



BECOMING AATMANIRBHAR: TAKING CUE FROM RUSSIA-UKRAINE CONFLICT

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Introduction

To boost national security, hard power, and operational capability, the Indian Air Force (IAF) is focusing on advancing towards the indigenous development of equipment, possessing cutting-edge technology, modern aviation platforms, and systems. The vision of the IAF is in consonance with Prime Minister Narendra Modi's vision of 'Aatmanirbhar Bharat Abhiyaan.'

'Aatmanirbharta' or self-reliance, has become a strategic necessity for India. India's military preparedness can be put to test at any time, given the unpredictable geopolitical scenario. In these uncertain times, the urgency of reducing reliance on imported military hardware and diversifying the defence inventory of India is the need of the hour. India's forces need to stay battle-ready, and it can't afford to look to other countries for help during any war-like situation. Despite the NATO and Western countries providing weapons to Ukraine, the scarcity of ammunition has been a cause of concern as the weapons and ammunition took considerable time to reach Ukraine due to delays in transportation. Further, it also takes time to impart training to soldiers and deploy ammunition and heavy artillery in a war-like situation. The conflict, which has now been going on for close to six months, brings to the foreground the fact that each country has to fight its own war and they must be capable of themselves in every way necessary.

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Innovation, Agility, and Diversification – Need of the hour

The geopolitical uncertainties in the form of security challenges such as border disputes, wars and terrorism threats have encouraged many countries to raise their defence budgets. Despite the economic fallout of Covid-19 world military spending continued to grow in 2021, reaching an all-time high of US\$ 2.1 trillion, said Dr Diego Lopes da Silva, Senior Researcher with SIPRI's Military Expenditure and Arms Production Programme.¹ India should also consider following suit by increasing its defence budget and at the same time using its budget efficiently and productively to develop

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the indigenous defence industry to maintain a security edge over its adversaries. For this self-reliant mission to materialize, Indian industries need to develop and manufacture ground-breaking defence capabilities and advanced technologies to equip the forces with the latest weaponry. It is imperative to encourage and strengthen the domestic defence ecosystem for an effective and uninterrupted supply of defence products to the Indian Armed Forces. India needs to establish cooperation among indigenous technology partners and friendly countries who are ready to provide technology for the local industry to develop and produce weapons on a large scale. To attain these objectives, the Indian government is providing appropriate opportunities and initiatives to both domestic and foreign companies that can invest, collaborate, set up joint ventures, and earn a profit by offering the finest combat-proven products, technologies, and systems on the market.

There is a lot that can be achieved if the IAF reduces its dependency on imported equipment for its inventory. However, the IAF can't compromise on its readiness and operational requirements, and it must be able to meet the strategic challenges that modern armed forces face around the world. There is a need to enhance capabilities for responding in multiple domains with weapons and equipment of international standards at short notice. India must reduce dependence on imports of military hardware and confidently keep moving on the path of Aatmanirbharta in the defence sector. This will assist the armed forces of India to become independent in terms of the equipment they require, and it will improve India's economy to grow faster by reducing the trade deficit. It will contribute to making India's aviation industry highly competitive. It will encourage India's domestic industry to develop advanced technology. To beat the technology learning curve, private sector participation must be encouraged. Competitive research and development play a great role in revolutionising the aerospace industry. This will strengthen domestic aviation manufacturing to cope with hurdles in maintaining its inventory. Apart from that, it will help in achieving progressive economic growth

that can help the government to support the military modernisation of the armed forces and is likely to generate skilled jobs directly and indirectly within the aerospace ecosystem of the country.

Change in Geopolitical Dynamics – Challenges

The use of Unmanned Combat Aerial Vehicles (UCAVs), hypersonic weapons, modern missiles, and aviation in the ongoing war has made the world realize the changing nature of warfare. This is an announcement on how the war is being fought and will be fought in the future. India must take a cue to accelerate its developmental efforts and strategize its indigenous operational capabilities to strengthen the manufacturing of aircraft and weapons. The focus must be on building a robust indigenous engine for indigenous aircraft, as these aircraft cause a huge dent in the Indian government's coffers.

To meet its future requirements, IAF is working in partnership with Indian domestic industries, including small-scale industries and academia. The Indian Government has also established a dedicated department for directly interacting and networking with the major players in Indian industries engaged in the development of defence equipment.

Global trade has been impacted because of the sanctions on Russia, resulting in impacting and affecting the important transport links between Russia and Ukraine and the rest of the world. Exports and imports are hard hit all over the world. It is expected that more such consequences are likely to happen. Supply bottlenecks, especially in the defence and fuel sector would be majorly hit. Most of the military hardware that India has is of Russian origin, which accounts for approximately 65 per cent. India being one of the major importers of Russian-origin weapons, equipment and related critical spare parts, it is one of the most vulnerable as, at present, Russian defence factories are busy producing, preparing, and accumulating military hardware for the war in Ukraine. The sanctions imposed on Russia are very likely to impact its economy further which might hamper the defence production further. Due to this India might face the issue of supply spares and maintenance of products. India's dependence on Russia for the supply of essential and critical air defence equipment, which includes Sukhoi Su-30MKI, MiG-29s, MiG 21 Bison, Beriev A-50 based AWACS, IL-76, An-32, Ilyushin Il-78MKI aerial refueller, Ilyushin Il-38, Mi-17 helicopters, Kamov Ka-31 and Ka-28.² The delay in delivery of the S-400 air defence system from Russia because of the threats of looming sanctions from the USA under CAATSA (Countering America's Adversaries Through Sanctions Act) is one of the various instances that show that India cannot afford to rely on foreign countries for its security needs. India should learn the lesson of reducing the dependence on imports for defence products and be prepared to combat the potential future. In the given geopolitical trend, dependence of India on Russia's military equipment is very challenging.³ As in today's unpredictable times, India cannot afford the interruption in deliveries of its major defence equipment. For the forces to

be operationally ready, timely deliveries of quality weapons and products are essential. With China on one side and Pakistan on the other, India cannot afford to be lethargic in terms of its defence preparedness. Before the Ukraine–Russia War, various security analysts were under the impression that a two-front war can be avoided by handling the neighbours diplomatically.

Promoting and Strengthening Defence Indigenisation

India started designing, developing, and manufacturing combat aircraft in the 1960s. India built 147 HF-24 Marut fighters in the 1960s, which shows that there was intent to strengthen its domestic industry from the start but for various reasons, India could not become a key player in the aviation industry. To become a significant global player, the Indian aerospace industry has been striving to move in the direction of developing and promoting indigenous development.

India achieved a milestone with the first flight of a made-in-India, Hindustan Aeronautics Limited (HAL) Dornier Do-228. This aircraft is a highly versatile, multi-purpose light transport aircraft, having various capabilities. It is a utility and commuter transport and can be used in third-level services and air-taxi operations as well as in coast guard duties and maritime surveillance.

To further strengthen its squadrons, the IAF has placed an order for the procurement of 83 indigenously built Light Combat Aircraft (LCA) Tejas Mark1A fighter jets from HAL. Such state-of-the-art fighter aircraft are expected to act as a catalyst to encourage PM Modi's vision of Aatmanirbhar Bharat. The deal, worth about Rs 48,000 crores, would be a major boost for the IAF and help it to arrest the fall in the number of its fighter aircraft squadrons. It is the first "Buy (Indian-Indigenously Designed, Developed and Manufactured)" category procurement of combat aircraft with an indigenous content of 50 per cent which will progressively reach 60 per cent by the end of the programme.⁴

To meet its future requirements, IAF is working in partnership with Indian domestic industries, including small-scale industries and academia. The Indian Government has also established a dedicated department for directly interacting and networking with the major players in Indian industries engaged in the development of defence equipment. The Indian government has come up with a 'negative import' list as well as a 'positive indigenization list' under which there will be products which will be bought only from Indian industries, even if it takes time. This has been done to encourage research and development in the defence arena, leading to more robust production and manufacturing of technologically advanced indigenous products.

Focused Approach to Transformation

In the ongoing conflict, the world is taking sides either with Ukraine or Russia. However, India has taken a neutral stand not only because Russia has been an all-weather friend of India but also because India is still dependent on the majority of its

defence equipment from Russia. Therefore, to have strategic freedom, India needs to be fully self-reliant in defence equipment and weapon systems. Being self-reliant would not only make the Indian armed forces more formidable but also project India as a global power. The perception of being a global power also acts as a deterrent effect on the adversaries, and it reduces the probability of any major confrontation between them. Only strong and self-reliant nations are taken seriously by the other world powers.⁵ This type of hard power also provides a strategic edge and helps in settling issues with any other volatile or politically unstable country. A strong and well-planned defence system will also help to counter the opportunities of an adversary to settle political or other issues by the use of force because of the military weaknesses of the unstable country.

IAF had planned to upgrade AN-32, MiG-29, Jaguar, Mirage-2000 and its air defence missile system to deal with the problem of obsolescence concerning aircraft and weapon systems. But these plans have hit a roadblock due to the ongoing crisis.

The Indian Armed Force uses Russian-made fighter jets, transport planes, helicopters, battleships, submarines, battle tanks, infantry combat vehicles, and multi-rocket systems. Apart from these, Indian forces are also heavily dependent on Russia for spares and supplies. Su-30MKIs are manufactured in India, but the supply of spares to the Indian companies is from Russian companies.⁶ IAF had planned to upgrade AN-32, MiG-29, Jaguar, Mirage-2000 and its air defence missile system to deal with the problem of obsolescence concerning aircraft and weapon systems. But these plans have hit a roadblock due to the ongoing crisis.

Conclusion

India is surrounded by countries that are either hostile towards India or are politically weak and vulnerable to neighbouring pressure. This puts India in a pickle as it must be proactive all the time. India must work towards strengthening its defence forces to tackle adversaries like Pakistan and China. At the same time, it must diplomatically handle volatile countries like Sri Lanka, Myanmar, and Afghanistan so the adversaries don't use them as an launching pad against India.

Looking at the security dynamics, India is vulnerable to any kind of conflict. Indian defence forces must remain on their toes to protect the sovereignty of India. In the changing nature of warfare and with emerging new technologies, the IAF needs to focus on building a multi-domain domestic industry and developing niche and core technologies that are specific to military requirements. This will help the Indian forces to effectively neutralize the technology, weapons, and platforms that the adversaries have or will possess in the future.

‘Aatmanirbharta’ is the necessary pre-requisite and long-term solution for achieving this objective. Looking at the Indian government’s effort and support to all the stakeholders in the direction of self-reliance, it is a huge opportunity for all participants, investors and other stakeholders in defence production. India has a huge aerospace demand and market. The domestic industry needs to harness its capabilities and synergize its efforts to develop technologically advanced weapons. These efforts must be supported and assisted by the government by framing and executing policies. This will lead to swifter decision-making and help in reducing the roadblocks to attain a well-established domestic manufacturing industry. During this process of developing better quality military hardware, we will also have to address issues of budget constraints. To overcome this constraint and improve the economy, the Indian government as well as the aerospace and defence industry are trying their best to meet the demands for self-reliance and to boost their business by exporting to friendly foreign nations. India must remember that, in the long run, there is nothing more important than having a robust, indigenous, and self-reliant defence ecosystem to become a formidable force around the world.

Notes:

- ¹ SIPRI, "World military expenditure passes \$2 trillion for the first time," April. 25, 2022, <https://www.sipri.org/media/press-release/2022/world-military-expenditure-passes-2-trillion-first-time>. Accessed on August 26, 2022.
- ² Pradip. R. Sagar, "Lessons for India from Russia-Ukraine conflict," *The Week*, June 03, 2022, <https://www.theweek.in/news/india/2022/06/03/lessons-for-india-from-russia-ukraine-conflict.html>. Accessed on August 03, 2022.
- ³ Indian Defence and Research Wing, "Lessons for India from Russia-Ukraine conflict," *IDRW*, June 04, 2022, <https://idrw.org/lessons-for-india-from-russia-ukraine-conflict%EF%BF%BC/>. Accessed on June 27, 2022.
- ⁴ "Cabinet approves procurement of 83 LCA 'Tejas' from HAL for Air Force," *PSU WATCH*, January 13, 2021, <https://psuwatch.com/cabinet-approves-procurement-of-83-lca-tejas-from-hal-for-air-force/>. Accessed on June 27, 2022.
- ⁵ Lt Gen Balbir Singh Sandhu (Retd), "War in Ukraine: Lessons in Self-Reliance for India as Posturing Makes 'Two-Front Conflict' a Possibility," *News18*, February. 27, 2022, <https://www.news18.com/news/opinion/war-in-ukraine-lessons-in-self-reliance-for-india-as-posturing-makes-two-front-conflict-a-possibility-4815551.html>. Accessed on June 27, 2022.
- ⁶ Manu Pubby, "Ukraine crisis: India examines exposure to Russian arms," *The Economic Times*, March 06, 2022, <https://economictimes.indiatimes.com/news/defence/ukraine-crisis-india-examines-exposure-to-russian-arms/articleshow/90024351.cms>. Accessed on August 01, 2022.



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