

GOVERNMENT OF INDIA
MINISTRY OF PLANNING

LOK SABHA
UNSTARRED QUESTION NO. 903
TO BE ANSWERED ON 07.02.2024

GLOBAL INNOVATION INDEX

903. SHRI SUMEDHANAND SARASWATI:
SHRIMATI RANJEETA KOLI:
DR. MANOJ RAJORIA:

Will the Minister of PLANNING be pleased to state:

- (a) whether India's ranking in Global Innovation Index has improved over the years;
- (b) if so, the changes which are apparent on ground specially in terms of availability and affordability;
- (c) the quantum of amount spent by the Government on science and technology related research during the last decade along with its rank in the world level; and
- (d) the details of measures implemented by the Government to support researchers by creating international opportunities and also ensuring job security within the country with the aim of preventing brain drain and if so, the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS
AND PROGRAMME IMPLEMENTATION; MINISTER OF STATE (INDEPENDENT
CHARGE) OF THE MINISTRY OF PLANNING AND MINISTER OF STATE IN THE
MINISTRY OF CORPORATE AFFAIRS

(RAO INDERJIT SINGH)

- (a): Yes, Sir. India's ranking in the Global Innovation Index has improved from 81 in 2015 to 40 in 2023.

- (b): Discernible changes, because of the above illustrated improvement in India's ranking in the Global Innovation Index, have been observed on the ground in terms of the availability and the affordability of innovative solutions. They include India's recent strides in the following sectors:
- (i) Space sector.
 - (ii) Renewable Energy sector.
 - (iii) Defence sector, especially the indigenous development and production of defence equipment of various types.
 - (iv) Biotechnology sector, especially the indigenous development and production of vaccines and oxygen concentrators to combat the Covid 19 pandemic.
 - (v) Online learning tools for affordable education.
- (c): As per latest R&D Statistics, 2022-23 brought out by Department of Science and Technology, the amount spent by the Government on science and technology related research during last decade is given in Table below:

The amount spent by the Government on science and technology related research during last decade	
Year	(Rs. in Cr.)
2011-12	42,665.62
2012-13	46,886.28
2013-14	48,841.09
2014-15	54,935.05
2015-16	59,430.29
2016-17	63,974.55
2017-18	71,969.15
2018-19	82,250.19
2019-20	87,813.47
2020-21	80,992.83

Further, as per the R&D Statistics published by the Department of Science & Technology, Government of India during 2016-17, 2019-20 and 2022-23, India's ranking in the World level in R&D expenditure (in Billion PPP \$) is at 7th position.

- (d) Some of the measures taken by the Government aiming to retain our scientific workforce and thereby reducing brain drain by creating adequate opportunities to support researchers in the country are as follows:
- (i) Science and Engineering Research Board (SERB) provides a platform for overseas scientists including Non-Resident Indians to undertake collaborative research in Indian Institutions and Universities for a finite period of time through its Visiting Advanced Joint Research (VAJRA) Faculty Scheme.
 - (ii) Department of Science and Technology (DST), launched Vaishvik Bharatiya Vaigyanik (VAIBHAV) Fellowship for fostering collaboration between scientists of Indian Diaspora with Indian Higher Educational Institutions (HEIs), Universities and/ or public funded Scientific Institutions.
 - (iii) Extramural funding schemes of Department of Science and Technology (DST), Department of Biotechnology (DBT) and Council of Scientific and Industrial Research (CSIR) including schemes like Start-up Research Grant, Core Research Grant, Research fellowships such as JC Bose, Swarnajayanti, National Postdoctoral Fellowship, MK Bhan-Young Researcher Fellowship and Raman Research Fellowship targeted at scientific community to empower them to pursue world-class research in cutting edge areas.
 - (iv) Several schemes for building research infrastructure for enhancing research capabilities such as Fund for improvement of S&T infrastructures in universities and higher educational institutions (FIST), are being implemented by the Department of Science and Technology (DST).
 - (v) The Scientific Ministries and Departments have a flexible Complementing Scheme / Merit based promotion scheme and Performance Related Incentive Scheme to provide secure career progression to the scientists.
 - (vi) The Scientific Ministries and Departments have enhanced the monthly stipend for their Junior Research Fellows, Senior Research Fellows and Research Associates.
 - (vii) Further, the Scientific Ministries and Departments also provides financial assistance to research students to attend the seminars/ symposia abroad to present their research work with the objective to gain from the experience and research of the foreign scientific fraternity in their specialized areas.
