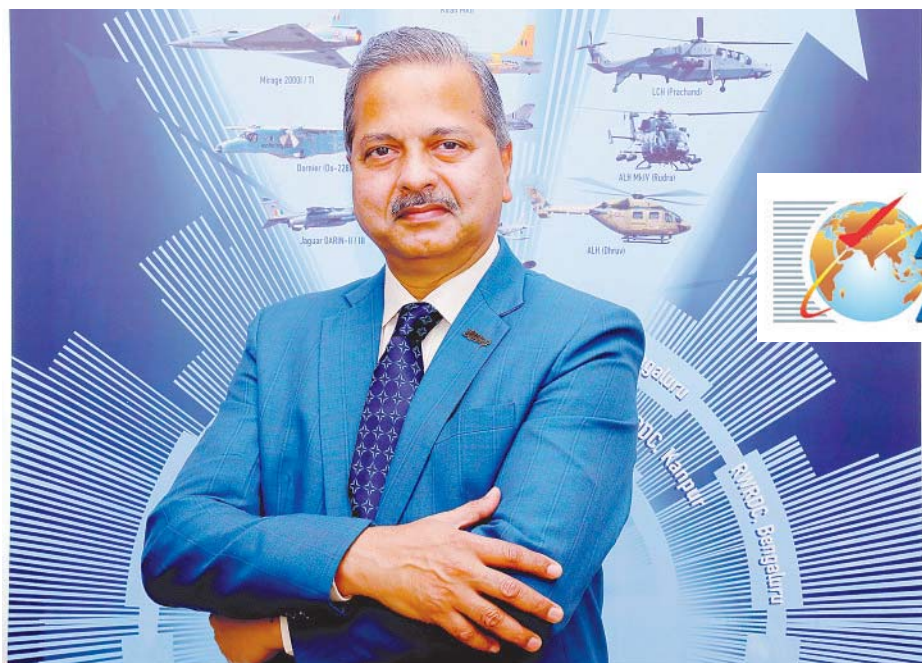


# Make-in-India (Aatmanirbharta) Decade Propels HAL's Growth

The focus on indigenous manufacturing has also enhanced export opportunities for Indian-made defence and aerospace products



Dr. D.K. Sunil, Chairman and Managing Director, HAL

The Make in India (Aatmanirbharta) initiative, launched by the Hon'ble Prime Minister of India, is designed to transform India into a global manufacturing hub. The defence sector, a key pillar in this initiative has witnessed significant changes in the past decade and catalyzed a shift in approach, especially in the case of Hindustan Aeronautics Limited.

HAL, since its inception in the 1940s, has played a pivotal role in enhancing India's defence capabilities, manufacturing aircraft, helicopters, and other aviation systems crucial to Indian defence forces. HAL over the years has transformed itself from a producer of high-tech assets to a technology company credited with an array of indigenous products such as ALH Dhruv, Rudra and LCA Tejas.

### Policy Changes

The Government has taken several policy initiatives in the past few years and brought in reforms to encourage indigenous design, development and manufacture of defence equipment, thereby promoting self-reliance in defence manufacturing & technology in the country. These initiatives, inter-alia, include according priority to procurement of capital items from domestic sources under Defence Acquisition Procedure (DAP) 2020 which has led to a reversal of 70:30 import export ratio; announcement of 18 major defence platforms for industry led design & development in March 2022; notifica-

tion of 'Positive Indigenisation Lists' for the Services and Defence Public Sector Undertakings (DPSUs), for which there would be an embargo on the import beyond the timelines.

### Strategic Autonomy and Security

When HAL started off in 1940 as an MRO for allied forces, very few would have reckoned that HAL would produce the first indigenous supersonic fighter Hindustan Fighter – 24 (Marut) in the early 1960s. However, in the 70s and 80s, the focus of the country shifted towards license manufacturing due to the geopolitical compulsions of that time.



The design of LCA Tejas and ALH Dhruv during the 90s drove the country towards indigenisation. The next real fillip for the development of indigenous capacity and capability came in 2014 by way of Make in India initiative. The Make in India initiatives have helped HAL in transforming itself from being a Production agency for License / ToT manufacturing into an integrated provider of superior technology solutions through indigenous design, development and production for fixed and rotary wing platforms. The initiative mandates increasing domestic content in defence projects, and HAL has responded by developing new platforms

with greater indigenised content and these include Light Combat Aircraft Tejas, Hindustan Turbo Trainer-40, Light Combat Helicopter Prachand, Light Utility Helicopter, Advanced Light Helicopter Dhruv.

### Self-Reliance and Indigenous Capability Building

The initiative has significantly boosted India's defence production capabilities. In the fiscal year 2023-24, the defence production value reached approximately ₹1.27 lakh crore, marking a 16.7% growth over the previous year. In the last five years, an increase of 60% has been achieved. HAL has been a major player in this achievement by contributing 23.7% of the share. The Value of Production of HAL has been steadily growing over the years from Rs 20,590 Crs in FY 2019-20 to Rs 30,118 Crs in FY 2023-24. Now there is a considerable decrease in dependency on foreign OEMs resulting in decreased Turn Around Time and increased serviceability of aircraft/helicopters/systems. The Make in India initiative has led to a spurt in indigenization efforts over the last ten years and has helped HAL in addressing supply chain challenges faced due to the current geo political situation. HAL's indigenisation efforts have witnessed a fourfold increase in annual foreign exchange savings and a multi-fold increase in vendor base.

### Increased Foreign Direct Investment (FDI) and Technology Transfer

The initiative has opened up the sector to Foreign Direct Investment (FDI), with up to 74% allowed through the automatic route and 100% with government approval in specific cases. This has led to joint ventures, partnerships, and technology transfers between Indian companies and global aerospace and defence giants, enabling Indian manufacturers to adopt advanced technologies.

HAL signed a MoU with General Electric, USA in June 2023 for ToT and Manufacturing of GE-414 aero-engine in India for LCA MK2 Aircraft with 80% technology transfer. A 50:50 Joint Venture "SAFHAL Helicopter Engines Pvt. Ltd." was formed with Safran Helicopter Engines, France, in November 2023, for indigenous design and development of engines for Indian Multi Role Helicopter and Deck Based Multi Role Helicopter. This is the first instance where a high performance aero-engine will be jointly developed for an Indian platform with access to core engine technologies. Both the projects will result in acquiring core engine design and manufacturing technologies and transform the Indian Aero engine manufacturing ecosystem.



### Boost in Defence Exports

The focus on indigenous manufacturing has also enhanced export opportunities for Indian-made defence and aerospace products. Defence exports have seen a remarkable rise, reaching ₹21,083 crore in 2023-24, which is a 32.5% increase from the last financial year. Over the last decade, defence exports have grown 21 times, indicating India's strengthening position in the global defence market. This growth not only enhances India's economic stature but also strengthens diplomatic ties with importing countries.

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HAL exported two Hindustan 228 aircraft to Guyana Defence Forces and set up a new regional marketing office in Kuala Lumpur, Malaysia in July 2023 to promote indigenous platforms in the export market. This Regional Office will serve as a hub for HAL's engagement with other South-East Asian Countries and also act as a window for other Indian Defence PSUs.

### Economic Benefits and Growth of Small and Medium Enterprises (SMEs)

The aerospace and defence sector, under Make in India, has fostered the growth of SMEs. With the emergence of the manufacturing ecosystem, HAL's efforts have resulted in industry partners graduating from Tier III to Tier I.

HAL aims to be a lead aerospace integrator, primarily through robust private partnerships. HAL has been supporting the private industries (including MSMEs), with more than 2000 registered sub-contractors by extending technical support and hand-holding. HAL has uploaded around 26,000 imported items in Srijan Portal to invite private vendors for indigenous development. HAL is also utilizing private vendors in the design and development of systems, examples include Multi-Function Display, Solid State Flight Data Recorder to name a few.

### Job Creation and Skill Development

Make in India initiative has created numerous job opportunities across the aerospace and defence sector. The demand for skilled labour in the aerospace sector has increased for production and assembly lines to high-end R&D. HAL has formed an Aerospace and Aviation Sector Skill Council (AASSC) to address the need for the development of a specialized workforce through skill development programs and bridge the gap between demand and supply of skilled manpower in areas like design and development, manufacturing, MRO, Airline Operations and Airports. The Make in India initiatives at HAL have been made possible due to the active support extended by all stakeholders like Indian Defence Services, DRDO, ADA, ADE, RCMA, DGAQA, DGCA, industry partners and MSMEs. The success of HAL under Make in India has been fuelled by the inflow of orders from the Government and this is a testament to the power of well-executed industrial policy in shaping the nation's defence and economic future.

— Dr.D.K.Sunil,  
Chairman and Managing Director,  
HAL