

India's Defence Modernization: Key Strides and Challenges:

Through programs like the Make in India initiative, domestic missile systems like Agni and BrahMos, and developments in naval and aeronautical technology, India has made great strides toward modernizing its defences. Production capacities have increased thanks to the creation of defence corridors and collaborations with the private sector. But being self-sufficient is still difficult.

Difficulties in Reaching Self-Sufficiency:

1. **Insufficient R&D Investment:** Innovation is constrained by India's 0.65% GDP allocation to R&D.
2. **Dependency on Imports:** Semiconductors and other vital technology are mostly imported.
3. **Policy Inconsistencies:** Long-term planning is hampered by frequent modifications and administrative hold-ups.
4. **Skilled Workforce Shortage:** Productivity is impacted when industry demands and available skills are not aligned.
5. **Weak Industry-Academia Collaboration:** Innovation is stifled by a lack of collaborations.

Ways to Get Past Obstacles:

1. Boost R&D Funding: To spur innovation, set aside at least 2% of GDP for research. Create a talent strategy that emphasizes military technology-aligned skilling and reskilling initiatives.

2. Encourage high-tech industries and lessen dependency on imports to increase domestic manufacturing.

3. Boost Cooperation: To improve technology transfer, cultivate industry-academia ties. Simplify the IP Framework: Establish a strong environment for the creation and defense of patents.

In order to achieve India's goal of having an independent defence industry, which is necessary for both its strategic independence and economic expansion, these issues must be resolved.

