GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1561
ANSWERED ON 12/02/2026

DEEP TECH STARTUP POLICY

1561 SHRI RAJINDER GUPTA:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government has set up a National Deep Tech Startup Policy to provide support to startups for breakthroughs in quantum and biotech;
(b) if so, the details thereof and the progress made in this regard;
(c) if not, the reasons therefor;
(d) the challenges faced in this regard, so far; and
(e) the measures to be taken for furthering deep tech hubs and fostering university-industry linkages?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE
MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) to (c): The Government has been taking **substantial and coordinated initiatives** at multiple levels to support deep-tech startups. In this regard, the Union Cabinet approved the **Research, Development and Innovation (RDI) Scheme** on **01 July 2025** to promote enhanced participation of the private sector in research and development. The Scheme envisages a **corpus of ₹1 lakh crore over a period of six years**.

The **sunrise sectors** identified under the RDI Scheme include, inter alia, **deep technologies such as quantum computing, robotics and space technologies; biotechnology, biomanufacturing, synthetic biology, pharmaceuticals and medical devices; artificial intelligence and its applications in agriculture, health and education; energy security and energy transition including climate action; and the digital economy including digital agriculture**. The Scheme also supports technologies critical for **strategic requirements, economic security and Atmanirbharta**, as well as other sectors or technologies considered necessary in public interest.

In addition, the **Department of Science and Technology (DST)** has been implementing the **National Initiative for Developing and Harnessing Innovations (NIDHI)** since **2016**, which is a flagship programme aimed at converting technology-driven ideas into successful startups. NIDHI supports scouting, incubation, and scaling of innovations through a nationwide network of **DST-supported Technology Business Incubators**, fostering an innovation-driven entrepreneurial ecosystem aligned with national priorities.

Furthermore, the **National Quantum Mission** has been launched **by the Union Cabinet on 19 April 2023** with a total outlay of ₹6,003.65 crore for the period **2023-24 to 2030-31** to accelerate research, development, and deployment of **quantum technologies,** including quantum computing, communication, and sensing. Similarly, the **Bio-E3 Policy** is being implemented to promote **biotechnology entrepreneurship, biomanufacturing, and bio-based innovation,** creating an enabling environment for startups to scale their solutions in emerging biotechnologies.

(d) The key challenges in supporting deep-tech startups include **high capital and infrastructure requirements**, **long gestation periods**, **technology and market risks**, **limited availability of patient capital**, and the need for **specialised talent, testing, and validation facilities**. These challenges are being addressed through mission-mode programmes, long-term financing mechanisms, incubation and mentoring support, and public-private partnerships under various Government initiatives.

(e) The Government is implementing a comprehensive and coordinated framework to strengthen **deep-tech hubs**, promote **industry–academia collaboration**, and accelerate the **commercialisation of research outcomes** in the country.

In this regard, the **Anusandhan National Research Foundation (ANRF)** has launched multiple programmes under its **Mission for Advancement in High-Impact Areas (MAHA)**, including the **2D Innovation Hub**, **MedTech Mission**, **Electric Vehicle (EV) Mission**, **Artificial Intelligence for Science & Engineering (AI-SE)**, **CRM Research Programme**, among others. These initiatives are designed to facilitate **university–industry partnerships**, develop **incubation ecosystems**, and enable **multi-stage engagement models** for nurturing and scaling deep-tech ventures.

Further, the **ANRF Translational Research and Innovation (ATRI) initiative** aims to bring together all key stakeholders to channelise expertise and resources to unlock India's innovation potential. Under this initiative, **ATRI Centres** will be established to provide targeted support for advancing promising technologies from **Technology Readiness Level (TRL) 4 to TRL 7**, thereby strengthening the innovation pipeline from laboratory to market. Participation of relevant **industries, Public Sector Undertakings (PSUs), and startups** is a mandatory component of this initiative.

The **Council of Scientific and Industrial Research (CSIR)**, as an integral part of the **National Innovation System (NIS)**, is actively engaged in establishing and operating **state-of-the-art incubation facilities** to support technology translation and entrepreneurship. Representative CSIR incubation centres include the **Venture Centre at CSIR–National Chemical Laboratory (Pune)**, **Atal Incubation Centre at CSIR–Centre for Cellular and Molecular Biology (Hyderabad)**, **Nutra-Phyto Incubation Centre at CSIR–Central Food Technological Research Institute (Mysuru)**, **Technology Business Incubator at CSIR–Indian Institute of Integrative Medicine (Jammu)**, and the **Innovation-cum-Incubation Centre at CSIR–National Aerospace Laboratories (Bengaluru)** in collaboration with the **National Research Development Corporation (NRDC)**. These centres provide startups with **R&D support, prototyping facilities, access to advanced instrumentation, and advisory services**.

In addition, the **Research, Development and Innovation (RDI) Scheme**, approved by the Union Cabinet, complements these initiatives by providing **long-tenor, low-interest and patient capital**, including support through **Deep-Tech Funds of Funds**, for high-risk and high-impact research and innovation. The RDI Scheme strengthens downstream financing and commercialisation of technologies emerging from **ANRF programmes and CSIR incubation ecosystems**, thereby reinforcing an end-to-end innovation pipeline from research to market.

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