GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:6579
ANSWERED ON:06.05.2015
SHARE OF S T IN COUNTRY S GROWTH
Dubey Shri Nishikant ;Tharoor Dr. Shashi

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

(a) the growth achieved in the field of science and technology (S&T) during each of the last three years and the current year;

(b) whether the Government proposes to increase the share of S&T in the total growth of the country;

(c) if so, the details thereof and the steps taken by the Government in this regard;

(d) whether the Government is aware that there is a need to address modern challenges in science and technology such as identifying new linkages between science and areas such as economics and law, converting modern research and theory into practice, documenting and innovating traditional scientific knowledge and funding start-ups in new areas of technology; and

(e) if so, the reaction of the Government thereto?

Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI Y.S. CHOWDARY)

(a) The growth achieved in the field of Science and Technology is gauged in terms number of research papers published and patents brought out by the country. The details of growth achieved in S&T sector, as per the available statistics, is as under:

	2011	2012	2013	2014
Paper Published#	56886	64176	71941	69891
Patents Filed##	1259	1734	2474	3044

Source: # Web of Science, SCI database accessed on May 1, 2015 ## Patent granted at United States Patent Trademark Office (USPTO) by Country of Origin

(b) As per Science, Technology and Innovation Policy-2013, increasing gross expenditure on R&D in S&T sector to 2% of GDP has been a national goal. Accordingly, the Government has successively increased S&T plan outlays in the country. The details of significant increase in plan outlays of major scientific departments/agencies are given as under:

(Rs. crore)

S&T Deptt. / Agencies	VIII Plan (1992-97) Approved Outlay	IX Plan (1997-2002) Approved Outlay	X Plan (2002-07) Approved Outlay	XI Plan (2007-12) Approved Outlay	XII Plan (2012-17) Approved Outlay
1. D/o Atomic Energy (R&D Sector)	600.00	1500.00	3501.35	11000.00	19878.00
2. M/o Earth Sciences	130.00	510.62	1125.00	7004.00	9506.00
3. D/o Science & Technology	640.00	1497.35	3400.00	11028.00	21596.00
4. D/o Biotechnology	265.00	675.00	1450.00	6389.00	11804.00
5. D/o Scientific & Industrial Research	655.00	1327.48	2575.00	9000.00	17896.00
6. D/o Space	1804.00	6511.72	13250.00	30883.00	39750.00
Grand Total	4094.00	12022.17	25301.35	75304.00	120430.00
Increase in successive Plan (Multiplier Effect)		2.9	2.1	3.0	1.6

(c) The Government has been providing various measures for sustaining growth of scientific research in the country. These measures include successive increase in plan allocations for Scientific Departments, setting up of new institutions for science education and research, creation of centres of excellence for research and facilities in emerging and frontline S&T areas in academic and national institutes, establishment of new and attractive fellowships for both research students and scientists, attractive pay package to scientists as per 6th pay commission, recent substantial revision of fellowships for research students, strengthening infrastructure for Research and Development (R&D) in universities, encouraging public-private R&D partnerships, recognition of R&D units and fiscal incentives and support measures for R&D in industries etc.

(d) & (e): Yes, Madam. The government is aware about the modern challenges in Science & Technology (S&T). The new Science, Technology and Innovation Policy 2013 envisages linking S&T with new areas such as economics and law and sectors of economy, converting modern research and theory into practice, documenting and innovating traditional scientific knowledge and funding start-ups in new areas of technology through policy and reform processes. Several institutions under the Ministry of Science and Technology such as Biotechnology Industry Research Assistance Council, National Innovation Foundation, Technology Development Board, Technology Information and Forecasting Council, National Science & Technology Entrepreneurship Board, National Research and Development Corporation etc are engaged in such endeavour.