@n-ABLE
The e-newsletter for the Indian Biotech industry

www.ableindia.in

March 2025 | Issue 0020

IBER 2025 Report Released

India BioEconomy soars to $165.7 billion in 2024, Startups touch 10,075

Greeting to all our members!

I am delighted to share the highlights of the India BioEconomy Report (IBER) 2025, prepared by ABLE for BIRAC, that was released by the Union Minister for S&T and PMO, Dr Jitendra Singh, in New Delhi on 21st March 2025. A key feature this time was the simultaneous release of the English and Hindi versions of IBER 2025.

The BioEconomy has grown by 9.8 % over 2023 to $ 165.7 billion and the number of startups in the country has crossed a major milestone to reach 10,075 in 2024. BioEconomy contributed 4.25 percent to the national GDP in 2024. This is on par with the contribution of this sector in major economies like the US (5%) and China (4%). This means our national BioEconomy is on a similar growth path that exists in major global economies. The BioIndustrial segment continued its dominance contributing 47.2% with BioPharma (35.2%) standing second. The analysis of state-level contributions reveals a distributed landscape. Maharashtra stands out as the leading state, followed by Karnataka and Telangana. The study also shows that states exhibit specialized strengths across segments. The details are available in the 122-page report.

This newsletter also covers full details of the successful BioEconomy Conclave 2025 conducted in February 2025 by ABLE. The event was well attended with participation from all segments of the industry from around the country. ABLE Governing Body members steered all the key panel discussions and the event provided many valuable suggestions on the event theme, **"Focusing on Emerging Technologies in Shaping the World."**

All the important recommendations from the Conclave have been captured in detail in this newsletter. Many of these suggestions have been mentioned in the IBER 2025 report, to bring to the attention of policy makers.

We at ABLE look forward to your continued support to all our activities and welcome you all to participate wholeheartedly in the **India Pavilion** being set up by ABLE at the world's largest biotechnology event, BIO Boston 2025 from June 16-19, which is supported by BIRAC.

Happy reading!
G S Krishnan
Hon. President

IN THIS ISSUE

India BioEconomy Report 2025 Released

21 March 2025

The **India BioEconomy Report 2025** was officially launched by **Dr. Jitendra Singh**, Hon'ble Minister for Science & Technology & PMO, Government of India during the 13th BIRAC Foundation Day Ceremony at the National Media Centre in New Delhi. The report highlights India's remarkable progress in biotechnology, with the **BioEconomy reaching $165.7 billion in 2024, marking a 16-fold increase over the past decade**. This rapid growth underscores the government's focus on fostering biotechnology as a pillar of economic expansion.

Dr. Jitendra Singh emphasized that India's bioeconomy is on track to reach $300 billion by 2030, driven by the Bio-E3 Policy (Biotechnology for Economy, Employment, and Environment). This policy aims to position India as a global leader in biotech innovation and biomanufacturing.

Mr. G S Krishnan, Hon. President, ABLE, provided valuable insights into the progress across key biotech sectors BioPharma, BioIndustrial, BioAgri, and BioServices, while highlighting the vast potential of India's BioEconomy. He highlighted that the number of biotech startups has reached 10,075 in 2024.

The report also recognizes the key contributions of all the sectors with India being the world's largest vaccine producer and home to 60% of global vaccine manufacturing. Key recommendations in the report focus on scaling up investments, strengthening private sector participation, and expanding India's biotech capabilities through strategic policy interventions. This initiative reaffirms India's commitment to integrating biotechnology into national development and fostering an innovation-driven bioeconomy.

Watch the recording here: **https://www.youtube.com/live/x0_02yTkvxs**

IN THIS ISSUE

IBER 2025 Press Coverage

- https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2113745
- https://www.thehansindia.com/business/indias-bioeconomy-sees-16-fold-rise-to-reach-1657-billion-in-10-years-minister-955988
- https://www.dailyexcelsior.com/dr-jitendra-releases-india-bioeconomy-report-16-fold-growth-in-10-years/
- https://www.theweek.in/news/biz-tech/2025/03/21/india-s-bio-economy-expanded-16-fold-in-ten-years-dr-jitendra-singh.html
- https://www.siliconindia.com/news/general/indias-bioeconomy-has-witnessed-a-remarkable-16fold-rise-in-10-years-of-the-past-one-decade-nid-235044-cid-1.html
- https://www.newsonair.gov.in/indias-bioeconomy-hits-165b-dr-jitendra-singh-launches-bio-sarthi-bioeconomy-report/
- https://www.business-standard.com/markets/capital-market-news/india-s-bio-economy-witnessed-16-fold-rise-in-last-ten-years-125032101004_1.html
- https://theprint.in/india/jitendra-singh-calls-for-bigger-private-investments-in-bio-economy/2559616/
- https://www.etvbharat.com/en/!business/india-bio-economy-growth-targets-enn25032107174
- https://apacnewsnetwork.com/2025/03/indias-bio-economy-soars-to-165-7-billion-in-a-decade-union-minister-dr-jitendra-singh/
- https://indusbusinessjournal.com/2025/03/indias-bioeconomy-sees-16-fold-rise-to-reach-165-7-billion-in-10-years-minister/
- https://www.devdiscourse.com/article/science-environment/3288210-indias-bioeconomy-soars-agri-biotech-in-jk-holds-untapped-potential-says-dr-jitendra-singh
- https://biovoicenews.com/birac-turns-13-dr-jitendra-singh-releases-india-bioeconomy-report-2025/
- https://www.deccanherald.com/india/indias-bio-economy-may-touch-300-billion-by-2030-says-report-3458593
- https://www.fiinews.com/2025/03/22/manufacturing-bio-economy-grew-to-165-7bn/

- https://www.universitycube.net/news/indias-bioeconomy-soars-165-billion-innovation-bio-e3-policy-03-21-2025--f8274b7a-17f6-4759-89e8-5ee280bc1131
- https://www.thehansindia.com/business/indias-bioeconomy-sees-16-fold-rise-to-reach-1657-billion-in-10-years-minister-955988
- https://www.digitalhealthnews.com/india-s-bioeconomy-surges-to-165-7-billion-driven-by-innovation-policy-support
- https://www.sarkaritel.com/indias-bioeconomy-sees-16-fold-rise-to-reach-165-7-billion-in-10-years-minister/
- https://www.sakshipost.com/news/indias-bioeconomy-sees-16-fold-rise-reach-1657-billion-10-years-minister-389409
- https://www.lokmattimes.com/technology/indias-bioeconomy-sees-16-fold-rise-to-reach-1657-billion-in-10-years-minister-2/
- https://www.newkerala.com/news/o/indias-bioeconomy-sees-16-fold-rise-reach-1657-billion-10-565
- https://in.investing.com/news/economy-news/indias-bioeconomy-sees-16fold-rise-to-reach-1657-billion-in-10-years-minister-4734922
- https://investmentguruindia.com/newsdetail/india-s-bioeconomy-sees-16-fold-rise-to-reach-165-7-billion-in-10-years-minister588670

Economic Times 24/03/2025

South Leads in Bioeconomy Boom with 45.4% Share in '24

Maharashtra, Karnataka and Telangana key biotech hubs, contributing 38.8% to national total

ET 24/03/2025

Our Bureau

Bengaluru: South India accounted for the largest share of India's bioeconomy, accounting for $35.2 billion (45.4%) in 2024, followed by the western region at $30.02 billion (38.7%), according to an industry report. Maharashtra, Karnataka and Telangana emerged as the key biotech hubs, collectively accounting for 38.8% of the national total.

"This concentration suggests that these states have favourable conditions for biotech innovation, such as robust infrastructure, access to funding and a skilled talent pool," said the India Bioeconomy report published by the Association of Biotechnology Led Enterprises.

The bio-industrial segment, followed by biopharma, remained the top contributor to India's bioeconomy which reached $165.7 billion in 2024. Over the last decade, the sector has seen 16-fold growth.

"With advancements in biomanufacturing, agribiotech and health sciences, India is poised to reach its ambitious bioeconomy targets, creating new opportunities for startups, researchers and industries," said GS Krishnan, honorary president of the Association of Biotechnology Led Enterprises.

Collaboration among industry, academia and policymakers will be crucial for India to become a global bio-industrial hub, he said.

Earlier this week, science and technology minister Jitendra Singh called for greater private-sector investments in bioeconomy.

"We are witnessing the dawn of a bio-revolution that will be as transformative for India as the IT revolution was for the West. With sustained efforts, India is not just participating in the global biotechnology revolution — we are leading it," Singh said in Delhi while launching Bio Saarthi, a global mentorship initiative.

The number of biotech startups doubled in 2024, reaching 10,075. The number of new startups registered in the year, however, fell more than 13% to 1,544 from 1,776 in 2023.

The bioeconomy contributes 4.25% to India's GDP, driven by growth in biotechnology agriculture, innovation, biomanufacturing and healthcare.

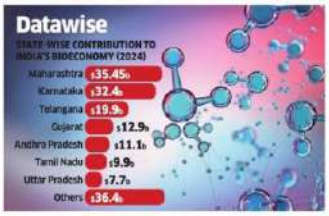
By 2030, the sector is projected to double to $300 billion with a 12.3% compound annual growth rate, the report said.

IN NUMBERS

The number of biotech startups doubled in 2024, reaching 10,075. New startups registered in the year fell over 13%

Datawise

STATE-WISE CONTRIBUTION TO INDIA'S BIOECONOMY (2024)



Deccan Herald 23/03/2025

RISE TO TOP

India's bio-economy may touch $300 bn by 2030: Report

KALYAN RAY
NEW DELHI, DHNS

India's bio-economy can touch $300 billion in the next five years, nearly doubling from the $165.7 billion in 2024, according to a new biotech industry report.

The biotechnology-driven economy has witnessed a remarkable 16-fold rise in the last 10 years, from $10 billion in 2014 to an impressive $165.7 billion in 2024, with Maharashtra and Karnataka being top two states in the sunrise sector.

The sector contributes 4.25% to the overall GDP and has shown a compound annual growth rate of 17.9% over the past four years, showcasing India's potential as a global biotech powerhouse like the US and China, says the India Bio-economy Report, 2025 prepared by the Association of Biotechnology-led Enterprises (ABLE) for Biotechnology Industry Research Assistance Council.

"This is just the beginning. India's bio-economy can grow to contribute 10-12% of the GDP over the next decade, potentially elevating India into the ranks of world's top bio-based economies," said Rajesh Gokhale, Secretary, Department of Biotechnology.

The report — released by the Union Science Minister Jitendra Singh on March 21 — projects India's bio-economy market size to cross the $200-billion mark by 2027 and reach the $300-billion milestone by 2030.

"A key milestone highlighted in the report is the growth of India's bio-startup ecosystem, which has now surpassed 10,075 startups, showcasing the country's dynamic innovation landscape," said GS Krishnan, ABLE president.

The two biggest areas for growth would be bio-medical and bio-industrial sectors that may increase to $128 billion and $121 billion respectively by 2030.

The report comes a few months after the Cabinet approved the Bio-E3 policy — Biotechnology for Economy, Employment, and Environment — which seeks to promote bio-manufacturing activities and bio-foundries besides generating skills and manpower for the sector.

ABLE BioEconomy Conclave 2025

13 February 2025

India's Biotech business continues its rapid growth, with the BioEconomy surpassing $150 billion and on track to achieve $300 billion by 2030. To catalyze this growth and foster collaboration, the **BioEconomy Conclave 2025**, organized by the **Association of Biotechnology Led Enterprises (ABLE)**, provided a dynamic platform to explore opportunities, innovations, and advancements across the biotech landscape. Held under the theme ***"Focusing on Emerging Technologies in Shaping the World"***, the event convened industry leaders, policymakers, and experts to discuss transformative developments in biotechnology. **The conclave took place on 13th February at TAJ MG Road, Bengaluru from 09:00 AM to 07:00 PM (IST)**, featuring a packed agenda of insightful sessions, keynote addresses, and networking opportunities.

The BioEconomy Conclave 2025 kicked off with the **Inaugural Session** followed by five specialized sessions focusing on key biotech sectors: **BioPharma**, **BioAgri**, **BioIndustrial**, **TechMed**, and **Startups & Incubators**. Each session featured distinguished keynote speakers, expert panelists, and moderators.

The conclave was honored by the presence of **Shri. Priyank M Kharge**, Hon'ble Minister of Electronics, IT & Bt and Rural Development and Panchayat Raj, Government of Karnataka, and **Dr. Kiran Mazumdar Shaw**, Hon. Non-Executive Chairperson of ABLE and Executive Chairperson of Biocon & Biocon Biologics, whose participation highlighted the event's strategic importance.

Inaugural Session

The BioEconomy Conclave 2025 was inaugurated by **Shri. Priyank M Kharge**, Hon'ble Minister of Electronics, IT & Bt and Rural Development and Panchayat Raj, Government of Karnataka and **Dr. Kiran Mazumdar Shaw**, Hon. Non-Executive Chairperson of ABLE and Executive Chairperson of Biocon & Biocon Biologics with the gracious presence of **Dr. P M Murali**, President, ABLE Council of Presidents & CMD, Jananom and **Mr. G S Krishnan**, Hon. President, ABLE. **Ms. Debjani Ghosh**, Distinguished Fellow & Chief Architect-NITI Frontier Tech Hub, NITI Aayog joined us online. The session set the tone for the day, emphasizing India's biotech potential and the role of emerging technologies in shaping global advancements and outlining the roadmap to achieving the $300 billion BioEconomy target by 2030.

Shri. Priyank M Kharge likely highlighted Karnataka's leadership in fostering biotech innovation, emphasizing the state's strong ecosystem. He stated, "The state government is committed to introducing agile policies, including the possibility of a State Biodiversity Bill aligned with the central government. Additionally, we plan to convene a roundtable with biotech industry leaders ahead of the upcoming state budget. Karnataka has already positioned itself as a research hub, a manufacturing powerhouse, and an innovation capital. The government will extend full support to further drive the growth of the biotech sector." The Minister also elaborated on the Karnataka Biotechnology Policy 2024-2029, which aims to create 30,000 jobs and establish biomanufacturing hubs across the state. He emphasized Karnataka's significant contributions to India's bioeconomy, stating that the state alone accounts for $31 billion of the sector's total value.

Dr. Kiran Mazumdar-Shaw emphasized the biotech industry's potential to tackle global challenges through emerging technologies. Highlighting India's vast opportunities in the sector, she stated, "India is recognized as the world's largest vaccine manufacturer and the leading producer of generic drugs. Biocon ranks as the third-largest insulin producer and is among the top global players in biosimilars. However, while India is often seen as a supplier of low-cost medicines, the reality is that we are providing global health security—an aspect that must be better highlighted." She stressed the need for a robust ecosystem to foster innovation and new product development in India. She pointed out that future trends in healthcare will be driven by predictive, precision, and personalized medicine. Predictive healthcare will rely heavily on advanced diagnostics, while precision medicine will leverage biomarkers for targeted treatment. Meanwhile, personalized medicine, particularly in cell and gene therapy, holds tremendous potential for revolutionizing cancer care with both curative and maintenance therapies. She further underscored the importance of disrupting the cost of therapy to make these advanced treatments accessible, stating that India has the capability to achieve this transformation. She also highlighted the crucial role of government support in driving this innovation and ensuring India's leadership in the global biotech landscape.

Dr. P M Murali emphasized that the future of biotechnology lies in personalized medicine, synthetic biology, precision agriculture, biomanufacturing, and technology-driven, high-quality, low-cost medicines. He stressed that investing in research and development is critical, as neglecting innovation could hinder progress. He highlighted the availability of biomanufacturing facilities and acknowledged the Union government's significant support for the sector. Additionally, Dr. Murali emphasized that fostering collaboration will be key to accelerating market entry and strengthening human capital, driving further growth in the biotech industry.

Mr. G.S. Krishnan highlighted that India's key focus areas in biotechnology include biomanufacturing, bioservices, med-tech, startup incubation, biosecurity, and regulatory frameworks. He emphasized that the sector is on track to grow from its current $150 billion to $300 billion by 2030. He also acknowledged the significant contributions of Maharashtra, Karnataka, Telangana, Gujarat, Andhra Pradesh, and Delhi, among others, in driving India's biotech growth

Ms. Debjani Ghosh highlighted biotechnology's role in India's economic transformation. She underscores biotech as a key growth driver, emphasizing advancements in AI, synthetic biology, and genomics that are reshaping sectors like BioPharma, BioAgri, and TechMed. Advocating for policy support, collaboration, and innovation, she envisions India as a global biotech leader. Watch the full video for more insights!

The session outlined the conclave's objectives to bridge gaps between policy, industry, and innovation, and to propel India toward its $300 billion BioEconomy goal by 2030.

Watch the session recording here: ***https://youtu.be/4dWUzMPabwo***

Session 1: BioPharma

The Biopharma Session at the BioEconomy Conclave 2025 highlighted the critical role of biopharma in India's bioeconomy, focusing on innovation, cost reduction, emerging technologies, and regulatory advancements. The session was moderated by **Mr. B N Manohar**, MD & CEO, Stempeutics Research. The keynote address was given by **Dr. Vijay Chandru**, Founder Director, Strand Life Sciences, CRISPRBITS. The other speakers were **Dr. Alok Srivastava**, Head - Department of Hematology, CMC Vellore; **Mr. Shreehas Tambe**, CEO & MD, Biocon Biologics; **Dr. Sanjay Singh**, MD & Country Head, Medtherapy Biotech and **Dr. Ramesh Hariharan**, Director & CEO, Strand Life Sciences.

The discussion emphasized cost reduction in biotherapeutics, AI-driven innovations in drug discovery, and the need for microbial biodiversity repositories to boost biotech advancements, particularly in Karnataka. The shift from communicable to non-communicable diseases (NCDs), including cancer and diabetes, further strengthens the case for biologics and gene therapies as preferred treatment options. The growing biosimilars market, projected to reach $60 billion by the end of the decade, presents immense opportunities for ensuring affordable healthcare solutions. With 10 approved gene therapy products and more in development, India has the potential to lead in this sector, addressing unmet medical needs efficiently. The session highlighted the establishment of a cell and gene therapy association to foster collaboration between industry and academia and the investment in GMP facilities within hospitals to expedite drug production and validation. The discussion also stressed the importance of positioning India as a global innovation hub, moving beyond its traditional role as a low-cost drug supplier.

Watch the session recording here: ***https://youtu.be/VkhypuRIKLs***

Session 2: BioAgri

The BioAgri session featured an insightful panel discussion on the future of agriculture, emphasizing the role of innovation, regulatory frameworks, and corporate strategies in creating a sustainable global food system.The session was moderated by **Ms. Sowmya Balendiran**, Co-Founder & Chief Business Officer, Sea6 Energy. The keynote address was given by **Dr. K K Narayanan**, Founder & Managing Director, Sthayika Seeds. The other speakers were **Dr. Paresh Verma**, ED & Chief Executive, Bioseed SE Asia; **Mr. Burjis Godrej**, Executive Director, Godrej Agrovet; **Ms. Neha Srivastava**, Partner, Remfry & Sagar and **Ms. Ritu Verma**, Co-Founder & Managing Partner, Ankur Capital.

The session highlighted the need to enhance farmer income, improve climate resilience, and integrate cutting-edge technologies such as AI, IoT, and machine learning to make farming more efficient and resourceful. The discussion underscored the importance of precision farming, smart irrigation, and genome editing to boost crop yields and address environmental challenges. The panel also addressed intellectual property challenges, funding gaps for agri-startups, and the need for collaboration between corporations and innovators. The session concluded that India's agricultural sector must embrace emerging technologies, attract investments, and implement policy reforms to enhance productivity, ensure food security, and drive economic growth. With collaboration, innovation, and strategic policymaking, agriculture will play a pivotal role in shaping the future of India's bioeconomy.

*Watch the session recording here: **https://www.youtube.com/watch?v=Wb536RcRcQ0***

Session 3: BioIndustrial

This session featured an engaging panel discussion on BioIndustrial advancements, emphasizing the role of biomanufacturing, artificial intelligence (AI), and sustainability in shaping the future of the bioeconomy. The session was moderated by **Dr. Ezhil Subbian**, Hon. General Secretary, ABLE & CEO, String Bio. The keynote address was given by **Dr. P M Murali,** President, ABLE Council of Presidents & CMD, Jananom. The other speakers were **Mr. Anurag Chadha,** Director-Food & Beverage Biosolutions, South Asia, Novonesis; **Dr. Ashish Paradkar,** Independent Advisor and **Dr. Ashvini Shete**, Strategy & Technology Lead-Renewable Chemicals & Materials, Praj Industries.

The session highlighted the integration of AI in bioengineering, which is accelerating innovation, while challenges such as tariffs on steel and the need for improved downstream processes in fermentation remain critical barriers to growth. Precision fermentation, Microbial manufacturing innovations, alternative feedstocks, and advancements in probiotics were discussed as key trends driving the industry. The panelists emphasized India's growing role in bioplastics production, leveraging its abundant feedstock and engineering expertise to reduce reliance on fossil-based plastics. Government support and regulatory policies were highlighted as crucial enablers for the biomanufacturing and bioplastics industries. The discussion also emphasized the importance of collaboration between startups, academia, and industry to accelerate innovation. The session also addressed consumer awareness of probiotics, with experts stressing the need for better education and branding to enhance market adoption. Overall, the panel reinforced that India is well-positioned to lead in bioindustrial advancements, provided there is strategic investment, policy support, and increased industry-academia collaboration.

Watch the session recording here: ***https://www.youtube.com/watch?v=uZT0xjWcTGM***

Session 4: TechMed

The TechMed session discussed the transformative potential of emerging healthcare technologies on health systems and the bioeconomy. The session was moderated by **Ms. Deepanwita Chattopadhyay**, Hon. Vice President, ABLE & CMD, IKP Knowledge Park. The keynote address was given by **Dr. Nachiket Mor,** Visiting Scientist, Banyan Academy of Leadership in Mental Health & Commissioner, Lancet Citizens' Commission. The other speakers were **Mr. Suresh Subramanian**, Partner & National Life Sciences Leader, Ernst and Young LLP; **Dr. Chandrasekhar Nair,** Director, Bigtec Labs & Molbio Diagnostics and **Dr. Anirvan Chatterjee,** Co-Founder & CEO, HaystackAnalytics.

The discussions revolved around the necessity for Universal Health Coverage (UHC) and the role of technology in achieving this goal amid the challenges of healthcare access, particularly in developing nations like India. Dr. More emphasized the disparities in income and healthcare access, urging for a concerted effort to leverage local human resources and technological advancements to provide comprehensive primary care. The panelists highlighted various innovative technologies, including AI in drug discovery, telemedicine, and genomic sequencing, as critical tools to enhance healthcare delivery and patient outcomes. The insights provided during the session offer a roadmap for future initiatives aimed at overcoming existing healthcare challenges and fostering a robust bioeconomy.

Watch the session recording here: ***https://www.youtube.com/watch?v=jYzhR-4TWZ8***

Session 5: Startups & Incubators

The final session celebrated the entrepreneurial spirit, focusing on the role of startups and incubators in driving biotech innovation. The session was moderated by **Mr. Ravi Bhola**, Treasurer, ABLE and Managing Partner, K&S Partners. The keynote address was given by **Dr. P M Murali,** President, ABLE Council of Presidents & CMD, Jananom. The other speakers were **Dr. Premnath V**, Director, Venture Center; **Dr. Mrutyunjay Suar**, CEO, KIIT-TBI; **Ms. Shreya Malik**, Head - Biotech / Medtech Domain, SIIC-IIT Kanpur and **Mr. Mayuresh Raut**, Co-Founder & Managing Partner, Seafund.

Discussions centered on funding challenges, the need for patient capital, and the role of incubators in nurturing early-stage innovation. Panelists stressed the importance of founder capabilities, market adaptability, and strategic pivots in navigating the complexities of biotech entrepreneurship. The session also emphasized deep-tech startups' unique hurdles, where technological advancements and market understanding are crucial for success. This insightful discussion provided a comprehensive perspective on India's startup ecosystem, highlighting the intersection of investment, innovation, and collaboration in fostering a thriving bioeconomy. The key takeaways are valuable not only for entrepreneurs and investors but also for policymakers and industry stakeholders committed to strengthening India’s biotech landscape.

Watch the session recording here: ***https://youtu.be/hSsRX9eI9WQ***

The BioEconomy Conclave 2025 reaffirmed India’s position as a global biotech leader, fostering collaboration and innovation across BioPharma, BioAgri, BioIndustrial, TechMed, and the startup ecosystem. With the BioEconomy on track, the event underscored the critical role of emerging technologies in shaping a sustainable and transformative future. The event was a resounding success, thanks to the contributions of speakers, partners, sponsors, and attendees.

Key Recommendations from the BioEconomy Conclave

The BioEconomy Conclave 2025 held by ABLE articulated an ambitious vision for India's BioEconomy: to grow from the current $165.7 billion (2024) to $300 billion by 2030, and further to $1 trillion by 2047. This strategic roadmap synthesizes key insights from industry leaders, policymakers, and innovators to outline the path toward achieving these targets. With a required CAGR of approximately 10.6% to reach the 2030 milestone and 7.5% thereafter to achieve the 2047 vision, India must implement coordinated policy interventions, strategic investments, and ecosystem development across five key sectors: BioPharma, BioAgri, BioIndustrial, TechMed, and the Startup Ecosystem.

Growth Targets and Required CAGR

Timeline	Current (2024)	Short-term (2030)	Long-term (2047)
Market Size	$165.7 billion	$300 billion	$1 trillion
Required CAGR	-	10.6% (2024-2030)	7.5% (2030-2047)
Job Creation	~3.5 million	~10 million	~20 million
Focus Areas	Accelerate growth	Scale and integrate	Global leadership

To achieve the 2030 target of $300 billion from the current $165.7 billion (2024), India's BioEconomy needs to grow at a Compound Annual Growth Rate (CAGR) of approximately 10.6% over the next six years. Subsequently, to reach $1 trillion by 2047, a sustained CAGR of about 7.5% will be required from 2030 onwards. While challenging, this growth trajectory is achievable with strategic interventions across all BioEconomy sectors, considering that the sector grew from $151 billion in 2023 to $165.7 billion in 2024 (9.7% annual growth).

Strategic Pillars for BioEconomy Growth

1. BioPharma: High-Value Therapeutics and Precision Medicine

While India has established itself in generic pharmaceuticals with a 25% global market share, it needs to build capabilities in cell and gene therapies urgently, where the global market is already around $20 billion.

BioPharma contributes approximately 35% to India's bioeconomy. The sector has showed significant capabilities in biosimilars and fermentation-based drugs, but there is immense potential for growth in advanced therapies.

Policy Recommendations:

- Increase R&D support through targeted tax incentives for private sector research
- Develop an integrated model that connects research capabilities with commercial distribution
- Simplify regulatory pathways to reduce approval timelines from the current 3 years to match global standards of 15-18 months
- Create specialized infrastructure for high-tech manufacturing, particularly for cell and gene therapies

- Establish programs to address the talent gap through upskilling and reskilling initiatives
- Reward the development of affordable CAR-T therapies and gene therapies for treating genetic disorders
- Develop infrastructure for genomic data collection, storage, and analysis to facilitate biomarker discovery

Key Strategies:

- Establish 10 cell and gene-therapy manufacturing hubs across India by 2027
- Create a $5 billion BioPharma Innovation Fund with public-private participation
- Reduce regulatory approval timelines from 36 months to 15 months by 2026
- Develop specialized biotech manufacturing parks with plug-and-play infrastructure
- Launch a National Biomarker Discovery Program with participation from 50 medical institutions

Implementation Timeline:

- 2025-2026: Regulatory reforms and initial fund establishment
- 2026-2028: Infrastructure development and talent upskilling programs
- 2028-2030: Scale-up of manufacturing and commercialization initiatives

2. BioAgri: Climate-Resilient and Nutrition-Enhanced Agriculture

Agriculture employs 40-50% of India's workforce and contributes 12-15% to GDP. The BioAgri experts emphasized the need to reimagine agriculture as an industry rather than just a livelihood activity.

Policy Recommendations:

- Address regulatory uncertainty around gene editing technologies, particularly SDM (Site-Directed Mutagenesis) to speed up innovation
- Harmonize the Protection of Plant Varieties and Farmers' Rights Act with the Patent Act to encourage innovation
- Develop comprehensive climate resilience strategies using biotechnology for crop stress tolerance
- Focus on productivity enhancement in areas where India faces deficits, such as oilseeds, pulses, feed, and cotton
- Encourage precision agriculture technologies for optimal resource utilization
- Develop bio-fortification strategies to address micronutrient deficiencies
- Increase investment in agricultural biotechnology focused on "producing more with less"
- Create mechanisms for capturing value from traditional knowledge and genetic resources

While India has achieved self-sufficiency in staple foods, significant gaps remain in livestock productivity, oilseeds, and other high-value agricultural products.

Key Strategies:

- Develop clear regulatory framework for gene editing technologies by 2026
- Establish 15 agri-biotech parks focused on oilseeds, pulses, and cotton by 2028
- Create a $3 billion fund for climate-resilient crop development

- Launch a National Bio-fortification Mission to address micronutrient deficiencies
- Implement AI-driven precision agriculture programs across 100 million hectares

Implementation Timeline:

- 2025-2027: Regulatory harmonization and initial research investments
- 2027-2029: Scaling of precision agriculture technologies
- 2029-2030: Commercial deployment of climate-resilient crop varieties

3. BioIndustrial: Sustainable Manufacturing and Biomaterials

The BioIndustrial experts suggested to focus on biomanufacturing and its potential to create sustainable materials and processes.

Policy Recommendations:

- Establish consortia for biomanufacturing to enable knowledge sharing and resource optimization
- Create single-window clearance mechanisms for biomanufacturing facilities
- Incentivize academic institutions to establish manufacturing setups that can be used by industry
- Develop specialized programs to attract talent in biomanufacturing, including initiatives for reverse brain drain
- Invest in downstream processing innovations that have seen limited advancement over the past 40 years
- Support the development and scaling of bioplastics and other biomaterials, particularly PLA (Polylactic Acid)
- Create milestone-based matrices for tracking progress in biomanufacturing capabilities

The session highlighted that biomanufacturing in India faces fewer regulatory hurdles compared to other biotech sectors, but lacks scaling capabilities and specialized talent.

Key Strategies:

- Establish 5 national biomanufacturing consortia by 2027
- Create single-window clearance system for biomanufacturing facilities by 2026
- Develop 10 bio-foundries for scaled prototype development
- Implement preferential procurement policies for bio-based materials in government
- Launch a $2 billion fund for downstream processing innovations

Implementation Timeline:

- 2025-2026: Policy framework development and consortia formation
- 2026-2028: Infrastructure establishment and talent development
- 2028-2030: Commercial scale-up and global market penetration

4. TechMed: Digital Health and Diagnostic Technologies

The TechMed leaders emphasized the role of technology in improving healthcare access and outcomes, particularly in the context of universal health coverage.

Policy Recommendations:

- Strengthen the Ayushman Bharat Digital Mission (ABDM) to facilitate seamless data exchange
- Expand the ABHA (Ayushman Bharat Health Account) registration beyond the current 60 million
- Develop human resources for healthcare by training high school students for primary healthcare roles
- Utilize cloud computing and satellite technology for healthcare surveillance and delivery
- Support diagnostic innovations focused on infectious diseases, particularly those prioritized by WHO
- Encourage AI applications in medical imaging and diagnostics
- Develop platforms for disease surveillance integrating genomic data
- Create regulatory pathways for digital therapeutics and personalized medicine approaches

Experts believe that healthcare challenges are significant barriers to economic growth, with health-related issues potentially reducing IQ development by 20%, according to some studies presented.

Key Strategies:

- Achieve 500 million ABHA (Ayushman Bharat Health Account) registrations by 2027
- Establish a National Health Data Grid with participation from all states by 2028
- Develop AI-based diagnostic platforms for the top 20 disease conditions
- Create a $1 billion fund for point-of-care diagnostic technologies
- Implement satellite-based telemedicine networks in 100,000 villages

Implementation Timeline:

- 2025-2026: Digital infrastructure development and standard setting
- 2026-2028: AI model development and clinical validation
- 2028-2030: National scale deployment and integration with global health systems

5. Biotech Startup Ecosystem: Innovation to Commercialization

India has established 95 Bio-Nests (bioincubator facilities) providing approximately 900,000 square feet of incubation facilities. However, several challenges remain in the startup ecosystem.

Policy Recommendations:

- Strengthen mentorship programs that focus on go-to-market strategies rather than just technical aspects
- Address the evolving regulatory landscape that creates additional burdens for biotech startups
- Establish incubators in locations where the surrounding ecosystem can support startup growth
- Increase availability of risk capital for biotech ventures, particularly for early-stage funding
- Create specialized accelerator programs for biotech startups that account for longer development timelines

- Develop mechanisms for industry-academia collaboration focused on commercialization
- Establish strategic funds that can provide patient capital for deep tech biotech ventures
- Support manufacturing hubs and bio-foundries that can serve multiple startups

Key Strategies:

- Expand Bio-Nest incubation facilities to 2 million square feet by 2028
- Establish a $3 billion Biotech Venture Fund with tiered funding mechanisms
- Create 50 specialized biotech accelerator programs with industry linkages
- Develop mentor networks comprising 5,000 domain experts
- Implement specialized IP protection and fast-track patent examination for biotech

Implementation Timeline:

- 2025-2026: Expansion of incubation facilities and fund establishment
- 2026-2028: Accelerator program development and mentor network creation
- 2028-2030: Global market access programs and scale-up support

Cross-Cutting Enablers

Several themes emerged across all sessions that require coordinated policy interventions:

1. Human Capital Development

- Train 500,000 specialized biotech professionals by 2030
- Establish 50 Centers of Excellence for frontier biotech education
- Create industry-academia exchange programs with 100 global institutions
- Implement the NIPUNA program for advanced skill development
- Develop specialized curricula for convergent technologies (Bio+AI, Bio+Engineering)

2. Policy and Regulatory Framework

- Create a National BioEconomy Mission with representation from all stakeholders
- Establish a single-window regulatory mechanism for biotech innovations
- Reform the Biodiversity Access regime to facilitate research while ensuring equitable benefit sharing
- Develop specialized regulatory pathways for emerging technologies
- Create regulatory sandboxes for testing innovative approaches

3. Infrastructure and Ecosystem

- Develop 10 integrated biotech clusters with complete value chains
- Establish a National Biological Data Repository
- Create shared technology platforms accessible to startups and academic institutions
- Implement preferential procurement policies for biotech innovations
- Develop Global Alliance Networks for international market access

4. Investment and Funding

- Mobilize $50 billion in public and private investments by 2030
- Create sector-specific funds with patient capital approaches
- Implement tax incentives for R&D investments in biotech
- Develop outcome-based funding mechanisms for high-risk innovations
- Create corporate innovation funds with matching government contributions

Annual Growth Trajectory to 2030

Year	Projected Size ($ billion)	Annual Growth Rate
2024	165.7 (Current)	-
2025	179	8.02%
2026	197	10.1%
2027	217	10.2%
2028	240	10.6%
2029	268	11.7%
2030	300	11.9%

Implementation Approach: The 5-5-5 Model

To achieve the ambitious growth targets, this roadmap proposes a "5-5-5 Model" focusing on 5 key sectors, across 5 implementation phases, with 5 core enablers:

Five Implementation Phases

1. **Acceleration Phase (2025-2026)**
    - Policy reforms and regulatory harmonization
    - Initial fund establishment and institutional mechanisms
    - Roadmap adoption across states and central government
2. **Growth Phase (2026-2027)**
    - Infrastructure development and specialized facilities
    - Human capital programs and skill development initiatives
    - Early-stage funding and proof-of-concept support
3. **Scale-up Phase (2027-2028)**
    - Industry-academia partnership programs
    - Manufacturing capability development
    - Market access and commercialization support
4. **Integration Phase (2028-2029)**
    - Integration of value chains and cluster development
    - Global market penetration strategies
    - Regulatory excellence and international harmonization
5. **Leadership Phase (2029-2030)**
    - Positioning India as a global BioEconomy leader
    - Development of next-generation technologies
    - Establishing global standards and best practices

Five Core Enablers

1. **Policy**: Favorable regulatory environment and incentive structures
2. **People**: Skilled workforce and specialized talent development
3. **Platforms**: Shared infrastructure and technology platforms
4. **Partnerships**: Public-private collaborations and international alliances
5. **Promotion**: Marketing, branding, and global positioning

Strategic Focus Areas for Accelerated Growth

1. Frontier Technologies

Five frontier technologies that will drive disproportionate growth in India's BioEconomy:

Technology	Current Stage	2030 Vision	Impact Areas
Cell & Gene Therapy	Early adoption	Manufacturing hub	Rare diseases, Cancer
Synthetic Biology	Research stage	Commercial applications	Materials, Agriculture
AI + Biology	Emerging	Integrated platforms	Drug discovery, Diagnostics
Precision Agriculture	Pilot projects	Nationwide adoption	Climate resilience, Nutrition
Biomanufacturing	Limited scale	Industrial scale	Sustainable materials, Enzymes

2. Regional BioEconomy Clusters

Developing specialized regional clusters to leverage local strengths:

Region	Focus Areas	Investment Target	Job Creation
Bengaluru-Mysore-Mangalore	BioPharma, Digital Health	$2.8 billion	250,000
Delhi-NCR	Medical Devices, Diagnostics	$2.0 billion	180,000
Hyderabad	Vaccines, Biosimilars	$2.5 billion	200,000
Pune-Mumbai	Industrial Biotechnology	$1.8 billion	150,000
Ahmedabad-Vadodara	Agri-Biotech, Enzymes	$1.5 billion	120,000
Chennai-Coimbatore	Medical Devices, Bioinformatics	$1.7 billion	140,000

Conclusion: Realizing the "Indian Biotech Century"

This strategic roadmap provides a comprehensive framework for achieving India's ambitious BioEconomy targets of $300 billion by 2030 and $1 trillion by 2047. Based on the current baseline of $165.7 billion (2024), the required growth rates of 10.6% CAGR to 2030 and 7.5% CAGR from 2030 to 2047 are challenging but achievable with coordinated efforts across all stakeholders.

The vision of making the next 25 years the "Indian Biotech Century" is both ambitious and realistic given India's strengths in talent, biodiversity, and innovation capacity. By focusing on the five key sectors, implementing the 5-5-5 model, and strategically investing in frontier technologies and regional clusters, India can establish itself as a global leader in biotechnology.

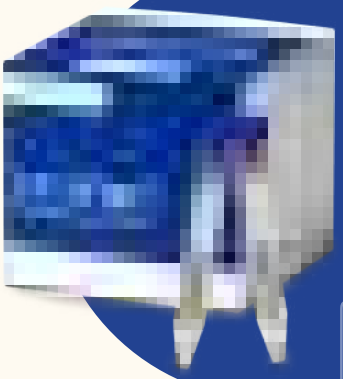
This roadmap calls for immediate action across all stakeholders to start the acceleration phase and set in motion the transformation of India's BioEconomy from potential to reality. With consistent policy support, strategic investments, and ecosystem development, the BioEconomy can become a major driver of India's economic growth, job creation, and global competitiveness while addressing critical challenges in healthcare, agriculture, and environmental sustainability.

NGIVD

SUPPORTING YOUR MOLECULAR BIOLOGY WORKFLOW

RubAce™

Best-in-class
Decontaminant



MolFeri™

Secure transit,
Enhance yield

isoPwr-M™

Magnetic bead technology

isoPwr-S™

Spin Column technology

Faster, Easier, Enriched
Nucleic Acid Extraction

READILY AVAILABLE • GLOBAL QUALITY • AFFORDABLE PRICING

ALSO AVAILABLE ON GeM Government e Marketplace

PRODUCT INFORMATION

FOR SAMPLE REQUIREMENT/
PRODUCT INFORMATION

+91 9266158701 info@ngivd.com ngivd.com

Manufactured by :
NextGen In-Vitro Diagnostics Pvt. Ltd.

MAKE IN INDIA

ISO 13485:2016 ISO 9001:2015

ABLE with the Indian Life science delegation to Paris

10-14 March 2025

Carve Startup Labs, in collaboration with **ABLE** and supported by **Choose Paris Region**, successfully led an exclusive Indian Biotech Startup Delegation to Paris, France, focusing on Life Sciences, MedTech, and HealthTech Innovation. From March 10–14, 2025, the startups engaged with leading life sciences clusters, incubators, investors, and government agencies, gaining firsthand insights into European market entry strategies, healthcare regulations, and certifications. The delegation included **Dr. Balasubramanya S**, General Manager of ABLE; **Dr. Maneesh Thomas**, Chief Executive Officer of Manipal-GoK Bioincubator; **Dr. Anand Khedkar**, Co-Founder & Director of Sekkei Bio; **Dr. Monalisa Chatterji**, Co-Founder & Director of Sekkei Bio and **Mr. Anuj Chandalia**, Founder of Manentia AI.

Key Highlights:

- Participated at MedInTechs Summit 2025, Europe's premier healthcare innovation event.
- Explored PariSanté Campus, France's national hub for digital health innovation.
- Visited Future4Care accelerator, a unique open-innovation ecosystem in Europe that combines a startup accelerator and an institute focused on digital health and e-health. It supports healthtech startups and scale-ups.
- Exclusive networking with Paris Region's thriving biotech & healthcare ecosystem.

Paris, with its cutting-edge R&D hubs, access to 50M+ healthcare consumers, and strong funding incentives, is a strategic gateway for Indian biotech and health-tech innovators looking to scale globally. This delegation marks a major step in strengthening India-France collaborations in life sciences and healthcare.

Global Biotech Alliance: India Roundtable

11 March 2025

String Bio Private Limited in collaboration with ABLE and Hoover Institution, Stanford University, successfully hosted the Global Biotech Alliance: India Roundtable in Bengaluru on 11th March, bringing together key biotech leaders and a distinguished bio-delegation from Stanford University, SynBioBeta and Hoover Institution.

The roundtable featured insightful discussions on India's biotech innovation, biomanufacturing potential, and opportunities for global collaboration. It also emphasized the need to strengthen India's leadership in the evolving biotech landscape through strategic partnerships and international cooperation. The Global Biotech Alliance aimed to foster international collaboration, drive cutting-edge research, and position India as a global leader in biotechnology and synthetic biology.

ABLE at the India-Scotland Business Meeting in Edinburgh!

4-6 March 2025

ABLE participated in the **India-Scotland Business Meeting** from 4th-6th March in Edinburgh, Scotland, leading a delegation of Indian companies. The event was organized by the Consulate General of India at Edinburgh and Scottish Development International, in collaboration with FICCI, ABLE, Grant Thornton UK and Scottish Enterprise at the City Chambers in Edinburgh, Scotland facilitating key discussions on strengthening biotech collaborations between the two nations. **Mr Siddharth Malik, Consul General of India** in Edinburgh played a key role in organizing this important business connect meeting. The delegation included **Mr Narayanan Suresh**, COO of ABLE **Dr. Balasubramanya S**, General Manager of ABLE; **Dr. Maneesh Thomas**, Chief Executive Officer of Manipal-GoK Bioincubator; **Mr. Roderick Stuart**, Managing Partner of Cellagility Biomed and **Mr. Midhun A Kunj**, Founder of Vowels Lifesciences.

An MoU was signed between ABLE India & the Scottish Lifesciences Association, in the gracious presence of **Dr. Rajesh Gokhale**, Secretary, Department of Biotechnology, Ministry of Science and Technology, Government of India. While **Mr Narayanan Suresh, COO**, signed the MoU on behalf of ABLE, Scottish Lifesciences Association was represented by its CEO, **Mr Scott Johnstone. Scotland deputy First Minister (deputy CM) Rt. Honourable Ms Kate Forbes**, endorsed the MoU as a witness.

This partnership aims to foster cross-border innovation, investment, and technological exchange between Scotland and India, strengthening life sciences and technology-driven Foreign Direct Investment. The MoU aims to enhance the global competitiveness of companies in both nations, support collaborative R&D in key focus areas, and promote entrepreneurship among young innovators. The MoU serves as a strategic initiative to build strong linkages between biotechnology companies in Scotland and India, driving mutual growth and innovation in the sector. With 130+ business delegates from India and Scotland, this event marked a significant step in fostering innovation, partnerships, and growth in the life sciences sector**.**

As part of the India-Scotland Business Meeting, sectoral site visits were organized by the Consulate of India at Edinburgh, offering valuable insights into Scotland's thriving biotech and life sciences ecosystem. The delegation visited Piramal Pharma Group's Manufacturing Site, Heriot-Watt University, Roslin Institute, and Edinburgh Technopole, engaging with key stakeholders in research, innovation, and manufacturing.

Dr. Rajesh Gokhale, Secretary, Department of Biotechnology, Ministry of Science and Technology, Government of India, also had an enriching interaction with Indian Ph.D. students at Roslin Institute, fostering academic and research collaboration.

The Indian Biotech delegation led by ABLE also participated in the Lifesciences roundtable organized in collaboration with Scottish Lifesciences Association & ABLE. This roundtable brought together key stakeholders from the Department of Biotechnology, Scottish Enterprise, and other leading biotech companies from India & Scotland to discuss collaboration in biotech, healthcare, and innovation. **Mr Suresh** presented an overview of India's Biotech Industry and how its manufacturing expertise in biopharmaceuticals and vaccine is key to ensuring that there is a stable, equitable, and affordable healthcare system in the world. A dynamic Q&A session with **Dr. Rajesh Gokhale**, Secretary, Department of Biotechnology, and industry leaders sparked insightful discussions on strengthening partnerships, driving research, and fostering innovation in the life sciences sector.
Rt. Honourable **John Swinney**, the First Minister of Scotland (equivalent to CM) hosted a special reception at his residence for the India delegates on 4th March 2025.

ABLE at Advantage Assam 2.0

1 March 2025

The **Advantage Assam 2.0** summit successfully concluded on March 1, 2025, marking a significant milestone in charting the roadmap for biomanufacturing and biofoundries in Assam. The event brought together key stakeholders from government, industry, and academia to explore the opportunities unlocked by the Assam Bio E3 Policy and its potential to drive innovation, sustainability, and economic growth in the region.

Mr. G S Krishnan, Hon. President of ABLE moderated the panel discussion session on "Biomanufacturing and Biofoundries – Leveraging Bio E3 Policy for Assam's Roadmap". The session featured industry pioneers and policymakers, including Dr. Rajiv Gandhi, Founder, Hester Biosciences Limited; Dr. Manish Diwan, Biotechnology Industry Research Assistance Council (BIRAC), GoI and Mr. Subramani Ramachandrappa, Founder, Fermbox Bio. The session was chaired by Shri Keshab Mahanta Ji, Honourable Minister of Science & Technology, Govt. of Assam, who reinforced Assam's commitment to becoming a leading biomanufacturing hub and urged startups to embrace excellence in biotechnology-driven solutions.

The discussion highlighted the transformative role of **biotechnology and synthetic biology** in shaping Assam's industrial landscape, emphasizing their potential to drive **sustainable manufacturing and environmental conservation** through **biofoundries**. Additionally, the session explored **investment and growth opportunities** for **startups, researchers, and industry players**, positioning Assam as a key player in India's **bioeconomy**. With its **rich biodiversity and forward-looking policy framework**, Assam has the potential to become a leading **bio-innovation hub**. **Collaboration between government, industry, and academia** will be crucial in fostering innovation, accelerating growth, and unlocking new opportunities in **biomanufacturing and bioeconomy expansion**.

ABLE Webinar on “Learn about New Jersey Life Sciences Ecosystem and Opportunities for Indian Startups”

28 February 2025

ABLE, in collaboration with **Choose New Jersey** successfully concluded the webinar on the Institute for Life Science Entrepreneurship (ILSE) & the New Jersey-India Biotech Corridor. The webinar highlighted New Jersey’s thriving life sciences ecosystem, showcasing its cutting-edge infrastructure, funding opportunities, and collaborative business environment, making it an ideal destination for Indian biotech companies looking to expand into the U.S. market.

The webinar the event highlighted the strengthening U.S.-India biotech ties, with India contributing 20% of biosimilars and 33% of generics globally. New Jersey's world-class R&D facilities were recognized as a major driver of biotech innovation, offering state-backed grants and incentives to help life science entrepreneurs scale their operations. The state’s top-tier universities provide a highly skilled STEM workforce, further supporting industry growth. Additionally, Indian biotech firms are expanding rapidly in New Jersey, leveraging technology transfer and commercial support to enhance their global footprint.

Watch the full recording here: ***https://www.youtube.com/watch?v=qA2Xp0CYWxA***

Exclusive Networking Session with the Australian Delegation in Bengaluru & Mumbai

27-28 February 2025

ABLE in collaboration with the **State Government of New South Wales (NSW), Australia**, successfully hosted an exclusive networking session in Bengaluru and Mumbai. This event brought together key stakeholders, including leading Contract Research Organizations (CROs), clinical trial sites, and industry experts, to explore the opportunities for clinical trials and biotech collaboration in NSW. The event provided a fantastic platform for fostering India-Australia collaboration in clinical research and innovation. By engaging with NSW's biotech ecosystem, Indian companies gained valuable insights into regulatory pathways, funding opportunities, and global market access. This partnership is set to strengthen cross-border innovation, drive cutting-edge clinical research, and enhance biotech investments between India and Australia.

ABLE as Supporting Organization at BioAsia 2025

24 February 2025

Bio Asia 2025, Asia's premier life sciences and health tech forum, brought together industry leaders, MSMEs, and startups to drive India's leadership in the life sciences sector. With an impressive lineup of speakers, the event served as a 'Catalyst of Change', fostering collaborations, innovation, and investment opportunities. Discussions highlighted AI-driven healthcare, clinical research, and personalized medicine, reinforcing Hyderabad's position as a global life sciences hub. Engaging panel sessions and networking opportunities enabled knowledge sharing among policymakers and industry pioneers. ABLE was proud to be a Supporting Organization at BioAsia 2025, contributing to its success.

1st National BioPharma Mission - Regional Technology Transfer Office (NBM-RTTO) Technology Licensing Event 2025

24 February 2025

Mr. Venkat Kamalakar Bundla, ABLE Governing Body Member & Managing Director, Garphi Biosciences Pvt. Ltd., participated in the 1st National BioPharma Mission - Regional Technology Transfer Office (NBM-RTTO) Technology Licensing Event 2025 held today at T-Tub, Hyderabad.

The event showcased 123 cutting-edge technologies in Pharma, Medical Devices, and Diagnostics, offering exciting opportunities for licensing and collaboration. ABLE was honored to be the Knowledge Partner for this significant event.

ABLE as a Knowledge Partner at Biologics Conference 2025

30-31 January 2025

Institute of Chemical Technology, Mumbai, in collaboration with the Mumbai Biocluster, successfully hosted the **5th Annual Summit of Biologics Conference and Workshops** focused on Biopharmaceutical Product Development on January 30-31, 2025, at the Novotel Dona Sylvia Resort, Goa. This landmark event has evolved into a premier platform bringing together key stakeholders for scientific exchange, business networking, and industry advancement. ABLE was the Knowledge Partner for the event. **Mr. GS Krishnan, Hon. President of ABLE** delivered the Keynote address during the Inaugural session. He underscored the critical role ABLE plays in empowering start-ups: providing them with the necessary support to scale-up and transition into commercial success.

"The 150 *billion dollar Indian Bioeconomy is set to exceed the* $300 *billion mark by* 2030. *Biotech start-ups play a pivotal role in this growth, with nearly* 10,000 *start-ups already contributing to the industry*.", said Mr. G S Krishnan.

The conference witnessed an overwhelming response, bringing together over 700 attendees, including 150 distinguished speakers, 12 key sponsors, and 41 exhibitors.

ABLE Western Regional Chapter - Venture Centre, Pune

News Update

The **Center for Biopharma Analysis (CBA)** at Venture Center proudly offers world-class, GLP-compliant **bioassay services** tailored to accelerate your biopharmaceutical innovations. Whether you're validating monoclonal antibodies or optimizing potency, our expert services ensure precision and reliability.

Our Premier Services:

1. ADCC Assay Services

Explore Immune Activation Like Never Before!

Purpose: Evaluate Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) to assess effector function of the Therapeutic mAb.

Why Choose Us?

- Ready-to-use validated assays with cutting-edge, genetically engineered effector cells.
- High-throughput options for faster results at scale (96- and 384-well formats).
- Custom method development to meet your specific needs.
- Data analysis using PLA software, one of the very well accepted software across all regulatory agencies for assay and sample suitability and relative potency determination.

What You Get: A comprehensive report with reportable %relative potency values, dose response curve, raw data, and statistical insights.

2. CDC Assay Services

Measuring the Impact of Complement-Mediated Cell Lysis

Purpose: Analyze Complement-Dependent Cytotoxicity (CDC), a critical mechanism for therapeutic antibodies.

Why Choose Us?

- Proven, reliable assays leveraging rabbit complement.
- Precision-driven customization for unique project requirements.
- Detect cell lysis using metabolic activity indicators for superior accuracy.
- Data analysis using PLA software, one of the very well accepted software across all regulatory agencies for assay and sample suitability and relative potency determination.

What You Get: Detailed report with reportable %relative potency values to support regulatory submissions and publications, raw data and dose response curve.

3. C1q Binding Assay Services

Unlock the Power of Antibody Binding!

Purpose: Measure antibody-C1q binding, the gateway to complement system activation.

Why Choose Us?

- Advanced ELISA-based assays in high-throughput formats.
- Tailored solutions for robust method qualification and validation.
- Ideal for evaluating the therapeutic efficacy of CDC-reliant monoclonal antibodies.

What You Get: A polished report with % relative binding activity of the antibody under study, dose response curve, raw data and statistical insights.

Why CBA is Your Trusted Partner

- GLP-Compliant Excellence: Adhering to ICH guidelines for rigorous quality.
- Custom Solutions: Tailored method development, validation, and reporting.
- Sample analysis for relative potency determinations, stability sample studies. Biosimilar and RMP/RP comparative studies, any protocol driven studies with complete documentation, analyses etc.
- Flexible Pricing: Discounts for startups, academic institutions, and bulk samples.

Getting Started is Easy

- **Book a Consultation**: Connect with our expert Business Development Team to explore options.
- **Submit Your Request**: Complete the application form and receive a customized invoice.
- **Watch Innovation Happen**: Let our experts handle the rest while you focus on breakthroughs!

Get started today! Contact us for a free consultation or book a service
https://tinyurl.com/ffdz2nam

For enquiries, contact:

Rutuja Patil
Email: rutuja.patil@venturecenter.co.in
Phone: +91 8956677542

VENTURE CENTER

nbm NATIONAL BIOPHARMA MISSION

CBA CENTER FOR BIOPHARMA ANALYSIS AT VENTURE CENTER
Supported by National Biopharma Mission, BIRAC

ACCELERATE BIOPHARMA BREAKTHROUGHS WITH OUR CUTTING-EDGE BIOASSAY SERVICES!

The Center for Biopharma Analysis (CBA) at Venture Center proudly offers world-class, GLP-compliant bioassay services tailored to accelerate your biopharmaceutical innovations. Whether you're validating monoclonal antibodies or optimizing potency, our expert services ensure precision and reliability.

- **GLP-Compliant Excellence**
- **Validated Assays**
- **Custom Solutions**
- **Flexible Pricing**

1. ADCC Assay Services: Explore Immune Activation Like Never Before!

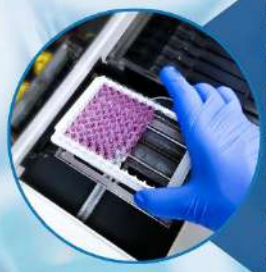
Purpose: Evaluate Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) to assess effector function of therapeutic mAbs.

What You Get: A comprehensive report with reportable % relative potency values, dose response curve, raw data, & statistical insights.

2. CDC Assay Services: Measuring the Impact of Complement-Mediated Cell Lysis

Purpose: Analyze Complement-Dependent Cytotoxicity (CDC), a critical mechanism for therapeutic antibodies.

What You Get: A detailed report with reportable %relative potency values to support regulatory submissions and publications, raw data & dose response curve.



3. C1q Binding Assay Services: Unlock the Power of Antibody Binding!

Purpose: Measure antibody-C1q binding, the gateway to complement system activation.

What You Get: A polished report with %relative binding activity of the antibody under study, dose response curve, raw data &statistical insights.

Book a FREE consultation: Connect with our Business Development Team to explore options and let our expert team handle the rest!

Book Your Slot

For enquiries -
rutuja.patil@venturecenter.co.in
+91 8956677542

BIOTECH NEWS

New survey: U.S. biotechs warn tariffs could impede access to cures, stifle innovation

Today, the Biotechnology Innovation Organization (BIO) released results from a membership survey that underscores the significant, global integration of the biomedical supply chain. According to the findings, nearly 90% of U.S. biotech companies rely on imported components for at least half of their FDA-approved products -- making the supply of medicines for US patients and families especially vulnerable to proposed tariffs on the European Union, China, and Canada.

According to the survey, tariffs will:

- **Reduce Access to Affordable Medicines:** A staggering 94% of biotech firms anticipate surging manufacturing costs if tariffs are placed on imports from the European Union.
- **Stall Medical Innovation:** Proposed tariffs on the EU would force 50% of companies to scramble for new research and manufacturing partners. Half of those surveyed say they would have to rework or potentially delay regulatory filings, jeopardizing the pace of innovation.
- **Create Red Tape:** In the face of sudden tariffs, 80% of biotech firms report needing at least 12 months to find alternative suppliers, and a remarkable 44% would require more than two years -- delays that could disrupt the pipeline of breakthrough treatments.

"This survey demonstrates the far reaching and potentially damaging impacts of the proposed tariffs on our biotechnology industry, on biomedical research and on patients," said BIO President and CEO John F. Crowley. "We fully support strong policies and programs that incentivize the manufacture of medicines here in America. Re-onshoring key parts of the biotechnology supply chain to the U.S. and our allies and strengthening the American manufacturing base should be a high priority for both national and economic security. It will take years, though, for this shift and we need to be mindful of the negative consequences of these proposed tariffs. We look forward to working with the Administration and Congress to develop incentives and policies that drive private sector dollars to spur a renaissance of U.S. biotech manufacturing." Conducted in February 2025, the survey captures perspectives ranging from small, start-up companies to large-cap corporations with more than $1 billion in revenue.

Source: www.bio.org

ASSOCIATION OF BIOTECHNOLOGY LED ENTERPRISES (ABLE)

Comments and questions are welcome and should be adDr.essed to:

Email
coo@ableindia.org.in

Website
www.ableindia.in

Twitter

LinkedIn

AdDr.ess
No.123/C, 16th Main Road 4th Block, 5th Cross, Koramangala, Bangalore-560 034, India

Tel.:
+91-80-41636853

able
Pursuing Infinite Opportunities
Association of Biotechnology Led Enterprises