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â??Govt should facilitate low-interest loans or VC funding specifically for biopharma startups & small enterprisesâ?•

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In a recent development, Nagpur-based biotech company GeNext Genomics (GNG) has joined hands with Merck Life Science to support the Indian biotech system, particularly in the area of biomanufacturing, which is garnering more attention after the approval of the BioE3 policy. Supriya Kashikar, Founder & Chief Executive Officer, GeNext Genomics shares her views with BioSpectrum on the growth of biomanufacturing sector in India, and how the company plans to play a relevant role in this aspect.



What are the key objectives of your recent collaboration with Merck? How will this partnership foster innovation and strengthen India's position in the global biotech market?

The partnership combines Merck's biomanufacturing systems with GNG's Clone Development and HIND Antibody Library to drive biopharmaceutical innovation and position India as a hub for advanced R&D. The GNG-Merck collaboration creates a unique competitive edge for both companies by integrating local expertise with global biomanufacturing capabilities. Furthermore, Merck's expertise in both Upstream Processing (USP) and Downstream Processing (DSP) will support us in areas of biologics production, optimising cell culture yields, and refining end products to meet international standards.

This partnership is set to innovate and strengthen India's biotech landscape:

- *Platform Processes for Novel mAbs and Other Molecules:* With Merck's advanced bioprocessing systems installed at GNG, we're positioned to efficiently develop and produce novel monoclonal antibodies (mAbs) and other therapeutic molecules. These processes ensure consistent, high-quality products that meet the highest global standards.
- *Supporting Clone Development Services from India:* With the integration of Merck's systems into GNG's Clone Development platform, we're set to become a go-to provider for scalable clone development services. This will cater to a wide range of biotech firms, both in India and abroad.
- *Infrastructure for Startups***:** Our collaboration creates a solid infrastructure for biotech startups, providing end-to-end support—from process development to clinical-phase production. This ensures that biotech startups in India can focus on innovation while we handle the complexities of scaling up.
- *Future Scale-Up and Commercial Manufacturing:* With Merck's decades of expertise in drug development and manufacturing, GNG is well-positioned to advance its capabilities in scaling up production and preparing for commercial manufacturing. This strategic collaboration enables GNG to explore and pursue the commercialisation of its proprietary New Biological Entities (NBE) and biosimilar candidates, ensuring a robust pathway from development to market readiness.

What other plans are in store at GNG for driving innovation?

We envision GNG as an emerging leader in novel and biosimilar asset development both as its own pipeline as well as contract research in the coming years. In line with this vision, GNG plans to expand its reach and impact across global biopharmaceuticals, diagnostics, and therapeutic antibody discovery and development.

Some of our strategic goals include:

- *Scaling the HIND Antibody Library:* We aim to expand the HIND Antibody Library's scope to encompass a diverse range of therapeutic targets, positioning it as a vital tool for novel drug discovery and collaborative research from India.
- *Strengthening Biosimilar and Biologic Production:* Leveraging our collaboration with Merck and seeking strategic partnerships, we look forward to expanding GNG's biosimilar offerings to meet the demand for affordable, high-quality biologics in domestic and global markets. Currently one being in pre-clinical studies supported by the National Biopharma Mission, BIRAC.

- *Expanding Diagnostic and Custom Antibody Solutions:* As precision medicine continues to gain prominence, GNG plans to develop new diagnostic and antibody solutions for emerging diseases and personalised treatments.

Our aim is to be steadfast in our mission to drive innovation and contribute to the future of biotechnology by offering cutting-edge solutions that can transform global healthcare.

Would the new BioE3 policy prove to be a gamechanger for the future of biotechnology in India?

Building a robust biomanufacturing ecosystem in India is crucial for accelerating innovations in bio-based product development. With the nation's bioeconomy projected to reach $300 billion by 2030, the startup community plays a pivotal role in driving this transformation, fostering technological advancements, and addressing industry challenges.

In this context, the BioE3 Policy— 'Biotechnology for Economy, Environment, and Employment'—represents a transformative milestone for India's biotech sector. By fostering innovation-driven R&D and championing sustainable biomanufacturing, this policy not only aligns with global climate goals but also positions India at the forefront of the circular bioeconomy. Furthermore, the BioE3 policy will play a pivotal role in enhancing and amplifying the life sciences sector by building a skilled workforce and creating new employment opportunities, thereby strengthening the country's research capabilities and technological expertise. Additionally, by addressing key infrastructure needs, the policy aims to streamline scaling-up processes, making biotechnology advancements more accessible and cost-efficient.

Overall, this policy is a step in the right direction for India's life science industry. As we continue to support the emerging biotechnology startup community, the advent of this policy will boost our motivation to drive the Circular Economy revolution by 2047.

Though biotech innovation is increasing in our country with technological advancements, innovators still face multiple challenges. What are your views on this and expectations from the government?

In recent years, India's biopharma industry has witnessed significant growth, fuelled by technological advancements, research, and increased manufacturing capabilities. Although the industry holds immense growth potential, it is crucial to tackle challenges that may hinder progress.

Securing adequate funding and managing budgets effectively are significant hurdles for Indian biotech startups. The sector is further challenged by complex regulatory landscapes, high production costs, limited access to advanced technologies, and a shortage of specialised talent in critical domains. Adding to these issues is the urgent need for enhancing the laboratory infrastructure to support research and development. GNG has been grateful to BIRAC for supporting the development of one of our assets through the National Biopharma Mission Grant.

Unlocking the industry's full potential requires strategic policymaking, a stronger focus on research and innovation, and robust public-private partnerships. Recognising these critical challenges and addressing them decisively at both global and local levels is crucial for driving the next wave of advancements.

We believe the government plays a crucial role in unlocking the full potential of the biotech sector. To drive meaningful growth, a proactive approach is needed to strengthen public-private partnerships, advancing research and technologies, skill development, and constant industry/stakeholder initiatives will amplify the potential of the biotech industry.

Additionally, strengthening ties between academia and industry is essential to drive innovation and build valuable partnerships in research and technological advancements. Government policies that prioritise skill development, empower scientists, and promote R&D can help cultivate a culture of continuous innovation within the sector.

When speaking specifically for Biopharma, the government should develop and implement a comprehensive biopharma policy that incentivises research, innovation, and production and streamline regulatory frameworks to reduce bottlenecks in drug approval and manufacturing processes. The government should facilitate low-interest loans or venture capital funding specifically for biopharma startups and small enterprises. Currently, BIRAC is the only body that does it, but we need more and more government bodies to come up with biopharma-focused financial instruments to attract investors.

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