manufacture defence equipment on our own, without relying on other nations, is known as defence self-reliance. An excellent idea for India's military is Atmanirbhar Bharat. It represents India's military's increased power and autonomy. The goal of Atmanirbhar Bharat is to make India's military more resilient, independent, and sustainable.

India's military upgrading includes Atmanirbhar Bharat. For it to be effective, we must continue to work on it. India must continue to develop its technological capabilities, and we must continue to enact policies. India must ensure its use of military technologies is efficient (MOD, 2023). Atmanirbhar Bharat self-reliance plan for India's defence has strengthened the country's strategic position, but its effectiveness will depend on how well the defence reforms have gone.

Challenges

5.1 Key Constraints/Challenges

The changes implemented under the Atmanirbhar Bharat model, the Indian defence sector still faces significant obstacles to modernising its forces. One of the most important problems facing the Indian defence industry is the country's continued reliance on foreign suppliers for a range of high-tech needs, which undermines self-reliance (Kotha et al., 2025). These areas include propulsion systems, sophisticated electronic devices, sensors, and electronic warfare. The lack of funding for defence R&D is another major obstacle. Defence R&D spending is still lower than that of other major military powers, despite the government's recognition of the need to invest in innovation. This is a problem since, in the absence of further R&D, both developing domestic technology and integrating various technologies will be difficult (MoD, 2023). Without sufficient research and development, the defence sector may stop being driven by innovation and instead become assembly-driven (Singh, 2025).

The procurement process is still troublesome. This process is still relatively complex, despite efforts to simplify it. Additionally, the decision-making process is still sluggish. Furthermore, the process is made more difficult by risk-averse leadership. Delays in decision-making deter domestic businesses from investing in the military industry, as Singh (2021) noted. The current acquisition and procurement procedure remains very troublesome. The second major issue remains the lack of cooperation among the military, business, and research organisations. Communication gaps are another significant problem. The defence industry's capabilities do not meet the armed force's demands. However, there is still a lacklustre link between industry and research organisations, which makes it more challenging to turn research

into reality. Panda (2020). A review of the literature highlights problems with capital allocation and the acquisition of necessary skills. Specialised skills are necessary for the production of defence items, but they are not equally accessible worldwide. The lack of adequate training facilities and the shortage of trained personnel have also been emphasised as barriers to the nation's defence capabilities development (MoD, 2023). Overall, these problems show that, even with the favourable conditions created by the "Atmanirbhar Bharat" plan, several institutional and technological obstacles remain to be addressed to fully enhance the nation's defence capabilities.

Recommendations & Conclusion

6.1 Recommendations

Sustained investments in defence research and development are essential to establishing a robust defence posture consistent with the Atmanirbhar Bharat goal. Propulsion systems and electronics are two technologies that require special attention. It is necessary to address sensor and system integration difficulties, primarily because India currently relies on outside suppliers for this technology. Long-term strengthening of India's defence posture is anticipated from increased R&D funding, which will lead to innovative outcomes. The goal of Atmanirbhar Bharat, defence self-reliance, requires collaboration among the armed services, industry, and research institutions. Developing defences is crucial to doing this.

Defence equipment purchase and procurement must be expedited and streamlined. Governance-related delays and uncertainties will be lessened as a result. More significant incentives for the private sector to invest in additional production capacity will result from the establishment of precise equipment purchase plans. Simplifying the procurement process is crucial to guaranteeing equipment delivery on schedule. However, greater private-sector participation in the manufacturing of defence equipment, driven by cutting-edge, creative ideas, will boost the overall effectiveness of the procurement process. The private sector will also be able to go from producing components to developing systems due to easier access to resources for research, testing, and exporting. International partnerships can also be used to encourage technology transfer and build domestic capabilities.

Finally, the goals of military modernisation should be better matched with the defence export policy. To ensure that export-led growth supports the development of domestic capabilities and defence readiness, export promotion should focus not only on increasing export volumes but also on raising the quality and technological levels of exports.

6.2 Conclusion

The objective of this study was to assess the Indian defence sector and examine how recent reforms have addressed gaps in defence production, defence equipment procurement, and technological innovation. The study is based on the broader Atmanirbhar Bharat framework, with particular focus on the development of the Indian defence industry. The findings suggest that institutional and regulatory reforms have improved India's defence industry. The participation of private-sector organisations has increased, and in some areas, reliance on imports has decreased. This supports the goal of strengthening India's military

capabilities and strategic autonomy. However, several challenges remain, including technological dependence, low investment in defence research and development, and delays in procurement processes. Therefore, while Atmanirbhar Bharat represents an important shift in India's defence industry, continued innovation, better coordination among institutions, and consistent policy efforts will be necessary for the new framework to succeed.

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