

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 1896
THE ALLOTTED DAY ON 12/02/2021**

Measures to Combat COVID-19

1896. SHRI RAJAN VICHARE

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

- (a) the preparedness made so far by his Ministry to combat COVID-19 pandemic along with the details thereof;**
- (b) whether the Ministry is working on any specific scheme to provide assistance to health workers; and**
- (c) if so, the details thereof**

ANSWER

**MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

स्वास्थ्य और परिवार कल्याण मंत्री, विज्ञान और प्रौद्योगिकी मंत्री और पृथ्वी विज्ञान मंत्री
(डॉ. हर्ष वर्धन)

(a) The Department of Science and Technology (DST) and its various Autonomous Institutions made sincere efforts to address R&D and innovation related challenges arising out of COVID-19 pandemic. A mapping of startup ecosystem was done to identify and support relevant technology solutions ready for scale-up. Several calls through DST, Science & Engineering Research Board (SERB), Technology Development Board (TDB), Indo-US S&T Forum (IUSSTF) were made inviting research proposals on COVID-19 related challenges. A National Super Model was formulated to predict the spread of the pandemic. Some major breakthroughs came out from initiatives like Centre for Augmenting War with COVID-19 (CAWACH) and Science and Society programme. DST's Autonomous institutes like Sree Chitra Tirunal Institute of Medical Science and Technology, Survey of India, Technology Information Forecasting and Assessment Council (TIFAC), and others have significantly contributed in the field of diagnostic kits, hospital devices, Personal protective Equipment (PPE), masks and other technology solutions to reduce the menace of COVID pandemic

The Department of Biotechnology (DBT), initiated an integrated response to overcome the unprecedented COVID-19 pandemic. The DBT-BIRAC (Biotechnology Industry Research Assistance council) COVID-19 research Consortium call was issued, whereby, more than 100 projects for development of vaccines, diagnostics and therapeutics are being supported. 'Mission COVID Suraksha' is being implemented to accelerate the indigenous COVID-19 vaccine development efforts. Nearly 15 vaccine candidates are being supported of which 3 vaccine candidates are in clinical trial stage and about 2 vaccine candidates are in advanced pre-clinical developmental stage. Several indigenous diagnostics kits have been developed. PAN-India 1000 SARS-CoV-2 genome sequencing was successfully completed. The Indian SARS-CoV-2 Genomic Consortium (INSACOG) has been launched, to ascertain the status of new variants of SARS-CoV-2 in the country. DBT is working closely with the Ministry of External Affairs for advancing vaccine development and conducting training programme to strengthen clinical trial capacity activities in neighboring countries.

Council of Scientific & Industrial Research (CSIR) has responded to the situation with a well-coordinated and integrated approach in cooperation with all relevant stakeholders. CSIR is extending all possible R&D support to the industry and is also aligned to the Government's strategy of mitigation of outbreak. CSIR has developed more than 100 technologies under five technology verticals viz., Digital and Molecular Surveillance; Rapid and Economical Diagnosis; Development of new drugs/repurposing of drugs; Hospital Assistive Devices and PPEs and Supply chain and logistics and is working with about 100 industries. Six CSIR labs are working on sequencing of coronavirus to know if any genetic changes are occurring in the virus while it is spreading in the country Thirteen CSIR labs are engaged in corona diagnostic testing. CSIR Labs have developed several rapid diagnostic kits, drug formulations like Favipiravir, Remdesivir, Arbidol, for synthesis and repurposing for COVID.

(b) & (c): No Sir, Ministry of Science and Technology (MoST) has not been directly involved in aiding the health workers. However, some of the innovative solutions/products such as diagnostic kits, hospital devices, protective gears, etc. developed through MoST supports have significantly helped to reduce the challenges faced by the health workers in dealing with the COVID 19 patients.
