## GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA UNSTARRED QUESTION NO.3656 TO BE ANSWERED ON 2/1/2019

## GLOBAL SCIENTIFIC POWER

#### 3656. DR. SUNIL BALIRAM GAIKWAD: SHRI V. PANNEERSELVAM:

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

- (a) whether the Government has set any goal to position India among the top five global scientific power;
- (b) if so, the details thereof and the action taken by the Government to achieve this goal;
- (c) whether the Government motivates the scientists to take up significant innovations at the global standards and
- if so, the details thereof along with budget allocated for this purpose;
- (d) whether the Government has also prepared technology vision 2035;
- (e) if so, the details thereof along with the aims and objectives thereto; and
- (f) the steps taken/being taken by the Government to encourage the scientists to achieve the vision?

#### ANSWER

# MINISTER OF SCIENCE AND TECHNOLOGY, MINISTER OF EARTH SCIENCES AND MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

## (DR. HARSH VARDHAN)

विज्ञान और प्रौद्योगिकी मंत्री, पृथ्वी विज्ञान मंत्री और पर्यावरण, वन एवं जलवायु परिवर्तन मंत्री

## (डा. हर्ष वर्धन)

(a) & (b): The Government announced Science, Technology and Innovation (STI) Policy in the year 2103 at the 100<sup>th</sup> Indian Science Congress at Kolkata. According to the Policy, the Government aspires to position the country among the top five global scientific powers by 2020. Accordingly, the STI Policy seeks to: (i) Enhance India's global share of scientific publications from the present 3.6% to 7.0%; (ii) Establish world class infrastructure for R&D in some select areas; (iii) Make careers in science, research and innovation attractive enough for talented and bright minds; (iv) Create an environment for enhanced private sector participation in R&D, technology and innovation; (v) Seed S&T based high risk Innovation; (vi) Participate in international R&D projects that are high cost and high science.

(c) The Government motivates everyone including scientists to take up significant innovations at Global Standards. The Government is continuously encouraging the Indian scientific community to bring out path breaking innovations having global social and market impact. Department of Science and Technology (DST) has launched a programme, NIDHI (National Initiative for Developing & Harnessing Innovation) where in number of schemes like, Technology Business Incubators, Centre of Excellence, Seed Support system etc are being implemented to support innovation. A total budget of Rs. 196 crores has been earmarked for FY 2018-2019 for these programmes. National Innovation Foundation (NIF) Ahmedabad, an Autonomous Institute of DST, also provides support for scouting, spawning, sustaining and scaling-up grassroot level innovations across the country.

(d) Yes Madam, Technology Information, Forecasting and Assessment Council (TIFAC), an autonomous body of Department of Science and Technology, has prepared 'Technology Vision 2035' document which was released by Hon'ble Prime Minister, on 3<sup>rd</sup> January 2016 during 103<sup>rd</sup> session of Indian Science Congress, held at Mysore University, Mysuru.

(e) Technology Vision 2035 document presents a range of technologies to address the prerogatives that Indians must enjoy as citizen of a developed country by 2035. These technologies are placed on a timeline of four stages namely-Ready for deployment; lab to field; requiring targeted research; and technology in imagination, providing a lead for stakeholders to carry on the baton forward. For realization of envisioned scenario, the document has identified 10 grand challenges that our country should confront to make wide-scale impact across the sectors, as we move towards 2035. The transversal technologies like Materials, Manufacturing and Information & Communication Technology (ICT) that provide the sub-stratum and cut across all the other technologies have also been focused.

(f) To achieve the objectives of the Technology Vision 2035 document and encourage the scientists, drawing of technology roadmaps of 12 sectors identified in the document is underway to provide future technology trends, demand projections, R&D directives, pointers for research, anticipated challenges and policy imperatives etc., of which 6 sectoral technology roadmaps on Education: Materials; Manufacturing; Transportation: Medical Science and Health Care; and Information & Communication Technology have already been released and remaining 6 will be released soon.