



CENTRE FOR  
JOINT WARFARE  
STUDIES

GL/13/25

# EVOLUTION OF MILITARY INDUSTRIAL COMPLEXES IN INDIA: ROAD AHEAD

BY  
LT GEN (DR) N B SINGH,  
PVSM, AVSM, VSM (RETD)

ORGANISED BY CENJOWS  
03 APRIL 2025

**EVOLUTION OF MILITARY INDUSTRIAL**  
**COMPLEXES IN INDIA: ROAD AHEAD**  
**BY LT GEN (DR) N B SINGH, PVSM, AVSM, VSM (RETD)**  
**ORGANISED BY CENJOWS ON 03 APRIL 2025**

The session discussed the growth of India's defence industrial base, with an emphasis on the strategic initiatives required to increase self-reliance in defence manufacturing. A leitmotif that was cultivated was the need to decrease dependence on imports and build indigenous capabilities. Centre stage was the Indian government's "Make in India" initiative announced in 2014, which was a turning point towards greater indigenous defence manufacturing, technology development, and indigenisation of defence systems.

The discussion mentioned the historical development of India's defence sector, tracing its development in the public and private domains since the country achieved independence. The key positions of ordnance factories, Defence Public Sector Undertakings (DPSUs), and the private sector were highlighted as they are key components of a robust defence manufacturing system. It was noted that for the defence industry in India to prosper, it should develop towards higher self-reliance and innovation, thus countering the drawbacks and high costs of overreliance on imported defence systems.

India can be compared with countries like Israel and China, both of which, having gone through the same challenges in the 1970s, had shifted towards indigenous defence manufacturing. Israel's indigenous development of the Merkava tank after the 1973 war and China's IDAR policy were cited as the best examples of how countries can escape the import dependence cycle and establish independent defence industries. India was called upon to make a similar strategic shift, with focus on indigenisation and technological upgradation to fill critical gaps in the defence capabilities of the country.

The conference also discussed the imperatives that have to be overcome on the path of self-reliance by India. These are technology gaps in areas of importance, tardy rate of procurement, and limited private sector participation in the manufacture of defence equipment. Continuation of modernisation, product enhancement, and equipment upgradation were emphasised in order to sustain military preparedness. The defence industrial base also has to become diversified, involving prime contractors, subsystem manufacturers, and anchor institutes. Increased participation of the private sector is essential to bridge gaps in design houses, system integration, and production.

Looking ahead, the long-term vision for 2050 was set to achieve technological parity with regional rivals through a balanced approach emphasising technology security, indigenisation, and self-reliance. Emphasis was placed on cultivating an innovation ecosystem and investing in unproven technologies with world leadership potential. The idea of knowledge sharing of system design with the private sector also emerged as a promising direction to accelerate development.

Export of defence systems turned out to be the key policy for strengthening international relationships and fostering friendship with allied states. However, it is highly important to provide meticulous assembly and maintenance of exported platforms to assist in maintaining cordial international relations and avoiding eventual strategic disengagement.

Briefly, the meeting brought to the forefront the need for the government, the armed forces, and the private sector to come together and create a robust and indigenous defence industrial base. With a focus on indigenisation, technological advancement, and strategic exports, India can reduce its dependence on imports, improve its military, and become a major player in the international world of defence manufacturing.

**Action Items:**

- Raise domestic defence production to decrease dependency on foreign imports. Support for the Make in India program must be sustained with greater participation from the private sector.
- Gain from Israel's experience and China's indigenisation plans to speed up India's defence production capacity focusing on modern, product improvement, and continuous evaluation works to enhance military readiness.
- Promote private sector investment in research, development, and defence manufacturing to fill technology gaps. Achieve technological parity with immediate competitors by 2050 through a comprehensive approach that focuses on autonomy. Employ defence exports to build strategic relationships, while in the process being mindful to carefully assemble and maintain the systems being exported.