

**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY**

**RAJYA SABHA  
UNSTARRED QUESTION No. 2548  
TO BE ANSWERED ON 10.08.2021**

**Global S & T research and initiative**

**2548. Lt. Gen. (Dr.) D. P. Vats (Retd.):**

**Shri Harnath Singh Yadav:**

**Shri Vijay Pal Singh Tomar:**

Will the Minister of *Science and Technology* be pleased to state:

- a) whether India has emerged as a key mover of global S&T partnerships in critical areas like energy, water, health and astronomy which are global challenges to make the world a better and more scientific place to live in and, if so, the details thereof;
- b) whether India played a crucial role in launching 'Mission Innovation' which is a global initiative and, if so, the details thereof; and
- c) whether the COVID-19 pandemic established India's position as a leading country in tackling the pandemic crisis and, if so, the details thereof?

**ANSWER  
MINISTER OF STATE (INDEPENDENT CHARGE) OF  
SCIENCE AND TECHNOLOGY AND EARTH SCIENCES  
(DR. JITENDRA SINGH)**

- a) Yes Sir, The Ministry of Science and Technology, through Department of Biotechnology (DBT), Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR) and Science and Engineering Research Board (SERB) have played a key role in developing global S&T partnerships in critical areas including energy, water, health and astronomy. India has key partnerships in the emerging areas of Science and Technology and supporting Research and Development focused to address the India specific issues related to critical areas in energy, water, health and astronomy. Major missions have been launched in the mutually agreed areas of Global Interest through regular mode and under Public Private Partnerships. All Departments under the Ministry have dedicated Programme Divisions supporting Innovations, Research Development and Demonstration (R, D & D) Projects and Capacity Building in the flagged Areas. India is a partner in many multilateral initiatives addressing global challenges such as clean energy through Mission Innovation, Anti Microbial Resistance

through Global AMR Research and Development (R&D) Hub, Grand Challenges India and others. India has emerged as a key mover of global S&T partnerships in critical areas to make the world a better and more scientific place to live in.

- b) The Mission Innovation (MI) is a global initiative of 22 countries and the European Commission (on behalf of the European Union) catalyzing investment in research, development and demonstration to make clean energy affordable, attractive and accessible for all. Mission Innovation was launched during 21<sup>st</sup> Conference of the Parties (COP 21) in November 2015, in presence of Hon'ble Prime Minister, India along with world leaders. Department of Biotechnology is the nodal agency for coordinating national efforts in clean energy R, D & D and implementing various activities in close collaboration with DST and other line ministries. India, During Phase I played crucial role in MI Activities at global level by participating through DBT, DST and CSIR in eight Innovation Challenges and co-leading three challenges (Smart Grids, Off-Grid access to Electricity and Sustainable Biofuels). India has set up Clean Energy International Incubation Center to provide support to start-ups for providing the most impactful clean energy solutions for the societal good. Building on success of last five year's joint efforts, India along with other MI members has also agreed to continue its commitment for phase 2.0 for another 5 years through the Missions and Platforms for translating knowledge into deployable solutions.
- c) Yes Sir, the Government of India has taken up strong national and international research programs to address COVID-19 related challenges, primarily focused on basic research, diagnostics, therapeutics, and vaccines development in close collaboration with industries and start-up companies. The pandemic has provided a unique opportunity for India to harness the indigenous bio-manufacturing capacities for the global good. Considering the availability of a safe and efficacious vaccine for COVID-19 for effective control of the pandemic, the Government of India is supporting vaccine development and manufacturing activities through both national efforts and international partnerships. Currently, in India, 03 vaccine candidates for COVID-19 have been approved for Emergency Use Authorization (EUA). Besides these, about 04 vaccine candidates are in clinical stage of development and 01 candidate is in advanced pre-clinical stage of development. Many other vaccine candidates by industry and academia are in pre-clinical and early stages of development. India is one of the few countries in the world which has a promising pipeline of vaccine candidates of different platforms in various stages of clinical development. Under the Partnerships for Advancing Clinical Trials (PACT) initiative, Department of Biotechnology (DBT) partnered closely with the Ministry of External Affairs for strengthening clinical trial capacities in neighboring countries. DST is making Interventions on Yoga and Meditation on mental health of students, healthcare workers and senior citizens during the pandemic. Yoga-based rehabilitation program for COVID-19 patients etc. are some of the unique engagements of India in comparison to other countries in tackling the pandemic. CSIR has supported projects for development of the needed Active Pharmaceutical Ingredients (API) molecules for standardizing the process, scale-up and establishing production line of these molecules for the development of Vaccines for COVID-19. Apart from this, many bilateral and multilateral collaborative joint calls for COVID-19 across multiple platforms have been undertaken.

\*\*\*\*