GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF SCIENCE & TECHNOLOGY **RAJYA SABHA UNSTARRED QUESTION NO. 1894** ANSWERED ON 16/03/2023

SPENDING ON R&D TO STOP BRAIN DRAIN

1894. SHRI M. MOHAMED ABDULLA:

Will the Minister of Science and Technology be pleased to state:

(a) whether it is a fact that India's spending on Research and Development (R&D) is amongst the lowest in the world;

(b) if so, the reasons therefor;

(c) whether the Central Government is aware of the fact that lower spending on R&D and less innovative opportunities may lead people to move to other countries for better opportunities; and

(d) if so, the details of steps proposed to be taken to prevent the phenomenon of brain drain in the country?

ANSWER

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

(a)&(b) No Sir, India ranks 6th globally in R&D investment in terms of US\$ Purchasing Power Parity (PPP). A comparative table pertaining to R&D expenditure by select countries is at **Annexure I**. Moreover, as per the latest available statistics, India's spending on Research and Development (R&D) is consistently increasing in last 10 years and has increased nearly tripled from Rs. 39,437.77 crore in 2007-08 to Rs. 1,13,825.03 crore in 2017-18.

(c)&(d) The Government has been making sincere efforts to enhance the R&D expenditure and create adequate opportunities for the researchers that include the competitive extramural funding schemes. The government has also taken several steps to increase opportunities for research students pursuing Ph.D. and Post-Doctoral research. The Science and Engineering Research Board (SERB) has recently taken a decision to increase the number of Post-Doctoral Fellowships (PDFs) from 300 annually to 1000. In addition, the SERB-Ramanujan Fellowship, SERB-Ramalingaswami re-entry Fellowship and SERB-Visiting Advanced Joint Research Faculty Scheme (VAJRA), etc., have been devised to promote brain gain by attracting bright researchers of Indian origin to work and contribute to STI ecosystem in India.

ANNEXURE I

SI No.	Country	2018
1	USA	581.6
2	China	554.3
3	Japan	176.8
4	Germany	137.9
5	Republic of Korea	99.6
6	India	68.2
7	France	66.8
8	UK	52.1
9	Brazil	41.1*
10	Russian Federation	40.1

R&D Expenditure by top 10 countries (in billion Current PPP\$) 2018 or latest year available

Note: * 2017 data

Source: UNESCO Statistics, Global Investment in R&D, June 2020
