

Expenditure on Research and Development

1381. SHRI TARUN VIJAY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the percentage of India's GDP spent on Research and Development during the last three years and the percentage of it contributed by Government in corresponding years;

(b) the corresponding figures for the BRICS countries, USA and Japan; and

(c) the desired level of investment in Research and Development according to various policy statements of Government and how Government plans to achieve it and by when?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI ASHWANI KUMAR): (a) and (b) According to the available official Statistics, India's Research and Development Expenditure figures as percentage of Gross Domestic Product (GDP) during last three years are annexed. The Government contributed three-fourth of the total national R and D expenditure during this period. The corresponding figures for BRICS countries, USA and Japan are also given in Statement (*See below*).

(c) According to the recent PM's Address at 99th Indian Science Congress in January 2012, the Government aims at increasing the total R and D spending as percentage of GDP to 2% by the end of Twelfth plan period from the current level of about 0.9 per cent. The Government proposes to achieve the targeted goal during the Twelfth Plan period through various measures such as policy changes, increase in investment in R and D including by Industry and Strategic sectors, expansion of basic science infrastructure, aligning S and T to development needs like food and health care, evolving new models of public-private partnership in scientific research, encouraging international collaboration etc.

Statement

*R and D Expenditure as percentage of GDP for BRICS countries,
USA and Japan*

Country	2006	2007	2008	2009
Brazil ^a	0.99	1.07	1.08	NA
Russian Federation ^b	1.07	1.12	1.04	1.25
India ^c	0.87	0.88	0.90*	0.90*
China ^b	1.39	1.40	1.47	1.70
South Africa ^a	0.93	0.92	0.92	NA

Country	2006	2007	2008	2009
USA ^d	2.62	2.69	2.82	2.88
Japan ^a	3.40	3.44	3.44	3.33 ^d

Source: a. UNESCO Science Report, 2010

b. OECD, Main Science and Technology Indicators, 2011

c. Research and Development Statistics, 2009 DST (Gol)

d. NSF, Science and Engineering indicators 2012

Note: NA - Not Available; * - Estimated

Funds for Research and Development

1382. SHRI T.M. SELVAGANAPATHI: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact the Government had decided to enhance the spending on Research and Development to a respectable level;

(b) whether it is also a fact that India has, so far, been spending very less on R and D as compared to other developing nations; and

(c) whether due to global competitiveness it has become necessary to upgrade the R and D technology?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI ASHWANI KUMAR): (a) Yes, Sir. The Government has decided to enhance the spending on Research and Development (R and D) as percentage of GDP to 2% by the end of Twelfth plan period from the current level of about 0.9%.

(b) No, Sir. According to the UNESCO Science Report 2010, the expenditure on R and D as percentage of Gross Domestic Product (GDP) in India is about 0.9 %. Public expenditure on R and D as percentage of GDP in most countries is in the range of 0.7 - 1.0 % which is similar to the public investment in India. However, the private investment on R and D as percentage of GDP in India is 0.23 % which has not kept pace with the developed countries including China where it is 1.05%.

(c) Yes, Sir.

Science and Technology Centres

1383. DR. T. SUBBARAMI REDDY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government proposes to establish more Science and Technology Centres in the country, especially in Andhra Pradesh;

(b) if so, the details thereof;

(c) the locations identified for this purpose; and

(d) by when these centres are likely to be established?