GOVERNMENT OF INDIA

MINISTRY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF SCIENCE AND TECHNOLOGY

RAJYA SABHA

UNSTARRED QUESTION NO. 773

ANSWERED ON 05/02/2026

R&D OUTCOMES

773 SHRI G.C. CHANDRASHEKHAR:

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

(a) whether Government has evaluated the outcomes of public R&D expenditure, given that Gross Expenditure on R&D remains below 1 per cent of GDP; and

(b) the new strategy to improve technology commercialisation, industry collaboration and private sector R&D participation?

ANSWER

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

(DR. JITENDRA SINGH)

(a) The outcomes of public R&D expenditure are periodically evaluated through various mechanisms. One such study titled "Evaluation of Innovation Excellence Indicators" has been recently conducted by the Office of the Principal Scientific Adviser to the Government of India which evaluated outcomes of the 233 public-funded R&D laboratories/institutes spread across the country. The report highlights that during 2021–22 and 2022–23, a total of 1,622 patents were filed by 233 public-funded R&D institutes, while 1,356 patents were granted to 232 institutes. In addition, 1,839 technologies were transferred, 1,014 new products were developed, and 1,746 new services were introduced over the two-year period. Furthermore, the outcomes of all central sector schemes/programmes are being evaluated through the Output-Outcome Monitoring Framework (OOMF) coordinated by NITI Aayog. Also, third-party evaluation of various central sector schemes/programmes has been carried out for their continuation during the 16th Finance Commission period i.e. 2026-27 to 2030-31.

(b) As part of the strategy to improve technology commercialization, industry collaboration and private sector R&D participation, the government has taken several new initiatives through programmes/schemes, missions and policy interventions. These are:

- Establishment of the Anusandhan National Research Foundation (ANRF) through the ANRF Act, 2023 to provide high level strategic direction for research, innovation and entrepreneurship in the fields of science & technology with a provision of ₹14,000 crore from the Central Government funding.
- Launch of the Research, Development and Innovation (RDI) Scheme, with a financial pool of ₹1 lakh crore over six years, to boost private sector research.
- Launch of National Missions such as National Quantum Mission to make India one of the leading nations in the development of Quantum Technologies & Applications (budget outlay: ₹6,003.65 crore), National Mission on Interdisciplinary Cyber Physical Systems (budget outlay ₹3,660 crore).
- Promotion of Public–Private Partnerships (PPPs) and creation of Technology Hubs under National Mission on Interdisciplinary Cyber Physical Systems and National Quantum Mission to foster collaborative technology development.
- Implementation of programmes such as the National Initiative for Developing and Harnessing Innovations (NIDHI), Biotechnology Industry Research Assistance Council (BIRAC) programmes, Innovations for Defence Excellence (iDEX), and TIDE 2.0 (Technology Incubation and Development of Entrepreneurs) to foster innovation in academic and research institutions.
- Implementation of programmes like Fast Track Translation (FTT) & Fast Track Commercialization (FTC) to support translation and commercialization of laboratory research outputs and strengthening technology transfer and commercialization through Technology Transfer Offices (TTOs), incubation centers, PPPs, and structured licensing models.
- Introduction of enabling policies such as the Geospatial Policy 2022, Space Policy 2023, and BioE3 (Biotechnology for Economy, Environment and Employment) Policy 2024, etc.

All these measures aim to boost technology commercialization, foster industry partnerships and expand private sector participation in national R&D.

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