

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA**

**UNSTARRED QUESTION NO. 9
TO BE ANSWERED ON 02/02/2022**

EXPENDITURE ON SCIENTIFIC R&D

- 9. DR. KRISHNA PAL SINGH YADAV:
SHRI UNMESH BHAIYYASAHEB PATIL:
DR. SHRIKANT EKNATH SHINDE:
SHRIMATI APARUPA PODDAR:
SHRI RAJENDRA DHEDYA GAVIT:
DR. SUJAY RADHAKRISHNA VIKHE PATIL:
DR. HEENA GAVIT:**

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:-

- (a) the details of the annual Government expenditure on scientific Research/Development (R&D) of Science and Technology in the country and its percentage share of GDP;**
- (b) the comparative details of other developing and developed countries in terms of expenditure being made towards this end;**
- (c) the steps being taken by the Government to increase allocation in the field of Science and Technology;**
- (d) the frequency of audit performed on the research outcomes by the Government; and**
- (e) the problem of plagiarism in research encountered by the Government along with the remedial action taken/being taken in this regard?**

ANSWER

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

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

(a) & (b) As per the latest available R&D statistics, the National Gross Expenditure on Research and Development (GERD) in S&T sector during the years 2015-16 to 2017-18 was Rs. 95452.44 crore, Rs. 103099.26 crore and Rs. 113825.03 crore respectively. It is estimated to be of the order of Rs. 123847.71 crore for the year 2018-19. However, India's GERD as percentage share of GDP, has been 0.7% during last 3 years. The corresponding figures for some developed and developing countries include, Israel (4.9), South Korea (4.5), Japan (3.3), Germany (3.1), USA (2.8), France (2.2), China (2.1), UK (1.7), Canada (1.5), Brazil (1.2), Russia (1.0) and South Africa (0.8).

(c) The Government has taken various initiatives to increase allocation in the field of Science and Technology such as successive increase in plan allocations for scientific departments, setting up of new institutions for science education and research, creation of Centres of Excellence and facilities in emerging and frontline areas of S&T in academic and national institutions, supporting Mega Facilities for Basic Research, launching of new fellowships, substantial grant to potential scientists through extramural research funding, scaled up funding in the new areas such as Clean Energy and Water including Energy Efficiency, Clean Coal Technology, Smart Grids, Methanol, Desalination, Genome Engineering Technology, climate change research, National Supercomputing Mission (NSM), National Mission on interdisciplinary Cyber Physical System (ICPS) etc., promotion of innovation, entrepreneurship and start-ups grant for young scientists, Funds for Improvement of S&T Infrastructure (FIST), encouraging public-private partnerships, fiscal incentives and support measures for enhancing the participation of industry in R&D, etc.

(d) The audit on research outcomes in various scientific departments and research organisations is carried out annually. In addition, the compliance audit and performance audit are conducted at periodic intervals. Various scientific research schemes are also audited through a third party audit mechanism at mid-term and five yearly periods.

(e) The Government has encountered the problem of plagiarism in research and a Regulation on "Promotion of Academic Integrity and Prevention of Plagiarism in Higher Education Institutions, 2018" has been brought out by University Grants Commission (UGC) to address this issue in the country. In addition, various scientific research organisations have constituted Ethics Committees to check plagiarism.
