GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA UNSTARRED QUESTION NO.1257 TO BE ANSWERED ON 28/6/2019

RESEARCH OUTPUT IN SCIENCE UNIVERSITIES

1257. SHRI SANTOKH SINGH CHAUDHARY:

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

(a) whether it is a fact that research output in science in Indian universities is low and of poor quality, if so, the details thereof along with the reasons therefor;

(b) the amount of research expenditure as share of GDP in last five years, year-wise;

(c) whether this expenditure on research is sufficient to make India a superpower, if so, the details thereof and if not, the reasons therefor; and

(d) the steps taken by the Government to increase the quantity and quality of research in universities of the country?

ANSWER

Minister of State in the Ministry of Health and Family Welfare Shri Ashwini Kumar Choubey स्वास्थ्य और परिवार कल्याण मंत्रालय में राज्य मंत्री

श्री अश्विनी कुमार चौबे

(a) According to the inputs received from Department of Higher Education, Ministry of Human Resource and Development, India has maintained 5th position in the world in terms of research output in science as per Elsevier Report on R&D perspective (2016-18). The volume of research output has shown a consistently increasing trend during the last three years with 1,51,672 publications in 2016, 1,54,306 in 2017 and 1,71,879 in 2018. However, India's research is 19% less cited than the world average and only 9.3% is published in top 10% Journals, 8.5% falls in the bracket of top 10% most cited worldwide.

(b) & (c): As per the latest available statistics, the amount of research expenditure as share of GDP for the last five years has hovered around 0.7%. However, there has been a consistent increase in the Gross Expenditure on R&D (GERD) over the years and globally India is among the top 10 nations in GERD in terms of purchasing power parity. It has resulted in significant successes in several S&T sectors such as space, defence, atomic energy, agriculture, vaccine production, low cost healthcare etc.

(d) The Government has taken various initiatives over the years to increase quantity and quality of research in universities of the country. These include number of schemes, awards, fellowships, Chairs & Programmes with financial assistance across S&T disciplines such as Special Assistance Programme(SAP); Basic Scientific Research (BSR); Universities & Colleges with Potential for Excellence (UPE/CPE); Fund for Improvement of Science and Technology Infrastructure (FIST), Sophisticated Analytical Instrument Facilities (SAIF), Visiting Advanced Joint Research (VAJRA) scheme; Impacting Research Innovation and Technology (IMPRINT) and Uchhatar Avishkar Yojana (UAY) schemes; Digital repository of research and teaching material; Minor and Major Research Projects (MRP); establishing centres of excellence; Research Parks and TBIs; Prime Minister's research fellowships; research workshops, seminars and conferences; and Emeritus fellowship etc.
