# Government of India Ministry of Science and Technology Department of Biotechnology

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#### Monthly Cabinet Summary, May-2020

- I. Important policy decisions taken and major achievements during the month:
  - (i) COVID related Initiatives:
    - a. Task Force for focussed research on corona vaccine and other Science & Technology: The Department participated in the discussion meeting of the task force, Chaired by the Hon'ble Prime Minister on 5<sup>th</sup> May, 2020. During the meeting, progress in expanding the network of testing facilities as well as indigenization of the manufacturing components required for COVID-19 testing was highlighted. Vaccine development activities of the department were also presented to the Hon'ble Prime Minister during the course of meeting.
    - b. Request for Proposal (RFP) for COVID-19 Research Consortium: DBT and its Public Sector Undertaking, Biotechnology Industry Research Assistance Council (BIRAC), had published a RFP as part of the comprehensive efforts to facilitate development of indigenous research solutions to tackle COVID-19. In the first phase, 70 proposals have been shortlisted for further consideration by DBT-BIRAC. The second phase of the call closed on May 15, 2020, in response to which 598 proposals have been received and are being reviewed.
    - c. Fifth meeting of the Empowered Technology Group (ETG) and the PMO constituted Task Force for Focused Research on Corona Vaccine and other Science and Technology issues: The Department participated in the meeting held on 22 May, 2020 under the Co-Chairmanship of Dr. Vinod Paul, Member (Health), NITI Aayog and Prof. K. Vijay Raghavan, Principal Scientific Adviser to the Government of India. Department shared the list of COVID-19 vaccine candidates being considered by DBT, DST and ICMR to the Task Force for review under PM CARES fund for support. Additional budget requirement for COVID19 activities and India's participation in the ACT Accelerator for COVID 19 was also discussed in the meeting.
    - d. Launch of 1000 Genome sequencing of SARS-Cov 2 Virus: Hon'ble Minister of Science Technology and Earth sciences, announced the Launch of 1000 Genome sequencing of SARS-Cov 2 virus by the consortia of DBT Autonomous Institutions to understand the viral and host genomics of COVID-19 outbreak. In the proposed study sequencing of 1000 SARS Cov-2 genomes from the clinical samples will be done. The study will help to understand the evolving molecular phylogeny of the virus and the emerging mutations in the viral RNA as well as identify the host genetic variations which correlate with transmission, susceptibility and disease severity. This study is being coordinated by NIBMG, Kalyani with active participation from CDFD, Hyderabad; ILS, Bhubaneswar; NCCS, Pune; InStem, Bengaluru along with other

- DBT Autonomous Institutions. The findings of this study will assist development of efficient diagnostic assays, vaccine and drug candidates and help formulate policies for containment of the outbreak. As on 24<sup>th</sup> May2020, 430 virus samples are being sequenced and analysed which are expected to be completed by 31<sup>st</sup> May 2020.
- e. **DBT City/Regional clusters for COVID-19:** The City /Regional clusters are being established In a Hub and Spoke model to scale-up testing of COVID-19 samples in government institutions across the country. Institutes and Laboratories which have the capacity and expertise for both Sample collection, handling/processing (BSL-2 facility) and testing (RT-PCR) serve as the hubs and they will involve a number of laboratories which have RT PCR machines and the requisite manpower as their extended Testing facilities. The Hubs are Government laboratories approved by respective Ministries /Departments (DBT, DST, CSIR, DAE, DRDO, ICAR etc.) as per ICMR guidelines. So far 20 City /Regional clusters have been established. More than 90 institutions are involved and over 1,60,000 samples have been tested.
- f. FIRST HUB (Facilitation of innovation and regulations for start-ups and innovators): FIRST HUB is a facilitation unit set up by DBT at BIRAC to address the queries of Innovators. With regards to prevailing situation around globe, special FIRST HUB COVID-19 sessions are being held every Friday to solve the queries of innovators. Representatives from CDSCO, ICMR, NIB, GeM, KIHT, BIS, DBT and available take queries on Regulatory Pathways, Funding to Opportunities, Public Procurement, IVD testing and validation, Standards and Specifications, Manufacturing and testing infrastructure support. These sessions started from 03<sup>rd</sup> April 2020. For the month of May, session for COVID-19 was conducted on 1st, 8th and 15th, 22nd May 2020 i.e. every Friday of the Month. Representatives from **CDSCO**, ICMR, NIB, GeM, KIHT, **DBT** and **BIRAC** were available to take queries on Regulatory Pathways, Funding Opportunities, Public Procurement, IVD testing and validation, Standards and Specifications, Manufacturing and testing infrastructure support. In total more than 50 queries were taken in these three sessions of FIRST HUB.
- g. COVID Medtech Manufacturing Development at Andhra Pradesh MedTech Zone (AMTZ): The Department through its National Biopharma Mission (NBM) implemented by Biotechnology Industry Research Assistance Council (BIRAC)-a PSU of DBT, is supporting Andhra Pradesh MedTech Zone (AMTZ), Visakhapatnam. Facility is commonly shared to manufacture diagnostic kits, ventilators & imaging equipment and is operationalizing indigenous manufacturing of kits and reagents for testing. A three pronged approach- DBT-AMTZ COMManD [COVID Medtech Manufacturing Development] strategy, has been put in place by the support of DBT, GOI and the ecosystem support of AMTZ. At present, AMTZ has developed manufacturing capacity of 3 lakh RT-PCR kits/month, 1 lakh RNA extraction kits/month and 1 lakh Viral Transport Medium (VTM)/month.

## (ii) Medical biotechnology

- a. **Inter-Institutional Biodesign Center:** A call for proposal for establishment of Interinstitutional biodesign centers was announced. 34 proposals were received. The shortlisting committee meeting was held on 8<sup>th</sup> May and 11 proposals have been shortlisted for further consideration through presentation.
- b. National Biomedical Resource Indigenisation Consortium (N BRIC): A pilot "National Biomedical Resource Indigenization Consortium (NBRIC)" was launched by the Department to drive indigenous innovation in a public private partnership for developing resources and services across the biomedical product value chain including diagnostics, vaccines and therapeutics for COVID19. The N BRIC platform is hosted and led by the Centre for Cellular and Molecular Platforms (C-CAMP), Bengaluru in partnership with Association of Biotechnology Led Enterprises (ABLE) and Confederation of Indian Industry (CII) as industry partners. The NBRIC aims to bridge the demand-supply gaps of biologicals and decrease high import dependencies of raw material and equipment.

## (iii) International Cooperation

- a. Indo-German joint collaboration in fundamental research in the Life Sciences:

  Department in collaboration with Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), Germany has announced Funding Opportunities under Indo-German joint collaboration in Fundamental Research in the Life Sciences. The partnership will enable Indian and German researchers to seek synchronised funding for integrated, ambitious, cutting-edge and innovative fundamental research projects including projects on epidemics or pandemics such as the current SARS-CoV-2 pandemic. Under the joint call proposals of upto three years duration will be supported.
- b. **Indo-Australian Biotechnology fund (IABF):** Department conducted the 12<sup>th</sup> round of IABFto evaluates the new proposals. IABF supports Indian and Australian scientists, from both the public and private sectors, to collaborate in cutting edge areas of science and technology. The proposals of mutual interest to Indian and Australia i.e. Cancer therapeutics/theranostics, Genomic and precision medicine and Pest-resistant crops were evaluated through video conferencing.
- c. **Indo-Sweden webinar:** A webinar was conducted on 5<sup>th</sup> May through MS-teams platform on Advancing healthcare through AI between by DBT and Vinnova, Sweden. The webinar highlights success stories of the collaboration, the innovation ecosystem and facilitated match-making between Indian and Swedish partners for the joint call on digital healthcare. More than 500 participants registered for the webinar.
- d. **Indo-EU Cooperation:** Department in partnership with European Commission (EC) announced a co-funding call for expression of interest (EoI) on COVID-19 under 'Horizon 2020' work programme on May 30, 2020. This initiative aims to develop innovative and rapid health-related approaches and deliver quick results relevant to society and higher preparedness of health systems to mitigate emergencies like COVID-19. DBT has agreed to participate in 4 call topics focusing on the following:-

- Repurposing of manufacturing for vital medical supplies and equipment
- Medical technologies, Digital tools and Artificial Intelligence (AI) analytics to improve surveillance and care at high Technology Readiness Levels (TRL)
- Pan-European COVID-19 cohorts || Research and Innovation Action
- Networking of existing EU and international cohorts of relevance to COVID-19

## (iv) Agriculture Biotechnology

a. Fourth (4<sup>th</sup>) meeting of the Scientific and Technical Advisory and Appraisal Group (STAG) of Agriculture and Allied areas was held online on 26<sup>th</sup> May, 2020. A total of 24 project proposals (8 in Agriculture & Plant Sciences, 9 in Animal Biotechnology and 7 in Aquaculture and Marine Biotechnology) were presented in the meeting. The committee approved 18 proposals (7 proposals of Agriculture & Plant Sciences, 4 proposals of Animal Biotechnology and one has been recommended for presentation in Apex meeting, 6proposals of Aquaculture and Marine Biotechnology).

## (v) Capacity Building Infrastructure and Human Resource Development (HRD)

- a. The fourth meeting of Task Force on HRD: The task force was held from 16<sup>th</sup> to 23<sup>rd</sup> April, 2020 through Video conferencing by NIC Webroom portal for evaluation of proposals under PG Teaching Program. 113 coordinators presented the proposals. The Task Force recommended 71 proposals for financial support by DBT for the period of 15<sup>th</sup> Finance Commission. The Committee after a brainstorming session, also recommended Mandatory Terms & Conditions and Admission Process to be followed from 2020-21 onwards. Recommendations of Task Forces were communicated to 71 Universities/institutes for acceptance of DBT terms and conditions and inform the process for selection and admission of students through national level entrance examination to be conducted by Regional Centre for Biotechnology, Faridabad on behalf of the Department of Biotechnology.
- b. The meeting of the Task Force on RRSFP: Meeting was convened on 27<sup>th</sup> and 28<sup>th</sup> May, 2020 for selecting proposals received under BUILDER category and recommended 16 proposals for supporting the infrastructure for post graduate teaching programmes across the country.
- c. A very important decision was made in continuation to the support for phase III of the "Access to Macromolecular Crystallography Beamlines at ESRF, France" by RCB, Faridabad and it was recommended for financial support.

#### (vi) Biosafety and Regulations

a. **Review Committee of Genetic Manipulation (RCGM):** The 183<sup>rd</sup> meeting of Review Committee of Genetic Manipulation (RCGM) was held on **05.05.2020**. In the meeting, the Committee considered 50 applications including information items submitted by the various applicants. After deliberation on each application, appropriate decision was taken by the RCGM.

- b. **Institutional Biosafety Committees:** Twenty four (24) Institutional Biosafety Committees were constituted on IBKP portal. Considering current COVID 19 situation, notification allowing IBSCs to hold meeting through video conferencing up to 30<sup>th</sup> June, 2020 was issued.
- c. Rapid Response Regulatory Framework for COVID-19 Vaccine development: The Rapid regulatory framework for fast track processing of applications relating to recombinant vaccines for COVID 19 has been developed, and the guidance note and check list were issued on 26.5.2020
- d. Rapid Response Regulatory process for COVID-19 related research and development: Permission on Fast Track basis were issued to applicants undertaking R & D on COVID 19 in 12 cases.
- e. **DGFT Cases:** The comments of the Department were communicated to DGFT on one application seeking permission for export of SCOMET (Special Chemicals, Organisms, Materials, Equipment and Technologies) items.
- (vii) **Publications & Patents:** During the month **57** research publications and **5 patents** (**2granted and 3 filed) were reported** by the Autonomous Institutes of the Department.
- (viii) Technology/products developed by the Autonomous Institutes: Three (3)
  - a. Vaccine using receptor binding domain of spike protein, an ELISA has been developed to detect IgG antibodies against SARS-CoV-2. The sensitivity of developed IgG ELISA is 100% after 14 days from the onset of symptoms or after 14 days from RT-PCR testing. Specificity is 98.6%.
  - b. A chemical based disinfectant that can be applied on fabric to make protective masks and overalls for use in hospitals and other clinical settings is in progress.
  - c. A process was developed for preparing curcumin encapsulated chitosan-Alginate sponge useful for wound healing. The above technology has been transferred to the Pharmaceutical Company Golap Pharmaceuticals, Jaipur, Rajasthan for commercialization.

### II. Compliance Report on Important Matters/Issues

(i) Important policy matters held up on account of prolonged inter-ministerial consultations: N/A

(ii) Compliance of Cabinet/Cabinet Committee decisions: N/A

No. of COS decisions	Proposed action plan/timelines for	Remarks
pending for	compliance of COS	
compliance	decisions	
-	-	-

- (iii) No. of cases of 'sanction for prosecution' pending for more than three months:
  Nil
- (iv) Particulars of cases in which there has been a departure from the Transaction of Business: Nil
- (v) Rules or established policy of the Government: N/A
- (vi) Status of implementation of e-governance:
- (vii) Total No. of active files:8221 Total No. of e-files generated during May, 2020:196

#### tatus of Public Grievances:

	No.	of	Public	Grievances	redressed	No. of Public Grievances pending at the	1
during month: 134			nth: 134		end of the month: 12	l	

- (viii) Information on the specific steps taken by the Ministry/Department for utilization of the Space, Technology based tools and application in Governance and Development: Nil
- (ix) Confirmation that the incumbency details of all posts in the Ministry/Department and its organizations falling under the purview of the ACC have been updated on AVMS: It is confirmed that the incumbency details of all the posts in the Ministry/Department (both Autonomous institutes and PSUs under DBT) falling under the purview of the ACC have been updated on AVMS.
- (x) Status regarding compliance of the directions of ACC. A paragraph on Cases in which the ACC directions have not been compiled with distinct heading: It is confirmed that the directions of ACC are complied with.
- (xi) Status of cases where recommendations from PESB have been received but the proposals are yet to be submitted to the ACC Secretariat: It is stated that the same may be treated as 'Nil'
- (xii) **Status of Government e- Marketplace (GeM):**Procurement made through GeM for the month of May, 2020 is Nil/-.