बाइरैक
इग्नाइट इनोवेट इंक्यूबैट
birac
Ignite Innovate Incubate

13th ANNUAL REPORT
2024-25

Biotechnology Industry Research Assistance Council
(A Government of India Enterprise)

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Biotechnology Industry Research Assistance Council

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About BIRAC

Vision

Stimulate, foster and enhance the strategic research and innovation capabilities of the Indian biotech industry, particularly start-ups and SMEs, for creation of affordable products addressing the needs of the largest section of society.

Mission

Facilitate and mentor the generation and translation of innovative ideas into biotech products and services by the industry, promote academia - industry collaboration, forge international linkages, encourage techno-entrepreneurship and enable creation and sustainability of viable bio enterprises.

FOCUS

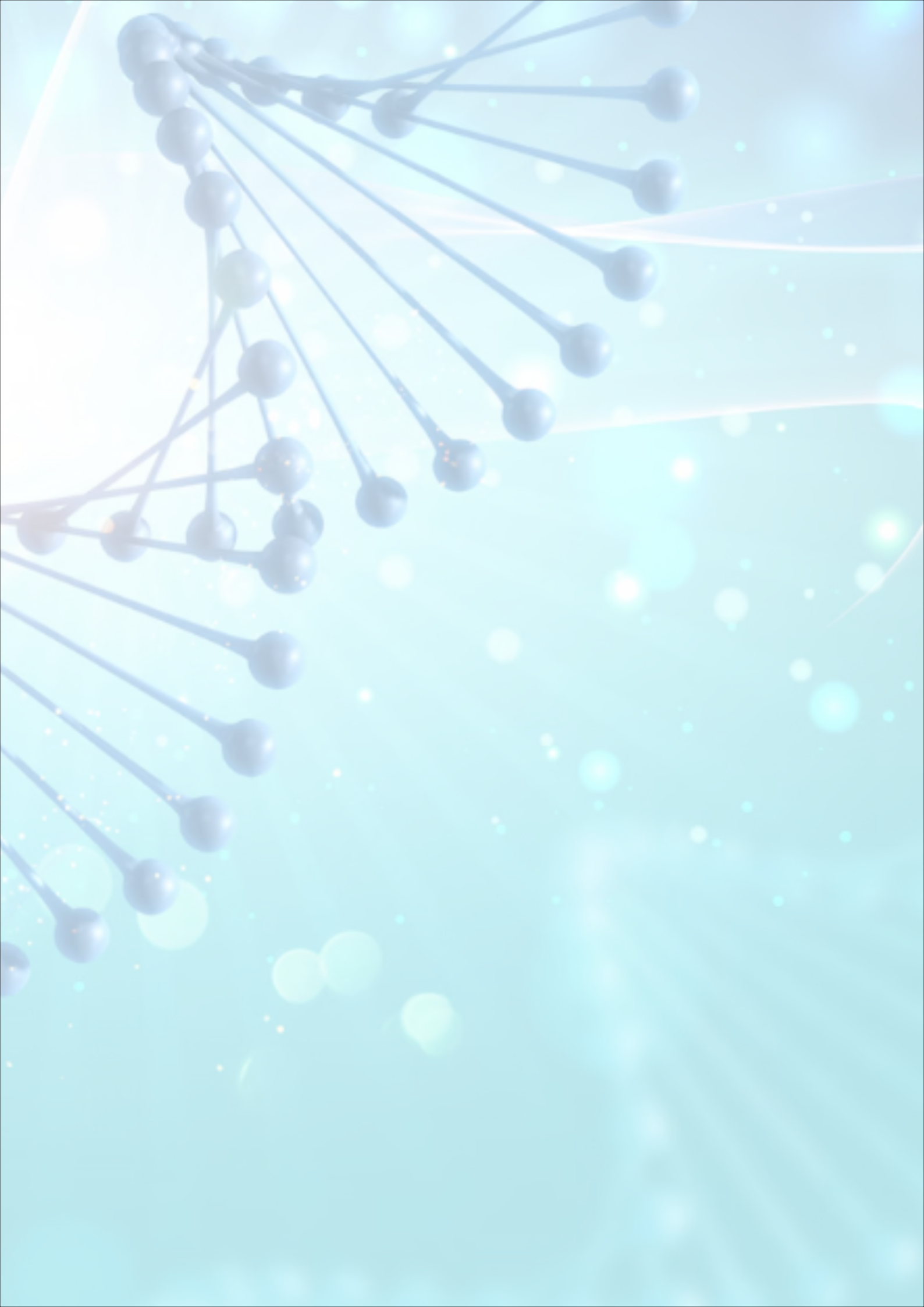
Empowering and Enabling the Biotech Innovation Ecosystem for affordable product development.

CORE VALUES

Integrity | Transparency | Team work | Excellence | Commitment

KEY STRATEGIES

- Foster innovation and entrepreneurship in all places of research
- Promote affordable innovation in key social sectors
- Higher focus on start-ups & small and medium enterprises
- Contribute through partners for capability enhancement
- Encourage diffusion of innovation through partners
- Enable commercialization of discovery
- Ensure global competitiveness of Indian enterprises



EXECUTIVE SUMMARY

Biotechnology Industry Research Assistance Council (BIRAC) is a Not-for-Profit, Section 8, Central Public Sector Enterprise, established in 2012 by the Department of Biotechnology under Ministry of Science and Technology, Government of India. Its core mandate is to strengthen and empower emerging Biotech enterprises. BIRAC is dedicated to promoting, nurturing and enabling the Biotech Innovation Ecosystem for the development of globally competitive, affordable products to address the unmet needs of society at large.

Biotechnology remains one of India's most promising 'sunrise sectors'. India's bioeconomy has witnessed remarkable growth, rising from USD 10 billion in 2014 to USD 165.7 billion in 2024 with a target of $300 billion by 2030. The sector contributes 4.25% to GDP with a compound annual growth rate (CAGR) of 17.9% over the past four years (IBER 2025). This expansion underscores the sector's dynamism and long-term potential. The consistent upward trajectory of the biotech sector over the past decade highlights its growing role in driving India's vision of Viksit Bharat by 2047. Flagship initiatives of the Government of India, such as Make in India and Startup India, aim to position the country as a global hub for biotechnology innovation and bio-manufacturing. Startups primarily fuel the biotech innovation pipeline. However, the proportion of deep-tech biotech startups still represent a relatively small segment within India's broader startup ecosystem-the third largest globally. Here, BIRAC's enabling efforts are recognized as fundamental in promoting the growth of biotech startups from <50 in 2012 to 10,000+ as of Dec., 2024 (IBER 2025).

BIRAC's unwavering commitment and support for the growth of the biotech sector have been pivotal in nurturing a globally competitive biotech ecosystem. Its success is rooted in the visionary approach of the Department of Biotechnology (DBT), which established BIRAC as a dedicated arm to drive innovation and R&D. BIRAC's initiatives are strategically designed to address the dynamic needs of the sector, with new programs introduced and existing ones refined through regular on-ground assessments by project divisions and consultations with stakeholders. The programs cater to the entire product development cycle i.e. from ideation, proof of concept, validation, and commercialisation.

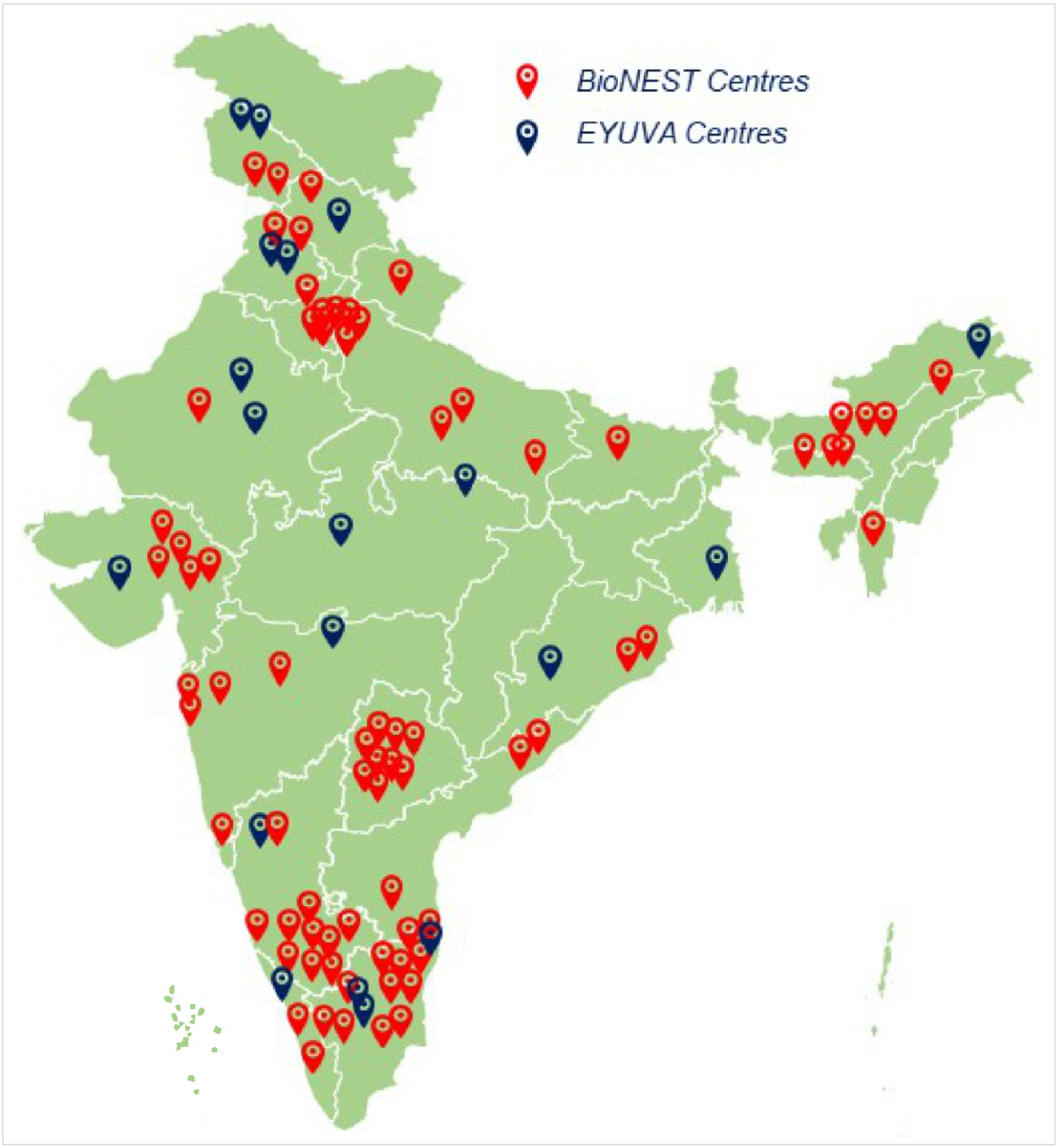
This year, BIRAC celebrated its 13th Foundation Day on March 20th 2025 and witnessed with the release of the India Bioeconomy Report 2025 by Dr. Jitendra Singh, Hon'ble Union Minister of State (Independent Charge), Ministry of Science & Technology, Ministry of Earth Sciences, Minister of State in the Prime Minister's Office, Ministry of Personnel, Public Grievances and Pensions, Department of Atomic Energy and Department of Space. 13 years of BIRAC are reflected in a strong ecosystem growth seen in terms of the increase in number of startups, robust infrastructure facilities, rise in private investments, national & global awards and recognitions, commercialization of made-in-India biotech products and so on.

BIRAC's 13th Foundation Day Celebration

Over the past 13 years, **BIRAC has been instrumental in building a vibrant biotech innovation ecosystem in India.** Through Public-Private Partnerships, it has undertaken a multitude of activities, ranging from funding high-risk translational research, supporting nascent ideas, capacity building and establishing specialised bio-incubation centres, hand holding through mentoring and training, to policy advocacy, all aimed at accelerating the growth of the biotech innovation across the nation. BIRAC's programs, schemes and policy initiatives are supplemented through strategic collaborations, partnerships with National & International bodies, Government departments, Agencies, States, Industry, Angels/ VCs, Mentors, Experts, Philanthropic organizations, NGOs etc.

*BIRAC's Partners' | *AcE Fund Partners & Investors | * BIRAC's Incubation Network

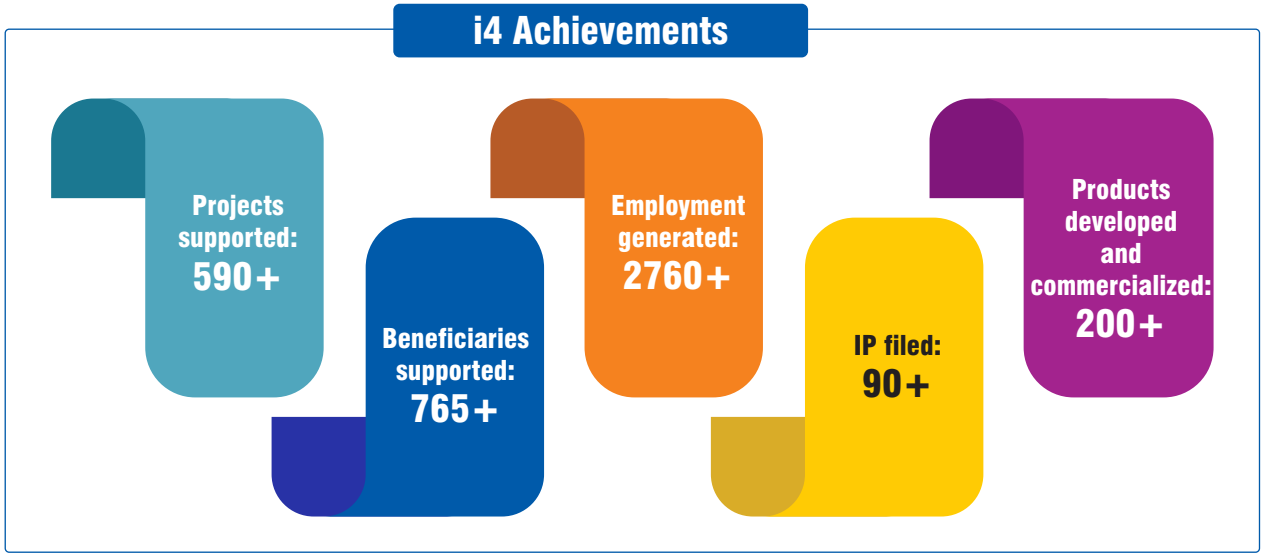
BIRAC's Bioincubation (BioNEST) and pre-incubation (E-YUVA) programmes have collectively supported 94 bioincubation facilities across the country, providing an enabling environment for the translation of early-stage scientific ideas into viable technologies. These facilities offer nurturing grounds to nascent ideas by providing access to high-end infrastructure, specialised and advanced equipment, business mentorship, IP, legal and regulatory guidance, and networking opportunities, fostering a robust ecosystem for early-stage innovation in biotechnology. These facilities are strategically embedded within Universities, Research Institutes, and Research Hospitals, or as standalone centres, located in 25 states and UTs, including tier 2 & 3 cities, bringing opportunities closer to entrepreneurs, thereby obviating the need to relocate from their hometowns due to a lack of local opportunities. BioNEST & E-YUVA centres have supported over 2,700 incubatees & students. More than 1,300 IPs have been filed by the incubatees, and over 800 products have been developed, reaching various stages of market deployment.



Network of BioNEST and EYUVA Centres

BIRAC's BIG program has been instrumental in nurturing a robust pipeline of biotech startups. So far, around 1,000 innovative ideas have been supported out of close to 14,000 applications received from across the country. The applicant pool spans 550+ cities and 38 aspirational districts across India, with more than 50% of the applications coming from Tier 2 and Tier 3 cities.

Small Business Innovation Research Initiative (SBIRI) and Biotechnology Industry Partnership Programme (BIPP), the two flagship schemes of BIRAC, support biotechnological product / technology development by strengthening R&D capabilities of start-ups/companies / LLPs. They provide the desired impetus for taking translational ideas forward for validation, scale-up, demonstration and pre-commercialization. SBIRI facilitates companies to take their Proof of Concept (PoC) towards early-stage validation. Since its inception in 2005, the scheme has supported 341 projects resulting in the validation/commercialization of 90 products / technologies and filing of 53 patents. BIPP scheme serves as a launch pad for scaling and commercializing high-risk innovations through cost-sharing between BIRAC and the Industry. Since its inception, 249 projects including 69 collaborative projects have been supported under BIPP. A total of 110 products/technologies have been successfully developed and validated till date. While some of these have already been commercialized, others are at the pre-commercialization stage.



i4 Achievements

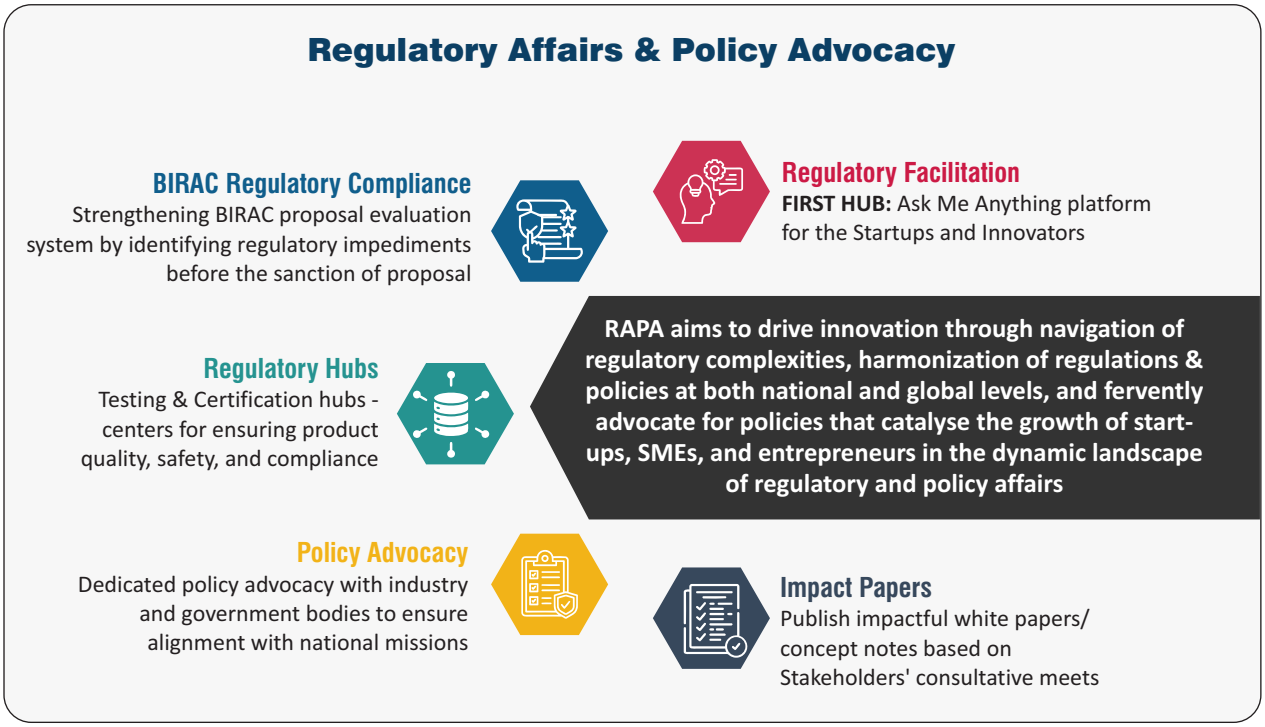
The PACE Scheme (Promoting Academic Research Conversion to Enterprise) boosts translational research within academia. PACE has 2 components, namely AIR (Academic Innovation Research) which promotes the development of Proof-of-Concept (PoC) for a process/product by academia; and CRS (Contract Research Scheme) which enables validation of a process or prototype (developed by the academia) by an industry partner. So far, 176 projects have been supported under the scheme, with 10 technologies/products reaching TRL 7-9 and 28 IPs filed.

BIRAC Equity schemes constitute another major vertical of support for startups and biotech companies. SEED (Sustainable Entrepreneurship and Enterprise Development) Fund; LEAP (Launching Entrepreneurial Driven Affordable Products) Fund and Biotechnology Innovation (AcE-Accelerating Entrepreneurs) Fund-of-Funds, which offer support to the early-stage start-ups for differential growth, have helped the entities to attract private investment from Angels and VCs.

BIRAC's in-house Technical Division strengthens discovery, translation, and product development by supporting funding decisions, monitoring, and delivery. Its core functions include identifying and funding high-potential projects under DBT-BIRAC schemes, conducting technical evaluations, monitoring projects at TRL 3 and above, advancing translational research and technology missions, fostering partnerships, supporting national initiatives (NBM, Ind-CEPI, COVID Suraksha, AMR, ATGC, Biomanufacturing), building capacity through niche meetings and training, and managing the Technology Portal showcasing successful products.

BIRAC's in-house IP & Technology Management (IPTEM) assists biotech start-ups, academic institutions, and entrepreneurs in securing patents by offering financial and technical support under the BIRAC "Patenting & Technology Transfer for Harnessing Innovations (PATH) scheme. The group supports translation of research outcomes into practical applications via technology transfer, licensing, and commercialisation. It also contributes to ecosystem development through advisory, mentoring, and IP capacity-building workshops.

Regulatory Affairs and Policy Advocacy (RAPA) division of BIRAC plays a strategic role in influencing the country's regulatory environment. Platforms such as FIRST HUB and REFINE serve as single-window facilitators for start-ups and innovators, offering tailored regulatory guidance and direct interaction with regulators. RAPA also facilitates dialogues with national and international stakeholders on emerging areas of national significance, such as Smart Proteins and Cell & Gene Therapy Products (CGTPs), via the Global Regulatory Knowledge Exchange Forum. These discussions are essential for identifying regulatory gaps, addressing challenges, and collaboratively developing pathways to enhance India's readiness for emerging technologies.



BIRAC has been at the forefront of engaging with all stakeholders- the innovators, academia, Industry, SMEs, Investors, national and international partners and so on. Partnerships are integral to expanding BIRAC's activities and delivering customised services aligned with the evolving needs of the biotech ecosystem. BIRAC, through its Business Development and Communication (BDCOM) division, fosters strategic partnerships actively engaging with national and international agencies, government bodies, industries, investors, NGOs, and philanthropic institutions to strengthen research, innovation, and development. The division also structured outreach initiatives including organizing BIRAC's annual flagship events, participation in sponsored events and creating a curative narrative to connect with the external world through digital and print media. These opportunities bring together stakeholders to showcase India's growing strength in the sector, emphasize peer-to-peer learning, identifying gaps and opportunities, networking, and showcasing innovations and create opportunities for co-creation, co-development, and co-scaling.

Global Bio-India (GBI) is an annual mega international event led by the Department of Biotechnology (DBT) and Biotechnology Industry Research Assistance Council (BIRAC) to showcase India's potential and growth opportunities to the international world. GBI offers a platform to biotechnology stakeholders, including international bodies, regulatory bodies, Central and State Ministries, SMEs, large industries, bio clusters, research institutes, investors, and the startup

ecosystem to meet and interact. 4th edition of GBI was held from 12-14 September, Pragati Maidan, New Delhi and witnessed a footfall of 10,000+ participants representing 27+ countries. Over 30 technical sessions and roundtables were organized, including 4 super sessions and 10+ focused discussions featuring deliberations with industry leaders, state representatives, embassies, national and global regulatory experts, IP specialists, investors, and biomanufacturing experts from the UK. The sessions also highlighted India-UK-South Africa collaborations, bioeconomy discussions, and startup pitches, where 30+ national and international biotech startups showcased their innovations before a panel of investors and industry experts.

During the Global Bio-India 2024, BIRAC announced Letter of Intent (LoIs) with 11 national and international organisations to foster technological advancement, knowledge exchange, and collaborative innovation within India's biotech ecosystem. The partners include: Blockchain for Impact (BFI), the Netherlands; Children's Investment Fund Foundation (CIFF), UK; UK Research and Innovation (UKRI), UK; United States Pharmacopeial Convention (USP), US; La Trobe University, Australia; Mauritius Institute of Biotechnology Ltd (MIBL), Mauritius amongst the International entities and DHR Holding India Pvt. Ltd., IPE Global Ltd, US-India Strategic Partnership Forum (USISPF), IBioM (Indian Biotech MSME and Startup Foundation), Bharat Startup and Innovation Society (BSIS) amongst the national ones.

BIRAC houses Project Management Units (PMUs) for programmes of global repute. PMU for **Grand Challenges India (GCI),** a collaborative initiative between the Department of Biotechnology (DBT) and the Bill & Melinda Gates Foundation, continues to be a driving force behind India's health innovation ecosystem. This year, GCI focused on diagnostics innovation, validating indigenous HPV test kits for cervical cancer screening and launching initiatives for affordable point-of-care diagnostics for enhanced Tuberculosis detection and Neglected Tropical Diseases. In AI and Digital Health, Initiatives like "Catalyzing Equitable AI Use to Improve Global Health" are leveraging AI for improved diagnosis and policymaking. The National Disease Modelling Consortium (NDMC) advanced to Phase II, creating India-specific models for diseases like malaria and TB to guide public health strategy.

Significant progress in Maternal and Child Health was achieved through the GARBH-INi cohort, advancing biomarker discovery for adverse pregnancy outcomes, and initiating immediate Kangaroo Mother Care (iKMC) implementation research. The Non-Hormonal Contraceptive Discovery Program also advanced, sequencing over 1,000 samples to identify novel targets for female contraception. GCI also expanded efforts in Antimicrobial Resistance, genomic surveillance, with a plan for the expansion of the INSACOG consortium to include wastewater surveillance for pathogens and AMR. It also initiated programs on Climate Change and Health. Under capacity building, 100 PhD fellows were supported through an immersion program, and the "Women Leadership in STEM" program was launched to empower 20 mid-career women scientists through mentorship and leadership training. Through these initiatives, GCI continues to catalyse high-impact innovation, reinforcing India's position as a global hub for transformative health solutions.

Make in India (MII) for Biotech sector is led by DBT and supported by BIRAC since 2015. Through its PMU at BIRAC, it drives policy advocacy, data analysis, stakeholder engagement, and strategic initiatives to strengthen India's bioeconomy. The PMU also works closely with Invest India, DBT & DPIIT for the growth of the Bioeconomy and Biotech Innovation ecosystem of the country. It implements the Biotech Fund of funds - AcE, which now with its 16 daughter AIFs, has so far resulted in Venture capital investment of INR 1200+ Cr in 93 Startups/SMEs. These beneficiary companies have secured an additional INR 4300+ Cr. in follow-on funding. The PMU monitors India's BioEconomy, steers Global Bio-India, and supports initiatives like Biofoundry, Biomanufacturing under Bio-RIDE scheme and BioE3 policy, fostering growth for startups as well as large and medium enterprises.

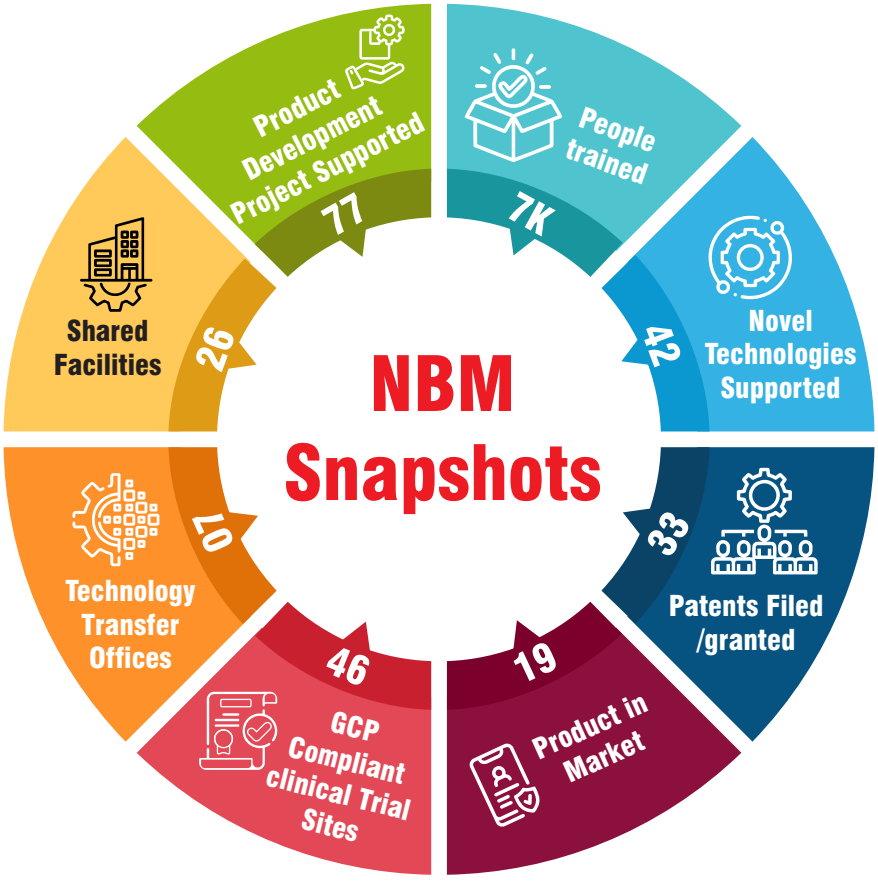
The BioE3 policy gained strong traction through national campaigns like Global Bio-India 2024 and is being implemented via the Bio-RIDE scheme to boost biomanufacturing and Biofoundries. Key policy reforms, including Angel Tax abolition, offering relief to the investor and startup community and recalibration of customs duties (under HS 9802 back to 10% from 150%), provided significant relief to small-volume biotech reagents and standards importers/ users like startups, researchers, and industry and others. The NCR Biotech Cluster revitalisation into a 200-acre model with co-located R&D Institutions, Startups, Industry and supporting service providers cluster received broad stakeholder support. Global Bio-India 2024 hosted 10,000+ participants from 27+ countries and featured the release of the India

BioEconomy Report (IBER 2024). India's biotech leadership was further underscored with the release of IBER 2025 and the launch of BioSaarthi, a global mentoring initiative to empower and scale biotech startups worldwide during BIRAC's 13th Foundation Day.

The **National Biopharma Mission**, approved by the Union Cabinet in May 2017 with a total cost of USD 250 million, co-funded by DBT and the World Bank and implemented through a PMU at BIRAC, fosters industry-academia collaboration to accelerate the transition from discovery to early-stage development of biopharmaceuticals under the "Innovate in India (i3)" initiative. The mission is designed to be one of the key drivers for achieving India's USD 150 billion bioeconomy target by 2025, strategically aligned with **Make in India, Start-up India, and DBT's National Biotechnology Development Strategy.**

NBM has supported the establishment of 26 shared facilities for product development, serum bio-banks, virus repositories, 10 demographic and Health Surveillance sites (DRIVEN Network), and 5 clinical trial networks across 36 hospitals for oncology, diabetology, rheumatology, and ophthalmology indications. Since inception, it has trained 7,400+ professionals, published 62 peer-reviewed papers, and filed 33 IPs, supported 231 grantees across diverse verticals and facilitated 77 product development projects in domains such as medical devices and diagnostics, vaccines, and biotherapeutics, addressing critical gaps in the biopharmaceutical development pipeline.

NBM has supported several landmark innovations, including India's first indigenous HEV vaccine (Zydus Life Sciences), MRI scanner (Voxelgrids Innovations), biosimilar of Victoza 'Liraglutide' (Levim Biotech LLP, launched at 65% lower cost), and clinical development of India's first inactivated Chikungunya vaccine for Phase II and III (Bharat Biotech International Ltd), and live attenuated tetravalent recombinant dengue vaccine for phase I and II (Indian Immunologicals Limited). Other notable achievements include HiMedia's serum-free, chemically defined media and



NBM Snapshots

feed supplements for therapeutic proteins; OmniBRx's 5L and 50L India's 1st single-use bioreactors for adherent cell culture, indigenous flexible video endoscope (Healthcare Technology Innovation Centre (HTIC) in collaboration with Mitra Medical Services), affordable dental implant (Intessence Solutions), real-time ECG device (Carditek), and Human Bone marrow derived Mesenchymal Stem Cell based VELGRAFT technology as a skin substitute for diabetic foot ulcers (Datt Mediproducts).

NBM is also supporting clinical trials of India's first CAR-T cell therapy for pediatric Acute Lymphocytic Leukemia (ALL) and Lupin's Phase III global trial of Aflibercept, a biosimilar, with a global clinical trial at 30 trial sites in India and 5 sites in Russia, both poised to be upcoming breakthroughs.

A key pillar of NBM's strategy is technology transfer, bridging academic research and industry. To enable this, 7 Technology Transfer Offices (TTOs) have been set up across India, supporting scouting and evaluating innovations, IP management, spin-offs, facilitating commercialization, and creating spin-offs, etc. The TTO network has facilitated ~850 IP filings and 115 technology transfers.

DBT's Ind-CEPI mission is implemented through the Ind-CEPI Program Management Unit (PMU) at BIRAC, which works in global collaboration with CEPI (Coalition for Epidemic Preparedness Innovations). It aims to strengthen India's epidemic preparedness by supporting vaccine development and public health readiness. It has supported vaccines for Chikungunya and COVID-19, including GEMCOVAC-19 - India's first and the world's first thermostable mRNA vaccine. Beyond vaccines, Ind-CEPI focuses on capacity building, infrastructure, and inter-ministerial coordination for developing frameworks, surveillance and logistics for the use of new vaccines.

Way forward:

The BioE3 Policy, the first ever Biotechnology focused policy of the country focusing on Economy, Employment, and Environment, along with the BioRIDE Scheme, is set to serve as a key driver of India's bio-innovation agenda toward a resilient and globally competitive bioeconomy. These initiatives accelerate biomanufacturing growth by promoting process innovation, establishing shared infrastructure like Biofoundries, and scaling up indigenous technologies. Through these efforts, BIRAC seeks to position India as a global biomanufacturing hub, fostering innovation-driven production that meets both domestic and international demands while ensuring environmental and economic sustainability.

The biotechnology sector in India is entering a new phase of maturity, marked by ecosystem readiness and a shared national vision for innovation-led growth. Building on this momentum, BIRAC, with the guidance of the Department of Biotechnology (DBT), will continue to steer the country's bio-innovation agenda towards realizing the goals of a resilient, inclusive, and globally competitive bioeconomy.

As the bioeconomy emerges as a recognized national growth vertical, BIRAC's role will extend beyond funding innovation to fostering systemic transformation. This includes enabling policy alignment, catalysing public–private partnerships, and enabling commercialization through industry linkages, investor networks, and global collaborations. With ecosystem maturity steadily advancing, BIRAC will also focus on capacity building, skill development, and technology diffusion to ensure that scientific advances translate effectively into scalable, market-ready solutions.

Going forward, the BIRAC–DBT leadership envisions to translate India's scientific potential into tangible outcomes-new jobs, sustainable enterprises, and enhanced global competitiveness. By synergizing national priorities with international partnerships, BIRAC aims to position India as a bio-innovation powerhouse, driving the next wave of growth in health, agriculture, energy, and environment, and contributing meaningfully to the global bioeconomy.

CONTENTS

Biotechnology Industry Research Assistance Council

CIN: U73100DL2012NPL233152
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Website: www.birac.nic.in | **Email:** birac.dbt@nic.in
Tel: 011-29878000 | **Fax:** 011-29878111

NOTICE

NOTICE is hereby given that the Thirteenth Annual General Meeting of the Company will be held on:

Day and Date: Wednesday, 24th September, 2025 **Time:** 1.00 P.M.

Venue: Biotechnology Industry Research Assistance Council, 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi - 110020.

for transacting the following business:

Ordinary Business:

1. To receive, consider and adopt the Audited Financial Statement of the Company as on March 31, 2025 together with the Reports of the Directors and Auditor thereon and comments of the Comptroller & Auditor General of India in terms of Section 143(6)(b) of the Companies Act, 2013;
2. To fix the remuneration of the Statutory Auditor for the financial year 2025-26, in terms of provisions of Section 139(5) read with Section 142 of the Companies Act, 2013.

NOTICE :

1. MEMBERS ENTITLED TO ATTEND AND VOTE MAY APPOINT ONE OR MORE PROXIES TO ATTEND AND VOTE INSTEAD OF THEMSELVES. PROXIES TO BE VALID MUST BE RECEIVED AT THE REGISTERED OFFICE OF THE COMPANY.
2. Only bonafide members of the Company whose names appear in the Register of Members in possession of valid attendance slips duly filed and signed will be permitted to attend the meeting. The Company reserves its right to take all steps as may be deemed necessary to restrict non-members from attending the meeting.
3. This meeting is being called at shorter notice with the consent of the requisite number of shareholders as prescribed under Companies Act, 2013.

By Order of the Board

Sd/-

Kavita Anandani
Company Secretary
Membership Number- F12643

Registered Office :
5th Floor, NSIC Business Park, NSIC Bhawan,
Okhla Industrial Estate, New Delhi - 110020
Date: 24th September, 2025

CHAIRMAN'S MESSAGE

Dr. Rajesh S. Gokhale
Secretary, Department of Biotechnology Ministry of Science & Technology, Government of India, DG BRIC & Chairman, BIRAC

India's biotechnology sector today stands at an inflection point of global relevance. The year 2024–25 has been one of substantive growth and policy consolidation for us. The Indian bioeconomy advanced to an estimated USD 165.7 billion in 2024 and strengthened its share to 4.25% of the national GDP. With a clear target of USD 300 billion bioeconomy by 2030, biotechnology is now a critical driver of Viksit Bharat@2047.

A defining policy steering pioneering initiatives in this direction is the BioE3 Policy (Biotechnology for Economy, Environment and Employment) approved by the Union Cabinet on August 24th, 2024. The Policy aims to capture the transformative power of biotechnology by fostering innovation spanning sectors such as health, agriculture, space, food etc. DBT-BIRAC's efforts have led to the launch of the High-Performance Biomanufacturing Platforms under the BioE3 Policy on September 1st, 2025. A network of 21 advanced bio-enabler facilities across India will offer shared infrastructure enabling startups, SMEs, industries, and research institutions to test, scale, and bring technologies to market. Further, marking one year of the BioE3 Policy, the D.E.S.I.G.N for BioE3 Challenge has been launched as a year-long initiative, with BIRAC playing a pivotal role in its implementation

Missions such as the National Biopharma Mission (NBM), Grand Challenges India (GCI), Ind-CEPI, and Make in India for Biotech are enabling the country to move from being primarily a knowledge hub to becoming a producer of cutting-edge biopharmaceuticals, diagnostics, vaccines, and sustainable bio-based products for India and for the world.

As we progress, the emphasis will remain on scaling Bharat's advanced bio-manufacturing capacity, attracting global capital for biotech startups, fostering cutting-edge R&D translation, and enabling Indian startups to become globally competitive enterprises. The momentum of 2024–25 inspires confidence that India is ready to shape the global bioeconomy through responsible leadership and pioneering innovation.

Further, BIRAC has been complying with the requirements of Corporate Governance as stipulated by the Department of Public Enterprises (DPE) for Central Public Sector Enterprise (CPSEs). The Corporate Governance report for the year 2024-25 forms a part of Annual Report.

I commend the BIRAC team and all partners, academia, industry, investors, and innovators, for their role in shaping this vibrant ecosystem. Together, we are propelling India towards a future where biotechnology not only fuels economic growth but also delivers equitable, sustainable, and globally competitive solutions.

Dr. Rajesh S. Gokhale
Secretary, DBT, DG, BRIC & Chairman, BIRAC

MANAGING DIRECTOR'S MESSAGE

Dr. Jitendra Kumar

FY 2024–25 has been a defining year for BIRAC, one that reflects the maturing of India's biotech innovation landscape and our collective progress from scientific discovery to global competitiveness. Over the past thirteen years, BIRAC has grown into an organisation that does far more than fund early ideas; it enables entire innovation journeys, from ideation and proof-of-concept to validation, scale-up and market deployment.

During the year, our Incubation network expanded to 95 centres across 25 States and Union Territories and the Biotechnology Ignition Grant (BIG) program continued to serve as India's most visible entry platform for biotech entrepreneurship, crossing the milestone of 1,000 early-stage ideas supported from more than 550 cities, with an encouraging share of applicants from Tier-II and Tier-III regions. Equally important has been our work in mobilising capital for high-risk innovation through equity support mechanisms such as SEED, LEAP and the AcE Fund-of-Funds.

On the policy and ecosystem front, BIRAC played a pivotal role by driving the implementation of BioE3, India's first National Biotechnology Policy under the Bio-RIDE scheme. A strong thrust on advanced biomanufacturing remained central to our efforts. From scaling Bio-RIDE and next-generation biofoundries to enabling world-class pilot and commercial manufacturing facilities, it has surely positioned India as a trusted global hub for cost-effective, high-quality bio-based products.

Our global positioning efforts were exemplified by successful implementation of the fourth edition of Global Bio-India (GBI-2024), the largest-ever Biotech event in India, which brought together over 10,000 delegates from 27+ countries. During the year, BIRAC forged new international and national partnerships by signing LoIs with entities such as UKRI, CIFF, BFI, La Trobe, MIBL, Danaher India and so on to create opportunities for knowledge exchange and collaborative innovation.

We also launched the BioSaarthi global mentoring initiative during our 13th Foundation Day under the Make-in-India mission for the biotech sector and showcased India's capability as a trusted partner in bio-innovation and manufacturing.

The National Biopharma Mission continued to fill critical gaps by creating shared infrastructure, training a skilled workforce and supporting product pipelines in vaccines, biologics, medical devices and diagnostics, including cutting-edge therapies such as CAR-T and new vaccine candidates against emerging diseases. Through Grand Challenges India and Ind-CEPI, BIRAC has advanced high-impact health innovation from validating affordable HPV diagnostics and point-of-care TB tests to delivering GEMCOVAC-19, the world's first thermostable mRNA COVID-19 vaccine, and strengthening India's epidemic preparedness.

BIRAC strengthened India's biotech regulatory ecosystem with platforms like FIRST HUB and REFINE, enabling innovators to navigate complex compliance pathways with greater speed and clarity. We continued to empower startups and researchers by supporting patent filings, technology transfer and commercialization, enabling Indian innovations to reach global markets.

The year also saw landmark product milestones. Nafithromycin, a next-generation macrolide antibiotic to address rising antimicrobial resistance; Voxelgrids' affordable MRI scanner reached the market, transforming access to high-end diagnostics; and biosimilar Liraglutide moved towards affordable diabetes care. India's first CAR-T cell therapy for paediatric Acute Lymphocytic Leukemia advanced in clinical development; completion of scientific review for indigenously developed HPV Test Kits marked a step towards an affordable and accessible chip-based RT-PCR test for rapid cervical cancer detection in India and other LMICs, while the indigenous HEV vaccine and other vaccine platforms continued to progress.

Looking ahead, our focus will remain on deepening support for deep-tech innovators, scaling world-class biomanufacturing capacity, strengthening technology transfer and IP commercialisation, and forging new global alliances. With the support of the Department of Biotechnology, the trust of industry, academia and investors, and the energy of our vibrant startup community, BIRAC will continue to transform India into a globally competitive and self-reliant biotechnology powerhouse that delivers affordable and impactful solutions to the world.

Dr. Jitendra Kumar
Managing Director, BIRAC

BOARD OF DIRECTORS

Dr. Rajesh S. Gokhale	:	Chairman
Dr. Jitendra Kumar	:	Managing Director
CA. Nidhi Shrivastava	:	Director (Finance)
Government Nominee Director		
*Ms. Ekta Vishnoi	:	Government Nominee Director
**Shri Vishvajit Sahay	:	Government Nominee Director
Non-Official Independent Director		
Dr. Penna Krishna Prasanthi	:	Non-Official Independent Director

***Was appointed as Government Nominee Director w.e.f. 12th March, 2025.**

****Held the position of Government Nominee Director till 20th January, 2025.**

CHAIRMAN

Dr. Rajesh S. Gokhale

Secretary, Department of Biotechnology Ministry of Science & Technology, Government of India, DG, BRIC & Chairman, BIRAC

Prof. Rajesh S. Gokhale is the Secretary of the Department of Biotechnology (DBT) in the Ministry of Science & Technology, Government of India. He is currently on deputation from the Indian Institute of Science Education & Research (IISER), Pune. Over the course of his career, he has held several important academic and leadership positions, including at the National Institute of Immunology (NII) and as Director of the CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB). During his tenure at CSIR-IGIB, he was instrumental in establishing the Institute's South Campus in Delhi and building new interdisciplinary programs in disease research and genomics.

Prof. Gokhale was trained at the Indian Institute of Science (IISc), Bengaluru, and later at Stanford University, USA. His research career has focused on understanding how diseases develop and progress, with the goal of identifying new ways to treat them. His group has made important discoveries about tuberculosis and autoimmune disorders such as vitiligo. By exploring how the body's metabolism and immune system interact, his work has helped open new directions for developing therapies that address the root causes of diseases rather than just managing symptoms. His scientific contributions have been widely recognized and published in leading international journals such as Nature, Nature Chemical Biology, Molecular Cell, and the Proceedings of the National Academy of Sciences (PNAS).

A strong advocate of nurturing young talent, Prof. Gokhale has guided and mentored more than 200 students and early-career researchers. Around 25 students have completed their PhDs under his supervision, and many of his mentees are now contributing to academia, industry, and policy across the world. He has also been actively involved in translating research into applications that can benefit people. In 2010, he co-founded Vyome Biosciences, a company that develops new treatments for skin-related conditions. The company has advanced a therapy for drug-resistant acne into late-stage clinical trials and has introduced over-the-counter dermatology products in the market.

Prof. Gokhale has received several national and international honours for his contributions to science and innovation. These include the Infosys Prize, the Shanti Swarup Bhatnagar Prize, the National Bioscience Award, the J.C. Bose National Fellowship, and the IIT Bombay Distinguished Alumni Award. He has also been a Wellcome Trust Senior Research Fellow (UK) and an International HHMI Fellow (USA). He is an elected Fellow of all the three Indian National Science Academies.

In his leadership role at DBT, Prof. Gokhale is guiding the national biotechnology agenda with a strong focus on innovation, sustainability, and self-reliance. He has championed the BioE3 vision (Biotechnology for Economy, Environment and Employment) as a unifying framework for the future of biotechnology in India. Under his stewardship, DBT is driving initiatives in biomanufacturing, genomics, synthetic biology, and precision medicine, with an emphasis on affordability and accessibility.

Prof. Gokhale's vision reflects a balance between advancing cutting-edge science and ensuring societal impact. He is committed to strengthening India's role as a global leader in biotechnology by building strong partnerships between academia, industry and government, while also nurturing the next generation of scientists and entrepreneurs.

MANAGING DIRECTOR

Dr. Jitendra Kumar

Dr. Jitendra Kumar, Managing Director, Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology, Ministry of Science and Technology, Government of India.

Dr. Jitendra Kumar holds a PhD degree (Year 2002) in Biotechnology from the Institute of Microbial Technology, Chandigarh. Subsequently, he moved to the University of Illinois, Chicago as a visiting research scholar, where he worked on leukemia. He then joined Ohio State University, Columbus Ohio (USA) as Post Doctoral Researcher (year 2004). Additionally, he holds an MBA degree from the Fisher College of Business at Ohio State University in the United States (Year 2009).

After returning from the United States (Year 2009), he joined as a Vice-President of the Life Sciences Innovation at IKP Knowledge Park in Hyderabad where he was actively involved in mentoring incubate companies, creating a pipeline of entrepreneurs through innovative models of team building around the technologies, and collaborated with public R&D laboratories and universities to develop entrepreneurial models of commercialization. Dr. Kumar then moved to Bangalore to set up operationalize the Bangalore Bioinnovation Centre (BBC) (as Head and Managing Director), a joint initiative of Department of Information Technology, Biotechnology and Science & Technology, Government of Karnataka and the Department of Biotechnology, Government of India. He joined BIRAC as Managing Director in year 2023.

Dr. Kumar has helped several companies in raising funds through seed funding & Government grants and is involved in the due diligence process for venture funding. He was involved in setting up a world-class centre for translational research and technology entrepreneurship in Bangalore. He has contributed immensely to the growth and development of two Biotech Innovation clusters- Hyderabad (through IKP Knowledge Park) and Bangalore (through Bangalore Bioinnovation Centre - a joint initiative of DBT and Karnataka Government). Currently, he is involved in spurring the Bioinnovation ecosystem at a national level as Managing Director, Biotechnology Industry Research Assistance Council (BIRAC).

Dr. Kumar is an Internationally acclaimed thinker and advisor on Biotech Innovations and entrepreneurship. He has been invited as a speaker at various conferences in the USA, South Korea, Germany and the Netherlands to represent India. He has inspired thousands of youths to start and build successful Biotech ventures. He has around 20 years of experience in research and innovation management in the area of life sciences. He has around 50 peer- reviewed publications and around 60 products have been launched under his mentorship. He has been an external PhD and MSc thesis supervisor at University of Agricultural Sciences, Bangalore and has supervised 2 PhD's and 6 MSc students. He has been recently conferred "Life time achievement award for promoting & nurturing Innovation in Agritech" from India, Chamber of Food & Agriculture & outstanding professional law and from Agriculture today.

DIRECTOR FINANCE

CA. Nidhi Shrivastava

CA. Nidhi Shrivastava was appointed as first **Director (Finance) at BIRAC. A Fellow Chartered Accountant and Law Graduate from Delhi University,** with a **B.Sc. in Environmental Sciences from Ramjas College (DU),** she also has certification in "Risk Mitigation through Forensic Document Examination" from LNJN, Ministry of Home Affairs. Ms. Shrivastava brings over **20 years of expertise in corporate accounts, project financing, budgeting, taxation, treasury, audit, and fund management.** She has worked with prestigious organizations such as **Deloitte, Ernst & Young, NTC Ltd., and NAFED,** where she played a crucial role in financial restructuring and strategic growth.

At BIRAC, she has led key initiatives in **budgetary control, seed funding, grant-in-aid management, fund flow optimization, technology adoption, and stakeholder collaboration** reflecting her ability to synergize governance with innovation.

Ms. Shrivastava was a distinguished delegate in the **Advanced Global Leadership Program** organized by SCOPE in collaboration with IIM Calcutta and **St. Gallen University, Switzerland.** As the first woman participant, she received advanced training in **strategic leadership, supply chain resilience, AI-driven solutions, corporate governance, sustainability, and international trade,** with representations at institutions such as **WTO, ILO, OECD, and GIZ across Europe.**

Recognized in **Whispers in the Corridors magazine (April 2025),** she stands out as a trailblazer in promoting **gender diversity in India's public sector leadership,** being among fewer than **30 women Board Members out of 700 across PSUs**

FORMER GOVERNMENT NOMINEE DIRECTOR

Shri Vishvajit Sahay

Additional Controller General of Defence Accounts O/o Controller General of Defence Accounts, Ministry of Defence, Government of India and Former Government Nominee Director, BIRAC

Shri Vishvajit Sahay belongs to the 1990 batch of the Indian Defence Accounts Service. Presently working as Additional Controller General of Defence Accounts, he handles Accounts & Budget and the IFA system of the Defence Accounts Department.

An alumnus of St. Stephen's College, Delhi, he has diverse experience of working in the Government of India, having earlier served as Additional Secretary and Financial Adviser (AS & FA), providing financial advice to three Scientific Departments/Ministry, viz., Department of Science & Technology, Department of Biotechnology and Ministry of Earth Sciences. In his earlier assignments, he has served as Jt. Secretary in the Department of Heavy Industry and Director in the Ministry of Information & Broadcasting. He has held additional charge of the posts of Chairman & Managing Director, Heavy Engineering Corporation, Ranchi, a Schedule 'A' CPSE, CEO & Project Director of National Automotive Testing Research & Development Infrastructure Project (NATRIP) and Director in the Directorate of Film Festivals, Delhi.

Within the Ministry of Defence and the Defence Accounts Department, he has experience of working in the Acquisitions Wing of the Ministry of Defence as Finance Manager (Land Systems), during the period 2008-13. He has also served as Principal Controller of Defence Accounts (Pension) Allahabad and briefly as Principal IFA (Ordnance) in the Army HQrs. Shri Sahay has extensive experience of having worked in several field and Headquarters Organisations of the Defence Accounts Department with experience of closely working with the MoD, Army and Ordnance Factories.

GOVERNMENT NOMINEE DIRECTOR

Ms. Ekta Vishnoi

Joint Secretary, (Administration), Department of Biotechnology, Ministry of Science & Technology & Government Nominee Director, BIRAC

Ms. Ekta Vishnoi belongs to the 1999 batch of the Indian Revenue Service (IRS). A gold medalist of Delhi University in M.Sc. Organic Chemistry, she was awarded the Finance Minister Gold Medal for being the best officer during training in the Indian Revenue Service. She also holds an LLB degree.

She has diverse experience working in various divisions in the Income Tax Department including investigation, headquarters and assessment units. Before joining the Department of Biotechnology as a Joint Secretary, she worked with the Sports Authority of India, leading Khelo India and Fit India Mission of the Government of India.

NON-OFFICIAL INDEPENDENT DIRECTOR

Dr. Penna Krishna Prasanthi

M.D. (General Medicine)

Dr. Penna Krishna Prasanthi is a Senior Consultant Physician at Harshitha Hospital & Best's Diabetic Care Centre, Tirupati, Andhra Pradesh. She completed her MBBS from Sri Venkateswara Medical College, Tirupati in 1994 and M.D. General Medicine from Kurnool Medical College, Kurnool, Andhra Pradesh in 2000.

She is the only Woman Physician from the state of Andhra Pradesh reached to National level in the last 25 years in Association of Physicians of India (API), Research Society for the Study of Diabetes in India (RSSDI), Indian Medical Association (IMA). She is the First Women Chairperson of Association of Physicians of India in both states of Telangana & Andhra Pradesh over the past 50 years. She has been instrumental in forming Women Doctors Wing of IMA in the State of Andhra Pradesh.

Currently she is the only Physician from the state of Andhra Pradesh representing the Credential Committee of Association of Physicians of India at national level and is also a Governing Council member of Sri Padmavathi Women's Degree & PG College, Tirupati. She has served in leadership roles such as Chairman of API Andhra Pradesh Chapter, Governing Council Member of RSSDI, and Advisory Member of IMA Women Doctors Wing. She was President and Secretary of IMA Tirupati and Founder Secretary of API Tirupati.

She is the Fellow of Indian College of Physicians of India, Research Society for Study of Diabetes in India, IMA Academy of Medical Specialities and Diabetes India. She has received many orations like Dr. I. Joga Rao Memorial Oration, Dr. Rotarian E.S. Reddy Memorial Oration and Sri B. Lakshmi Reddy Memorial Orations. She also received awards like Best Woman Diabetologist Award from RSSDI, IMA President Appreciation Award for Academic Excellency and Community Services, Ugadhi Puraskar Award from Delhi Telugu Academy, Sri Padma Medha Award from Sri Padmavathi Women's University and innumerable awards for her Community Services and academic excellence.

She is the Life Member of Various Prestigious Professional Organisations like API, RSSDI, IMA, Endocrine Society of India, Indian Thyroid Society, Diabetes in Pregnancy Study Group India (DIPSI), Diabetic Foot Society of India, Nutrition Society of India, Indian Society of Critical Care Medicine(ISCCM), National Medicos Organisation (NMO). She continues to serve the community through Lion's Club, Rotary's Club and walker's Associations.

She worked in Government Service for few years and later shifted to private sector. To quench her academic thirst and research she has been active in pursuing fellowships in the field of Diabetology and actively working on Diabetic Foot Problems with Diabetic Foot Research Initiative. She is keenly involved in research projects on Nutrition in Diabetes and Infections in Diabetes along with various educational institutions. She contributed chapters in API Textbook of Medicine.

Dr. Prasanthi has conducted over 3000 free Medical & Public Awareness sessions for women, students and rural communities for the past 25 years. During the Covid Pandemic she did exemplary work in Tirupati along with district administration in starting Covid Care Centres and tele medicine consultation to thousands of patients. She has been recognized with Covid Warrior Award and many more for her selfless services in COVID situation.

Her main motto is to empower the citizens of this Nation particularly women & children with preventive health care and promoting our traditional Healthy Life styles through Public Health Education.

CORPORATE INFORMATION

REGISTERED OFFICE :

5th Floor, NSIC Business Park, NSIC Bhawan,
Okhla Industrial Estate, New Delhi-110020
CIN: U73100DL2012NPL233152
Website: www.birac.nic.in
Email: birac.dbt@nic.in
Tel: +91-11-29878000
Fax: +91-11-29878111
Twitter handle: @BIRAC_2012

STATUTORY AUDITORS :

M/s Gupta Garg & Agrawal
Chartered Accountants
G-55 Royal Palace, IInd Floor,
Laxmi Nagar, Vikar Marg, Delhi-110092
Tel: 011-43016663
Email: cabbgupta@gmail.com

BANKERS :

Union Bank of India
Block 11, CGO Complex,
Lodhi Road, New Delhi-110003

: **STATE BANK OF INDIA**
Core 6, SCOPE Complex,
Lodhi Road, New Delhi-110003

: **HDFC Bank Ltd.**
A3 NDSE, South Ex Part 1
New Delhi-110049

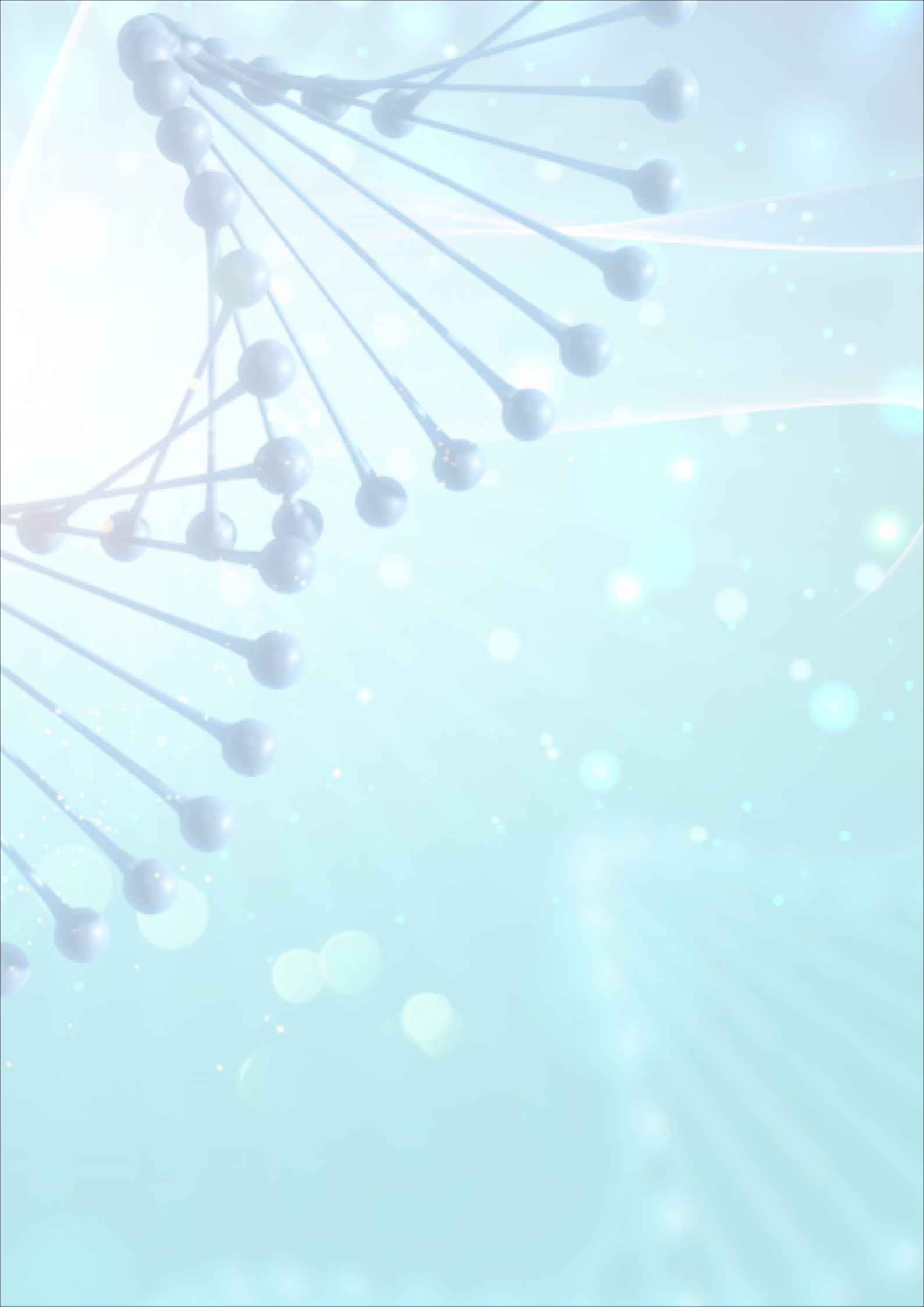
: **Union Bank of India**
MTNL Building, Opp. Gate No. 13
JLN Stadium, New Delhi-110003

: **ICICI Bank**
E 30, Saket, New Delhi-110017

: **RBI Branch**
RBI, No. 6, Sansad Marg,
New Delhi-110001

COMPANY SECRETARY : **Ms. Kavita Anandani**

DIRECTORS' REPORT



DIRECTORS' REPORT

To the Members,

1. ABOUT BIRAC

Biotechnology Industry Research Assistance Council (BIRAC) is a not-for-profit Section 8 company under the Companies Act, 2013 (originally incorporated under the Companies Act, 1956). It functions as a Schedule B, Central Public Sector Enterprise (CPSE) under the Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India. Established as an interface agency, BIRAC is dedicated to empowering emerging biotech enterprises to pursue strategic research and innovation aligned with nationally relevant product development goals.

BIRAC is at the industry-academia interface and implements its mandate through a diverse portfolio of impactful initiatives, be it providing access to risk capital through targeted funding, supporting technology transfer and IP management and hand holding schemes to foster innovation and enhance global competitiveness of Indian biotech firms.

In its thirteen years of existence, BIRAC, through its Public-Private Partnership (PPP) model, has initiated and implemented a range of schemes and programmes to foster innovation and strengthen the startup ecosystem across the country. These strategic partnerships help to bridge the existing gaps in the industry-academia Innovation research, enabling the development of high-quality, affordable products through cutting-edge technologies. BIRAC actively partners with national and international organisations, government agencies, industry, investors, experts, NGOs, and philanthropic bodies to collaborate and deliver the salient features of its mandate.

2. OUR PHILOSOPHY & ACHIEVEMENTS

Biotechnology is spearheading a transformative change and shaping the future of healthcare, agriculture, environment, and industry. It is seen as a sunrise sector fuelling innovation, supporting high-value jobs, and addressing some of the most pressing global challenges, from food security to affordable healthcare and sustainable growth. With its multidisciplinary nature and knowledge-intensive base, biotechnology led economy has become a cornerstone of India's economic growth story.

At the same time, the sector demands significant investment in infrastructure, specialized equipment, and high-quality talent. The Biotechnology Industry Research Assistance Council (BIRAC) was created by the Department of Biotechnology, Ministry of Science & Technology, Government of India to fill in these gaps. Over the past 13 years, BIRAC has evolved into a nationally and globally recognised enabler of the Indian biotech innovation ecosystem. BIRAC has seeded and scaled a thriving entrepreneurial landscape, leading to the successful commercialization of hundreds of innovations that directly address societal needs.

Through funding, mentorship, regulatory facilitation, validation platforms, investor linkages, and opportunities for global visibility, BIRAC supports innovators across the entire lifecycle of product development. It also places special emphasis on enabling deployment in low-resource settings, ensuring that innovations reach those who need them most.

The Technical department provides support for Discovery, Translational, and Product Development Programmes, focusing on identifying and mentoring promising projects that can deliver affordable, nationally relevant solutions. Key activities include technical evaluation and monitoring of projects under various funding schemes such as BIG, SBIRI, PACE, BIPP, and others; TRL-monitoring/assessment from all BIRAC schemes, coordinating translational efforts to convert discoveries into products; initiating new technological missions; and supporting

national and international partnerships. The Department also conducts 'Niche Area' meetings to explore emerging funding areas, supports hands-on training/workshops for capacity building, supports DBT-BIRAC joint initiatives, and maintains a 'Technology Portal' to showcase successful innovations.

Some of the ongoing schemes/programs constitute of Product Commercialization Program Fund (PCP Fund); Early Translation Accelerator (ETA); Innovation Clean Technology-Scale Up; Synthetic Biology, Guar Gum; Integrated approach to address/support COVID-19 vaccine, induced immunity, related processes and facilities; establishing preclinical models for Drug discovery; AMRIT Team Grants.

As part of India's first Policy in Biotechnology, the 'BioE3 (Biotechnology for Economy, Environment and Employment) Policy for 'Fostering High Performance Biomanufacturing; several calls have been launched in the following thematic areas to support product/technology development as well as establishment of shared infrastructure. The initiative is jointly being implemented by DBT and BIRAC:

I. Setting up of "मूलांकर" BioEnabler Hubs: Biofoundry and Biomanufacturing Hubs"

II. Functional Foods and Smart proteins

III. Precision Biotherapeutics (monoclonal antibodies, mRNA therapeutics, cell & gene therapy)

IV. Climate resilient agriculture

V. Carbon capture and utilization

VI. Futuristic marine research

VII. Bio-based Chemicals & Enzymes, Biopolymers, Active Pharmaceutical Ingredients (APIs).

BIRAC has established a network of 94 specialized bio-incubation centres across 25 States and Union Territories under its BioNEST (incubation) and E-YUVA (pre-incubation) schemes. Regular nationwide awareness programs, workshops, and webinars have been initiated, leading to increased engagement in Tier 2 and Tier 3 cities, as well as aspirational districts.

BIRAC's flagship scheme, the Biotechnology Ignition Grant (BIG), receives nearly 2,000 applications annually. To date, over 17,000 applications have been received from aspiring entrepreneurs, with more than 50% originating from non-metro and non-Tier 1 cities. Additionally, 38 aspirational districts have been successfully integrated into the program.

Equity based schemes, namely SEED (Sustainable Entrepreneurship and Enterprise Development) Fund and LEAP (Launching Entrepreneurial Driven Affordable Products) Fund, provide critical support to biotech startups at different stages of growth and are implemented through BIRAC's BioNEST incubators. SEED Fund has supported 149 high-potential biotech startups through a strategic investment of INR 45 crore, catalyzing significant downstream success. Under the LEAP Fund, 60 biotech startups have been supported.

Under PPP initiative of BIRAC, flagships schemes namely, Small Business Innovation Research Initiative (SBIRI) and Biotechnology Industry Partnership Programme (BIPP) have provided pathways to facilitate development of innovative products and technologies by small and medium companies bringing together the private industry, public institutions and the government under one umbrella to promote the research and innovation in the Indian Biotech Sector. Under these schemes, 590 projects involving 768 beneficiaries (start-ups/companies and academic institutions) have been supported. The projects have resulted in filing of 90+ IPs and about 200 products and technologies attaining TRL 7-9, many of which have already been commercialized and some others are ready to hit the market.

BIRAC supports academia to facilitate translational research in partnership with Companies to take the products and technologies of societal/national importance towards commercialization through the Promoting Academic Research Conversion to Enterprise (PACE) Scheme. The support has enabled filing of 26 IPs and resulted in 10 products/technologies reaching TRL 7-9.

The Social Innovation Programme for Products: Affordable and Relevant to Societal Health (SPARSH) is BIRAC's

flagship initiative focused on fostering social innovation to address some of the most pressing challenges faced by society. Launched in 2013, the programme has been instrumental in supporting high-impact ideas and innovations that target neglected and unmet needs, particularly in Tier II and Tier III cities across India. Through a structured immersion process, SPARSH has successfully identified and nurtured innovative solutions, many of which have been translated into sustainable and impactful enterprises.

BIRAC's BioNEST incubation center network has been accessed by 2700+ Incubatees. Considering this subset alone, more than 1,300 IPs have been filed and 800+ biotech products/ technologies reached the market.

Platforms: Bringing together the biotech community stakeholders

BIRAC has been instrumental in expanding the base of the "Innovation Pyramid," fostering a robust culture of entrepreneurship across India. Recognizing that this ecosystem is dynamic and ever-evolving, BIRAC continuously adapts its approach by revising schemes, introducing new ones, strengthening capacity building, and expanding partnerships. This agility ensures that startups and entrepreneurs receive value-added opportunities at every stage of their journey, from early-stage research to market-ready solutions.

To strengthen linkages across the ecosystem, BIRAC regularly convenes national and international platforms that foster collaboration, peer learning, and co-creation. Landmark initiatives such as Global Bio India (through four editions held in 2024, 2023, 2021 and 2019), Mission Start-up: Innovation, Technology & Entrepreneurship at IISF 2024 have established India as a global hub for biotech engagement and growth. Earlier milestones include the first-ever Biotech Start-Up Expo in 2022 and the first-time introduction of Startup Conclave as one of the fourteen side events during IISF held in January 2023.

In addition, annual and regular platforms such as BIRAC Foundation Day, Conclaves for flagship schemes and programmes such BioNEST, E-YUVA, BIG, NBM etc. provide a national platform for startups, entrepreneurs, incubators, mentors, investors and industry leaders to exchange knowledge, showcase innovations, and forge collaborations.

BIRAC has also invested in robust digital infrastructure to support its operations and enhance transparency. The 3i Portal serves as a user-friendly single-window platform for application submission, proposal screening, and post-grant monitoring, making scheme management more efficient. Complementing this effort, the Biotech Showcase e-portal (https://biotechinnovations.com) features more than 850 products and technologies from BIRAC-supported startups and companies, ensuring innovations are accessible in the public domain and visible to potential partners, investors, and collaborators.

3. AUDIT COMMITTEE

During the year 2024-25, BIRAC did not have an Audit Committee. As mandated by DPE Corporate Governance Guidelines the Audit Committee should have minimum three Directors with two thirds of them being Independent Directors and Chairman being an Independent Director. The term of four Independent Directors ended on 15th March, 2020 and only one non-official Independent Director was appointed on the Board on 27th March, 2023. Three of the four sanctioned positions still remain vacant from 15th March, 2020. BIRAC is not in a position to form an Audit Committee as per DPE Guidelines. In absence of adequate number of Non official Directors the role of Audit Committee is being discharged by the Internal Audit Committee to recommend financial matters and approval is by Board of Directors.

4. FINANCIAL STATEMENTS

The financial statements are made on accrual method of accounting under the historical cost convention, in accordance with the accounting standards issued by the Institute of Chartered Accountants of India.

5. ANNUAL RETURN

Pursuant to Section 92(3) read with Section 134(3)(a) of the Companies Act 2013, the Annual Return as on 31st March, 2025 is available on the BIRAC website at url https://www.birac.nic.in/desc_new.php?id=957.

6. NUMBER OF MEETINGS OF THE BOARD

The Board met Four times during the financial year, the details of which are given in the Corporate Governance Report, which forms a part of the Annual Report. The intervening gap between any two meetings was as prescribed under the Companies Act, 2013.

7. PARTICULARS OF CONTRACTS OR ARRANGEMENTS MADE WITH RELATED PARTIES

BIRAC has not entered into any contracts or arrangements with related parties as per the provisions of Section 188(1) of the Companies Act, 2013.

8. RTI

BIRAC follows all the necessary procedures and processes in accordance with the Right to Information Act, 2005, as amended from time to time and Government Guidelines. It has appointed a Central Public Information Officer (CPIO), Deemed Public Information Officer (DPIO), Transparency Officer and Appellate Authority. The details are available on BIRAC website at url https://www.birac.nic.in/desc_new.php?id=184.

9. RISK MANAGEMENT POLICY

BIRAC has a Risk Management Policy in place approved by the Board. The mandate of BIRAC is to nurture innovation by mentoring and funding high risk, highly innovative projects by itself or with multiple partners throughout the innovation value chain, namely, early-stage innovation research, product development, product validation and commercialization. BIRAC, being a Government organization, the need for Risk Management is reflected in its commitment to ensure transparency and public accountability of its partnerships, activities and schemes. The schemes, activities, workshops and partnerships are monitored by Standard applications, formats and funding agreement which have inbuilt controls and accountability mechanisms at every stage.

There is a proper technical evaluation of projects by a committee of experts and an in-house legal drafting and vetting process, financial due diligence and screening of projects is undertaken, internal controls and audit protocols are in place with the Comptroller & Auditor General of India (C&AG) conducting supplementary audit.

Risk Management monitoring process in the organization is based on compliance reporting in the Risk calendar which is circulated to all the Department Heads with comprehensive parameters drawn from the Risk Register for managing schemes, activities and providing funding support. The Board ensures the integration and alignment of the risk management system with the corporate and operational objectives and also ascertains that risk management is undertaken as a part of normal business practice and not as a separate task at set times.

10. IMPLEMENTATION OF OFFICIAL LANGUAGE

A Rajbhasha Implementation Committee has been constituted in BIRAC to ensure compliance with the Official Language (Hindi) policy in the office during each quarter. The Committee reviews the status of Hindi usage in the office, its application in official correspondence, and other related activities through quarterly meetings. It also addresses and resolves issues arising in the implementation of Rajbhasha.

During the Financial Year 2024–2025, a total of four meetings of the Rajbhasha Implementation Committee and four Hindi workshops were successfully organized. Through these activities, all officers and employees were encouraged to make greater use of Hindi in official work. Hindi Pakhwada was also celebrated in the month of September. The celebration commenced with Hindi Diwas on 14th September 2025 and concluded on 29th September 2025.

BIRAC is also a member of the Town Official Language Implementation Committee (NARAKAS); hence, the organization actively participates in various activities organized by NARAKAS related to the implementation of the Official Language.

11. DISCLOSURE UNDER THE SEXUAL HARASSMENT OF WOMEN AT WORKPLACE (PREVENTION, PROHIBITION AND REDRESSAL) ACT, 2013

BIRAC has in place an Internal Complaints Committee under the Prevention of Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the rules notified thereunder with the terms of reference as required under the CSS (Conduct) Rules and the Guidelines laid down by the Hon'ble Supreme Court in Vishaka and others vs. State of Rajasthan. The mandate of the Internal Complaints Committee is to redress the complaints, if any, received regarding sexual harassment as defined in the said Act.

Number of Sexual Harassment Complaints received	NIL
Number of Sexual Harassment Complaints disposed off	NIL
Number of Sexual Harassment Complaints pending beyond 90 days	NIL

All employees of BIRAC including regular employees, contractual, part time, daily wage earners, either employed directly or through an agent or contractor, whether for remuneration or not, trainees, apprentices, those working on a voluntary basis, directors and experts on various committees are covered under this policy.

The organisation has not received any grievances under this Act, during the financial year 2024-25. During the year 2024-25, a workshop was conducted on "Gender Sensitization & Prevention of Sexual Harassment at Workplace" to sensitise the employees on Gender issues and educate them on the various aspects of the Act.

Gender composition

Number of employees as on the closure of Financial Year

Female	46
Male	29
Transgender	NIL

12. COMPLIANCE UNDER MATERNITY BENEFIT ACT,1961

Your Company has complied with all applicable provisions of the Maternity Benefit Act, 1961.

13. PROCUREMENT FROM MICRO AND SMALL ENTERPRISES (MSEs)

The Total annual procurement for financial year 2024-25 was ₹ 4,89,53,292/-, out of which the procurement from MSEs was ₹ 3,16,43,529/- amounting to 65.00% of the total procurement and the procurement from MSEs owned by Women Entrepreneurs was ₹92,125/- amounting to 0.33% of the total procurement from MSEs.

14. DIRECTORS RESPONSIBILITY STATEMENT

In accordance with the provisions of Section 134(5) of the Companies Act, 2013, the Directors' state that:

- in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
- the directors have selected such accounting policies and applied them consistently and made judgements and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the Statement of Income and Expenditure of the company for that period;
- the directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- the directors have prepared the annual accounts on a going concern basis; and
- the directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

15. CORPORATE GOVERNANCE

A separate report on Corporate Governance is annexed with this report.

16. AUDITORS' REPORT

M/s Gupta Garg & Agrawal, Chartered Accountants are the Statutory Auditors of the Company appointed by the Comptroller and Auditor General of India for the period under review (Financial Year 2024-25). The Auditors' report and C&AG report are appended to the financial statements and are self-explanatory and suitably explained in the Notes to the accounts.

17. (a) BANKERS

The Bankers of the organization are:

- Union Bank of India, Block 11, CGO Complex, Lodhi Road, New Delhi-110003.
- State Bank of India, Core 6, SCOPE Complex, Lodhi Road, New Delhi-110003
- HDFC Bank Ltd., A3 NDSE, South Ex Part 1, New Delhi-110049
- Union Bank of India, MTNL Building, Opp. Gate No. 13 JLN Stadium, New Delhi-110003.
- ICICI Bank, E 30, Saket, New Delhi-110017
- RBI, No. 6, Sansad Marg, New Delhi-110001

(b) Treasury Single Account- As per DoE, Ministry of Finance, OM No 1/(18)/PFMS/FCD/2021 dated 9th March, 2022 regarding flow of funds under Central Sector Schemes, BIRAC has opened Zero Balance Subsidiary Account (ZBSA) with ICICI Bank as a subsidiary account of a Central Nodal Agency (CNA), National Institute of Plant Genome Research (NIPGR) and National Institute of Immunology (NII) for disbursement to Grantees are processed out of the allocated drawing limits in ZBSA account. Further, as per DBT communication, Treasury Single Account (TSA) has been opened with RBI for BIRAC Core grant and payment are made through TSA account.

18. ABOUT DIRECTORS

BIRAC is guided by a Board comprising of senior professionals, academicians, policy makers and eminent professionals from the industry. Dr. Rajesh S. Gokhale, Secretary, DBT is the Chairman of BIRAC w.e.f 1st November, 2021. Dr. Jitendra Kumar is the Managing Director of BIRAC w.e.f 9th June, 2023. The tenure of Shri Vishvajit Sahay, Additional Secretary & Financial Advisor, DBT and Government Nominee Director, BIRAC ended 20th January, 2025. Ms. Ekta Vishnoi Joint Secretary (Administration) was appointed as Government Nominee Director in place of Shri Vishvajit Sahay with effect from 12th March, 2025. CA. Nidhi Shrivastava was appointed as Director (Finance) w.e.f 15th December, 2021 on the Board of BIRAC. Dr. Penna Krishna Prasanthi was appointed as Non-Official Independent Director w.e.f 27th March, 2023 on the Board of BIRAC.

19. CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO

The information pertaining to conservation of energy, technology absorption, foreign exchange earnings and outgo as required under Section 134(3)(m) of the Companies Act, 2013 read with Rule 8(3) of the Companies (Accounts) Rules, 2014 is as follows:

A. Conservation of Energy

Disclosure regarding conservation of energy is not applicable to our Company.

B. Technology Absorption, Adoption and Innovation

Particulars required under Rule 8(3)(B) of the Companies (Accounts) Rules, 2014 have not been given since the company has no direct Research and Development activity. However, the main function of BIRAC is to

facilitate and provide financial support for generation and translation of innovative ideas into biotech products/technologies, foster innovation in all places of research and to encourage diffusion of innovation through partners. The details are provided in the Management Discussion and Analysis Report.

C. Foreign Exchange Earnings & Outgo

The foreign exchange earnings and outgo during the year are given below: (₹ in lakh)

Grant Received in Foreign Exchange/Indian Rupee to the Extent Utilized	
A. Outflow from grant received in Foreign Exchange in Indian Rupees	2536.79
B. Foreign Exchange Outflow from grant received in Rupees	
1. Books, Journal and Database Subscriptions	23.90
2. Entrepreneurship Development	-
3. Advertisement/Publicity/Publication	-
4. Foreign Travel and Meetings	5.70
C. CIF Value of Import	-

20. PARTICULARS OF LOANS, GUARANTEES OR INVESTMENTS UNDER SECTION 186 OF THE COMPANIES ACT, 2013

The details of Loans and investments as covered under the provisions of Section 186 of the Companies Act, 2013 are given in notes no. 7 and 8 of notes forming part of the Balance Sheet as on March 31, 2025. These investments were made on behalf of DBT (Department of Biotechnology). These Loans and advances were given under the BIRAC schemes.

21 SIGNIFICANT ORDERS PASSED BY REGULATORS OR COURTS OR TRIBUNAL

There are no significant material orders passed by the Regulators/Courts/Tribunals which would impact the going concern status of the Company and its future operations.

22. FRAUDS REPORTED BY AUDITORS UNDER SECTION 143(12), OTHER THAN THOSE WHICH ARE REPORTABLE TO THE CENTRAL GOVERNMENT

The Statutory Auditors have not reported any incident of fraud to the Board of Directors of the Company.

23. DETAILS OF APPLICATION MADE OR ANY PROCEEDING PENDING UNDER THE INSOLVENCY AND BANKRUPTCY CODE, 2016 (31 OF 2016) DURING THE YEAR ALONG WITH THEIR STATUS AS AT THE END OF THE FINANCIAL YEAR

The Company has filed the CIRP proceeding in which six cases were pending under the Insolvency and Bankruptcy Code, 2016 (31 of 2016) as on March 31, 2025. Total amount outstanding is ₹ 399,483,087/-.

24. ONE-TIME SETTLEMENT AND VALUATION

Biotechnology Industry Research Assistance Council (BIRAC) a not-for-profit Section 8, Schedule B, Central Public Sector Enterprise (CPSE), set up by Department of Biotechnology (DBT), Government of India has not taken any loan from Banks and Financial Institutions.

25. CORPORATE SOCIAL RESPONSIBILITY UNDER SECTION 135 OF COMPANIES ACT, 2013

(a) CSR Contribution by BIRAC

The Board in its 64th Board Meeting held on 16th December, 2024 deliberated CSR under the amended rules, the applicability of CSR provisions must be assessed annually. For FY 2023-24, Net surplus is less than Rs. 5 crores hence CSR provisions for the current financial year (FY 2024-25) are not applicable. As per Companies Act, 2013, BIRAC is not Statutorily obliged to allot CSR budget for the Financial Year 2024-25

A detailed report on CSR activities as per the provisions of the Companies Act, 2013 is available at Annexure-1 to this report. The CSR policy of the Company has been provided on the Company's website at https://www.birac.nic.in

(b) To take note of CSR funding received by BIRAC.

BIRAC has registered itself as an implementing agency under the Companies Act 2013 and rules made there under vide filling Form CSR-1 to the Ministry of Corporate Affairs (MCA). The CSR registration number is CSR00025388.

BIRAC can undertake CSR activities as permitted by its Memorandum of Association and for activities as specified under Schedule-VII 9(a) of the Companies Act, 2013.

"9(a) Contribution to incubators or research and development projects in the field of science, technology, engineering and medicine, funded by the Central Government or State Government or Public Sector Undertaking or any agency of the Central Government or State Government."

BIRAC being a Section 8 company, the Board in its 40th Board Meeting held on 12th February, 2020 has approved accepting CSR fund for furthering the mandate of BIRAC for setting up Incubation centers and innovation networks in the country.

CSR funds received and utilised during the Financial Year 2024-25 (₹ in lakh)

Particulars	Stryker Global Technology Center Private Limited	Stryker India Private Limited
Opening Balance as on 1st April 2024	7.66	1.93
Add: Interest earned during the year	0.20	0.05
Add: Fund received during the Financial Year	0.00	0.00
Less: Fund Utilized during the Financial Year	5.02	1.27
Closing Balance as on 31st March 2025	2.84	0.71

ACKNOWLEDGMENT

The Directors wish to place on record their appreciation for the valuable guidance and co-operation extended by the Auditors, Banks and various Government agencies. The Directors also wish to place on record their appreciation for the sincere efforts put in by the executives and staff of the Company.

For and on behalf of Board

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN : 07017109

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN : 09436809

Date: 24th September, 2025
Place: New Delhi

MANAGEMENT DISCUSSION AND **ANALYSIS REPORT**

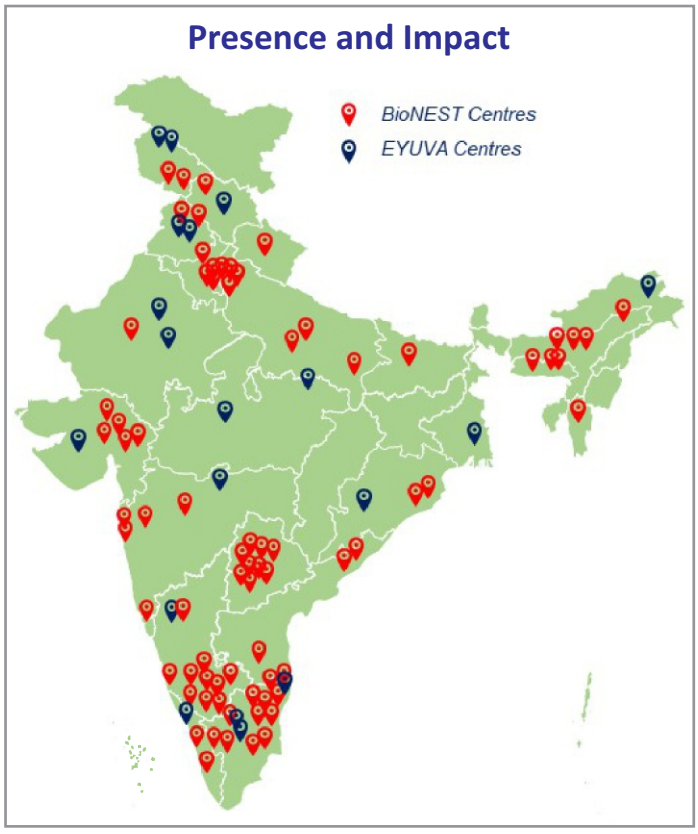
BIRAC SCHEMES

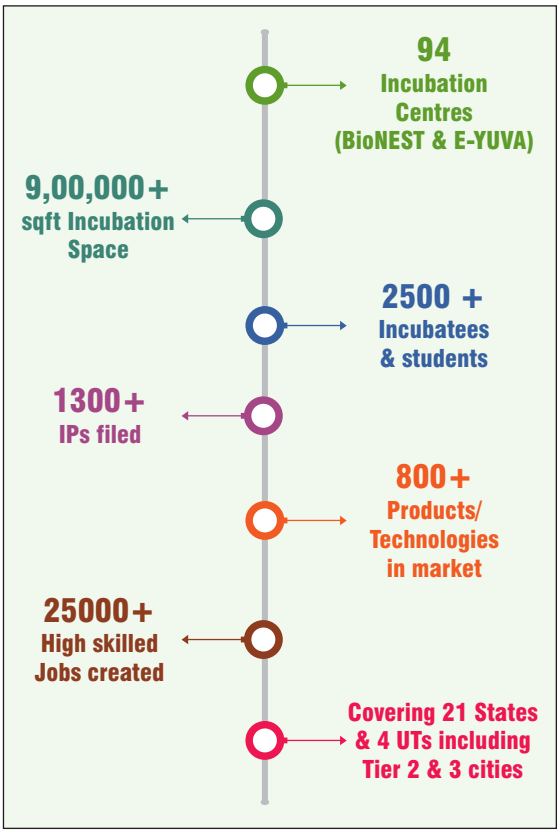
Bioincubators Nurturing Enterprises for Scaling Technologies (BioNEST)

BIRAC's BioNEST network has expanded to comprise 75 Bioincubators and 19 E-YUVA Centres contributing to a cumulative incubation space exceeding 9,00,000 sq. ft. and supporting over 2700 entrepreneurs & Startups.

Following activities were undertaken in the FY 2024-25:

- Continued support of the existing 75 BioNEST Incubation Centres.
- More than 2,500 Incubatees supported through the network of BioNEST Incubation Centres.
- Periodic expert review meetings were conducted to review progress of ongoing Incubation Centres.
- Onboarding of 10 new BioNEST centres is under process which includes, technical due diligence, Financial Due Diligence and legal formalities.
- A New Call for proposals under the BioNEST scheme was announced from 15th Feb - 31st March 2024 attracting 116 proposals. These proposals were presented before the Preliminary screening and selection Committee and after two rounds of selection 19 proposals have been finalised for APEX committee review.
- BioNEST Centres regularly organize workshops, mentoring programs for startups, new incubators etc. (Approx 200 such events are organized by the BIRAC network of BioNEST centres during the year).





Highlights of the FY 2024-25:-

1. **Startup Expo in Kathua, Jammu:**

Mega Startup Expo at Kathua was organized on 4th Jan 2024 and inaugurated by Hon'ble Vice President of India, Shri Jagdeep Dhankhar, in the august presence of Dr. Jitendra Singh, Union Minister of State (Independent Charge) Science & Technology.

Startup Expo in Kathua

This Startup Expo under the theme, "Emerging Startup Trend in North India", was organized jointly by Biotechnology Industry Research Assistance Council (BIRAC), DBT, GoI and CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, wherein a total of 25 Startup from North India Incubation ecosystem showcased their innovations and products.

2. **BioNEST & E-YUVA Conclave:**

The BioNEST - E-YUVA Conclave, held on 17th May 2024, in New Delhi brought together key stakeholders from the bio-incubation ecosystem for insightful discussions, knowledge exchange and collaboration in life sciences innovation. With participation of over 100+ leaders from the Bioincubation community across the country the event provided an opportunity to network, collaborate, learn from seasoned veterans in the field. The event was graced by Dr Kalaiselvi, DG CSIR; Dr. Mamidala Jagadesh Kumar, UGC Chairman; Dr. Rajeev Raghuvanshi, Drug Controller General of India; Dr Alka Sharma, Sr. Adviser DBT and Dr Jitendra, MD BIRAC.

BioNEST & E-YUVA Conclave

The conclave featured technical sessions focused on different aspects of incubation and entrepreneurship development. Overall, the conclave served as a key platform for fostering interaction, collaboration, and strategic planning to enhance the incubation ecosystem and support the growth of emerging biotech startups across India.

3. Global Bio-India 2024:

BIRAC along with its BioNEST Incubation centres organised around 60 Roadshows across the nation to create awareness about BIRAC initiatives and to motivate students, researchers and scientists towards entrepreneurship. These roadshows also created awareness about the Global BioIndia 2024 which was organised from 12-14 Sept 2024. These Roadshows were conducted in 45 Cities including 38 Tier 2/3 cities. More than 10,000+ Participants were sensitized through these events.

Glimpses of the Roadshows organised during 2024-2025

- **Incubator Pavilion:** Around 95+ Bioincubation centres participated and exhibited in the Global Bio-India 2024 and took up booths.
- **Master Class for Incubators:** BIRAC along with Indian STEPs and Business Incubators Association (ISBA) organised a masterclass for incubator managers on two important aspects that impact the outcomes of the incubation - Building a Quality Pipeline for Incubation and Financial and Operational Sustainability of the Incubation Centre.

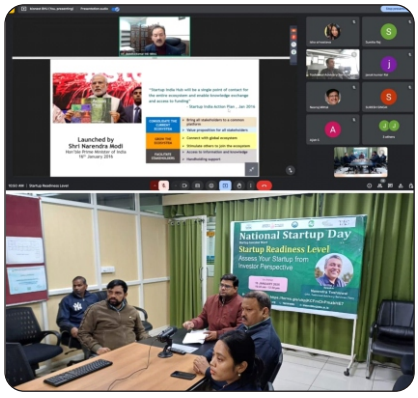
Master Class for Incubators

- **Incubation Awards:** Best Incubation Centre Awards were presented under different categories to following incubation centres during the Global Bio-India 2024:
  - **Best Incubation Centre (Tier I Cities):** BSC BioNEST Bio-Incubator, RCB, Faridabad Delhi NCR, was recognized for its excellence in supporting and accelerating biotech startups in a major metropolitan region.
  - **Best Incubation Centre (Tier II Cities):** PSG-STEP, Coimbatore, and Manipal Govt. of Karnataka & BioNEST Bioincubator, Mangalore, received joint recognition for their outstanding contributions in creating thriving innovation environments in their respective regions.
  - **Best Incubation Centre (Tier III Cities):** Technology Innovation and Development of Entrepreneurship Society (TIDES), IIT Roorkee, was honoured for its impactful efforts in driving entrepreneurship and innovation in smaller cities.
  - **Best Incubation Centre Exhibit:** E-YUVA Centre, Career College Bhopal, was awarded for presenting a stellar exhibit that showcased its role in supporting students and researchers for undertaking translational research.

Incubation Awards

4. National Startup Day:

On the occasion of National Startup Day, celebrated on 16th January 2025, Dr. Jitendra Kumar, MD BIRAC, addressed bioincubation centres across the country. The day was marked by vibrant celebrations at BioNEST, E-YUVA, and SPARSH centres nationwide, featuring pitch sessions, innovation showcases, and engaging panel discussions.



National Startup Day

Glimpses of the Bioincubation Facilities supported by BIRAC:

Bioincubation Facilities

E-YUVA

E-YUVA (Empowering Youth for Undertaking Value Added Innovative Translational Research) scheme is an initiative of BIRAC designed to cultivate a culture of applied research and innovation among young students across India. The scheme provides structured support to student innovators at the undergraduate, postgraduate, and doctoral levels through mentorship, fellowships, research grants, and access to incubation facilities.

Dedicated E-YUVA Centres, established within select academic and research institutions, act as innovation hubs to identify, mentor, and nurture promising student-led ideas. Each centre is strategically linked to a BIRAC-supported BioNEST Centre (Knowledge Partner) to facilitate deeper entrepreneurial engagement and translational outcomes.

Since its inception, the E-YUVA scheme has played a transformative role in fostering a pipeline of young biotech innovators and strengthening grassroots-level entrepreneurship.

Support under E-YUVA Scheme:

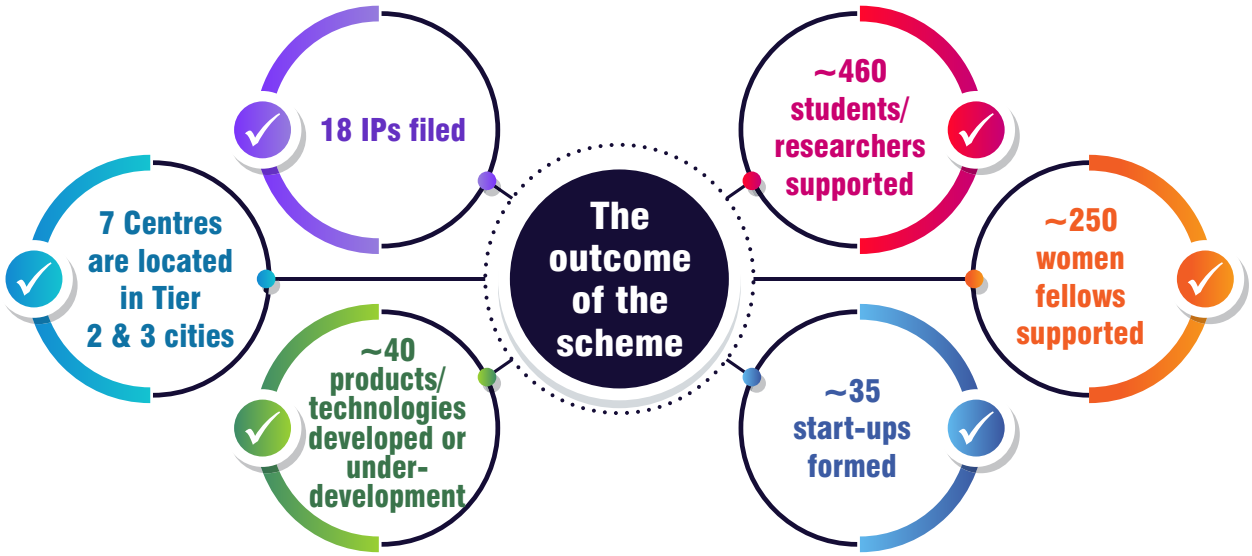
1. **E-YUVA Centres**
   - Pre-incubation space (3,000 sq. ft. or more)
   - Conduct Entrepreneurial Awareness Workshops & Fellowship management
2. **Fellowships:**

   a) E-YUVA Fellows
   - A team of 3-5 UG pursuing students, guided by a mentor
   - Fellowship and mentoring support for 12 months

   b) Innovation Fellows
   - Students who have completed post-graduation/PhD
   - Selected fellows work full-time from the EYC
   - Fellowship and mentoring support for 18 months

E-YUVA Network:

The E-YUVA scheme has demonstrated substantial growth, expanding its national footprint from 10 to 19 pre-incubation centres across 15 States and Union Territories. Through two national calls, the scheme has supported over 450 Fellows, comprising undergraduate, postgraduate, and postdoctoral students. These centres continue to nurture a vibrant culture of innovation and translational research among young minds, contributing to the development of a strong pipeline of early-stage biotech innovators.



Highlights of the FY 2024-25:

1. **BioNEST & E-YUVA Conclave** held on 17th May 2024, an insightful discussion on "E-YUVA: Igniting Innovation through Preincubation" was held where panellists shared their experiences, challenges and learnings. The panel comprised representatives from both young and mature E-YUVA centres such as Panjab University, Adamas University, Anna University, Chennai and Career College, Bhopal along with E-YUVA Committee Chair Ms. Geetika Dayal and moderated by Ms. Shilpy Kochhar, Head BDCOM, BIRAC.


BioNEST & E-YUVA Conclave

2. **Active engagement during Global Bio India 2024:**
   - All E-YUVA Centres successfully organised road show to promote Global Bio-India 2024 and also to create awareness about BIRAC's various initiatives.
   - E-YUVA Centres and their respective fellows actively participated during the Global Bio India (GBI) 2024.
   - The E-YUVA Centre at Career College, Bhopal was awarded the Best Incubation Centre Exhibit at GBI 2024 for its outstanding showcase of entrepreneurial initiatives and support for translational research in biotechnology.


Glimpses of EYUVA Centres participation during Global BioIndia 2024

3. **E-YUVA Centres** organised 100+ workshops, exposure visits and training programs for fellows and other students to create awareness among the young minds towards Entrepreneurship. Focused events on topics such as IP, Regulatory, entrepreneurship in life-sciences etc were organised across the country.

Glimpses of events organised by the EYUVA Centres during FY 2024-25

Early Translation Accelerator (ETA)

Early Translation Accelerator (ETA), focusses on catalyzing transformation of young academic discoveries (publications /patents) with possible commercial and societal impact into economically viable ventures and technologies. The proposed set up is expected to collaborate with academic investigators, engage industry and to leverage international translation ecosystems. Supporting early translation accelerator for establishing validation/proof-of-concept is in line with the BIRAC's mission of facilitating translation of innovative ideas into biotech products and attracts industry to take validated technologies (originated from academic labs) forward in terms of development.

Critical components of ETA:

1. Continuous flow of discoveries with potential applications from academic investigators.
2. A scientific component that evaluates, collaborates and provides technology access to the discovery projects.
3. Early engagement with industry and investors to help drive the discoveries and validated technologies towards successful commercialization through mentoring, partnerships and technology transfer.

Major Achievements:

- To date, seven ETAs have been established. ETAs at C-CAMP and Yenepoya Foundation for Technology Incubation, established for health care, IIT-Madras Bio incubator, EDC-VC and BBB-RCB for Industrial Biotechnology and, KIIT-TBI and BETIC –IIT Bombay for Devices & Diagnostics, respectively.
- ETA at C-CAMP completed 3 projects with the support of ETA funding and filed 2 patents. The industries have embraced all of the technologies developed by C-CAMP.
- ETA at IIT-Madras bio-incubator has completed 04 projects in the field of Industrial Biotechnology and is in negotiation with the industries for adoption of the technologies.
- Clinical validation is in progress for the projects supported under ETA-Yenepoya, and Clinical validation has been completed for the projects supported under ETA-BETIC.
- Projects to be undertaken for translation at KIIT-TBI and EDC-VC were further recommended by the ETA expert committee.
- Project identification is in progress at 7th ETA, i.e. BBB-RCB in the area of Industrial Biotechnology.

Yenepoya Technology Incubator	BETiC	IITM BIOINCUBATOR
ETA: focused on Healthcare	ETA: focused on Devices & Diagnostics	ETA focused on Industrial Biotechnology
C-CAMP Centre for Cellular and Molecular Platforms	VENTURE CENTER	KIIT KIIT Technology Business Incubator KIIT-TBI
ETA: focused on Healthcare	ETA focused on Industrial Biotechnology	ETA: focused on Devices & Diagnostics
	BBB BSC BioNEST Bio-Incubator	
	ETA focused on Industrial Biotechnology	

Social Innovation Programme for Products Affordable & Relevant to Societal Health (SPARSH)

Sparsh Touching a billion lives

BIRAC, under the aegis of DBT, Govt. of India, initiated the SPARSH program in 2013, aimed at promoting the development of innovative solutions to society's most pressing problems through biotechnological approaches. The programme has been investing in high impact ideas and innovations that could address neglected unmet needs and challenges of society. It creates social startups by enabling an entrepreneur ecosystem. The program witnessed 3 phases with establishment of 22 SPARSH centres and more than 150+ SPARSH fellows. Two phases of SPARSH created innovations in the following six thematic areas:

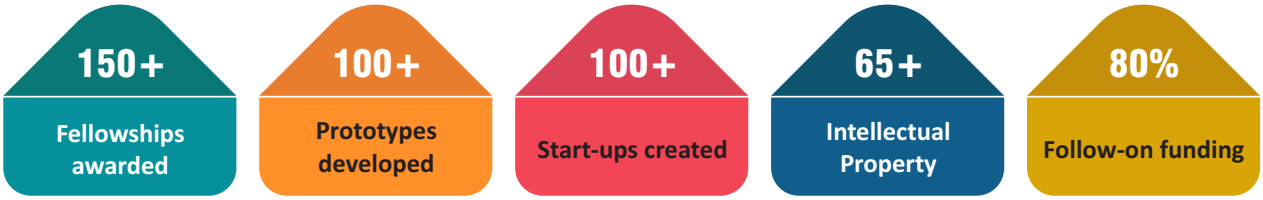
- Maternal and Child Health
- Ageing and Health
- Food and Nutrition
- Waste to Value
- Combating environmental pollution and
- Agri-Tech (including reducing post-harvest losses)

With phase III, the program has expanded to 18 SPARSH Centres (3 in collaborations) and 3 Knowledge Partners for creating social impact with 270 young entrepreneurs.

SPARSH centres and knowledge partners all over in India

PHASE I	
SPARSH CENTRES	**STATE**
Villgro Innovations Foundation	Tamil Nadu
KIIT-TBI Bioincubator	Odisha
Entrepreneurship development Center	Maharashtra
Translational Health Science and Technology Institute	Gurgaon
KIIT TBI Bioincubator	Odisha
C-Camp	Karnataka
SCTIMST- TIMED	Kerala
Entrepreneurship Development Center	Maharashtra
PHASE II	
Healthcare Technology Innovation Center, IIT Madras HTIC	Tamil Nadu
Atal Incubation Centre (AIC CCMB)	Hyderabad, Telangana
Villgro Innovations Foundation	Tamil Nadu
IIM Calcutta Innovation Park	Kolkata West Bengal
IIITM-K	Trivandrum
(Maker Village)	Kerala
PSG-STEP, Coimbatore	Coimbatore Tamil Nadu
Foundation for Innovation and Technology Transfer FITT	New Delhi
FIRST, IIT Kanpur	Kanpur Uttar Pradesh
Yenepoya Foundation for Technology Incubation	Mangalore Karnataka
IKP Knowledge Park	Hyderabad, Telangana
KIIT-TBI Bioincubator	Odisha
Entrepreneurship Development Center EDC	Pune Maharashtra
CCAMP Centre for Cellular and Molecular Platforms	Bangalore Karnataka
SCTIMST-TIMED	Trivandrum Kerala
KNOWLEDGE PARTNERS	
TISS	Maharashtra
PHASE III	
PSG-STEP, Coimbatore	Coimbatore, Tamil Nadu
Foundation for Innovation and Technology Transfer	New Delhi
SCTIMST-TIMED (in collaboration with	Trivandrum, kerala
IIITM-K (Maker Village))	Trivandrum, kerala
Atal Incubation Centre - Centre For Cellular and Molecular Biology	Hyderabad, Telangana
Yenepoya Foundation for Technology Incubation	Mangalore, Karnataka
KIIT Technology Business Incubator (in collaboration with	Bhubaneswar, Orissa
Bhubaneswar City Knowledge Innovation Cluster Foundation) (BCKIC)	Bhubaneswar, Orissa
Bio-resources Development Centre, Upper Shillong in collaboration with	Shillong, Meghalaya
(IIT Guwahati Technology Innovation and Development Foundation)	Guwahati, kamrup, Assam
Society for Technology Business Incubator, IISER Mohali	Mohali, Punjab
Golden Jubilee Women Biotech Park, Chennai	Kanchipuram, Tamil Nadu
Birla Institute of Technology and Science Pilani	Pilani, Rajasthan
Parul University	Vadodara, Gujarat
T K Narayanappa Foundation	Bengaluru, Karnataka
University of Petroleum And Energy Studies (UPES)	Dehradun, Uttaranchal
TIEDS, IIT Roorkee	Uttarakhand, Uttaranchal
Association for Bio-inspired Leaders and Entrepreneurs at SASTRA	Kodambakkam, Chennai, Tamil Nadu
KNOWLEDGE PARTNERS	
TISS Incube Foundation	Rajgurunagar, Pune, Maharastha
IIT Madras-Gopalakrishnan Deshpande Centre for Innovation and Entrepreneurship	Chennai, Tamil Nadu
Association of Biotechnology Led Enterprises	Bangalore, karnataka

SPARSH, plays a transformative role in bridging biotechnology innovation with grassroots social impact in India. It is aligned strongly with SDG 3 (Good Health and Well-being), SDG 6 (Clean Water and Sanitation), and SDG 9 (Industry, Innovation and Infrastructure) and also supports the national mission by fostering self-reliant biotech solutions tailored for Indian community. It provides funding, mentoring, and immersion for young entrepreneurs for developing solutions through social startups.



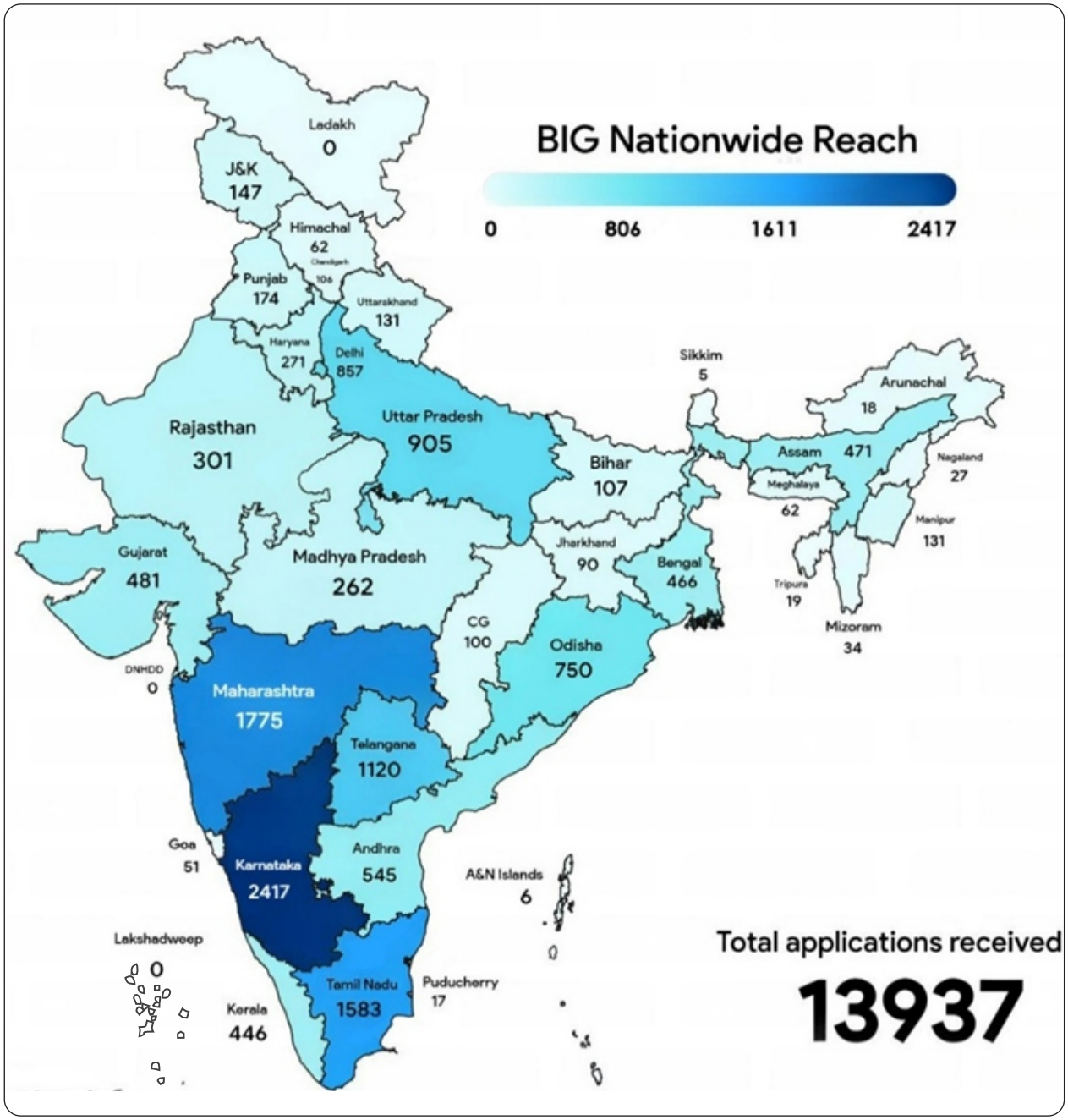
SPARSH impact

The SPARSH program has effectively identified novel solutions through rigorous immersion and facilitated the creation of 100+ startups. A few successful startups with their themes are listed below:

Startups created through SPARSH	Theme
Dhanvantri Biomedical Pvt Ltd., Miraqules MedSolutions Pvt Ltd., Sabera Healthcare Pvt Ltd., Prantae	Public health
Vivesty green recyclers Pvt Ltd., Craste, Green Amor Ventures Pvt Ltd., Greenik, Sustainable Ventures Pvt Ltd., New Unnat India Technosolution & Innovation Pvt Ltd., KMPK Innovation pvt. Ltd., Renergizr Industries Pvt Ltd.,	Environment sustainability and climate resilience
Green Pod Labs Pvt Ltd., Smart Aquaculture Monitoring system, Resnova Technologies Private Limited, Turtleback Technologies Private Limited, Purple Matter Technologies Pvt. Ltd., SWEAF Soul Ventures Pvt. Ltd.,	Agriculture and allied sectors
Thynaa Healthy Naturally Pvt Ltd., Renaissance Super foods Pvt. Ltd., Greenikk Janitri Craste	Upliftment of the backward communities /rural and weaker sections of the society

Biotechnology Ignition Grant (BIG)

The Biotechnology Ignition Grant (BIG) is the flagship initiative of BIRAC, designed to empower young startups and individual entrepreneurs at the ideation stage. Launched in 2012, BIG is one of India's largest early-stage funding programs in the biotechnology sector. It provides a grant of up to INR 50 lakhs for a period of 18 months to support the translation of innovative ideas into proof-of-concept. The program offers a strategic blend of financial support and enabling infrastructure, covering critical aspects such as incubation, access to equipments, operational costs, team building, mentorship, and training.



BIG is implemented through a network of eight BIG Partners, BIRAC's leading BioNEST bioincubators. These partners offer end-to-end support including awareness creation, intensive mentoring (technical, IP, and business), hand holding throughout the project lifecycle, and networking opportunities, extending assistance from pre-submission stage to completion of the project and even after.

Over the past 13 years, the successful implementation of the Biotechnology Ignition Grant (BIG) scheme has significantly fostered a robust culture of biotech entrepreneurship across India. Since its inception, the program has received close to 14000 applications and supported close to 1,000 high-potential projects. BIRAC has committed approximately INR 500 Crores under the BIG scheme, making it a cornerstone of early stage biotech innovation funding in the country. The impact of BIG has been far-reaching, it has enabled the creation of numerous startups, led to the development of over 200 innovative products and technologies, and facilitated the filing of more than 800 IPs. The scheme has also played a key role in promoting inclusive innovation, with nearly 250 women entrepreneurs supported, and has contributed to the creation of a highly skilled workforce of over 3,500 professionals. Many BIG grantees have gone on to achieve national and international recognition, winning prestigious awards and accolades. Notably, over 150 grantees have collectively secured more than INR 3,500 Crores in follow-on funding from private investors- underscoring the scheme's effectiveness in de-risking early innovation and catalyzing scale-up and commercialization.

During the financial year 2024-25 following activities were carried out:

- BIG 24th Call was launched on 14th April 2024 and 1752 applications were received under the call. Out of the total received applications, 51 new projects were recommended for support after multi-tiered selection process.

- A series of grant writing workshops were organized to raise awareness about the 24th call of BIG scheme. These sessions aimed to support early-stage biotech entrepreneurs by providing guidance on crafting competitive BIG proposals.
- The 4th edition of Global Bio-India 2024 was organized by Biotechnology Industry Research Assistance Council (BIRAC) and Department of Biotechnology (DBT). It was a three-day event from 12-14 September 2024 providing a platform to BIG supported start-ups to showcase their products and technologies. Many grantees were conferred with awards and some also got an opportunity to launch their products.

o **BIRAC Innovators Awards** were presented to the following startups for their outstanding achievements in various biotech categories, acknowledging their contributions to advancing India's innovative bioeconomy:

1. **Biomedical Devices & Diagnostics and Bioinformatics:** Piscium Health Sciences, Mumbai and Sensivision Health Technologies, Bengaluru
2. **Industrial Biotechnology:** GPS Renewables, Bengaluru

Piscium Health Sciences Pvt

Sensivision Health Technologies

GPS Renewables

Glimpses of BIG Grantees being felicitated with BIRAC Innovation Awards

- **BIRAC Best Startup Exhibitor Awards** were presented to the following trailblazing companies for their outstanding contributions to biotechnology:

1. **Industrial Biotechnology:** Rigel BioEnviron Solutions Private Limited
2. **Healthcare Therapeutics:** Apramitha Innovations Private Limited
3. **Healthcare Devices and Diagnostics:** Denovo Bioinnovations Private Limited

Rigel BioEnviron Solutions Pvt. Ltd.

Apramitha Innovations Pvt Ltd

Denovo Bioinnovations P. Ltd.

Glimpses of BIG Grantees being felicitated with BIRAC Best Startup Exhibitor Awards

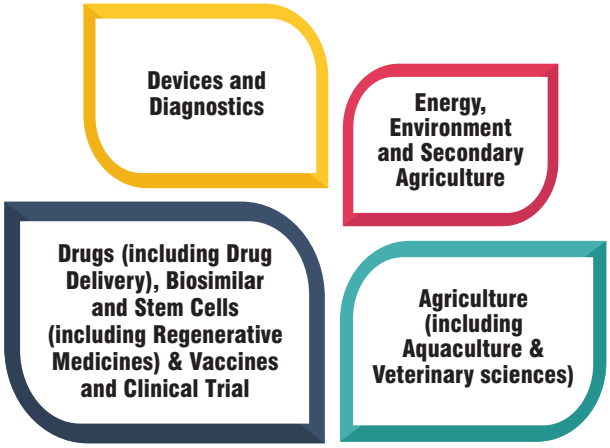
- **5 BIG supported start-ups launched their products during GBI 2024**

1. **Tishyas Medical Device Development Solutions Private Limited:** Developed IXanner 7vn: A Portable and handheld device for comprehensive screening of the eye using Optical Coherence Tomography
2. **Nanosafe Solutions:** Active copper based antimicrobial technology formulations for coating, plastics, textiles, foam and cosmetics, construction chemicals
3. **Neuome Technologies Private Limited:** Developed instaPRESERVE®, a solution for collection transport and storage of biospecimen at ambient temperature
4. **Ripple Healthcare Private Limited:** Developed Hip Pro - Advanced airbag technology protects your hips and reduces the risk of injury due to fall
5. **Kcat Enzymatic Private Limited:** Developed Transaminase (Greenaminase®) & Hydroxylase (Greenhydroxylase®) enzymes designed to reduce carbon footprints, support sustainability, and provide cost-effective solutions for the production of APIs, and drug.

Intensifying the Impact of Industrial Innovation (i4)

The i4 programme supports biotechnological product/technology development by strengthening R&D capabilities of start-ups/companies/LLPs. The programme is operated through two schemes:

Proposals funded under i4 are categorized under the following thematic areas:



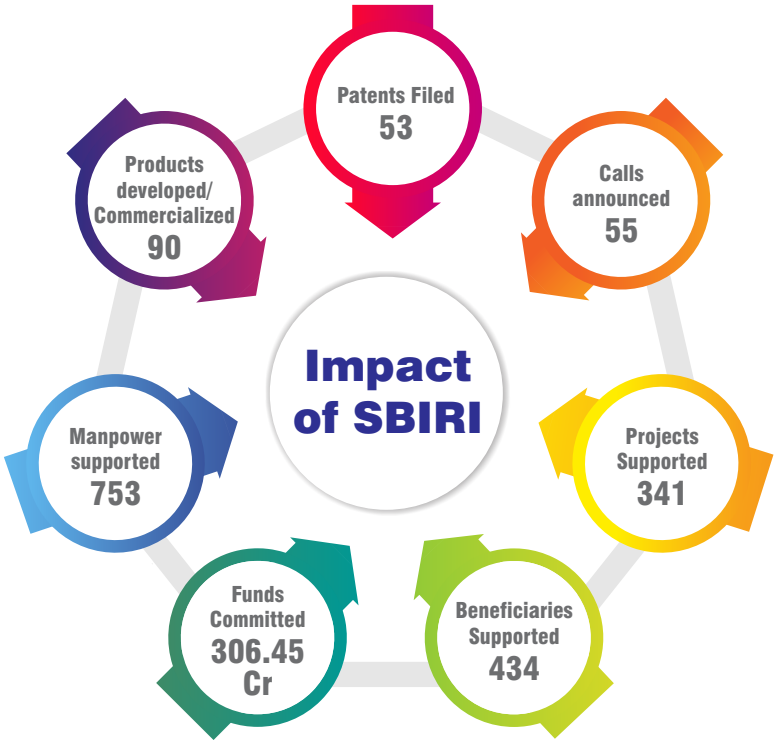
During the financial year 2024-25, two calls for proposals were announced under i4 (SBIRI and BIPP) and PACE (AIR and CRS).

Small Business Innovation Research Initiative (SBIRI)

Small Business Innovation Research Initiative (SBIRI) acts as an enabling platform to support development and initial validation of products/technologies, thus fulfilling a major gap in the product development cycle. It has facilitated innovation, risk taking by small and medium companies and bringing together the private industry, public institutions and the government under one roof to promote the research and innovation in the Indian Biotech Sector.

Since the inception of the scheme, 341 projects (262 solo and 79 collaborative) involving 434 beneficiaries (both from industry & academia) have been supported and over 90 products/technologies have been developed till date.

During 2024-25, in all 18 projects were catered under the scheme. The ongoing projects covering almost entire spectrum of biotechnology mentored and monitored by Project Monitoring Committee (PMC) through online evaluations/physical site visits or presentations before Technical Evaluation Committee. Five projects have been completed during the year. Under 54th and 55th calls announced in the FY 2024-25, 230 proposals were received under the scheme out of which 209 were eligible and are presently under different stages of evaluation.



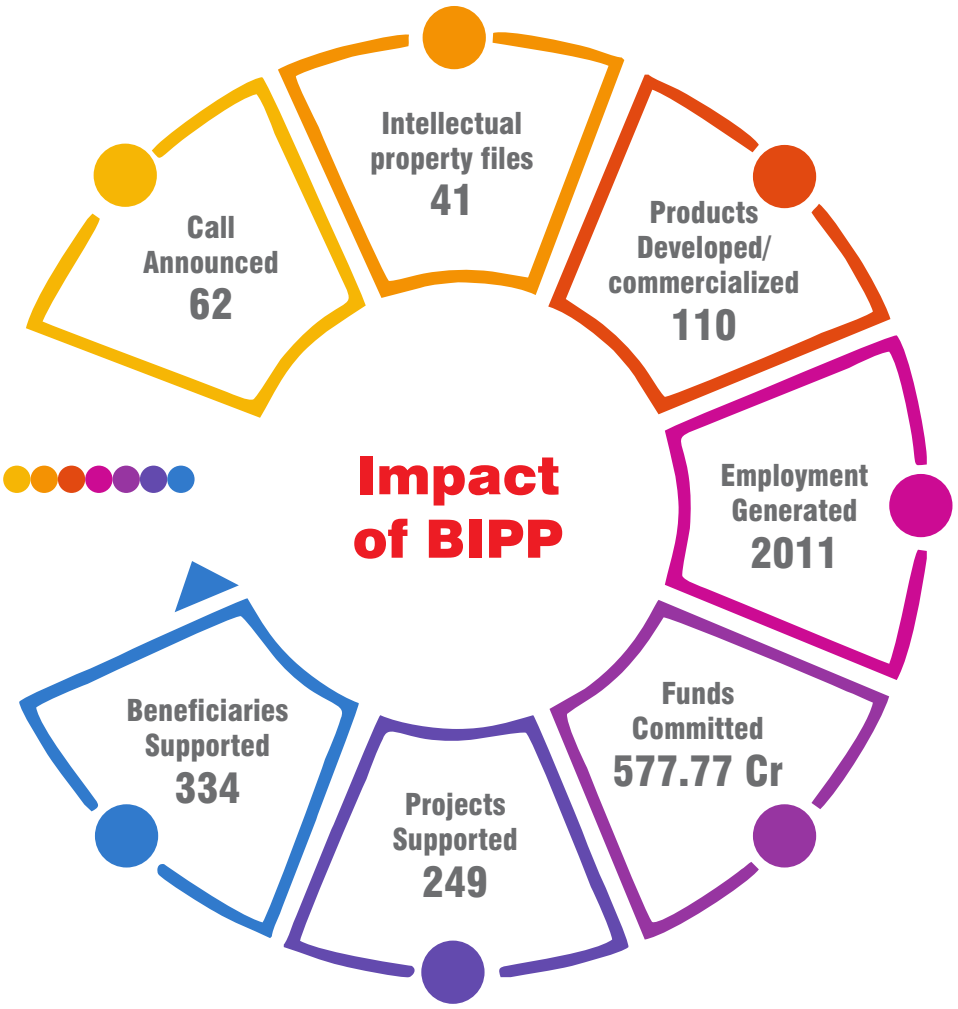
Biotechnology Industry Partnership Programme (BIPP)

The Biotechnology Industry Partnership Programme (BIPP), a Public-Private Partnership scheme, supports high risk, accelerated development of transformational technologies/products in the Biotech Sector. The Scheme serves as a launch pad for scaling and commercializing high risk innovations through cost sharing between BIRAC and the industry.

Since inception, 249 projects including 69 collaborative projects have been supported under the scheme that have yielded 110 products/technologies. While some of these have already been commercialized, others are at the pre-commercialisation stage.

During 2024-25, 20 projects were mentored and supported. 13 new proposals have been sanctioned and are currently at different stages of processing. 5 projects successfully completed during this period. Eight (8) products/technologies reached TRL 7-9 taking them closer to commercialization. Regular monitoring and mentoring of the projects was undertaken to ensure successful outcomes.

Two new calls (61st and 62nd) for proposals were announced during the year under which a total of 118 proposals were received, out of which 111 proposals were found to be eligible. These proposals are under different stages of evaluation.



Promoting Academic Research Conversion to Enterprise (PACE)

PACE supports academia to develop technology/product (up to PoC stage) of societal/ national importance and its subsequent validation by an industrial partner.

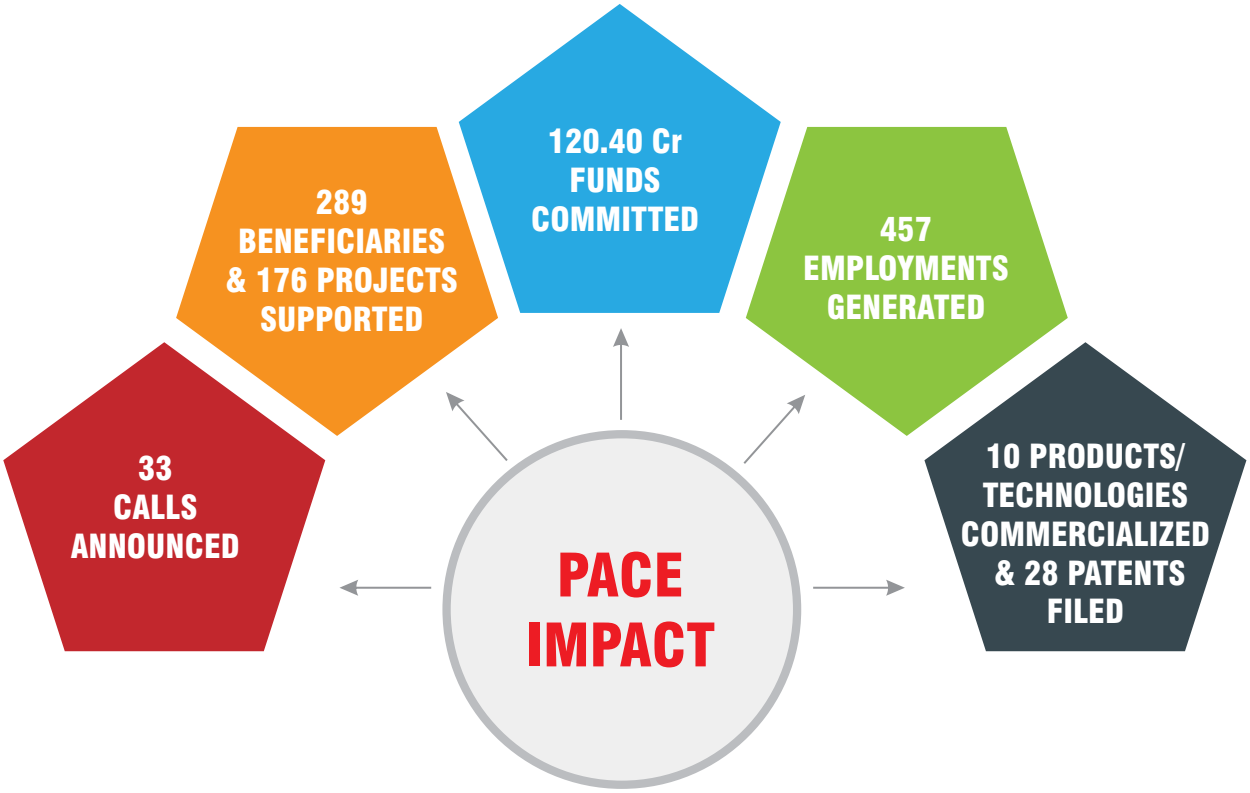
The Scheme has two components:

- **Academic Innovation Research (AIR):** The program promotes development of Proof-of-concept (PoC) for a process/product by academia with or without the involvement of industry/LLP
- **Contract Research Scheme (CRS):** The scheme supports validation of process or prototype (developed by the academia) by an industrial partner/LLP

Since inception, 33 calls have been announced under which 176 projects were supported. So far, 10 technologies /products have attained TRL 7 or higher TRL and 28 IPs have been generated. More than 75% projects funded under AIR component of PACE have achieved TRL 3 so far.

During FY 2024-25, 31 ongoing projects (including 06 new projects) involving 36 academic institutions, 10 companies and 13 collaborations were supported. The ongoing projects were mentored and regularly monitored through online interactions/site visits and presentation to the Technical Expert Committee to ensure successful outcomes.

During the year, two calls for proposals (32nd and 33rd) were announced under which a total of 328 proposals were received. Under 32nd Call, 12 proposals have been recommended for funding whereas proposals received in 33 Call are currently under different stages of evaluation.

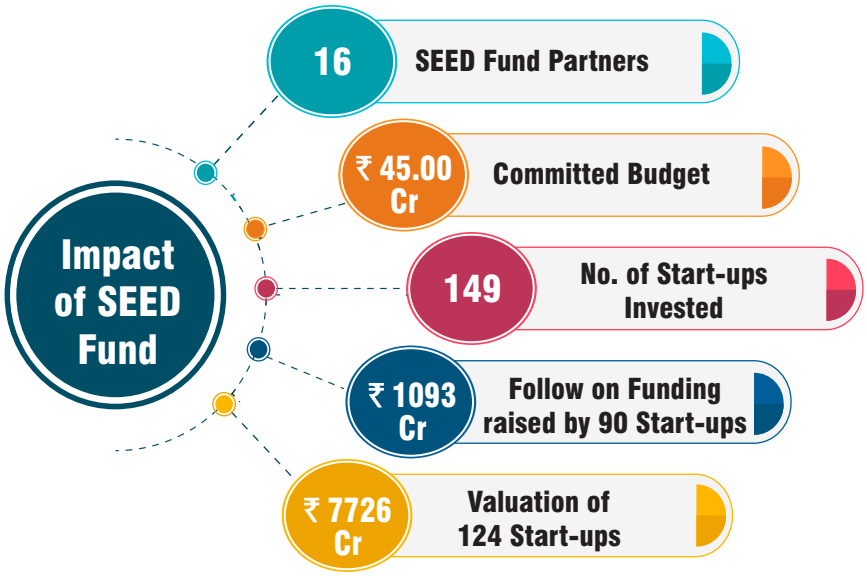


EQUITY FUNDING SCHEMES

Sustainable Entrepreneurship and Enterprise Development (SEED) Fund

Sustainable Entrepreneurship and Enterprise Development (SEED) Fund is an early-stage equity funding program launched by BIRAC to support biotech startups at the Proof-of-Concept (PoC) stage. Through this program, BIRAC offers first equity exposure of up to ₹30 lakhs to innovative startups, helping bridge the gap between early grant-based funding and larger venture capital investments.

The scheme is operationalized through BIRAC-supported BioNEST incubators, referred to as SEED Fund Partners, who manage and deploy the funds in selected startups via equity or equity-linked instruments.

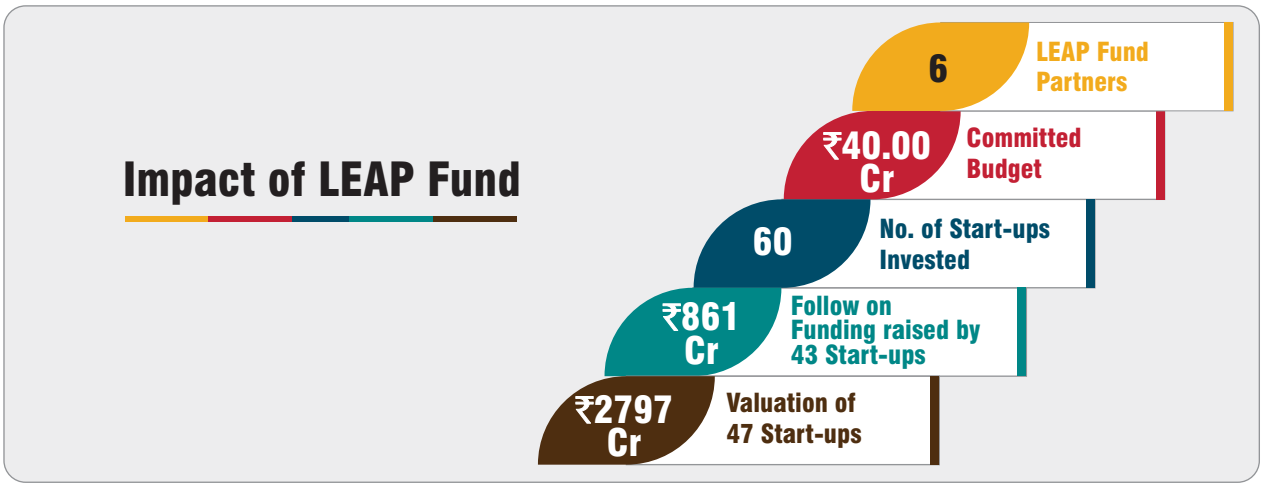


To date, the SEED Fund scheme has effectively catalysed early-stage innovation and supported the development of promising biotech ventures. During the financial year 2024-25, the scheme supported 13 new start-ups, contributing to the creation of approximately 150 jobs. Although no exits were recorded in this period, 26 start-ups successfully secured follow-on funding from private investors. This robust capital inflow reflects strong investor confidence and underscores the growing maturity and market relevance of SEED-supported enterprises. Additionally, 2nd BIRAC Equity Fund Steering Committee meeting was convened during the year to consult the revamping of the equity funding programs.

Launching Entrepreneurial Driven Affordable Products (LEAP) Fund

Launching Entrepreneurial Driven Affordable Products (LEAP) Fund is BIRAC's late-stage equity funding program aimed at accelerating commercialization of biotech innovations. It provides equity support of up to ₹1 crore per start up, that have successfully developed and validated prototypes and are ready for pilot deployment or scale-up.

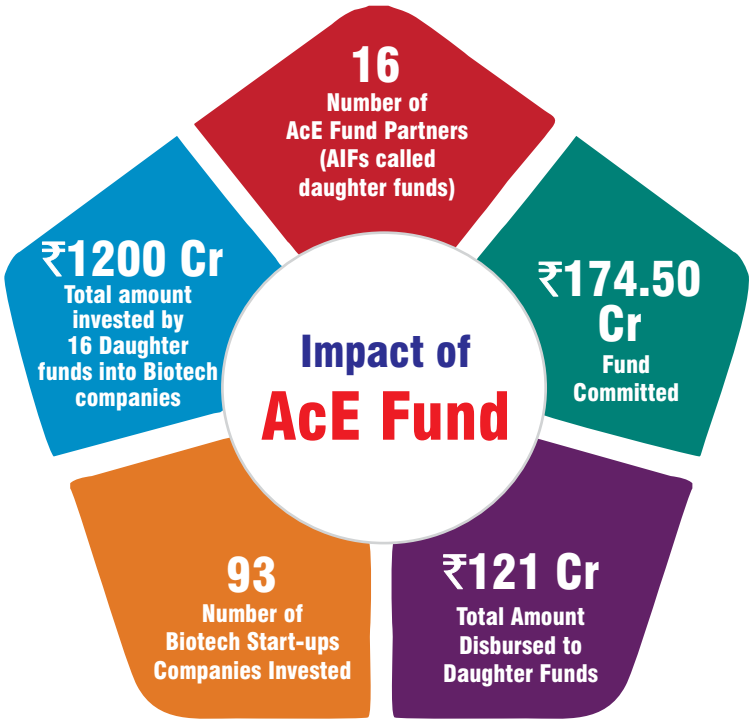
This scheme is implemented through selected BioNEST incubators, known as LEAP Fund Partners. The program focuses on reducing the time-to-market, de-risking high-potential innovations, and crowding in private investments. LEAP has become a vital pipeline for enabling access to capital and infrastructure for growth-stage start-ups.



The LEAP program continues to demonstrate encouraging early outcomes in advancing late-stage biotech ventures. In the financial year 2024–25, four start-ups were supported under the scheme, resulting in the creation of approximately 30 jobs. While no exits were reported during the year, 10 start-ups successfully raised follow-on funding from private investors, underscoring strong investor interest and growing market confidence in the commercialization potential of supported enterprises. Additionally, 2nd meeting of the BIRAC Equity Fund Steering Committee was held during the year to discuss the restructuring of the equity funding programs.

Fund of Funds-Biotechnology Innovation Fund AcE (Accelerating Entrepreneurs)

Accelerating Entrepreneurs (AcE) Fund is a "Fund of funds" which aims to foster R&D and innovation in Biotechnology by plugging the gap of "Valley of Death" encountered by Biotech start-ups during their 'product development cycle' and 'growth phase'. AcE Fund invests and partners with SEBI- registered AIFs (Venture Funds and Angel Funds), which are professionally managed and desirous of investing in biotech sector. The Daughter Funds are committed to invest 2x of BIRAC's investment amount from fund corpus in Biotech start-ups. AcE Fund provides equity investment of up to Rs. 7 Cr per startup. The AcE Fund has been able to infuse private equity commitment into the Biotech ecosystem using AcE fund as a catalyst.



Biotechnology Innovation Fund-AcE has been able to attract several Venture Funds willing to invest in Biotech Startups. It has reflected a willingness of private venture capital to invest into the high-risk area of Biotech. This is a very encouraging change that this DBT-BIRAC's Fund of funds scheme has been able to trigger.

AcE 2.0 proposal with a fresh fund corpus of Rs. 500 Cr is under discussion. With 25 additional AcE Partners, BIRAC can aim to mobilize 2x fund commitment from VCs thereby mobilizing another Rs. 1000+ Cr into the Biotech ecosystem. Thus, a larger pool of additional Biotech startups can be supported

AcE Fund Partners & Investors

Endiya
Indian Angel Network Alpha Fund
STAKEBOAT CAPITAL NAVIGATING LEVEL NEXT
BHARAT INCLUSION INITIATIVE BY CIIE.CO
NABVENTURES
alkemi
KITVEN FUND - 3 BIOTECH
Somerset Indus Capital Partners
GVFL ॥ साहसे श्रीः प्रति वसति ॥
ideaspring CAPITAL
Indian Angel Network Fund
RVCF
ankur capital

Product Commercialization Program (PCP)

BIRAC is promoting product/technology development in different fields of biotechnology through various funding schemes such as BIG, BIPP, SBIRI, PACE, IIPME and SPARSH. On successful project completion, the technologies developed with BIRAC support attain certain level of maturity, which is measured on a TRL (Technology Readiness Level) scale of 1 to 9.

BIRAC launched Product Commercialization Program Fund (PCP Fund) to hasten the product commercialization process by providing support to product technologies, which are at or above TRL-7 stage, developed by Indian Start-ups. When the technology/product has been successfully validated (TRL 7 and above) and is moving towards commercialization, then besides technical and funding support, the start-ups also require guidance and support on various other issues such as IP, technology transfer, regulatory, business plan, market conditions, networking, etc. PCP fund addresses few of these critical requirements through target funding.

The main objectives of PCP Fund are:

- To hasten the product commercialization processes by providing all necessary support to the projects that have performed well under the ongoing funding programs of BIRAC and have high commercial potential.

- To become a Product Development Partner of such technologies by providing required support including financial grants, mentoring, connecting with Investors, regulatory facilitation, market access, etc.

Besides BIRAC-supported start-ups, Indian Biotech start-ups with products/technologies of national importance, developed through support from other sources, and which are at TRL-7 or above, are also eligible.

Nine products/technologies were supported, out of which three projects are ongoing and one has been shortlisted for funding support in 2024-25; six projects have been completed and recommended to start benefit sharing. Two companies (Aarna Biomedical Products Pvt. Ltd. and Fibroheal Woundcare Pvt. Ltd.) have already shared their benefit sharing instalments and the rest will start from this year.

List of the supported startups and their technology/project are as follows:

1. **Aarna biomedical products Pvt. Ltd. given benefit sharing**

   (**Sampoorti:** A mobile and concise suitcase comprising of prosthesis of different sizes, pocketed bras of different sizes with prosthesis covers).

2. **Medtra Innovative Technologies Pvt. Ltd.**

   (Vein tracking/finder device with augmented reality using NIR).

3. **InnAccel Technologies Pvt. Ltd.**

   (**VAPCare:** An intelligent secretion and oral hygiene management system to prevent a deadly infection called ventilator associated pneumonia, which is responsible for more than 250,000 deaths every year in India alone).

4. **BonAyu Lifesciences Pvt. Ltd. (Jubeln Lifesciences Pvt. Ltd.)**

   (Oral thin film platform for the delivery of Nutraceuticals, Cosmetics & Personal Care industries as a better alternate to the conventional tablets, capsules, liquids and gels.)

5. **Fibroheal woundcare Pvt. Ltd.**

   (Silk protein derived surgical wound dressings and other wound management solutions).

6. **Innaumation Medical Devices Pvt. Ltd.**

   (AUM Tracheo-Esophageal Voice Prosthesis for Laryngectomy Patients)

7. **Aspartika Biotech Pvt. Ltd.**

   (Production & Commercialization of Omega 3 Fatty Acids based products and nutraceuticals using Supercritical fluid extraction technology)

Intellectual Property and Technology Management (IPTEM)

Intellectual Property and Technology Management (IPTEM) Group at BIRAC plays a critical role in supporting start-ups, Academia and young innovators by guiding them through the complex processes of intellectual property (IP) protection, technology transfer, and commercialization. As part of its core mandate, the group conducts IP due diligence for eligible proposals received under various BIRAC funding programs, including SBIRI, BIPP, PACE, BIG, NBM, and Special Calls announced time to time.

1. **BIRAC-PATH (Patenting and Technology Transfer for Harnessing Innovations):**

   A key initiative under this group is the BIRAC PATH (Patenting and Technology Transfer for Harnessing Innovations) program, which offers financial assistance and strategic support to BIRAC beneficiaries for securing patents both in India and abroad-across PCT, Convention, and National Phase entries. In addition to patent support, the program also facilitates technology transfer and commercialization services. These activities are carried out through BIRAC's empanelled IP and technology transfer firms, ensuring timely, quality assistance to innovators.

2. Sensitization & Capacity Building Workshops:

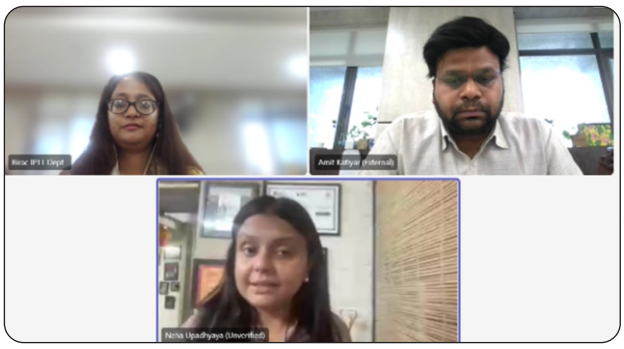
The IPTEM group also focuses on conducting Intellectual Property & Technology Management related sensitization and capacity building workshops especially for start-ups, university researchers and faculty working in the biotech sector. Emphasis is placed on outreach in Tier II and Tier III cities, with training covering the fundamentals of IP, hands-on IP search techniques, patent drafting and technology transfer.

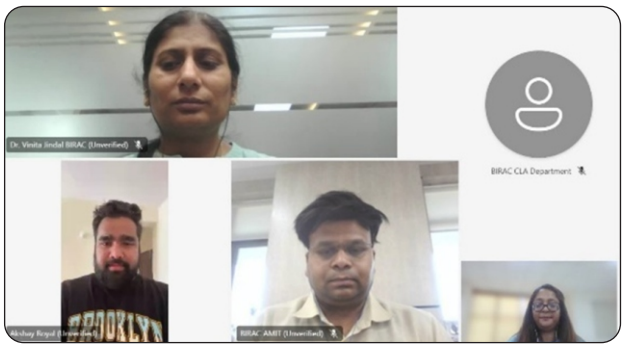
Workshop at BioNest- IIT Jodhpur

Workshop at IIT Patna

3. Advisory & Mentoring Sessions:

In addition to workshops, the group organizes monthly IP & Technology Management (IP & TM) Law Clinic held on the second Friday of every month - providing pro bono, one-on-one mentoring to innovators. The clinics offer expert guidance on selecting appropriate IP protection strategies (patents, trademarks, copyrights, designs), IP filing process, Patentability criteria, Licensing and Technology transfer Process, Technology Valuation and the Biological Diversity Act etc.





Glimpses from the IP & TM law clinic Sessions

4. Stakeholder Dialogue on Technology Access & Licensing – GBI 2024:

The group led a panel discussion at **Global Bio-India 2024** titled "Accelerating Bio-transformation : Navigating Technology Access, Co-Creation & Licensing." The session brought together thought leaders from industry, academia, and policy makers to discuss practical strategies to overcome legal and IP challenges in public-private partnerships (PPPs) and to unlock India's biomanufacturing potential.

Technical Session 2 at GBI-2024

Additionally, during GBI-2024, an **amendment to the Technology license agreement was executed between ICAR-CIRB (through Agrinnovate) and Techinvention Pvt. Ltd.,** following BIRAC's earlier facilitation of the transfer of the **"Ruminant Pregnancy Detection Kit (Preg-D)"** to Techinvention. This amendment formalized a collaborative project aimed at developing an **improved version of the kit.**

Signing of Amendment to License Agreement - GBI-2024

5. Knowledge Partner for WHO Regional Workshop

BIRAC, in partnership with the World Health Organization (WHO), supported the Regional Workshop on Capacity Building in Technology Transfer held from 19-21 November 2024 in Kerala. The BIRAC IPTEM group provided technical assistance, focusing on public-health-oriented IP management, licensing models and strategies to improve access to health technologies across the South-East Asia Region. The workshop featured participation from SEARO country representatives and experts from WHO, WTO, NIH and the Netherlands, enabling valuable knowledge sharing and collaboration.

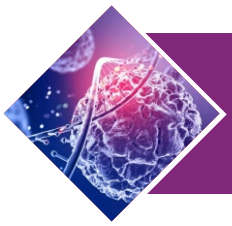
WHO Regional Workshop 2024

Key Highlights (FY 2024–2025)

- Supported **4 BIRAC** beneficiaries under the BIRAC PATH program for drafting and filing of Provisional patent applications, Complete patent and National Phase filings in India, USA, EU, and China.

- Initiated licensing of two BIRAC-supported technologies through empanelled Technology Transfer firms.

- Conducted **5 sensitization workshops** on the theme "Bio-Entrepreneurship and Intellectual Property & Technology Management in Life Sciences" at:
  - o Sher-e-Kashmir University o NEHU Shillong
  - o University of Delhi (South Campus) o IIT Patna o IIT Jodhpur



- Organized 10 virtual one-on-one mentoring IP clinic sessions, providing tailored guidance to innovators.

Regulatory Affairs & Policy Advocacy (RAPA)

To strengthen India's regulatory and policy milieu, Biotechnology Industry Research Assistance Council (BIRAC) has created dedicated Regulatory Affairs & Policy Advocacy (RAPA) unit on 17th May 2024 to drive innovation through navigation of regulatory complexities, harmonization of global regulations, and advocate for policies that catalyze the growth of start-ups, SMEs, and entrepreneurs in the dynamic landscape of regulatory and policy affairs. The RAPA was launched in the presence of Dr. Rajeev Singh Raghuvanshi, DCGI, CDSCO; Dr. N. Kalaiselvi, Director General, CSIR India & Secretary DSIR; Dr Alka Sharma, Senior Advisor, Department of Biotechnology; Prof. Mamidala Jagadesh Kumar, Chairman, UGC; Dr Jitendra Kumar, MD, DBT BIRAC.

This unit will play a pivotal role in navigating the intricate regulatory landscape and ensuring the smooth execution of BIRAC's innovation-focused objectives.

Launch of Regulatory Affairs & Policy Advocacy (RAPA) on 17th May 2024

Blueprint for Regulatory and Policy Excellence

BIRAC convened a stakeholders' consultation meeting on 22nd November 2024, to develop a roadmap for regulatory and policy excellence, involving consultants from various regulatory bodies. Key recommendations include redefining BIRAC's role in supporting start-ups with regulatory facilitation, collaborating with ministries for policy advocacy, establishing specialized regulatory centers, and implementing advanced facilitation.

Blueprint for Regulatory and Policy Excellence: BIRAC's strategic meeting

REgulatory Facilitation for INnovators and Entrepreneurs (REFINE)

In the Blueprint for Regulatory and Policy Excellence meeting held on 22nd November 2024, BIRAC announced REFINE as a customized facilitation to further strengthen the regulatory framework by providing product- or technology-specific mentoring on regulatory documentation, application support, risk assessment, success metrics, and licensing requirements.

Launch of REFINE programme

Global Regulatory Knowledge Exchange Forum for Emerging Technologies

A platform conceptualized during Global Bio-India (GBI) 2024 in collaboration with the World Health Organization (WHO), aimed at bringing together regulators and policymakers to share regulatory knowledge and support emerging innovative biopharma products and technologies. The recommendations from this diverse group will assist in developing the regulatory forum for emerging technologies.

Roundtable | Enhancing Biomanufacturing through Global Regulatory Convergence: A Unified Approach

As part of this initiative, BIRAC held a **stakeholders' consultation** meeting on **Emerging Regulatory Pathways for Cell and Gene Therapy Products** on 20th February 2025 in collaboration with DBT and CDSCO. The deliberations focused on cell and gene therapy (CGT), regenerative medicine, and precision medicine. This stakeholder consultation saw active participation from multiple stakeholders, reflecting on regulatory challenges and gaps to promote the emerging sector.

The department prepared a recommendation paper and submitted it to CDSCO, DBT, and NITI Aayog, highlighting the regulatory gaps and challenges in this emerging area.

Compliance of BIRAC Proposals with National Regulatory Requirements

Regulatory Expert Committee (REC) plays a crucial role in strengthening BIRAC's proposal evaluation system by identifying regulatory impediments prior to proposal sanction to avoid any regulatory hurdles related to feasibility and timelines.

During FY 2024–25, the REC, chaired by Dr. V. Prakash, convened three meetings to evaluate projects submitted under BIPP, SBIRI, and PACE. In its 15th session on 13th June 2024, 19 proposals were reviewed. The 16th meeting on 22nd November 2024, examined 22 proposals, while the 17th meeting on 10th February 2025, assessed 29 proposals.

To date, the RAPA department has monitored 400+ BIRAC-funded proposals to ensure they adhere to national regulatory standards.

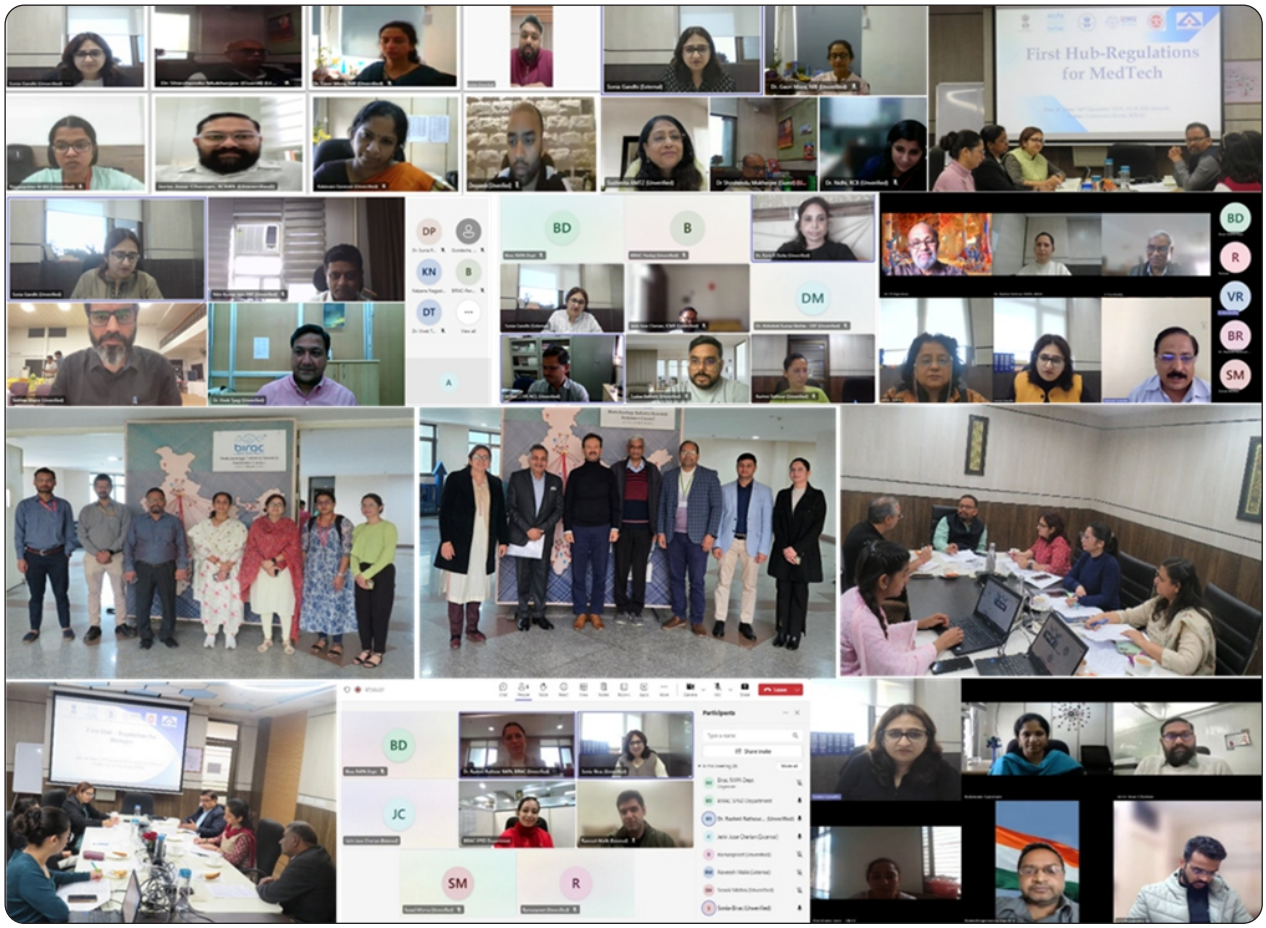
FIRST HUB: Facilitation of Innovation and Regulation for Startups and Innovators

First Hub is a single window facilitation unit of BIRAC designed to address the regulatory queries of innovators. Representatives from key organizations, including CDSCO, DBT, ICMR, NIB, BIS, GeM, FSSAI, and BIRAC, assist innovators.

To date, this initiative has successfully conducted 60+ First Hub meetings and addressed 1000+ queries.

Table 1: First Hub Sessions

S.No	File Name	No. of Queries	Dates
1.	First Hub	09	08th March 2024
2.	First Hub	09	05th April 2024
3.	First Hub	11	07th June 2024
4.	First Hub	07	04th October 2024
5.	First Hub-Regulations for MedTech	21	08th November 2024
6.	First Hub-Regulations for Biologics	19	29th November 2024
7.	First Hub-Regulations for MedTech	20	06th December 2024
8.	First Hub-Funding Insights	32	20th December 2024
9.	First Hub-Regulations for Biostimulants and Food Products	16	10th January 2025
10.	First Hub-Mentoring and Scientific Connects	28	24th January 2025
11.	First Hub-Regulations for Agriproducts	17	07th February 2025
12.	First Hub- Regulations for MedTech	16	07th March 2025



First Hub sessions (FY 2024-25)

Regulatory Enablers for the Biomanufacturing Mission

Regulatory Conclave on Smart Protein

DBT and BIRAC convened a regulatory conclave on 30th May 2024 to develop a regulatory framework for smart protein research and commercialization in India, in alignment with the DBT's bio-manufacturing mission.

Regulatory Conclave on Smart Protein organized at the Indian Habitat Center, New Delhi, India

RAPA prepared a recommendation paper on smart proteins and intends to collaborate with FSSAI on creating regulatory frameworks for cultured and fermentation-derived proteins in India.

RAPA Scientific Contributions and Outreach

Centre of Excellence Biopharmaceutical Technology (CBT)

BIRAC collaborated with the Centre of Excellence Biopharmaceutical Technology (CBT), IIT Delhi, for the 9th edition of CBT Course Series 2024 (10th December - 11th December 2024), an international lecture series on upstream, downstream, analytical, regulatory, and data analytics aspects for biosimilars. The two-day regulatory module featured engaging deliberations on key concepts of regulatory approval for biopharmaceuticals, delivered by esteemed speakers from national and international government and industry bodies.

The event underscores BIRAC's commitment to enhancing biopharmaceutical innovation and fostering worldwide regulatory collaboration.

Sonia Gandhi, DGM and Head, RAPA, delivered an insightful talk on “Innovations in the Regulatory Framework of Biosimilars: Advancing Science, Safety, and Affordability” as part of the CBT Course Series 2024 at the Centre of Excellence, Biopharmaceutical Technology, IIT Delhi.

Experts talk on key concepts of regulatory approval for Biopharmaceuticals

CBT meeting held at IIT Delhi, New Delhi

International Conference of Drug Regulatory Authorities (ICDRA)

Central Drugs Standard Control Organization (CDSCO) convened the 19th International Conference of Drug Regulatory Authorities (ICDRA) on 14th to 18th October, 2024, at Yashobhoomi, IICC, Dwarka, Sector 25, Delhi. This landmark event brings together regulatory officials from diverse WHO Member States, boosting collaboration and forging international consensus on critical regulatory priorities.

BIRAC participated in ICDRA from 14-15 October 2024, highlighting its role in advancing biotechnology and regulatory advocacy.

BIRAC participated in the International Conference of Drug Regulatory Authorities held at Yashobhoomi, New Delhi, India

National Conference on Strategic Trade Controls (NCSTC)

BIRAC participated in the National Conference on Strategic Trade Controls (NCSTC), 16th to 17th January 2025, organized under the aegis of the Directorate General of Foreign Trade (DGFT) and the Ministry of External Affairs (MEA).

Sonia Gandhi, DGM and Head, RAPA, contributed to the session on the Indian Biosafety Regulatory Framework and emphasized the importance of obtaining export permissions for SCOMET items, especially for Indian biotech companies exporting Category 2 products.

Guidelines for Novel Healthcare Solutions in collaboration with Blockchain for Impact (BFI)

Atal Incubation Centre-Centre for Cellular & Molecular Biology hosted a Regulatory Compliance Day One Workshop focused on Guidelines for Novel Healthcare Solutions in collaboration with Blockchain for Impact (BFI) on 14th February, 2025. Sonia Gandhi, DGM and Head, RAPA, presented on “Enabling Innovation: Regulatory Science & Policy Advocacy for Bio-Startups.”

BioAsia 2025

BioAsia 2025, the 22nd edition of Asia's premier life sciences and healthcare forum, took place from 24th to 26th February 2025, at the Hyderabad International Convention Centre in Hyderabad, India. Themed "Catalysts of Change: Expanding Global Healthcare Frontiers," the event gathered global leaders from the biopharma, health tech, and MedTech sectors to discuss advancements in healthcare innovation.

BIRAC partnered with BioAsia 2025 as the Startup Stage Partner. Representing BIRAC were Dr. Raj K. Shirumalla (Mission Director, NBM), Dr. Pramal Biswa (Senior Manager, MII), and Dr. Rashmi Rathour (Associate Consultant, RAPA).

Inaugural Conference of InSEV - EVOLVE 2025

The 'Inaugural Conference of InSEV - EVOLVE 2025', organized by the Indian Society for Extracellular Vesicles (InSEV) and AIIMS, New Delhi, was held from March 24th to 26th, 2025, at the JL Auditorium of AIIMS, New Delhi. The event gathered prominent researchers, clinicians, and industry specialists from across the world to explore the evolving field of Extracellular Vesicles (EVs), to shape the future of EV research and its practical applications in healthcare. Sonia Gandhi, DGM and Head, RAPA, participated as a panelist in the session titled EV Ride: Navigating the Journey.

Collaboration of BIRAC with United States Pharmacopeia (USP)

The Letter of Intent (LOI) between the BIRAC and the United States Pharmacopeia (USP), formalized on 12th September 2024, to foster innovation through Preferential Access to Reference Standards (PAR).

Collaboration of BIRAC with USP

A discussion was held on 25th July, 2024, to address the availability and procurement of high-quality standards and regulatory intelligence, which are considered major hurdles for the commercialization of biologicals. USP and DBT-BIRAC also discussed potential collaboration opportunities to fill this gap for startups.

Building Regulatory Capabilities for Bio Startups in India

A panel discussion was organized on 13th September 2024 on "Building Regulatory Capabilities for Bio Startups in India", powered by U.S. Pharmacopeia. The session focused on the regulatory capability building needs of bio startups in India, identifying existing gaps, and discussing future strategies to enhance their growth. Additionally, opportunities were explored for fostering innovation, developing policies to ensure access to affordable, high-quality therapies, to promote self-reliance through the Make in India program.

Programs for Niche areas and supplementary activities

A. Program on Synthetic Biology

The area of Synthetic Biology requires special attention in view of the enormous applicable potential. Since Synthetic biology is an emerging technology, BIRAC had supported a program on "Synthetic Biology for transition towards a bio-based economy". The main aim of the program is to generate joint research, development and commercialization activities.

Two calls for proposals have been announced which led to supporting a total of 11 projects. These projects focus on developing products such as rose oxide, sandalwood sesquiterpenes and biobutanol production. The projects have resulted in development of PoC. Patents have been filed for a few technologies. Strategies are currently being formulated to further support these developments and to promote continued research in this area.

B. Innovation Clean Technology - Scale up

Under the 100 days agenda of the Department of Biotechnology, few promising technologies in the area of waste management/waste to energy were taken forward for Scale up/implementation at 10 sites/States. The implementation of these technologies had to be done in association with Municipal Corporations/Urban local bodies (ULBs) identified by the companies. Few potential technologies, that had achieved TRL 7, supported by DBT/BIRAC were shortlisted for consideration. Out of these, a total of 4 technologies are being implemented in association with the Municipality/ULB of Goa, Bangalore and Greater Mumbai.

Three projects have been completed.

1. **GPS Renewables:** A 2-ton-per-day plant using organic fraction of municipal solid waste for conversion to biogas has been installed at Haji Ali in Mumbai. The biogas generated is being converted to electricity and is being used at electric charging station.
2. **Openwater.in:** A membraneless, chemical free, waste water treatment system has been developed and demonstration at Gram panchayat, Mavallipura
3. **Flycatcher Technologies:** The Rhino Digesters of various capacities (75, 150, 300 and 500 kg/day) were manufactured at the facility in Dabhasa, Gujarat and installed at multiple locations under the jurisdiction of the corporation of the city of Panaji to treat a total food waste of 5025 kg/day. the biogas is mostly being utilized for cooking in canteens or kitchens partly replacing 20-30% LPG cylinders.

The second call for proposals was announced in December 2022 and 2 proposals were recommended for funding support. These projects are being implemented in association with Srinagar Municipal Corporation and Bhavnagar Municipal corporation. Plants have been set up and data generated has been initiated.

Fig. Biodigestor using food waste installed at a site in Panaji

C. Program on Guar Gum

The Guar Industry has evolved from being used for domestic and ruminant feed purpose to finding use in industry. Owing to new technologies and ongoing R & D, the natural gum property of guar can have varied applications from in food, pharma industry to oil Industry. The guar industry is poised to grow and develop owing to high focus on research in Universities and technical institutes of the world. Leading players operating in the global guar gum market include Jai Bharat Gum, Vikas WSP, Hindustan Gums, Shree Ram Gum, Cargill Inc., Lucid Group, Ashland Inc., Supreme Gums Pvt. Ltd, India Glycols Ltd, Rama industries and Lamberti.

Looking at the agricultural and industrial importance of this marginalized crop, BIRAC is working on overall development of guar production, R&D and processing industry, aligning the views of all the stakeholders in the value chain in the form of single vision strategy.

To promote development of the area, focused call for proposals was announced and proposals were sanctioned in the area of building material mixtures, sealants, bioplastics, biomedical patch and guar derivatives.

Few of the products/technologies developed under this program include NUTRIFIBER (Nuevo Polymers Pvt. Ltd.); Indigenous biodegradable plastic (Ruhvenile Biomedical) and Indigenous Wall Putty (Shriram Institute for Industrial Research, Delhi)

Out of the 8 proposals considered for funding, 05 have been taken as completed and 03 are ongoing and the review for these is under progress.

Technology and product development under Guar Gum in FY 2024-2025:

Natural dermal Bioadhesive

Dermal bioadhesives are integral part of the biomedical devices like transdermal patches, medical devices, and surgical accessories. Bioadhesives are known to play a key role in retaining the devices on the site of application and therefore determine the efficacy of the devices in most instances. Presently, India exports most of the medical grade adhesives that include cyanoacrylates, polyurethanes or silicones from abroad. Ethicon (US), 3M (US), B. Braun Melsungen AG (Switzerland), Baxter International (US) and Henkel (Germany) are the major players in the Medical adhesive market. There is no medical grade bioadhesive in India that is eco-friendly, economical, indigenously developed, biocompatible, safe and stable. The currently available synthetic bioadhesives normally do not allow the development of transdermal patches of polar therapeutic molecules. In addition, the presently available synthetic bioadhesives highly expensive, occlusive and flammable. Guar Gum is found to be a good base material for development of hydrogel bioadhesive transdermal patches for application to the skin and would be first of its kind from indigenous origin. The Guar gum based bioadhesive was proposed to overcome the limitation of most of the synthetic bioadhesives existing in the current market.

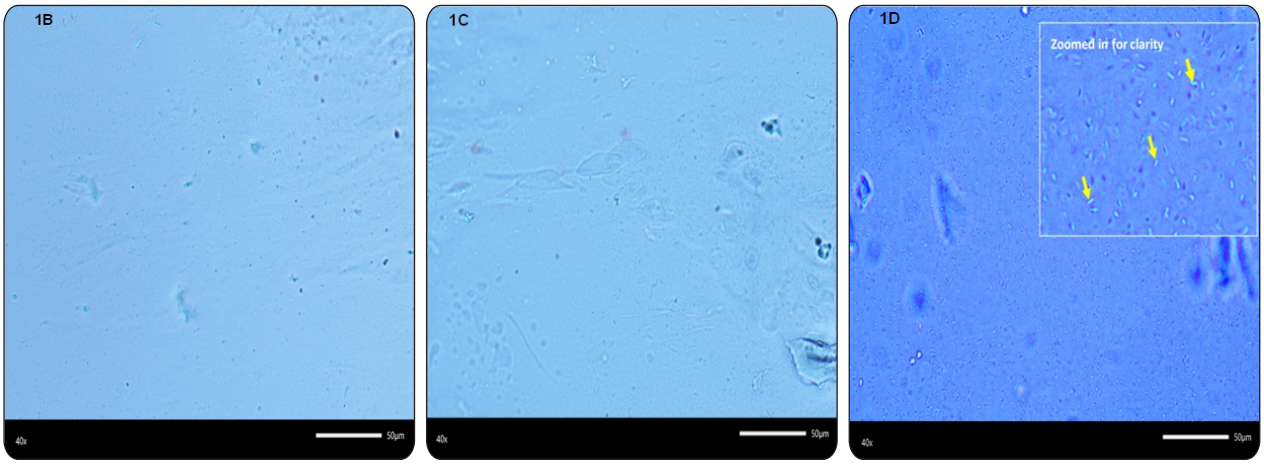


Figure (from left to right) : [a] Bright field microscopy of placebo Guar gum patch. [b] 2%w/w API Guar gum patch. [c] 5%w/w API containing guar gum patch.

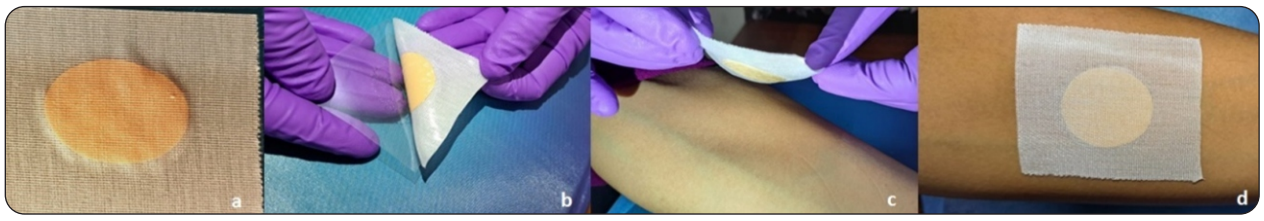


Fig. Guar-Gum Patch

BIOPLABEAN™ is a truly biodegradable packaging material from using entirely natural sources such as biopolymers and inedible oil. This composition enables the material to naturally biodegrade within 6 months to 1 year without posing any toxic risks. BIOPLABEAN™ is a beneficial to protect our Mother Nature and future generation from plastic pollution. BIOPLABEAN™ had an in-build UV protective technology which accelerates the sustainability of agriculture products, bio medical products, etc. BIOPLABEAN™ can be unique solution to alter the single use plastic pollution and makes sustainable world. BIOPLABEAN™ product is indigenously developed by Ruhvenile® biomedical and all the raw materials were highly produced in India. The cost of product manufacturing and packaging will come around INR 150/KG.

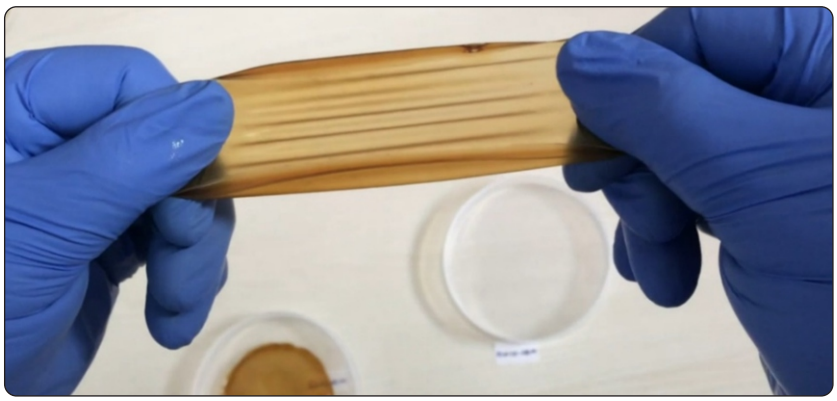


Fig. BioPlaBean, a truly biodegradable material developed from completely natural sources like biopolymers.

Ruhvenile® Biomedical OPC Pvt Ltd is an Indian company (DIPP 29327), officially recognized by the Department of Scientific and Industrial Research (DSIR). Internationally acclaimed as a DEEP TECH PIONEER by Hello Tomorrow in Paris, France, and acknowledged by the UK and Belgium governments, is dedicated to advancing cutting-edge indigenous biomedical products through research and development for public health and sustainable societal development.

AMRIT Team Grants

The Department of Biotechnology (DBT), Government of India announced "AMRIT Team Grants", a joint call with Biotechnology Industry Research Assistance Council (BIRAC) This is a new initiative/program in accordance with the Hon'ble Prime Minister's call for "Jai Anusandhan" to support new and innovative collaborative research programs. The program will address national needs and propel India as a global leader in Biotechnology.

Under this initiative, ambitious research ideas, high-risk, milestone driven research for knowledge-based discoveries and interdisciplinary efforts involving academia, the clinic and start-ups are being supported to address challenging problems beyond the scope of a single laboratory. Spin outs and venture creation will be encouraged. Outcomes are expected to enhance the bioeconomy, break silos and provide knowledge- based solutions to societal needs. The proposals are considered from all domains of biotechnology including Healthcare, Agriculture, Plant, Animal Biotechnology, and Biomanufacturing. The initiative aims to foster excellent science, balancing high quality research with societal needs. The areas to be addressed are Bio-Manufacturing, Health, Wellness and Medical Interventions and Bio-Wealth. Total of 13 proposals have been recommended.

BIRAC's Strategic Partnerships

Through Strategic Partnerships, BIRAC stitches together an ecosystem that converts science & research into outcomes for people and markets at scale. BIRAC's partnerships are designed to bring together government ministries and agencies, industry, investors, multilateral and philanthropic organisations, and academia to move ideas from lab to market with clarity and speed. Through a robust public–private approach, we co-design missions, pool resources, and provide end-to-end support ranging from catalytic funding for proof of concept to scale-up; IP and regulatory guidance aligned with global benchmarks; access to shared facilities and real-world validation sites; market linkages and procurement pathways; and focused mentoring, capacity building, and investor connect.

In FY 2024-25, we strengthened this network through new partnership intents and co-funding arrangements with philanthropic partners to address priority health needs; deepened international cooperation on quality, safety, and standards for complex biotherapeutics; expanded programmes that build capabilities of entrepreneurs, incubators and also open up new avenues for global market access. The underlying aim is to speed up translation and promote wider adoption of emerging technologies across health, agriculture, industrial and clean biotech, and environmental sustainability.

Announcement of Letters of Intent (LoIs) during Global Bio-India 2024

BIRAC announced Letters of Intent (LoIs) with eleven (11) national/international organizations to drive technological advancement, promote knowledge exchange, and enhance collaborative innovation within India's biotech innovation ecosystem. Category wise list of LoIs is as follows:

- **Promoting catalytic funding opportunities through global philanthropic collaborations:**
  - **BIRAC-Blockchain for Impact (BFI):** To promote biomedical innovations across different TRLs.
  - **BIRAC-Children's Investment Fund Foundation (CIFF):** To support child and maternal health innovations
- **Enabling the innovation and regulatory ecosystem through international co-operation:**
  - **BIRAC-UK Research and Innovation (UKRI):** To build a global biotech innovation ecosystem by engaging key stakeholders across both countries
  - **BIRAC-United States Pharmacopeial Convention (USP):** To facilitate development of standards and alternative methods to assess safety and efficacy of complex biopharma products, including targeted delivery systems, monoclonal antibodies, gene/nucleic acid therapies, AI-driven platforms, and engineered proteins.
  - **BIRAC-La Trobe University:** To establish India-Australia Bio-Innovation corridor through Strengthening Innovation & Entrepreneurship and Advancing Collaboration & Investment
  - **BIRAC-Mauritius Institute of Biotechnology Ltd (MIBL):** Promote and accelerate biotechnology through joint projects, technology transfer, capacity building, stakeholder engagement, and other collaborative initiatives.
- **Capacity Building for startups and entrepreneurs:**
  - **BIRAC-DHR Holding India Pvt. Ltd. (Danaher):** Facilitate knowledge exchange, technology adoption, skill development, and capacity building in life sciences and biopharma, while exploring a joint Centre of Excellence.
- **Collaborations with National Ecosystem Enablers:**
  - **BIRAC-IPE Global Ltd.:** Promote innovations and startups in India by strengthening the innovation ecosystem across life sciences, biotechnology, healthcare, climate change, waste management, and related domains

- **BIRAC-US-India Strategic Partnership Forum (USISPF):** Collaborate to enable market access, navigate IP/regulatory frameworks, exchange knowledge, and build startup capacity.
- **BIRAC-IBioM (Indian Biotech MSME and Startup Foundation):** Strengthen life sciences clusters, foster global access for Indian startups, advance policy and PPP frameworks, and promote innovation through events, AI workshops, and academic–industry collaboration
- **BIRAC-Bharat Startup and Innovation Society (BSIS):** Strengthen the biotech startup ecosystem through global outreach, funding access, capacity building, policy advocacy, and international collaborations.

Snapshots of LoI announcements during Global-Bio India 2024

BIRAC's network of Strategic Partnerships

Memorandum of Understanding (MoU) signing with Indian Chamber of Food and Agriculture (ICFA)

On the World Earth Day, April 22, 2025, BIRAC and the Indian Chamber of Food and Agriculture executed a MoU to promote the advancement of sustainable innovations in agriculture, food, and nutrition through biotech interventions. The MoU focuses on empowering innovators via capacity building, FPO/cooperative engagement, market access, and data-driven agri-policy development using real-time farmer feedback.

The MoU was announced during the "Save the Earth Conclave 2025" organized by ICFA & the Phoenix Foundation Sanstha, Lodga (Latur, Maharashtra), in collaboration with Bharti Institute of Public Policy, ISB Hyderabad and African-Asian Rural Development Organization (AARDO), New Delhi. The conclave was sponsored by BIRAC, graced by Hon'ble Ministers including Sh. Amit Shah ji along with other ministers.

BIRAC-ICFA MoU signing on World Earth Day, April 22, 2025

Snapshots from sessions during Save the Earth Conclave 2025

Partnerships in action

"Train the Trainers Workshop: Strengthening Agri-preneurship through practical incubation"

BIRAC hosted a four day long train the trainers workshop for delegates from South Africa, jointly with support from the Foreign, Commonwealth, and Development Office (FCDO), UK. The joint Workshop held from March 24-27, 2025 across Delhi and Hyderabad focused on highlighting the critical role played by Incubation ecosystem in fostering the growth of agri-tech startups and innovations. The workshop was attended by delegates from the nodal bodies in South Africa including Department of Science, Technology & Innovation (DSTI), University of KwaZulu-Natal (UKZN), Technology Innovation Agency (TIA), and the Department of Agriculture, Rural Development, and Land Reform (DALRRD). BIRAC facilitated training and visits of delegates to premier institutes and agri-focused incubators supported by BIRAC. The workshop comprised interaction with Indigram Labs Foundation (ILF), a leading agri-focused incubator based in Delhi,

followed by site visits to Regional Centre for Biotechnology (RCB), Faridabad, Indian Institute of Technology (IIT), Delhi, National Institute of Plant Genome Research (NIPGR), Delhi, Association for Innovation Development of Entrepreneurship in Agriculture (a-IDEA) - Technology Business Incubator, ICAR-NAARM, Hyderabad and IKP Knowledge Park, Hyderabad.

The sessions organized over the 5 days period offered insights into virtual incubation and acceleration model, best practices for fostering agri-innovations, tour to the facilities at Institutes and Incubators, interaction with Faculty, Scientists and Entrepreneurs and successful agri-startups. Participants also visited the research centers of ICAR–Indian Institute of Rice Research (IIRR), Hyderabad, and explored the food processing facilities at ICAR's NutriHub, Indian Institute of Millets Research (IIMR). The sessions also included a masterclass on *"Operationalizing a Successful Incubation Center"* covering best practices, case studies, and an overview of incubation programs, support mechanisms, and success stories.

The workshop was held under the broad Memorandum of Understanding between BIRAC and FCDO to expand the Research and Innovation Partnership between India and the UK. BIRAC, FCDO, and South African representatives outlined their vision for trilateral collaboration and innovation opportunities during the workshop.

Snapshots from the BIRAC-FCDO Joint workshop on Training the trainers, March 24-27, 2025

Ongoing collaborations:

BIRAC-Confluence for Health Action and Transformation Foundation (CHATF): BIRAC and CHATF (with a brand name, India Health Fund (IHF), a Tata Trusts initiative) have created a pooled funding to support innovative solutions in the area of diagnostics and digital health to combat infectious diseases in India and other developing countries. This partnership, with a combined funding of INR 44 Crores over five years, aims to improve healthcare equity and access, particularly in the areas of Tuberculosis, Vector-Borne diseases, Disease Surveillance, AMR, and Climate adaptive healthcare solutions. Innovations would be supported across the entire development cycle from early-stage (idea to PoC), through late-stage validation and evidence generation via BIRAC's regular and specialized calls launched jointly with IHF.

The BIRAC-IHF partnership for creating a pooled fund was announced during Global Bio-India2023.

In addition, BIRAC has active collaborations with entities including Foreign and Commonwealth Development Office (FCDO), UK; Policy Cures Research, Australia; TiE Delhi-NCR; Nasscom Foundation; States including Panjab, Karnataka and so on.

Some of our past partnerships include those with the University of Cambridge, UK; NESTA, UK; Business-Finland; University of Queensland; USAID; CEPIFRA etc.

Prospective Collaborations:

BIRAC-Netherlands: Discussions regarding joint activities and strategic partnerships are ongoing with Innovation enabling agencies of the Netherlands including the Netherlands Innovation Network (NIN), an organization based out of Netherlands Embassy in India; Biotech Booster, a publicly funded entity in the Netherlands for promoting biotech innovations and Hudson River Biotechnology along with the University of Wageningen for exploring CRISPR technology transfer. Multiple rounds of discussions and interactions were hosted by BIRAC with above entities during the FY 24-25.

One of the visits by Team NIN to BIRAC

BIRAC-Korea Unicorn Incubator: BIRAC and Unicorn Incubator, Korea discussed strategic alignments in bilateral innovation exchange, collaboration between incubators, accelerators and startup ecosystems of both countries. The interactions were facilitated through Embassy of India in Seoul.

BIRAC-Global Antibiotic Research & Development Partnership (GARDP), Geneva, Switzerland: BIRAC and GARDP are exploring a partnership to create a platform for affordable, quality-assured medicine production and faster access to essential health innovations.

BIRAC EDGE (Enabling Development and Growth of Enterprises) Centers

Under the Startup India Action Plan (2016), BIRAC was mandated to establish five regional centers to mentor and support startups, entrepreneurs, and innovators. In alignment, four centers were set up by BIRAC: BIRAC Regional Innovation Centre (BRIC), BIRAC Regional Entrepreneurship Centre (BREC), BIRAC Regional Bio-innovation Centre (BRBC), and the BIRAC Regional Techno-entrepreneurship Centre East and North East Region (BRTC-E & NE), each with a distinct focus:

- BRIC at IKP focused on regional innovation and ecosystem mapping.
- BREC at C-CAMP promoted entrepreneurship in Tier 2 & 3 cities, investor linkages, and early stage entrepreneurship challenges.
- BRBC at Venture Center facilitated regulatory support, mentor-mentee connects, and incubation management training.
- BRTC at KIIT-TBI Bhubaneswar concentrated on techno-entrepreneurship in North and Northeast India, particularly supporting women entrepreneurs and self-help groups.

To carry forward the impactful work done by the BIRAC Regional Centres and to address the gap in understanding of stakeholders and beneficiaries, due to the word “Regional”, the initiative has been rebranded as EDGE Centers (Enabling Development and Growth of Enterprises), envisioned as BIRAC’s extended arms for nurturing startup growth.

This initiative aims to expand the biotech innovation ecosystem by supporting key elements that drive the development, commercialisation, and market expansion of biotech and bio-based products and technologies, and at the same time strengthen the incubation backbone under the following broad thematic areas:

A. Internationalization of Indian biotech Startups, SMEs and companies

B. Capacity Building for Bio-Incubation Ecosystem

C. Advancing and Accelerating Entrepreneurship

D. Facilitating and promoting Investments

E. Field Validation of biotech and bio-based products and technologies

F. Promoting bio-based strengths of NER to boost local entrepreneurship

First national call for proposals for setting up of BIRAC EDGE centers was announced in January, 2025, with a total of 122 proposals received across these categories.

Amrit Grand Challenge-जनCARE Innovation Challenge- Reimagining the Healthcare Delivery - Touching a billion lives

The Amrit Grand Challenge–**जन**CARE (AGCJ) program has significantly boosted India's digital health landscape supporting **84 innovative solutions** working in the areas of Digital Health, BIG data, mHealth, Blockchain, Telemedicine, and AI/ML across different stages including

- **Early Ideation & Testing,** wherein 74 innovations received up to ₹10 lakhs each as grant (15 innovations supported through CSR funds)
- **Pre-commercialization & Validation:** 8 innovations received up to ₹20 lakhs each as equity investment
- **Advanced Multi-centric Deployment:** 2 innovations received ₹50 lakhs each as equity investment
- Innovations have been supported across the following focus areas
    - Access to primary healthcare in tier-2, tier-3 cities and rural settings:
    - Solutions to enhance patient compliance
    - Health Data Collection, Predictive Analysis and Digital learning in medicine
    - Data Privacy, Storage and Security Solutions
    - Solutions for improved community outreach
    - Data-driven modeling to enable pharma/biopharma research development and Innovation

Beyond funding, innovators supported through the program also gained opportunities for product field validation, connects with government programs, corporate engagement, investor linkages, and sector-specific mentorship-creating a pipeline for scalable, impactful healthtech solutions.

The program was launched in January 2022 by DBT/BIRAC and NASSCOM, in collaboration with Grand Challenges India (GCI) and other partners, with IKP Knowledge Park as the implementation partner. The initiative was financially supported by DBT, GCI, India Health Fund, and Stryker.

Distribution of AGC-JanCARE Beneficiaries Across India

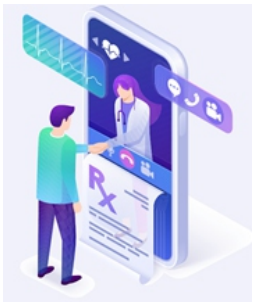
Snapshot of a Success Stories of AGC-janCARE program beneficiaries-Creating Impact on the Ground

Product - Fitknees - A Sensor-Based System For Prevention And Monitoring The Progress of Athletes With Lower Body Injuries.

Company - Ashva Wearable Technologies Pvt. Ltd.

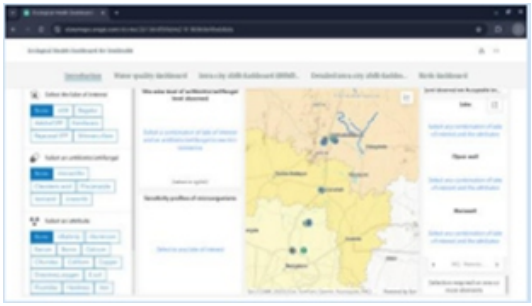
Product - A Smart Intravenous Dripper System For Centralized Monitoring and Automatic Stopping of Intravenous Fluid

Company - Rekindle Automations Private Limited



Product - Quick Commerce of Healthcare Products and Services

Company - Shoonyatvam Foundation (dawa.ai)

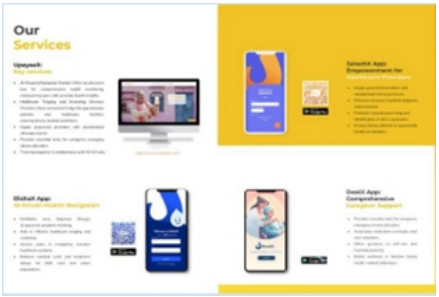


Product - Digital Dashboard for Wastewater Reuse

Company - Molecular Solutions Care Health LLP

Product MobiL: Upper & Lower Limb Robotic and VR-Based Rehabilitation Solution

Company - Rymo Technologies Private Limited



Product - UpayaaX: Healthcare Navigation and Triaging Digital Products Using AI for Physical and Mental Health

Company - Upayaahealth (OPC) Private Limited

Product - HELO HEALTH: a multi-parametric device giving instant results for more than 51 parameters

Company - Adarsa Private Limited

Product - Digital Mental Health Care (DMHC) and well-being program in Primary/ Community Healthcare Centres

Company - Mental Health Foundation India

Snapshot of a Success Stories of AGC-janCARE program beneficiaries-Creating Impact on the Ground

Product - ASSURED - Early stage single rapid diagnostic kit for Malaria, Dengue and Chikungunya.
Company - Ameliorate Biotech Private Limited

MACHENN
MAKING IDEAS HAPPEN

Product - Extended Reality-based Healthcare Equipment Training Simulation
Company - Machenn Innovations Private Limited

Product – ONI: connected ecosystem between ObGyns and Pregnant Mothers to focus on improving fetal health and labour outcomes
Company - Onicares Education Private Limited

Product – Ixanner: a portable OCT for early diagnostics of glaucoma in a telemedicine set up
Company - Tishyas Medical Device Development

Product - सुरक्षा (SAVE™) – (Point of Care Testing) platform, Back Pack
Company - BRIOTA Technologies Private Limited

Product - Lower limb exosuit for Rehabilitation
Company - Astrek Innovations Private Limited

Product - Molecular Grade Biological Sample Collection Kits to transport and preserve nucleic acids from various biological samples
Company - Azooka Labs Private Limited

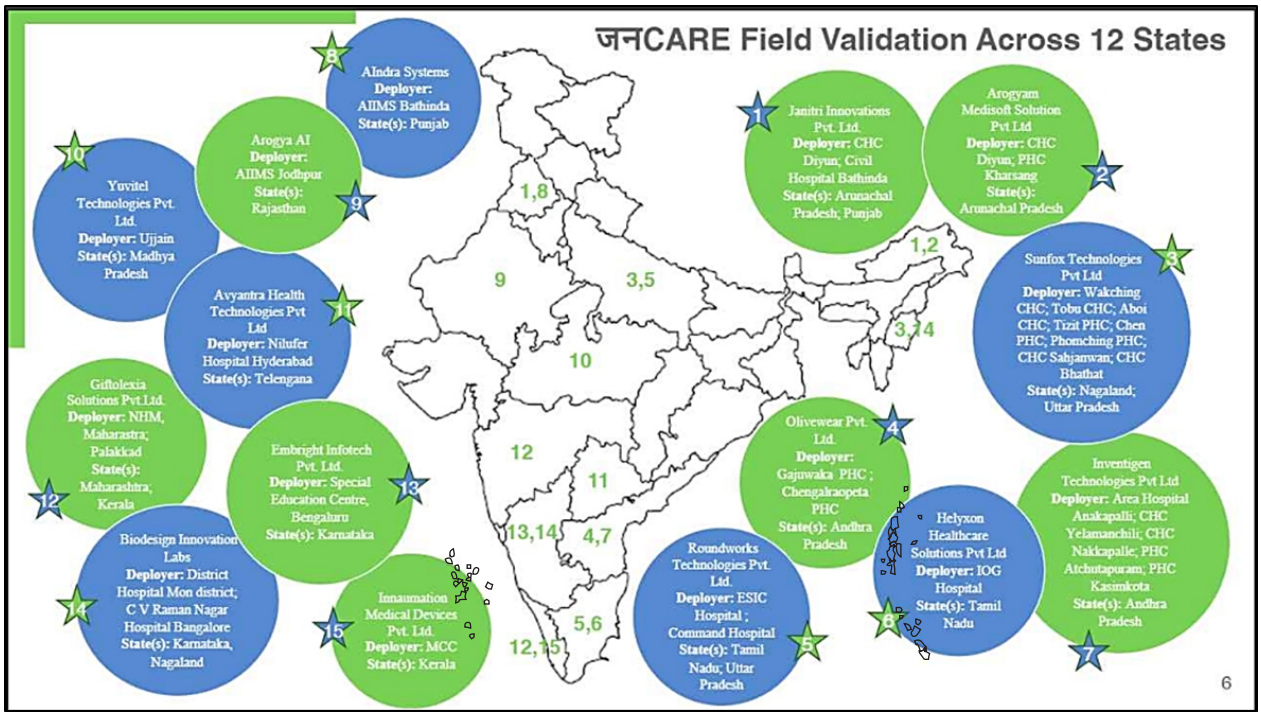
Product - IVA -Intelligent Vision Analyser for comprehensive eye screening
Company - Alfaleus Technology Private Limited

Product - Beltless ECG/EMG based Fetal Maternal labour Monitoring Patch
Company - Janitri Innovations Private Limited

जनCARE Innovation Challenge-Reimagining the Healthcare Delivery in Low-Resource Settings

The **जन**CARE-Innovation Challenge launched in Dec 2020 by BIRAC and NASSCOM in collaboration with Grand Challenges India (GCI) has successfully driven health-tech innovations into low-resource healthcare settings across India, completing field validation studies for 14 grantees in 12 states. The initiative was designed to discover, design, and scale innovative, affordable health-tech solutions for rural and semi-urban healthcare facilities such as PHCs, CHCs, and sub-centres.

Several products have already been adopted by government and industry stakeholders, demonstrating tangible improvements in areas such as cardiovascular care, maternal and child health, diabetes, COPD, and cancer management. Leading industry partners including AstraZeneca, GE Healthcare, Siemens Healthineers, Medanta Hospitals, St John's Research Institute, Health Care Global Enterprises, and TATA AIG supported innovators with technical guidance, market access, and mentorship ensuring sustained support through the pilot phase.



JanCARE Field validation studies across the nation

Impact created under the JanCARE program

Product – Keyar: Fetal Maternal Monitoring device
Company - Janitri Innovations Pvt. Ltd

Product – Alveofit: IoT enabled, Respiratory Healthcare digital platform
Company - Roundworks Technologies Private Limited

Product – HaemurEx: Remote Health Monitoring System
Company - Arogyam Medisoft Solution Pvt. Ltd.

Product - PreSco - AI/ML-based platform for Neonatal Sepsis Detection
Company - Avyantra Health Technologies Pvt. Ltd.

Product – RespirAID: Portable Ventilator of Emergency Care and Transport Ventilation
Company - Biodesign Innovation Labs

Product - Gaze Pattern Based Screening for Early identification of Dyslexia in Children
Company - Giftolexia Solutions Private Limited

Product – Savemom: AI-driven end-to-end maternal care platform
Company - Olivewear Pvt. Ltd.

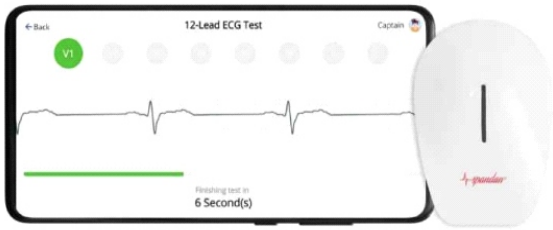
Product - AarogyaAIÂ® Rapid Tuberculosis Drug Sensitivity Test
Company - AarogyaAI Innovations Pvt. Ltd.

Impact created under the JanCARE program

Product - EPICare: Technology program for effectively managing IMR & MMR
Company - Helyxon Healthcare Solutions Pvt. Ltd.

Product - Healthcare Kiosk: Providing affordable healthcare services to India's most remote rural areas, where doctors are scarce
Company - Yuvitel Technologies Pvt. Ltd.

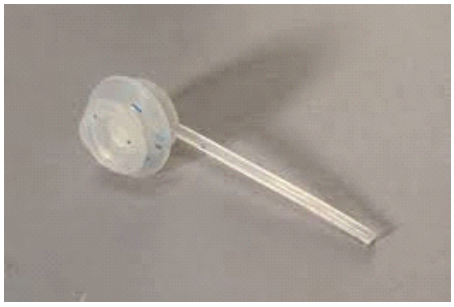
Product - CervAstra:Computational Pathology-based, affordable system for detection of Cervical Cancer
Company - Aindra Systems



Product - Spandan: A Portable ECG Device
Company - Sunfox Technologies Pvt. Ltd.

Product - Onward Assist: Cancer analytics platform
Company – Inventigen Technologies Pvt. Ltd.

Product - Auticare: XR-AI based Assistive Technology Learning Platform
Company - Embright Infotech Pvt. Ltd.



Product – Aum Voice Prosthesis
Company - Innaumation Medical Devices Private Limited

Outreach Initiatives

Global Bio India 2024:

Global Bio-India (GBI), a Mega International event for biotech stakeholders is a strategic initiative by the Department of Biotechnology and BIRAC to propel and position India's biotechnology sector into the global spotlight. This event is envisaged to serve as a catalyst for transformative growth of the biotech industry and showcase India's biotech strengths to the global community. Global Bio-India offers a unique business networking platform for varied participants including Central and State Ministries, Startups, SMEs, Large industries, Bioclusters, Research institutes, Investors, Incubators, Regulators, Policy Makers, Business analysts, Legal, IP, CROs, Innovation missions from other countries, International bodies, Industry Associations, and others. The event, over its four editions, has emerged as the only national event of this scale and one of the most sought-after events globally for the biotech community. The event is a testimony to global confidence about 'Destination India' as the most exciting emerging hub in the biotech sector. High-level business and technical delegations witness India's growing Bio-Economy and growth trajectory supported through the Government of India's Policies and continued support commitment. This is expected to provide a boost to both Make In India and Startup India national missions for the biotech sector.

Fourth edition of GBI 2024 was organised by the Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India, along with its Public Sector Undertaking, Biotechnology Industry Research Assistance Council (BIRAC) from 12-14 September 2024 at the Pragati Maidan, New Delhi. The three-day event was the largest representation of the country's entire biotechnology stakeholders to the national and international biotech community. The GBI 2024 theme highlighted the potential and opportunities in **'Biotech Innovation'** and **'Bio-manufacturing'** and their impact on the Bioeconomy. The event was organized in partnership with key stakeholders, national and international partners including Startup India, Invest India, Department of Science & Technology, S&T Line Ministries and Departments from Centre and States, Association of Biotechnology Led Enterprises (ABLE), Federation of Indian Chambers of Commerce & Industry (FICCI), International partners like BIO US, USISPF, International Facilitation Partner: Global Business Inroads, BIO-Korea as Country Partner; Investors Associations like IVCA, IAN; TiE-Delhi-NCR, World Health Organization (WHO) India, TeamworkArts, Sathguru Management Consultants, Indian Science and Technology Entrepreneurs Park and Business Incubator Associations (ISBA), India Health Fund (IHF), Bharath Startup and Innovation Society (BSIS), Association of Indian Medical Device Industry (AIMED) and so on.

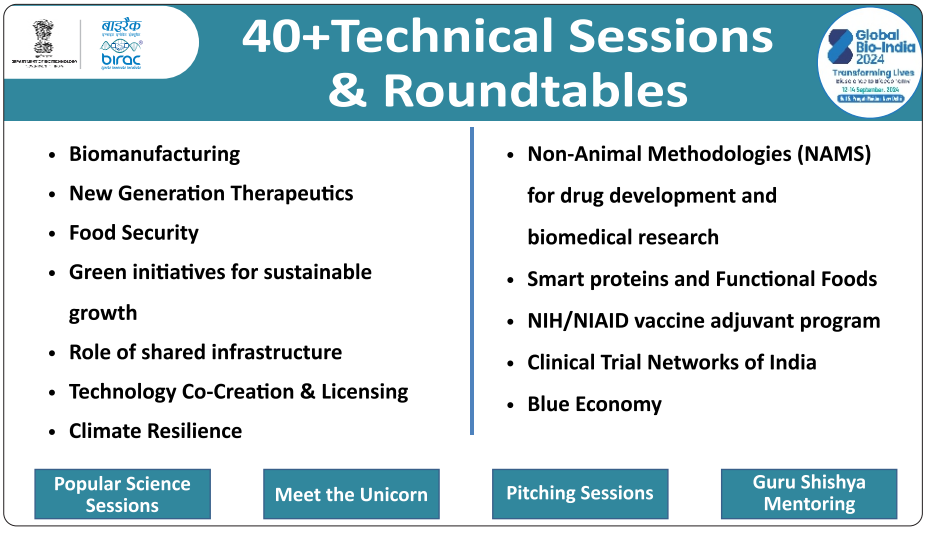
The Mega Expo comprised 400+ Startups, 90+ Incubators, 40+ Industry (including SMEs, Services/CROs), 27+ countries, 14 State Government Departments, 35+ Academic Institutions showcasing their innovations, products and offerings. The event witnessed a footfall of 10,000+ participants including stakeholders from Biopharma, Medtech, Diagnostics, Industrial Biotech, Bio-Agri, Industry Associations, Investor Associations, Global Entrepreneurship Organizations, aspiring entrepreneurs/innovators, faculty from Universities/Research Institutes, young students from school and so on. 2300+ B2B business meetings were held during the 2.5 days.

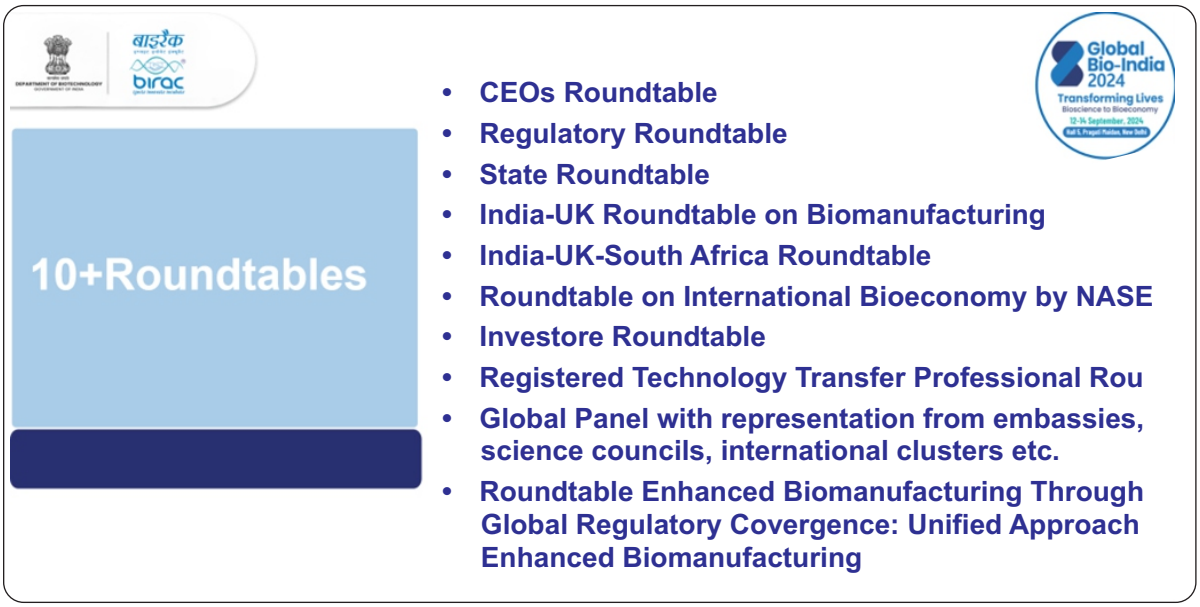
More than sixty roadshows, hosted by BIRAC's BioNEST Incubators and other partners were organized across 45 cities (including 38 Tier 2 & 3 cities) across the country to create awareness about the event.

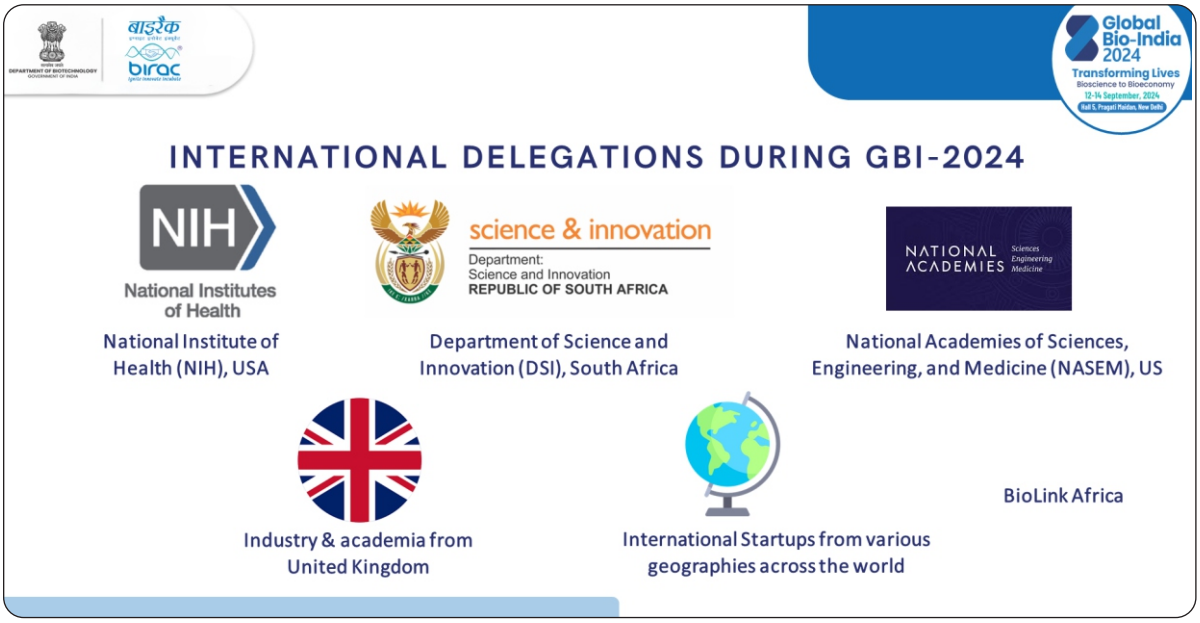
Sessions during GBI 2024:

- 40+ Technical Sessions and Roundtables
  - o 4 super sessions
  - o 10+ Roundtables
- Startup pitches: 30+ Biotech national and International startups presented their innovations to a panel of investors and industry experts.
- Bio-quiz for school students (organized for the first time during GBI)

New Announcements on Biomanufacturing initiative, global partnerships, launch of Bioeconomy Report and new product launches were made during GBI 2024







Publications released:

- India BioEconomy Report 2024
- BIRAC Compendium 2024
- BIRAC Exhibitor Directory
- Biotechnology Innovation Fund - Fund of funds - AcE (Accelerating Entrepreneurs)
- Insights into BIRAC's Equity Fund Scheme
- Amrit Grand Challenge-जनCARE Report on Early-Stage Innovations

Snapshot of publications

Felicitation of the awardees:

- **BIRAC Innovators Awards:** 11 startups/innovators received awards across 7 themes
  1. **Therapeutics and Vaccines:** Immuneel Therapeutics Pvt. Ltd., Bengaluru, and Wockhardt Ltd., Mumbai
  2. **Biomedical Devices & Diagnostics and Bioinformatics:** Piscium Health Sciences Pvt. Ltd., Mumbai, Sensivision Health Technologies, Bengaluru, and Sunfox Technologies Private Limited, Dehradun
  3. **Agriculture (including Veterinary Sciences and Aquaculture):** Indian Veterinary Research Institute, Bareilly, in collaboration with Genomis Carl Pvt. Ltd., Andhra Pradesh
  4. **Industrial Biotechnology:** GPS Renewables, Bengaluru, and Shriram Institute for Industrial Research, New Delhi
  5. **Innovation with High Social Impact:** Genrobotic Innovations, Thiruvananthapuram
  6. **AI-based Innovation:** Torchit Eigatronics Private Limited, Ahmedabad
  7. **Special Recognition:** Interactive Research School for Health Affairs, Pune
- **Best Exhibitor Awards for Incubator and Startups:** 6 Startups were recognized under 6 different categories.
  - **Agriculture:** Ekosight Technologies Pvt. Ltd.
  - **Industrial Biotechnology:** Rigel BioEnviron Solutions Pvt. Ltd.
  - **Healthcare Therapeutics:** Apramitha Innovations Pvt. Ltd.
  - **Healthcare Devices and Diagnostics:** Denovo Bioinnovations Private Limited
  - **International Participant:** Biopesticide Limited
  - **Women Entrepreneur:** Inte-e-Labs Pvt. Ltd.
- **Best Incubation Centre Awards:** 4 incubation centers were awarded for their outstanding contributions in promoting entrepreneurship and innovation within their regions.
  - **Best Incubation Centre (Tier I Cities):** BSC BioNEST Bio-Incubator, RCB, Faridabad, Delhi NCR, was recognized for its exemplary support in accelerating biotech startups in a metropolitan region.
  - **Best Incubation Centre (Tier II Cities):** PSG-STEP, Coimbatore, and Manipal Govt. of Karnataka &

BioNEST Bio-Incubator, Mangalore, were jointly awarded for creating dynamic innovation ecosystems in their respective regions.

- **Best Incubation Centre (Tier III Cities):** Technology Innovation and Development of Entrepreneurship Society (TIDES), IIT Roorkee, was honored for its impactful efforts in fostering entrepreneurship and innovation in smaller cities.
- **Best Incubation Centre Exhibit:** E-YUVA Centre, Career College, Bhopal, received recognition for an outstanding exhibit showcasing its contributions to advancing entrepreneurial ventures and biotech innovation.

BioE3 Policy Awareness Campaign Competition Awards: Organized by DBT in association with BRIC-Institute of Life Sciences Bhubaneswar under various themes:

- **WINNERS OF SELECTED SLOGANS:**

1. "Go Green, Not Red, Not in Color, But by Nature:, Opt for Smart Proteins" by Dhanaswi Katore, DYPatil Univ., Navi Mumbai, Maharashtra
2. "Grow Resilient, Feed the Future" by Prithu Bhattacharyya, RKMVCC, Rahara, West Bengal
3. "Turning Today's Emissions into Tomorrow's Essentials" by Mayank Kapri, SJIPR,Palghar, Maharashtra
4. ''कार्बनर्ब को कैद कर के, कृति को आजाद करगें'' by Shiwangi Kesarwani, IIT-BHU, Varanasi,Uttar Pradesh
5. "From Emissions to Sustainable Solutions, Carbon Capture for a New Revolution" by Anil Behera, ICGEB, New Delhi
6. "जलबायु से ताल मिलाओ मार्ट खेती से फसल बचाओ" by Nishikanta Das, Bhadrak, Odisha
7. "Chemicals and Enzymes from Biomass, will avert the Future Energy and Economic Clash" by Smrutirekha Mishra, Revenshaw University, Cuttack, Odisha
8. "मोटा अन सेहत का सार, लटेून से मुत, शक्ति अपार" by Bishakha Biswakarma, NABI, Mohali, Punjab
9. "When Microbes are at Play, Simple Cells turn into Chemicals Every Day!" by Geethadevi, PSGRKCW, Coimbatore, Tamil Nadu
10. "Uncharted Waters, Boundless Space: Exploring Beyond the Borders of the Sea and Space" by Jyotismita Ghosh, NABI, Mohali, Punjab

- **WINNERS OF SELECTED ESSAYS:**

Theme: "Bio-based Chemicals and Enzymes"

1. "Bio-Based Chemicals and Enzymes for a Greener World" was awarded to Maharshi Limbola from Central Institute of Fisheries Education, Mumbai, Maharashtra
2. "Plastic to Bioplastic: The Bacterial Journey" was awarded to Shoham Ghosh from St.Xavier's College, Kolkata, West Bengal

Theme: Climate Resilient Agriculture

1. "Smart breeding, a boon for combating climate change" was awarded to Arpita Mohapatra from OUAT, Bhubaneswar, Odisha
2. "Sub-optimality and Robustness for Bio-Economy" was awarded to Vishwadeep Mane from Indian Institute of Science, Bengaluru, Karnataka

Theme: Carbon Capture and its Utilization

1. "The Life and Transformation of Carbon Dioxide: A Journey Through Capture, Utilisation and the BioE3 Policy" was awarded to Keerthika K. from University of Madras, Chennai, Tamil Nadu.

Theme: Futuristic Marine and Space Research

1. "The Blueprints of Life: From Ocean Depths to Cosmic Frontiers" was awarded to Disha Chattopadhyay from Dr. Homi Bhabha State University, Mumbai, Maharashtra

2. "Frontiers Unleashed: The Future of Marine and Space Exploration" was awarded to Mohd Yusuf from Bhaskaracharya College of Applied Sciences, New Delhi
3. "Futuristic Marine and Space Research" was awarded to Payal Pragnya Routray from Siksha O Anusandhan Deemed University, Bhubaneswar, Odisha
4. "Waste Management in Long-Term Space Missions: An Analysis" was awarded to Chelsi Narang from IIT BHU, Varanasi, Uttar Pradesh
5. "Futuristic Marine and Space" was awarded to Rakshita Dornal from Modern College of Arts and Science, Pune, Maharashtra

Startup Product Launch: Eleven (11) products of Startups were launched

1. Roundworks Technologies Pvt. Ltd. launched Alveofit: A digital respiratory health care platform for asthma, COPD and lung care. Other products include Alveoair,AlveoMD, Alveoair Clinical Grade
2. MedevPlus launched IXanner 7vn: A Portable and handheld device for comprehensive screening of the eye using Optical Coherence Tomography
3. Nanosafe Solutions launched:a. Active copper based antimicrobial technology formulations for coating, plastics, textiles, foam and cosmetics, construction chemicals, b. Copper fortification of water and other edible liquids via plastic packaging,c. Leaching copper, as a replacement for preservatives, through plastic packaging,d. Shelf-life extension using copper ingredients in flexible film,e. Organic, partially-import substituting antimicrobial formulation for application in medical devices coating, paints & polyurethane foam
4. Neuome Technologies Pvt. Ltd. launched instaPRESERVE®, solution for collection transport and storage of biospecimen at ambient temperature
5. Genexis Biotech Pvt. Ltd. launched Bringing in 100 Animal-Free Proteins and FBS Alternative for a Sustainable Future
6. Ripple Healthcare Pvt. Ltd. launched Hip Pro: Advanced airbag technology protects your hips and reduces the risk of injury due to fall
7. Nutriciana Healthcare Pvt. Ltd. (BioNEST-NIPER Guwahati-BioNEST) launched Nutriciana Child - A dietary supplement for malnutrition for children
8. Revelations Biotech Pvt. Ltd, Hyderabad launched FOSLIFE- A healthy sweet soluble functional prebiotic fibre (Fructo-oligosaccharides)
9. Revelations Biotech Pvt. Ltd, Hyderabad launched ALLULOSE- A sweet tasting zero calorie rare sugar
10. Kcat Enzymatic Pvt. Ltd. has pioneered innovative biocatalytic solutions using proprietary engineered enzymes Transaminase (Greenaminase®) & Hydroxylase (Greenhydroxylase®). These enzymes are designed to reduce carbon footprints, support sustainability, and provide cost-effective solutions for the production of APIs, and drugs.
11. Prameela Life Sciences Pvt. Ltd. launched Advanced Probiotic based skincare formulations and raw materials.

Snapshot of a few Global Bio-India 2024

Snapshot of a few Startup Product Launches and Awards

BIRAC's 13th Foundation Day

BIRAC commemorated its 13th Foundation Day over two days, March 20-21, 2025, in New Delhi, bringing together key stakeholders from across the biotechnology ecosystem, including policymakers, industry representatives, academia, and entrepreneurs.

A significant highlight of the event was the release of the India Bioeconomy Report 2025 by Dr. Jitendra Singh, Hon'ble Union Minister of State (Independent Charge), Ministry of Science & Technology, Ministry of Earth Sciences, Minister of State in the Prime Minister's Office, Ministry of Personnel, Public Grievances and Pensions, Department of Atomic Energy and Department of Space. The report documented a 16-fold growth in India's bioeconomy from USD 10 billion in 2014 to USD 165.7 billion in 2024 contributing 4.25% to the national GDP and surpassing the earlier target of USD 150 billion by 2025.

In his address, the Hon'ble Minister applauded BIRAC's contribution in nurturing the biotech innovation ecosystem nationally and supporting more than 5,000 innovation-driven projects. He stressed the importance of integrating Indian biotech into global value chains and boosting bio-based exports. The Minister also launched *BioSaarthi*, a six-month mentorship program offering sector-specific guidance to emerging startups.

Dr. Rajesh S. Gokhale, DG-BRIC, Secretary, DBT and Chairman, BIRAC, delivered the Foundation Day Address, highlighting key achievements from DBT–DBT-BIRAC-supported initiatives. He showcased major breakthroughs such as the development of gene therapy for *Hemophilia,* discovery of *Nafithromycin* as a novel antibiotic, creation of *Kisan Kavach*, a protective anti-pesticide suit for farmers, and the progress under the *GenomeIndia* initiative. Dr. Gokhale underscored the importance of India's *BioE3 Policy* as a roadmap for a sustainable bioeconomy, and elaborated on the *National Biomanufacturing Initiative* aimed at positioning India as a global biotechnology leader.

The Foundation Day Lecture was delivered by Dr. Rahul Purwar, Professor at IIT-Bombay and Founder-CEO of ImmunoACT Pvt. Ltd., who shared perspectives on advances in immunotherapy.

Glimpses of BIRAC's 13th Foundation Day Celebration

Ecosystem Engagement: Events & Sponsorships

BIRAC's outreach activities aim to strengthen India's biotechnology innovation ecosystem by connecting startups, researchers, industry, and academia with investors, policymakers, and global partners. These engagements create opportunities to exchange knowledge, explore markets, and build collaborations, supporting the growth of biotechnology across the country.

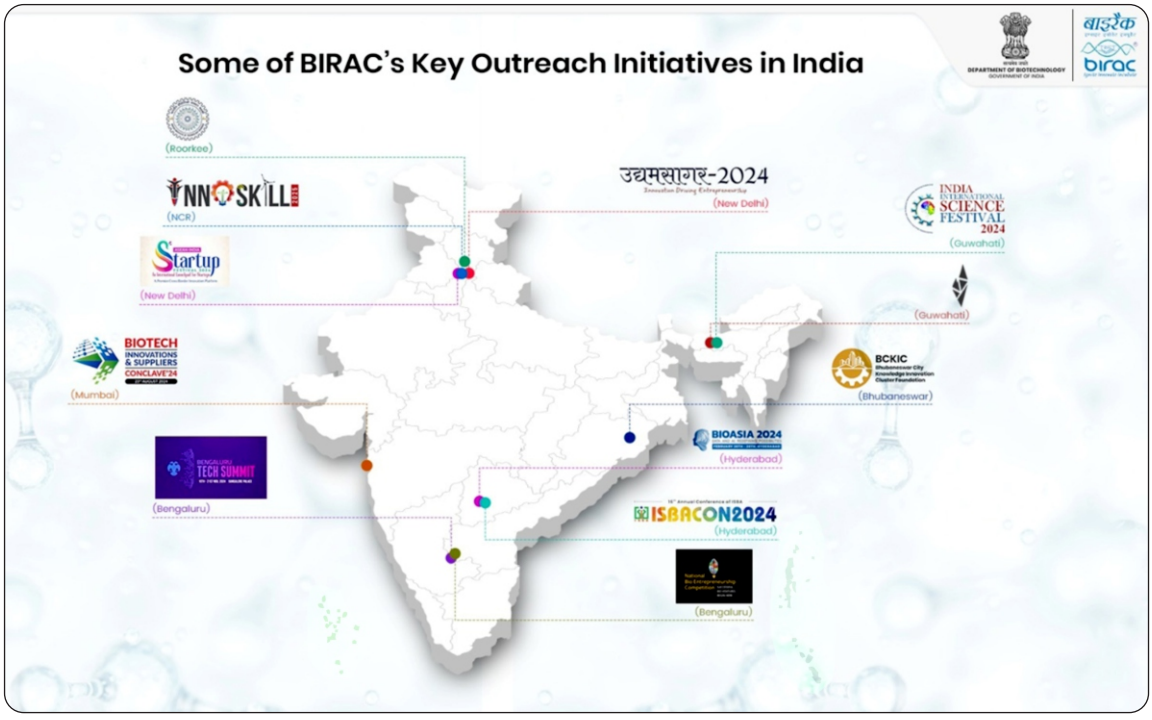
During the year, BIRAC participated in key forums across Bengaluru, Hyderabad, Mumbai, New Delhi, and the NCR, while also representing India at international platforms in San Diego and Stockholm. This wide presence reflects BIRAC's effort to give visibility to innovators from different regions and to link them with the larger biotechnology network.

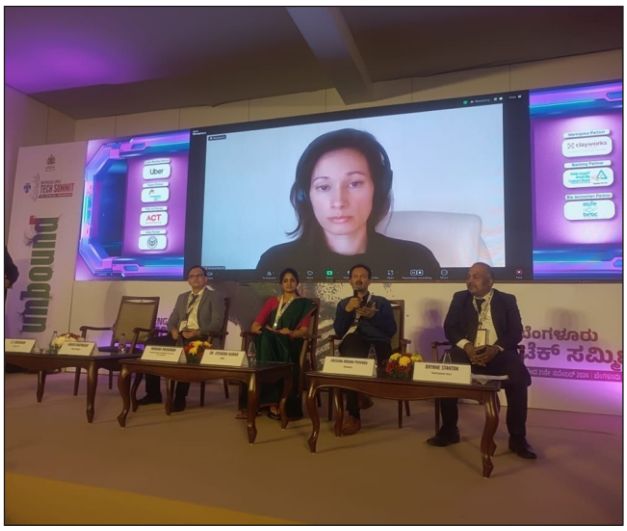
At the Bengaluru Tech Summit, one of India's leading technology events, BIRAC contributed to discussions on the bioeconomy and showcased technologies with commercial potential. In Hyderabad, at BioAsia, Asia's largest life sciences conference, BIRAC partnered as the Startup Stage Partner to highlight early-stage enterprises and the incubator network. It also participated in ISBACON 2024, emphasizing the role of incubation managers and ecosystem enablers.

In Mumbai, BIRAC was the Title Sponsor of the Biospectrum Biotech Supplies Conclave, an industry-focused forum on research tools and enabling technologies for drug discovery and vaccine development. In New Delhi, BIRAC collaborated with JNU for Udyamsagar 2024, marking World Entrepreneurship Day with student-led pitches and a startup showcase. BIRAC also partnered with INNOSKILL 2025 in the NCR, engaging students and young professionals in innovation and sustainability challenges.

Internationally, BIRAC co-led the India Pavilion at the BIO International Convention 2024 in San Diego, featuring more than 30 organizations and launching the India Biotech Handbook 2024. At BIO-Europe 2024 in Stockholm, BIRAC represented India's biotechnology sector and underlined opportunities for global collaboration.

Through these initiatives, BIRAC has strengthened incubation networks, promoted young entrepreneurs, and enhanced India's global visibility in biotechnology. These efforts are aligned with the national mission to advance innovation, foster self-reliance, and contribute to India's growing bioeconomy.





Glimpses of a few key BIRAC events

Biotech Showcase Portal

Biotech Showcase Portal

Biotech Showcase e-Portal (https://biotechinnovations.com) has been created as a centralized data repository to bring the entire biotech ecosystem on a single platform, including Startups, SMEs, Incubation Centres, Mentors, Investors, and other stakeholders. The portal enables users and visitors to connect, explore, identify, and create new business opportunities. Launched by Hon'ble Prime Minister Shri Narendra Modi ji during the Biotech Startup Expo 2022, the portal showcases 850+ cutting-edge Biotech Products and Technologies from across India. Equipped with interactive features, the portal enables users to spotlight their achievements for recognition at national and international levels, connect with startups, entrepreneurs, and incubators in their domain, network directly with relevant investors and experts and stay ahead with real-time updates on announcements and opportunities

Other Initiatives

3i Portal

BIRAC 3i portal is BIRAC's official website for the end to end proposal submission which is hosted at NICSI Cloud Server.

The 3i Portal has become a cornerstone for effectively managing BIRAC's diverse funding schemes. Its user-friendly interface and regular updates have made it a go-to platform for all stakeholders. BIRAC 3i portal is regularly expending its reach, the portal is streamlining financial operations.

Enhanced data mining capabilities, coupled with new reporting tools, are driving data-driven decisions. The portal has proven instrumental in conducting impactful surveys and generating valuable insights.

Looking ahead, advanced search functions and a dedicated mobile app will further elevate user experience. A groundbreaking networking portal is on the horizon, fostering collaborations within India's biotech community and eventually extending its reach globally. This platform will showcase products, services, research, and technologies, accelerating innovation and market entry.

As BIRAC is growing, the access of BIRAC portal is also enhancing. Plans are underway to upgrade the BIRAC 3i Portal, with a focus on enhancing its functionality, accessibility, and user engagement including development of personalized dashboards, AI-powered support, smart search and filtering, real-time application tracking, interactive visual data, timely notifications to the users regarding proposals etc.

Technology Portal

A technology portal was launched on the 6th Foundation Day of BIRAC which provides information about the technologies and products that emerged out of BIRAC funding which are launched in the market or are ready to enter the market. There are around 200+ technologies/products on the portal for technology seekers to connect with the innovators. For the FY 2024-25, **175 connections** were provided to the technology seekers using the BIRAC Technology Portal.

Mission

Grand Challenges India (GCI): Catalyzing Innovation for Public Health and Development

Overview

Grand Challenges India (GCI) is a flagship partnership between the Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India, and the Gates Foundation. Since its launch in 2012, GCI has served as a pioneering platform to identify, support, and scale innovations that address critical health and developmental challenges in India and the Global South. In earlier years, the program also benefited from strategic collaboration with partners such as USAID and Wellcome.

With a cumulative joint investment of over USD 75 million, GCI has, over the past 13 years, emerged as a leading enabler of transformational scientific and technological solutions that advance public health and development outcomes. The initiative strategically invests in high-impact, scalable innovations to bridge gaps in maternal and child health, infectious diseases, vaccines, point-of-care diagnostics, agriculture, nutrition, and allied areas. More recently, GCI has also expanded its focus to include capacity building and ecosystem strengthening.

GCI adopts a collaborative, cross-sectoral approach, fostering indigenous research and innovation by linking public and private stakeholders and leveraging their collective expertise. Through thematic open calls and targeted specialized initiatives, the program supports researchers, entrepreneurs, and institutions in developing context-relevant, inclusive, and affordable solutions that have the potential for sustainable scale and impact.

Since its inception, GCI has launched 47 innovation programs and received over 3,000 applications. Of these, 224 projects, including 36 under Grand Challenges Explorations India (GCE-India), have been supported, leading to the development of affordable medical technologies, drug delivery systems, diagnostics, and digital service models. These projects have resulted in nearly 80 peer-reviewed publications and multiple granted patents and filings nationally and internationally, contributing to India's growing knowledge economy and strengthening its position as a hub for global health innovation.

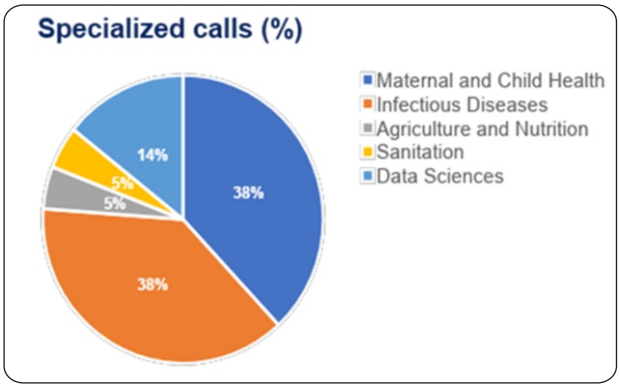


Figure 1: Distribution of Grand Challenges India Specialized Calls (FY 2024-25).

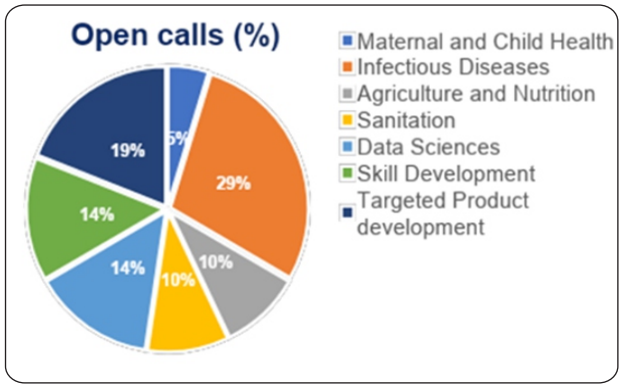


Figure 2: Distribution of Grand Challenges India Open Calls (FY 2024-25).

In FY 2024–25, a key highlight was the meeting between Dr. Jitendra Singh, Union Minister of State (Independent Charge) for Science and Technology; Earth Sciences and Minister of State for PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Mr. Bill Gates, Dr. Rajesh S. Gokhale, Secretary, DBT and Director General, BRIC, reaffirming India's leadership in vaccine development, gene therapy, and

biomanufacturing. GCI continues to anchor the country's global health innovation footprint through strategic partnerships and cutting-edge research and continues to play a pivotal role in advancing India's science-led development agenda, with a focus on equity, access, and long-term impact across geographies.

Science and Technology Minister Dr Jitendra Singh held discussions with philanthropist Mr. Bill Gates in New Delhi.

Vaccine & Diagnostics Innovation

qHPV Clinical Development

India has come up with its first indigenously-developed vaccine against cervical cancer. The development of quadrivalent (6,11,16 and 18) Human Papillomavirus vaccine (qHPV) 'CERVAVAC' is an outcome of a partnership between the Serum Institute of India (SII), DBT through GCI-BIRAC along with the Gates Foundation (BMGF). The SIIPL qHPV vaccine i.e. CERVAVAC® has received a Manufacturing & Marketing License. CERVAVAC® has been launched in the Indian market in Q1 2023.The phase 2/3 clinical study data (9-14 yrs cohort) was published in Lancet Oncology. The 36 Month follow up of all subjects is completed.

Validation study of indigenous HPV tests for cervical cancer screening (i-HPV)

Cervical cancer is a major public health concern in India, accounting for a significant share of global cases and deaths. While HPV vaccination is key, early and accurate screening is critical for reducing the disease burden. Traditional methods like Pap smear and visual inspection with acetic acid (VIA) have limitations, prompting a shift toward HPV DNA testing as recommended by WHO. In response to same, GCI and BIRAC, under the DBT, launched a program to validate indigenous RT-PCR–based HPV test kits through a multi-site study, implemented at AIIMS, New Delhi (nodal site), in collaboration with ICMR-NICPR, Noida and ICMR-NIRRCH, Mumbai.

To ensure robust quality control, the WHO-IARC provided 1,100 blinded cervical samples from its biobank, distributed across the Indian sites and a reference laboratory in Belgium. Test kits were benchmarked against internationally validated assays (Cobas by Roche and Allplex by Seegene). The Truenat (Molbio) and PathoDetect (Mylab) kits were found to meet WHO validation criteria, showing high sensitivity, specificity, and consistency. This initiative marks a significant step in strengthening India's diagnostic ecosystem, particularly in low-resource settings, and supports India's commitment to expanding affordable cervical cancer screening tools.

Diagnostics for Neglected Tropical Disease (NTD) – Lymphatic Filariasis (LF)

Neglected Tropical Diseases (NTDs) are a group of 20 conditions that continue to pose significant public health challenges globally and in India, especially among vulnerable populations. India bears a high burden of several NTDs, including Lymphatic Filariasis (LF). In line with the WHO's 2021-2030 Roadmap - which emphasizes the need for accessible, accurate diagnostics to achieve elimination targets. GCI launched an open call titled "Diagnostics for Neglected Tropical Diseases (NTD) - Lymphatic Filariasis (LF)." The initiative supports the development of affordable, field-ready diagnostic tools aligned with WHO Target Product Profiles (TPPs) and suitable for integration into India's National LF Elimination Programme.

Five innovative projects were selected under Phase I, focusing on point-of-care solutions such as lateral flow assays, LAMP-based diagnostics, biomarker discovery platforms, and microscopy-enhanced tools to improve early detection of LF in underserved regions. The program is designed in two phases, with Phase I focused on early-stage development and Phase II targeting further validation and scale-up. Most Phase I projects are currently underway, with key outcomes expected by September/October 2025. A stakeholder consultation is planned for September 2025 to share progress, gather expert input, and shape Phase II, ensuring the program remains aligned with India's and global efforts to eliminate NTDs by 2030.

Fundamental and Innovative Research in Cachexia Tuberculosis

Tuberculosis (TB) patients suffer from progressive and debilitating loss of muscle mass and function, referred to as Cachexia. It is one of the critical and neglected areas in TB management and patient-care. GCI program on Cachexia Tuberculosis aims to foster collaborative research, develop solutions and generate evidence across a spectrum of gap areas. An open Request for Proposals seeking consortia-based innovative research-interests was launched from 28th November 2023 to 12th January 2024. RFP sought proposals on three key areas: i) addressing the basic gaps in knowledge, ii) identifying the innovative solutions, and iii) assessing the burden. Of 50 received proposals, 42 eligible proposals underwent three rigorous rounds of review for selection of awardees and funding support.

Three value-driven research consortia are being supported through this program. The consortia are exploring the underlying immunometabolism and pathophysiology of cachexia, novel solutions and cachexia specific diagnosis panels. The burden of cachexia in TB is being assessed in two states to uncover new strategies for improving patient care and policy recommendations.

Enhanced TB Diagnostics and Adjunct Technologies for Sample Collection and Processing

Tuberculosis (TB) has re-emerged as the world's leading infectious disease killer, with India accounting for 26% of global cases in 2023. Despite WHO-recommended rapid diagnostics, access in India remains limited, highlighting the urgent need for scalable, affordable, and point-of-care (PoC) solutions. In response, GCI launched a dedicated call to support the development of low-cost, accurate molecular diagnostics and simplified sample processing methods - including collection, lysis, and preparation - for use in community settings.

The call prioritizes novel approaches such as non-invasive sampling (e.g., saliva, oral swabs), self-administered blood collection devices, instrument-free lysis techniques, and emerging alternatives like breath-based diagnostics. A total of 76 proposals were received by deadline August 2025. Initial triage is underway, with shortlisting by the Selection Committee scheduled for July/August 2025.

The Med-Tech Challenge

One of the key challenges in India's healthcare landscape is the development and deployment of affordable medical technologies. Despite growing demand, innovators often face technical, financial, and market-access barriers, preventing promising solutions from reaching those most in need-particularly underserved populations.

To bridge this gap, GCI launched the MedTech Challenge, a program designed to accelerate the journey of cost-effective healthcare innovations from concept to market. The initiative supports Indian startups in overcoming

commercialization hurdles through a structured program that includes mentorship, training, tools, and access to strategic networks.

Out of numerous applicants, 22 teams were selected for a five-week virtual workshop focusing on market fit, business modelling, and entrepreneurship skills. With guidance from expert mentors, teams refined their proposals for the BIRAC Accelerator Grant Award. The proposals were rigorously evaluated through a peer-reviewed development framework and due diligence process.

Four promising technologies were supported under the program:

- JC Orthoheal Pvt. Ltd.: Pediatric variants of its FlexiOH orthopedic immobilization device.
- Cureous Labs Pvt. Ltd.: Eturnal, a device to detect and prevent pressure ulcers.
- Aindra Systems Pvt. Ltd.: CervAstra, an affordable cervical cancer screening solution for primary care.
- InnAccel Technologies Pvt. Ltd.: Saans, a neonatal breathing support device.

These startups are now advancing their technologies toward pilot testing and deployment, with some exploring scale-up and entry into new markets. The GCI MedTech Challenge demonstrates how targeted support and ecosystem collaboration can transform early-stage ideas into impactful medical solutions, contributing meaningfully to India's healthcare goals.

Novel Monoclonal Antibodies (mAb) Program

Novel Monoclonal Antibodies Program is directed at discovery and development of indigenous novel therapeutics. Under this program, human Nipah virus (NiV), an infectious and fatal zoonotic disease, is one of the priority areas. The recurrent Nipah virus outbreak and their unpredictability poses a significant public health concern. Its high case-fatality rate and potential for pandemic spread are alarming given the absence of licensed vaccines and effective therapeutics in place. It is imperative to develop effective monoclonal antibodies (mAbs) as therapeutics to ensure time-sensitive response to counter future outbreaks and prevent case fatalities.

A pilot study on the discovery and development of indigenous novel therapeutic mAbs against Nipah virus is in pre-grant making phase, and it aims to undertake the development and characterization of anti-Nipah mAbs and establish stable mAb expression capabilities. The proposed pilot study will be undertaken by BRIC- Translational Health Science and Technology Institute (THSTI). The study team has isolated the potently neutralizing novel anti-Nipah virus monoclonal antibodies of human origin. Overall, the study will be undertaken in a staged approach to deliver the first indigenous novel anti-Nipah monoclonal antibodies (mAbs) therapeutic product.

Transformative Sanitation Technologies (TST)

The Transformative Sanitation Technologies (TST) represent a breakthrough in decentralized sanitation technologies by offering a safe, hygienic, and sustainable way to treat waste at source without the requirement of sewer infrastructure, septic tanks, and with minimal use of water and promote recycling of treated water. Designed to operate entirely off-grid, TSTs treat human waste onsite, making them particularly suitable not only for high-end consumers but also for underserved urban slums, rural & remote areas, and emergency settings such as disaster relief camps.

In response to the urgent need for scalable, next-generation sanitation solutions, we propose the launch of the India TST Challenge - a national innovation platform to catalyse the development and piloting of working models of advanced, decentralized wastewater management and toilet technologies.

The Challenge aims to spark a wave of design-led, tech-enabled, and context-sensitive sanitation innovations that address critical gaps across the sanitation value chain: from household-level treatment to community-scale reuse systems. By supporting innovators through funding, technical hand holding, and deployment pathways, the TST Challenge will help create market-ready, regulation-compliant, and relevant products for the Indian ecosystem and beyond. Currently, the RFP is ready to launch an open call under GCI.

AI & Digital Health

Catalyzing Equitable Artificial Intelligence (AI) Use to Improve Global Health

Recognizing the transformative potential of Artificial Intelligence (AI) in healthcare, GCI launched the strategic call "Catalysing Equitable AI Use to Improve Global Health". The initiative emphasizes the need for LMIC-led, inclusive AI innovation, particularly addressing the needs of vulnerable groups like women and children.

The call sought safe, context-appropriate applications of AI, especially Large Language Models (LLMs), to tackle priority health challenges in India and beyond. Applicants were encouraged to use AI tools suited to their specific environments and implementation needs, with a strong focus on evidence generation, validation, and cost-effectiveness.

Proposals recommended for funding under this program span a range of impactful interventions. These include clinical decision support tools designed for frontline health workers (FLWs) and clinicians to improve the diagnosis and management of diseases at low cost; population health and policymaking tools that generate timely insights by leveraging routinely available or underutilized data; workflow and service quality tools to enhance frontline efficiency while reducing operational costs; and communication solutions that use AI to deliver targeted, language-sensitive, and literacy-appropriate health messages to diverse populations. Through this initiative, GCI aims to positions India as a leader in responsible, inclusive AI adoption, ensuring that LMICs actively shape the future of global health innovation.

AI for Ultrasound

Initiated during the fiscal year, the AI for Ultrasound program builds on foundational work supported by DBT through the GARBH-INi cohort and the knowledge integration (ki) Data Challenge Round 1, an innovative platform that brought together clinical researchers and data scientists, including collaborators from IIT Madras. The program focuses on developing AI-enabled tools for accurate gestational age (GA) estimation tailored to the Indian population. The GARBH-INi team has developed three models, GARBH-INi-GA1, GARBH-INi-GA2 (based on ultrasound biometry), and GAUGE (GARBH-INi Ultrasound image-based Gestational Age Estimator), spanning all trimesters of pregnancy. Preliminary external validations have shown these models outperform international standards such as Hadlock and INTERGROWTH-21st, with GARBH-INi-GA2 and GAUGE demonstrating higher accuracy in second and third trimester estimations. To enable clinical translation, the current phase includes large-scale validation across eight sites in India, ensuring geographic and population diversity for robust, real-world applicability.

National Disease Modelling Consortium Phase II

The National Disease Modelling Consortium (NDMC), founded in 2022, is an exclusive initiative focused on creating India-specific disease models, solely funded by the Gates Foundation. Anchored in the Koita Centre for Digital Health at the Indian Institute of Technology, Bombay, the consortium unites modelers nationwide to generate comprehensive disease burden estimates and assess the impact of vaccination and intervention strategies on the population.

In Phase I, the consortium concentrated on creating India-specific disease models and bringing together public health researchers and data modelers to estimate disease burden, vaccination coverage, and intervention strategies tailored to India's needs. Governed by an Advisory Council with representatives from various government departments, NDMC's research is currently centered on four key disease areas, aligned with India's government schemes:

1. **Malaria:** Enhancing understanding of transmission dynamics and spatial distribution to inform targeted interventions and resource allocation.
2. **Tuberculosis (TB):** Building disease models to analyse transmission patterns and identify high-burden regions, contributing to TB control and eradication.
3. **Vaccine Preventable Diseases (VPDs):** Developing models for diseases like Diphtheria, Hepatitis B, HPV, Measles, and others, focusing on high vaccination coverage and burden reduction.
4. **Neglected Tropical Diseases (NTDs):** Addressing Lymphatic Filariasis and Kala-azar with models and spatial mapping to improve outcomes for vulnerable communities.

GCI has initiated efforts to implement Phase II of the program, while facilitating the translation of the developed modeling findings into practical implementation through government machinery. While Phase I focused on establishing the consortium and initiating disease models in the Indian context, Phase II will build on this foundation and focus on advanced disease models, build and enhance partnerships with programmatic partners to translate these model outcomes into policy.

Toward this, the First Program Mentoring Committee (PMC) meeting for the National Disease Modelling Consortium Phase II was convened on 24 March, 2025 reviewed the program's scope. This meeting facilitated constructive conversations between the stakeholders, mentors and the IITB Team to enable collaborative planning and strategizing for the program's future steps. The IITB team presented their proposal and updated implementation strategy, which was followed by an engaging and interactive session.

Maternal, Child & Reproductive Health

GARBH-Ini Research Projects: Advancing Precision Maternal and Child Health in India

The GARBH-INi Cohort, a pioneering inter-institutional research initiative supported by the DBT, is positioned as one of India's flagship efforts to advance precision public health for maternal and child health. Recognized as a Mission Project under the Atal Innovation Mission of NITI Aayog, GARBH-INi is contributing to India's long-term vision for data-driven, genomics-enabled healthcare solutions.

In 2021, GARBH-INi joined the international Multi-Omics for Mothers and Infants (MOMI) Consortium, which brings together high-quality cohort studies and bio-repositories across Asia and Africa. The consortium addresses pressing global health questions by harmonizing clinical variables and building institutional capacity for advanced multi-omics research. Under Phase I, GARBH-INi contributed harmonized clinical and phenotypic data to support the development of a standard sample inventory tracker, enabling interoperability across partner datasets.

Currently, MOMI Phase II is in mid-implementation, focusing on expanding genomic analysis using low-pass whole genome sequencing (WGS) across Indian MOMI cohort samples. Led by the Translational Health Science and Technology Institute (THSTI), in partnership with the National Institute of Biomedical Genomics (NIBMG), this phase includes comprehensive genomic analyses of pregnancy phenotypes, bio-analytics, and micronutrients, alongside epidemiological assessments of risk factors associated with adverse pregnancy outcomes.

Phase III of the MOMI program, supported during the fiscal year, focuses on evaluating maternal and infant (cord blood) micronutrient levels and their association with adverse pregnancy outcomes such as preterm birth, small-for-gestational age (SGA), and preeclampsia. The study aims to refine population-specific nutrient thresholds for healthy pregnancy outcomes and identify molecular signatures predictive of risk. Epigenome-wide association studies (EWAS) are being conducted to detect maternal and fetal DNA methylation patterns linked to these outcomes. Discovery-phase proteomics and metabolomics from the MOMI-5 cohort have identified candidate biomarkers, which are now being externally validated using the GARBH-INi platform across 1,000 participants at two time points. Additionally, metabolite signatures from the INTERBIO-21st fetal study are being validated in GARBH-INi. Together, these multi-omics and nutritional analyses aim to inform predictive, context-specific strategies for improving maternal and newborn health in low-resource settings.

As part of the Selenium Study Consortium under MOMI, GARBH-Ini conducted a genome-wide association study (GWAS) examining selenium as a variable trait. A sub-cohort of 2,056 pregnant women was assessed for biomarkers of micronutrient status, with 220 preterm births reported. The study identified micronutrient deficiencies before 20 weeks of gestation and demonstrated associations between micronutrient levels and preterm birth. GWAS analyses further revealed associations between specific single nucleotide polymorphisms (SNPs) and selenium concentrations in pregnancy.

A nested sub-study within the cohort also examined N-linked glycosylation dynamics in longitudinal samples from women with gestational diabetes mellitus (GDM) and matched controls. The project successfully identified, for the first time, distinct N-linked glycosylation patterns associated with Gestational Diabetes Mellitus (GDM) across three stages of pregnancy, highlighting potential early biomarkers such as CFHR4, IL1RAP, and FRMPD1. Using advanced mass spectrometry and glycopeptide enrichment techniques, it revealed novel glycosylation in hemoglobin beta subunit, serum albumin, and hyperglycosylation of haptoglobin, potentially linked to inflammation and adverse pregnancy outcomes. These findings offer a promising alternative to current GDM diagnostics like OGTT, especially in low-resource settings. Key deliverables include comprehensive proteomic datasets, glycoproteome profiles, pathway enrichment results, trained personnel, and a manuscript under preparation, positioning this project as a scientific success with strong translational potential.

In parallel, GCI is supporting the GARBH-INi India Pregnancy Risk Stratification Platform Alignment (GIPA) project, led by Christian Medical College Vellore and supported by the Gates Foundation. The GIPA project successfully aligned and validated community-based pregnancy risk stratification data from a remote rural setting in Assam with the national GARBH-INi and global Antenatal/Postnatal Research Collective (ARC) platforms, establishing harmonized protocols for data and biospecimen collection. Key deliverables included the enrollment of 295 pregnant women, high rates of facility-based deliveries, standardized biological sample collection, and the validation of known risk factors like anemia, hypertension, low BMI, and short interpregnancy intervals. The project demonstrated that high-quality antenatal care and biobanking are feasible in low-resource settings, contributing to biomarker validation and predictive modeling for maternal and neonatal health. Its success story lies in the creation of a scalable, field-tested platform for risk-based care delivery and translational research, enabling future digital health innovations and national policy applications.

Pilot Scale up of Women and Infants Integrated Growth Study (WINGS), Himachal Pradesh

The Women and Infants Integrated Growth Study (WINGS) - an individually randomized factorial design trial was funded and supported by GCI, BIRAC in 2016-2017. The study assessed the impact of a package of health, nutrition, psychosocial care and environmental interventions delivered throughout the pre- and peri-conception period, pregnancy and first 2 years of life on both weight and length and stunting at 2 years of age. The study findings indicated that a package of interventions in multiple domains when delivered concurrently results in substantial reduction in the proportion of low-birth weight, small for gestational age, anemia and stunting in children. It also reduces the risk of anemia, reproductive tract infection and improves gestational weight in mothers.

In view of the promising outcomes of WINGS trial, a pilot Scale-up of WINGS, in the Una district of Himachal Pradesh, has been initiated in December, 2024. This is a specialized initiative within the purview of GCI-BIRAC in close collaboration with DBT, NITI Aayog, ICMR, Government of Himachal Pradesh and Gates Foundation. The package of integrated interventions proven to deliver results in WINGS trial is being scaled up in five Blocks of District Una (Amb, Dhundla, Gagret, Haroli & Una) of Himachal Pradesh, using the principles of implementation research design that aims to develop an optimized, scalable and sustainable model to achieve high and effective coverage in a state.

Immediate Kangaroo Mother Care (iKMC) scale up - implementation research

The Immediate Kangaroo Mother Care (iKMC) scale-up implementation research is a critical initiative aligned with the Government of India's priority to improve neonatal health and survival through evidence-based interventions. With growing global evidence supporting early initiation of KMC, the program aims to advance a comprehensive, integrated scale-up strategy that begins at the facility level and continues across the facility–community continuum. The World Health Organization (WHO) selected six sites across Africa and Asia to implement this initiative, with CHRD-SAS, New Delhi, being one of two sites in India. Safdarjung Hospital (SJH) and THSTI are providing technical leadership, supporting the development of implementation strategies, establishment of Mother-Newborn Intensive Care Units (MNICUs), and training of government health personnel. The program was officially launched in the 2024-2025 fiscal year and is now under active implementation.

Non-Hormonal Contraceptive Discovery Program (NHC-DP)

GCI is supporting Strand Life Sciences, to conduct an extensive screening of 1000 women with idiopathic infertility, aiming to identify genetic targets for female contraception.

This biphasic study aims to develop a data set that will serve as a valuable resource for further assessment of the potential of these genetic variants in identifying potential target candidates for contraceptive drugs. The feasibility study has finalized study documents including Clinical Study Protocol, including recruitment of 10 subjects and collection and bio-banking of blood samples and performed whole exome sequencing for all 10 subjects and generated QC metrics.

Implementing the expansion phase, the project has made substantial progress by successfully completing the recruitment of 1,018 participants, including 715 women with idiopathic infertility and 303 biological controls, from 37 clinical sites across India. Whole Exome Sequencing has been completed for 1,009 samples, with advanced bioinformatics analyses underway to identify genetic variants linked to unexplained infertility. Initial findings have revealed both known and novel loss-of-function mutations in genes potentially involved in reproductive biology. The final phase involves prioritizing these candidate genes using literature and public data sources to identify targets for non-hormonal contraceptive development.

This study marks a significant milestone in India's reproductive health research, establishing a diverse genomic dataset and demonstrating the feasibility of large-scale fertility genomics. Its success lies in laying the groundwork for future contraceptive R&D that avoids hormonal pathways, offering safer and more acceptable options for women and contributing to broader efforts in expanding contraceptive choices globally.

Knowledge Integration and Translational Platform (KnIT)

KnIT is a specialized initiative under GCI. The program aims to generate evidence by analyzing secondary data to address pressing issues in Maternal and Child Health and Nutrition in India. The program was launched in 2016 and it supported knowledge synthesis and transfer of evidence to the state level. GCI-BIRAC and the DBT, hosted a meeting titled "Strategies for Improving Maternal and Child Nutrition in India" on 25th February 2025. The event marked the dissemination of key findings from phase I and the official release of the supported study report, "Drivers of Decline in Stunting in India." The meeting served as a platform for participants to reflect on the scientific evidence generated through the study and to derive actionable insights to inform future strategies.

Partners unveil a key publication titled "Strategies to Improve Maternal and Child Health in India", a collaborative effort to inform data-driven health planning and implementation.

Consultation on Maternal and Child Health Strategies Stakeholders from academia, government, and global health organizations gather to deliberate on evidence-based interventions to strengthen maternal and child health outcomes in India.

Post successful completion of the first phase of KnIT which led to significant outcomes in terms of research publications, meetings/consultations with states to address regional MCH and nutrition challenges, the second phase of KnIT has been initiated in 2024. KnIT 2.0 has supported three projects on Maternal and Child Health, Nutrition, and Anemia and their work is under progress. The projects supported are, 'Association of intrauterine growth, breastfeeding, and micronutrient status with neurocognitive development in childhood'; 'Drivers of anemia reduction in India: Insights from district exemplars' and 'TB Vaccine India study for accelerating development and introduction of tuberculosis vaccine: A mathematical modelling approach'; and 'Anemia and environmental pollution in Indian women'.

Antimicrobial Resistance (AMR)

Genomic Surveillance

Antimicrobial resistance (AMR) poses a serious global health threat, particularly in low- and middle-income countries (LMICs). Whole Genome Sequencing (WGS) is emerging as a powerful tool to monitor AMR by identifying resistance genes and tracking pathogen evolution. Under the Global Health Research Units (GHRUs) program, supported by the UK's NIHR and led in India by Grand Challenges India (GCI), a state-of-the-art microbial genomics lab write has been established at Central Research Laboratory, Kempegowda Institute of Medical Sciences, (CRL-KIMS), Bengaluru. This facility has generated critical AMR data, strengthened infection control, and reduced sequencing costs.

Phase I of the program successfully established India's largest pathogen sequencing network. Building on this, the Phase II of the program, was proposed and supported under the GCI ambit, aims to build a nationwide, real-time WGS-based AMR surveillance ecosystem with standardized workflows, advanced data systems, and strengthened local bioinformatics capacity. A key focus is the integration of WGS into the monitoring of vaccine-preventable infections to support evidence-based policymaking and timely public health interventions. The program demonstrates how genomic data can generate actionable insights and shape both national and global AMR strategies.

Global Pneumococcal Sequencing project: Establishing decentralized global genomic surveillance for the pneumococcus

Streptococcus pneumoniae is a major cause of illness and death among children and the elderly, yet accurately assessing its disease burden in India remains difficult. Although vaccines like PCV10 and PCV13 are available, they are not yet fully implemented under the Universal Immunization Programme, limiting widespread protection. Conventional diagnostic methods do not capture genetic variations or antimicrobial resistance patterns, which are critical for disease control.

To address these challenges, GCI has launched a program to conduct global genomic surveys of *S. pneumoniae*, with a focus on high-burden settings such as India. The initiative aims to map the diversity of circulating strains, identify resistance determinants, and forecast the emergence of vaccine-escape variants. The genomic data generated will inform the development of more effective vaccines and support public health decision-making for improved pneumococcal disease control.

Group B Streptococcus (GBS) Genomic Surveillance in LMICs

Group B Streptococcus (GBS) is a significant cause of neonatal infections and infant mortality, with India accounting for the highest number of GBS-colonized pregnant women globally. Despite its impact, there is limited data on the true burden of GBS disease in India, particularly in the context of preterm births and stillbirths.

To address this critical knowledge gap, GCI is supporting a Whole Genome Sequencing (WGS) initiative to analyze GBS isolates collected across various regions and age groups in the country. The study aims to examine serotype

distribution, antimicrobial resistance patterns, and the genetic diversity of the pathogen. By understanding the genomic characteristics of GBS, the project will provide key insights into disease transmission and virulence, and inform strategies for disease control and vaccine development to reduce the global burden of GBS.

INSACOG Phase II

The COVID-19 pandemic has highlighted the critical need for health emergency preparedness, particularly through proactive surveillance of both known and emerging pathogens. In alignment with the World Health Organization's (WHO) call to strengthen genomic surveillance strategies for pathogens, there are plans to expand the genomic surveillance of the Indian SARS-CoV-2 Genomics Consortium (INSACOG).

INSACOG is a multi-laboratory and multi-agency initiative spanning India, consisting of a network of 54 laboratories dedicated to conducting surveillance studies using genome sequencing methods. This initiative focuses on monitoring genomic variations and establishing connections with epidemiological trends. The current program aims to expand INSACOG's efforts with a specific focus on wastewater surveillance of SARS-CoV-2, emerging pathogens, and antimicrobial resistance through genomics-based methods. Continuous surveillance using wastewater serves as an early warning system for detecting the presence and spread of various viruses, bacteria, and other pathogenic microbes. It allows for monitoring community transmission, providing local authorities with timely information to manage public health responses effectively. Enhanced wastewater surveillance will therefore contribute significantly to facilitating timely updates to vaccines and therapeutics. This proposal is currently in the grant-making phase.

Climate Change and Health

Climate change can affect human health directly such as extreme weathers, heat stress, floods/storms and indirectly through changes in vectors-borne diseases, water-borne pathogens, water quality, air quality and increasing healthcare vulnerability. Climate change poses a significant threat to the achieved progress and ongoing efforts to protect human health. The Climate Change program of GCI is aligned with the Grand Challenges global initiative 'Accelerating Catalyzing Solutions for Climate Change's Impact on Health, Agriculture and Gender' launched during COP28. An open RFP on 'Accelerating Catalyzing Solutions for Climate Change's Impact on Health in India was launched from December 3, 2023 to January 31, 2024. The proposals were sought on three major focus areas: i) Infectious diseases and emerging pathogens of concern, a) Early warning and disease surveillance and b) Climate-health linkages, ii) Climate sensitive health concerns, and iii) Smart Healthcare. This initiative focused on locally-driven, system-level research and cross-cutting solutions on mandate areas that are scalable and sustainable.

A total of 93 proposals were received, of which 62 met eligibility criteria outlined in the RFP and progressed past the preliminary screening. The eligible proposals underwent three rigorous rounds of review. Eight innovations and pilot studies are currently being supported under this program. These studies are focusing on strengthening surveillance and early warning models for vector borne diseases, developing innovative tools for monitoring impact of air pollution on health, and building resilient & responsive capacities to address heat stress and strengthen healthcare system resilience.

Climate change & Agricultural Development

The adverse effects of climatic irregularities pose a significant threat, to farming community with respect to crop production rendering them unstable and unsuitable for sustaining agricultural productivity. This instability profoundly impacts food availability and nutritional quality, posing a formidable challenge to the agri-food system. The agricultural sector in India, in particular, faces heightened vulnerability to the threats posed by climate change, with potential severe repercussions on food crop and milk production. In response to these pressing challenges, GCI aligning with the Grand Challenges global initiative launched a call on 'Accelerating Catalyzing Solutions for Climate Change's Impact on Agriculture in India' during the COP 28. The primary objective of this call is to bridge the gap between innovative concepts and practical implementation, delivering both short-term and long-term outputs. These outputs are intended to fortify the agriculture and food system's resilience against the adverse effects of climate change.

In response to the open call a total of 160 proposals were received, of which 117 met eligibility criteria outlined in the RFA and progressed past the preliminary screening. The eligible proposals underwent three rigorous rounds of review. Post review eight projects are currently being supported under this program. The program also aims to cultivate a robust network of researchers and stakeholders, amplifying awareness about the challenges while channeling forthcoming outcomes into practical, implementable solutions.

Capacity Building & Leadership

Immersion Program for PhD Fellowship

GCI, in partnership with the Biotechnology Research Innovation Council BRIC, is supporting the Immersion Fellowship Program for up to 100 fellows annually over a three-year period (2024-2026). The i3c BRIC-RCB PhD program in Biosciences includes a mandatory 3-month immersion program (field internship) for all PhD fellows. This immersion follows the first semester of coursework and aims to provide practical experience in areas of societal need, fostering innovation and entrepreneurship. The program is supported by a dedicated grant that covers the associated costs.

In 2024 - 2025, we supported 100 PhDs, aligning their research with major global grand challenges, specifically focusing on biotechnology and related fields. The program takes a unique approach by bringing together participants from diverse areas such as agriculture, plant science, animal science and human health in one place in order to create a specialized workforce, and transforming the way they tackle scientific challenges, with an emphasis on real- world applications.

Prof. M.K. Bhan Mid-Career Research Fellowship Program

This fellowship has been instituted in memory of Padma Bhushan Prof. Maharaj Kishan Bhan, the renowned pediatrician, an eminent scientist and former Secretary, DBT and Chairperson, BIRAC, Government of India. Prof. Bhan was a luminary of Indian public health who contributed immensely to this field and revolutionized the biotechnology landscape in India. The aim of the fellowship is to continue Prof. Bhan's vision for research and innovation in public health by identifying and supporting extraordinary emerging scientific leaders in India while solving the country's most pressing health and development challenges. This fellowship intends to provide opportunities to mid- career researchers empowering them as independent investigators.

Women Leadership in STEM

GCI-BIRAC in collaboration with Womenlift health launched a program titled 'Women's Leadership in STEM' on 27th October, 2023 to empower mid-career women professionals in Science, Technology, Engineering and Mathematics (STEM) and to cultivate a pipeline of women leaders in science and technology. Through the open call total of 119 applications were received. The proposals underwent three rounds of review to select 20 mid-career women for this program.

Recognising the barriers that limit women's participation and progression in STEM careers, the program aimed to catalyse a systemic change towards gender equality in leadership in STEM. The one year long programme supported the cohort of 20 women scientists through a series of three fully funded, residential workshops which included a deep dive into leadership assessments, mentorship, coaching, and peer learning opportunities. The programme was designed to advance talented women into senior leadership by investing in mid-career women and influencing the environments in which they live and work. The training provided with leadership frameworks and tools to enhance their skills and expand their influence within their institutions and the wider STEM ecosystem.

Celebrating Women in Science, Policy, and Leadership

Women leaders from diverse sectors unite under the WomenLift Health and Grand Challeng./es India platform to share experiences and catalyze change through leadership in health and science innovation

Women Leaders in STEM at LBSNAA, Mussoorie The WomenLift Health and GCI STEM cohort joins the Fostering Gender Responsive Governance Training at LBSNAA, Mussoorie, emphasizing inclusive leadership in public health and science.

About Ind-CEPI Program

The Ind-CEPI Program (India Coalition for Epidemic Preparedness Innovations) is a landmark initiative program supported by the Department of Biotechnology (DBT) and implemented through a dedicated Program Management Unit (PMU) at Biotechnology Industry Research Assistance Council (BIRAC). Ind-CEPI aims to enhance India's epidemic preparedness through rapid vaccine development and associated competencies/technologies for diseases of epidemic potential, as well as build coordinated preparedness in the Indian public health system and vaccine industry. In addition to vaccine development, the program focuses on supporting overall epidemic preparedness through capacity building, infrastructure strengthening and interministerial coordination for developing frameworks surveillance and logistics for use of new vaccines.

The **program functions in engagement with global CEPI, Coalition for Epidemic Preparedness Innovations** (a pioneering collaborative organization working towards global epidemic preparedness), aligning with its objectives. CEPI manages a portfolio of vaccines at various stages of development. CEPI provides technical expertise in vaccine research and development to Ind-CEPI under certain defined scope of an **Engagement Strategy.** A tripartite Engagement Strategy document was thus signed between CEPI, DBT and BIRAC in 2019 (renewed in October, 2024), delineating shared objectives and joint technical activities which can be undertaken in the Ind-CEPI program.

Broad Objectives of PMU-Ind-CEPI

Major accomplishments and actions undertaken in Ind-CEPI:

I. **Vaccine Development:** Program Ind-CEPI has taken decisive steps towards development of key vaccine candidates and supporting the same through clinical trials. In the endeavor to provide effective vaccines, the program has supported the development of two vaccines:

S.No.	Vaccine	Company	Support provided for	Current Status
1	**COVID-19 mRNA Vaccine, GEMOVAC-19**	Gennova Biopharmaceuticals Private Limited	Preclinical and Phase-1	India's First mRNA vaccine; World's first Thermostable mRNA vaccine, Received Emergency use authorization
2	**Chikungunya Vaccine (Inactivated)**	Bharat Biotech International Limited	Preclinical and Phase 1	Currently in Phase 2/3 of clinical trials

Overall impact:

- **Thermostable mRNA platform:** Gennova's mRNA vaccine platform has been a major breakthrough as was recognized as the world's first thermostable mRNA vaccine. As these vaccines do not require expensive cold chain transportation, they are relatively cheaper to manufacture and hence more accessible. Novel mRNA platforms have also been identified as a **pivotal enabler of rapid response development of vaccines.** The platforms are flexible to be adapted for developing new vaccine candidates and for clinical testing and subsequent scale-up during outbreaks. Thus, mRNA platforms are a vital tool that can help to create a library of vaccine candidates that could be used against Disease X that might emerge from high priority virus families. Based on this technology, regulators approved 2 Covid vaccines (**GEMCOVAC 19** and **GEMCOVAC OM** (Omicron variant), during COVID-19 pandemic.

- **Inactivated virions technology:** As a part of **Global Chikungunya Vaccine Clinical Development Program (GCCDP)** of CEPI, Ind-CEPI has supported towards development of world's first inactivated Chikungunya vaccine, a debilitating illness that results in substantial health and economic consequences around the world, including in low- and middle-income countries (LMICs). **Inactivated virions technology has a safety profile** which potentially makes this vaccine accessible to special populations, such as the **immunocompromised and pregnant** women, that some other technologies cannot reach.

II. **Infrastructure Strengthening for vaccine development**

- **Consultancy support** for establishing **Quality Management System (QMS)**

Through Ind-CEPI, BIRAC has also provided Consultancy support for establishing Quality Management System (QMS) for immunogenicity laboratories and animal challenge study facilities involved in vaccine development. Immunogenicity laboratories were supported for ISO/IEC 17025:2017 accreditation by NABL and Animal Challenge Study facilities were supported for GLP accreditation by NGCMA. Six facilities/ laboratories were supported under this initiative.

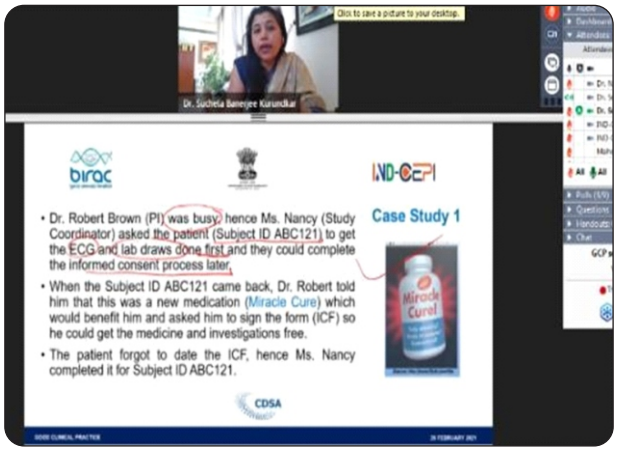
III. **Capacity Building programs:**

The program Ind-CEPI has made concerted efforts to promote capacity building, skill development and regional coordination. The PACT (Partnerships for Accelerating Clinical Trials) initiative was undertaken by BIRAC in collaboration with CDSA (Clinical Development Services Agency), under the aegis of the Ind-CEPI Program of DBT, to support researchers and investigator teams of neighbouring countries to enhance and strengthen their clinical trial capabilities.

In this direction, series of two consecutive e-Courses entitled "Strengthening Clinical Trial Research Capacity" in neighbouring and India Friendly countries respectively were organized. This training envisaged an in-depth coverage of various topics pertinent to following areas:

- Good Clinical Practice
- Ethical considerations in clinical research
- Good Clinical Laboratory Practice
- Novel vaccine development and immunization policy in a pandemic

With a total engagement of over 2500 participants from 13 countries including Afghanistan, Bangladesh, Bhutan, Maldives, Mauritius, Nepal, Sri-Lanka, Bahrain, Kenya, Myanmar, Oman, Somalia and Vietnam, the series was very well received and proved to be an important diplomacy initiative for regional networking and coordination with these countries.



IV. Strengthening internal inter-ministerial co-ordination for rapid vaccine development and testing to address known and unknown infectious disease threats

Ind-CEPI's participation in meetings and consultations with various interministerial and global organizations like MOHFW, ICMR, CDSCO, DCGI, MOD and MEA and CEPI etc., aims to contribute towards establishing tools, networks, systems and resources that are required in advance to deal with EID outbreaks and for evaluating strategies for the rapid development and manufacturing of vaccines.

Ind-CEPI Mission has conducted collaborative discussions that has led to a coordinated response strategy during outbreaks especially during COVID -19. As a part of **Bilateral Cooperation,** dialogues were initiated with Myanmar and Bahrain as cooperation efforts with neighbouring countries in matters of COVID-19 vaccines, for joint production and distribution of COVID vaccines.

BIRAC's participation in The Nipah Diseases and Medical Countermeasures workshop, organized by **CEPI, ICMR and ISARIC** (The International Severe Acute Respiratory and emerging Infection Consortium) provided an overview of BIRAC's initiatives on **One Health.**

National Biopharma Mission (NBM)

The National Biopharma Mission (NBM) is an Industry-academia Collaborative Mission for Accelerating Discovery Research to Early Development for Bio-pharmaceuticals – An "Innovate in India for Inclusiveness (I3)" project.

The National Biopharma Mission (i3 project) of the Department of Biotechnology, Government of India, was approved by the Union Cabinet with a total budget outlay of ₹ 1,500 Cr., of which 50% is co-funded by the World Bank. The program is being implemented by the Biotechnology Industry Research Assistance Council (BIRAC) Program Management Unit and is aligned with the national mission of ''Make in India' and "Aatmanirbhar Bharat Abhiyan".

The mandate of the National Biopharma Mission is to enable and nurture an ecosystem to advance India's technological and product development capabilities in biopharmaceuticals, to a level that will be globally competitive over the next decade and transform the health standards of India's population through affordable product development.

Program Component

NBM is focused on two components to realize its objectives:

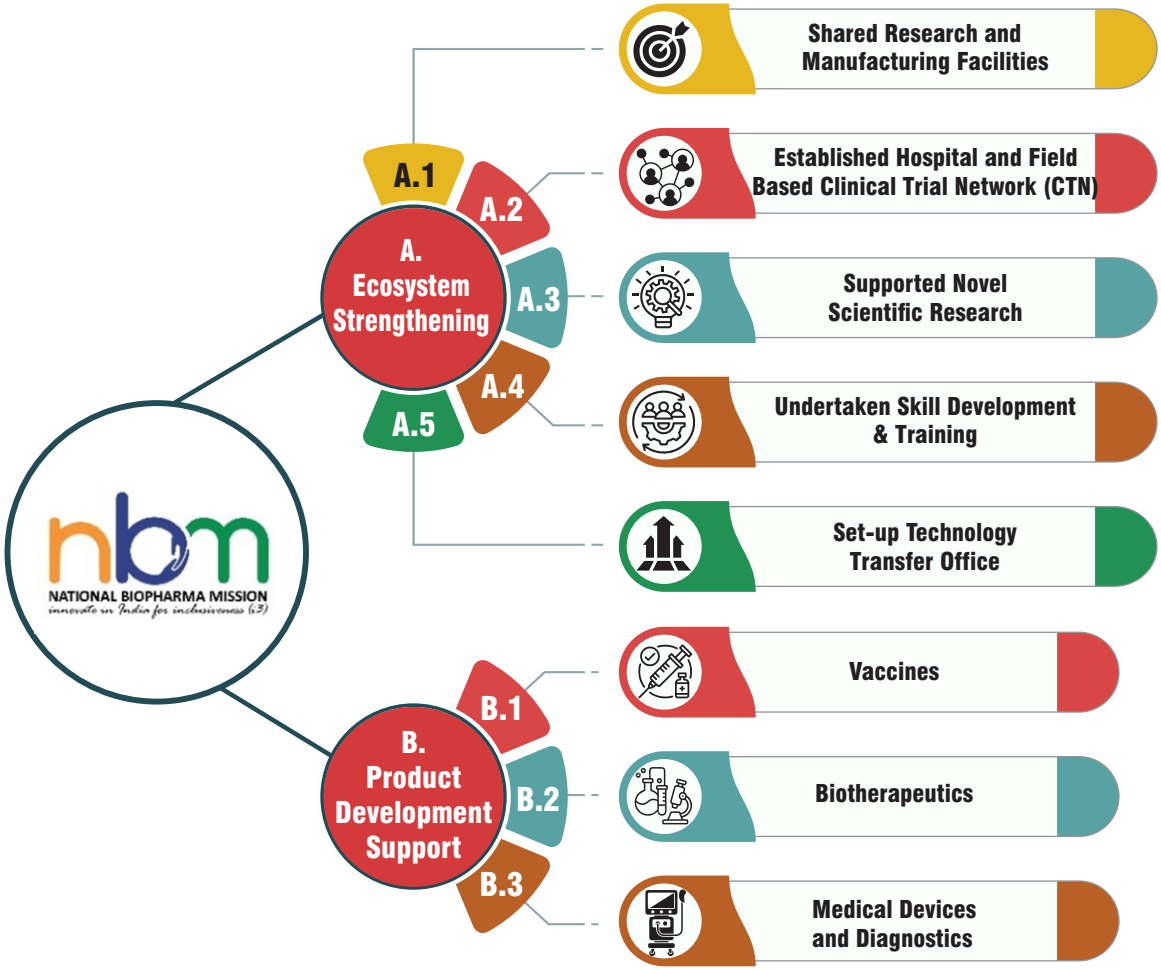
A: **Ecosystem Development:** To create an enabling environment by strengthening and enhancing existing infrastructure, building effective collaborative partnerships/consortia for the development of cutting-edge technologies, enhancing clinical expertise, and accelerating translational research. The program subcomponents include the following:

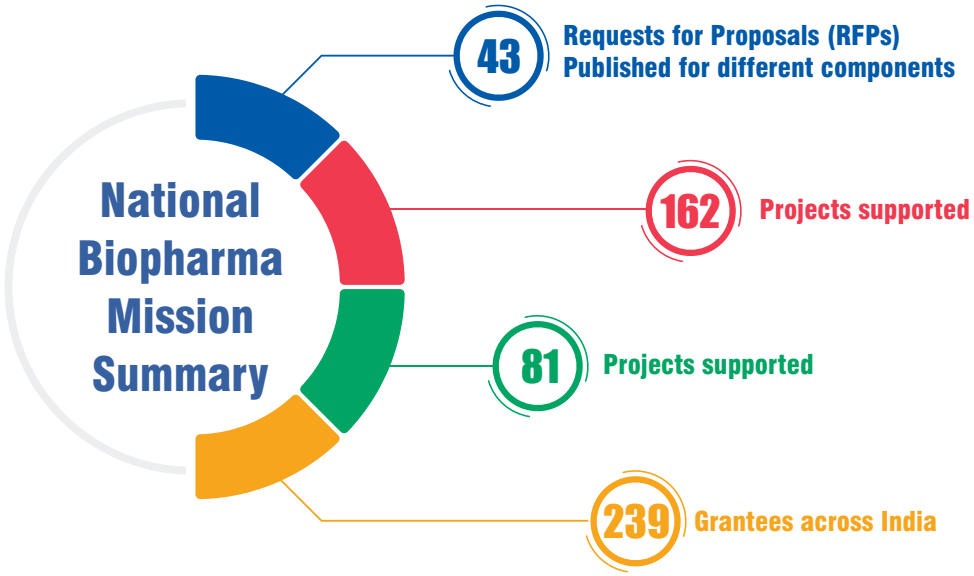
- **A.1** **Shared facilities:** Establishing/strengthening shared research/ manufacturing facilities that are accessible, equipped with state-of-the-art infrastructure, and employing relevant talent that can provide services at an affordable cost.
- **A.2** **Clinical Trial Networks:** Clinical trial units linked to a network of clinical experts and sites for conducting standardized, regulated, as well as reliable clinical trials.
- **A.3** **Scientific Research:** Building a consortium of partners, a network of research entities, for the development of innovative technologies and platforms currently not available in the country.
- **A.4** **Skill development or Training:** Development of skilled manpower equipped with next-generation inter-disciplinary competencies.
- **A.5** **Technology Transfer Offices:** To enhance Technology Transfer capabilities across different verticals.

B: **Development of Specific Products:** The products supported are aligned to bring affordable healthcare products for high disease burden/ need in the country. The program subcomponent includes Vaccines, Bio-therapeutics, medical devices and diagnostics.

NBM Components and Subcomponents

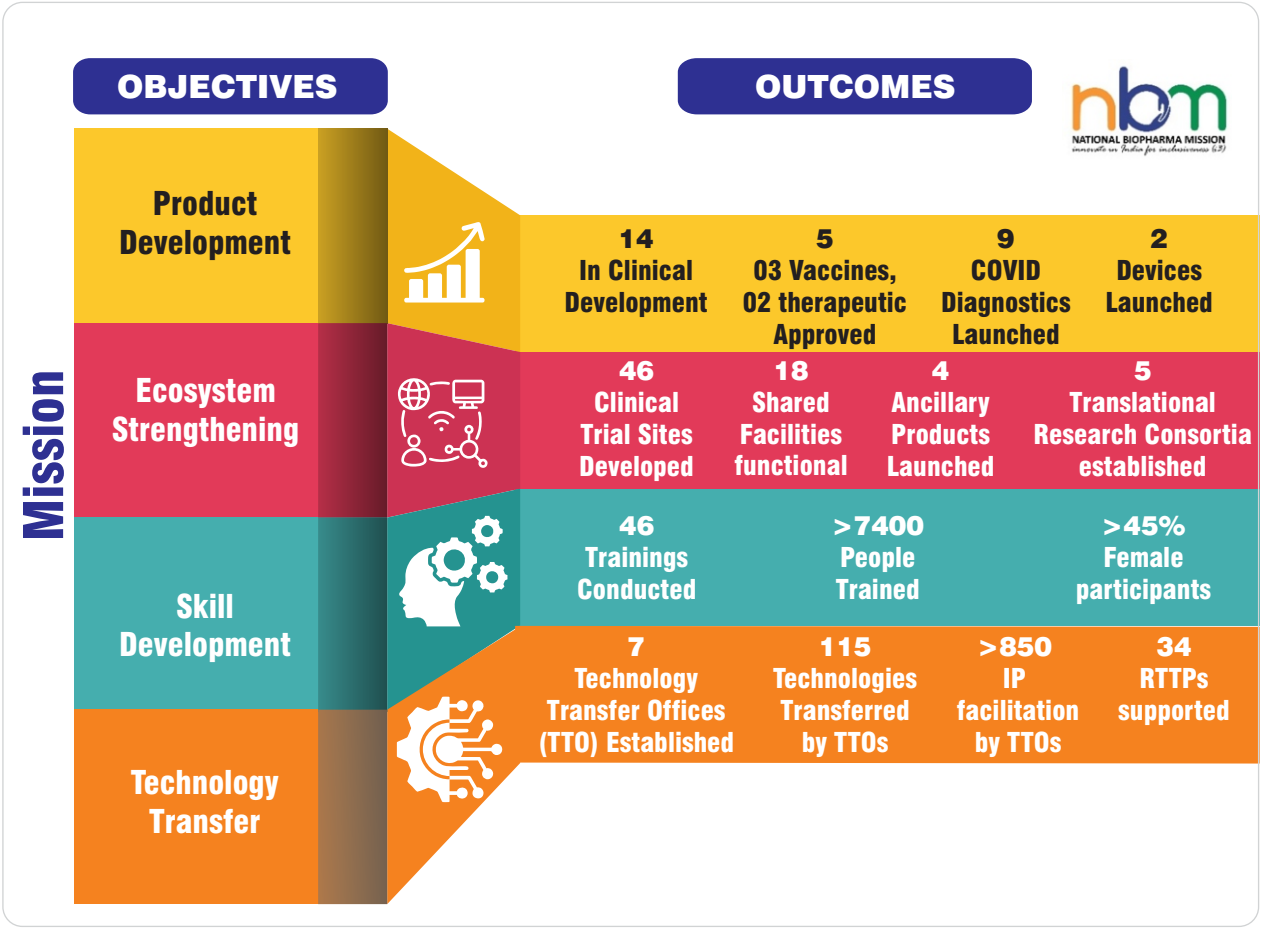
Pilot-to-market innovation ecosystem





Distribution of the grantees across the Public & Private Sector and within Academia & Industry

Mission Objectives and Key Outcomes of the Program



Key Highlights of Year 2024-25

- Electromagnetic inductance and elecrtomagnetic conductance (EMI/ EMC) facility was inaugurated at IIT Kanpur. The facility is NABL-accredited and is providing services.
- Phase II clinical trials of first indigenously developed Hepatitis E vaccine was successfully completed by Zydus Life Sciences Ltd., along with Translational Research Consortium partners, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Council of Scientific & Industrial Research - Indian Institute of Chemical Biology (CSIR- IICB) Kolkata, Sanjay Gandhi Post Graduate Institute of Medical Sciences, (SGPGI) Lucknow and Shiv Nadar University. The vaccine was found to be stable for up to 36 months at 2-8°C.
- India's first-in-human clinical trial of an indigenously developed CD-19 targeted chimeric antigen receptor (CAR) -T cell therapy is making promising strides at the Tata Memorial Centre. Designed for pediatric patients battling relapsed or refractory B-cell Acute Lymphoblastic Leukemia (ALL), this groundbreaking initiative - conducted in collaboration with IIT Mumbai-has successfully enrolled 40 children in a Phase I/II trial to date. The CAR-T product, NexCAR-19, marks a historic milestone as the first commercially approved, low-cost CAR-T therapy developed entirely within India. Born from the TMC-IITB-ImmunoACT partnership, NexCAR-19 represents not only a scientific breakthrough but also a leap toward accessible, homegrown affordable immunotherapy solutions with 10% cost reauction. While its efficacy in pediatric patients remains to be fully

established, this forms the central objective under the National Biopharma Mission (NBM). The final clinical is report expected by September 2025 - a key moment that could redefine India's role in global cell therapy innovation.

- Bharat Biotech International Ltd. has completed a seamless Phase II, observer-blind, multi-centre, randomized clinical trial to evaluate immunogenicity and safety of BBV87, an inactivated Chikungunya Virus Vaccine in healthy subjects, 12 - 65 years of age. The Phase II clinical study report was submitted to CDSCO in June 2025.
- Human bone marrow derived Mesenchymal Stem Cell based VELGRAFT technology as a skin substitute for difficult to treat wounds of Diabetic Foot Ulcers, has been successfully developed by Datt Mediproducts Private Limited. The first phase of the clinical trials supported by NBM has been completed and report submitted to CDSCO.
- Indian Immunologicals Ltd. has completed a Phase I single blind randomized placebo-controlled trial to evaluate the safety and immunogenicity of tetravalent recombinant Dengue Vaccine in healthy adults of 18 to 50 years of age.
- Biosimilar of Aflibercept by Lupin Ltd for age-related macular degeneration is nearing completion of Phase 3 global clinical trial at 19 trial sites in India and 5 sites in Russia, with 230 patients from India and 18 patients from Russia. With the Mission's support, Lupin aims to develop a cost-effective Aflibercept biosimilar (less than 40% innovator's price) which can reduce the financial burden of treatment.
- The mobile platform-based MRI scanner and its designing has been completed. This will have all the necessary equipment arranged on the mobile platform along with the MRI Scanner, which includes: generator, uninterrupted power supply units, compatible split chillers for mobile containers, and connections for earthing pits, etc. The testing and validations are in progress.
- Healthcare Technology Innovation Centre (HTIC) in collaboration with Mitra Medical Services has developed a flexible video endoscope and has completed clinical studies and ISO13485 certification. CDSCO approval for license to manufacture and sale is awaited.
- TTK Chitra's has developed the second improved version of the Titanium Heart valve named Model TC2. The design improvements made are: effective orifice areas, improved MRI compatibility, and improved thrombo-resistance. Phase I clinical trials have been successfully completed with NBM support, and application has been submitted to CDSCO for approval to initiate the Phase II trial.
- Call for Antimicrobial Resistance (AMR) was launched to support the development of diagnostics to detect antimicrobial resistant pathogens and development of new antibiotics, therapeutics, or any novel approaches to combat antimicrobial resistance. Total 66 proposals were received and 62 were found to be eligible. 5 project have been finally recommended for funding support under National Biopharma Mission.
- Under the training component, over 7400 candidates have been trained since the beginning of the Mission.
- NBM grantees have published 62 papers in peer-reviewed journals in the Mission.
- NBM grantees filed 33 IPs since the beginning of the Mission.
- Under the various verticals, there have been several successful projects which came to fruition in the year 2024-25

NBM Success Stories

Ecosystem Strengthening/ Shared facilities

Shared Facility Services - Devices and Diagnostics

	Services
Design and Prototyping Facility C-CAMP, Bangalore (ISO 13485 certified)	• 3D design, Printing, Fabrication, Assembly
Rapid Prototyping Facility Netra accelerator foundation, Aurangabad (ISO 13485 certified)	
Design and Prototyping Facility Yenepoya University, Mangalore, Karnataka	
Large animal testing Facility, Palamur Biosciences, Hyderabad (ISO 13485 and NABL accredited)	Safety, Efficacy and performance evaluation of medical devices in porcine model
Devices and Diagnostics Manufacturing Facility Andhra Pradesh Med-tech zone (AMTZ)	Ventilators 11000 units; ILAB 10,000+tests; Elisa tests 3 Cr; AMTZ Shared Facility; VTM-1Cr; RT-PCR Tests-12 Cr
Huwel Lifesciences, Telangana	

Medical Device prototyping facility

Large Animal Facility for Device Testing

EMI/EMC Facility Inauguration at IIT Kanpur in March 2025

Shared Facility Services - Bio-therapeutics

FACILITY	SERVICES
Bio-manufacturing Facility	
Shilpa Biologicals Pvt Ltd, Karnataka (Process Development and cGMP Manufacturing)	• Commercial lot of Covid vaccines Scale-up and generation of Clinical trial batch of vaccines and biosimilars • Generation of MCB and WCB of biosimilars.
MJ Biopharma, Pune	• 100 L PDL and fill finish facility for insulin and non-insulin mAbs.
Biotherupeutics Characterization Facility	
Syngene, Centre for Advanced ProteinStudies, Bangalore (GLP Analytical Characterization)	• Biologics advanced characterization Services including dossiers for Regulatory dossier submission.
Entrepreneurship Development Centre, Pune	
CSIR-Indian Institute of Chemical Technology, IICT, Hyderabad	

Bio-therapeutics Manufacturing Facilities




Bio-therapeutics characterization facilities

Shared Facility Services - Vaccines

	Services
NIBEC IRSHA, Pune: National Centre for Immunogenicity Testing to evaluate vaccines in clinical trials	• 14 types of immunogenicity tests available • Dengue NS1/IgG ELISA • Dengue, Chikungunya, COVID • DENV / CHIKV / SARS-CoV-2 -specific plaque reduction neutralization test (PRNT) studies • SARS-CoV-2 Microneutralization test
NIVER, CRL, KIMS, Bangalore: GCLP facility of Pneumococcal Vaccine Immunogenicity Evaluation	

Product development-Medical Devices

VideoLaryngoscope (vLaryngoscope) by Vphore Labs Pvt. Ltd., Bangalore

Gaps and Needs

- Affordable, locally made devices to reduce import reliance
- Wider access in rural and emergency settings
- Rugged, portable designs with long battery life
- Universal training and skill development programs
- Improved maintenance and sterilization infrastructure

Progress

- vLarynx by VPHORE labs, is a video laryngoscope for use in emergency rooms, operating rooms, and surgeries.
- This device helps in viewing and examining the larynx during operations such as endotracheal incubation in adult, paediatric, and neonatal patients.
- Preclinical and preliminary regulatory standard related testing successfully completed.
- Successful clinical trial on over >50 patients has been conducted.

NBM Support

- NBM has supported pilot batch production of around 20 units of vLarynx video laryngoscope
- Support for CRO based compliance testing of the video laryngoscope was provided
- Clinical study of the video laryngoscope at 4 hospital sites was supported and successfully completed.

Impact:

- Lower Costs
- Reduce import dependency
- Wider Accessibility
- Faster Supply & Repairs
- Technology Advancement

Mandibular bone augmentation with Nanotex Scaffold by Amrita Vishva Vidyapeetham

Gaps and Needs

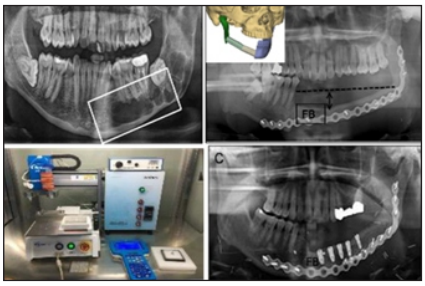
- Limited access to advanced grafting materials and techniques in rural areas
- High cost of imported bone grafts and implants
- Shortage of trained maxillofacial surgeons in smaller towns
- Inconsistent availability of bone banking and sterilization facilities
- Need for indigenous, affordable, and biocompatible augmentation materials

Progress

- Mandibular Bone Augmentation by Nanotex Scaffold is a Groundbreaking Synthetic law Graft developed by by Amrita Vishva Vidyapeetham.
- The Nanotex is manufactured using customized device called yarn winding machine under In-House GMP facility and preclinical biocompatibility of the Nanotex material has been perforemda as per the ISO 10993-6 requirements.
- Polit scale clinical trial and report submission to CDSCO is completed.

NBM Support

- NBM, BIRAC supported the production of implant material and completion of pre-clinical testing as per quality management system [QMS]
- NBM had also supported pilot scale clinical trial which has been successfully conducted on 10 patients and report has been submitted.



Impact:

- Reduce import dependency
- First-ever synthetic jaw-bone graft develop. globally.
- Restores jaw function and aesthetics at lower treatment cost.
- Addresses high oral cancer and trauma-related jaw defect burden in India.
- Fully indigenous innovation from lab to clinical trial.

Fusion Imaging Endoscopy for Minimally Invasive Laparoscopic surgeries by Irillic Private Limited, Bangalore in Collaboration with CMR university, Bangalore

Gaps and Needs	• High procurement cost due to reliance on imported systems. • Limited availability of compact, portable, and OR-friendly designs. • Integration difficulties with diverse laparoscopic and imaging platforms. • Lack of indigenous manufacturing and technology development. • Need for improved resolution, latency-free image fusion, and real-time processing.
Progress	• Early development to clinical validation of Laparoscopic fusion imaging endoscopy has been completed. • The device is already marketed. • NBM, BIRAC supported - Proof of Concept, early clinical feedback generation, engineered prototype design, development till clinical validation & pre-compliance regulatory approvals of the devices. • The company has already brough the device to the market.
NBM Support	• Enhanced surgical precision through real-time multimodal imaging fusion. • Reduced operative time by improving anatomical navigation. • Lower complication rates due to better visualization of critical structures. • Expanded access to minimally invasive procedures in complex cases. • Potential cost reduction with future indigenous device development.

Ecosystem Strengthening/ Translational Research Consortia

Focuses on ensuring the translational ecosystem to stimulate, standardize and provide support for advancing development and evaluation of vaccines and monoclonal antibodies.

HEV TRC- "Success Story"

- Hepatitis E virus (HEV) infection is a leading cause of acute viral hepatitis and is associated with a significant burden of disease in India and other countries in Asia and Africa, with a particularly severe disease among pregnant women.
- Developing an effective vaccine against it is a public health imperative.

- A recombinant subunit vaccine for hepatitis E, developed indigenously in India by Zydus Lifesciences was manufactured under cGMP conditions and met critical process parameters and critical quality attributes.
- The vaccine was found to be stable up to 36 months at 2-8°C at the time of this note and further studies were ongoing.
- A randomized, placebo-controlled Phase II clinical trial for this vaccine demonstrated that the vaccine was safe and highly immunogenic. The results were presented to the Indian regulatory authority and a Phase III licensure trial has been proposed.

Impact:

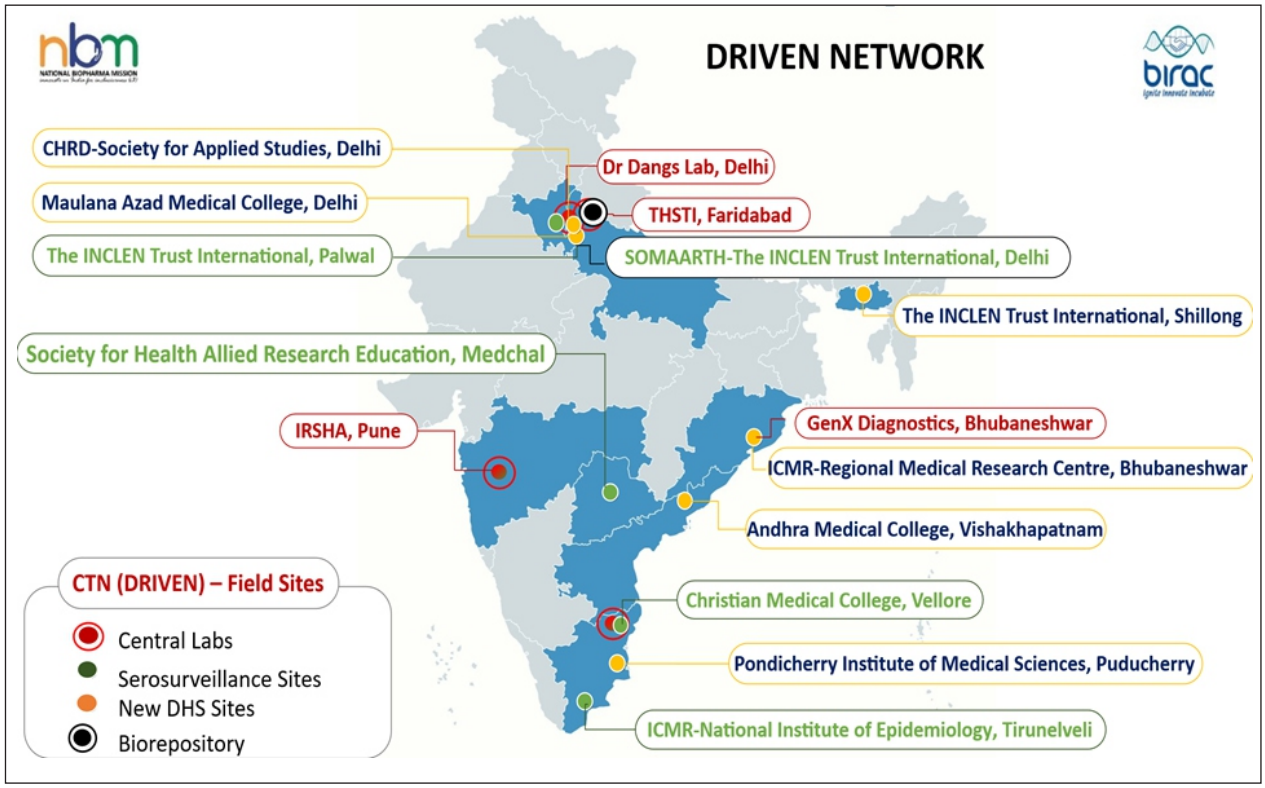
- There is only one innovator vaccine available from China and this newly developed indigenous vaccine, once approved by regulatory bodies, will be a useful tool to prevent an important disease, for which no treatment is available.
- The TRC Leveraged capabilities of various partners, including those in the industry, academia and clinical centers to develop and test new vaccines in the country in a short time.
- The vaccine has the potential to be used globally in areas where HEV infection is endemic and frequent outbreaks are reported including India.

Ecosystem Strengthening/Clinical Trial Networks

DBT's Resource of Indian Vaccine Epidemiology Network (DRIVEN)

Driven Clinical Trial Network Sites

Under the National Biopharma Mission (NBM), DBT-BIRAC, Government of India, has supported the establishment of 10 clinical trial networks to strengthen India's clinical trials ecosystem. These 10 community-based sites aim at strengthening infrastructure and supporting the development of vaccines.



Activities:

On Clinical Trials Day 2025, DBT-BIRAC, under the National Biopharma Mission (NBM), proudly presents the Clinical Trials Network of 46 GCP-compliant sites across India - a national-level platform established to strengthen the country's capacity to conduct clinical trials.

This extensive network brings together hospital and community-based trial sites located in leading institutions of repute across diverse regions, reinforcing India's ability to conduct high-quality clinical trials with population diversity.

Link: https://www.linkedin.com/feed/update/urn:li:activity:7331203760418889728/

A snapshot of the achievements of the network is given below:

- Pan India 10 GCP-compliant sites are ready to conduct late-stage clinical trials for vaccine development
- Population data, including health parameters, household characteristics, and other environmental factors mapped.
- Data entry using android-based electronic format called 'SOMAARTH 1 & SOMAARTH 3' to capture & store data.

- The geographic locations of the sites are unique, showing variation in terms of urban, peri-urban, rural, and tribal-predominant areas.
- Establishing Geographic Information System-enabled Surveillance Sites for supporting clinical trials research.
- Access to more than 900,000 healthy individuals for vaccine trials.
- Baseline seroprevalence sample collection and investigations completed.
- COVID, Dengue & Chikungunya seroepidemiology study completed to obtain baseline and endline data of the respective diseases.
- Acute Febrile Illness study across 10 sites in India, including North East, is ongoing for Dengue and Chikungunya.
- 750 participants were enrolled per site, with a total baseline enrolment of 7,631 participants. Endline samples were collected from 7,273 participants, resulting in an overall retention rate of 95.30%.
- Around 350 + individuals trained for GCP and Gennova Pharma Ltd.
- 20 + Regulatory Trials conducted by a clinical trial network for sponsors such as Serum Institute of India Pvt. Ltd., Gennova, Bharat Biotech India Ltd., ICMR-NARI-SIIPL, Dr. Reddy's Laboratories (DRL) for vaccine development
- Research Published

Ecosystem Strengthening / Clinical Trial Networks of Hospitals

National Biopharma Mission has created 5 pan-India hospital based GCP - compliant clinical trial networks for the first time in the country for 4 disease indication. The project has made significant strides in various critical areas, achieving key milestones and ensuring robust infrastructure for the clinical trials.

Each network has a mix of public and private hospitals. All centers have completed capacity-building exercise across all the sites of the network over the last 3 years with trained manpower and the purchase of equipment for conducting future clinical research. A Research department was established in every hospital for clinical study development and trials. Harmonized, processed, and uniform SOPs are followed at all network sites. For patient registry establishment, a common IT platform, i.e., the registry software where the patient database has been stored with access controls, has been established under an MoU with all sites of the network.

The networks can be accessed by start-ups looking for sites for clinical trials through BIRAC by writing to nbm1.birac@nic.in or technical.birac@nic.in. The site details are shared on BIRAC website birac.nic.in/nbm/cms/page/clinical-trial-network.

A snapshot of the achievements of each network is given below:

1. **Ophthalmology network led by Amrita Institute, Kochi,** under the supervision of Lead investigator Dr. Gopal Pillai, has 5 more centres and has established India's first **ophthalmology network.**

   For the Registries - Network sites have enrolled ~ 11,802 patients of Diabetic retinopathy, Branch retinal vein occlusion and Central retinal vein occlusion, age-related macular degeneration, and chronic eye diseases registries across all sites.

   The Publications the team has published 02 manuscripts on "knowledge and perceptions on clinical trials among trial participants in India", a cross-sectional survey study, and a questionnaire-based study. Further, the team plans to publish registry data revealing regional variations in treatment modalities and outcomes. For getting network mode trials, MoUs have been signed with CROs, such as Fortea, SSDN, SNC and Syneos Health, etc.

Sustainability: Currently 22 clinical trials are ongoing and 07 are Investigator initiated trials.

2. **The rheumatology clinical trial network was established under the supervision of Lead Investigator Dr. Rajiva Gupta, Medanta Hospital with five Leading Private/Public Hospitals and Rheumatology centers.**

   Registry: The network has established a registry of rheumatology diseases, approved by its Ethics Committee at all sites, and has enrolled 14339 subjects.

   Sustainability - Currently, 25 Sponsored studies have been initiated.

   Publication: The network has published a manuscript on Conventional synthetic disease-modifying drugs (DMARDs) remain the mainstay of therapy of rheumatoid arthritis in India in JAPI, and 03 more manuscripts from Registry data have been submitted for publication. Two network sites, MGIMS Wardha and KD Hospital Ahmedabad were new sites in the network.

3. **The Diabetology network,** led by MS Ramaiah Medical College and Hospital, led by Dr. Pramila Kalra, has 06 more sites and has created a diabetes registry.

   Registry – The Diabetes registry has a total of 25276, including type 2 diabetes mellitus and type 1 diabetes mellitus patients were enrolled across geographical locations in India.

   Sustainability: There are 13 ongoing clinical trials in the network sites. **The network has signed MoUs with Pfizer and Novo Nordisk.**

4. **The oncology network led by JIPMER, under the supervision of Dr. Prasanth Ganesan, has 5 more institutes, and has created 5 registries for cancer.**

   JIPMER Oncology Network (6 Sites)

   Registry data on 5 different cancers were prepared with a total of over 7334 patient records.

   The network had relatively new centers in the oncology area which are now adept in conducting clinical trials.

   The network has received funding support from ICMR-NCG for network mode trial and start- Scalp cooling trial to prevent chemo-induced alopecia, a device developed by a BIRAC-funded start-up, is being conducted by the network sites.

5. **The Tata Memorial Hospital (TMH), under the supervision of Dr. Manju Sengar, leads the 2nd oncology network with 11 centres.**

   Registry: The network has developed registries for Lung cancer, Breast cancer, Colorectal cancer, Gallbladder cancer, Lymphomas, and Chronic Myeloid Leukemia with about 46449 patient data.

   Sustainability: Over 150 feasibility assessments have been received and shared with the respective pharmaceutical companies, of which 17 have converted into trials and completed. Additionally, 3 sponsored clinical trials by pharma industry are ongoing. All network sites are included in the Esophageal cancer trial funded by ICMR. Tata Memorial Hospital (TMH) has an MoU with Novartis.

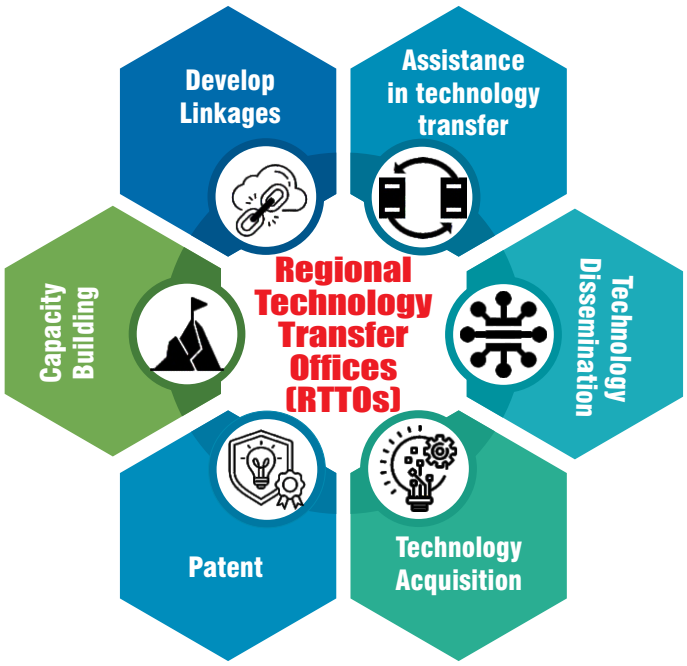
   Publications from the network: There are 7 publications from the network related to the Registry data on different cancers, types.

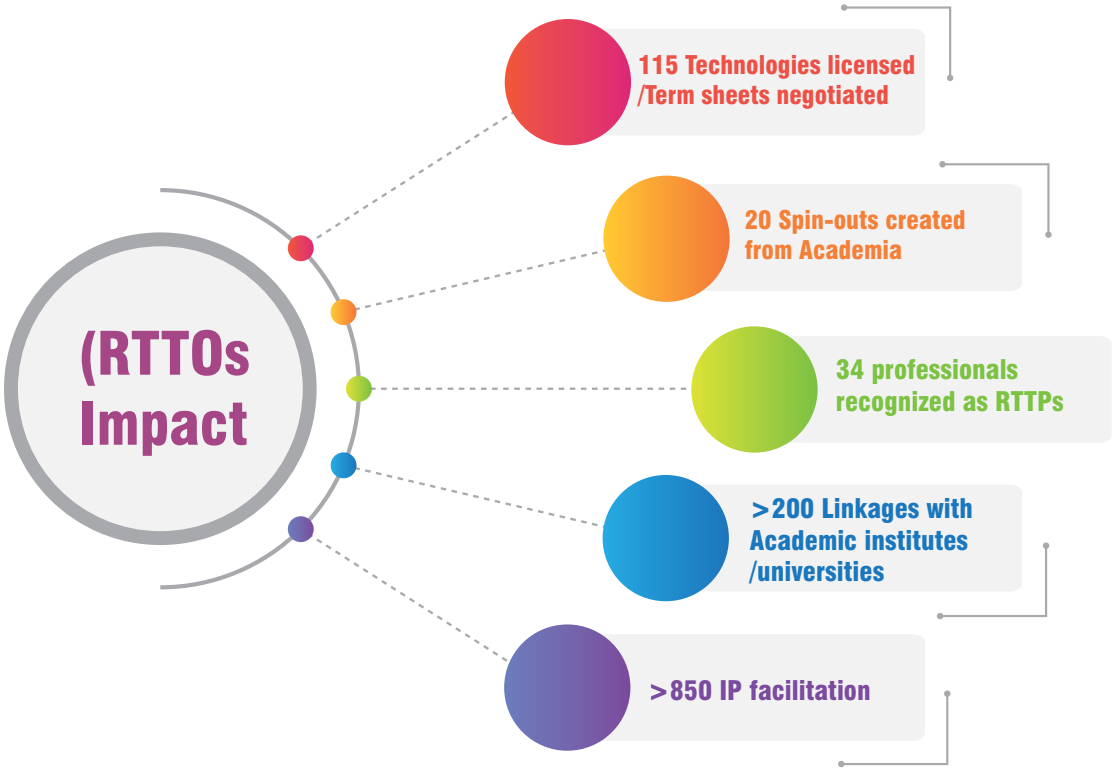
   Gaining Clinical trial experience by sites of networks – Sri Sankara Deva Nethralaya Guwahati, MGIMS Wardha, Kusum Dhirajlal Hospital Ahmedabad, NEIGRIHMS and SRM Chennai, CMC Ludhiana (an oncology division was established under the project), Amala Cancer Hospital Thrissur, NEIGRIHMS and Cachar Cancer Hospital Silchar, Assam.

Ecosystem Strengthening/Regional Technology Transfer Offices (RTTOs)

NBM supports the establishment of RTTOs to enhance academia-industry inter-linkages, strengthen the bio-cluster ecosystem, and to provide increased opportunities for academia to translate knowledge

Mandate for establishing RTTOs





Impact and Outcomes in Financial Year 2024- 2025

Regional RTTO meeting and capacity building workshop with international and national experts organized from 30th to 31st January 2024 at C CAMP, Bangalore

NBM- BIRAC Team attended the STEM Summit 2024, organized by Society for Technology Management on 1st and 2nd February 2024. Initiated support under NBM and BIRAC to prepare future leaders in the domain of intellectual property and technology transfer.

First National Biopharma Mission-Regional Technology Transfer Office, Technology Licensing Event- 2025

The National Biopharma Mission successfully organized the First combined Regional Tech Transfer Offices (RTTOs) Technology Licensing Event at T-Hub, Hyderabad on 24th February, 2025. The event witnessed participation from over 200 key stakeholders, including innovators, investors, academic institutions, startups, and MSMEs. The event showcased 123 cutting-edge technologies from the Pharma, MedTech, Devices, and Diagnostics sectors. Highlights of the event included technology pitch sessions and poster presentations by innovators and RTTOs, showcasing healthcare technologies available for licensing.

Training and capacity building

NBM is committed to skill development through training programs to create high-quality human resources and opportunities in biopharmaceuticals.

The proposed areas of skill development training program are:

a. **Biomanufacturing:** Biomanufacturing covers upstream and downstream process development, cell line development, cell and gene therapy, etc.

b. Clinical Evolution- it covers clinical trial study design and execution.

c. Medical Device Certification- ISO certification and parameters.

d. Other-technical areas training- Good Clinical Lab Practice (GCLP), IP and Patent filing, and project and business development skill training.

5 trainings were conducted in the year 2024-2025. A total of 565 participants got the training, out of which the female participation was 217.

Trainings	Total Number
Total Trainings (till date)	46
Number of Participants	7470
Female participants	3378

To date, ~7470 participants, including 3378 female participants, have been trained under different training and workshops under NBM.

Requests for Proposals

1. Proposal evaluation completed for Follow-on Funding call. Out of 50, 11 projects were recommended by SAG and TAG for funding.
2. One request for proposals (RFP) was announced on 11th Dec 2024 for inviting eligible organizations to conduct training on ISO 13485 Certification and Clinical Trial Conduct. Out of the 40+ proposals received, 4 proposals were recommended by the Skill Development Committee.

NBM Conclave: Catalysing Transformative Impact on Affordable Product Development in India

The NBM Conclave, organized by NBM, DBT-BIRAC on 8th August 2024, highlighted the transformative outcomes of strategic investments in healthcare innovation. The event served as a powerful platform to reflect on the progress achieved, measure tangible impact, and shape the roadmap for future interventions. Bringing together over 700 delegates from across the globe - including industry leaders, startups, SMEs, academia, incubators, investors, and key national and international stakeholders-the conclave catalyzed cross-sectoral dialogue and collaboration at scale.

NBM Impact Book Launch

Key highlights of the NBM conclave were:

- Launch of the NBM Impact Book by Dr. Jitendra Singh, Hon'ble Union Minister of State (Independent Charge) for Science & Technology; Earth Sciences; MoS, PMO; and Minister of State for Personnel, Public Grievances & Pensions, Department of Atomic Energy, and Department of Space.
- Impact book showcases high-impact projects funded across Biotherapeutics, Vaccines, Shared Infrastructure Facilities, and Technical Capacity Building.
- Keynote Addresses delivered by eminent scientists, offering visionary insights into the future of healthcare Add a note on innovation and impact of NBM enabling on this growth.
- SBT & MD Sir's remarks Expert Panel discussions explored strategic themes and emerging challenges in the pharma and Medtech ecosystem.
- Success Stories highlighting the journey and achievements of standout initiatives supported under NBM were showcased.
- Exhibition Stalls displaying innovative products and ecosystem-enabling initiatives developed with NBM's support.\\
- Dr. Rajesh S Gokhale (Secretary, DBT & Chairman BIRAC) and Dr. Jitendra Kumar (Managing Director, BIRAC) praised the entire team of NBM, BIRAC for putting efforts in making this mission successful.

Round Table Discussions on Adjuvants and Clinical Trial Networks at the Global Bio-India 2024

At GlobalBioIndia 2024, a high-level technical session titled **"The NIH/NIAID Vaccine Adjuvant Program: New Insights, Access to Novel Adjuvants, and Opportunities for Collaborations"** brought together global leaders in vaccine research. Moderated by Dr. Jyoti Malik Logani (Scientist F, Department of Biotechnology), Dr. Wolfgang W. Leitner (Chief, Innate Immunity Section, NIAID, NIH, USA), and Dr. Kentner Singleton (Program Officer, DAIT, NIAID, NIH, USA), the session spotlighted opportunities for strategic collaborations between NIAID-supported initiatives and Indian research efforts.

A distinguished panel of eight eminent scientists from academia and industry, alongside global stakeholders and industry experts, engaged in in-depth discussions on enhancing collaboration, advancing public-private partnerships (PPPs), and co-developing next-generation adjuvants. The session underscored the transformative potential of global cooperation in accelerating vaccine innovation through shared research, resources, and expertise.

In a parallel session titled **"Opportunities and Challenges - Clinical Trial Networks of India,"** participants explored the dynamic landscape of clinical trials across the country. Building on insights from the inaugural national network meeting, the session brought together representatives from regulatory bodies, industry, and academia to chart a cohesive strategy for strengthening India's clinical research ecosystem.

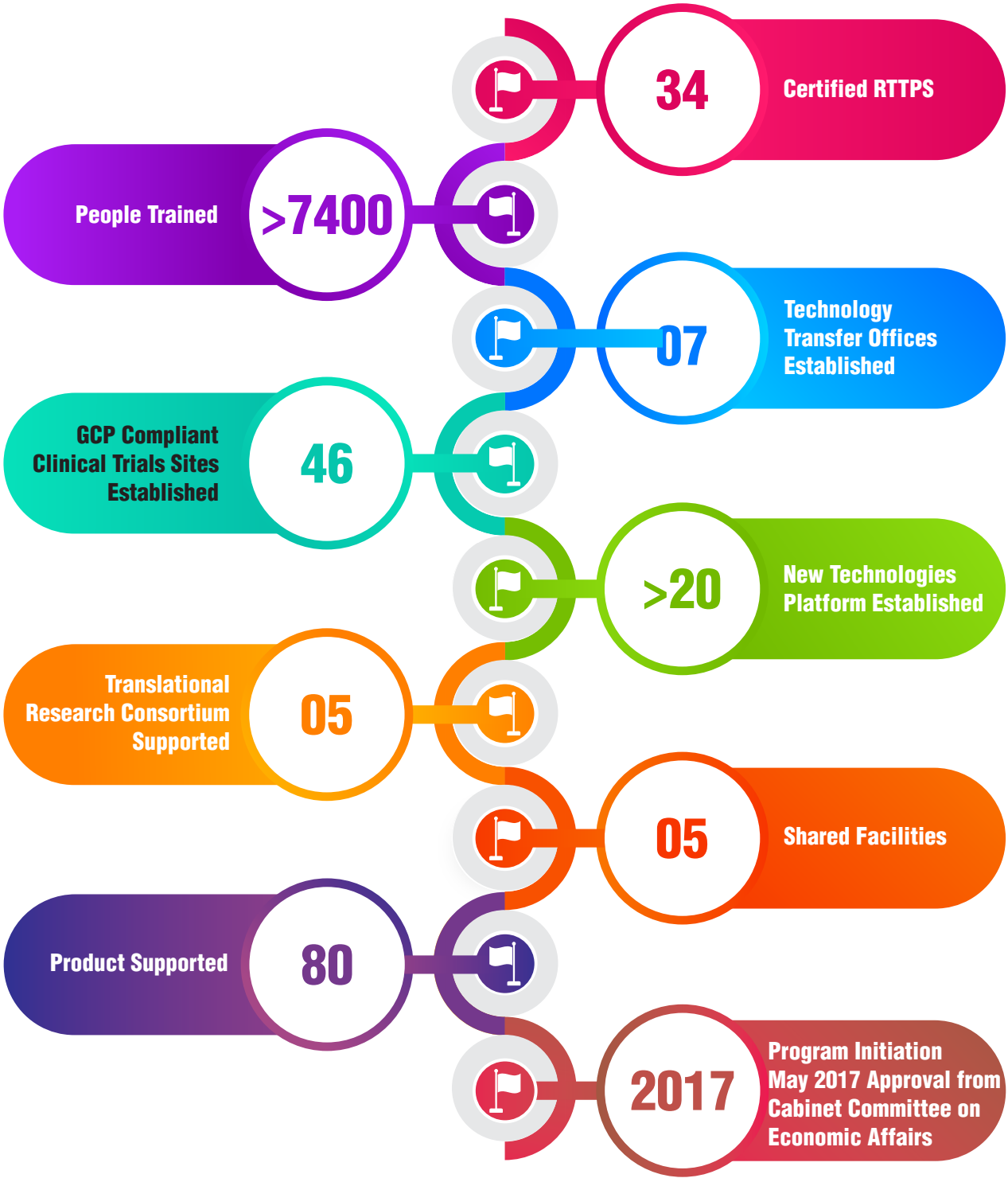
Key themes included the urgent need for a skilled investigator pool, the pivotal role of BIRAC-supported networks, and the importance of expanding trials in critical areas such as oncology and vaccines. The session also addressed community engagement strategies and the establishment of comprehensive demographic and environmental surveillance systems. Emphasis was placed on fostering robust collaborative frameworks to ensure data integrity, ethical standards, and long-term sustainability in clinical research practices.

Stakeholder Meetings:

NBM has convened a series of stakeholder meetings to understand the requirement of biopharma sector and Medical device industry in India.

1. A one day Stakeholder meeting was conducted on 21 March 2025 to define the roadmap to integrate clinical trial networks established by NBM with the Bioinnovation hubs in India. The keys points of discussion were:
    a. Understand the strengths and opportunities for clinical trial networks and bio-innovation hubs.
    b. Recommend a feasible integration model based on the existing strengths and prepare a roadmap to address the gaps.
    c. Develop a detailed plan to harness the realworld data using AI models to gain new insights for novel healthcare solutions.

NBM: The Journey So Far



RTTOS: Regional Technology Transfer Offices,
RTTPs: Registered Technology Transfer Professional

Make-in-India & Startup India National Mission

A Program Management Unit (PMU) for Make in India has been set up by DBT at BIRAC to facilitate Biotech Industry in the country. It aims to catalyze the growth of the existing ecosystem of large and medium-scale biotech companies (under Make In India National Mission), as well as new emerging Startups (under Startup India National Mission) in the sector. It works closely with Invest India to promote investment opportunities for the sector and reports into DPIIT through DBT.

The Make In India PMU key activities include the following:

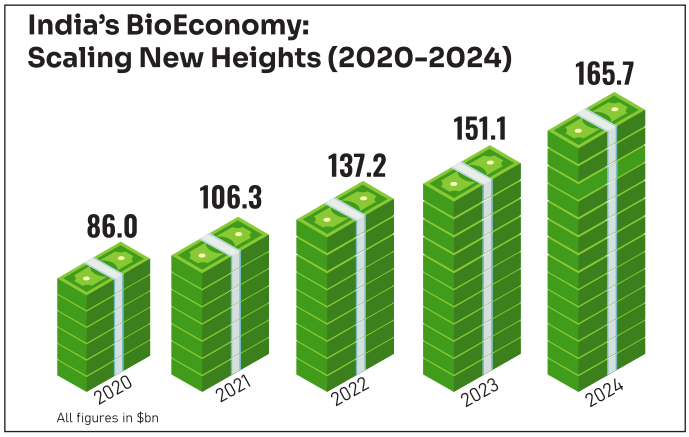
- **Annual Mapping of India's bioeconomy**
- **Strategic analysis** of startup ecosystem trends and opportunities
- **Policy advocacy, providing key inputs on strategic matters related to the biotech ecosystem, gap analysis and opportunities**
- **Empowering industry** through promoting investment facilitation, regulations, funding, and Public Private Partnerships
- Destination India is promoted through **state connects, stakeholder consultations and global outreach through** events such as Global Bio-India hosted by DBT-BIRAC, to showcase India's biotech sector prowess and bring together biotech stakeholders from India and overseas
- **Supporting DBT core group for policy initiatives** like Biofoundry, Biomanufacturing and BioE3 policy
- **Biotech Fund of funds – AcE** to promote private equity and venture capital investments into the biotech innovation ecosystem
- **Collaborating closely with Invest India, DBT and other ministries/ departments** to drive growth in India's bioeconomy.

1. **India BioEconomy:**

   India BioEconomy Report is a strategic annual mapping report reflecting the progress in bioeconomy and biotech ecosystem.

a) India BioEconomy Report 2024 was released by Dr. Jitendra Singh, Hon'ble Union Minister (I/C), Ministry of Science & Technology during Global Bio India 2024

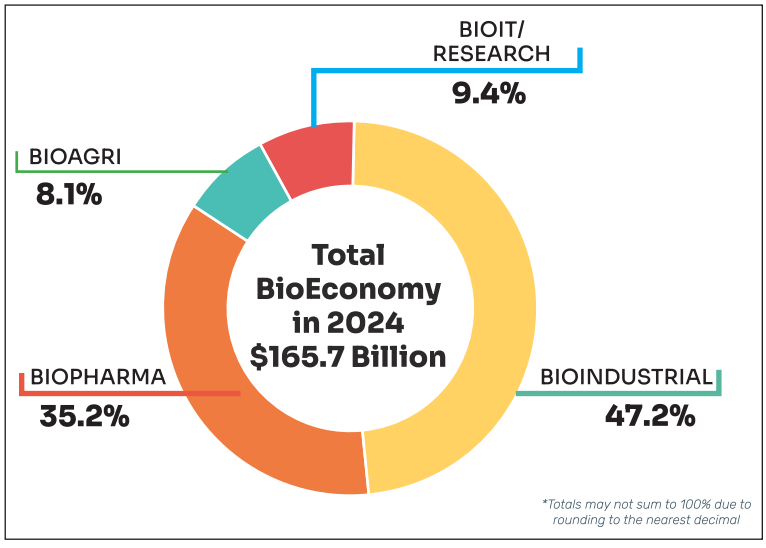
b) India BioEconomy Report 2025 was released by Dr. Jitendra Singh, Hon'ble Union Minister (I/C), Ministry of Science & Technology during BIRAC's 13th foundation day celebrations on 21st March 2025.

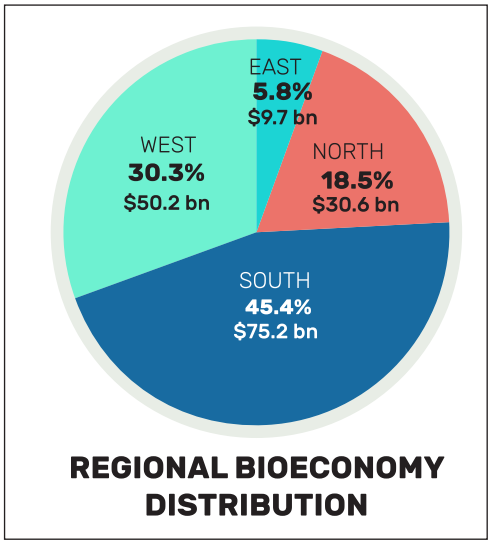


Source - India BioEconomy Report 2025

Key Highlights include:

- India Bioeconomy reached $165.7 billion in 2024, compared to previous year's $151.1 billion registering a 9.7% annual growth.
- India's BioEconomy current contribution is 4.25% to the overall GDP of the country.
- India Bioeconomy has seen a positive growth at CAGR of 17.9% over the past four years.
- Four key segments contribute to the India BioEconomy i.e., BioIndustrial at 47.2%, followed by BioPharma at 35.2%, Bio Services at 9.4% and BioAgri at 8.1%
- India's BioEconomy growth exhibits distinct regional patterns: South Zone is a substantial contributor with 45.4% to the national BioEconomy, West Zone followed with 30.3%, while the North and East Zones showed 18.5% and 5.8%. This regional performance indicates opportunity to promote ecosystem to foster further growth across the nation.
- Startup Ecosystem: The cumulative number of Indian biotech startups is 10,075, crossing a milestone of 10,000 in 2024.





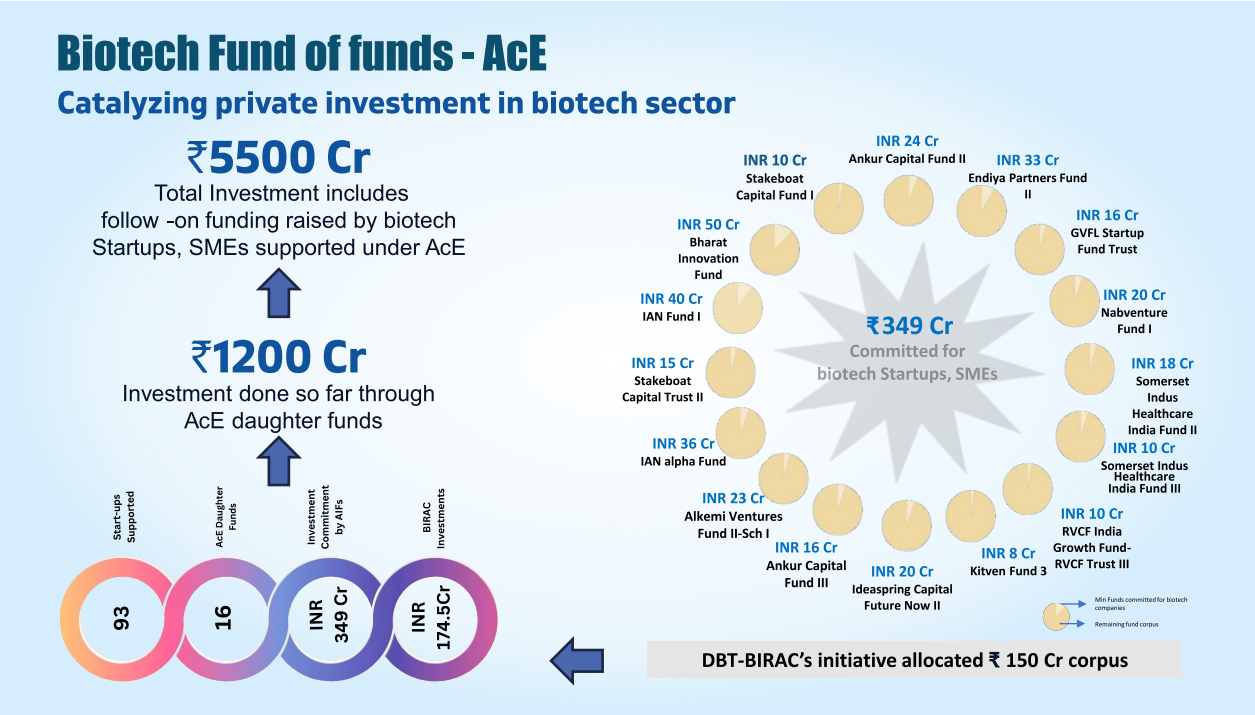
Source - India BioEconomy Report 2025

2. Biotech Fund of funds:

Biotech Fund of funds - AcE (Accelerating Entrepreneurs) is being promoted by the Department of Biotechnology (DBT) under the aegis of Make in India initiative, implemented by BIRAC. It fosters R&D and innovation in Biotechnology by plugging the funding gap, the "Valley of Death" for early-stage startups.

Aligned with Startup India national mission launched in 2016 by Hon'ble Prime Minister, the Department of Biotechnology in 2017-18 allocated INR 150 Cr for Fund of funds - AcE initiative for biotech sector. The AcE fund supports 16 Alternate Investment Funds (AIFs) daughter funds who, so far, have invested Venture capital of INR 1200+ Cr in 93 Startups, SMEs. More than 50% of these biotech companies have successfully raised follow-on funding of another INR 4300+ Cr. These pilot efforts of DBT- BIRAC have yielded, so far, an infusion of INR 5500+ Cr into the biotech startup ecosystem through PPP.

Under Bio-RIDE scheme approved in 2024, additional INR 150 Cr have been approved. Once, the fund allocation order is received from DBT, the PMU at BIRAC will roll out the national call for application to onboard AIFs to create additional AcE daughter funds and support biotech Startups, SMEs.



3. Supporting Deep-tech bio-based Startups to nurture innovation ecosystem:

There is an increasing recognition of the significance of promoting Deep-tech Startups for fostering high-value innovations, as indicated by Hon'ble Minister of Commerce Mr Piyush Goyal, from the stage of Startup MahaKumbh 2025. Biotech sector is one amongst the promising sector for deep tech innovations.

4. Supporting Biotech Startups for promoting innovation ecosystem

Startups Products & Technologies are provided end to end support by BIRAC from ideation to commercialization stage including funding, access to infrastructure, mentors, experts, investors, industry, national and international showcasing opportunities, etc. All these efforts promote biotech entrepreneurship in the country. This is reflected in the yearly gain in the number of biotech startups in the country:

- Number of biotech startups in the country: 10,000+
- BIRAC supported bio-specialized Incubation centre network has expanded to 95+

- Product Launch by Startups: 11 startup products were launched from the international platform of Global Bio- India 2024.
- Follow on funding raised by Startups: A total of INR 1200+ Cr was raised by 46 biotech startups in the FY 2024-25. This shows support from private, venture capital for the ecosystem.
- Biotech showcase e-portal (https://biotechinnovations.com) features 800+ biotech products which have been commercialized.

5. Policy advocacy and new initiatives

5.1. Promoting deep tech startups in the country: Bio-based innovations contribute to long term sustainable economic growth, this fact is gaining wider acceptance through continuous focus and policy advocacy efforts of DBT-BIRAC. The annual increase in BioEconomy values seen for the country and trends from the developed countries economy are reflected in the annual BioEconomy Report published through Make In India PMU, BIRAC.

In order to promote biotech entrepreneurship, the proposal to delink early stage funding support to biotech startups, entrepreneurs of upto INR 50 lakhs from royalty, equity etc. has been accepted by the government. Consequently, funding support under BIRAC schemes like Biotech Ignition Grant (BIG) would be grant-in-aid.

5.2. BioE3 policy: The BioE3 Policy (Biotechnology for Economy, Environment, and Employment) proposed by the Department of Biotechnology (DBT) was approved by the Union Cabinet on August 24, 2024. This shall promote bio-based innovation and bio-manufacturing in the country. There is emphasis on capacity enhancement by developing infrastructure and funding high risk R&D projects. The policy encourages Public Private Partnership with participation of national and international stakeholders bringing academia-industry and investments for developing Technology clusters. Make In India PMU and BIRAC played active role in the core team of DBT for developing the policy.

5.3. Bio-RIDE scheme: Under BioE3 policy there is focus on infrastructure and R&D projects i.e., (i) developing Technology clusters having high end common access infrastructure for Pilot and Validation level to facilitate product development, setting up of Biofoundry and bio-manufacturing capacity enhancement; and (ii) thematic project funding for undertaking high risk innovations in the areas which required emphasis viz, Bio-based Chemicals and Enzymes, Functional Food and Smart Proteins, Precision Biotherapeutics, Climate Resilient Agriculture, Biofuels and Carbon Capture and Futuristic Marine and Space Research.

Funding support to entrepreneurs and Startups as grant-in-aid has been clarified by defining a ceiling of INR 50 lakhs. Funding to Industry has been redefined with a minimum 30% co-contribution by Industry along with a 5% royalty payment upon success. Likewise, academic research institutions can receive upto 100% funding on condition of success linked 5% royalty pay back.

5.4. Central allocation of 1 lakh crore fund for Deep Tech Startups: From DBT-BIRAC it has been proposed to consider sectoral allocation of the fund in order to promote certain high-risk niche areas including Biotech sector. This will promote indigenous capacity to innovate high value products and reduce dependence on growing global uncertainties. BIRAC has demonstrated its ability to ignite entrepreneurship, manage and support early stage biotech startups. With additional funding support, it can handhold such companies during their mid to late stage journeys and also promote private participation.

5.5. National Stock Exchange listing of Startups: Policy level discussions are underway to allow pre-IPO listing of deep tech startups on national stock exchange. This can potentially be an additional stream of fund raising opportunity for the biotech startups.

5.6. Broaden the scope of activities to include complementary for-profit activities in the growing ecosystem: DBT incorporated BIRAC is a non-profit company that works at the interface of academia and industry. Due to the nature of section 8 under companies Act 2013, BIRAC is bound by certain statutory restrictions. For

example, there is restricted participation in growth stage of startups through equity, paid services, unleashing revenue generation potential on infrastructure & services on pay per use, etc. Therefore, having a for-profit arm option within DBT-BIRAC as enabler would expand the scope of activities to assist it for the rapid growth of the ecosystem.

5.7. BioSaarthi – an International Mentoring program: The Initiative aims at navigating biotech startups for accelerated growth through international experts' mentorship and strategic guidance. BioSaarthi program will facilitate structured mentor-mentee engagements, offering personalized guidance to mentees at PoC to commercialization stage. Overseas experts who are senior professionals having experience from MNCs, especially the Indian diaspora, will serve as international mentors. BioSaarthi initiative was announced by Dr. Jitendra Singh, Hon'ble Union Minister (I/C), Ministry of Science & Technology during BIRAC's 13th foundation day celebrations on 21st March 2025.

6. Global Bio-India 2024

Global Bio-India a mega international congregation of biotechnology stakeholders, including Large industries, Startups, Bioincubators, Research institutes, Investors, Ecosystem enablers, International bodies, Regulators, Central and State ministries/ Departments, others. This annual event has gained recognition as a renowned international platform to see the largest gathering of bio-based deep tech innovations in the country.

Global Bio-India 2024 was organized by DBT-BIRAC from 12th- 14th September, 2024 at Bharat Mandapam, Pragati Maidan, New Delhi, showcasing India's growing biotech ecosystem. **This year's theme was Bio-innovation and Bio-manufacturing under BioE3 policy and its impact on the BioEconomy.** The event was inaugurated by **Dr. Jitendra Singh** - Hon'ble Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space.

The Mega event saw **550+ exhibitors, 10,000 + delegates, 25+ countries, 14 States; 35+ Investors, 400+ Biotech Startups, 90+ bioincubators, 400+ Industry,** representation from Biopharma, Medtech, Diagnostics, Industrial Biotech, Bio-Agri domain. There were stakeholder discussions on National and Global Regulatory Trends; Industry-Academia interactions; Private Equity and Venture Capital Investments, etc. in 30+ Technical sessions, CEO Roundtables, 4 super sessions, a Startup Pavilion with **30+ Startup pitches; Launch of 11 new products of Startups.**

BIRAC also signed agreements with seven international organizations to foster collaboration.

Publications released during GBI 2024:

i. India BioEconomy Report 2024 (https://www.birac.nic.in/webcontent/IBER_2024.pdf)

ii. BIRAC Compendium of Products and Technologies 2024 (https://www.birac.nic.in/webcontent/birac_compendium_2024.pdf)

iii. Insights into BIRAC Equity Fund (https://www.birac.nic.in/webcontent/equity_schemes_19_09_2024.pdf)

iv. Amrit Grand Challenge **जन**CARE Innovations Report (https://www.birac.nic.in/webcontent/1726661399_AGCJanCARE_Report_Early_Stage_Innovations.pdf)

7. Biocluster development:

Based on ground level assessment, stakeholder consultation, and feedback from the startup ecosystem, a few gaps in the ecosystem were identified. One of the key infrastructural gaps is the absence of common access pilot-scale and validation-level facilities for startups, faculty entrepreneurs, and research institutions. To promote biomanufacturing and strengthen pre-product development capacity, there is a need for establishing integrated technology clusters that bring together academia, industry, and government under a collaborative framework. This proposition is reflected in the BioE3 Policy and the Bio-RIDE Scheme.

8. Data Research & Analysis: Publications released

- India BioEconomy Report 2024 (https://www.birac.nic.in/webcontent/IBER_2024.pdf)
- India BioEconomy Report 2025 (https://www.birac.nic.in/webcontent/indan_bioeconomy_report_2025.pdf)
- AcE Fund Report (https://birac.nic.in/webcontent/fund_of_funds_AcE_fund.pdf)
- Equity Funds report (https://birac.nic.in/webcontent/equity_schemes_19_09_2024.pdf)

Awards/Recognitions/Success Stories (FY 2024-25)

1. Agrovriddhi Pvt. Ltd.

Developed aptamer-based paper microfluidic device for pesticide detection. The product was successfully launched at the prestigious Global Bio-India 2023 event, gaining significant recognition. As part of early validation forging international consensus on critical regulatory priorities.

Fig. Product Demonstration, collaboration and future opportunities btw Agrovrddhi and Spices Board.

2. Famnutra Millet Foods Pvt. Ltd.

Brand name: Blissbody

Received an award of "BEST PIONEERING HEALTH AND WELLNESS BEVERAGE BRAND". Published in all regional channels like 10TV, V6, ETV and newspapers about the innovation

3. MLIT Sol Pvt. Ltd.

- **Invention Title:** PRECISION POULTRY FARMING USING IOT AND AI Patent: 202441010230 A
- Future food Asia 2nd round finalist.
- JAPFA Feeds Future challenge. Top Eight Finalists

4. Curem Biotech LLP

Curem Biotech, a student startup at the Indian Institute of Science Education and Research in Pune, working on developing portable and cost-effective diagnostics, has won the iGEM's Startup Showcase competition. It won the Benchling and Hummingbird VC prize comprising a cash award of $10,000.

5. HAB BIOMASS Pvt. Ltd.

- Funds raised post BIG - 21.5 lakhs
- 2024 Garje Marathi Global 1 L cash award
- 2nd Place at the Global Entrepreneurs Conclave 2025! Recognized as a revenue-generating startup in the early traction phase, this accolade highlights HAB
- Biomass's innovative approach and impactful business model. The award, accompanied by a cash prize of ₹50,000


6. Silifarm Technologies Pvt. Ltd.

- (March 2024) Matri by Silifarm Technologies Pvt. Ltd wins a great deal at Shark Tank India



7. Shrimp Hoard Technologies Pvt. Ltd.

- The startup has been recognized by leading agritech incubators and was shortlisted under the prestigious India Innovation Challenge Contest by Texas Instruments affirming its innovation and sectoral impact.

8. Healthcare Technology Innovation Centre-IIT Madras Mitra Medicals Pvt. Ltd.

- 12 Publications in international peer reviewed journals and conferences
- Patented scope connector design technology (patent pending)

9. Intessence Solutions Pvt. Ltd.

- Top 3 WinER grant award 2023
- Top-6 winner of Together 2023
- Top-5 winner of Bio Asia 2023 for 50000 rupees.
- First among the top-3 Women Entrepreneur award WinER 2023 in Global BioInida
- FICCI Excellence Award among the top5
- USAID SAMRIDH grant winner 2024
- Momprenaur startup India winner 2024 for 50 Lakhs rupees.

10. Intessence Solutions Pvt. Ltd

- Received pan India dental Implant supply order from Directorate of Dental Services (DGDS) Delhi, (Indian armed forces), for supply to about 50 centers in the country
- Completion of Multi-centric study across 9 centers in the country, demonstrating success rates achieved by globally renowned companies in this segment

11. Apramitha Innovations Pvt. Ltd.

- Demonstrated consistent and robust clinical outcomes across 14 hospitals Nationwide, reinforcing the reliability and effectiveness of our therapy.
- Honored with the “Best Startup Award – Healthcare (Therapeutics)” at Global Bio India 2024, a prestigious recognition of our scientific excellence and innovation.
- Proud recipient of the “Best Startup Award” at IKMC 2024, further affirming our leadership in the biotech startup ecosystem.

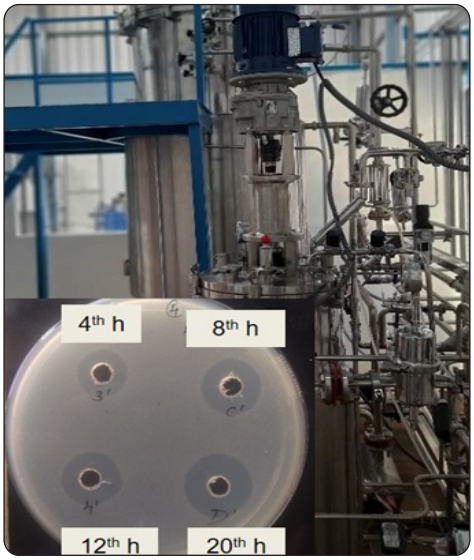
12. Ayati Devices Pvt. Ltd.

- Featured on Shark Tank India – Season 4, gaining national attention as an innovative, impactful medtech startup solving a major public health challenge.
- Selected for international showcases such as MEDICA Germany and Arab Health, gaining visibility among global distributors and healthcare networks.

13. Fermentech GSV Pvt. Ltd.

Fermentech GSV has successfully validated its Nisin (GSV-234) in new industrial applications, including bakery products and coconut water processing. The company is now advancing to a 3-5 KL scale-up for pre-commercial volumes.

Fermentation → Membrane extraction Steps → Drying → Formulation



Nisin produced in 500L fermentation-captured in agar diffusion assay carried out different log hours

interns from GCT Coimbatore worked in the nisin bio-manufacturing project

14. Immuneel Therapeutics Pvt. Ltd.

Successful commercialization of varnimcabtagene autoleucel (Qartemi) based on the safety and efficacy data of IMAGINE trial funded by BIRAC. This will help meet the unmet need for cancer patients in India by providing access to a global standard CAR-T manufactured in a closed cGMP system.

Qartemi® (varnimcabtagene autoleucel) Immuneel's closed cGMP manufacturing facility in Bengaluru

15. Temperate Technologies Pvt. Ltd.

- First commercial installation of an 100-ton onion storage facility in Bilkal village, Marpalle mandal, Vikarabad district, Telangana. It is a completely solar-powered installation.

16. Wockhardt Limited

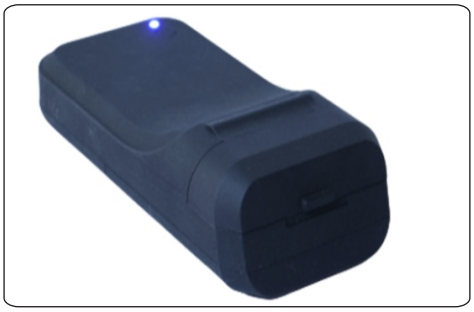
- Wockhardt has been recognized as one of the WOW Workplaces of 2025, a prestigious acknowledgment in the Pharmaceutical & Healthcare sector
- The Biotechnology Industry Research Assistance Council (BIRAC), a Government of India enterprise, recognized Wockhardt's innovative research and awarded the prestigious BIRAC Innovator Award 2024 for its novel antibiotic, Nafithromycin (MIQNAF).

17. Pragmatech Healthcare Solutions Pvt. Ltd.

- Screened 2000 women in rural and urban poor Chennai (Tamil Nadu) in partnership with Cancer Institute (WIA) Adyar and Penn Nalam (NGO) through support from Pfizer India CSR Initiative (Pfizer Indovation): **https://www.youtube.com/watch?v=wILsfh3TPpk**
- Recent publication for the CERVICHECK Self Sampling kit's clinical validation study in the Asian Pacific Journal of Cancer Prevention (APJCP): **https://journal.waocp.org/article_91438.html**
- Featured on Shark Tank India Season 3, Ms. Namita Thapar joined us as an **investor: https://www.youtube.com/watch?v=C0cAmkAPWmU**

18. FaunaTech Solutions Pvt. Ltd.

- Winners of the IDF Dairy Innovation Challenge, for pioneering dairy health diagnostics, Winners of the Livestock Health Track at the Access Sharjah Challenge 2024, UAE and Extreme Tech Challenge (XTC) at the World Food Forum, Rome.
- Finalist at the Grow-NY Business Competition, USA and Selected for the AgFunder GROW Impact Accelerator, Singapore.
- Finalist at the Future Food Asia (FFA), Singapore – spotlighting Asia's top agri-food tech innovators.






19. Torchit Electronics Pvt. Ltd.

- Jyoti AI: Innovation Award at the United Nations General Assembly (2024), New York
- Jyoti AI: BIRAC - AI Innovation Award
- Most Impact Product Award, Padmashree Dr Keiki Mehta (Opthemologist)
- Named in Forbes Asia 30 under 30 (2025)

Outcome of all BIRAC activities

Affordable Products and Technologies developed through different schemes

BIRAC has an inherent system of grading the projects into 7 theme areas for project monitoring and promoting innovation in that sector. The Healthcare sector has been categorized into 4 thematic areas namely, Drugs (including drug delivery), Biotherapeutics including Biosimilars and Regenerative Medicine, Vaccines, Devices and Diagnostics. The other theme areas for which BIRAC provides funding are Agriculture (including Aquaculture and Veterinary Sciences), Clean Energy & Environment (including Secondary Agriculture) and Bioinformatics (including Artificial intelligence, Big Data Analysis, IoT's & software development).

BIRAC emphasizes that projects supported through its various funding schemes on conclusion yield the targeted outcome in the form of products, technology, IPR, etc. Towards this end, BIRAC screens proposals under various schemes for their Technological Readiness Level (TRL) on a scale of TRL 1 to TRL 9 and filters in those having the potential to reach higher TRLs through BIRAC support. Potential regulatory hurdles in the projects are already identified during the evaluation phase. Supported projects are regularly mentored and rigorously monitored. BIRAC assess the TRL progression of project through progress evaluation by Project Monitoring Committee (PMC) experts, either online or onsite, presentation of progress by project coordinators to the Technical Expert Committee (TEC) and online evaluation of milestone completion reports by the subject matter experts associated with a particular project.

The initiatives undertaken by BIRAC have resulted in the successful completion of targeted milestones of many projects from different sectors, and the development of many early/late-stage technologies and affordable products. **During the year 2024-25, more than 85% of projects completed Early-stage validation (TRL-3 and above), and 67 projects (32: TRL-7; 21: TRL-8; 14: TRL-9)** delivered products/technologies which are at late-stage validation, pre-commercial stage, market launched or commercialized.

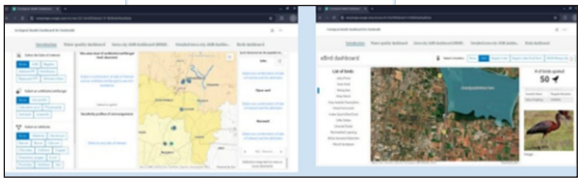
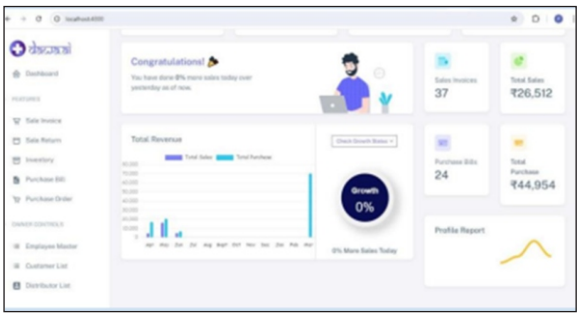
Products/Technologies ready to be launched/commercialized in FY 2024-25

Devices and Diagnostics	
Voxelgrids Innovations Private Limited 	The first MRI product Voxelgrids has developed and deployed is a compact, lightweight, full body 1.5 Tesla MRI scanner that is capable of being used in both stationary and mobile configurations. This product is designed to be deployed and operated under the most challenging installation conditions and still generate outstanding images for clinical diagnosis.

Intessence Solutions Pvt. Ltd 	• Refirm dental implants are made to provide twin benefits of "Easy placement" and "Good stability". The high quality dental Implants having novel and superior features, along with the complete set of associated instruments and armamentarium are proudly designed and manufactured in India. • The clinical performance of the product evaluated through a multi-centric study across India, has demonstrated success levels achieved by global majors. The product is approved by CDSCO and the facility is ISO 13485 certified. • Commercialization was started based on these licenses. The commercial sale has been initiated and 400 units have been sold so far in India (mostly in Karnataka).
InnAccel Private Limited 	• Intelligent Breathing Support for Neonatal and Pediatric Care: SAANS is an intelligent, infrastructure-independent, multi-therapy system to provide non-invasive breathing support for neonatal and pediatric patients in all clinical and transport settings. • SAANS Technology is currently utilized by 200+ hospitals in the states like Assam and Rajasthan, etc. 1200+ units are sold and used by many government hospitals as well as by AIIMS Delhi, AIIMS Bhopal, AIIMS Jodhpur, Kalawati, Max, Fortis, which are other notable customers. 50,000 patients are monitored and treated annually using this technology.
Rymo Technologies Pvt Ltd 	• Mobi-L, leverages advanced robotics and virtual reality to transform physical rehabilitation by providing personalized, goal-based training. With over 80 units already deployed in clinics across India and an international distribution agreement with Fourier Intelligence in Malaysia, Mobi-L is revolutionizing rehabilitation, offering effective and accessible therapy solutions worldwide.

Silifarm Technologies Private Limited  	• Working in Electronics System Design & Manufacturing domain, with the product "Matri"- A Menstrual pain reliever device , A tiny-portable , rechargeable , user friendly electronics device which can give relief from menstrual pain just within 10 minutes. • Matri solves the problem of debilitating menstrual pain by providing a non-invasive, drug-free wearable device that offers instant and customizable relief, empowering women to continue their daily activities without discomfort.
Neuome Technologies Pvt. Ltd.    	• Neurome's flagship product InstaPreserve combines biospecimen technology and preservation science, eliminating the need for cold-chain logistics and reducing operational costs, while maintaining long-term sample stability.
Adarsa Private Limited  	• Helo Health Maxx-A Multi-Parametric Diagnostics Device engineered to deliver consistent, high-performance operation throughout the day—with only a single charge required. • Designed for both online and offline environments, it empowers healthcare providers by instantly testing over 60 vital health parameters with impressive precision and reliability. • The product is supported with accessories like the ECG Cable, BP Probe, SPO2 Probe, High Accuracy Strain Gauge Smart Scale as well as consumables like Test Strips

Ameliorate Biotech Pvt. Ltd. Ameliorate Biotech Pvt Ltd 	• Single diagnostic device for early-stage detection of Malaria, Chikungunya & Dengue from a drop of blood: Under Clinical Evaluation.
Azooka Labs Private Limited azooka 	• Zero Power Zero Contamination Sample Collections Kits for infectious disease and biological samples as a molecular upgrade to LMIC. • RNA WRAPR and the mWRAPR products are advanced molecular transport media that preserve DNA and RNA integrity at ambient temperature for up to 40 days without requiring cold storage. By inactivating pathogens in collected samples, these kits eliminate contamination risks, ensuring safety for healthcare workers and sample handlers.
Briota Technologies Pvt Ltd BRIOTA PASSION . INNOVATION . HEALTH 	• **सुरक्षा (SAVE™) –POCT Back Pack:** Comprehensive Single Window AI First POCT screening and diagnosis for 12 NCDs • Live projects in pilot phases with various state NHMs. Included as part of the National Program of NCDs and ready to scale with funding support from the government and VCs.

Janitri Innovations Pvt. Ltd. 	• Janitri offers medical-grade fetal, maternal and newborn monitoring solutions to use at hospitals or home. Backed by clinical research & patented technology to ensure safety and accuracy. Under AGC-janCARE Scale up of AI-enabled labor monitoring software for remote/central monitoring and automated interpretation.
MedevPlus (Tishyas Medical Device Development Solutions Private Limited) Redefining Diagnostics and Therapeutics 	• IXanner®: A portable OCT for early diagnostics of glaucoma in a telemedicine set up. • Ver 1.0 is in the market for pediatric and homecare applications. For Ver 2.0, Clinical validations in a clinic set-up are completed; it is due in a telemedicine camp. CDSCO registration was obtained. Applied for a test license
Molecular Solutions Care Health 	• A Digital Dashboard for Wastewater Re-Use A OneHealth Approach to Determining the Impact of "Kere Sanjeevani" Project and Wastewater Based Agricultural Irrigation. Dashboard
Shoonyatvam Foundation 	• Dawa.ai: AI-powered SaaS Solution for Retail Pharmacies

Ayati Devices Pvt. Ltd 	• Vibrasense + T is a portable, handheld, rechargeable device designed for comprehensive quantitative sensory testing (QST). It offers precise quantification of Vibration, Warm, and Cold perception thresholds. By assessing both large and small nerve fiber function, Vibrasense + T provides a more complete picture of neurological health.
Pragmatech Healthcare Solutions Private Limited 	• Zero Power Zero Contamination Sample Collections Kits for infectious disease and biological samples as a molecular upgrade to LMIC. • RNA WRAPR and the mWRAPR products are advanced molecular transport media that preserve DNA and RNA integrity at ambient temperature for up to 40 days without requiring cold storage. By inactivating pathogens in collected samples, these kits eliminate contamination risks, ensuring safety for healthcare workers and sample handlers.
Torchit Electronics Private Limited 	• Torchit's revolutionary assistive solution, Jyoti AI Pro, is a next-generation wearable designed to empower the visually impaired with the power of Artificial Intelligence. This innovative device transforms ordinary glasses into AI-powered smart glasses, offering real-time object recognition, multilingual reading, scene description, and much more — all offline, making it truly universal, lightweight, and accessible for daily use.

Aarna Biomedical Products 	• "Sampoorti" - An institution-centric product named as Sampoorti which is a mobile and concise suitcase comprising of prosthesis of different sizes and pocketed bras of different sizes with prosthesis covers, patient information forms and information brochures. • "Poorti" - a user-centric post mastectomy kit has been designed utilising a product co-evolution strategy where each component of the kit has been developed with iterative feedback as per the aspirations of the end user leading to both technical and anthropometric betterment than the available alternatives together with a one-minute product self-use video thereby dispensing the need of any external help.
MEDTRA INNOVATIVE TECHNOLOGIES PRIVATE LIMITED 	• Veineux is a highly efficient Near-Infrared (NIR) vein tracking device powered by Augmented Reality (AR), designed to reduce failed IV attempts and improve vein access accuracy. Its portable, hands-free design enables quick and reliable vein visualization without altering standard clinical practices. Ideal for emergency, ICU, pediatric, and geriatric care, Veineux seamlessly integrates into clinical workflows to enhance patient care and efficiency.
FIBROHEAL WOUNDCARE PRIVATE LIMITED 	• Silk protein derived surgical wound dressings & products are non-mammalian source in origin, non-cytotoxic, non-allergenic, biodegradable, low-cost, innovative & concept based, patented products developed for active & advance wound care management. It has high tensile strength, specific amino acid sequence which acts as scaffold for new cell migration, promotes cell attachment and aids in faster wound healing process.

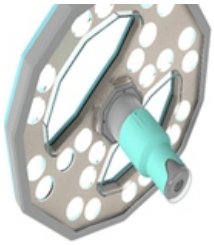
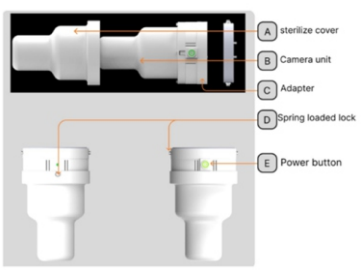
INNACCEL TECHNOLOGIES PRIVATE LIMITED INNACCEL 	• VAPCare by InnAccel is an intelligent, automated secretion management system that enables closed-loop oral hygiene and secretion clearance for intubated and ventilated patients. The device uses smart sensors and algorithms to identify secretion events and automatically clear oral and subglottic secretions without breaking the ventilation circuit, thus reducing infection risk.
BonAyu Lifesciences Private Limited BonAyu 	• Oral thin film platform for the delivery of Nutraceuticals, Cosmetics & Personal Care industries as a better alternate to the conventional tablets, capsules, liquids and gels
Drugs (including Drug Delivery)	
Wockhardt Limited Saving Lives 55 years WOCKHARDT | LIFE WINS 	• MIQNAF (nafithromycin) is a novel, India-discovered, oral macrolide antibiotic offering a first-ever, once-daily, 3-day, safe, monotherapy for the treatment of community-acquired bacterial pneumonia (CABP) caused by any of the entire range of typical and atypical bacterial pathogens including those resistant to current antibiotic options such as azithromycin, clarithromycin and amoxicillin/clavulanate.

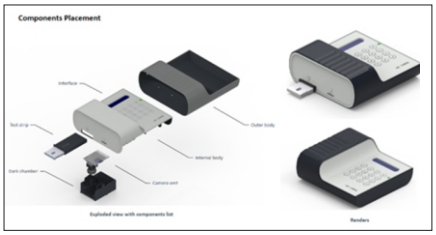
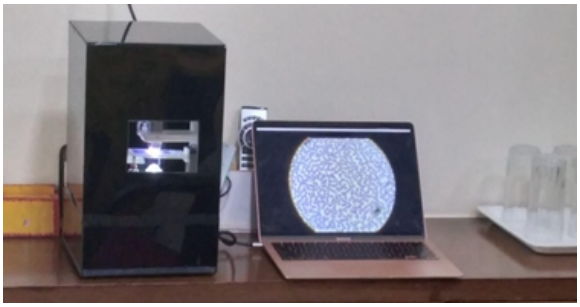
Agriculture	
AGROVRDDHI 	• Aptamer-based paper microfluidics for the rapid, on-site colorimetric detection of 4 major classes of pesticides (Organophosphates, Organochlorines, Carbamates & Pyrethroids) in one single test. • Simple and quick user friendly, field deployable, affordable solution for detection of 4 major pesticides based on aptamer AuNPs-paper microfluidics device integrated with mobile scanner for self-intuitive colorimetric detection involving easy onsite analysis of pesticides within few minutes from food and agricultural commodities.
Energy and Environment	
Famnutra Millet Foods Private Limited 	• Blissbody is a sugar-free, millet-fermented functional beverage developed through a patented process using germinated foxtail millet. It is rich in B-vitamins, supports digestive health, and is safe for diabetics. • Packaged sustainably in glass, Blissbody offers a clean-label, science-backed alternative to sugary drinks with strong consumer validation and early sales traction.
HAB BIOMASS PRIVATE LIMITED  	• A Mobile Unit, with inbuilt UVGL shredder, dry heating Sterlisation chamber and briquetting unit. This machine converts Medical Waste into Bio Briquettes to be used in Boilers and Furnaces as alternative to coal and firewood. This is a high tech machine using AI and IOT for live data tracking and scanning of waste to regulate the ethical usage and answerability.

Veterinary Science and Aquaculture	
DruFarm Technology Private Limited 	• Transforming Dairy Farming with DairyGuard, The "DairyGuard Project" is a pioneering initiative aimed at empowering small-scale dairy farmers. DairyGuard introduces the revolutionary IoT Collar, a cutting-edge solution that not only monitors cattle health but also optimizes breeding cycles, increases milk production, and reduces veterinary expenses.
Shrimp Hoard Technologies Pvt. Ltd. 	• Shrimp Hoard Technologies has developed an IoT-enabled water quality monitoring system tailored for shrimp farming. • The solution provides real-time data on critical parameters, reduces manual errors, and improves farm productivity through predictive insights-ensuring healthier yields and sustainable aquaculture.

OTHER EXEMPLARY PRODUCTS DEVELOPED/UNDER DEVELOPMENT THROUGH BIRAC SUPPORT THAT HAVE COMPLETED LATE-STAGE VALIDATION IN FY 2024-25

Devices and Diagnostics	
Healthcare Technology Innovation Centre - IIT Madras **Mitra Medicals Private Limited** 	• SmartEye - a comprehensive technology platform for endoscopy including all hardware and software components, and a range of commercial products: one next-generation flexible video endoscope and one multispectral video endoscope.

TTK HEALTHCARE LIMITED, HEART VALVE DIVISION, THIRUVANANTHAPURAM 	• TTK Chitra Titanium Heart Valve (Model TC2) features an improved design with several enhancements, including: Improved effective orifice areas; Improved MRI compatibility; Improved thrombo-resistance. • This single centre pilot study of Model TC2, has demonstrated that the safety and performance of this improved model is comparable to that of any other valves currently available in the market. This pilot study now needs to be expanded into a much larger multi-centric pivotal study which can confirm these improvements and safety with statistical significance.
UnivLabs Technologies Pvt Ltd 	• Advanced endoscopy system developed by Univlabs Technologies Private Limited has features such as multi-spectral CPU/GPU imaging instead of existing FPGA system – suitable for tier 2 and tier 3 hospitals at more affordable cost, reducing out of pocket expense to 1/3rd
BETIC - unit of IIT Bombay  	• Modular OT Recording Camera: The device can be used for live transmission of the surgery and the recording system it to enable training of other surgeons, conduct research, and improve patient safety in revision surgeries. The camera unit is to be mounted on an OT light head. The Camera Unit uses Wi-Fi technology to communicate with the Recording Software. This rechargeable surgery recording device seamlessly integrates into any Operation Theatre light setup

BETIC - unit of IIT Bombay  	• ECG Patch for Holter Monitoring: A device for rapid and accurate placement of electrodes and to enable long term monitoring of heart for people having heart abnormalities suggested by doctors and be used in hospitals, clinics & patients' home
BETIC - unit of IIT Bombay 	• Point of Care Device for Glycemic HbA1c: lateral flow glycated haemoglobin immunosensor-based point-of-care device enables ease of sampling, testing and interpreting. The functional prototype including a portable reader has been developed by integrating different modules for safety, efficacy and performance. The test uses an anti-human Hb monoclonal antibody conjugated with colloidal gold and an anti-human HbA1c monoclonal antibody coated on the test line.
BETIC - unit of IIT Bombay 	• Meconium Suction Device: a dedicated portable handheld device to remove the meconium stuck in the airway of a newborn baby. It is meant to help pediatricians and NIC nurses perform the task efficiently and effectively, in delivery rooms and neonatal intensive care units.
Curem Biotech LLP 	• A portable AI assisted diagnostic system (AI Microscope) that aims to make malaria diagnostics efficient, accessible, and affordable, and to reduce the time and cost of diagnosis in microscopy based disease diagnostics.

Atre Healthtech Private Limited 	• Atre Healthtech is a startup that focuses to advance health responsibly through the use of cutting edge technology. By leveraging the power of AI, ML and robotics, they aim to improve patient outcomes and support medical professionals. They are currently focused on developing tele-operated medical devices such as tele-operated ultrasound system.
InnoDx Solutions Private Limited 	• Quantitative RT-PCR kit for detecting all HBV genotypes A-H in human blood samples which will be an open system so that all small blood banks and hospitals can utilize our test for accurate quantitative HBV detection for screening and right treatment purposes.
Ashva Wearable Technologies, Bangalore  	• Fitknees-An AI-enabled motion sensor system, assesses knee function and generates detailed Kneeports® reports, offering actionable insights into knee therapy progress. • Using special AI-powered algorithm, Fitknees accurately measures your mobility, extension lag, inclination angle, proprioception, and muscle strength. It also calculates your static and dynamic balance, along with the most crucial test, the GAIT analysis.

Astrek Innovations 	• Unik Exo: an effective solution for hospitals, rehabilitation centers, and care providers to address mobility challenges in individuals with lower-limb disabilities.
Inovocare Healthsoft Solutions Pvt. Ltd. 	• Non-Invasive Baro Reflex Assessment - Combined System (NIBRA-CS®), a cloud-based diagnostic device for non-invasive assessment of baro-reflex and autonomic function to diagnose Dysautonomia. The device meets EHR/EMR standards and ABDM requirements and is designed to be a cost-effective solution for diabetic and elderly patients.
Mental Health Foundation India 	• Mind Healthcare Online Program and Education (MiHOPE®): The software features tested include Digital Health Records (for mental health-related issues),conduction of live remote Tele-Consultations, Local coordinator and doctor user profile maintenance and prescription generation as per the National Tele-Medicine Guidelines of MoHFW.

Nex Fitzap Private Limited LogyAI	• AI-based screening of cataract disease from smartphone images • Clinical trials in the Southern India with nearly 440 patients, 794 eye images were included in the study. The overall accuracy of the AI screening solution for cataract detection was computed to be 90.08%. Further, the accuracy was 88.02% for immature cataract, 97.16% for mature cataract, and 90.08% normal category. Logy AI cataract prediction module's AUC (0.8946) falls under the good category.
Onicares Education Pvt. Ltd. ONI Cares EARLY LIFE PROGRAMMING	• AI Prenatal Care Product helping improve foetal health and labour outcomes. An AI based Clinical Webapp for ObGyns connected to a mobile app for Pregnant Mothers. The clinical webapp provides a simple 4 step consultation
Individual Researcher - Dr. Rampalli Viswa Chandra SVS Institute of Dental Sciences committed to science - to care with compassion	• A Low-cost Digital Occlusal Analysis System for Analysis of Errant Bite Forces and Jaw-Joint Disorders
Techsolver Communications and Innovative Platforms Pvt. Ltd. TCIP	• Prothrombin time testing using smart digitalized sensing of paper-based assay for low-resource settings • Completed 200 clinical trials at AIIMS Jodhpur
Upayaahealth UpayaaX  	• UpayaaX: Healthcare Navigation and Triaging Digital Products Using AI for Physical and Mental Health. • Upayaahealth works in healthcare and AI. Its umbrella of services is called UpayaaX under which it is offering digital apps called DishaX-Healthcare navigation, SalaahX- Standardised consult and DostX which is for caregiver support for families dealing with chronic diseases.

Drugs (including Drug Delivery)

Datt Mediproducts Private Limited

Datt Mediproducts Private Limited

- Velgraft is a tissue engineered artificial skin substitute comprising of a biocompatible, biodegradable biopolymeric matrix and human mesenchymal stem cells (hMSCs). Velgraft acts as a skin substitute that aids in chronic wound healing by accelerating the migration of cells present in wound corners towards closure of wound.

ByLin Medtech

- Hydrating oral bio patch for patients with extreme Xerostomia:
  - Made of indigenous biomaterials which are biocompatible and biodegradable.
  - Continuous wetting of the oral cavity possible.
  - No sugars, No preservatives.
  - MVP ready.
  - Tested and proven as NON-CYTOTOXIC.
  - Tested and proven as NON-SKIN IRRITANT.
  - Tested and proven as NON-SKIN SENSITIZER.
  - Inherent antimicrobial activity tested and proven.
  - Tested and proven as a biodegradable product.
  - India Patent granted - Patent No: 384827
  - USA Patent Application No: 17/635,266

Energy & Environment

Fermentech GSV Private Limited

- Nisin is fermentation technology derived biological shelf life enhancing ingredient. This peptide finds applications in food processing and provide clean, green and natural labelling options for agro-food industries. GSV 234- a nisin ferment developed by Fermentech GSV is scaled up to pilot production volumes and down-stream processing steps involves membrane-based technologies and vacuum processing.
- The technology involved scaling up of Nisin production at 500 L scale. Subsequently, downstream process development for the extraction and purification of the nisin was established.
- The application has been submitted to FSSAI for bio-ingredient product approval.

Evlogia Eco Care Private Limited

- Technology for manufacturing biodegradable and eco-friendly single-use cutleries like straws, lids, take-away container boxes, cups and spoons made from locally available agricultural waste.
- Prototypes developed for Washing process, holes making/roughening process, improvised rolling machines, glue application machine and sterilization with Ozone.

Pure Pigments LLP

- Pure Pigments LLP is a startup solving the problems of textile pollution which is the second largest polluting industry in the world. They have proposed to develop Natural Inks and dyes that can be used for textile screen. These dyes are made out of raw materials sourced from natural sources like flowers, seeds, bark, root and leaves. These dyes have no impact on the environment and water systems.

Agriculture

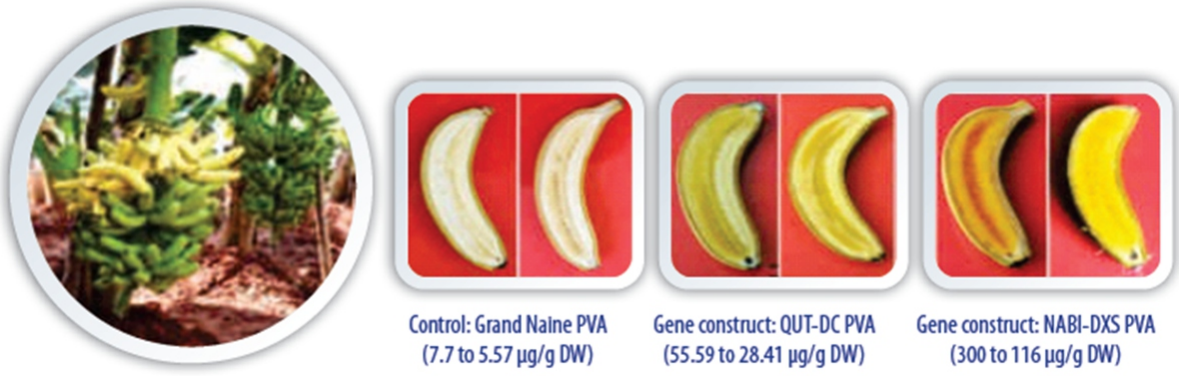
Trebirth Private Limited

- Trebirth is a startup building a device to detect stem borers inside plants and trees before notable infestation symptoms are visible to tracers and farmers.
- In the face of escalating global challenges, Trebirth emerges as a beacon of innovation and dedication, empowering farmers to address the pressing issue of grub infestations with cutting-edge solutions. Through their comprehensive approach, they aim to mitigate the impact of these pests on crops, ensuring a more robust and sustainable agricultural production system for generations to come

Veterinary Science and Aquaculture	
MLIT Sol Pvt Ltd. PoultryMon Smart Poultry Monitoring MLIT 	• The system for Precision Poultry Farming utilizing the combined power of the Internet of Things (IoT) and Artificial Intelligence (AI). A robust data communication infrastructure ensures real-time data collection, the data and early-warning alerts for abnormal conditions and potential health issues in the poultry flock. • This system empowers farmers to make data-driven decisions for optimizing environmental conditions, preventing disease outbreaks, and ensuring the health and productivity of their poultry through precise IoT based real-time monitoring and AI-powered insights.
FaunaTech Solutions Private Limited FaunaTech 	• FAUNA- A novel smartphone-based handheld diagnostics platform for early detection of critical diseases, monitoring health, screening milk, food, grains quality at the source. The integrated hardware-software delivers rapid, quantitative results with lab-traceable accuracy, enabling early disease detection.

BIRAC-QUT, Australia- Bio-fortification & Disease resistance in Banana

Under this BIRAC supported technology development and transfer program, transgenic banana plants with enhanced level of Provitamin A and Iron, and resistant to Fusarium and BBTV were developed using gene constructs provided by Queensland University of Technology (QUT), Australia to Indian research organizations.



Promising transgenic banana events having high PVA and iron (higher than the control) content in ripe-fruit- pulp were identified. After obtaining necessary biosafety clearances from regulatory bodies (IBSC, RCGM and GEAC), the transgenic lines were transferred to experimental sites at 4 locations viz., (i) National Agri-Food Biotechnology Institute (NABI), Mohali, Punjab, (ii) ICAR-National Research Centre for Banana (ICAR-NRCB), Trichy (iii) Navsari Agricultural University (NAU), Gujarat, and (iv) Sarat Chandra Sinha College of Agriculture, Assam Agricultural University (SCSCA, AAU), Dhubri, Assam for Event Selection Trials (EST). Currently, the research data generated under EST is being analysed for the final event selection.

BIRAC and USAID supported wheat project

On account of increase in population, deteriorating soil quality, continuously and unsustainably sinking water table coupled with the proportion of the population below the poverty line, food security in the Indo-Gangetic plains has become a major challenge.

To address some of these challenges BIRAC has supported a project entitled "Development of heat tolerant, high yielding and climate resilient wheat cultivars by utilizing genomics, molecular and physiological information and resources". Under this, high-yielding, heat-tolerant wheat cultivars are being developed by building upon the available resources and breeding materials by utilizing information from model systems and currently available modern breeding, genetic, genomic, physiological, and biochemical tools.

BIRAC – IKP Grand Challenges in Agri-technology Translation for Boosting Farmers' Income

BIRAC in partnership with IKP Knowledge Park is conducting a Grand Challenge in "Agri-technology Translation to Boost Farmers' Income". The focus of the program is to demonstrate increased income for farmers through deployment of selected technologies at BIOKISSAN hubs and other partners. The Program is being conducted in 2nd stages. In the first stage, 10 innovative technologies were identified, funded, and monitored for field testing. Based on data obtained, 5 promising technologies/start-ups have been selected for 2nd stage to undertake large-scale demonstration. The 2nd stage of the Program is jointly supported BIRAC and IKP Knowledge Park

Fostering High Performance Biomanufacturing

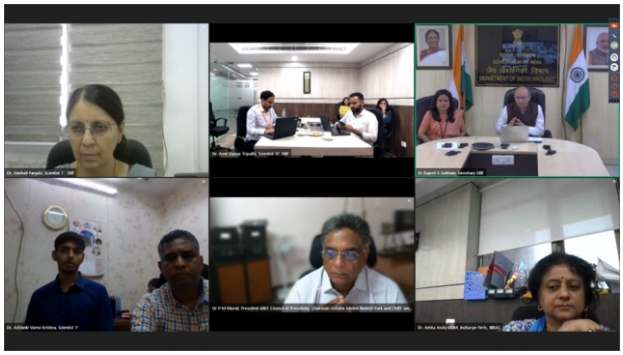
The Department of Biotechnology (DBT) envisages bringing together Scientific and Technological advancement to enable Circular-Bioeconomy by advancing 'High-Performance Biomanufacturing' initiative in the country. This integrated programme is proposed towards achieving a major goal of the BioE3 Policy (i.e. Biotechnology for Economy, Environment and Employment) for green, clean, and prosperous India, being developed by the Department. This is aligned with 'Lifestyle for the Environment (LiFE)' launched by the Hon'ble PM on 20th October, 2022 to propel mitigation of global climate change by incorporating green and friendly environmental solutions in every aspect of life. Union Budget 2023-2024, the Government of India has laid emphasis on Green Growth as one of its seven major verticals, with an aim to reduce the carbon intensity of the economy and provide for large-scale green job opportunities.

Biomanufacturing offers great potential by being amenable to innovation, energy efficient, and causing reduced pollution. The backbone of this initiative comprises advanced tools of biotechnology including synthetic biology, genome editing, microbial bioresources, metabolic engineering, etc. It has the potential to provide an alternative to traditional petrochemical-based manufacturing through the manufacture of biogenic products such as food additives, biopharmaceuticals, biogenic dyes, bulk chemicals, animal feed products, flavours/fragrances, biomaterials, Agri-bioproduct, etc. using sugar-based microbial fermentation and other sustainable biomass/waste resource-based manufacturing methods.

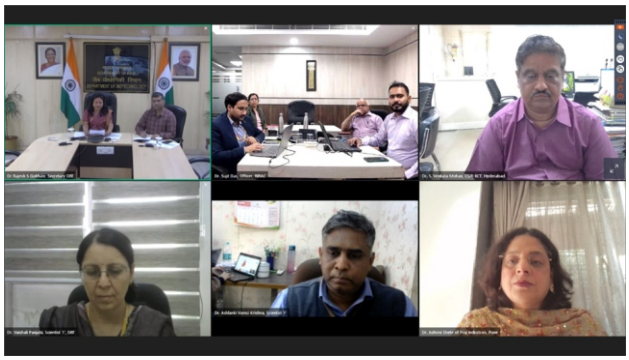
Initiatives taken under Bio-manufacturing:

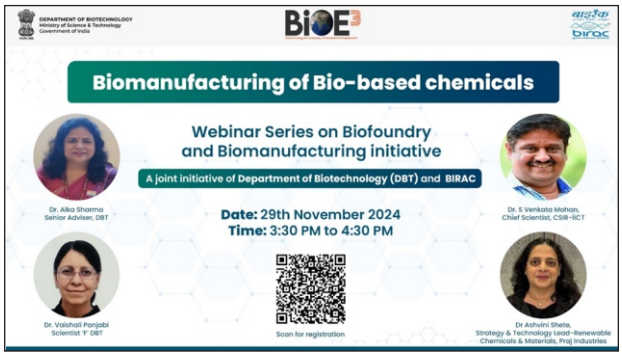
- **DBT, in partnership with BIRAC, launched call for proposals for setting up of "मूलांकर" BioEnabler Hubs:** Biofoundry and Biomanufacturing Hubs" in PPP mode under the BioE3 Policy for "Fostering High Performance Biomanufacturing. Proposals were invited for setting up of Biofoundries (for early scaling-up of proof-of concepts) and Biomanufacturing Hubs (shared pilot-scale and pre-commercial-scale facilities) to support research, innovation and scale up in the following thematic sectors/subsectors: (i) Bio-based chemicals, Bioplastics, Active Pharmeceutical Ingredients (APIs), and Enzymes (ii) Functional Foods and Smart Proteins (iii) Precision Biotherapeutics (monoclonal antibodies, mRNA therapeutics, cell & gene therapy) (iv) Climate resilient agriculture (agribiologicals) (v) Biofuels and Carbon capture (vi) Futuristic marine and space research. A total of 31 proposals got selected under this call.

- DBT in partnership with BIRAC Launched Webinar Series on Biomanufacturing and Biofoundry Initiative on 14.11.2024. The Webinar Series brought together together industry leaders, scientists, researchers, start-ups, and SMEs to discuss key developments in biomanufacturing. Each session under the Webinar Series covered the thematic areas such as bio-based chemicals and enzyme, smart proteins and functional foods, precision biotherapeutics, climate-resilient agriculture, carbon capture and it's utilization and futuristic marine and space research, providing a platform for knowledge sharing and policy insights. In his keynote address, Dr. Rajesh S. Gokhale, Secretary DBT, emphasized on India's goals to lead the next industrial revolution through biomanufacturing. The industrialization of biology is a vision where biomanufacturing could transform existing chemical-based production, create new sectors, and open new markets for bio-based products. The Webinar attracted a diverse audience of 500+ participants, including academicians, industry experts, start-ups, and govern ment representatives. The Q&A session, moderated by DBT and BIRAC officials, saw active participation in seeking insights on the policy's implementation and the future of biomanufacturing in India.

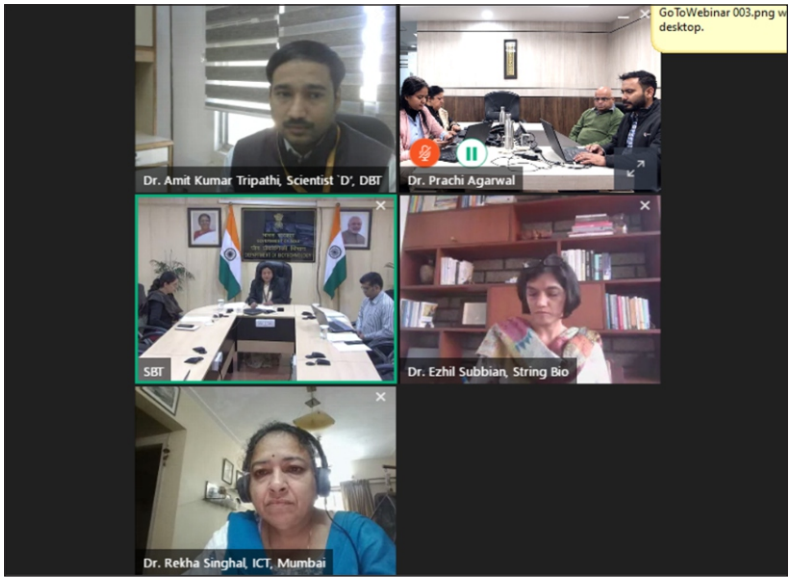


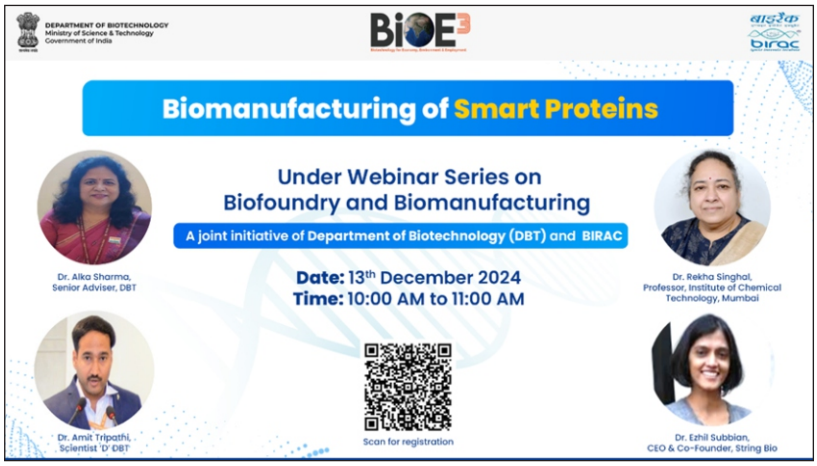
- In order to disseminate information regarding the BioE3 Policy and also to discuss the thematic areas in detail, the DBT, Govt. of India in association with BIRAC, is organizing the 'Webinar Series on the Biofoundry and Biomanufacturing Initiative', which was inaugurated by the Secretary-DBT & Chairman-BIRAC on 14.11.2024. The second Webinar under this series focused on, "Biomanufacturing of Biobased Chemicals" which was held on 29.11.2024. More than 200+ participants attended the webinar. Opening remarks were given by Dr. Alka Sharma, Sr. advisor and Scientist H, DBT, focusing on the role of DBT in facilitating impactful progress in the field. Dr. Vaishali Punjabi, Sc. F. (DBT) provided an overview on the bio-based manufacturing of specialty chemicals. Dr. Venkat Mohan (CSIR-IICT, Hyderabad) and Dr. Ashwini Shete (Praj Industries, Pune) discussed on Biobased Chemicals - Challenges and Opportunities. The Q&A session, moderated by DBT (Dr. Amit Tripathi) and BIRAC and officials (Dr. Sujit Das), saw active participation from attendees seeking additional information on future prospects in the field and the related regulatory challenges.





- The third session of the Webinar Series on "Biomanufacturing and Biofoundry Initiative" was conducted on 13.12.2024 by Department of Biotechnology (DBT) and Biotechnology Industry Research Assistance Council (BIRAC). The session focused on: "Bio-manufacturing smart proteins" and saw participation from more than 250 stakeholders from Industry, Government organizations and public as well as private institutions. Opening remarks were given by Dr. Alka Sharma, Sr. advisor and Scientist H, DBT, focusing on the role of DBT in facilitating impactful progress in the field. Dr. Amit Tripathi (DBT) provided insights on the process of smart protein bio-manufacturing in India. Academic perspective was provided by Dr. Rekha Singhal (ICT, Mumbai) who spoke about the opportunities available in the alternate and smart protein sector and how to leverage them through public-private partnerships. Dr. Ezhil Subbian (String Bio Pvt. Ltd.) gave insights in to the field from an industrial perspective with a focus on the global market, industry adoption and challenges faced by the industries working in the sector. The Q&A session, moderated by BIRAC officials (Dr. Sujit Das and Dr. Smita Hingane), saw active participation from attendees seeking additional information on future prospects in the field and the related regulatory challenges.

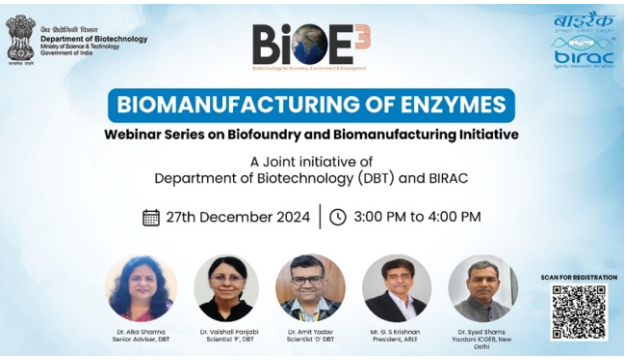




- The fourth session of the Webinar Series on "Biomanufacturing and Biofoundry Initiative" held on 27.12.2024, focused on: "Bio-manufacturing of Enzymes"

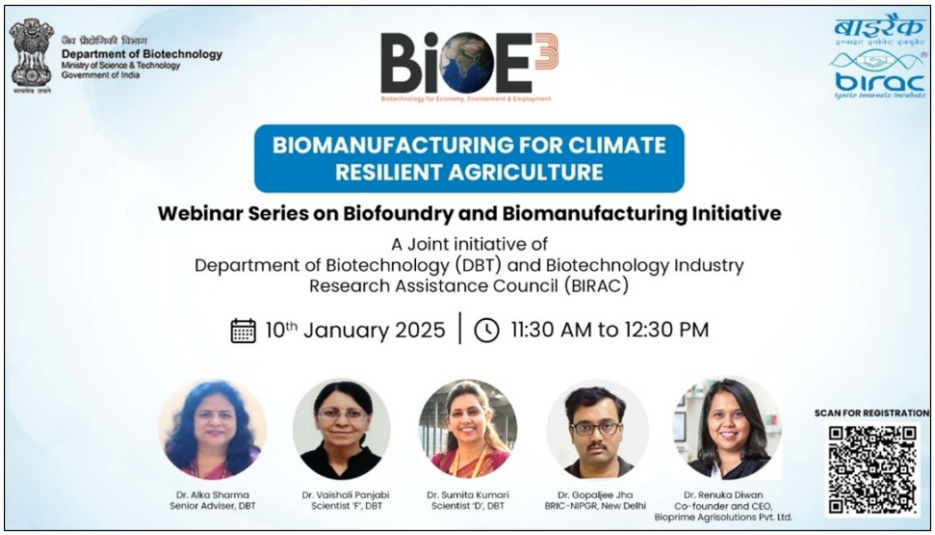
  The session continued to be a success with more than 466 participants in attendance from varied sectors. Dr. Vaishali Panjabi, Scientist `F', DBT welcomed the participants and opened the session with introductory

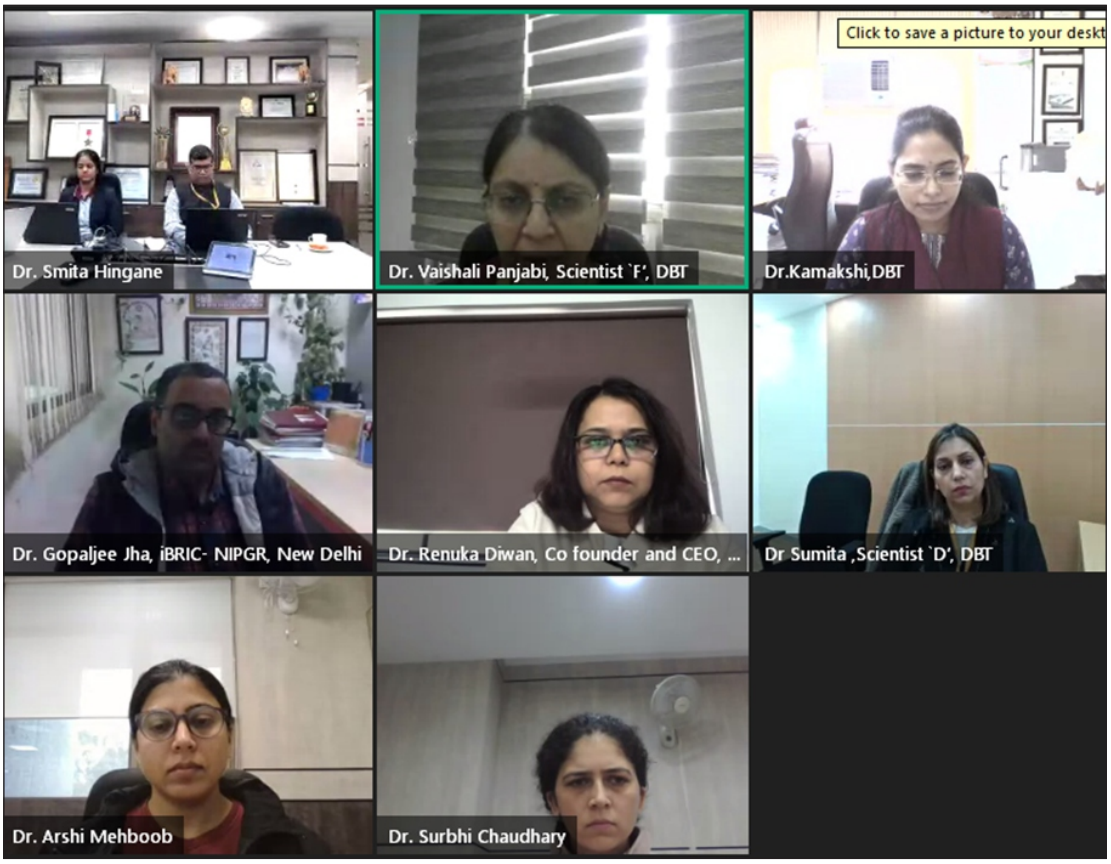
remarks. Dr. Alka Sharma, Sr advisor and Scientist H, DBT, familiarized the audience with the BioE3 policy and spoke about how the policy promotes bio-manufacturing of enzymes in India and the efforts by DBT in this direction. Dr. Amit Yadav gave an overview of the field followed by a session by Dr. Syed Shams Yazdani, ICGEB, New Delhi, who gave insights into the development of novel host platforms through genome engineering for production of enzymes. Mr. G S Krishnan, President, ABLE spoke about the manufacturing roadmap for industrial enzymes, market penetration in India and how the policy encourages indigenous manufacturing. The session was followed by a Q&A session, moderated by DBT and BIRAC officials, where attendees participated with queries related to manufacturing, implementation and opportunities for Indian manufacturers.



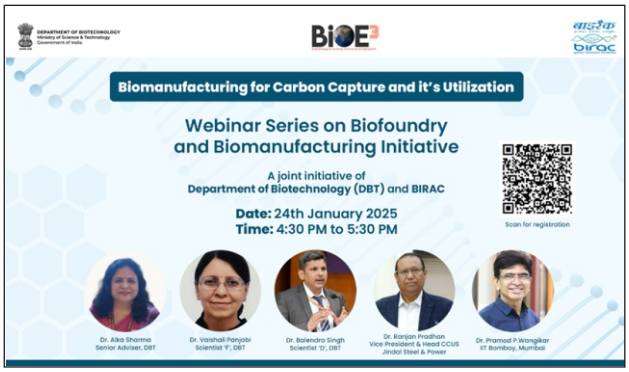
- The Fifth session of the Webinar Series on "Biomanufacturing and Biofoundry Initiative" was held on 10. 01. 2024.

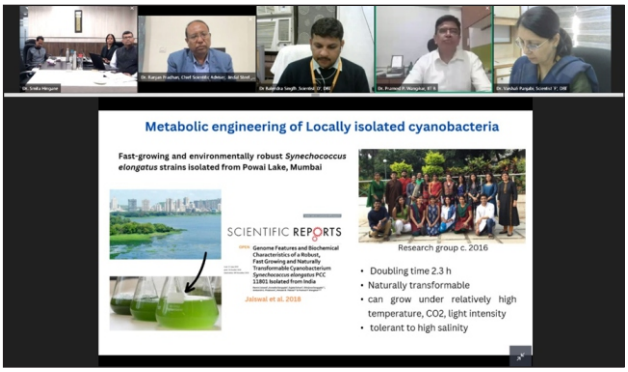
  The webinar focused on: **"Bio-manufacturing for Climate resilient agriculture"** Dr. Kamakshi Chaithri P, Scientist `D', DBT opened the session followed by an address by Dr. Vaishali Panjabi. The first talk was by Dr. Sumita, Scientist `D'(DBT). She spoke about the challenges agriculture sector is facing due to climate change and the potential solutions that Bio-manufacturing can provide. Dr. Gopaljee Jha, iBRIC- NIPGR, New Delhi brought in the academic perspective and gave the participants an overview of the scientific progress made towards achieving climate resilient crops through genome editing. Dr. Renuka Diwan, Co founder and CEO, Bioprime Agrisolutions Pvt Ltd. spoke about the global landscape of the sector and the challenges faced in bio-manufacturing with an emphasis on Industry-academia partnership. The Q&A session, moderated by DBT and BIRAC officials, saw an active participation from audience with insightful responses by the guest speakers.



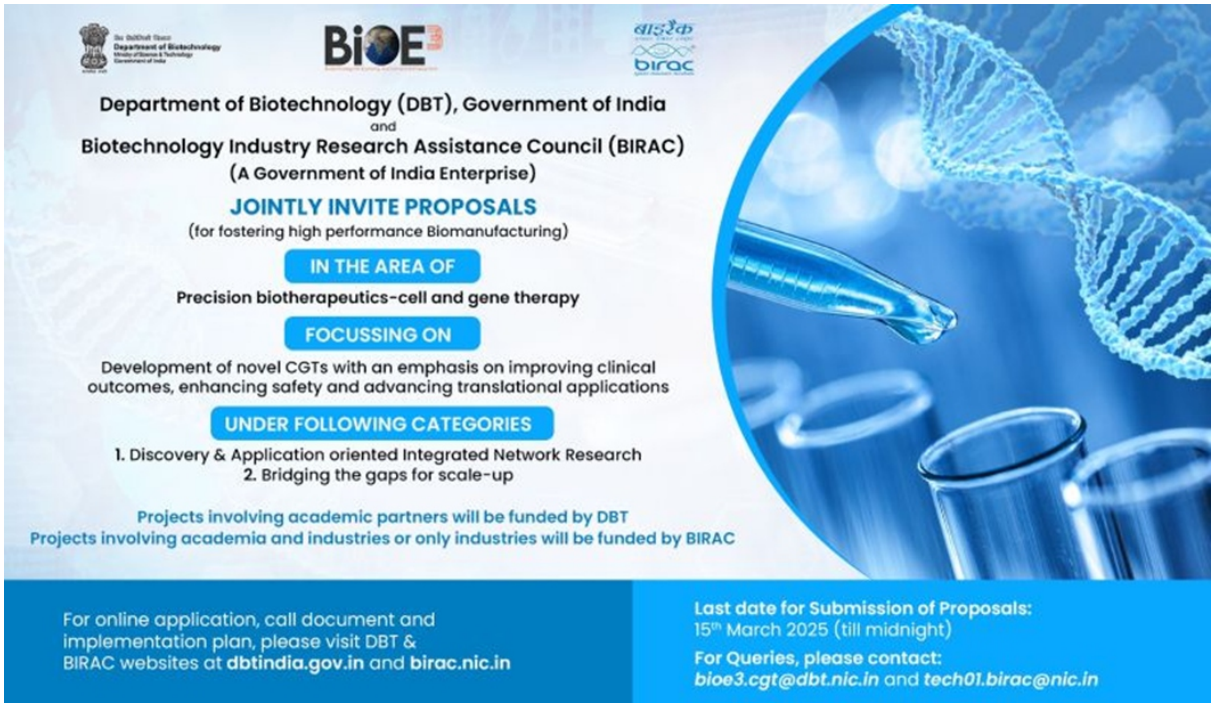


- The Sixth Webinar "Biomanufacturing and Biofoundry Initiative" series focussed on "Biomanufacturing for Carbon Capture and its Utilization". The webinar, part of the #Biofoundry & #Biomanufacturing Initiative, was jointly organized by the Department of Biotechnology, India, and BIRAC. It was scheduled for January 24, 2025. The event aimed at promoting green growth through biomanufacturing and biofoundry initiatives.

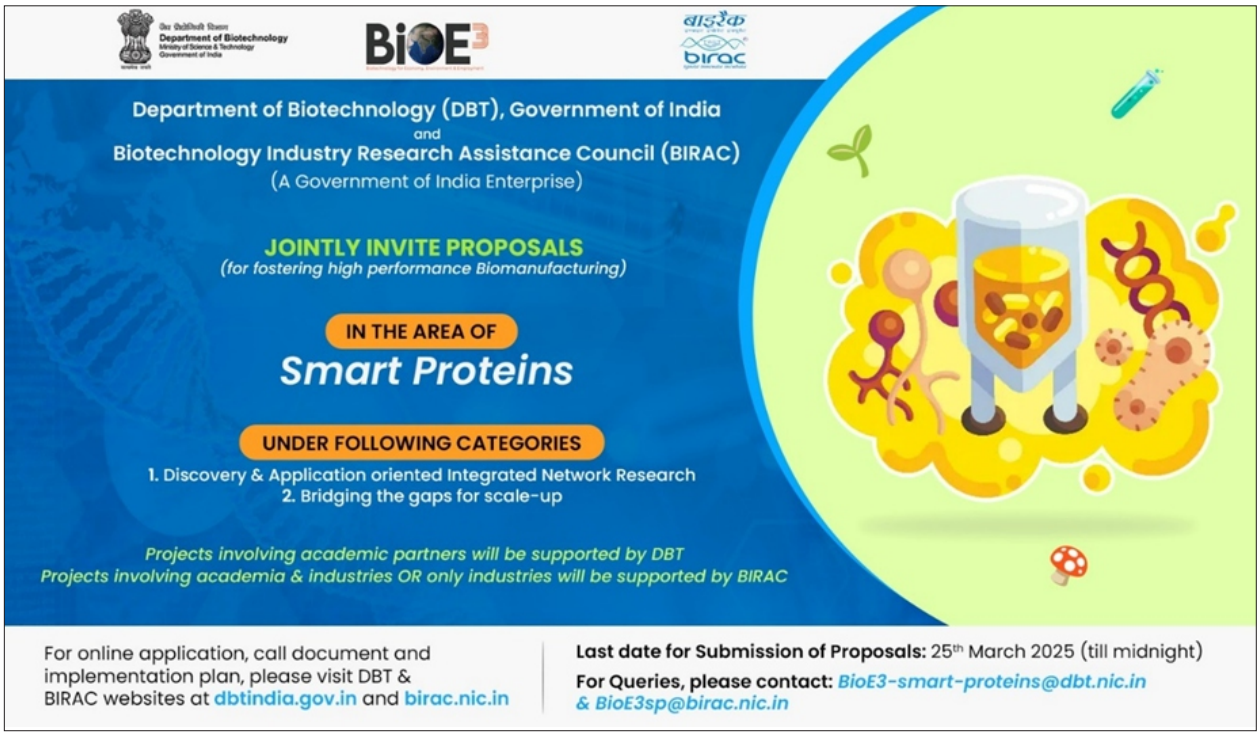




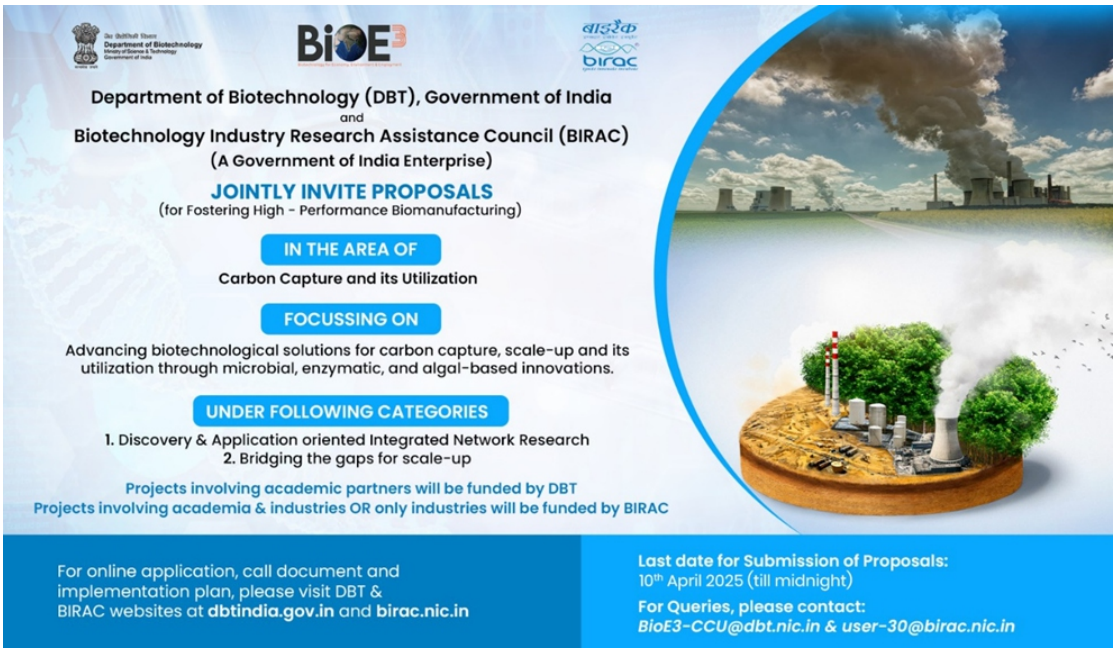
- DBT-BIRAC Joint Call for Proposals on **'Precision Biotherapeutics-Cell and Gene Therapy'** for Fostering High Performance Biomanufacturing under BioE3 Policy was launched on 14.02.2025.



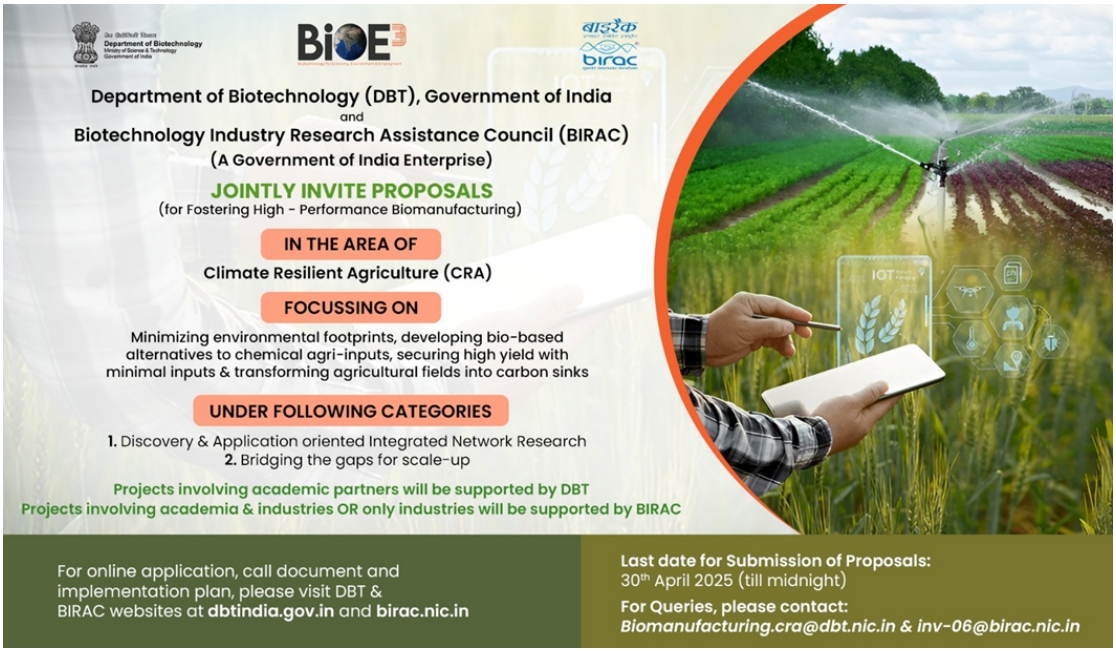
- DBT-BIRAC Joint Call for Proposals on **'Smart Proteins'** for Fostering High Performance Biomanufacturing under BioE3 Policy was launched on 21.02.2025.



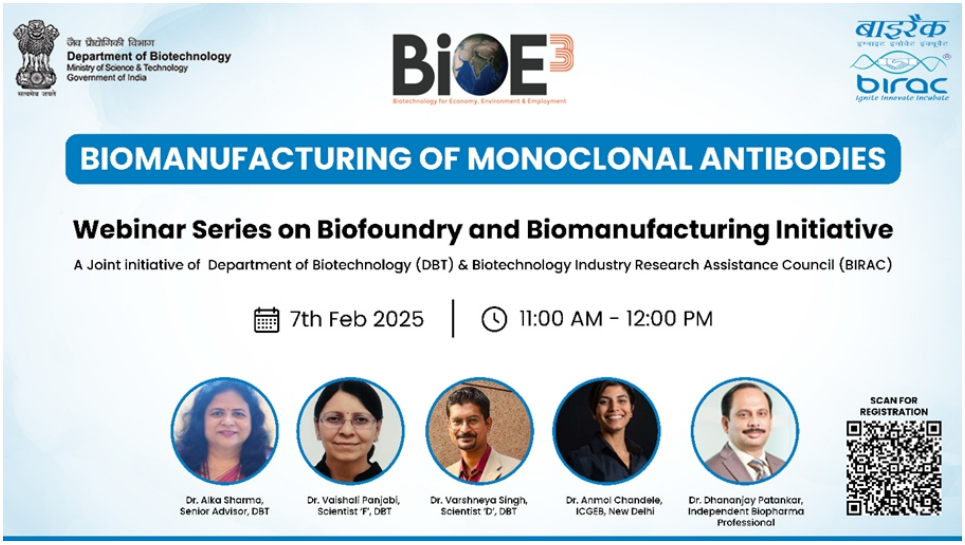
- DBT-BIRAC Joint Call for Proposals on **'Carbon Capture and its Utilization'** for Fostering High Performance Biomanufacturing under BioE3 Policy was launched on 25.02.2025.



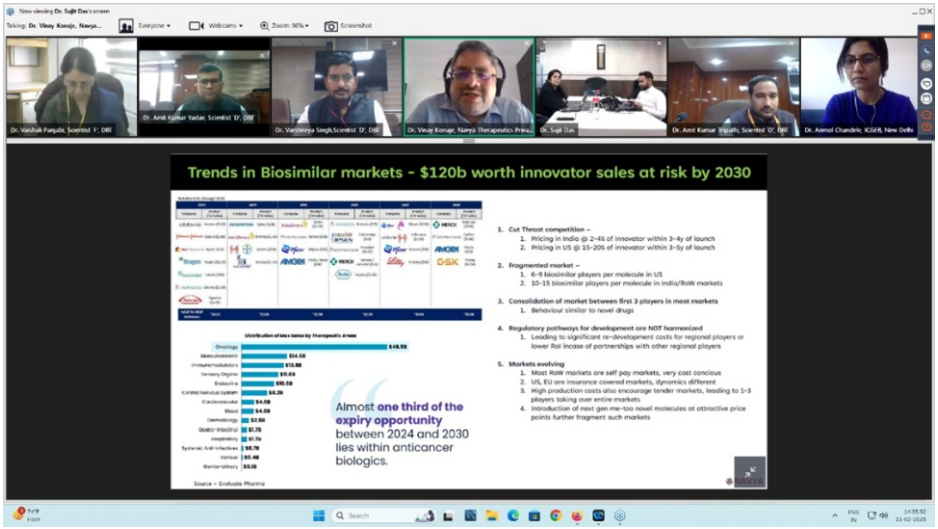
- DBT-BIRAC Joint Call for Proposals on **'Climate Resilient Agriculture'** for Fostering High Performance Biomanufacturing under BioE3 Policy was launched on 27.03.2025.



- On Feb. 11, 2025, the seventh session of the webinar series on **"Biomanufacturing and Biofoundry Initiative"** brought together experts from industry-academia to discuss **"Biomanufacturing of Monoclonal Antibodies"**.The session began with opening remarks and an overview of the BioE3 policy by Dr. Vaishali Panjabi (Sc. 'F', DBT)..



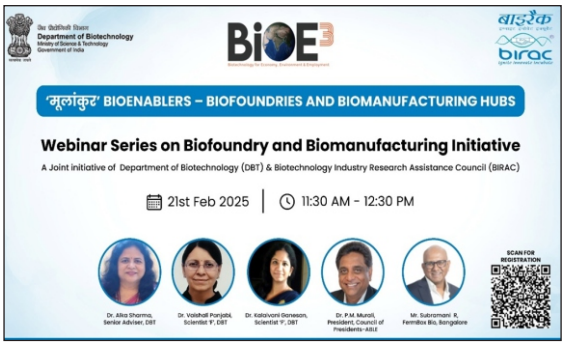
Key Highlights: Dr. Varshneya Singh (DBT), highlighted on the overview for Biomanufacturing of Monoclonal Antibodies. He discussed on the development of a bio-manufacturing ecosystem that can promote development and manufacturing of mAbs; Dr. Anmol Chandele (ICGEB, New Delhi), discussed the Academic perspective on the Biomanufacturing of human monoclonal antibodies; Dr. Vinay Konaje (Navya Therapeutics Pvt. Ltd.) discussed the trends in the biosimilar market and addressed the challenges during the setup of manufacturing units and during the operational phase for mAbs. He also highlighted regulations in the global context and catering to India's requirements for mAbs. The session concluded with a dynamic Q&A moderated by Dr. Amit Tripathi, Sc. 'D' (DBT) and Dr. Sujit Das, Officer (BIRAC), featuring active audience participation and insightful responses from the speakers. More than 350 participants (from academia and industry) attended the webinar, which was also live-streamed on YouTube.

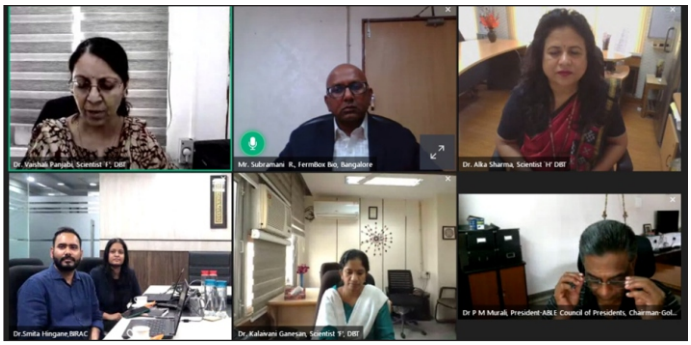


- On Feb. 21, 2025, the eighth session of the webinar series on "Biomanufacturing and Biofoundry Initiative" brought together experts from industry-academia to discuss "**मूलांकूर** BioEnablers - Biofoundries and Biomanufacturing Hubs". The session began with opening remarks and an overview of the BioE3 policy by Dr. Alka Sharma, Sc. `H' DBT and Sr. Adviser, DBT. The session was moderated by Dr. Vaishali Panjabi (Sc. 'F', DBT)

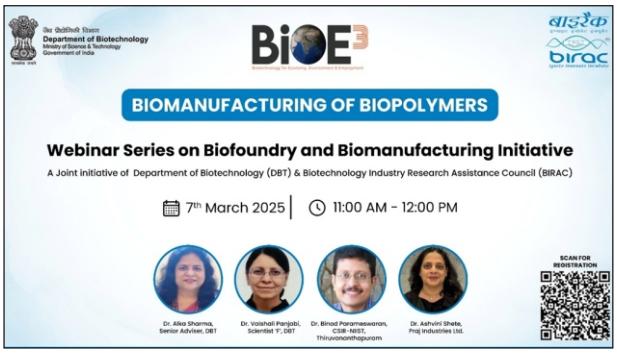
  Key Highlights: Dr. Kalaivani Ganesan, Scientist 'F', DBT, highlighted the Establishment of Bio-Enabler Hubs and the initiative plans to set up "**मूलांकूर** BioEnablers," comprising Biofoundries and Biomanufacturing Hubs, to accelerate technology development and commercialization; Dr. PM Murali, President, Council of

Presidents-ABLE discussed the investment in research and development including fundamental research. He also highlighted how to foster collaboration and knowledge sharing using academia-industry partnerships; Mr. Subramani Ramachandrappa, Founder, FermBox Bio, discussed the strategic bioenabler policies. He also stressed on the learnings from the Biomanufacturing ecosystem of other countries for India including bioconvergence initiatives emphasising the importance of cross-disciplinary research. The session concluded with a dynamic Q&A moderated by officials from DBT and BIRAC viz. Dr. Amit Yadav, Sc. 'D' (DBT), Dr. Amit Tripathi, Sc. 'D' (DBT), Dr. Sujit Das, Officer (BIRAC), and Dr. Smita Hingane, Associate Consultant (BIRAC) featured active audience participation and insightful responses from the speakers. More than 300 participants (from academia and industry) attended the webinar, which was also live-streamed on YouTube.

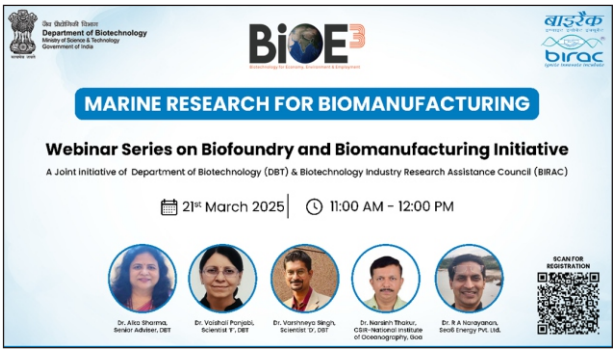


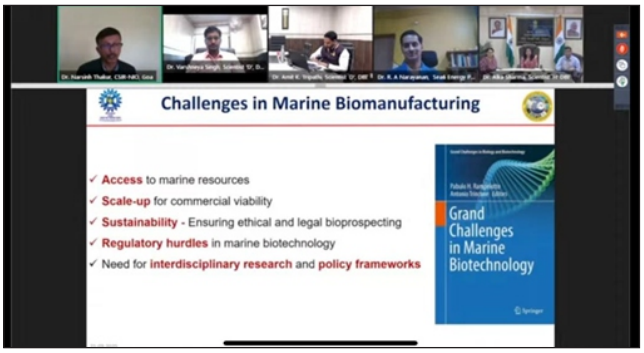


- On March 07, 2025, the ninth session of the webinar series on **"Biomanufacturing and Biofoundry Initiative"** brought together experts from industry-academia to discuss **"Biomanufacturing of Biopolymers".** The session began with opening remarks and an overview of the BioE3 policy by Dr. Vaishali Panjabi (Sc. 'F', DBT). The session was moderated by Dr. Amit Yadav, Sc. 'D' (DBT). Dr. Binod Parameswaran, Principal Scientist, (CSIR-National Institute for Interdisciplinary Science and Technology, Kerala) discussed the Biomanufacturing of Biopolymers: Academia Perspectives. He elaborated on the advances in biodegradable polymer blends and large-scale biomanufacturing that can drive a greener, bio-based economy. Dr. Ashvini Shete, Strategy & Technology Lead - Renewable Chemicals (Praj Industries, Pune) highlighted on 'Biopolymers for a Circular Economy: Endless Possibilities, Zero Waste. The session concluded with a dynamic Q&A moderated by officials from DBT and BIRAC viz. Dr. Amit Tripathi, Sc. 'D' (DBT), Dr. Sujit Das, Officer (BIRAC), and Dr. Smita Hingane, Associate Consultant (BIRAC), featured active audience participation and insightful responses from the speakers. More than 200 participants (from academia and industry) attended the webinar, which was also live-streamed on YouTube.



- On March 21, 2025, Department of Biotechnology along with Biotechnology Industry Research Assistance Council (BIRAC) hosted its tenth webinar in the Bio-foundry and Biomanufacturing Initiative series, focusing on **"Marine Research for Biomanufacturing"**- A vital step towards sustainable practices. Dr. Alka Sharma, Scientist 'H' at the Department of Biotechnology, emphasized how marine/aquatic systems are rich in biomass, feeding into several downstream industries such as food additives, bio-stimulants, biomaterials etc. She further highlighted the BioE3 Policy's vision to foster high-performance biomanufacturing by promoting sustainable green growth and addressing global challenges through affordable and accessible bio-based solutions. Dr. Varshneya Singh highlighted the surge in global seaweed cultivation and spoke about how India can tap into this vast opportunity of cultivating high-yield varieties and advanced offshore farming technologies. Dr. Narsinh Thakur stressed the importance of sustainable utilization of marine living resources for long-term ecological and economic benefits. Collaboration between academia and industry is crucial for advancing marine biomanufacturing. Dr. R. A Narayanan shared insights on exciting products from seaweeds, including nutraceuticals, bioplastics, and biofuels! However, challenges like genetic variability and species limitations need to be addressed for sustainable growth. The webinar concluded with an engaging Q&A session, where participants discussed challenges and opportunities in "Marine Research for Biomanufacturing".





Technology upgradation

The technical group along with experts takes the responsibility of continuously monitoring and mentoring the supported projects to meet their objectives. The technical group assigns nodal officers for each thematic area (to have an overall understanding of projects from that theme) and technical officers for each project (to closely monitor the progress of the project). Further, they take responsibility for achieving the goals of their respective projects. This close monitoring and mentoring have resulted in the development of several processes, technologies, commercialization of products/technologies (TRL-8 & 9), technology maturation of projects to Technology Readiness Level-7 (TRL-7) and filing of IPRs. The table below provides information on the products/technologies at validation, pre-commercialization, and commercialization stage and IP filed through BIRAC funding during FY 2024-2025.

S. No.	Category	Number
1	Products commercialized (TRL-9)	14
2	Process/technologies at Pre-commercialization stage (TRL-8)	21
3	Number of projects completed late-stage validation (TRL-7)	32
4	IP filed	52

Significant Events from Technical Department (FY 2024-25)

- A technology portal was launched on the 6th Foundation Day of BIRAC, which provides information about the technologies and products that emerged out of BIRAC funding, that are launched in the market or are ready to enter the market. There are around 300+ technologies/products on the portal for technology seekers to connect with the innovators. For the FY 2024-25, **172 connections** were provided to the technology seekers using the BIARC Technology Portal.
- **A webinar on "Enabling wider adoption of Microphysiological systems: The Role of Standards and Funding",** was organized by Humane Society International India. Dr. Dhiraj Kumar from BIRAC participated in the Panel Discussion of the webinar with Indian and global stakeholders on 24.04.2024. The theme of the session was, 'How funding can accelerate the development of microphysiological system'. The panel also included Dr. Sonja Beken (Belgian Federal Agency for Medicines and Health Products (FAMHP), Ms. Rajeshwari Adheseshan (Bill and Melinda Gates Foundation), and Mr. Vishal Gandhi (CEO, BIORx Venture Advisors), Dr. Glyn Satacey (Director-International Stem Cell Banking Initiative) and Dr. Y.K. Gupta (Chair, Technical Committee Good Food Practices; Vice Chair-National Standing Committee on Medicines and Healthcare Products).
- The Department of Biotechnology (DBT) and Biotechnology Industry Research Assistance Council (BIRAC), have organized the **Regulatory Conclave on Smart Proteins** (in hybrid mode) on April 30, 2024 in India Habitat Center (New Delhi), under the initiative 'Fostering High Performance Biomanufacturing'. The regulatory conclave was a collaborative effort of DBT and BIRAC in bringing together all the stakeholders (national and international) to deliberate on developing a robust, stringent, and efficient regulatory framework for research, manufacturing, sale, distribution, and import/export of Smart Proteins in India. The conclave witnessed participation from academia, start-ups, industries (national & international).

- Dr Dhiraj Kumar, Chief Manager (Technical), BIRAC delivered a talk on different funding opportunities at BIRAC for Life Sciences & Biotechnology on 07th May 2024 at Department of Life Sciences, Central University of South Bihar, Gaya, Bihar.

- Centre for DNA Fingerprinting and Diagnostics (CDFD) and National Institute of Animal Biotechnology (NIAB), co-hosted a one day **"Student Placement Conclave 2024"** on June 15, 2024 under the ambit of iBiotechnology Research and Innovation Council+ (iBRIC+), Department of Biotechnology, Ministry of Science and Technology (S&T), Govt. of India; as part of the Placement Cell of the iBRIC+ institutions. This conclave aimed to bring together senior doctoral students, recruiters and professionals from diverse industries, academia and policy makers to facilitate networking, discussion, and provide opportunities for placements and career advancements/guidance. The program included flash talks by students, poster sessions, invited talks from experts from academia, industry and policy makers and an extensive interactive session between the students and the invited experts. Dr. PKS Sarma (Head-Technical, BIRAC), presented a talk on, 'Role of BIRAC in empowering Indian Biotech Ecosystem' during one of the technical sessions in the conclave.
- Indian Institute of Technology (IIT) Kanpur's Startup Incubation and Innovation Centre (SIIC), in collaboration with G.B. Pant University of Agriculture and Technology (GBPUA&T), co-hosted the **"AgriTech Innovation and Startup Meet"** at GBPUA&T in Pantnagar, Uttarakhand, to ignite innovation and entrepreneurship in agriculture on June 24, 2024. The event offered a platform for startups from both universities to showcase their ventures. Startups from SIIC, IIT Kanpur, and GBPUA&T presented their innovative technologies, fostering interaction and potential collaborations among entrepreneurs and scientists. This initiative aims to strengthen the agricultural entrepreneurship ecosystem in North India. Dr. Amita Joshi (DGM-Technical, BIRAC) presented a talk on, 'Role of BIRAC in Promotion of Agritech Technologies & Startups' during one of the technical sessions in the event.

- BIRAC organized a super session on **"Next Generation Therapeutics"** on 13.09.2024 during the Global Bio India Event at Pragati Maidan, New Delhi, which showcased the underlying opportunities on how India can prepare and be ready for next-generation therapies and deliver them to patients. Opportunities lie in oligonucleotide-based therapies, hormones, bispecific antibodies, antibody-drug conjugates, cell-based therapies, etc. are going to grow as we move forward. There is rapid interest and rise in CAR-T cell therapies throughout the world. It is important to know that emerging tools i.e. AI, CRISPR-Cas, etc. can be important to treat diseases that are difficult to treat and partnerships are the key to exploring and executing this upcoming area.

- BIRAC organized a super session with Industry-Academia interaction on, **'Enhancing Food Security through Agritech Innovations-Opportunities and Challenges',** on 13.09.2024 during the Global Bio India Event at Pragati Maidan, New Delhi. The session focussed on enhancing food security in developing nations like India to delve deeper into the key technologies available along with the start-up ecosystem to ensure food security as well as to deliberate upon the opportunities and challenges (technology percolation, upgradation, acceptance, etc) in implementing the same. And also, to discuss the pertinent case studies that have built a rural-urban continuum from technology creation to adoption under the agri-food system.

- BIRAC organized a technical session with Industry-Academia interaction on, **'Evolving landscape of the food Industry: Smart proteins and Functional Foods',** on 13.09.2024 during the Global Bio India Event at Pragati Maidan, New Delhi. The session focussed on driving innovation in the food industry, focusing on developing nutritious and nutritious products aligned with the principles of sustainability and wellness. Recognizing the potential of Biomanufacturing to power green growth, Functional Foods and Smart Proteins have been considered as one of the mandates in the 'High-Performance Biomanufacturing', initiative which supports India's vision of a 'Viksit Bharat'.

- BIRAC organized a technical session with Industry-Academia interaction on, **'Non-Animal Methodologies in Drug Discovery & Biomedical Research',** on 13.09.2024 during the Global Bio India Event at Pragati Maidan, New Delhi. The session focussed on shedding light on the transformative impact on animal lives, underscoring the development of Non-Animal Methodologies (NAMS) for human disease treatment.
- BIRAC organized a technical session with Industry-Academia interaction on, **"Tapping the Blue Economy",** on 14.09.2024 during the Global Bio India Event at Pragati Maidan, New Delhi. The session focussed on UNSDG 14 which aims to "conserve and sustainably use the oceans, seas and marine resources for sustainable development" as a guiding principle for global governance and use of ocean resources. Shri Krushna Chandra Patra, Hon'ble Minister of Science and Technology Department, Government of Odisha delivered a keynote address during the session.

- To enhance the capabilities of the Indian biotech industry, hands-on training/workshops, and webinars are supported by BIRAC to bridge the gap between academic training and industry needs. Over the years, BIRAC has provided several hands-on training/workshops and webinars specifically in food processing, nutraceuticals, synthetic biology, upstream/downstream processing, medical devices, and biopharmaceuticals.

  For better outreach to the stakeholders, BIRAC launched call on 'conducting hands-on training/workshops and webinars' from the relevant organizations on 30.10.2024. The applicants were encouraged to submit technically and scientifically intense proposals in biotechnology-related areas.

- World Economic Forum in association with DBT and BIRAC conducted **a Global Workshop on Accelerating the Tech-Driven Bioeconomy** on 25.11.2024 at India Habitat Center, New Delhi. The visionaries and changemakers across the nation came together to develop the framework for a tech-driven bioeconomy. With perspectives from government, business, academia, research, and civil society, this workshop focussed on the transformative potential of biotechnology to create a sustainable and thriving future for our planet and its people.

- An event was hosted by Animal Protection organization, Humane Society International/India, in collaboration with the Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology (DBT) and the Office of the Principal Scientific Adviser to the Government of India on 12th December 2024, to discuss the **Advancement of Human-centric non-animal methodologies (NAMs) in Drug Development and Biomedical Research.** Senior stakeholders from academia, industry, government, and regulatory bodies discussed on strategies driving innovation factors in this sector and attract investments. The workshop highlighted need and trend of increasing Global Adoption of NAMs, particularly the use of Microphysiological systems (MPS), in biomedical research and drug Discovery. Dr Jitendra Kumar Managing Director Biotechnology Industry Research Assistance Council (BIRAC) participated and shared his views at a roundtable event on advancement of Human Centric, Non-Animal Methodologies in drug development and biomedical research. Dr. PKS Sarma and Dr. Dhiraj Kumar from BIRAC spoke about the organization's specialized programs and funding options that encourage and strengthen non-animal approaches in drug development and biomedical research.

- Dr. Shilpi Gupta from BIRAC gave a key note lecture on “Empowering Bioentrepreneurs: BIRAC’s Role in Fostering the Innovation Ecosystem” at “Bioprocessing India 2024” organized from 15-17 December, 2024 at IIT Madras. The talk focused on the role of BIRAC in supporting and nurturing bioentrepreneurship, BIRAC’s tailored initiatives and funding opportunities that supports and empowers the ecosystem to navigate the challenges of bringing novel biotech ideas to market. She also Chaired the session on “Translational Ventures” which had talks focusing on technology management, incubation ecosystem and commercialization aspects.

- Dr. Shilpi Gupta (BIRAC) participated in a panel discussion on **Biomanufacturing at Biosphere’25** held at IIT Delhi from 28th February - 1st March 2025. The event brought together Industry Leaders, Government representative and other stakeholders from India for insightful talks and knowledge exchange.

- Dr. Amita Joshi (BIRAC) participated in a Joint Workshop on **"Strengthening Agri-preneurship through Practical Incubation",** that was co-organized by BIRAC and the UK’s Foreign, Commonwealth, and Development Office (FCDO) from March 24th-27th, 2025. The workshop is part of the successful collaboration under the Memorandum of Understanding between BIRAC and FCDO to expand the India-UK Research and Innovation Partnership. This initiative aims to facilitate innovative development projects in and with third countries, alongside ongoing discussions with the South African Government and key bodies, including the

Department of Science, Technology & Innovation (DSTI), University of KwaZulu-Natal (UKZN), Technology Innovation Agency (TIA), and the Department of Agriculture, Rural Development, and Land Reform (DALRRD).

- **AgroSpectrum Technovate 2025** (27th March 2025, Mumbai) acted as a platform to explore the intersection of agriculture and technology. The event aims to bring together industry leaders, innovators, researchers, and policymakers to discuss and showcase the latest advancements in agritech. With a focus on sustainable practices and cutting-edge technologies, the conference was good in addressing the challenges and opportunities facing the agricultural sector in the 21st century. Dr Prachi Agarwal (BIRAC) has presented on the vision and mission along with the mandate of taking Agri innovations forward.

- Dr. Shilpi Gupta (BIRAC) participated in the Global Forum for Engineering Biology 3.0, held at the J. Craig Venter Institute in La Jolla, California, on 27-28 March 2025. The forum convened representatives from across the globe in engineering biology and bioeconomy to share insights, discuss trends, and explore opportunities for collaboration.

- **8th INTERNATIONAL CONFERENCE ON RECENT TRENDS IN BIOENGINEERING (ICRTB-2025)** was organized by MIT School of Bioengineering Sciences & Research in Pune from January 31st - February 01st, 2025. The conference brought together engineers, clinicians, industry, and academia to share research ideas in the field of Bioengineering with reference to healthcare and environment. Dr. Aparna Sharma, Chief Manager, Technical Division BIRAC, presented on the Role of BIRAC in supporting the Biotech Startup innovation ecosystem in the country through its various funding opportunities and recently launched BioE3 policy.

- The International Biomanufacturing Summit (IBS) 2025 was held at Gauhati University, Guwahati in Assam on January 10-11, 2025. The summit was a collaboration between Assam Startup and NEISED. Chief Secretary of the Govt. of Assam, Dr. Ravi Kota, IAS and Dr. Alka Sharma (Sr. Adviser, DBT, Ministry of S&T, Govt. of India) attended the inaugural session of the International Bio-manufacturing Summit 2025 at Gauhati University, Guwahati as the chief guests, marking a significant milestone in the state's push towards becoming a leader in the bio-manufacturing sector. In his address, Dr. Ravi Kota emphasized the alignment of Assam's bio-manufacturing initiatives with the vision of Prime Minister Narendra Modi for a Viksit Bharat 2047. Role of Bioincubators in Biomanufacturing in the NER was detailed by Dr. Chhaya Chauhan (Sr. Manager & In-charge Incubation, BIRAC). Overview of DBT-BIRAC Biomanufacturing Initiative was elaborated by Dr. PKS Sarma, Chief Consultant & Former Head-Technical, BIRAC. Panel Discussion on 'Exploring Biomanufacturing Potential in Northeast India' was conducted at the International Bio-manufacturing Summit-2025 on 10.01.2025 at Guwahati University, Assam. The session was moderated by Dr. Shilpi Gupta, DGM, Technical Dept., BIRAC. During the session, the Thematic Sectors of Biomanufacturing was discussed by the following speakers: Prof. Pulok K Mukherjee, PhD, FRSC, FNASc, IBSD, Imphal, Dr. Shaon Raychaudhuri, Waste to Wealth Innovative Technologies LLP, Tripura, Prof. S R Joshi, NEHU, Shillong, Dr. Ramani Thakuria, AAU-OD, PME Cell in charge, Assam, Prof. Debasish Das, IIT-Guwahati. The outcome of the session, the key deliverables of biomanufacturing in the NER, along with the vote of thanks, was delivered by Dr. Sujit Das (Officer, Technical Division BIRAC).

- Dr. Prachi Agarwal (BIRAC) participated in an Industry-Academia Meet 2025 organized by Swami Vivekananda University from 16-17th Jan., 2025. It was a platform designed to foster dialogue and collaboration between academia and industry, focusing on the transformative potential of biotechnology in shaping a sustainable and innovative future. She further provided an insight into what BIRAC is doing to foster a healthy relationship between Academia and Industry. The University based on this is keen to collaborate to set up an incubator, and a BioEdge centre. Swami Vivekananda University is keen to collaborate with BIRAC to successfully implement its various initiatives in the biotechnology sector.

- **The International Conference on Blue Economy (23rd-24th Jan 2025)** was organized by BCKIC Foundation in association with BRIC ILS, KIIT University & KIIT-TBI and supported by Ministry of Environment, Forests & Climate Change, Government of India , Department of Biotechnology, Biotechnology Industry Research Assistance Council (BIRAC), Department of Science and Technology, Ministry of Ports , Shipping and Waterways (India), Fisheries & Animal Resource Development Dept. Govt. of Odisha. The conference served as an enabling platform for innovations and technology in the marine sector, inviting professionals from diverse fields to explore the vast potential of marine ecosystems in various applications. Smt. Pravati Parida, Hon'ble Deputy Chief Minister of Odisha, inaugurated the event and discussed empowering sustainable growth through the marine ecosystem by fostering collaboration, innovation, and global partnerships to responsibly utilize aquatic resources. Dr. Rajesh Gokhale, Secretary-DBT & Chairman-BIRAC, discussed the newly-introduced Bio-E3 policy and emphasized its potential to revolutionize coastal economies, particularly in states like Odisha, known for their vast coastal resources. Dr. Dhiraj Kumar (BIRAC) participated in a panel discussion where he elaborated on BIRAC's funding mechanism and its different schemes for research & innovation with a focused work plan on the aquaculture sector ahead. Dr. Sujit Das (BIRAC) presented on BioE3 policy (with an emphasis on marine biotechnology) & the role of BIRAC in the marine sector in an institution-incubator network roundtable meeting. BIRAC has also supported the Blue Economy Mission 50 Accelerator program as a part of the event.

- Dr. Shilpi Gupta, Deputy General Manager, Technical (BIRAC) delivered a Keynote Lecture at the **First International Conference on Biological Sciences for a Sustainable Future: Research, Innovations, and Solutions (BSSF: RIS - 2025)** held at Indrasheel University Mehsana, Ahmedabad from 23-25th January 2025. She was also a panelist in the panel discussion on "How are research, startups and innovations driving the next wave of technological development?". The event brought together stakeholders from India and across the globe to share insights, present ground-breaking work, and engage in meaningful discussions.

- The BioNEST Agri Innovation Centre hosted an online webinar on **"Agri-tech Connect: Nationwide Outreach of Biological Material Repository and Knowledge Centre for Technology Curation and Transfer between Academia, Startups, and Entrepreneurs"** on January 28, 2025, as part of an outreach program for the Knowledge Centre (KC) and Biological Material Repository (BMR). The program's goal was to raise national awareness of the KC & BMR of the Agri Innovation Centre, UASB, among State Agriculture Universities, BioNEST incubators, and ICAR institutes. Students, academicians, entrepreneurs, and start-ups are a part of the target audience.

Dr Amita Joshi (Head-in charge & Deputy General Manager, Technical, BIRAC) gave a talk on crucial role of BIRAC in fostering innovation in the Agritech sector by supporting research, development, and commercialization of agricultural biotechnology through its funding schemes. She highlighted the role of the organization in providing funding and grants, incubation and capacity building, collaboration, networking, and technology and product development. She also highlighted some of the aspects of the 'BioE3 (Biotechnology for Economy, Environment and Employment) Policy for Fostering High-Performance Biomanufacturing'. Finally, she concluded that BIRAC acts as a catalyst for agricultural innovation by providing funding, support, and an enabling ecosystem for the development of biotechnology and agritech solutions in India.

- Union Minister Dr. Jitendra Singh called on States to establish **BioE3 cells as part of India's Biotechnology revolution and realize Bio-Vision in Viksit Bharat by 2047.** Dr. Rajesh Gokhale. Secretary Department of Biotechnology addressed the conclave on opportunities in Biotech Sector for Viksit Bharat. Dr. Alka Sharma, Senior Advisor DBT summarized the deliberations which took place throughout the day with states. Kiran Mazumdar Shaw, founder, Biocon joined the conclave through virtual mode. Mr. R. Subramani, Founder, Fermbox Bio, Bangalore also marked his presence along with senior representatives from almost all states. Dr. Jitendra Kumar, MD, BIRAC shared BIRAC's effort towards building strong industry linkages, paving the way for the establishment of BioE3 cells.

  The conclave provided a valuable platform for senior representatives from various states to deliberate on biotechnology initiatives, ensuring these efforts are aligned with each state's unique strengths and resources while staying true to the overarching goals of the BioE3 Policy.

Corporate & Legal Affairs Department

a) Other Enabling Service Departments.

The Company Secretary heads the Corporate Affairs and Legal Department. The Corporate Affairs Division is entrusted with the comprehensive management of all corporate governance and compliance functions of the Company. It is responsible for handling all Board-related matters, including the preparation and circulation of agenda papers, convening of Board and Committee meetings, recording and maintaining minutes, and ensuring timely follow-up on decisions taken by the Board. The Division also manages the conduct of General Meetings such as Annual General Meetings and Extraordinary General Meetings, ensuring adherence to all statutory requirements under the Companies Act and related regulations annual filling and statutory filling. In addition, it coordinates the implementation of the Department of Public Enterprises (DPE) guidelines and ensures timely compliance with various CPSE directives, circulars, and returns. Matters relating to the Right to Information (RTI) Act are also administered by this Division, including the receipt, processing, and timely disposal of applications and appeals in accordance with prescribed procedures. Further, the Division oversees other statutory compliances applicable to the Company, monitors updates in laws and regulations to ensure continued adherence, and acts as the nodal point for all coordination with the Administrative Ministry. This includes furnishing reports, replies to queries, and facilitating smooth communication on governance, and operational issues. Through these functions, the Corporate Affairs Division plays a pivotal role in upholding transparency, accountability, and effective corporate governance within the organization.

The Legal Division is a part of the Corporate & Legal Affairs Department of BIRAC. It is responsible wide array of advisory and support services, including preparing, reviewing, and modifying contractual instruments to support various BIRAC activities including organisational policy making, intellectual property & technology management, entrepreneurship development, strategic partnership, investment initiatives, international co-funding, and procurement of goods & services and ensuring that they are in compliance with all the statutory and legal requirements.

The services of the Legal Department also include facilitating the formulation and execution of various agreements, contracts, and MOUs for industry research, funding, licensing, technology transfer, technology acquisition, co-funding, and collaboration on behalf of BIRAC and its fund recipients or engaged agencies. The legal department provides the legal protection and risk management advice to management, managing the legal due diligence process pertaining to the various funding schemes, advising the management on the modalities of national and international co-funding initiatives facilitating technology acquisition, implementation of mission programmes schemes, such as BioRide scheme and Biomanufacturing, National Biopharma Mission (NBM), Bill & Mellinda Gates Foundation (BMGF), and Make In India (MII). Legal department reviews and advises management on legal implications of government Orders/ OM's, internal policies and procedures and also prompt processing of Legal Notices issued or received by BIRAC with respect to any violations, etc. The legal department of BIRAC ensures the proper and effective handling of the litigation matters.

b) Human Resources & Administration

In an organization, Human Resources and Administration is the Department in charge of all employees and employee-related operations. The HR & Administration Division in BIRAC is a key function focused on maximising the potential of the Human resources of the organisation to attain organizational goals in an effective and efficient manner. The Department also manages the activities related to Information & Technology area.

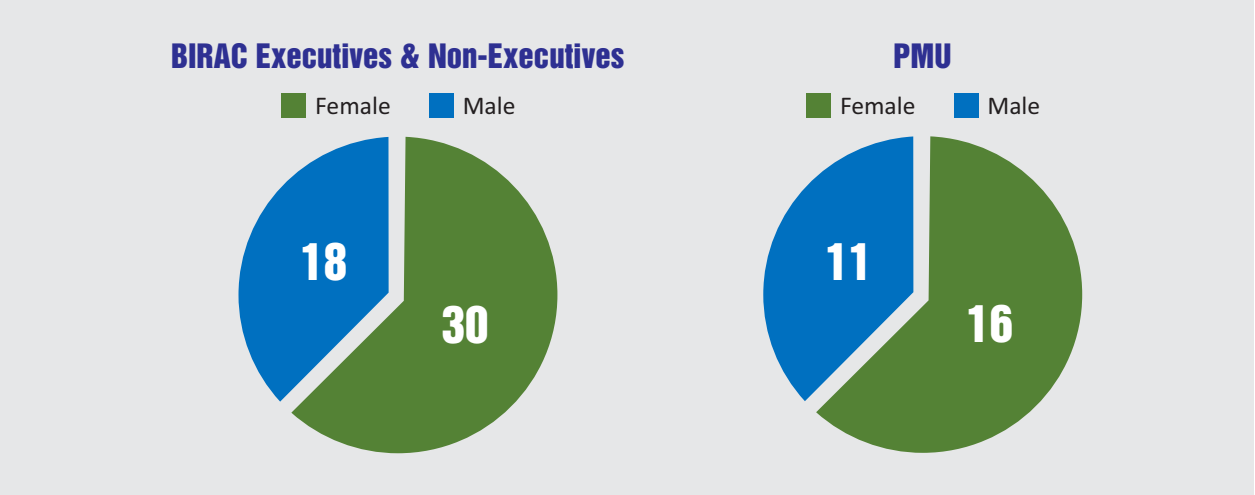
The HR Strategy of BIRAC is aligned to the concept of transforming culture and envisages powerful interventions in the areas of workforce planning, HR analytics, Employee Engagement, Capacity Building and Skill Development. In line of that, the primary responsibility of HR & Administration Dept. is to manage, assist & deal with all employee related matters including such functions beginning from manpower planning to budgeting, policy administration, recruitment, benefits administration, contract management, new

employee orientation, training and development, personnel records retention, salary administration, tenders & procurements, compliances, wage management, inventory, manpower planning, logistics etc.

The dedicated and resilient workforce of BIRAC continued to perform their duties despite frequent challenges and cordial relations are maintained across all verticals. The Company provides comprehensive welfare facilities to its employees to take care of their health, efficiency, economic betterment, etc., and to enable them to give their best at the workplace. The Company supports participative culture in the management of the enterprise and has adopted a consultative approach with collectives, establishing a harmonious relationship for industrial peace, thereby leading to higher productivity.

The total strength of employees as on March 31, 2025 was 75 [Seventy-Five] including BIRAC Executives & Non-Executives and Project Management Units (PMUs) of which 46 [Forty-Six] were women employees.

Employee Strength (in nos.)



The Department has put concerted efforts in talent management and succession planning practices, strong performance management and training initiatives to ensure that it consistently develops inspiring, strong and credible leadership. HR Department reviews the performance of employees in a systematic way and takes it as a developmental tool for all round development of the employee and the organization.

Learning and development programs are designed for the employees to upgrade their skills both in their domain areas and soft skills. These programs have played a key role to upgrade the workforce to adopt new technologies, systems and practices and make the workforce ready to face the future challenges. BIRAC is focussed on enhancing skill development of its employees by organizing in-house trainings and identifying domain specific training in reputed training institutes. In 2024-25, more than 150 man-days training has been imparted to BIRAC Employees including domain specific trainings and soft skill trainings.

Human Resource & Administration Department in BIRAC strives on implementing employee engagement activities through which employees feels a strong emotional and personal connection to their workplace which in turn reduces staff turnover, improve productivity and efficiency. National events such as Swachhata Pakhwada, Hindi Pakhwada, Yoga Day, Constitution Day, Vigilance Awareness Day etc. are also observed in BIRAC with fervour and zeal.

1. Special Campaign 4.0 and Global Campaign #एक पेड़ माँ के नाम #Plant4mother:

In line with the Government of India's Special Campaign 4.0, launched to institutionalize Swachhata and minimizing pendency in Government offices, BIRAC undertook several focused initiatives from 2nd October to 31st October 2024. These efforts were aimed at ensuring a clean, organized and green work environment:

- Store areas were identified, cleaned, and reorganized. All goods were systematically segregated, and unused or dusty items were cleared. Physical files were arranged and secured in Fire-Resistant Filing Cabinets.

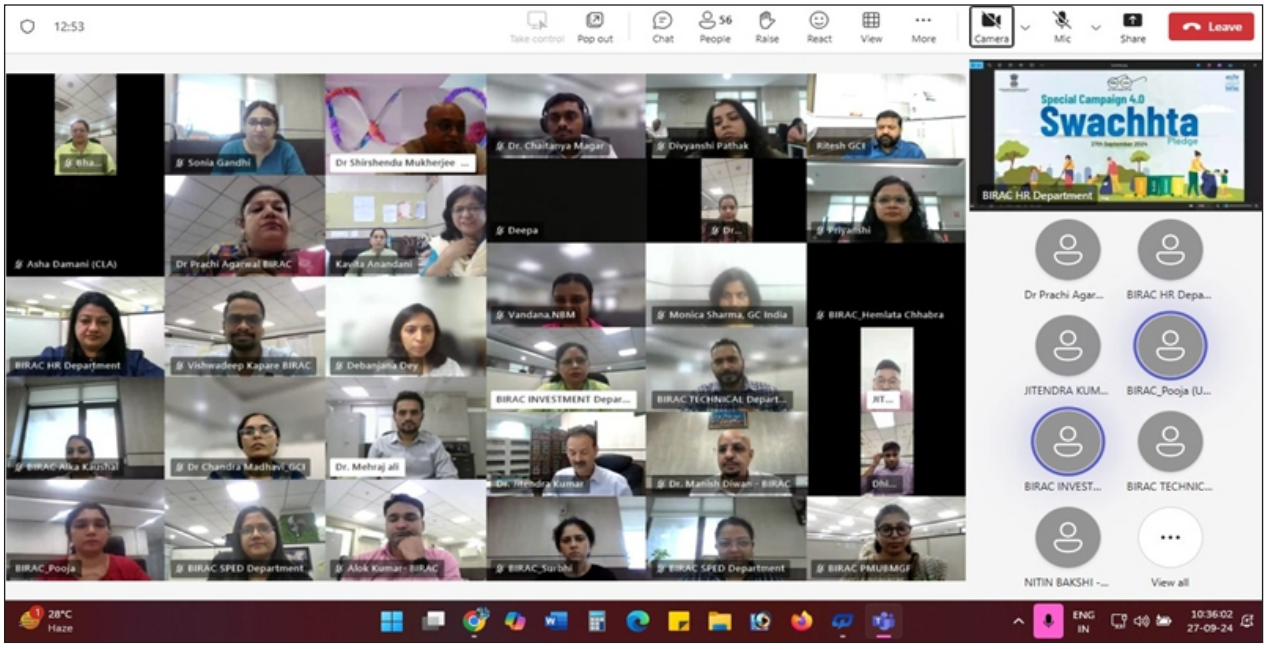
BEFORE	AFTER
	
	
	

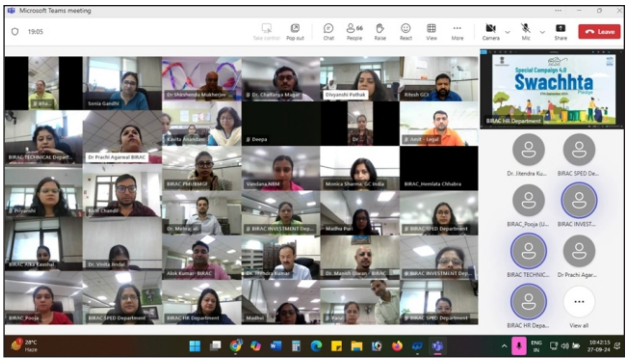
- On 20th September 2024, employees undertook a desk-cleaning activity. Simultaneously, a digital clean-up process was initiated to remove old, duplicate, and unused files from shared drives on servers.

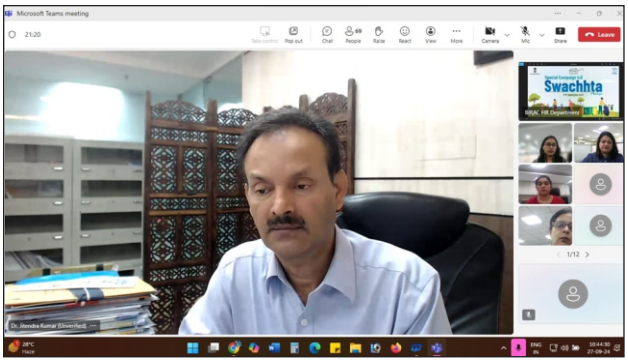

- Common washrooms used by the building workforce were deep cleaned. Hand towel rolls and toilet paper dispensers were installed to enhance hygiene.
- To improve the aesthetic appeal and sustainability of the office, indoor planters were placed across common areas. These not only enhanced the ambiance but also helped in maintaining a green cover, especially valuable on the top floor with direct sun exposure.

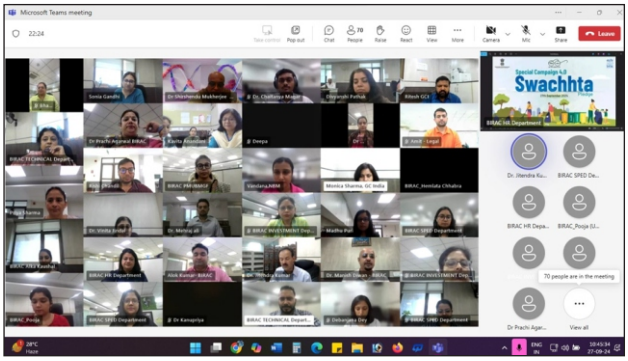


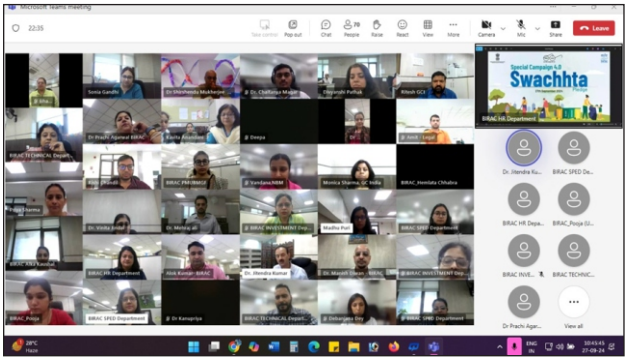

- On 27th September 2024, Dr. Jitendra Kumar, Managing Director, BIRAC, administered the Swachhata Pledge. BIRAC officials committed to devoting 100 hours per year towards cleanliness as a voluntary effort.











- On 30th September 2024, BIRAC organized a plantation drive in support of the global campaign **#एक पेड़ माँ के नाम** #Plant4mother, promoting environmental awareness and green initiatives.

  These initiatives reflect BIRAC's continued commitment to a clean, efficient, and eco-conscious work culture in line with national priorities.





2. International Yoga Day

International Yoga Day is observed every year on June 21 to raise awareness about the ancient practice of yoga and to celebrate its physical, mental, and spiritual benefits. Yoga plays a vital role in relaxing the mind and body, strengthening the immune system, and enhancing overall well-being. In the workplace, it not only contributes to better health but also fosters greater motivation, focus, and satisfaction among employees.

The Biotechnology Industry Research Assistance Council (BIRAC) marked the 10th edition of International Day of Yoga on 21st June 2024, embracing the year's theme: "Yoga for Self and Society."

The Yoga Day programme was organized at Lodhi Garden, New Delhi, where officials from BIRAC and the Department of Biotechnology (DBT) assembled early in the morning to participate in a guided yoga session. The event was graced by the presence of Secretary DBT & Chairman BIRAC and the Managing Director BIRAC, who joined the participants in performing various yogasanas with great enthusiasm.

A professional yoga instructor led the session, guiding participants through a series of yoga postures and breathing techniques. The instructor also shared insights on the significance and benefits of yoga, both as an ancient tradition and a modern-day wellness practice.

The session enabled participants to reconnect with themselves, improve mental clarity, and enhance their capacity to stay focused and manage stress effectively contributing to improved productivity, well-being, and morale in both personal and professional spheres.







3. Hindi Pakhwada, Workshops and other programs

At the beginning of the year 2025, BIRAC has witnessed a renewed interest in promoting the use of Hindi as the official language. Apart from promoting the use of the official language in BIRAC, the Official Language Implementation Committee was actively organizing various programs and activities. These initiatives aim to foster a greater appreciation and inclination towards the use of Hindi among BIRAC's officials.

During the month of August, BIRAC actively participated in a Rajbhasha workshop organized by NARAKAS and the Rajbhasha Department.

Apart from the Hindi workshops and NARAKAS meetings, Hindi Pakhwada was celebrated in the month of September. The celebration commenced with Hindi Diwas on 14th September 2025 and concluded on 29th September 2025. The following competitions were conducted as part of the Hindi Fortnight celebrations:

1. Hindi Essay Competition
2. Online Slogan Writing Competition
3. Online Poem Writing Competition
4. Maximum number of e-mail communications and comments written in Hindi by each department
5. Quarterly Meeting of Official Language Implementation Committee-BIRAC

All officials of BIRAC participated in the Hindi Pakhwada celebrations with great enthusiasm.

On the occasion of World Hindi Day in January, BIRAC officials shared inspiring thoughts and reflections on the importance and utility of Hindi. The initiative witnessed wholehearted participation, reinforcing BIRAC's dedication to preserving and promoting the language.

The monthly Book Club programme continued to be a unique platform for exploring Hindi literature. Every month, a selected literary piece was read and reviewed by an employee. To recognize active and outstanding participation, Dr. Jitendra Kumar, Managing Director, BIRAC, presented awards to the best performers.

In February, BIRAC participated in the Rajbhasha Samman Award Distribution Ceremony, organized by the Official Language Department, Government of India. The presence of BIRAC officials at the event reaffirmed

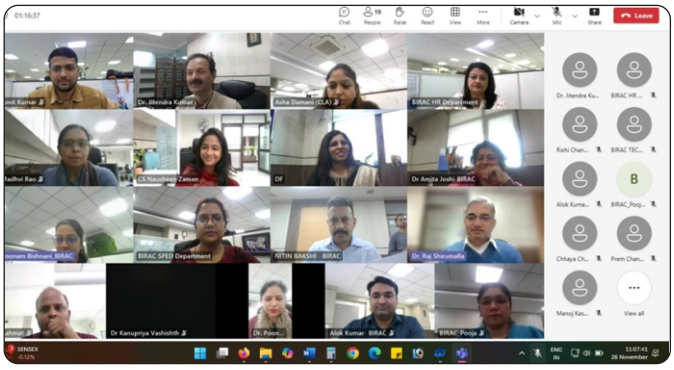
the organization's proactive and sustained commitment to the promotion of Hindi as the official language.

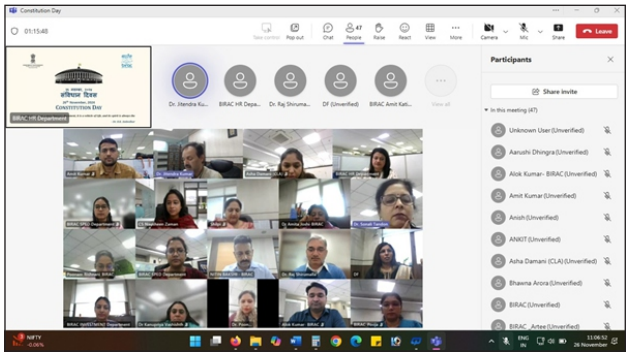
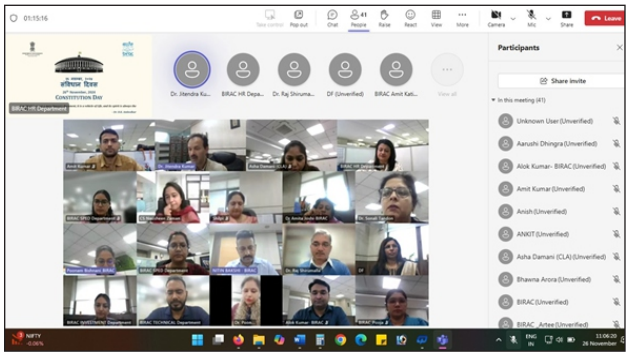
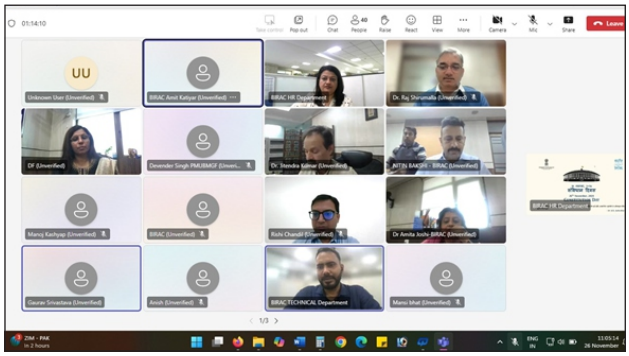
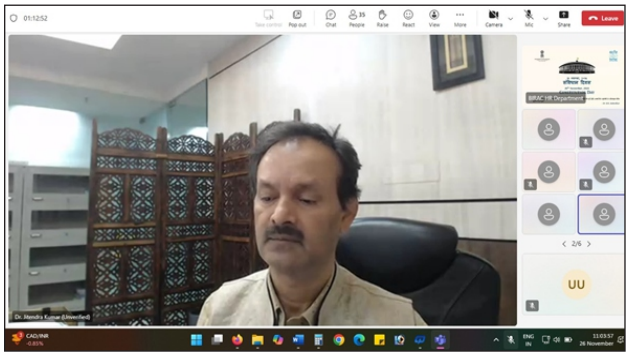
A special workshop on '' **हिन्दी भाषा के व्यावहारिक प्रयोग के स्वरूप**" was organized in the last week of March, drawing enthusiastic participation from BIRAC employees. The session featured an insightful keynote address by Professor Usha Sharma, a distinguished figure in Hindi literature. On this occasion, Dr. Jitendra Kumar, Managing Director, BIRAC, felicitated Professor Sharma. The workshop served as a valuable platform for knowledge-sharing and significantly enhanced participants' understanding of the practical and effective use of Hindi in official communication.

4. Constitution Day

Constitution Day, also known as Samvidhan Divas, is celebrated every year on 26th November to commemorate the adoption of the Constitution of India. This day serves as a reminder of the foundational principles enshrined in the Constitution and reinforces our collective responsibility to uphold its values.

As part of the celebrations, officials of BIRAC solemnly read the Preamble to the Constitution of India on 26th November 2024 reaffirming their commitment to the core values of justice, liberty, equality and fraternity.

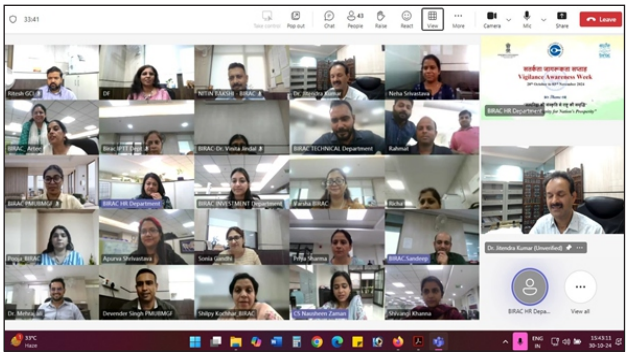


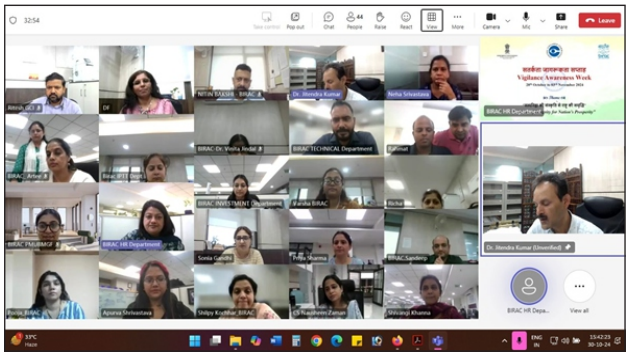





5. Vigilance Awareness

Vigilance Awareness Week 2024 was observed from 28th October to 3rd November 2024 with the theme **"Culture of Integrity for Nation's Prosperity"**. As part of the observance, the Integrity Pledge was administered by the Managing Director-BIRAC, on 30th October 2024.

On this occasion, officials of BIRAC reaffirmed their commitment to eradicate corruption and uphold the highest standards of integrity, transparency, and good governance in all aspects of the organization's operations.





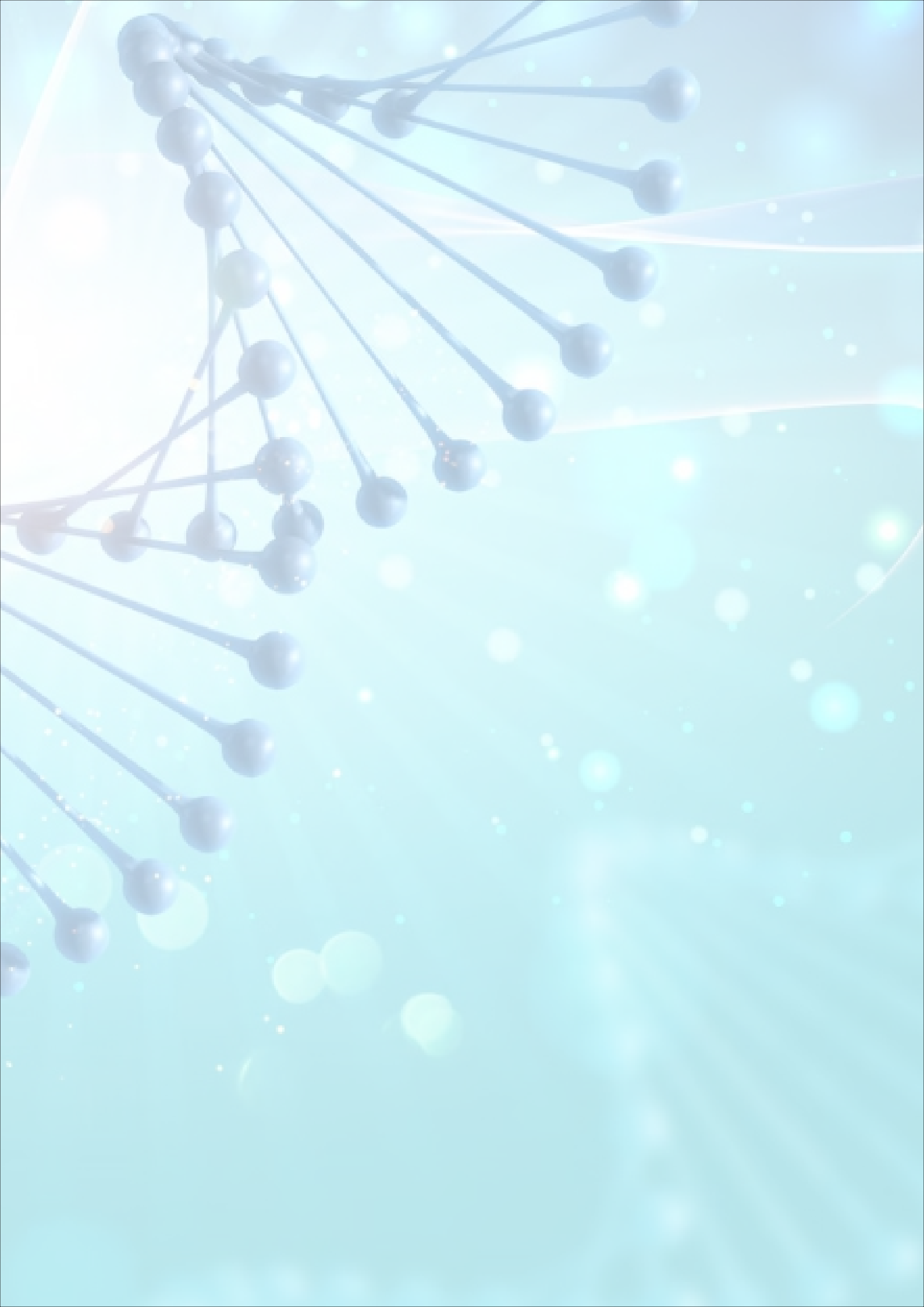
6. Workshop on Prevention of Sexual Harassment at the workplace [POSH]

In accordance with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, BIRAC regularly conducts workshops and awareness programmes to sensitise its officials and promote a safe working environment.

An in-house workshop on the Prevention of Sexual Harassment at Workplace was organised on 07th March 2025. The session aimed to equip officials with the necessary awareness and skills to identify, prevent, and address incidents of sexual harassment in the workplace.

The workshop fostered an understanding of the legal framework under the Act and highlighted the importance of maintaining a respectful, inclusive, and stress-free work culture conducive to enhanced performance and well-being.

With regular communication and sustained efforts HR and Admin Department is ensuring that employees are aligned on achieving BIRAC's strategic mission, while keeping employees engaged and motivated. It strongly believes in fostering a culture of trust and mutual respect in all its employees and seeks to ensure that BIRAC's core values and principles are understood by all.



REPORT
ON CORPORATE GOVERNANCE

REPORT ON CORPORATE GOVERNANCE

1. BIRAC PHILOSOPHY ON GUIDELINES ON CORPORATE GOVERNANCE

Corporate Governance refers to a set of systems, principles and processes by which a Company is governed. They provide the guidelines as to how a Company can be directed or be controlled such that it can fulfill its goals and objectives in a manner that adds to the value of the company and is also beneficial for all the stakeholders in the long term. Stakeholders in this case would include everyone ranging from the Board of Directors, Management, Shareholders to Customers, Employees and Society. BIRAC is committed to sound principles of Corporate Governance with respect to all its policies, practices and procedures. The Company's policies clearly reflect its values of transparency, professionalism and accountability. BIRAC consistently strives to uphold these values so as to generate long term economic value to all the stakeholders.

2. BOARD OF DIRECTORS

The Board of Directors currently consists of 5 (Five) Directors viz. an Executive Chairman, an Executive Managing Director, One Functional Director, a Government Nominee Director and a Non-Official Independent Director.

Four Board meetings of the Company were held on the following dates: 28th June, 2024, 27th September, 2024, 16th December, 2024 & 27th March, 2025.

The details of the Directors and the Board meetings attended are as follows till 31st March, 2025:

Name of the Director	Category	Directorships in other Companies	Member/Chairman of Committees in other companies		Board Meetings Attended (Nos.)	Attendance at last AGM
			Member	Chairman		
Dr. Rajesh S. Gokhale	Chairman (Executive)	Nil	Nil	Nil	4	Yes
Dr. Jitendra Kumar	Managing Director (Executive)	1	Nil	Nil	4	Yes
CA. Nidhi Shrivastava	Director (Finance)	Nil	Nil	Nil	3	No
*Shri Vishvajit Sahay	Government Nominee Director	1	Nil	Nil	3	No
**Ms. Ekta Vishnoi	Government Nominee Director	1	Nil	Nil	1	No
Dr. Penna Krishna Prasanthi	Non-Official Independent Director	Nil	Nil	Nil	2	No

***Shri Vishvajit Sahay held the position of Government Nominee Director till 20th January, 2025.**

****Ms. Ekta Vishnoi, was appointed as Government Nominee Director w.e.f. 12th March, 2025.**

None of the Directors are members of more than 10 Committees and/or act as Chairman of more than 5 Committees as prescribed under the Guidelines on Corporate Governance for Central Public Sector Enterprises (CPSEs) issued by the Department of Public Enterprises (DPE).

There are no pecuniary relationships or transactions of the non-executive directors of the Company.

3. AUDIT COMMITTEE

During the year 2024-25, BIRAC did not have an Audit Committee. As mandated by DPE Corporate Governance Guidelines, the Audit Committee should have minimum three Directors with two thirds of them being Independent Directors and Chairman being an Independent Director. The term of four Independent Directors ended on 15th March, 2020 and only one Non-official Independent Director was appointed by Board on 27th March, 2023. Three of the four sanctioned positions still remain vacant from 15th March, 2020. BIRAC is not in a position to form an Audit Committee as per DPE Guidelines. In absence of adequate number of Non official Directors the role of Audit Committee is being discharged by the Internal Audit Committee to recommend financial matters and approval is by Board of Directors.

4. REMUNERATION COMMITTEE

During the year 2024-25, BIRAC did not have a Remuneration Committee. As mandated by DPE Corporate Governance Guidelines the Remuneration Committee should have minimum three Directors all of them should be part-time Directors (Nominee Directors or Independent Directors). One Non-Official Director has been appointed in March 2023. Three positions still vacant from 15th March, 2020. BIRAC is not in a position to form a Remuneration Committee as per DPE Guidelines. However, the Board has approved the formation of an Internal Remuneration Committee with the only appointed Non official Director to Chair the Committee.

5. BOARD PROCEDURE

The meetings of the Board are generally held at the Company's registered office at New Delhi. The Company complies with the statutory requirements for holding Board Meetings. Apart from the statutory matters requiring Board's approval, all major decisions including key financial ratios, actual operations, feedback reports and minutes of meetings are regularly placed before the Board.

6. SHAREHOLDER INFORMATION AS ON 31st MARCH 2025

Category Code	Category of shareholders	Total number of shares	Total value of shares (in ₹)	Total shareholding as a percentage of total number of shares
Shareholding of Promoter and promoter category	President of India	9000	90,00,000	90
	Dr. Rajesh S. Gokhale (held on behalf of the President of India)	900	9,00,000	9
	Dr. Jitendra Kumar (held on behalf of the President of India)	100	1,00,000	1
	GRAND TOTAL	**10000**	**1,00,00,000**	**100**

7. GENERAL BODY MEETINGS

The details of general body meetings are as follows:

Period ended on	Venue	Date	Time
31.03.2023	Department of Biotechnology, 2, CGO Complex, 7th Floor, Lodhi Road, New Delhi-110003	27.09.2023	03.20 p.m.
31.03.2024	5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi 110020	27.09.2024	04.30 p.m.
31.03.2025	5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi 110020	24.09.2025	01.00 p.m.

8. TRAINING OF BOARD MEMBERS

BIRAC gives opportunity to all its Board members (Functional, Government Nominee and Independent) in line with requirement of DPE Guidelines and mandate of company to attend Director's training programmes organized by DPE and other reputed institutions. The training programmes aim at providing current developments in the field of Companies Act, Corporate Governance and model code of Business ethics as applicable to the Company and a platform to share the knowledge, skills and experience gained to and by the Directors. The Director's Training Policy has approved by the Board Directors is placed at BIRAC website at url https://www.birac.nic.in/desc_new.php?id=294.

9. DISCLOSURES (AS PER DPE GUIDELINES)

a) The Company has not entered into any material, financial or commercial transaction with the Directors or the management or their relatives in which they are either directly or through their relatives interested as directors and/or partners.

b) The Company has complied with applicable rules and regulations and no penalties or strictures were imposed on the Company by any statutory authority during the last two years.

c) The Company has complied with the applicable provisions of the guidelines of Corporate Governance.

d) Department of Public Enterprises vide its OM dated 29.07.2010, directed that all CPSEs will submit annual compliance report within 30 days from the end of the preceding Financial Year to the concerned ministry which consolidate the same for all CPSEs under its administrative control and forward it to the DPE by 30th June every year. BIRAC has submitted an Annual Compliance Report on implementation of policies and guidelines issued by DPE by 30th April, 2025 for Financial Year 2024-25. In compliance of the directives of DPE, BIRAC submitted its compliance report to the Department of Biotechnology for onward transmission to DPE.

e) No item of expenditure was debited in the books of accounts which was not for the purpose of the organisation.

f) No expenses of a personal nature of the Members of the Board of Directors were incurred out of the funds of the Company.

g) BIRAC has got Excellent Rating in Corporate Governance for FY 2021-22. DPE has to announce the Corporate Governance ratings for FY 2022-23, FY 2023-24 & FY 2024-5 which is awaited.

10. MEANS OF COMMUNICATION

Members/shareholders are apprised about the performance of the Company at each Annual General Meeting. The Company is an unlisted, private limited Section 8 Company and therefore, the need to communicate its quarterly or half-yearly results does not arise.

11. COMPLIANCE CERTIFICATE

In terms of Clause 8.2 of the DPE Guidelines on Corporate Governance, a certificate from a practicing Company Secretary, M/s Agarwal S. & Associates, Company Secretaries, New Delhi confirming the compliance of the provisions of Corporate Governance forms a part of the report on Corporate Governance.

12. REMUNERATION OF DIRECTORS

The total remuneration paid to Functional Directors as on 31st March, 2025:

Name of Functional the Director	Basic Pay (in ₹)	DA (in ₹)	HRA (in ₹)	Perquisites (in ₹)	Total 1st April, 2024- 31st March, 2025 (in ₹)
Dr. Jitendra Kumar	190,962/- per month	92,998/- per month [48.7% of Basic]	51,560/- per month [27% of Basic]	66,836/- per month [35% of Basic]	50,87,187.00
CA. Nidhi Shrivastava	174,836/- per month	85,145/- per month [48.7% of Basic]	47,206/- per month [27% of Basic]	61,193/- per month [35% of Basic]	46,64,273.00

13. CODE OF CONDUCT

BIRAC is committed to conduct business in accordance with the highest standards of business ethics and compliance with the applicable laws, rules and regulations. A Code of Business Conduct and Ethics in accordance with the DPE Guidelines has been laid down for all Board members and senior management.

All the members of the Board and senior management personnel have affirmed compliance with the same for the financial year 2024-25. The Code of Business Conduct and Ethics has also been put up on the website of the Company (www.birac.nic.in)

DECLARATION AS REQUIRED UNDER THE DPE GUIDELINES ON CORPORATE GOVERNANCE

"All the members of the Board and Senior Management Personnel have affirmed compliance of the Code of Business Conduct & Ethics for Board Members and Senior Management for the financial year ended on 31st March 2025".

For and on behalf of Board

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN: 07017109

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN: 09436809

Date: 24th September, 2025
Place: New Delhi

ANNUAL REPORT ON CSR ACTIVITIES

1. Brief outline on CSR Policy of the Company:

Biotechnology Industry Research Assistance Council (BIRAC) is a not-for-profit Section 8, Schedule B, Central Public Sector Enterprise, set up by Department of Biotechnology (DBT), Government of India.

The Board of BIRAC at its 45th Board Meeting held on 24th February 2021 approved the Corporate Social Responsibility Policy (CSR Policy). The CSR Policy of BIRAC was formulated in line with the provisions of the Companies Act, 2013 read with the Companies (Corporate Social Responsibility) Rules, 2014 and 'DPE Guidelines'.

Vision and Mission Statement for CSR Policy:

Vision Statement: BIRAC, through its CSR initiatives, will continue to enhance value creation in the society and in the community in which it operates, through its services, conduct & initiatives, so as to promote sustained growth for the society and community, in fulfilment of its role as a Socially Responsible CPSE.

Mission Statement: In line with the Companies Act, 2013 and DPE guidelines this policy aims at developing Company specific social responsibility strategies in long, medium and short term period with built in mechanism for implementation and monitoring towards creating a Societal impact.

2. **Composition of CSR Committee:** As per Companies (Amendment) Act, 2020 (applicable w.e.f. 22nd January, 2021), if the amount to be spent by a company does not exceed fifty lakh rupees, the requirement for constitution of the CSR Committee shall not be applicable and the functions of such Committee provided under Section 135, of the said Act shall be discharged by the Board of Directors of the company.

Further Amendment in Rule 3 of Companies (Corporate Social Responsibility Policy) Rules, 2014 (applicable w.e.f 20th September, 2022) mentioned that if a company having any amount in its Unspent Corporate Social Responsibility Account as per sub-section (6) of section 135 shall constitute a CSR Committee and comply with the provisions contained in sub-sections (2) to (6) of the said section.

Hence, as per the above-mentioned provisions, BIRAC does not have any unspent Corporate Social Responsibility amount. As per Board directions BIRAC has formed CSR Internal Committee. The Composition of the Committee is as follows:

1) Managing Director as Chairman;
2) Director (Operations): Member;
3) Director (Finance): Member;
4) Company Secretary: Member.
5) All Heads of BIRAC Divisions and Mission Director of Project Management Unit. All Division Heads as Members of the Internal CSR Committee.

All division Heads from Project Management Units, Strategic Partnership Group & Technical Group be coopted to be part of the Internal CSR Committee for evaluation of Proposals which are received in BIRAC for preliminary evaluation.

The Board in its 64th Board Meeting held on 16th December, 2024 deliberated that as per CSR under the amended rules, the applicability of CSR provisions must be assessed annually. For FY 2023-24 Net surplus is less than Rs. 5 crores hence CSR provisions for the current Financial Year (FY 2024-25) are not applicable. As per the Companies Act, 2013, BIRAC is not Statutorily obliged to allot CSR budget for the Financial Year 2024-25.

3. Composition of CSR Internal committee, CSR Policy and CSR projects approved by the board are available on BIRAC website at url https://www.birac.nic.in/desc_new.php?id=958.

4. Details of Impact assessment of CSR projects carried out in pursuance of sub-rule (3) of rule 8 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, if applicable (attach the report): **Not Applicable**

5. Details of the amount available for set off in pursuance of sub-rule (3) of Rule 7 of the Companies (Corporate Social responsibility Policy) Rules, 2014 and amount required for set off for the Financial Year, if any: **Not Applicable**

Sl.No.	Financial Year	Amount available for set-off from preceding Financial Years (in ₹)	Amount required to be set-off for the Financial Year, if any (in ₹)
Not Applicable			

6. Average net profit of the Company as per section 135(5) : **Not Applicable**

7. (a) Two percent of average net profit of the Company as per section 135(5) : **Not Applicable**

   (b) Surplus arising out of the CSR projects or programmes or activities of the previous Financial Years: **Not Applicable**

   (c) Amount required to be set off for the Financial Year, if any : **Not Applicable**

   (d) Total CSR obligation for the Financial Year (7a+7b-7c) : **Not Applicable**

8. (a) CSR amount spent or unspent for the Financial Year:

Total Amount Spent for the Financial Year (in ₹)	Amount Unspent (in ₹)				
	Total Amount transferred to Unspent CSR Account as per Section 135(6)		Amount transferred to any fund specified under Schedule VII as per second proviso to Section 135(5)		
	Amount	Date of transfer	Name of the Fund	Amount	Date of transfer
NIL			NIL		

(b) Details of CSR amount spent against ongoing projects for the Financial Year

(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)	(11)	
Sl. No	Name of the Project	Item from the list of activities in Schedule VII to the Act	Local area (Yes/ No)	Location of the project		Project duration	Amount allocated for the project (in ₹)	Amount spent in the current Financial Year (in ₹)	Amount transferred to Unspent CSR Account for the project as per Section 135(6) (in ₹)	Mode of Implementation Direct (Yes/ No)	Mode of Implementation Through Implementing Agency	
				State	District						Name	CSR Registration number
Not Applicable												

(c) Details of CSR amount spent against other than ongoing projects for the Financial Year:

(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	
Sl. No	Name of the Project	Item from the list of activities in Schedule VII to the Act	Local area (Yes/ No)	Location of the project		Amount allocated for the project (in ₹)	Mode of Implementation Direct (Yes/ No)	Mode of Implementation Through Implementing Agency	
				State	District			Name	CSR Registration number
NIL									

(d) Amount spent in Administrative Overheads : Nil

(e) Amount spent on Impact Assessment, if applicable : Nil

(f) Total amount spent for the Financial Year (8b+8c+8d+8e) : Nil

(g) Excess amount for set off, if any : Nil

Sl. No.	Particular	Amount (in ₹)
(i)	Two percent of average net profit of the Company as per section 135(5)	Nil
(ii)	Total amount spent for the Financial Year	Nil
(iii)	Excess amount spent for the Financial Year [(ii)-(i)]	Nil
(iv)	Surplus arising out of the CSR projects or programmes or activities of the previous Financial Years, if any	Nil
(v)	Amount available for set off in succeeding Financial Years [(iii)-(iv)]	Nil

9. (a) Details of Unspent CSR amount for the preceding three Financial Years:

Sl. No	Preceding Financial Year	Amount transferred to Unspent CSR Account under Section 135 (6) (in ₹)	Amount spent in the reporting Financial Year (in ₹)	Amount transferred to any fund specified under Schedule VII as per Section 135(6), if any	Amount remaining to be spent in succeeding Financial Years (in ₹)
Not Applicable					

(b) Details of CSR amount spent in the Financial Year for ongoing projects of the preceding Financial Year(s):

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sl. No	Project ID.	Name of the Project	Financial Year in which the project was commenced	Project duration	Total amount allocated for the project (in ₹)	Amount spent on the project in the reporting Financial Year (in ₹)	Cumulative amount spent at the end of reporting Financial Year. (in ₹)	Status of the project- Completed / Ongoing
Not Applicable								

10. In case of creation or acquisition of capital asset, furnish the details relating to the asset so created or acquired through CSR spent in the Financial Year (asset-wise details): **Not Applicable**

(a) Date of creation or acquisition of the capital asset(s): **Not Applicable**

(b) Amount of CSR spent for creation or acquisition of capital asset: **Not Applicable**

(c) Details of the entity or public authority or beneficiary under whose name such capital asset is registered, their address etc.: **Not Applicable**

(d) Provide details of the capital asset(s) created or acquired (including complete address and location of the capital asset): **Not Applicable**

11. Specify the reason(s), if the company has failed to spend two per cent of the average net profit as per section 135(5): **Not Applicable**

For and on behalf of Board

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN: 07017109

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN: 09436809

Date: 24th September, 2025
Place: New Delhi

CERTIFICATE OF COMPLIANCE OF CORPORATE GOVERNANCE AS PER THE GUIDELINES OF DEPARTMENT OF PUBLIC ENTERPRISES (DPE) BY A COMPANY SECRETARY IN WHOLE TIME PRACTICE

The Members,

BIOTECHNOLOGY INDUSTRY RESEARCH ASSISTANCE COUNCIL
5th Floor, NSIC Business Park, NSIC Bhawan,
Okhla Industrial Estate, New Delhi – 110020

We have examined the compliance of the conditions of Corporate Governance by Biotechnology Industry Research Assistance Council, (BIRAC) a Section 8 Not for Profit Private Limited Company and a CPSE under the Department of Biotechnology, Government of India (hereinafter referred as 'the Company') for the year ended on 31st March, 2025 as stipulated under the Guidelines of Corporate Governance for Central Public Sector Enterprises (CPSES) issued by Department of Public Enterprises (DPE) vide its order dated 14th May, 2010.

The compliance of Conditions of Corporate Governance is the responsibility of Management. Our examination was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of corporate governance as stipulated in above mentioned guidelines. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, we hereby certify that the Company has complied with the conditions of corporate governance as stipulated in the abovementioned Guidelines for the period under review subject to the following:

1. Composition of Board of Directors

As per para 3.1.4 of the DPE Guidelines on Corporate Governance, the number of Non-Official Independent Directors on the board of Directors of the company should be at least one-third of the total Board Members. As on 31st March, 2025 the Board of the Company comprises of total five directors, with only one Non-Official Independent Director. Presently, company has three vacant positions of Non-Official Independent Directors on the board. The Company being a Government Company, the constitution and composition of the Board including appointment and/or removal of Managing Director/ Directors/ Independent Directors is notified by the Central Government. The Company has raised the matter relating to appointment of Independent Directors to concerned Administrative Ministry.

2. Re-constitution of DPE mandated Committees

During the year 2024-25, BIRAC did not have an Audit Committee and Remuneration Committee as mandated by DPE Corporate Governance Guidelines due to non-appointment of sufficient number of Non official Independent Directors. BIRAC being a Government Company has neither the power nor control over the appointment of Directors.

3. Board Disclosures – Risk management

As per para 7.3.1 of the DPE Guidelines on Corporate Governance the Company shall lay down procedures to inform Board members about the risk assessment and minimization procedures. These procedures shall be periodically reviewed to ensure that executive management controls risk through means of a properly defined framework. BIRAC has a risk management plan and formed Risk Management committee in the FY 25-26 for review purpose.

BIRAC is a Section 8, Not for profit. Private Limited CPSE (Central Public Sector Enterprise), Although Companies Act does not mandate a Whistle Blower Policy for a Private limited company, however it is suggested that a Whistle Blower Mechanism may be considered.

We further state that compliance certificate is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the Management has conducted the affairs of the Company.

For **Agarwal S. & Associates,**
Company Secretaries,
Peer Review Certificate No. 2725/2022

Sd/-
CS Shweta Jain
Partner
FCS: 7152
COP: 27503
UDIN: F007152G001167267

Date: 04.09.2025
Place: New Delhi

AUDITORS' REPORT & ANNUAL ACCOUNTS

GUPTA GARG & AGRAWAL
Chartered Accountants

G-55, Royal Palace, 2nd Floor Laxmi Nagar,
Vikas Marg Delhi - 110 092
Ph.: 43016663, 22502455 Mob.: 9312282105
Email : cabbgupta@gmail.com

INDEPENDENT AUDITORS' REPORT

To the Members of
Biotechnology Industry Research Assistance Council
Report on the Standalone Financial Statements

Opinion

We have audited the accompanying standalone financial statements of Biotechnology Industry Research Assistance Council which comprise the Balance Sheet as at March 31, 2025, the Statement of Income and Expenditure, the Cash Flow Statement and notes to accounts for the year then ended, and a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India including the Accounting Standards, of the state of affairs of the Company as at 31st March, 2025, and its Surplus of Income over Expenditure and its cash flows for the year ended on that date.

Basis of Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Companies Act, 2013 and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Management's Responsibility for the Standalone Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Companies Act, 2013("the Act") with respect to the preparation of these standalone financial statements that give a true and fair view of the financial position and financial performance and cash flow of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards prescribed under section 133 of the Act.

This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the entity's financial reporting process.

Auditors' Responsibility

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order") issued by the Central Government of India in terms of sub-section (11) of section 143 of the Companies Act 2013, in our opinion the said order is not applicable to the company since it is a company registered under section 8.
2. As required by Section 143 (5) of the Act, we have considered the directions & sub-directions issued by the Comptroller & Auditor General of India. We give our report in the attached **Annexure "A".**
3. As required by section 143(3) of the Act, we report that:
   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.
   (c) The Balance Sheet, the Statement of Income and Expenditure and the Cash Flow Statement dealt with by this Report are in agreement with the books of account.

(d) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards prescribed under Section 133 of the Act.

(e) In terms of Notification No. G.S.R. 463(E) dated 05th June 2015 issued by the Ministry of Corporate Affairs, provision of Section 164(2) of the Act regarding disqualification of the Directors, are not applicable as it is a government Company.

(f) With respect to adequacy of the internal financial controls over financial reporting of the company and the operating effectiveness of such controls, refer to our separate report in **Annexure "B";**

(g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

i) The Company does not have any pending litigations which would impact its financial position.

ii) The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses.

iii) There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

iv) (a) The Management has represented that, to the best of it's knowledge and belief, other than as disclosed in the notes to the accounts, no funds have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the company to or in any other person(s) or entity(ies), including foreign entities ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries.

(b) The Management has represented that, to the best of it's knowledge and belief, other than as disclosed in the notes to the accounts, no funds have been received by the company from any person(s) or entity(ies), including foreign entities ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries.

(c) Nothing has come to our notice that has caused us to believe that the representations under sub-clause (a) and (b) contain any material mis-statement.

v) No dividend has been declared or paid by the company during the year.

vi) Based on our examination which included test check, the company has used an accounting software for maintaining its books of accounts which has a feature of recording audit trail (edit log) facility and the same has operated throughout the year for all relevant transactions recorded in the software. Further during the course of our audit we did not come across any instance of audit trail feature being tempered with. Additionally, the audit trail has been preserved by the company as per the statutory requirements for record retention.

For **GUPTA GARG & AGRAWAL**
CHARTERED ACCOUNTANTS
Firm Registration No. 505762C

Sd/-
(AMIT KUMAR JAIN)
PARTNER
Membership No. 509349
UDIN: 25509349BMOHWE5263

Place: Delhi
Date : 23.07.2025

ANNEXURE "A" TO THE INDEPENDENT AUDITORS' REPORT

Audit Report of Biotechnology Industry Research Assistance Council for the period 01.04.2024 to 31.03.2025 pursuant to Directions/Sub-Directions under section 143(5) of the Companies Act 2013

Directions for the year 2024-25

1. **Assess the fair valuation of all the investments, both quoted and unquoted, made directly by the Company or through Trusts, for Post retirement benefits of the employees. This includes verifying valuation methodologies, ensuring consistency with Ind AS and reviewing supporting documentation. The auditor shall provide a brief note on the valuation approach, its reasonability, and compliance with applicable regulations, reporting any material deviations or misstatements.**

   BIRAC provides gratuity liability of the employees on the basis of actuarial valuation at the end of each financial year. The amount of liability is invested in SBI Life Gratuity Policy by BIRAC Employee Gratuity Fund (Trust). The amount available after addition of each year is considered by the certified by valuer/actuary. This complies with the requirement of Ind AS. Based on actuarial valuation report provided by certified actuary, we found valuation approach is reasonable and in compliance with the regulations and no material deviation or misstatement observed.

2. **Whether the company has system in place to process all the accounting transactions through IT system? If yes, the implications of processing of accounting transactions outside IT system on the integrity of the accounts along with the financial implications, if any, may be stated.**

   As informed to us, all accounting transaction is processed through company owned IT System in tally software.

3. **Whether funds (grants/subsidy etc.) received/receivable for specific schemes from Central/State government or its agencies were properly accounted for as per the applicable accounting standards or norms and whether the received funds were utilized as per its term and conditions? Whether accounting of interest earned on grants received has been done as per terms and conditions of the Grant. List the cases of deviation.**

   Yes, funds received/ receivable for specific schemes from central/state agencies have been properly accounted for/utilized as per its terms and conditions.

4. **Whether the Company has identified the Key Risk areas? If Yes, whether the Company has formulated any Risk Management Policy to mitigate these risks? If yes, (a) whether the Risk Management Policy has been formulated considering global best practices? (b) whether the Company has identified its data assets and whether it has been valued appropriately?**

   Yes.

   Risk Management policy is formulated and operational.

   a) BIRAC Risk Management Policy has been formulated in alignment with global best practices. It is based on the ISO 31000 framework, clearly outlines the identification, categorization, analysis, evaluation, and treatment of risks covering strategic, compliance, operational, financial, litigation, IT/administrative, and contractual risks.

   b) The company had identified data assets. The data are hosted under NIC / NICSI platform.

5. **Whether the Company is complying with the Securities and Exchange Board of India (SEBI) (Listing Obligation and Disclosure Requirements) Regulation, 2015 and other applicable rules and regulations of SEBI, Department of Investment and Public Asset Management, Ministry of Corporate Affairs, Department of Public Enterprise, Reserve Bank of India, Telecom Regulatory Authority of India, CERT-IN, Ministry of Electronics and Information Technology and National Payments Corporation of India wherever applicable? If not, the cases of deviation may be highlighted.**

   Compliances related to Ministry of Corporate Affairs are being regularly followed and complied with.

For **GUPTA GARG & AGRAWAL**
CHARTERED ACCOUNTANTS
Firm Registration No. 505762C

Sd/-
(AMIT KUMAR JAIN)
PARTNER
Membership No. 509349
UDIN: 25509349BMOHWE5263

Place: Delhi
Date : 23.07.2025

ANNEXURE "B" TO THE INDEPENDENT AUDITORS' REPORT

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of **Biotechnology Industry Research Assistance Council** ("the Company") as of March 31, 2025 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's management is responsible for establishing and maintaining internal financial controls based on internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the standalone financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

Meaning of Internal Financial Controls over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of standalone financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that

1. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
2. provide reasonable assurance that transactions are recorded as necessary to permit preparation of standalone financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and

3. provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the standalone financial statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2025, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For **GUPTA GARG & AGRAWAL**
CHARTERED ACCOUNTANTS
Firm Registration No. 505762C

Sd/-
(AMIT KUMAR JAIN)
PARTNER
Membership No. 509349
UDIN: 25509349BMOHWE5263

Place: Delhi
Date : 23.07.2025

Biotechnology Industry Research Assistance Council

BALANCE SHEET AS AT 31ST MARCH 2025

CIN: U73100DL2012NPL233152

(Rs. in Lakh)

Particulars	Note No.	As at 31.03.2025	As at 31.03.2024
I EQUITY AND LIABILITIES			
(1) Shareholder's Funds			
(a) Share Capital	1	100.00	100.00
(b) Reserves and Surplus	2	4473.05	14082.34
(2) Non Current Liabilities			
(a) Other Long Term Liabilities	3	13810.00	10630.01
(b) Long Term Provisions	4	77.45	74.71
(3) Current Liabilities			
(a) Trade Payables	5a	302.58	242.91
(b) Other Current Liabilities	5b	17354.83	29154.04
(c) Short Term Provisions	5c	87.13	92.10
TOTAL		**36205.04**	**54376.11**
II ASSETS			
(1) Non-Current Assets			
(a) Property, Plant and Equipment and Intangible Assets			
(i) Property, Plant and Equipment	6	437.84	339.58
(ii) Intangible Assets	6	15.30	27.86
(b) Non-Current Investments	7	10722.02	9827.90
(c) Long-Term Loans and Advances	8	674.50	1013.24
(d) Other Non Current Assets	9	1635.18	182.43
(2) Current Assets			
(a) Cash and Cash Equivalents	10	20102.52	41828.66
(b) Short Term Loan & Advances	11	308.52	434.23
(c) Other Current Assets	12	2309.16	722.22
TOTAL		**36205.04**	**54376.12**
Significant Accounting Policies and Notes to the Financial Statements.	19 & 20		

The Notes referred to above form an integral part of Financial Statements.

Auditors Report

As per our report of even date attached
For Gupta Garg & Agrawal
Chartered Accountants
Firm Reg.No. 505762C

For and on behalf of Board of Directors

Sd/-	Sd/-	Sd/-	Sd/-
CA. Amit Kumar Jain	**Kavita Anandani**	**CA. Nidhi Shrivastava**	**Dr. Jitendra Kumar**
(Partner)	Company Secretary	Director (Finance)	Managing Director
Membership No.509349		DIN 09436809	DIN 07017109

Place : **New Delhi**
Date : **23rd July 2025**
UDIN: 25509349BMOHWE5263

Biotechnology Industry Research Assistance Council

STATEMENT OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31st MARCH 2025

CIN: U73100DL2012NPL233152

(Rs. in Lakh)

Particulars	Note No.	For the Year ended 31.03.2025	For the Year ended 31.03.2024
(1) INCOME			
Grants Received as Utilized	13	7559.69	14814.58
Extra-Mural Grants Received as Utilized	16A-I	12584.80	25554.33
Other Income	14	415.22	813.36
Total Income		**20559.71**	**41182.27**
(2) EXPENDITURE			
Programme Expenditure	15	5349.09	13111.50
Extra-Mural Programme Expenditure	16A-I	12584.80	25554.33
Employee Benefit Expenses	17	1034.27	971.83
Depreciation & Amortization Expenses	6	142.05	116.50
Other Expenses	18	1176.32	1234.53
CSR Expenditure	20.16	-	16.52
Total Expenditure		**20286.53**	**41005.21**
(3) Surplus of Income over Expenditure before exceptional and extraordinary items and Tax		**273.18**	**177.06**
Add/ (Less): Prior Period Income/(Expenditure) (net)		**-**	**-**
(4) Surplus of Income over Expenditure before extraordinary items		**273.18**	**177.06**
Add/(Less): Extraordinary Items		**-**	**-**
(5) Surplus before tax		**273.18**	**177.06**
Less: Current Tax		**-**	**-**
Surplus Carried Forward to Reserve & Surplus A/c		**273.18**	**177.06**
Earnings per equity share:			
(1) Basic		2,731.84	1,770.60
(2) Diluted		2,731.84	1,770.60
Significant Accounting Policies and Notes to the Financial Statements.	19 & 20		

The Notes referred to above form an integral part of Financial Statements.

Auditors Report

As per our report of even date attached
For Gupta Garg & Agrawal
Chartered Accountants
Firm Reg.No. 505762C

Sd/-
CA. Amit Kumar Jain
(Partner)
Membership No.509349

Sd/-
Kavita Anandani
Company Secretary

For and on behalf of Board of Directors

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN 09436809

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN 07017109

Place : **New Delhi**
Date : **23rd July 2025**
UDIN: 25509349BMOHWE5263

Biotechnology Industry Research Assistance Council

Cash Flow Statement for the Year Ended 31st March 2025

CIN: U73100DL2012NPL233152

(Rs. in Lakh)

Particulars		For the Year ended 31.03.2025	For the Year ended 31.03.2024
Cash Flow from Operating Activities:			
Net Surplus as per Income & Expenditure Account		273.18	177.06
Adjustments for :			
Depreciation		142.05	116.50
Management Expenses		0.00	(11.65)
Foreign Exchange Fluctuation		0.16	0.17
Interest Income		-242.86	(224.41)
Operating Profit before Working Capital changes		**172.53**	**57.67**
Increase/(Decrease) in Provisions & Payables		-8199.37	1,351.39
Increase/(Decrease) in Grant Utilisation		-3,859.83	4,110.68
Increase/(Decrease) In Capital Reserve/Deferred Income		89.52	200.06
Fund Utilisation Towards PPP Activities (Net)		-6,792.05	1,486.56
Provision for Sub-Standard & Doubtful Assets		-	-
(Increase)/ Decrease in Other Current Assets		-3,933.82	(1,651.90)
(Increase)/Decrease in Advances PPP Activities (Net)		781.77	1,024.03
Cash Generated from / (used in) Operations		-21741.25	6,578.49
Income Tax Refund / (Paid)		-	-
Net Cash from (Used in) Operating Activities	**(A)**	**-21,741.25**	**6,578.50**
Cash Flow From/ (Used In) Investing Activities:			
Purchase of Fixed Assets		**-227.75**	**(316.56)**
Net Cash from/(Used in) Investing Activities	**(B)**	**-227.75**	**(316.56)**
Cash Flow From/ (Used In) Financing Activities:			
Interest Income		**242.86**	**224.41**
Net Cash from/(Used in) Financing Activities	**(C)**	**242.86**	**224.41**
Net Increase in Cash and Cash Equivalents	D=(A+B+C)	-21,726.14	6,486.36
Cash and Cash Equivalent at beginning of the year	(E)	41,828.66	35,342.30
Closing Cash and Cash Equivalent (Refer Note 20.15)	**F=(D+E)**	**20,102.52**	**41,828.66**

Auditors Report

As per our report of even date attached
For Gupta Garg & Agrawal
Chartered Accountants
Firm Reg.No. 505762C

Sd/-
CA. Amit Kumar Jain
(Partner)
Membership No.509349

Sd/-
Kavita Anandani
Company Secretary

For and on behalf of Board of Directors

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN 09436809

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN 07017109

Place : **New Delhi**
Date : **23rd July 2025**
UDIN: 25509349BMOHWE5263

Biotechnology Industry Research Assistance Council

NOTES TO FINANCIAL STATEMENTS

1. Share Capital

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
A. Authorised		
10,000 Equity shares of Rs 1,000/-each	100.00	100.00
B. Issued, Subscribed & Fully paid		
10,000 Equity shares of Rs 1,000/- each fully paid up	100.00	100.00
Subscribed but not fully paid	Nil	Nil
TOTAL	**100.00**	**100.00**

C. Reconciliation of Number of Shares

Particulars	As at 31.03.2025	As at 31.03.2024
	No of shares	No of shares
Number of equity shares at beginning	10,000	10,000
Add: Equity shares issued during the period	-	-
Number of equity shares at the end	10,000	10,000

D. (i) Details of Shareholders holding more than 5% in equity shares of the company

Name of Shareholder	As at 31.03.2025		As at 31.03.2024	
	No. of fully paid up shares	% of shares held	No. of fully paid up shares	% of shares held
President of India	9,000	90%	9,000	90%
"Dr. Rajesh S. Gokhale (held on behalf of President of India)"	900	9%	900	9%

D. (ii) Change in Shareholding of Promoters

Shares held by promoters at the end of the year	As at 31.03.2025		As at 31.03.2024		% Change in Share-holding
	No. of fully paid up shares	% of shares held	No. of fully paid up shares	% of shares held	
President of India	9,000	90%	9,000	90%	NA
Dr. Rajesh S. Gokhale (held on behalf of President of India)	900	9%	900	9%	NA
Dr. Jitendra Kumar (held on behalf of President of India)	100	1%	100	1%	NA

E. Other details and Rights

The company has only one class of equity shares issued at par value of Rs.1,000/- each.

Each equity shareholder has right to one vote per share.

The shares do not have dividend rights.

Shares carry no distribution right in the event of liquidation.

2. Reserves and Surplus

(Rs. in lakh)

Particulars		As at 31.03.2025	As at 31.03.2024
I. Other Reserve*			
Funds Utilised for Loans under PPP Activities after 31/03/2014		0.00	1,607.91
Less: Provision for Sub-Standard & Doubtful Assets (Refer Note 20.3)		0.00	-518.07
Post BIRAC Realised		0.00	8,332.09
Add: Interest on post BIRAC realised		0.00	460.54
	(A)	**0.00**	**9,882.47**
II. General Reserve			
Surplus			
Opening Balance		4199.87	4022.81
Appropriation :			
Add: Transfer from Statement of Income & Expenditure		273.18	177.06
	(B)	**4,473.05**	**4,199.87**
TOTAL	**(A+B**	**4,473.05**	**14,082.34**

*As per Department of Expenditure, OM No 16(3)-B(SD)/2023, dated 02nd July 2024 , BIRAC significant accounting policy has been amended & Reserves created on account of loan portfolio are now shown under Non Current Liabilities and Current Liabilities. Refer Significant Accounting Policies 19.2.4(b).

3. Other Long Term Liabilities

(Rs. in lakh)

Particulars		As at 31.03.2025	As at 31.03.2024
(a)Loan Portfolio*			
Loan Portfolio (Unrealised)		6,646.48	5,820.33
Less: Provision for Sub-Standard & Doubtful Assets (Refer Note 20.3(a)		-5,663.46	5,462.69
(b)Benefit Sharing (Unrealised) (Refer 19 (2.2))		**1,537.47**	**0.00**
(c) Royalty (Unrealised) (Refer note 19 (2.1)		**33.46**	**0.00**
	(A)	**2,553.95**	**357.64**
(d)ACE Funding (Refer Note 20.19)	**(B)**	**10,722.02**	**9,827.90**
(e) Deferred Government Grant #			
Opening Balance			
Deferred Government Grant Transferred from Capital Reserve (Refer Note 19.2.4A)		367.44	167.38
Add: Capital Expenditure during the Period		227.76	316.56
Less: Depreciation on Fixed Assets during the Period		-142.05	-1,16.50
	(C)	**453.15**	**367.44**
(f) Earmarked Funds for Security Deposits	**(D)**	**80.88**	**77.03**
TOTAL	**(A+B+C+D)**	**13,810.00**	**10,630.01**

* As per Department of Expenditure, OM No 16(3)-B(SD)/2023, dated 02nd July 2024 , BIRAC significant accounting policy has been amended. Reserves created on account of loan portfolio are now shown under Non Current Liabilities and Current Liabilities. Refer Significant Accounting Policies note 19, 2.4(b).

Refer Note 19.2.4A

4. Long Term Provisions

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
For Employee Benefits		
Provision for Gratuity and Leave Encashment	77.45	74.71
	77.45	**74.71**

5. Current Liabilities

5a. Trade Payables

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Trade payables dues to MSME (Refer Note 20.14)	56.47	34.73
Trade payables due to creditors other than MSME	246.12	208.18
	302.59	**242.91**

Trade Payable Ageing Schedule

(Rs. in lakh)

Outstanding for following periods from due dates of Payments	(i) MSME	(ii) Others	(iii) Disputed dues - MSME	(iv) Disputed dues - Others
Less Than 1 Year	56.47	246.13	-	-
1 - 2 Years	-	-	-	-
2 - 3 Years	-	-	-	-
More Than 3 Years	-	-	-	-
Total	**56.47**	**246.13**	**-**	**-**

5b. Other Current Liabilities

(Rs. in lakh)

Particulars		As at 31.03.2025	As at 31.03.2024
Unutilised Grant (Refer Note 20.12)			
Unutilised Grant (BIRAC)		80.09	213.89
Unutilised Grant (DBT-BMGF-WT PMU) #		13,115.68	15,257.23
Unutilised Grant (National Biopharma Mission - I3)		394.26	1,177.47
Unutilised Grant (MeitY)		78.62	71.29
Unutilised Grant (GBI)		0.00	49.99
Unutilised Grant (Covid Suraksha)		1,736.75	1,446.13
Unutilised Grant (Grand Innovation Challenge Program)		50.78	50.00
Unutilised AcE Fund		590.15	1,634.12
	(A)	**16,046.33**	**19,900.12**
Other Payables			
Loan Portfolio (Realised)		17,879.93	8,753.36
Less : Refunded to DBT		17,085.45	-
	(B)	**794.48**	**8,753.36**
Bank Interest on Loan Portfolio (Realised)		1,179.41	466.43
Benefit Sharing (Realised)		20.34	-
Royalty (Realised)		89.21	-
Additional Interest (Realised)		85.56	-
		13,74.52	466.43
Less : Refunded to DBT		926.97	0.00
	(C)	**447.55**	**466.43**
Statutory Liabilities	**(D)**	**62.92**	**24.54**
CSR Fund ##	**(E)**	**3.55**	**9.59**
Total	**(A+B+C+D)**	**17,354.83**	**29,154.04**

Unutilised Grant under DBT-BMGF-WT PMU is to be utilised over a period of programs.

CSR funds received during the Financial Year from following entities (Rs. in lakh)

Particulars	Stryker Global Technology Center Private Limited	Stryker India Private Limited
Opening Balance as on 1st April 2024	7.66	1.93
Add: Interest earned during the year	0.20	0.05
Add: Fund received during the Financial Year	0.00	0.00
Less: Fund Utilized during the Financial Year	5.02	1.27
Closing Balance as on 31st March 2025	**2.84**	**0.71**

5c. Short Term Provisions (Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
For Employee Benefits		
Provision for Performance related pay (PRP)	70.94	70.94
Provision for Leave Encashment	6.77	21.16
For Income Tax		
Excess Interest received from Income Tax Department	9.42	0.00
	87.13	**92.10**

6. Schedule of Fixed Assets

(Rs. in lakh)

Particulars	Gross Block				Depreciation				Net Block	
	As at	Addition	Sales/ Adjustments	As at	As at	For the Period	Adjustments	As at	WDV as at	WDV as at
	1-Apr-2024	2024-25	2024-25	31-Mar-25	1-Apr-2024	2024-25	2024-25	31-Mar-25	31-Mar-25	31-Mar-24
Tangible Assets										
Furniture & Fixtures	621.33	190.98	-	**812.31**	311.13	105.56	-	**416.70**	395.62	310.20
Office Equipment	17.95	35.73	-	**53.69**	12.52	10.55	-	**23.07**	30.62	5.43
Computers	170.38	1.04	-	**171.42**	146.43	13.39	-	**159.82**	11.60	23.95
Total Tangible Assets	**809.66**	**227.75**	**-**	**1,037.42**	**470.08**	**129.50**	**-**	**599.59**	**437.84**	**339.58**
Intangible Assets	87.62	-	-	87.62	59.76	12.55	-	72.32	15.30	27.86
Total Intangible Assets	**87.62**	**-**	**-**	**87.62**	**59.76**	**12.55**	**-**	**72.32**	**15.30**	**27.86**
Total	**897.28**	**227.75**	**-**	**1,125.04**	**529.84**	**142.05**	**-**	**671.91**	**453.14**	**367.44**
Previous Year Figures	580.72	316.55	-	897.28	413.35	116.49	-	529.84	367.42	167.36

7. Non-Current Investments

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Others (held on behalf of DBT)		
AcE Funding (Refer Note 20.19)	10,722.02	9,827.90
	10,722.02	**9,827.90**

8. Long Term Loans & Advances

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Long Term Loans and Advances		
(Secured against Bank Guarantee/Hypothecation/Personal Guarantee)*		
Loans Portfolio (Including Interest on Loan Accounts PPP Activities)		
Secured Considered Good	660.24	1,029.53
Unsecured Considered Good	Nil	Nil
Doubtful	5,986.24	6,398.72
	6,646.48	**7,428.25**
Less: Current maturities of Long Term Loans & advances reflected under Current assets	308.52	434.23
Less: Provision for Doubtful Assets (Refer Note 20.3)	5,663.46	5,898.45
Less: Provision for Sub-Standard Assets (Refer Note 20.3)	0.00	82.32
	674.50	**1,013.24**
TOTAL	**674.50**	**1,013.24**

* Refer 20.3 (Securities available are on historical value)

9. Other Non Current Assets

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Security Deposit		
Security Deposit to MTNL	105.40	105.40
Security Deposit to NSIC	80.88	77.03
Benefit Sharing Receivable	1,448.90	0.00
Total	**1,635.18**	**182.43**

10. Cash & Cash Equivalents

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Cash in Hand	0.22	0.25
Balances with Banks: (Refer Note 20.15)		
In Current Accounts	0.20	0.20
In Saving Accounts	7,019.24	26,791.66
In Fixed Deposits	13,082.86	15,036.55
TOTAL	**20,102.52**	**41,828.66**

11. Short Term Loans and Advances

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Current maturities of Long Term Loans and Advances:(*)	308.52	434.23
(Secured against Bank Guarantee/Hypothecation/ Personal Guarantee)		
Total	**308.52**	**434.23**

* Refer 20.3

12. Other Current Assets

(Rs. in lakh)

Particulars	As at 31.03.2025	As at 31.03.2024
Accrued Interest-FD & Saving Account	67.66	70.03
Tax Credit	412.53	508.66
Benefit Sharing	88.57	0.00
Royalty Receivable	36.14	11.52
Prepaid Expenses	50.56	27.95
Other Recoverable	92.63	45.78
Unutilised Grant Biomanufacturing	2.93	0.00
Unutilised Grant (Bio-toilets in schools from North East Region)	1.66	1.66
Unutilised Grant (PPP Activities)	1,476.22	0.00
Unutilised Grant (SSC - NTBN)	25.61	25.55
Unutilised Grant (Ind CEPI)	24.28	2.48
Unutilised Grant (Make in India Facilitation Cell)	30.37	4.40
Biotech Expo	-	24.19
TOTAL	**2,309.16**	**722.22**

13. Income

(Rs. in lakh)

Grants Received as Utilized	For the year ended 31.03.2025	For the year ended 31.03.2024
PPP Activities	3,834.27	10,146.05
BIRAC Activities	3,725.42	4,668.53
TOTAL	**7,559.69**	**14,814.58**

14. Other Income

(Rs. in lakh)

Particulars	For the year ended 31.03.2025	For the year ended 31.03.2024
Royalty*	-	10.24
Management Fee - BMGF	-	11.65
Interest Received - Bank Accounts	242.86	578.65
Additional Interest*	-	32.31
Other Receipts	30.32	64.01
Amortised Deferred Government Grant	142.05	116.50
TOTAL	**415.23**	**813.36**

* Refer Significant Accounting policies 19, 2.1

15. Programme Expenditure

(Rs. in lakh)

Particulars	For the year ended 31.03.2025	For the year ended 31.03.2024
Grants Disbursed		
PPP Activities	3,635.03	10,373.85
BIRAC Activities	1,514.82	2,445.69
Programme Expenditure		
PPP Activities (Operational expenditure on Advertisement, Meeting and PMC)	199.24	291.96
Total	**5,349.09**	**13,111.50**

16A. Programme Management Unit DBT & BMGF

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure (GCI)		5,418.99	1,872.15
Operational Expenditure		271.09	363.01
Operational Non Recurring Expenditure		0.00	0.00
	(A)	**5,690.08**	**2,235.16**
Less:			
Programme Funds from DBT (GCI)		45.14	749.95
Programme Funds from BMGF (GCI)		5,157.15	1,052.81
Programme Funds from WHO IKMC Program		216.70	-
Programme Funds from WT		-	33.28
Programme Funds from WT Sanger (GCI)		-	-
Programme Funds Innovation Challenge (GCI)		-	36.11
	(B)	**5,418.99**	**1,872.15**
Less:			
Operational Fund from DBT`		-	-
Operational Non Recurring Fund from DBT		-	-
Operational Fund from BMGF		271.09	363.01
Operational Non Recurring Fund from BMGF		-	-
Operational Recurring Fund from WT		-	-
	(C)	**271.09**	**363.01**
(Refer to Note : 20.13.3)	**(A-B-C)**	**(0.00)**	**-**

16B. Extra-Mural Programme - Make In India

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		37.76	43.02
Operational Expenditure		34.94	15.76
	(A)	**72.70**	**58.78**
Less:			
Programme Funds from Make in India		37.76	43.02
	(B)	**37.76**	**43.02**
Less:			
Operational Fund from Make in India		34.94	15.76
	(C)	**34.94**	**15.76**
(Refer to Note : 20.13.5)	**(A-B-C)**	**-**	**-**

16C. Extra-Mural Programme - National Biopharma Mission (Innovate in India)

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		5,695.47	8,289.18
Operational Expenditure		761.77	712.81
	(A)	**6,457.24**	**9,001.99**
Less:			
Programme Funds from National Biopharma Mission (I3)		5,695.47	8,289.18
	(B)	**5,695.47**	**8,289.18**
Less:			
Operational Fund from National Biopharma Mission (I3)		761.77	712.81
	(C)	**761.77**	**712.81**
(Refer to Note : 20.13.7)	**(A-B-C)**	**-**	**-**

16D. Extra-Mural Programme - AcE Fund

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Operational Expenditure		8.30	5.72
	(A)	**8.30**	**5.72**
Less:			
Operational Fund from AcE Fund		8.30	5.72
	(B)	**8.30**	**5.72**
(Refer to Note : 20.13.8)	**(A-B)**	**-**	**-**

16E. Extra-Mural Programme - DBT-BIRAC-SSC(NTBN)

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Operational Expenditure		-	-
	(A)	**-**	**-**
Less:			
Operational Fund from DBT-BIRAC-SSC(NTBN)		-	-
	(B)	**-**	**-**
(Refer to Note : 20.13.9)	**(A-B)**	**-**	**-**

16F. Ind CEPI

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		250.00	427.75
Operational Expenditure		47.16	33.43
	(A)	**297.16**	**461.18**
Less:			
Programme Funds from IndCepi		250.00	427.75
	(B)	**250.00**	**427.75**
Less:			
Operational Fund from IndCepi		47.16	33.43
	(C)	**47.16**	**33.43**
(Refer to Note : 20.13.10)	**(A-B-C)**	**-**	**-**

16G. Covid Suraksha

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		-	13,690.05
Operational Expenditure		-	7.46
	(A)	**-**	**13,697.51**
Less:			
Programme Funds from National Biopharma Mission (I3)		-	13,690.05
	(B)	**-**	**13,690.05**
Less:			
Operational Fund from National Biopharma Mission (I3)		-	7.46
	(C)	**-**	**7.46**
(Refer to Note : 20.13.12)	**(A-B-C)**	**-**	**-**

16H. Amrit Grand Challenge JanCare program

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		56.29	87.04
Operational Expenditure		0.10	6.95
	(A)	**56.39**	**93.99**
Less:			
Programme Funds from CSR and IHC		56.29	87.04
	(B)	**56.29**	**87.04**
Less:			
Operational Fund from CSR and IHC		0.10	6.95
	(C)	**0.10**	**6.95**
(Refer to Note : 20.13.13)	**(A-B-C)**	**-**	**-**

16I. Bio Manufacturing

(Rs. in lakh)

Particulars		For the year ended 31.03.2025	For the year ended 31.03.2024
Programme Expenditure		-	0.00
Operational Expenditure		2.93	0.00
	(A)	**2.93**	**0.00**
Less:			
Programme Funds from Biomanufacturing		-	0.00
	(B)	**-**	**0.00**
Less:			
Operational Fund from Biomanufacturing		2.93	0.00
	(C)	**2.93**	**0.00**
(Refer to Note : 20.13.14)	**(A-B-C)**	**-**	**-**

17. Employees' Benefit Expenses

(Rs. in lakh)

Particulars	For the year ended 31.03.2025	For the year ended 31.03.2024
Salary & Allowances to Staff	913.59	874.05
Employer's Contribution to Provident Fund & Other Funds	120.68	97.78
TOTAL	**1,034.27**	**971.83**

18. Other Expenses

(Rs. in lakh)

Particulars	For the year ended 31.03.2025	For the year ended 31.03.2024
(A) Rent	321.81	651.00
(B) Advertisement & Publication	29.99	20.07
(C) Journal & Subscription	1.19	1.60
(D) Meetings:		
Meetings & Conferences	10.98	35.30
Sitting Fees & TA and DA	1.55	0.69
(E) Office and Administration Expenditure:		
Travel	90.64	81.40
Office Expenses	491.98	348.97
AMC Computer	2.36	2.20
Legal & Professional	1.92	1.80
Postage & Telephone Expenses	4.18	4.99
Power & Electricity	49.73	27.63
Printing & Stationery	1.74	1.08
Internet Expenses	9.51	20.24
(F) Training Expenses	15.71	7.66
(G) Consultancy Fee	140.47	27.61
(H) Statutory Audit Fees	2.40	2.12
(I) Foreign Exchange Fluctuation	0.16	0.17
TOTAL	**1,176.32**	**1,234.53**

19. REVISED SIGNIFICANT ACCOUNTING POLICIES

1. Corporate Information

Biotechnology Industry Research Assistance Council (BIRAC) "the Company" is a Section - 8 "Not-for-Profit Company" under the provisions of the Companies Act, 2013 having CIN U73100DL2012NPL233152. BIRAC is also registered under Section - 12A of the Income Tax Act, 1961.The Company is engaged in nurturing, promoting and mentoring Research and Development in Biotech Sector.

2. Basis of Preparation of Financial Statements

The Financial Statements of the Company are prepared in accordance with Generally Accepted Accounting Principles in India (Indian GAAP). These are in compliance, in all material respects, with the Accounting Standards notified under the Companies (Accounting Standards) Amendment Rules, 2016, (as amended) and the relevant provisions of the Companies Act, 2013. The Financial Statements are prepared on accrual basis and under the historical cost convention.

Preparation of Financial Statement requires the Management to make estimates and assumptions in regard to the reported amount of assets, liabilities, expenses and income of the reporting period. The estimates used in preparation of the Financial Statement are prudent and reasonable. The difference between the actual results and estimates, if any, are recognised in the reporting period in which the results are known and / or materialised.

2.1 Revenue Recognition

i) Interest:

a) Interest on loan granted is recognised on a time proportion basis taking into account the amount outstanding and applicable rate of interest. Interest Accrued, not yet realisable during the year on loans under various schemes, are shown under Other Long Term Liabilities. The interest accrued/ receipt during the year on loans is not recognised as income of BIRAC as it is repayable to the Government on realisation. Additional interest on the delayed payments is recognised on receipt basis which is repayable to Government on realisation.

b) Interest against time deposits with banks are accounted on accrual basis.

ii) Royalty is recognised on accrual basis on acknowledgment of amount due by the beneficiary which is repayable to Government on realisation .

iii) Management Fee is recognised on accrual basis in accordance with the terms of the relevant agreement.

2.2 Grants-in-Aid

Income by way of grants-in-aid has been recognized under Matching Principle of Accounting. All expenditure incurred out of the grants-in-aid, comprising of grants disbursed and other programmatic expenditure are matched with equal amount of income and adjusted against the grants- in -aid. Unspent balance of Grants-in-aid are carried forward as current liability to be utilized in subsequent years.

Amount recoverable under any scheme where there is an agreement for benefit sharing against Grant-in-Aid are recognized under Current Asset and **Current Liability** on Due basis which is repayable to Government on realisation.

The application of funds for disbursement of loans under different schemes is shown as Loans and Advances under Non-Current Assets. Loans disbursed during the year are shown under **"Other Long Term Liability - Loans Outstanding".**

2.3 Expenditure

All expenses are accounted for on accrual basis. Funds released as grants-in-aid are treated as expenditure in the Income & Expenditure Account. Amount unutilised and recovered from the grants are accounted as Current Liability repayable to the Government.

2.4 Reserve & Surplus

a) Grant-in-aid used for acquiring depreciable assets set up as Deferred Government Grant and recognised in the Statement of Income & Expenditure on a systematic basis over the useful life of the asset.

b) Funds disbursed from Government Grants as loan under any scheme are refundable on realization, which are accounted as:

- All amount advanced as Long Term Assets with corresponding Long Term Liability.
- All amounts falling due for repayment within the subsequent financial year shown as Current Assets.
- All amounts realized against the loans are shown as Current Liabilities repayable to Government.

Provision is made for any substandard/ doubtful/ bad debt that may arise on non-recovery from any borrower and adjusted against **"Other Long Term Liability - Loans Outstanding"**

2.4A Deferred Government Grant

Grant-in-aid used for acquiring depreciable assets set up as Deferred Government Grant and recognised in the Statement of Income & Expenditure on a systematic basis over the useful life of the asset.

2.5 Fixed Assets

Fixed Assets are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Gains or losses arising from disposal of fixed assets are measured as the difference between the net disposal proceeds and the carrying amount of the assets disposed of.

2.6 Depreciation and Amortization

Depreciation on assets is provided on useful life basis on written down value method as prescribed under Schedule II to the Companies Act, 2013.

Depreciation on fixed assets added/disposed of during the year/period is provided on pro-rata basis with reference to the date of addition/disposal

2.7 Intangible Assets

Intangible assets acquired are measured separately at cost. Intangible assets are carried at cost less accumulated amortization and accumulated impairment losses, if any. Internally, generated intangible assets are not capitalized and expensed off in the Statement of Income and Expenditure in the year in which the expenditure is incurred. Intangible assets are amortized over a period of five years as per Accounting Standard - 26 as no useful life provided in Schedule II to the Companies Act, 2013.

2.8 Investments

Current investments are carried at lower of cost and quoted/fair value, computed category-wise. Long-term investments are stated at cost. Provision for diminution in the value of long-term investments is made only if such a decline is other than temporary.

2.9 Foreign Exchange Transactions/Translation

Foreign currency transactions and balances: Foreign Currency Transfer is made as per the approved

Government guidelines. For any contribution being received from foreign entities, the necessary approval is obtained under the Foreign Contribution (Regulation) Act, 2010.

(i) **Initial Recognition:** Foreign currency transactions are recorded in the reporting currency by applying the exchange rate between the reporting currency and the foreign currency at the date of the transaction.

(ii) **Conversion:** Foreign Currency monetary items are retranslated using the exchange rate prevailing at the reporting date.

(iii) **Exchange Difference:** Exchange differences arising on long-term foreign currency monetary items related to acquisition of a fixed asset are capitalized and depreciated over the remaining useful life of the asset. The exchange differences on other foreign currency monetary items are accumulated in 'Foreign Currency Monetary Item Translation Difference Account' and amortized over the remaining life of the concerned monetary item.

All other exchange differences are recognized as income or as expenses in the period in which they arise.

2.10 Employees' Benefits

a) All the employees of the Company are on contractual basis. Provision of Employer's contribution is made as per the provisions of Employees Provident Fund Act, 1952.

b) The Company makes annual contributions under the Employees Gratuity scheme to a fund administered

by Trustees covering all eligible employees. The plan provides for lump sum payments to employees whose right to receive gratuity had vested at the time of resignation, retirement, death while in employment or on termination of employment of an amount equivalent to 15 days salary for each completed year of service or part thereof in excess of six months. Vesting occurs upon completion of five years of service except in case of death.

The plan assets are maintained with SBI Life Insurance Company Ltd. Employee Gratuity Scheme. The details of Investments maintained by SBI Life Insurance Company Ltd are not made available and have therefore not been disclosed.

c) Company's liability towards employee benefits such as leave encashment is provided on the basis of actuarial valuation.

2.11 Operating Leases

Lease payments for assets taken on operating lease are recognised as an expense in the Statement of Income & Expenditure as per terms of lease agreement.

2.12 Provisions & Contingent Liabilities

a) Funds sanctioned and yet to be released till the reporting period due to timing difference of milestone are not taken as liability, these are accounted as expenses on actual release of payment.

b) Provisioning on substandard Asset has been provided as per the approved classification of asset based on recoverability.

c) A provision is recognized when the company has present obligations as a result of past event. It is probable that an outflow of resources embodying economic benefits will be required.

2.13 Earning Per Share

The company is a section - 8 "Not for Profit Company". It does not generate any income/ revenue from its activities. It does not distribute any dividend to its shareholders. However, for the compliance of AS -20 the company has computed EPS as under:

a) Basic earnings per share are calculated by dividing the net income or loss for the period attributable to equity shareholders by weighted average number of equities shares outstanding during the period.

b) For the purpose of calculating diluted earnings per share, the net profit or loss for the period attributable to equity shareholders and the weighted average number of shares outstanding during the period are adjusted for the effects of all diluting potential equity shares.

2.14.1 Corporate Social Responsibility (CSR) on BIRAC:

The Ministry of Corporate Affairs (MCA) vide notification dated 27th February 2014 has notified the enforceability of Section 135 of Companies Act, 2013 (i.e. provision for CSR) and Companies (Corporate Social Responsibility Policy) Rules, 2014 with effect from 01.04.2014.

Section 135 of the Companies Act 2013 provides the threshold limit for applicability of the CSR to a Company:

(a) Net worth of Rs 500 Crore (Rupees Five Hundred Crore) or more;

Or

(b) Turnover of Rs 1,000 Crore (Rupees One Thousand Crore) or more;

Or

(c) Net profit of Rs 5 Crore (Rupees Five Crore)

or more.

"Net profit" shall not include such sums as may be prescribed and shall be calculated in accordance with the provisions of Section 198 of Companies Act.

Year of Applicability of CSR on BIRAC	:	F.Y. 2019-20 (Triggered year)
Reason	:	BIRAC has achieved the surplus of Rs. 7.95 Crore during the Financial Year 2019-20.

As BIRAC falls under clause (c), provisions of CSR is applicable from financial year 2020-21.

20. Notes to Accounts for the year ended 31st March 2025

20.1 Biotechnology Industry Research Assistance Council (BIRAC) receives funds from Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India by way of grant-in-aid for its operation.

20.2 "The disbursement were made in tranches as per the milestones determined for the activities. Contingent liability on account of sanctioned grants but not disbursed due to the timing difference of milestone based payments are not accounted.

During the current reporting period BIRAC disbursed the following amounts under different Schemes. "

(Rs. in lakh)

Particulars	Disbursement For the year ended 31.03.2025	Disbursement For the year ended 31.03.2024
PPP Activities		
Biotechnology Industry Partnership Programme (BIPP)	230.45	1,376.70
Small Business Innovation Research Initiatives (SBIRI)	227.23	573.44
Bio- Incubators support Scheme (BISS)	1,308.32	1,114.55
Biotech Ignition Grant (BIG)	600.00	4,388.67
University Innovation Cluster (UIC)	411.02	610.93
Translation Accelerator (TA)	34.06	276.08
Contract Research Scheme (CRS)	323.92	466.22
Social Innovation programme for Products: Affordable & Relevant to Societal Health (SPARSH)	46.18	646.79
Seed Funding for Incubators	-	100.00
Product Commercialization Unit (PCU)	46.57	393.10
Innovation Clean technologies	29.95	24.24
Covid_(B) Research Consortium	15.48	0.17
Covid_(C) Therapeutics	162.74	49.75
Covid_(d) PMD	106.40	-
LEAP Fund	-	317.10
Amrit Grand Challenge JanCare program	-	36.11
Grant Disbursed Grand Challenges	92.70	
Total	**3,635.02**	**10,373.85**
BIRAC Activities		
Partnership Program	1,263.92	1,957.41
Capacity Building & Awareness	147.35	82.21
Technology Transfer / Acquisition	18.49	225.17
IP Services	73.39	95.90
Entrepreneurial Development / Regional Centres	0.80	85.00
RAPA	10.88	-
Total	**1,514.83**	**2,445.69**

20.3 Loan and instalment due from borrowers shown under Long term Loans & Advances and other Current Assets respectively are secured wholly or partly by way of bank Guarantee/Hypothecation of asset/personal guarantee.

BIRAC has classified the loan assets based on aging of overdue under standard asset, standard asset –Rescheduled, sub-standard asset, and doubtful assets as under:

Class of Assets	Description	Aging of overdue	% of Provisioning
Standard Asset	Loan accounts not rescheduled and not classified as substandard or doubtful.	Upto 365 days	NIL
Standard Asset - Rescheduled	Loan accounts which, on account of reschedulement, are not classified as substandard or doubtful assets.	Upto 365 days	NIL
Substandard Asset	Loan accounts, other than Standard Asset-Rescheduled, in which payment of instalment is due for more than one year (365 days).	More than 365 days-999 days	upto 25%
Doubtful Asset	Loan accounts classified as doubtful, in which payment of instalment is due for 1000 days and above	Above 999 days -1999 days	25% (cumulative 50%)
		Above 1999 days	50% (cumulative 100%)

20.3(a) On Classification of an asset from standard to sub-standard or doubtful, interest has been derecognised and requisite provisioning are made for the substandard asset and Doubtful assets. The details of standard, standard- rescheduled, substandard and doubtful assets and the provisions are done on annual basis.

(Rs. in lakh)

Particulars		As on 31.03.2025	As on 31.03.2024
Standard Asset	A	578.00	854.26
Standard Asset – Rescheduled	B	82.23	175.27
Sub Standard Assets	C	0.00	329.27
Doubtful Assets	D	5,986.24	6,069.45
Total Assets	**E (A+B+C+D)**	**6,646.47**	**7,428.25**
Provision on Substandard Assets	F	-	82.32
Provision on Doubtful Assets	G	5,663.46	5,898.44
Total Provision	**H(F+G)**	**5,663.46**	**5,980.76**
Interest derecognised during the FY	I	106.59	112.62

20. Notes to Accounts for the period ended 31st March 2025.

20.3 b Movement of Loans

I.

S. No.	Particular	Opening Balance as on 01.04.2024	Transfer to Standard Asset- Reschedule during the year	Transfer from Standard Asset Reschedule during the year	Transfer from Standard Asset to Sub Standard during the year	Transfer from Standard Asset to Doubtful during the year	Transfer from Sub-standard during the year	Disbursement during the year	Interest Recognised During the year	Recovery during the FY 2024-25	Number of parties of closed Accounts	Closing balance as on 31.03.2025	No. of Parties
		A	B	C	D	E	F	G	H	I	J	K=A-B-C-D-E+F+G+H-I	
	Standard Asset	854.26	- -	-	-	-	-	-	10.61	286.87	-	578.00	
1		A	B	C	D	E	F	G	H	I	J	K=A-B-C-D-E+F+G+H-I-J	
	Numbers of Parties	17	0	0	0	0	0	0	0	0	7	10	10

II.

S. No.	Particular	Opening Balance as on 01.04.2024	Increase in Standard Assets reschedule as transfer from Standard Asset	Decrease in Standard Assets reschedule as transfer to Standard Asset	Increase in standard Assets Reschedule as transfer from Sub Standard Asset	Disbursement during the year	Interest Recognised During the year	Recovery during the FY 2024-25	Number of parties of closed Accounts	Closing balance as on 31.03.2025	No. of Parties	Remark for Reshedule with name of approval authority and its impact
		A	B	C	D	E	F	G	H	I=A+B-C+D+E+F-G		
	Standard Assets reshedule	175.27	-	-	-	-	2.10	95.13	-	82.23	-	-
2		A	B	C	D	E	F	G	H	I=A+B-C+D+E+F-G-H		
	Numbers of Parties	2	0	0	0	0	0	0	1	1	1	

III.

S. No.	Particular	Opening Balance as on 01.04.2024	Increase in Sub standard as transfer from Standard Asset reshedule/ Standard Asset /Doubtful Asset	Decrease in Sub standard as transfer to Standard loan Reshedule	Decrease in Sub standard as transfer to Doubtful Assets	Decrease in Sub standard as transfer to Standard Assets	Disbursement during the year	Interest Recognised During the year	Recovery during the FY 2024-25	Number of parties of closed Accounts	Closing balance as on 31.03.2025	No. of Parties	Provisions on Sub-standard Assets	Net Closing Balance as on 31.03.2025 (after provisions)	Remark for Reshedule with name of approval authority and its impact
		A	B	C	D	E	F	G	H	I	J=A+B-C-D-E+F+G-H		K	L=J-K	
3	Sub Standard Assets	329.27	-	-	315.27	-	-	-	14.00	-	0.47	-	-	0.47	4 nos. of Loan account has been transferred to Doubtful
		A	B	C	D	E	F	G	H	I	J=A+B-C-D-E+F+G-H-I				
	Numbers of Parties	5	0	0	4	0	0	0	0	0	1	1	-	1	

IV.

S. No.	Particular	Opening Balance as on 01.04.2024	Increase in Doubtful assets as transfer from Sub Standard Asset	Increase in Doubtful assets as transfer from Standard Asset	Decrease in Doubtful assets as transfer to Sub Standard Assets/ Standard Asset/Standard Asset Reschedule	Disbursement during the year	Interest Recognised During the year	Recovery during the FY 2024-25	Written Off during the FY 2024-25	Number of parties of closed Accounts	Closing balance as on 31.03.2025	No. of Parties	Provisions on Doubtful Assets	Net Closing Balance as on 31.03.2025 (after provisions)	Remark for Reshedule with name of approval authority and its impact
		A	B	C	D	E	F	G	H	I	J=A+B+C-D+E+F-G-H		K	L=H-K	
4	Doubtful Assets	6,069.45	315.27	-	-	-	-	398.48	-	-	5986.24	-	5663.46	322.79	
		A	B	C	D	E	F	G	H	I	J=A+B+C-D+E+F-G-H-I				
	Numbers of Parties	44	4	0	0	0	0	0	0	0	48	48	-	48	
	Gross Total Value as per Balance sheet (I+II+III+IV)										**6,646.48**	**60**	**5,663.46**	**983.02**	

20.4 (Rs. in lakh)

Age Wise Overdue Position		As on 31.03.2025	As on 31.03.2024
Upto one year	(A)	6.56	-
More than one year accumulated	(B)	5,854.98	6,138.77
Total	**(A+B)**	**5,861.54**	**6,138.77**

20.5 Suit Filed Accounts:

20.5.1 Suits filed by the company: (Rs. in lakh)

	As at 31.03.2025		As at 31.03.2024	
	Number of accounts	Total Amount*	Number of accounts	Total Amount
Suit filed accounts	13	5519.50	2	1,098.34

* The Suit filed account as above are classified and necessary provisions are made.

20.5.2 Suits filed against the company:

	As at 31.03.2025		As at 31.03.2024	
	Number of accounts	Total Amount	Number of accounts	Total Amount
Suit filed accounts	1	Nil	2	Nil

20.6 Programme Management Unit – DBT and BMGF

Department of Biotechnology (DBT) and Bill Melinda Gates Foundation (BMGF) have signed an MOU for supporting priority areas of research. BIRAC has been entrusted the responsibility to be the "Technical Management Unit". In this regard, BIRAC established a Programme Management Unit to administer programmes, of affordable product development in the area of Health Care and Agriculture. **Refer Note 20.13.3**

20.7 BIRAC – Extra Mural Programme

(a) **MeitY(IIPME):** Industry innovation programme on Medical electronics has been initiated by BIRAC in collaboration with Ministry of Electronics and Information Technology, Government of India. **Refer Note 20.13.4**

(b) **Make in India Facilitation Cell:** BIRAC has established a programme management unit for Biotechnology Industry Facilitation – Make in India Cell to channelize investment in India. **Refer Note 20.13.5**

(c) **Bio-toilets in schools from North East Region:** BIRAC is undertaking a programme on Bio toilets in schools from North East Region for benchtop demonstration of anaerobic digester for biogas generation and its utilization. **Refer Note 20.13.6**

(d) **National BioPharma Mission (I3):** The program named Innovate in India (I3) is an industry-academia collaborative mission of Department of Biotechnology (DBT) in collaboration with World Bank for accelerating discovery research to early development of Biopharmaceuticals and to be implemented by Biotechnology Industry Research Assistance Council (BIRAC). **Refer Note 20.13.7**

(e) **AcE Fund:** BIRAC is implementing the Biotechnology Innovation Fund - AcE Fund initiated by Department of Biotechnology, Govt of India for providing risk capital to Biotech start-ups for product development cycle and growth phase. **Refer Note 20.13.8**

(f) **SSC(NTBN):** BIRAC is undertaking a programme on Setting up of secretarial for scientific sub - committee (SSC-NTBN) under the national Technical Board on Nutrition (NTBN). **Refer Note 20.13.9**

(g) **IndCEPI:** BIRAC is undertaking a programme on Setting up of Epidemic preparedness through rapid vaccine development : support of Indian Vaccine development aligned with the global initiative of the Coalition for Epidemic preparedness Innovative (CEPI). **Refer Note 20.13.10**

(h) **GBI:** Global Bio India, A mega Biotech event was organised by DBT along with BIRAC , New Delhi. BIRAC implemented the event through Make in India (MII) cell at BIRAC with others partners. The event witnessed a participation of 2500+ participants from Academia, Industry, Start-ups Investors National & International fraternity. **Refer Note 17.13.11**

(i) **Mission COVID SURAKSHA:** The Indian COVID 19 Vaccine Development Mission " COVID SURAKSHA". Accelerating pre-clinical & clinical development and licensure of COVID-19 vaccine candidates that are currently in clinical stages or ready to enter clinical stage of development. Establishing clinical trial sites. Immunoassay laboratories, central labs and suitable facilities for animal studies, production facilities and other testing facilities to support COVID-19 vaccine development. Supporting development of common harmonized protocols, trainings data management systems, regulatory submissions, internal and external quality management systems and accreditations, to accelerate clinical development and licensure of COVID-19 vaccine candidates that have targets identified. Supporting capabilities for process development, cell line development and manufacturing of GMP batches for animal toxicology studies and clinical trials. Ensuring all vaccines being introduced through the Mission have preferred characteristics applicable for India. **Refer Note 20.13.12**

(j) **Amrit Grand Challenge JanCare program:** Grand innovation Challenge Program aimed to identify and support start-ups developing Telemedicine, Artificial Intelegence, Digital Health, Big data solutions. **Refer Note 20.13.13**

(k) **Biomanufacturing:** To enable Circular - Bioeconomy by 'Fostering High Performance Biomanufacturing' in the Country, an initiative on Biomanucturing and Biofoundry has been approved with a strategic focus on: bio-based chemeicals and enzymes, functional food, smart proteins, precision biotherapeutics, climate resiient agriculturre, carnon capture & its utilisation, futuristic marine and space research. **Refer Note 20.13.14**

20.8 Prior Period Adjustment

The prior period items are accounted in accordance with Accounting Standard - 5.

The previous year figures are reclassified and regrouped in accordance with the requirements applicable in the current financial year.

20.9 Related Party Disclosure

The provisions of Accounting Standard-18 are not applicable as there is no transaction between a reporting enterprise and its related parties.

(Rs. in lakh)

Name of Related Party	Transaction during the year with related Party	Remuneration
Dr. Jitendra Kumar, Managing Director	Nil	50.87
CA. Nidhi Shrivastava, Director (Finance)	Nil	46.64

20.10 Provision for Tax

No Provision for Income Tax has been made in the current reporting period since the company has been registered as a charitable entity u/s 12A of Income Tax Act, 1961 vide order No. 2974 dated 12th May, 2014.

20.11 Foreign Exchange Transactions

During the current reporting period the following income/expenditure has been incurred.

A. Income: Grant received in foreign exchange to the extent utilised Rs. 2536.79/- Lakh (Previous Year Rs. 1449.12/- Lakh)

B. Expenditure: (Rs. in lakh)

S. No.	Particulars	For the year ended 31.03.2025	For the year ended 31.03.2024
(i)	Technology Transfer	23.90	23.83
(ii)	Books, Journal and Database Subscriptions	-	-
(iii)	Entrepreneurship Development	-	-
(iv)	Advertisement/Publicity/Publication	-	-
(v)	Foreign Travel and Meetings	5.70	1.47

C. CIF Value of import is Nil for the current reporting period.

20.12 Details of Fund available and Utilised (Rs. in lakh)

S. No.	Particulars	Fund Available	Fund Utilised	Limit Expired /Transferred	Balance
1	BIRAC	4,243.70	4,163.61	-	80.09
2	PPP Activities	2,358.91	3,835.13	-	-1476.22
3	PMU - DBT/BMGF:				
	(i) Operational	**1,606.64**	**271.09**	**-**	**1335.55**
	BMGF	1,606.59	271.09		1335.50
	DBT Operational	-	-		-
	DBT - Non Recurring	-	-	-	-
	WT Operational	0.05	-	-	0.05
	(ii) Projects	**17,695.98**	**5,418.99**	**496.86**	**11,780.14**
	BMGF	16,445.04	5,157.15		11,287.89
	DBT	576.27	45.14	496.86	34.27
	USAID	160.29	-		160.29
	GCI_Innovation Challenge	14.31	-		14.31
	WT Projects	5.03	-		5.03
	WT SANGER Projects	71.92	-		71.92
	GTL Juno	37.37			37.37
	WHO IKMC Program	234.01	216.70		17.31
	University of Oxford	151.74			151.74
	Total	**19,302.62**	**5,690.08**	**496.86**	**13,115.69**
4	MeitY(IIPME)	78.62	-	-	78.62
5	Make in India Facilitation Cell	42.34	72.70	-	-30.36
6	Bio-toilets in schools from NER	-1.66	-		-1.66
7	National BioPharma Mission (I3)	8,089.38	6,457.41	1,237.71	394.26
8	AcE Fund	2612.23	2,022.07	0.00	590.16
9	SSC(NTBN)	-25.55	0.06	-	-25.61
10	IndCEPI	308.07	297.16	35.19	-24.28
11	GBI	49.99	49.99	-	-
12	Covid Surksha	1,736.75	-	-	1,736.75
13	Amrit Grand Challenge JanCare program	110.72	56.39	-	54.33
14	Bio Manufacturing	-	2.93	-	-2.93

20.13 Supplementary Schedule on Scheme Balances as on 31.03.2025

20.13.1 PPP Activities Funds

(Rs. in lakh)

Particulars			AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance			-	294.58
Add:	Funds received from DBT		2,019.63	9,702.15
Add:	Interest Income		0.86	-
Add:	Recoveries from unspent grant		338.42	149.32
			2,358.91	10,146.05
Less:	**Amount disbursed during the year :**			
	Grants Disbursed	3,635.03		10,373.85
	Loans Disbursed	-		-
	Programme Expenses	199.24		291.96
	Interest Refund to DBT	0.86	3,835.13	-
			-1,476.22	(519.76)
Add :	Surplus Redeployed towards Expenses		-	519.76
	Unutilised Balance Carried Forward		**-1,476.22**	**-**

20.13.2 BIRAC Funds

(Rs. in lakh)

Particulars			AS ON 31.03.2025	AS ON 31.03.2024
	Opening Balance		213.88	(53.53)
Add:	Received from DBT		4,000.00	5,200.00
Add:	Interest Income		-	-
Add:	Recoveries from unspent grant		29.82	206.58
			4,243.70	5,353.05
Less:	**Amount disbursed for Grants**			
	Partnership Programmes	1,263.92		1,957.41
	Technology Transfer & Acquisition	18.49		225.17
	Intellectual Property	73.39		95.90
	Entrepreneurial Development	0.80		85.00
	Capacity Building & Awareness	147.35		82.21
	Regulatory Affairs & Policy Advocacy (RAPA)	10.88	1,514.83	-
			2,728.87	2,907.36
Less:	Utilisation towards:			
	Manpower Expenses	1,034.27		971.83
	Non-Recurring Expenses	231.61		316.56
	Recurring Expenses	1,176.33		1,251.01
	Interest Refunded	206.58	2,648.79	-
			80.08	367.96
Less:	Limit Expired		-	154.07
	Unutilised Balance Carried Forward		**80.08**	**213.89**

20.13.3 BMGF PMU

(Rs. in lakh)

Particulars			AS ON 31.03.2025	AS ON 31.03.2024
	Opening Balance			
	Operations Fund	1,564.35		1,794.30
	Project Fund	13,692.88	15,257.23	11,164.07
Add:	Received From BMGF - Project	2,114.90		2,598.46
	Received From BMGF - Operations	-		-
	Received From DBT - Project	539.67		1,422.55
	Received From DBT - Operations	-		76.01
	Received From WT SANGER	-		-
	Received From WT Projects	-		126.70
	GRL_Juno	36.89		
	WHO IKMC Program	234.01		
	Received From University of Oxford	150.99	3,076.46	-
Less:	Interest Refunded		-	11.61
Add::	Bank Interest & Unspent Grant		968.93	957.93
			19,302.62	18,128.41
Less:	**Project Disbursement**			
	GCI: GSED	-		26.31
	GCI: IKP	134.47		
	GCI: HPV	23.46		551.25
	GCI: AMR	-		5.43
	GCI: Ki Data Challenge	45.14		9.26
	GCI: Sentinels	6.69		3.31
	GCI: Selenium	-		173.73
	GCI: GIPA	70.50		11.56
	GCI: Covid 19	36.22		22.27
	GCI: MOMI	217.57		350.38
	GCI: Non-Hormonal Conteiceptive	307.94		307.52
	GCI: Innovation Challenge	-		36.11
	GCI: Med Tech	51.81		138.71
	GCI: RTTC	-		29.70
	GCI: NTD	38.18		184.41
	GCI: MOMI IDES-2021_N-Link	14.80		22.22
	GCI: WINGS Study	2,000.00		-
	GCI: AI for Ultrasound	396.47		-
	GCI: MOMI-3	699.83		-
	GCI: Cachexia TB	241.54		-
	GCI: Climate Change and Agriculture	220.75		-
	GCI: Climate Change and Health	123.90		-
	GCI: PhD Fellowship	87.00		-
	GCI: AI for Global Health	256.56		-
	GCI: WLGH Meeting	119.38		-
	GCI: KnIT 2	95.48		-
	GCI: WHO-IKMC	216.70		-
	GCI: MK Bhan Fellowship (Manpower)	14.61	5,419.00	-

Particulars			AS ON 31.03.2025	AS ON 31.03.2024
Less:	**Activities Expenditure**			
	KSTIP (KnIT)	-		4.27
	Communication Support	-	-	-
Less:	**Operational Expenditure**			
	Manpower Expense	135.42		178.17
	Meeting Expenses	60.30		53.80
	Expenses for Space	36.20		89.95
	Administrative Expenses	39.17		25.16
	Equipment Expenses	0.00		-
	Wellcome Trust- Manpower	-		-
	Management Expenses	-	271.09	11.65
Less:	Limit Expired		496.86	539.67
	Limit Transferred		-	96.33
	Balance Fund			
	BMGF - Projects	11287.89		13,412.07
	DBT - Projects	34.28		36.60
	USAID - Projects	160.29		155.62
	BMGF - Operations	1335.50		1,564.29
	DBT - Operations	-		-
	WT SANGER	71.92		69.83
	GCI Innovation Challenge	14.31		13.89
	WT Projects	5.03		4.89
	GRL Juno	37.37		-
	University of Oxford	151.74		-
	WHO IKMC Program	17.30		-
	WT- Operation	0.05	13,115.69	0.05
			13,115.69	**15,257.23**

20.13.4 MeitY(IIPME)

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
	Opening Balance	71.29	59.96
	Received during the period	-	-
		71.29	59.96
Add:	Bank Interest	2.14	-
	Recoveries from unspent grant	5.19	11.33
		78.62	71.29
Less :	Programme Expenditure*	-	-
	Operational Expenditure	-	-
		78.62	71.29
Add:	Fund Redeployed towards Expenses from BIRAC	-	-
	Unutilised Balance Carried Forward	**78.62**	**71.29**

* "The programme expenditure includes loan disburded amounting to Rs. NIL (PY NIL) having total outstanding Amount of Rs 5.06 lacs including accrued interest (PY Rs. 10.11 lacs)"

20.13.5 Make in India Facilitation Cell

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		-4.40	1.45
	Received during the period	46.74	-
		42.34	1.45
Add:	Limit Reassigned	-	54.38
Add:	Bank Interest		
		42.34	55.83
Less :	Operational Expenditure	72.70	58.78
	Interest Refund to DBT	-	1.45
	Limit Expired	-	-
	Unutilised Balance Carried Forward	**-30.37**	**(4.40)**

20.13.6 Bio-toilets in schools from North East Region

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		**-1.66**	**(1.66)**
	Received during the period	-	-
		-1.66	(1.66)
Add:	Bank Interest	-	-
		-1.66	(1.66)
Less :	Programme Expenditure	-	-
	Interest Refund to DBT	-	-
	Unutilised Balance Carried Forward	**-1.66**	**(1.66)**

20.13.7 National Biopharma Mission (Innovate in India)

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		1,177.47	238.54
	Received during the period	3,500.00	-
	Limit reassigned	2,139.54	11,272.85
		6,817.01	11,511.39
Add:	Recoveries from unspent grant	1,255.69	956.86
	Bank Interest	16.68	-
		8,089.38	12,468.25
Less :	Programme Expenditure	5,695.47	8,289.18
	Operational Expenditure	761.77	712.81
	Interest Refund to DBT	0.17	149.26
	Limit Expired	1,237.71	2,139.54
	Unutilised Balance Carried Forward	**394.26**	**1,177.46**

20.13.8 AcE Fund

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		**1,634.12**	**1,206.25**
	Limit reassigned	-	3,569.18
		1,634.12	4,775.44
Add:	Capital Redeem	252.65	124.39
Add:	Bank Interest and other receipts	725.46	633.30
		2,612.23	5,533.12
Less :	Ace Funding	1,215.26	2,224.58
	Operational Expenditure	8.30	5.72
	Limit Transferred to PPP	-	1,668.71
	Interest Refund to DBT	798.51	-
	Unutilised Balance Carried Forward	**590.16**	**1,634.12**

20.13.9 SSC (NTBN)

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		**-25.55**	**(25.55)**
	Received during the period	-	-
		-25.55	(25.55)
Add:	Bank Interest	-	-
		-25.55	(25.55)
Less :	Operational Expenditure	-	-
	Interest Refund to DBT	0.06	-
	Unutilised Balance Carried Forward	**-25.61**	**(25.55)**

20.13.10 Ind CEP

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		-2.48	(77.85)
	Received during the period	310.55	2,247.39
		308.07	2,169.54
Add:	Bank Interest	-	-
		308.07	2,169.54
Less :	Programme Expenditure	250.00	427.75
Less :	Operational Expenditure	47.16	33.43
Less :	Interest Refund to DBT	-	0.29
Less :	Limit Transferred to PPP and National Biopharma	-	1,400.00
Less :	Limit Expired	35.19	310.55
	Unutilised Balance Carried Forward	**-24.28**	**(2.48)**

20.13.11 GBI

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		49.99	0.80
	Received from DBT	-	50.00
	Sponsorship	-	-
	From BIRAC	-	-
		49.99	50.80
Add:	Bank Interest	-	-
		49.99	50.80
Less :	Refunded to DBT	49.99	-
	Interest Refund to DBT	-	0.81
Less :	Limit Expired	-	-
	Unutilised Balance Carried Forward	**-**	**49.99**

20.13.12 Covid Suraksha

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		1,446.13	931.68
	Received from DBT	-	21,428.32
		1,446.13	22,360.00
Add:	Bank Interest	-	-
Add:	Recoveries from unspent grant	290.62	1,381.57
		1,736.75	23,741.57
Less :	Operational Expenditure	-	13,697.52
Less :	Interest Refunded	-	564.49
Less :	Limit Expired	-	-
Less :	Limit Transferred to PPP	-	8,033.44
	Unutilised Balance Carried Forward	**1,736.75**	**1,446.13**

20.13.13 Amrit Grand Challenge JanCare program

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		59.59	107.39
Received from Confluence Health	50.00		50.00
CSR Fund		-	-
Received from IHF		-	-
	50.00	**50.00**	**50.00**
		109.59	157.38
Add: Bank Interest on CSR	0.25		2.52
Add: Bank Interest on IHF	0.88	1.13	-
		110.72	159.90
Less : Project Expenditure_IHF	50.00	-	-
Less : Project Expenditure_CSR	6.29	-	93.99
Less : Operational Expenditure_IHF	0.10	-	-
Less : Interest Refunded to DBT	-	56.39	6.34
Balance Fund			
CSR Fund	3.55		9.58
DBT Fund	-		-
IHF Fund	50.78	54.33	50.00
Unutilised Balance Carried Forward		**54.33**	**59.58**

20.13.14 BIO Manufacturing

(Rs. in lakh)

Particulars		AS ON 31.03.2025	AS ON 31.03.2024
Opening Balance		-	-
Funds received from DBT	-		-
	-	-	-
Add: Bank Interest	-	-	-
	-	-	
Less : Program Disbursement	-	-	-
Less : Operational Expenditure	2.93	2.93	-
Unutilised Balance Carried Forward		**-2.93**	**-**

20.14 Disclosures required under Section 22 of Micro, Small and Medium Enterprises (MSME) Development Act, 2006

(Rs. in lakh)

S. No.	Particulars	AS ON 31.03.2025	AS ON 31.03.2024
(i)	Principal amount remaining unpaid to MSME suppliers as at the end of the reporting period.	56.47	34.73
(ii)	Interest due thereon remaining unpaid to MSME suppliers as at the end of the reporting period.	-	-
(iii)	The amount of interest paid along with the amounts of the payment made to the supplier beyond the appointed day.	-	-
(iv)	The amount of interest due and payable for the period.	-	-
(v)	The amount of interest accrued and remaining unpaid at the end of the reporting period.	-	-
(vi)	The amount of further interest due and payable even in the succeeding year, until such date when the interest dues as above are actually paid.	-	-
	Total	**56.47**	**34.73**

The above information regarding dues to MSME has been determined to the extent such parties have been identified on the basis of information submitted

20.15.1 Details of Balances with Banks

(Rs. in lakh)

Particulars	AS ON 31.03.2025	AS ON 31.03.2024
Current Accounts		
Union Bank of India (DBT-BMGF PMU)	0.20	0.20
Saving Accounts		
Union Bank of India (BIRAC/Make In India/Bio-Toilets/MeitY)	5,345.21	24,836.42
HDFC Bank (BIRAC)	3.56	9.70
State Bank of India (PPP Activities/AcE,NBM)	751.30	196.49
State Bank of India (DBT-NBM PMU)	213.27	790.76
State Bank of India (DBT-BMGF PMU)	705.90	958.29
ICICI Bank (ZBSA)	0.00	-
RBI TSA Account	-	-
	7,019.24	**26,791.66**
Fixed Deposits		
- State Bank of India - Maturity less than 90 days	13,082.86	15,036.55
	13,082.86	**15,036.55**

Cash and Cash Equivalents include deposits maintained by the Company with banks, which can be withdrawn by the Company at any point of time without prior notice or penalty on the principal in accordance of the terms & conditions of the creation of the deposits.

20.15.2 Details of Interest earned and their Allocation on Program

(Rs. in lakh)

Particulars	Amount	Amount
Total Interest Received from Bank on FD and Saving bank accounts		1,478.94
Less: Interest Allocated on Program		
BIRAC		
PPP	0.86	
BMGF	930.46	
Meity	2.14	
Make in India	-	
Bio-toilets in schools from North East Region	-	
National Biopharma Mission (Innovate in India)	16.68	
AcE Fund	32.38	
SSC(NTBN)	-	
Ind CEPI	-	
Covid Suraksha	-	
Amrit Grand Challenge JanCare program	1.13	
On Loan Recovery	252.44	
Total	**1,236.09**	**1,236.09**
Balance Interest after allocation on Program		242.85
Less: Interest Transferred to Income and Expenditure account		242.85

20.16 Consequent to the amendment made in significant accounting policy as per 19.2.1(i)(a), 19.2.1(ii), 19.2.2, 19.2.3 & 19.2.4(b) the financial impact on the amendment is as under:

S. No.	Particulars	Impact
1	Reserves & Surplus	"Other Reserves amounting to Rs 16,07,91,578 as on 01.04.2024, showing the funds utilized for loans under PPP Activities after 31/03/2014 (Post BIRAC) including accrued interest has been transfered to loan portfolio (Un realized) under Other Long Term Liabilities. Post BIRAC Realised amount of Rs 83,32,09,171/- as on 01.04.2024 has been shown as Loan Portfolio (Realized) under Other Current Liabilities and is refunded to DBT in FY 2024-25. Interest on Post BIRAC Realised Rs 4,60,54,407/- as on 01.04.2024 has been shown as Bank Interest on Loan Portfolio (Realised) under Other Current Liabilities & is refunded to DBT in FY 2024-25."
2	Other Long Term Liabilities	Pre-BIRAC Unrealised Portfolio of Rs 58,20,33,003/- as on 01.04.2024 & Other Reserves amounting to Rs 16,07,91,578 as on 01.04.2024 are shown as Loan Portfolio (Unrealized) under Other Long Term Liabilities. Royalty amount & Benefit Sharing booked, from the FY 2024-25 are shown under Other Long term Liabilities & are transferred to Other current liabilities on its realization."
3	Other Current Liabilities	Other Reserves amounting to Rs Rs 83,32,09,171/- , of Post BIRAC Realized, & Pre-BIRAC Realized Portfolio of Rs 87,53,35,803/- as on 01.04.2024 has been shown as Loan Portfolio (Realized) under Other Current Liabilities and is refunded to DBT in FY 2024-25. Other Reserves amounting to Rs 4,60,54,407/- of Interest on post BIRAC realized as on 01.04.2024 has been shown under Other Current Liabilities & is refunded to DBT in FY 2024-25. Royalty amount & Benefit Sharing recoverd from the respective amount booked in & from FY 2024-25 are shown as Other Current Liabilities. Addtional interest recovered from the FY 2024-25 are shown under Other Current Liabilities.
4	Income & Expenditure	Royalty, Benefit sharing, additional interest are payable to DBT on its realization from the FY 2024-25. Royalty & Benefit Sharing booked from the FY 2024-25 are shown Other Long term Liabilities. Additional Interest when received is shown under Other Current Liabilities .

20.17.1 Disclosure of Corporate Social Responsibility - CSR for FY 2024-25 : NA

20.17.2 Disclosure on receipt of CSR Contribution

BIRAC being a Section - 8 company, the Board in its 40th Board Meeting held on 12th February, 2020 has approved for accepting CSR fund for furthering the mandate of BIRAC for setting up Incubation centres and innovation network in the country.

BIRAC has registered itself as an implementing agency under the Companies Act, 2013 and Rules made thereunder filing the Form CSR-1 to the Ministry of Corporate Affairs (MCA). The CSR registration number is CSR00025388.

BIRAC received CSR funds of Rs.Nil from 'Stryker Global Technology Center Private Limited' for ongoing project.

BIRAC received CSR funds of Rs. Nil from 'Stryker India Private Limited' for ongoing project.

CSR funds received during the financial year as below (Rs. in Lakh)

Particulars	Stryker Global Technology Center Private Limited	Stryker India Private Limited
Opening Balance as on 1st April 2024	7.66	1.93
Add: Interest earned during the year	0.20	0.05
Add: Fund received during the Year	0.00	0.00
Less: Fund Utilized during the Year	5.02	1.27
Closing Balance as on 31st March 2025	2.84	0.71

20.18 Disclosure pursuant to Accounting Standard (AS) 15 Revised "Employee Benefits" :

20.18.1 Disclosure on Gratuity

I Assumptions as at

Particulars	Financial Year	
	2024-25	2023-24
Interest / Discount Rate	6.37%	6.97%
Rate of increase in compensation	3.00%	3.00%
Rate of return (expected) on plan assets	6.37%	6.97%
Employee Attrition Rate(Past Service (PS))	0PS: 0 to 42 : 15%	0PS: 0 to 42 : 15%
	-	-
Expected average remaining service	5.00	5.00

II Changes in present value of obligations (Rs. in lakh)

Particulars		Financial Year	
		As on 31.03.2025	As on 31.03.2024
Defined Benefit Obligation at the beginning		**201.53**	**160.43**
Add :	Current Service Cost	12.44	10.47
Add :	Interest Cost	34.17	29.09
Add :	Prior Service Cost – Vested benefit	-	-
Add :	Prior Service Cost – Non Vested benefit	-	-
Add :	Curtailments	-	-
Less :	Benefits Paid directly by the Company	-	-
Less :	Benefits Paid from Fund	-	-15.77
Add/Less :	Net transfer in/(out) (including the effect of any business combinations/divestitures)	-	-
Add/Less :	Actuarial Loss / (Gain) on Obligation	-15.53	17.31
	Defined Benefit Obligation at the end	**232.61**	**201.53**

III Changes in fair value of plan assets (Rs. in lakh)

Particulars		Financial Year	
		As on 31.03.2025	As on 31.03.2024
Opening balance of the fair value of the plan assets		**143.71**	**149.34**
Add:	Adjustment to Opening balance	-0.42	0.40
Add:	Expected Return on plan assets	**9.99**	**10.13**
Add:	Contributions by Employer	**-**	**-**
Add:	Contributions by Employee	**-**	**-**
Add:	Assets Distributed on Settlements	**-**	**-**
Add:	Assets Acquired on acquisition/(Distributed on Divestiture)	**-**	**-**
Add:	Exchange Difference on Foreign Plans	**-**	**-**
Add/(less):	Actuarial gains/(losses)	**-9.99**	**-0.39**
Less:	Benefits Paid	**-**	**-15.77**
Closing balance of the plan assets		**143.29**	**143.71**

IV Fair Value of Plan Assets (Rs. in lakh)

Particulars		Financial Year	
		AS ON 31.03.25	AS ON 31.03.24
Opening balance of the fair value of the plan assets		143.71	149.34
Add:	Adjustment to Opening balance	-0.42	0.40
Add:	Actual Return on plan assets	-	9.74
Add:	Contributions by Employer	-	-
Add:	Contributions by Employee	-	-
Add:	Assets Distributed on Settlements	-	-
Add:	Assets Acquired on acquisition/(Distributed on Divestiture)	-	-
Add:	Exchange Difference on Foreign Plans	-	-
Add/(less):	Actuarial gains/(losses)	-	-
Less:	Benefits Paid	-	-15.77
Fair value of the plan assets at the end		**143.29**	**143.71**
Funded Status (including unrecognised past service cost)		-89.34	57.83
Excess of Actual over estimated return on Plan Assets		**-9.99**	**-0.39**

V Experience History (Rs. in lakh)

Particulars	Financial Year	
	2024-25	2023-24
(Gain)/Loss on obligation due to change in Assumption	5.56	1.28
Experience (Gain)/ Loss on obligation	-21.08	16.02
Actuarial Gain/(Loss) on plan assets	-9.99	-0.39

VI Actuarial Gain/(Loss) Recognized (Rs. in lakh)

Particulars	Financial Year	
	2024-25	2023-24
Actuarial Gain/(Loss) for the period (Obligation)	15.53	-17.31
Actuarial Gain/(Loss) for the period (Plan Assets)	-9.99	-0.39
Total Gain/(Loss) for the period	**5.54**	**-17.70**
Actuarial Gain/(Loss) recognized for the period	5.54	-17.70
Unrecognized Actuarial Gain/(Loss) at end of period	-	-

VII Past Service Cost Recognised (Rs. in lakh)

Particulars	1-APR 24 to 31-MAR-25
Past Service Cost - (non vested benefits)	
Past Service Cost - (vested benefits)	-
Average remaining future service till vesting of the benefit	-
Recognised Past service Cost - non vested benefits	-
Recognised Past service Cost - vested benefits	-
Unrecognised Past Service Cost - non vested benefits	-

VIII Amounts to be recognized in the balance sheet and statement of Income & Expenditure (Rs. in lakh)

Particulars	Financial Year	
	AS ON 31.03.25	AS ON 31.03.24
Present Value of Obligations at end of period	232.62	201.53
Fair Value of Plan Assets at end of period	143.28	143.71
Funded Status	-89.34	-57.83
Unrecognized Actuarial Gain/(Loss)	-	-
Unrecognised Past Service Cost- non vested benefits	-	-
Net Asset/(Liability) recognized in the balance sheet	**-89.34**	**-57.83**

IX Expense recognized in the statement of Income & Expenditure (Rs. in lakh)

Particulars	Financial Year	
	AS ON 31.03.25	AS ON 31.03.24
Current Service Cost	34.17	29.09
Interest Cost on Obligation	12.44	10.47
Past Service Cost	-	-
Expected return on Plan Assets	-9.99	-10.13
Amortization of Prior service cost	-	-
Net actuarial (Gain)/Loss to be recognised	-5.54	17.70
Transfer In/Out -	-	
Curtailment (Gain)/Loss recognized	-	-
Settlement (Gain)/Loss recognised	-	-
Expense recognised in Income & Expenditure	**31.08**	**47.14**

X Movements in the Liability recognized in Balance Sheet (Rs. in lakh)

Particulars	Financial Year	
	AS ON 31.03.25	AS ON 31.03.24
Opening Net Liability	57.83	11.09
Adjustment to opening balance	0.42	-0.40
Expenses as above	31.08	47.14
Expected return on Plan Assets	-	-
Transfer in Liability	-	-
Transfer in Fund	-	-
Transfer out Liability	-	-
Transfer out Fund	-	-
Benefits Paid By The Company	-	-
Contribution paid	-	-
Closing Net Liability	**89.33**	**57.83**

X Movements in the Liability recognized in Balance Sheet (Rs. in lakh)

Particulars	Financial Year	
	AS ON 31.03.25	AS ON 31.03.24
Current Liability	50.39	46.08
Non-Current Liability	182.23	155.45

XII Projected Service Cost 31 Mar 2026 Rs. In Lakh **36.04**

XIII Asset Information (Rs. in lakh)

Particulars	AS ON 31.03.25	
	Total Amount	Target Allocation %
Cash and Cash Equivalents Gratuity Fund (SBI Life Insurance)	143.28	100.00%
Debt Security - Government Bond	-	-
Equity Securities - Corporate debt securities	-	-
Other Insurance contracts	-	-
Property	-	-
Total Itemized Assets	**143.28**	**100.00%**

XIV Effects of changes in assumptions

Discount Rate : The discount rate has decreased from 6.97% to 6.37% and hence there is an increase in liability leading to actuarial loss due to change in discount rate.

Salary Escalation Rate : The salary escalation rate has remain unchanged and hence there is no change in liability resulting in no actuarial gain or loss due to change in salary escalation rate.

20.18.2 Disclosure on Leave Encashment

I Assets / Liabilities (Rs. in lakh)

As on	31st March, 2025	31st March, 2024
Present value of obligation	53.13	49.73
Fair value of plan assets	-	-
Net assets / (liability) recognized in balance sheet as provision	-53.13	-49.73

II Summary of membership data

As at		31st March, 2025	31st March, 2024
a)	Number of employees	48	49
b)	Total Monthly Salary for leave encashment (Lakhs)	53.64	51.90
c)	Total Monthly Salary for leave availment (Lakhs)	107.28	103.81
d)	Average Past Service (Years)	7.70	6.78
e)	Average Age (Years)	41.36	58.94
f)	Average remaining working life (Years)	18.64	1.06
g)	Leave balance considered on valuation date	976	1,333

III Actuarial Assumptions :

i)	Retirement Age (Years)	60/Contract Period	60/Contract Period
ii)	Mortality rate inclusive of Provision for disability	IALM (2012 - 14)	IALM (2012 - 14)
iii)	Ages	Withdrawal Rate (%)	Withdrawal Rate (%)
	Up to 30 Years	5.00	5.00
	From 31 to 44 years	5.00	5.00
	Above 44 years	5.00	5.00
iv)	Leaves		
	Leave Availment Rate	5%	5%
	Leave Lapse rate while in service	Nil	Nil
	Leave Lapse rate on exit	Nil	Nil
	Leave encashment Rate while in service	Nil	Nil

IV Change in benefit obligation (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Present value of obligation as at the beginning of the period	48.73	36.68
b)	Acquisition adjustment	--	--
c)	Interest cost	3.43	2.58
d)	Past service cost	-	-
e)	Current service cost	8.22	8.72
f)	Curtailment cost/(Credit)	--	--
g)	Settlement cost/(Credit)	--	--
h)	Benefits paid	-18.83	-5.26
i)	Actuarial (gain)/loss on obligation	11.58	6.00
j)	Present value of obligation as at the end of period	53.13	48.73

V The amounts to be recognized in balance sheet and related analysis (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Present value of obligation as at the end of the period	53.13	48.73
b)	Fair value of plan assets as at the end of the period	--	--
c)	Funded status / Difference	-53.13	-48.73
d)	Excess of actual over estimated	--	--
e)	Unrecognized actuarial (gains) / losses	--	--
f)	Net asset / (liability)recognized in balance sheet	-53.13	-48.73

VI Expense recognized in the statement of Income & Expenditure (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Current service cost	8.22	8.72
b)	Past service cost	-	-
c)	Interest cost	3.43	2.58
d)	Expected return on plan assets	--	--
e)	Curtailment cost / (Credit)	--	--
f)	Settlement cost / (credit)	--	--
g)	Net actuarial (gain) / loss recognized in the period	11.58	6.00
h)	Expenses recognized in the statement of Income & Expenditure	23.22	17.31

VII Reconciliation statement of expense in the statement of profit and loss (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Present value of obligation as at the end of period	53.13	48.73
b)	Present value of obligation as at the beginning of the period	48.73	36.68
c)	Benefits paid	18.83	5.26
d)	Actual return on plan assets	--	--
e)	Acquisition adjustment	--	--
f)	Expenses recognized in the statement of Income & Expenditure	23.22	17.31

VIII Amounts for the current period (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Present value of obligation as at the end of period	53.13	48.73
b)	Fair value of plan assets at the end of the period	.	--
c)	Surplus / (Deficit)	-53.13	-48.73
d)	Experience adjustment on plan Liabilities (loss) / gain	-9.78	-6.00
e)	Experience adjustment on plan Assets (loss) / gain	--	--

IX Movement in the liability recognized in the balance sheet (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Opening liability	48.73	36.68
b)	Expenses as above	23.22	17.31
c)	Benefits paid	-18.83	-5.26
d)	Actual return on plan assets	--	--
e)	Acquisition adjustment	--	--
f)	Closing liability	53.13	48.73

X Bifurcation of PBO at the end of year as per schedule III to the companies Act, 2013 (Rs. in lakh)

		31.03.2025	31.03.2024
a)	Current liability	6.77	21.16
b)	Non-Current liability	46.36	27.57
c)	Total PBO at the end of year	53.13	48.73

20.19 Other Non-Current Investment (Rs. in lakh)

S. No.	Particulars	Financial Year Ending	
		As on 31st March 2025	As on 31st March 2024
1	**Other Non-Current Investment (unquoted)**		
	a) GVFL Start-up Fund	753.15	751.94
	b) IAN Fund	1,578.31	1,756.64
	c) Stakeboat Capital Fund	248.04	248.04
	d) Bharat Innovation Fund	2013.68	1,894.25
	e) Kitven Fund - 3	400.00	400.00
	f) Ankur Fund II	1,105.85	943.28
	g) Endiya Partners Trust	1,432.21	1,308.29
	h) RVCF India Growth Fund	353.13	423.53
	i) Somerset Indus Healthcare India Fund	846.17	846.17
	j) Nabentures Fund I-Investment	685.27	569.30
	k) Alkemi Venture Fund II- Scheme I	297.20	104.60
	l) Stakeboat Capital Fund - IIA	366.46	204.59
	m) Ideaspring Capital Future Now II	627.26	377.26
	n) Ankur Fund III	15.28	-
		10,722.02	**9,827.89**

Note: .

1. BIRAC is implementing the Biotechnology Innovation Fund - AcE Fund initiated by Department of Biotechnology, Government of India for providing risk capital to Biotech start-ups for product development cycle and growth phase.
2. The value of the investments are stated at cost . Provision for diminution in the value of long-term investments is made only if such a decline is other than temporary.
3. BIRAC undertakes Management and operation of AcE fund in the area of Biotechnology and life sciences and holds all investments made out of the AcE Fund in a fiduciary capacity for DBT.

Contingent liability

a) Liabilities for Suits filed against company is Nil

b) Capital Contribution with respect to AcE fund draw down request as per the agreement is yet to be received amounting to Rs. 5860.92 Lakhs.

Rs. in Lakh

Name of Fund	For the Year Ended 2025			For the Year Ended 2024	
	Committed Amount	Disbursement	Balance Committed	Disbursement	Balance Committed
GVFL Start-up Fund	800.00	774.53	25.47	762.21	37.79
IAN Fund	2,000.00	1,949.79	50.21	1,919.26	80.74
Stakeboat Capital Fund	500.00	500.00	0.00	500.00	0.00
Bharat Innovation Fund	2,500.00	2,013.68	486.32	1,894.25	605.75
Kitven Fund - 3	400.00	400.00	0.00	400.00	0.00
Ankur Fund II	1,200.00	1,119.36	80.64	956.78	243.22
Endiya Partners Trust	1,650.00	1,470.70	179.30	1,321.17	328.83
RVCF India Growth Fund	500.00	468.72	31.28	455.95	44.05
Somerset Indus Healthcare India Fund	900.00	846.17	53.83	846.17	53.83
Nabentures Fund I-Investment	1,000.00	717.19	282.81	596.05	403.95
Alkemi Venture Fund II- Scheme I	1,150.00	297.20	852.80	104.60	1,045.40
Stakeboat Capital Fund - IIA	750.00	366.46	383.54	204.59	545.41
Ideaspring Capital Future Now II	1,000.00	650.00	350.00	400.00	600.00
Ankur Fund III	800.00	15.28	784.72	-	-
IAN Alpha Fund	1,800.00	-	1,800.00	-	-
Somerset Indus Healthcare India	500.00	-	500.00	-	-
Total	**17,450.00**	**11,589.08**	**5,860.92**	**10,361.05**	**3,988.95**

20.21 The previous year's figures are reclassified and regrouped in accordance with the requirements applicable in the current financial year to make items comparable.

20.22 Relationship with MCA struck off Companies (Rs. in lakh)

Name of The struck off Companies	Nature of Transaction with struck off companies	Loan outstanding	Relationship with struck off companies, if any, to be disclosed
Usha Biotech Limited	Other outstanding balances (nature to be specified such as Loan Portfolio, Grants Disbursed etc.)	6.66	Borrower
Erkadi Medical Systems Pvt Limited	Other outstanding balances (nature to be specified such as Loan Portfolio, Grants Disbursed etc.)	31.41	Borrower

20.23 Ratio Analysis

S. No.	Particulars	Numerator	Denominator	Current Period	Previous Period	% Variance	Reason for Variance
1	Current Ratio (no. of times)	Total Current Assets	Total Current Liabilities	1.28	1.46	-12.30 %	Depicts decrease fund position
2	Debt - Equity Ratio	Total Debt (Long term borrowings + Short term borrowings (including current maturities of long term borrowings))	Equity	NA	NA	NA	NA
3	Debt Service Coverage Ratio (no. of times)	EBITDA	(Finance costs + Short term borrowings (including Current maturities of long term borrowings)	NA	NA	NA	NA
4	Return on Equity Ratio (%)	Net Income (PAT)	Shareholder's Equity	5.97%	1.25%	377.89%	Due decrease in Reserve & Surplus
5	Inventory Turnover Ratio (no. of times)	Cost of Goods Sold	Average Inventory	NA	NA	NA	NA
6	Trade Receivables Turnover Ratio (no. of times)	Net Credit Sales	Average Accounts Receivable	NA	NA	NA	NA
7	Trade Payables Turnover Ratio (no. of times)	Net Credit Purchases	Average Accounts Payable	NA	NA	NA	NA
8	Net Capital Turnover Ratio (no. of times)	Total Sales	Shareholder's Equity	4.40	2.85	54.55%	Due to decrease of Grant received
9	Net Profit Ratio (%)	Net Profit	Net Sales	1.36%	0.44%	208.23%	Increase in profit
10	Return on Capital Employed (%)	EBIT	Capital Employed	5.97%	9.13%	-34.56%	Due decrease in Reserve & Surplus
11	Return on investment (%)*	Net Profit	Cost of Investment	NA	NA	NA	NA

*** BIRAC undertakes Management and operation of AcE fund in the area of Biotechnology and life sciences and holds all investments made out of the AcE Fund in a fiduciary capacity for DBT. Income if any generated it will be ploughed back to fund and hence ratio has not been calculated.**

20.24 List of Abbreviations used in Financial Statements:

S. No.	Abbreviation	Description
1	BIRAC	Biotechnology Industry Research Assistance Council
2	AcE Fund	Accelerating Entrepreneurs
3	ACT	All Children Thriving
4	AgNu	Agriculture-Nutrition Projects
5	AMR	Antimicrobial Resistance
6	BCIL	Biotech Consortium India Limited
7	BIG	Biotechnology Ignition Grant
8	BIPP	Biotechnology Industry Partnership Programme
9	BISS	Bio Incubator Support Scheme
10	BMGF	Bill Melinda Gates Foundation
11	CRS	Contract Research Scheme
12	DBT	Department of Biotechnology, Ministry of Science & Technology, Government of India
13	ETA	Early Translational Accelerator
14	FD	Fixed Deposit
15	GCI	Grand Challenges India
16	HBGDKi	Healthy Birth Growth Development Knowledge Integration
17	NSIC	National Small Industries Corporation
18	IDIA	Immunization Data for Innovating Action
19	IIPME	Industry Innovation Programme on Medical Electronics
20	IMPRINT	Improving Growth in Infant Trail
21	IP	Intellectual Property
22	Ki	Knowledge Integration Data Challenge Programme
23	KSTIP(KnIT)	Knowledge Integration and Translation Platform (Knowledge Integration)
24	MeitY	Ministry of Electronics and Information Technology
25	Misc.	Miscellaneous
26	MTNL	Mahanagar Telephone Nigam Limited
27	NBM (I3)	National Biopharma Mission (Innovate in India)
28	PMC	Projects Monitoring committee
29	PMU	Programme Management Unit
30	PPP Activities	Public-Private Partnership Activities (Earlier termed as Industry and Manufacturing (I&M) Sector.)
31	RTTC	Reinvent the Toilet Challenge
32	SBI	State Bank of India
33	SBIRI	Small Business Innovation Research Initiative
34	SPARSH	Social Innovation programme for Products: Affordable & Relevant to Societal Health

S. No.	Abbreviation	Description
35	SSC-NTBN	Secretariat for Scientific sub-committee under the National Technical Board on Nutrition.
36	TA & DA	Travel Allowance & Diem Allowance
37	UIC	University Innovation Cluster
38	WT	Wellcome Trust
39	IndCEPI	Coalition for Epidemic preparedness Innovative
40	GBI	Global Bio India
41	MSME	Ministry of Micro, Small and Medium Enterprises
42	TSA	Treasury Single Account
43	ZBSA	Zero Balance Subsidiary Account

Auditors Report

As per our report of even date attached
For Gupta Garg & Agrawal
Chartered Accountants
Firm Reg.No. 505762C

For and on behalf of Board of Directors

Sd/-
CA. Amit Kumar Jain
(Partner)
Membership No.509349

Sd/-
Kavita Anandani
Company Secretary

Sd/-
CA. Nidhi Shrivastava
Director (Finance)
DIN 09436809

Sd/-
Dr. Jitendra Kumar
Managing Director
DIN 07017109

Place : **New Delhi**
Date : **23rd July 2025**
UDIN: 25509349BMOHWE5263

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 143(6) (b) OF THE COMPANIES ACT, 2013 ON THE FINANCIAL STATEMENTS OF BIOTECHNOLOGY INDUSTRY RESEARCH ASSISTANCE COUNCIL FOR THE YEAR ENDED 31 MARCH 2025.

The preparation of financial statements of Biotechnology Industry Research Assistance Council (BIRAC) for the year ended 31 March 2025 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the Company. The Statutory Auditors appointed by the Comptroller and Auditor General of India under Section 139(5) of the Act are responsible for expressing opinion on the financial statements under Section 143 of the Act based on independent audit in accordance with the standards on auditing prescribed under Section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 23.07.2025.

I, on behalf of the Comptroller and Auditor General of India have decided not to conduct the supplementary audit of the financial statements of Biotechnology Industry Research Assistance Council (BIRAC) for the year ended 31 March 2025 under Section 143 (6) (a) of the Act.

For and on behalf of the
Comptroller & Auditor General of India

Sd/-
(Dr. Kavita Prasad)
Director General of Audit, Central Expenditure
(Environment & Scientific Departments)

Place: New Delhi
Date: 10.09.2025

Biotechnology Industry Research Assistance Council

CIN U73100DL2012NPL233152
Regd. Office: 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi-110020
Website: www.birac.nic.in **Email:** birac.dbt@nic.in **Tel:** +91-11-29878000, **Fax:** +91-11-29878111

ATTENDANCE SLIP

Name of the member/Proxy (In Block Letters)	
Name of the member/Proxy:	
Folio No. :	
No. of Shares Held :	

I Certify that I am member/Proxy for the member of the company.

I hereby record my presence at the 13th Annual General Meeting of the Company held on 24th September, 2025 at 01.00 PM at Biotechnology Industry Research Assistance Council, 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi-110020.

.....
Member's/Proxy's Signature

Biotechnology Industry Research Assistance Council

CIN U73100DL2012NPL233152
Regd Office: 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi-110020
Website: www.birac.nic.in **Email:** birac.dbt@nic.in **Tel:** +91-11-29878000, **Fax:** +91-11-29878111

FORM NO. MGT-11 (PROXY FORM)

[Pursuant to Section 105(6) of the Companies Act, 2013 and Rule 19(3) of the Companies (Management and Administration) Rules, 2014.

Name of the Member(s):	
Registered Address:	
E-mail ID:	
Folio No.	

I / We, being the holder (s) of ..... shares of the above named Company, hereby appoint:

1. Name:..... Address:.....

   E-mail ID:..... Signature:.....

as my / our proxy to attend and vote (on a poll) for me on my/our behalf at the 13th Annual General Meeting of the Company held on 24th September, 2025 at 01.00 PM at Biotechnology Industry Research Assistance Council, 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi-110020.and at any adjournment thereof in respect of such resolutions as are indicated below:

Sr. No.	Resolutions	For	Against
1.	To receive, consider and adopt the Audited Financial Statement of the Company as on March 31st 2025 together with the Reports of the Directors and Auditor thereon and comments of the Comptroller & Auditor General of India in terms of Section 143(6)(b) of the Companies Act, 2013		
2.	To fix the remuneration of the Statutory Auditor for the financial year 2025-26, in terms of provisions of Section 139(5) read with Section 142 of the Companies Act, 2013		

Signed this day of September 2025

Signature of Shareholder (s) .....

Signature of Proxy holder(s) .....

Affix Revenue Stamp

NOTES:

1. MEMBERS ENTITLED TO ATTEND AND VOTE MAY APPOINT ONE OR MORE PROXIES TO ATTEND AND VOTE INSTEAD OF THEMSELVES. PROXIES TO BE VALID MUST BE RECEIVED AT THE REGISTERED OFFICE OF THE COMPANY.
2. ONLY BONAFIDE MEMBERS OF THE COMPANY WHOSE NAMES APPEAR IN THE REGISTER OF MEMBERS IN POSSESSION OF VALID ATTENDANCE SLIPS DULY FILED AND SIGNED WILL BE PERMITTED TO ATTEND THE MEETING. THE COMPANY RESERVES ITS RIGHT TO TAKE ALL STEPS AS MAY BE DEEMED NECESSARY TO RESTRICT NON-MEMBERS FROM ATTENDING THE MEETING.

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birac®
Ignite Innovate Incubate

Biotechnology Industry Research Assistance Council

(A Government of India Enterprise)

Regd. Office : 5th Floor, NSIC Business Park, NSIC Bhawan, Okhla Industrial Estate, New Delhi - 110020

CIN No. : U73100DL2012NPL233152 I Email : birac.dbt@nic.in, Website : www.birac.nic.in

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