

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2204
ANSWERED ON 06/08/2026

EXPENDITURE ON RESEARCH AND DEVELOPMENT

2204 SHRI S NIRANJAN REDDY:

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

- (a) whether Government has taken note that India's Gross Expenditure on Research and Development (GERD) remains around 0.65 per cent of GDP, significantly lower than that of several major innovation-driven economies;
- (b) whether Government has assessed the impact of current level of GERD on research quality, technology commercialisation and availability of early-stage funding for deep-tech innovations;
- (c) the year-wise details of GERD as a percentage of GDP, along with its sector-wise break-up during the last five years; and
- (d) the measures being taken to increase GERD and strengthen the translation of publicly funded research into commercially viable products, technologies and startups?

ANSWER

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

(a) to (c): As per the latest “*Research and Development Statistics 2025-26*” report, brought out by Department of Science and Technology (DST), the Gross Expenditure on Research and Development (GERD) as a percentage of GDP has increased from 0.66% in 2019-20 to 0.84% in 2023-24. In absolute terms, it has been consistently increasing over the years and more than tripled from Rs. 79,355.89 crore in 2013-14 to Rs. 2,44,767.81 crore in 2023-24. The sector-wise break-up during the last five years is as follows:

(Rs. Crore)

Year	2019-20	2020-21	2021-22	2022-23	2023-24
Government Sector	87813.47	80992.83	106133.32	110949.77	117861.21
Private Sector	44753.54	46388.13	88677.51	102428.35	126906.60
GERD	132567.01	127380.96	194810.83	213378.12	244767.81
GERD as a percentage of GDP (%)	0.66	0.64	0.83	0.82	0.84

Note: 1. Govt. Sector includes R&D expenditure by Central Government Ministries/Department Institutions + State Government S&T institutions/ State Agricultural Universities + Public Sector/joint sector Industries + Public Higher Education Institutes.

2. Private Sector includes R&D expenditure by Private Sector Industries + Scientific and Industrial Research Organizations (SIROs) + Private Higher Education Institutes.

The increase in GERD has contributed to strengthening the national R&D ecosystem by enhancing research capacity and quality, promoting technology development and commercialisation, and improving the availability of early-stage funding for deep-tech innovations. This is also reflected in the country's research and innovation outcomes. India ranks 3rd globally in the number of scientific research publications, 6th in patent filings, and has improved its position in the Global Innovation Index (GII) from 81st in 2015 to 38th in 2025.

(d) The Government has undertaken several measures to enhance Gross Expenditure on Research and Development (GERD) and strengthen India's research and innovation ecosystem, including promoting the translation of publicly funded research into commercially viable technologies, products, and startups. These include:

- Progressive increase in budget allocations for scientific departments and research-oriented programmes.
- Launch of ₹1.0 lakh crore Research, Development and Innovation (RDI) Fund to support private-sector-led, high-risk and strategic research. This transformative initiative aims to catalyze private sector participation and investment in high-impact R&D.
- Establishment of the Anusandhan National Research Foundation (ANRF) with a budgetary provision of Rs. 14,000 crore from Central Government and mobilizing additional funding from non-governmental sources.
- Launch of National Missions such as National Quantum Mission (budget outlay: Rs. 6,003.65 crore), National Mission on Interdisciplinary Cyber-Physical Systems (budget outlay Rs. 3,660 crore), India Semiconductor Mission (budget outlay Rs. 76,000 crore), National Supercomputing Mission, etc.
- 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 Technology-led innovation programmes such as: 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 strengthen India's innovation-to-manufacturing pipeline by supporting indigenous technology development, prototyping, scale-up, and industry linkages, thereby reducing dependence on imported technologies.
- Introduction of enabling policy frameworks such as: the Geospatial Policy 2022, Space Policy 2023, and BioE3 (Biotechnology for Economy, Environment and Employment) Policy 2024 with the provisions for increased participation from private sector.
