

Government of India
Ministry of Science and Technology
Department of Biotechnology

Monthly Cabinet Summary, September -2021

A. Important policy decisions taken and major achievements during the month:

I. Measures taken by DBT to address COVID-19

• Updates on Mission COVID Suraksha:

- “Mission COVID Suraksha – The Indian COVID-19 Vaccine Development Mission”, announced under the AtmaNirbhar Bharat 3.0 package, is being implemented by BIRAC, a Public Sector Undertaking (PSU) of DBT, to accelerate Indian COVID vaccine development and augment vaccine manufacturing capacities. An amount of Rs. 680 Cr. has been released by DBT to BIRAC.
- Support under the Mission is being provided for 04 vaccine candidates in clinical stage and 01 vaccine candidate in advanced pre-clinical stage of development, including: VLP vaccine candidate by Genique life sciences; DNA vaccine candidate by Zydus Cadila; Protein subunit vaccine candidate by Biological E; Intranasal vaccine candidate by Bharat Biotech; mRNA vaccine candidate by Gennova Biopharmaceuticals.
- Major highlights are listed below:
 - DBT-BIRAC supported ZyCoV-D, World’s first COVID-19 DNA vaccine, developed by Zydus Cadila received Emergency Use Authorization (EUA) for administration in humans aged 12 years and above. Submission of data to seek regulatory approval for a two-dose regimen of ZyCoV-D, is also under consideration by Zydus Cadila.
 - Adjuvanted-protein subunit based vaccine candidate by Biological E has initiated its Phase II/III safety & immunogenicity study. The vaccine candidate also was accorded regulator’s approval to conduct Phase II/III Paediatric trial in Children and Adolescents (5yrs. and above). 08 Mission COVID Suraksha supported Clinical Trial sites have been engaged by BioE for the conduct of Phase II/III trials.
- To further enhance the manufacturing capacities, capacity enhancement of 03 Public Sector Undertakings (PSUs), to ramp-up Covaxin production is being supported. Transfer of Technology from Bharat Biotech to the 03 PSUs [Haffkine Biopharma, Bharat Immunologicals and Biologicals Corporation Limited (BIBCOL) and Indian Immunologicals Limited (IIL)] and to Gujarat COVID Vaccine Consortium (GCVC) is underway and is being monitored on a regular basis.
- BBIL has completed facility validation at Malur, Bengaluru at higher scale of production at 3000L. 39.9 lakh dose equivalent Covaxin bulk substance was

manufactured in Malur facility of which, 28.5 lakh doses of Covaxin bulk substance was filled-in, in the month of September, 2021

- Technology transfer from BBIL to IIL is complete. Production of drug substance from IIL is on track and 2 million doses equivalent of drug substance, was achieved, in September, 2021.

- **Upgradation of DBT's laboratories as Central Drug Laboratories (CDLs)**

- Considering the need for enhanced batch testing of Vaccines, two DBT Autonomous Institutes- National Institute of Animal Biotechnology (NIAB), Hyderabad and National Centre for Cell Science (NCCS), Pune, have been identified for upgradation as Central Drug Laboratories (CDLs), for vaccine testing. Support for the same was provided under PM-CARES funds.
- The facility at NCCS, Pune, was notified as CDL, on June 28, 2021; the facility at NIAB, Hyderabad was notified on 17th August, 2021; by Ministry of Health and Family Welfare. MoHFW has notified NCCS, Pune as Central Drugs Laboratory on 28th June 2021, for testing and lot release of COVID-19 vaccines.
- At NCCS, Pune, construction and validation of Sterility Testing Laboratory; mock runs for testing, have been completed. SOPs and requisite formats for vaccine testing have been prepared. At NIAB, Hyderabad, training of personnel at CDSCO is complete; construction of the clean room and sterility testing laboratory and functionality preparedness activities are in final stages of completion.

- **Meetings of National Technical Advisory Group on Immunization (NTAGI):**

- Department participated in the 30th COVID-19 Working Group (WG) meeting held on 17th September, 2021, whereby a discussion was held on the 'COVID-19 Vaccine Tracker
- The 3rd NTAGI Standing Technical Sub-Committee (STSC) Meeting, under the joint chairpersonship of Secretary, DBT and DG-ICMR, was held on 24th September, 2021, whereby an update on deliberations of COVID-19 Working Group meetings and an update on COVID-19 Vaccine Tracking Platform developed by ICMR, was provided.

- **Meetings of Quad:**

- Department participated in a meeting of the Quad Vaccine Expert Group on 8th September, 2021, wherein discussions were held on: partnership with BioE; update on financing commitment by Japan; possible areas of science and technology cooperation under the Quad framework.
- Department participated in the Quad experts meeting held on 17th September, 2021, for exploring concrete areas of collaboration under the broad themes of Genomic Surveillance and Clinical trials.

- **Testing/Diagnostics**

- 21 City/Regional clusters for covid testing have been established and with over 3.22 lakh tests conducted in September 2021; in total 63.70 lakh samples have been tested so far.
- To further enable testing access to rural India, the I-lab (infectious disease lab)-mobile lab for COVID testing has been operational. The first lab is attached to THSTI hub and had performed about 1440 tests in September 2021 and thus completing 26,524 tests so far in the Faridabad region.

II. Research and Technology Development

a. Animal Biotechnology

A Network project entitled “Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the Northeast Region” with 27 institutions (ICAR, ICMR, veterinary colleges, medical colleges including AIIMS, universities, wild life organization) has been initiated which is anticipated to contribute to (a) the availability of nation-wide data on the selected zoonotic diseases and transboundary animal diseases (b) the development and validation of indigenous tests for use in the field, (c) the collection of valuable reference (positive and negative) sera banks, (d) the development of platforms such as monoclonal antibody facility and generation of laboratory animal models, (e) the establishment of a network of veterinary and medical centres and laboratories to work together, (f) initiate investment towards border security in terms of incursion of pathogens, and (g) a roadmap to provide strategy for a continuing endeavor and a sustainability pathway for One Health programme in India

b. Agriculture Biotechnology

Three improved chickpea varieties have been released at national level through the Varietal Identification and release Committee. These drought tolerant/wilt resistant chickpea varieties have been released for timely sown, rainfed/irrigated conditions in north-west plain/central zone.

Department has been instrumental in supporting the country's first ever non-GM (genetically modified) herbicide tolerant basmati rice (Pusa Basmati 1979 and Pusa Basmati 1985) varieties for direct seeded conditions which can significantly save water and labour compared to conventional transplanting. The mutant line(Robin) and the mutant ALS gene were identified and introgressed in existing popular rice varieties through a DBT supported network project. These varieties will have major implications for reducing water consumption in rice growing areas thus addressing problem of depleting water table and reducing intensive labour requirement for transplanting.

III. Societal outreach of DBT

AZADI KA AMRIT MAHOTSAV

- **STUDENT CONNECT:**

- 20 science Setu/Open day events were organized by DBT Autonomous Institutes to facilitate the engagement and interaction between researchers and college students and inspire critical scientific thinking and scientific curiosity.

- **STARTUP CONNECT:**

- a. 10th BIRAC Innovators meet was organized on 28th September, 2021 as part of “Azadi ka Amrit Mahotsav” on theme “**VIGYAN SE VIKAS**”. In this meeting Hon’ble Minister launched “Grand Challenge Program” to identify 75 innovations in Telemedicine, AI, Digital Health, BIG Data by Start-ups/Entrepreneurs. The event witnessed the participation of 1000+ startups, entrepreneurs, incubators, and industry representatives who joined through the online platform.
- b. Four road-shows were organised by BIRAC BioNEST incubators in Roorkee, Pune, Guwahati, and Goa. Leadership Dialogue Series on “Leadership in the creation of a new scientific endeavour -Role of a visionary and missionary” by Dr. K Kasturirangan was organised on 16th September
- c. Weekly Social Media Success Stories were published acknowledging various products and technologies developed with the DBT support for Atmanirbhar Bharat.

- **FARMER CONNECT:**

- a. The Biotech KISAN Hubs supported by the department led 5 awareness and guidance events called KISAN Melas on topics such as Grass Pea cultivation, North Eastern States, Sustainable fodder production strategies for enhancing livestock productivity, etc.
- b. A Mega KISAN Mela was also organised on “Popularization of Grass Pea cultivation among farmers” by Biotech KISAN Hub at Krishi Vigyan Kendra Gaya, Lakhisarai & Patna at various locations. More than 800 Farmers participated in the event.

- **SOCIETY CONNECT:**

DBT-RGCB's Tribal Heritage Project team has conducted an awareness class "Ethno Veterinary Treatment and its Contemporary Relevance" and distribution of medicinal plants to the tribal people in Varikkamuthan, Idukki District on 9th September 2021.

IV. International Cooperation

- Indo-Australian Strategic Fund (DBT, Govt. of India) and CSIR-Indian Institute of Chemical Biology (IICB), India organized an Indo-Australian Web-Symposium on 'RECENT ADVANCES IN DRUG DEVELOPMENT 2021' on 2nd & 3rd September 2021. The Symposium saw a turnout of around 300 participants from all across the globe.
- A virtual meeting held between members of IC Division, Department of Biotechnology and U.S.-India Business Council on 23rd September, 2021. In this meeting discussion held to explore possibilities for cooperation in the Area of Genomic Surveillance.
- A virtual coordination meeting held on 24th September, 2021 between members of IC division of DBT and DST regarding an overview of multilateral S&T program being anchored by DST. In this meeting areas and modalities were discussed for further involvement of DBT in the ASEAN/BIMSTEC and other multilateral groupings under the S&T frame work.
- A Virtual Consultative meetings/ Scoping Workshops were held on 1st September 2021 to discuss the status of initiatives under Global Innovation (Collaborate) Platform and Mission (Biorefineries) led by. Key priority areas are being identified for national Funding Opportunity Announcement (SAF), in consultation with US colleagues and other participating members for feedback under the Collaborative Platform on innovation for Sustainable Aviation Fuels.
- Senior Officials MI meeting (14th- 16th September, 2021): The virtual meetings were attended by the senior officials from MI member countries including India aimed to Review and assess the progress of the Wave 2 Missions and their readiness for launch at MI event at COP26. 'Mission Renewable Fuels Chemicals and Materials through Integrated Bio-refineries (RFCM-IB)': The Mission has been developed through multilateral discussions with stakeholder. India & Netherlands would be Co-lead in the Mission. It has been agreed that Mission will be launched during the MI event at COP26 Meeting.
- DBT-PAN IIT CENTRE FOR BIOENERGY-PHASE-II (15th September, 2021): Mega Initiative has been implemented for a period of 5 years at 5 IITs (Bombay, Jodhpur, Guwahati, Kharagpur, and Roorkee), to develop advanced biofuel technologies.

V. Human Resource Development and Capacity Building

a. Star Colleges Programme

The Star College Scheme was launched for improving critical thinking and encouraging 'hands on' experimental science at undergraduate level in basic science subjects. The Department has sanctioned 2.4 crores for 4 new colleges viz. Newman College, Thodupuzha, Idukki, Kerala; Sree Narayana College, Kollam, Kerala; The Cochin College, Koovapadam, Cochin, Ernakulam, Kerala and St. Xavier's College, North Goa, Goa to be supported under the strengthening component of the Star College Scheme and this shall support 22 Science departments in these colleges thereby facilitating approx 3000 students to get benefitted under this scheme.

b. SAHAJ: Usage and Revenue

The Department of Biotechnology launched '**Scientific Infrastructure Access for Harnessing Academia University Research Joint Collaboration, (SAHAJ)**' portal, where in DBT-Autonomous Institutes and DBT supported Infrastructure programmes provide and share its equipment and infrastructure to Research Institutes, Universities, Colleges and Start -ups / Entrepreneurs. During the month, **1,234** users availed the services at DBT-AIs and a total of **Rs. 3,13,25,306/-** revenue was generated.

VI. URJIT Cluster

Sub Committee discussion meetings were held with the Research teams from the Bhubaneswar, Bangalore and Mohali cluster on 8th, 10th & 13th September 2021, respectively, for defining the goals, articulation the milestones and deliverables of the proposed URJIT Clusters

VII. Publications & Patents

There have been **87** research publications and **03** patents (filed/granted) reported by the Autonomous Institutes of the Department.

VIII. Start-up facilitation initiatives

FIRST HUB is a facilitation unit set up by DBT at BIRAC to address the queries of Innovators. For the month of September, FIRST HUB session was conducted on 3rd September 2021 and clarified **8 queries**. Representatives from **CDSCO, ICMR, NIB, GeM, KIHT, BIS, 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.

IX. Autonomous Institutions of the Department of Biotechnology-

The Autonomous Institutes of the Department are leading research and development in various areas of Biotechnology while playing a critical role in building trained human capital to take forward cutting edge research in the country. There have been **87 research publications** and **03 patents** (filed/granted) reported by the Autonomous Institutes of the Department. More details at **Annexure I**

X. Public Sector Undertaking (PSU) of the Department of Biotechnology:

The Public Sector Undertakings (PSUs) of the department are actively involved in promoting innovation, translational research, industry, start-ups, entrepreneurship, and production activities in the country. More details at **Annexure II**

B. Compliance Report on Important Matters/Issues

- Important policy matters held up on account of prolonged inter-ministerial consultations: Nil

- Compliance of Cabinet/Cabinet Committee decisions: Nil

No. of COS decisions pending for compliance	Proposed action plan/timelines for compliance of COS decisions	Remarks
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- No. of cases of 'sanction for prosecution' pending for more than three months: Nil
- Particulars of cases in which there has been a departure from the Transaction of Business: Nil
- Status of implementation of e-governance:

Total No. of active files: 14353	Total No. of e-files generated during the month: 326
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- Status of Public Grievances:

No. of Public Grievances redressed during month:: 64	No. of Public Grievances pending at the end of the month: 04
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- 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

- a. 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 Department (in respect of both Autonomous institutes and PSUs under DBT) falling under the purview of the ACC have been updated on the portal of AVMS (copy enclosed).

b. 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.

c. Status of cases where recommendations from PESB have been received but the proposals are yet to be submitted to the ACC Secretariat: 'Nil'.

- Status of Government e- Marketplace (GeM):

Procurement of goods and services for Rs. 75540/- made through GeM during the month.