# GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA UNSTARRED QUESTION No. 1988 TO BE ANSWERED ON 29/11/2019

#### INCREASING EXPENDITURE AND ENCOURAGING SCIENTIFIC ACTIVITIES

#### 1988. SHRIMATI MANEKA SANJAY GANDHI:

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

- (a) the total budget spent on research in the field of science and technology in India by the Government in the financial year 2018-19;
- (b) whether the budget allocation have increased/decreased as compared to previous financial year;
- (c) whether the number of scientists per million people in India is far below the other Asian countries;
- (d) if so, the details thereof and the reaction of the Government thereto along with the steps being taken to encourage scientific activities in the country; and
- (e) the number of patents for new innovations granted to Indian scientists during each of the last five years?

### **ANSWER**

## MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES (DR. HARSH VARDHAN)

स्वास्थ्य और परिवार कल्याण मंत्री; विज्ञान और प्रौद्योगिकी मंत्री; और पृथ्वी विज्ञान मंत्री डॉ. हर्ष वर्धन

(a) & (b): The details of budgetary allocation and total budget spent /actual expenditure on research in the field of science and technology by the Ministry of Science and Technology Government of India in the financial years 2017-18 and 2018-19 are given as under: -

(Rs. In Crores)

| Danautmant  | <b>Budget Allocated</b> |          | <b>Budget Utilized</b> |          |
|---|-------------------------|----------|------------------------|----------|
| Department  | 2017-18                 | 2018-19  | 2017-18                | 2018-19  |
| Department of Science and Technology (DST)            | 4746.81                 | 5134.89  | 4635.22                | 5047.84  |
| Department of Biotechnology (DBT)                     | 2260.11                 | 2411.63  | 2231.42                | 2379.10  |
| Department of Scientific & Industrial Research (DSIR) | 4629.70                 | 4572.84  | 4618.29                | 4568.78  |
| Total (Ministry of Science and Technology)            | 11636.62                | 12119.26 | 11484.92               | 11995.72 |

Accordingly, the budget allocations of the Ministry of Science and Technology for the purpose of conducting scientific research in the country in financial year 2018-19 have increased as compared to previous financial year 2017-18. For the current financial year, the Government of

India has allocated Rs. 13076.34 crore for the Ministry of Science and Technology and thus budget allocations have increased as compared to previous financial years.

- (c) As per data published in UIS 2017 R&D Statistics Survey, by the United Nations Educational, Scientific and Cultural Organization (UNESCO), Institute of Statistics (UIS), number of Full Time Equivalent scientists/researchers per million people in India is 218 which is below the other Asian countries like Singapore, China, Japan, Malaysia, and Republic of Korea.
- (d) The government has launched a number of new measures and schemes for promotion of people's participation in research and development. A number of new schemes to attract young researchers that include: National Post Doctoral Fellowship; Early Career Research Award; Overseas Doctoral Fellowship; Overseas Post Doctoral Fellowship; and, Teacher Associates for Research Excellence, have been launched. These schemes have almost doubled the opportunities for young and aspiring researchers for carrying out R&D in their chosen areas of science and engineering. To address gender imbalance, a new scheme called "KIRAN" has been launched and a pilot scheme VIGYAN JYOTI has been started to attract and encourage young women scientists.

The Government has taken various steps to encourage scientific activities in the country such as successive increase in 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, 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 Technology, National Supercomputing Mission (NSM), National Mission on Interdisciplinary Cyber Physical System (ICPS), promotion of innovation, entrepreneurship and start-ups, etc. Department of Science and Technology is also implementing the "Innovation in Science Pursuit for Inspired Research" (INSPIRE) Scheme to maintain the pool of talented and well-nurtured researchers in the country.

To attract youth with science background to pursue science as a career, the government has recently enhanced the fellowship stipend.

(e) As per the Annual Report 2017-18 of the office of the Controller General of Patents, Designs, Trademarks and Geographical Indications India, the number of patents for new innovations granted to Indian scientists during the years 2013-14 to 2017-18 each as under:-

| Year    | Number<br>Granted | of Patent |  |  |
|---------|-------------------|-----------|--|--|
| 1001    | Indian            | Foreign   |  |  |
| 2013-14 | 634               | 3,592     |  |  |
| 2014-15 | 684               | 5,294     |  |  |
| 2015-16 | 918               | 5,408     |  |  |
| 2016-17 | 1,315             | 8,532     |  |  |
| 2017-18 | 1,937             | 11,108    |  |  |

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