GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
STARRED QUESTION No. *370
ANSWERED ON 26/03/2025

ROLE OF PRIVATE SECTOR IN NATIONAL RESEARCH FOUNDATION

***370. SHRI DUSHYANT SINGH:**
SHRI JAGDAMBIKA PAL:

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

(a) whether the Government has set up a National Research Foundation (NRF) to increase the spending on Research and Development (R&D) and to provide increasing role to private sector;

(b) if so, the details thereof;

(c) the details of the steps taken by the Government to increase R&D outlook in the country to create a competitive R&D ecosystem; and

(d) the other steps taken by the Government to increase participation of private sector in the research field?

ANSWER
MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)
विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 370 FOR 26.03.2025 REGARDING ROLE OF PRIVATE SECTOR IN NATIONAL RESEARCH FOUNDATION

(a) to (b): The government has established the Anusandhan National Research Foundation (ANRF) through ANRF Act of 2023, which was notified in February 2024. The establishment of the ANRF plays a central role in promoting research and innovation across India's universities, colleges, research institutions, and R&D laboratories. ANRF serves as an apex body providing high-level guidance for scientific research in the country, while also facilitating collaborations between industry, academia, government departments, and research institutions.

The ANRF aims to receive funds in the form of ANRF Fund, Innovation Fund, Science and Engineering Research Fund, Special Purpose Funds. A budgetary provision of Rs. 14,000 crore is made from the Central Government and remaining amount will be sourced through donations from any other source, including from public sector enterprises, the private sector, philanthropist organizations, foundations or recoveries made of the amounts granted to ANRF, any income from investment of the amounts received by ANRF and all amounts with the Fund for Science and Engineering Research under the repealed Science and Engineering Research Board Act, 2008.

(c) To enhance the R&D landscape and foster a competitive research ecosystem, the government has taken several strategic steps.

Under the newly formed ANRF, one of the key initiatives by ANRF is the Prime Minister's Early Career Research Grant (PM ECRG), which supports young researchers starting their careers by providing flexible budgets and progressive initiatives for easier research processes. This program aims to empower early-career scientists to undertake independent, impactful research.

ANRF has launched the EV-Mission program under the Mission for Advancement in High-impact Areas (MAHA). This initiative focuses on promoting Research & Development (R&D) in the Electric Vehicle (EV) sector, fostering self-reliance and global competitiveness in India's EV ecosystem.

The Indian Government has pursued several Mission Mode interventions, aimed at cutting edge R&D and technology development while building institutions and human capital. These

initiatives have sought to improve the collaboration of Industry, Government and Universities in the country.

Aspects of programmes such as the National Super Computing Mission, the National Mission for Interdisciplinary Cyber-Physical Systems, supporting deep-tech startups via Technology Innovation Hubs, the National Quantum Mission for advances in quantum computing, communications, sensing, & materials and devices , the National Biopharma Mission, the Atal Innovation Mission, Deep Ocean Mission, India Semiconductor Mission, National Green Hydrogen Mission to support Indian sustainable energy and the India AI Mission, aimed at technological and AI innovation, have also greatly advanced to create a competitive R&D ecosystem.

These, together with strong programs backing startups, entrepreneurs, and industries—like the DRDO's Technology Development Fund (TDF) scheme support to MSMEs and startups, iDEX support to innovation and technology development in India's aerospace and defense sectors, DST's National Initiative for Developing and Harnessing Innovations (NIDHI), and MeitY's Gen-Next Support for Innovative Startups (GENESIS) support to entrepreneurs in academia. The Department of Biotechnology (DBT) also supports innovation-driven research through various flagship programs like the Bioincubators Nurturing Entrepreneurship for Scaling Technologies (BioNEST), DBT-Wellcome Trust India Alliance joint initiative, DBT- BIRAC- Gates Foundation Collaboration, Genome India Project, and Biomanufacturing Initiative, aimed at strengthening indigenous research capabilities, promoting translational research, and industry-academia collaboration support to setting up biotech incubators in academic and research institutions.

Council of Scientific and Industrial Research (CSIR) has been pursuing R&D activities through a thematic approach across project categories: CSIR-Fundamental Innovative Research for the Science of Tomorrow (CSIR-FIRST); Focused Basic Research (FBR); Niche Creating Projects (NCP); Fast track Translation (FTT); Fast Track Commercialization (FTC); and Mission Mode Project (MMP). CSIR is deploying its knowledge base/technologies to benefit the masses through licensing/transfer of its knowledgebase/technology to Industries.

R&D in Earth System Science (RDESS)supports proposals from academic, research organizations, and universities in Earth System Science to enhance our understanding of the atmosphere, ocean,

solid earth, and biosphere, aligning with MoES's national goals. It encourages multi-disciplinary, multi-institutional, need-based, and time-bound projects, with deliverables aimed at advancing Earth System services (weather, climate, and marine) in the country.

As a result of these initiatives, India has emerged as the world's third-largest startup ecosystem. In terms of global innovation index, the country has jumped 42 places since 2015, reaching the 39th position.

(d) The full-year Budget for 2024-25 declared that a mechanism would be set up for 'spurring private sector-driven research and innovation at commercial scale with a financing pool of ₹1 lakh crore'. This was followed by specific allocation of Rs 20,000 Crore in the Budget 2025-26, to 'implement private sector driven Research, Development and Innovation (RDI)' as part of the pool of ₹1 lakh crore. The fund will encourage participation of private sector, in sunrise sectors, driving growth and innovation. The Department of Science and Technology (DST) is the lead agency responsible for the RDI Scheme.

Recently, the ANRF has launched the EV-Mission program under the Mission for Advancement in High-Impact Areas (MAHA). This initiative focuses on promoting Electric Vehicle (EV) adoption in India and aims to foster an ecosystem of self-reliance and global competitiveness. To incentivize private sector involvement, the MAHA EV-Mission guidelines require the active participation of industries, public sector undertakings (PSUs), and start-ups. Industry partners are expected to contribute at least 10% of the project cost, either in cash or kind (such as providing R&D facilities, vehicles, or systems for testing and validation). This collaborative approach ensures that the private sector plays a crucial role in advancing EV research and development in India.

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