

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

STARRED QUESTION NO:441  
ANSWERED ON:25.08.2006  
GDP SPENT FOR R& D .  
Chinta Mohan Dr.

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

- (a) The actual amount and percentage of GDP spent on research and development in the field of science and technology;
- (b) The comparative data for GDP expenditure for S&T with neighbouring countries especially China;
- (c) Whether the Government proposes to take specific measures to effect increase in higher allocation of funds and human resources to compete with other countries; and
- (d) If so, the details thereof?

**Answer**

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES(KAPIL SIBAL)

(a) to (d): A Statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARREDQUESTION NO. 441 FOR 25.08.2006 REGARDING `GDP SPENT FOR R&D`.

(a) & (b): According to the available official Research and Development Statistics, the expenditure incurred on research and development in the field of science and technology during 2002-03 was Rs.18000.16 crores which forms 0.8 % of India's GDP. Based on UNESCO Statistics (2005), a table comprising of the data on R&D expenditure as percentage of GDP for select neighbouring countries including China is annexed.

(c) & (d): Yes, Sir. The S&T Plan outlay of Scientific Departments/Agencies has been enhanced from Rs. 12,022 crores in 9th Plan to Rs. 25,243 crores in 10th Plan. Also, various initiatives have been taken by the Government to encourage investment on R&D both in industry and institutions through several fiscal incentives, income tax relief on R&D expenditure, weighted tax deduction for sponsored research, custom duty exemption on goods imported for use in Government funded R&D projects, tax holiday and other support measures such as support in the form of grants for industrial R&D projects, support to R&D projects through sector specific programmes of various scientific and economic Ministries and national awards for outstanding R&D.

Further to enhance human resource capabilities in the country various programmes/schemes have been initiated by the Government from time to time. Some of these programmes include: - Setting up of centres of excellence/advanced studies in the universities and academic institutions. - Creation of core groups of professionals with necessary modern facilities required for pursuing research in new and frontier areas of science. - Creation of new scientific Departments/Organisations. - Fund for Improvement of S&T Infrastructure in Higher Educational Institutions (FIST). - Manpower development training/re-training programmes through associateships/ fellowships including Science and Technology based training for entrepreneurial development - Provisions for temporary placement of scientists and technocrats under the scheme of scientist's pool. - Creation of supernumerary posts. - Fast Track Scheme for Young Scientists. - Better Opportunities for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST) fellowship to visit international laboratories and institutions. - Fellowships targeted towards performing scientists such as Swarnajayanti, Shyama Prasad Mukherjee Fellowships, The Ramanujan Fellowships, The Ramanna Fellowships etc. - Contact programmes to attract and motivate brilliant young scientists to take up R&D as a career. - Providing financial assistance to scientists to participate in international conferences and training programmes abroad. - Early Faculty Induction Programme, which aims at attracting bright and young under-graduate students in Engineering and Technology/Pharmacy/Architecture, etc. to take up science as their career. - Invitation to distinguished men and women of Indian origin settled abroad for short term technical assignments to assist in frontier and emerging areas of S&T. - Appointment of Non-Resident Indians (NRIs) and persons of Indian Origin in the permanent faculty positions in the Indian Institutes of Technology (IITs).

ANNEXURE

ANNEXURE AS REFERRED TO IN THE STATEMENT OF REPLY TO PARTS (a) AND (b) OF LOK SABHA STARRED QUESTION NO. 441 FOR 25.08.2006 REGARDING `GDP SPENT FOR R&D`.

R&D EXPENDITURE AS PERCENTAGE OF GDP FOR SELECT NEIGHBOURING COUNTRIES INCLUDING CHINA, 2000-02

Sl.No.	Name of country	R&D as % of GDP
1	Singapore	2.20
2	China	1.23
3	India	0.80
4	Nepal	0.67
5	Pakistan	0.27
6	Thailand	0.24
7	Sri Lanka	- 0.20
8	Egypt	0.19

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