Weekly Inputs on DBT’s efforts to Combat COVID-19

13th May, 2021
OVERVIEW

Taking note of the unprecedented scenario of the COVID-19 pandemic, the Department of Biotechnology prepared a roadmap early on with a focus on diagnosis, treatment and most importantly, prevention. DBT, its Autonomous Institutions (AIs) and the Public Sector Undertaking Biotechnology Industry Research Assistance Council (BIRAC), have been working relentlessly over the past one year to develop effective interventions for combating the pandemic.

Impact in numbers:

**100+ projects**
supported in the thematic areas of vaccines, diagnostics and therapeutics.

**7 vaccine candidates**
by industry and

**8 candidates**
by academia enabled.

**5 vaccine candidates,**
**19 clinical trial sites,**
**6 facilities for immunogenicity assays**
animal challenge models supported under Mission COVID Suraksha which is being implemented to accelerate Indian COVID vaccine development and augment vaccine manufacturing capacities.

**42.98 lakh samples**
tested as on date across the hubs.

**18409 samples**
tested in I-lab.

**15 Lakh**
diagnostic kits produced daily.
5 COVID-19 biorepositories established to promote research and development towards indigenous diagnostics, therapeutics and vaccines.

40,000 samples available to researchers and industry.

~50 BIRAC supported startups have developed innovative products for COVID-19.

20000 samples from across India received for sequencing.

10,000 sequences have been sequenced and analyzed.

OTHER HIGHLIGHTS

- THSTI bio-assay laboratory recognized by Coalition for Epidemic Preparedness Innovations (CEPI), under their network of 7 global laboratories.
- Organizing training programs for strengthening clinical trial capacities in neighboring countries under PACT initiative
- COVID 19 testing at 9 DBT Als, approved as Hubs for their respective City/Regional clusters.
- Rapid scale-up of manufacturing of indigenous COVID-19 diagnostic kits and deployment of nation’s first infectious disease mobile laboratory in Haryana.
- Supporting genomic surveillance of emerging variants of SARS-CoV-2, through INSACOG initiative
- Development of therapeutics from natural products in partnership with M/o AYUSH.
Major updates on the COVID-19 related activities of DBT for the period from May 07, 2021 to May 13, 2021 are placed below:

**DBT’S EFFORTS TO COMBAT COVID-19 – MAJOR UPDATES OF THE WEEK AT A GLANCE**

### VACCINES

- Capacity enhancement of 03 Public Sector Undertakings (PSUs), viz., Indian Immunologicals, Haffkine Biopharmaceuticals and Bharat Immunologicals and Biologicals Corporation Limited (BIBCOL), is being supported under Mission COVID Suraksha, in an effort to ramp-up Covaxin production. Transfer of Technology from Bharat Biotech to the 03 PSUs is underway.

- A “Pre-Briefing Session for the 6th ACT-Accelerator Facilitation Council (ACT-A FC)” was held on 5th May, 2021. The purpose of the briefing was to address the questions and queries raised by various participating economies and to discuss the agenda for the 6th ACT-Accelerator Facilitation Council Meeting scheduled to be held on 12th May 2021.

- The 22nd COVID-19 Working Group Meeting was held on 10th May 2021 to deliberate on issues pertaining to Dosing interval between two doses of Covishield vaccine; vaccination in pregnant and lactating women; rapid antigen testing prior to covid vaccination.

- Regarding up-gradation of labs at National Institute of Animal Biotechnology (NIAB), Hyderabad and National Centre for Cell Sciences (NCCS), Pune as Central Drug Labs:
  - At NIAB, Hyderabad, the Sterile room for interim facility is validated and certified.
  - Construction of Sterility Testing Laboratory and Procurement of Equipment as part of the permanent GLP facility is underway at NIAB and NCCS.

### COVID TESTING SERVICES

- 42.98 lakh samples tested as on date across the hubs.
- 18409 samples tested in l-lab.
Indian SARS-CoV-2 Genomic Consortium (INSACOG) an inter-ministerial consortium of 10 public funded research institutions has been established by DBT and MoH&FW for genomic surveillance of SARS-CoV-2 in India.

A datahub for centralized storage, analysis and management of SARS-CoV-2 sequences from different Indian institutes has been established at NIBMG and IGIB. Virus isolation, culture and storage repositories are being maintained at DBT-ILS, DBT-RCB and CSIR-CCMB.

INSACOG labs have received around 20000 samples from across India for sequencing and more than 10,000 sequences have been analyzed.

The sequences are analyzed to detect Variants of Concern (VoCs) such as B.1.1.7, B.1.351, P.1, and Variant of Interest such as B.1.617 and other emerging Variants of Interest (VoIs).

BIRAC organized a webinar on the theme “Scaling and deployment of Innovations for COVID19” on the occasion of National Technology Day on May 11, 2021.

On May 10th 2021, an APEX committee meeting for COVID-19 Consortium was scheduled to discuss the progress update of proposals supported under COVID-19 Therapeutics Call.