

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

LOK SABHA
UNSTARRED QUESTION NO. 4471
ANSWERED ON 30.03.2022

GENOME AND DNA SEQUENCING

4471 DR. MANOJ RAJORIA:

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

- (a) the current status of the genome and DNA sequencing of COVID-19 in the country;
- (b) the list of the total number of bio-repositories fixed by the Government for COVID-19; and
- (c) the details of the efforts being made by the Government for the development of biotechnology in the country in view of the circumstances arising out of COVID-19 in future?

ANSWER

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

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेन्द्र सिंह)

- (a) Sir, the Indian SARS-CoV-2 Genomics Consortium (INSACOG) being coordinated by the Department of Biotechnology (DBT), as on 23rd March 2022 has sequenced 2,01,373 SARS-CoV-2 genomes.
- (b) A total of 17 COVID-19 Bio-repositories have been notified by the Government of India. These are set up at laboratories of Department of Biotechnology (DBT), Council of Scientific & Industrial Research (CSIR) and Indian Council of Medical Research (ICMR). These COVID-19 Bio-repositories established at:
 - 1. ICMR-National Institute of Virology, Pune
 - 2. ICMR-National Institute of Virology Field Unit, Bangalore

3. ICMR-National Institute of Virology Field Unit, Kerala
4. ICMR- National Institute of Cholera and Enteric Diseases, Kolkata
5. ICMR-National Institute for Implementation Research on Non-Communicable Diseases, Jodhpur
6. ICMR- National Institute of Malaria Research, Delhi
7. ICMR- National Institute of Epidemiology, Chennai
8. ICMR- National Institute for Research in Reproductive Health, Mumbai
9. ICMR-Regional Medical Research Centre, Dibrugarh
10. NCR Biotech Science Cluster Translational Health Science and Technology Institute and Regional Centre for Biotechnology, Faridabad
11. Institute of Life Sciences, Bhubaneswar
12. Institute for Stem Cell Science and Regenerative Medicine, Bengaluru
13. National Centre for Cell Science, Pune
14. DBT funded Biorepository – Institute of Liver and Biliary Sciences, New Delhi
15. CSIR- Institute of Genomics and Integrative Biology, New Delhi
16. CSIR- Centre for Cellular & Molecular Biology, Hyderabad
17. CSIR - Institute of Microbial Technology, Chandigarh

(c) The Department of Biotechnology (DBT), based on extensive scientific deliberations, initiated an integrated response to overcome the unprecedented COVID-19 pandemic, in alignment with R&D Blueprint of the World Health Organization (WHO). DBT along with its public sector undertaking Biotechnology Industry Research Assistance Council (BIRAC) launched 'DBT-BIRAC COVID-19 Research Consortium' whereby, Research and Development projects were supported across the thematic areas of vaccines and supporting ecosystem, diagnostics and facilities for scale-up, therapeutics, drug repurposing & supporting ecosystem, and other biomedical interventions. The Indian SARS-CoV-2 Genomics Consortium (INSACOG) started jointly by Department of Biotechnology and Ministry of Health and Family Welfare in collaboration with Council of Scientific and Industrial Research and Indian Council of Medical Research with primary aim to expand whole genome sequencing of SARS-CoV-2 virus across the nation. Under National Biopharma Mission and Mission COVID Suraksha, the Department has enabled support for pre-clinical development of COVID-19 vaccine candidates and scale-up of manufacturing of COVID-19 diagnostic kits, facilities for animal challenge studies, facilities for immunogenicity assays, clinical trial sites etc.
