

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
RAJYA SABHA
STARRED QUESTION NO. * 368
TO BE ANSWERED ON 06/04/2023

STATUS OF MISSION INNOVATION

368. SHRI ABIR RANJAN BISWAS:

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

- (a) whether Government proposes to promote science and technology with emphasis on Emerging areas and their application for the development and support to weaker sections of society, if so, details thereof;
- (b) whether India has played a crucial role in launching 'Mission Innovation' which is a global initiative, if so, details thereof;
- (c) the details of funds allocated and utilized under Mission Innovation in last three years, year-wise;
- (d) whether Government has allocated funds to research and development projects under smart grids engaging various Indian and foreign institutes and industries; and
- (e) if so, details thereof and if not, reasons therefor?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF
THE MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) to (e): A Statement is laid on the table of the House.

STATEMENT IN RESPECT OF RAJYA SABHA STARRED QUESTION NO. *368 TO BE ANSWERED ON 06.04.2023 REGARDING 'STATUS OF MISSION INNOVATION'

(a) Yes, The Ministry of Science & Technology through Department of Science and Technology (DST), Department of Biotechnology (DBT), Science and Engineering Research Board (SERB) and Council of Scientific and Industrial Research (CSIR) is promoting Science and Technology for the weaker sections of the society through various schemes and programmes with focus on healthcare, agriculture, access to affordable energy, sustainable livelihoods etc. DST through various programmes under Science for Equity Empowerment and Development (SEED) is benefitting Women, Scheduled Caste (SC), Scheduled Tribe (ST), Communities, Elderly and Divyangjan etc. for improved livelihoods. Focus under such societal programme is to create new and potential models to facilitate opportunities for enhancement of income and quality of life. Several DBT programmes like Biotech-KISAN Hubs, Water Sanitation and Hygiene (WASH), Maternal and Child health initiatives, BIRAC's contribution towards combating Covid-19 pandemic etc. are designed for the development and support to the weaker sections of the society. CSIR is also focusing for the empowerment of the weaker sections of the society through its various initiatives like Aroma and Floriculture Mission for catalyzing rural empowerment through cultivation, processing, value addition and marketing of aromatic/fragrant plants.

(b) Yes, since inception India has played a pivotal role in Mission Innovation (MI), which was launched during 21st Conference of the Parties (COP 21) in November 2015, in presence of Hon'ble Prime Minister of India along with other world leaders. India was one of the founding countries which took initiative in sowing the seed of 'Mission Innovation'. The key objective was to double research and development investment on clean energy over five years by the participating countries who are the major responsible for global carbon footprints. After successful phase I, the second phase of Mission Innovation (MI2.0) was launched on June 2, 2021. The focus of MI2.0 is on decade of action (2021-2030) and the emphasis is to scale-up the deployment of innovative clean energy technology and deliver affordable and accessible solutions for all. There are seven New Missions (Zero-Emission Shipping, Clean Hydrogen, Green Powered Future, Carbon Dioxide Removal, Urban Transitions, Net-Zero Industries and Integrated Biorefineries) and three Innovation Platforms (Insight, Collaborate and Accelerate) in the MI2.0. India remains as one of the key members and ally for the ambitious climate and energy goals of MI2.0 as well.

During first Phase of MI, India participated various collaborative projects in the areas of Clean Energy research, development and demonstration. India co-led three Innovation Challenges (IC) namely Smart Grids, Off-Grid access to Electricity and Sustainable Biofuels and actively participated in other five Innovation Challenges such as Carbon Capture, Converting Sunlight, Clean Energy Materials, Affordable Heating and Cooling of Buildings, and Renewable & Clean Hydrogen.

Under the Mission Innovation, the Government of India has made concerted efforts to accelerate start-up technologies, greater public engagement towards research, development and demonstration for affordable clean energy solutions by initiating collaborative platforms and missions. To support start-ups at their early stage innovations, first of its kind 'Clean Energy International Incubator Centre' has been established under the aegis of DBT through Biotechnology Industry Research Assistant Council (BIRAC).

DST is actively participating in the Material for Energy (M4E) initiative and has launched Integrated Clean Energy Material Acceleration Platform (IC-MAP) that integrates automated robotic machinery with rapid characterization and Artificial Intelligence to accelerate the pace of discovery and to create a network of MAP assets to address regional needs for clean energy materials discovery and development.

Under MI 2.0, India is scaling up the Accelerate platform and is co-leading the Integrated Biorefineries mission, Innovation Community on Affordable Heating & Cooling of buildings and Innovation for Sustainable Aviation Fuel.

(c) The details of funds allocated and released /utilized under Mission Innovation during each of the last three years are as under:

Amount (Rs. in crore)		
Year	Allocated	Released/Utilized
FY 2019-20	44.63	29.63
FY 2020-21	34.09	19.97
FY 2021-22	38.36	21.72
Total	117.08	71.32

(d) & (e): Government has allocated funds to R&D projects under Smart Grids engaging various Indian and Foreign institutes and industries. DST is supporting R & D Projects on Smart Grids at various National Institutes, Universities, IITs in collaboration with partnering institutes from Canada, Norway, UK, Germany, New Zealand, USA, Australia, Italy, Denmark, Netherlands, Poland, Greece, Spain, France. DST has allocated 23.99 crores in last 3 years to support the projects on smart grids.
