

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

UNSTARRED QUESTION NO:4945

ANSWERED ON:13.08.2014

MEASURES FOR INNOVATION

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

- (a) weather as per a new global report, India has slipped in innovation;
- (b) if so, the reasons for the same and the Government's reaction thereto;
- (c) whether this drop in ranking would impact the rising economy of the country;
- (d) if so, the details thereof; and
- (e) the corrective measures taken/being taken by the Government to improve innovation in the country?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY; MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF EARTH SCIENCES; MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE; AND MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (DR. JITENDRA SINGH)

(a) Yes, Madam. As a part of the Global Innovation Index (GII) Report 2014, co-published by Cornell University, INSEAD and WIPO, India has fallen to 76 position from 66 in the year 2013.

(b) The Global Innovation Index (GII) measures national innovation performance based on a set of variables related to both innovation input and output. The innovation input index is a function of institutions, human capital and research, infrastructure, market sophistication and business sophistication. The output index considers knowledge and technology outputs as well as creative outputs. GI which is calculated on above indices, may not be conclusive for comparing annual positions of any country over consecutive years as the methodology of evaluation gets modified every year. Scores and rankings from one year to the next are not directly comparable. Each ranking reflects the relative positioning of that particular country/economy on the basis of the conceptual framework, the data coverage, and the sample of economies-elements that change from one year to another. In view of these, making inferences about absolute or relative performance on the basis of year-on-year differences in rankings may not present a clear view. As per the GI 2014 report, India has indicated strength in innovation efficiency ratio, R&D, knowledge diffusion, state of cluster development, creative goods export. India is the top ranking country in communications, computer and information services export. India also leads on Innovation amongst the countries from Central and Southern Asia Region. However, India needs to improve on its education system, knowledge creation and business sophistication.

(c) & (d): No Madam. The GI measures national innovation performance and presents a sense of broad trends by looking at a whole set of 81 indicators related to both innovation input and output. Many of the indicators and sub indices that go into this metric are broad ones that would go into any competitiveness study and are not specific to innovation and the growth of the economy.

(e) Many new initiatives of the Government of India are already underway to build an appropriate innovation ecosystem which also addresses some of the country specific challenges and gap areas as highlighted in the GI 2014 Report. The Government has set up an institutional framework for encouraging innovations in the field of science & technology. The National Innovation Foundation (NIF) has been set up by the Department of Science and Technology (DST) as an Aided Institute to support grassroots innovations and outstanding traditional knowledge. The NIF helps grassroots innovators to develop technologies by providing the risk capital, helping in development and documentation, value addition, IPR protection, business development, commercialization and social diffusion. The institutions under DST, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Agharkar Research Institute (ARI) are involved in development and promotion of innovations at grass root levels as well as at industrial level. The Technology Development Board set up by the Government provides financial assistance in form of equity, loan or grants to industrial concerns for commercialisation of indigenous technologies and innovations. DST is promoting establishment of 'Innovation and Entrepreneurship Development Centre (IEDC)' and 'Technology Business Incubator' (TBI) for fostering innovation, entrepreneurship and knowledge based start-ups. Council of Scientific and Industrial Research (CSIR) is catalyzing innovative research through its 'New Millennium Indian Technology Leadership Initiative (NMITLI)' programme.

The Department of Biotechnology (DBT) has set up a not-for-profit public sector company 'Biotechnology Industry Research

Assistance Council (BIRAC)' for promoting and nurturing industry and innovation research in the field of Biotechnology. To promote innovations in agriculture sector, a network of 22 Business Planning and Development units under National Agricultural Innovation Project (NAIP) along with agri-incubation facility have been established across the country. The Defence Research and Development Organisation (DRDO) has set up Directorate of Extramural Research & Intellectual Property Rights along with four distinct research boards for encouraging innovation in the field of Science & Technology. The Department of Space has formed an Office of Innovation Management to provide impetus to the process of innovation and encourage innovations in field of Space Science and Technology.