

Entrepreneurship is Key to Sustainable Growth for Future of Biotech

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The juncture has come where the global biotech sector needs to make some smart bets



India's emergence as a global healthtech and biotech innovation hub in the last decade, has changed the landscape of the world healthcare sector and the overall bioeconomy, by establishing centres of growth away from the historically prominent hubs in the Global North, for the first time. The development is transformative and has sweeping implications for how biotech especially healthcare advancements can create solutions for societal progress across countries.

In India itself, it is predicted that by 2047, biotech, healthtech, agriculture, and environment sectors will reshape our society and the boundaries of socio-economic development. Advanced and accessible diagnostics, personalized treatments, and affordable therapies are expected to reduce disease burdens, while innovations in agriculture promise increased crop yields and sustainable practices.

Similarly novel green technologies will mitigate environmental pollution, climate change and their domino effect on health and agriculture. Today's youth are poised to drive this revolution, positioning India as one of the emerging global leaders in innovation integrated with social and economic growth.

The vehicle carrying this innovation to society will be deep science entrepreneurship. India has jumped 40 places in Global Innovation Index in the last two decades. While India's investment in science and technology clearly has begun to pay off, India's young talent has embraced an entrepreneurial mindset and pursued entrepreneurships that solve real-world challenges, breaking away from traditional career choices.

India is now home to more than one hundred and twenty thousand startups and is the third largest startup ecosystem across the world with 102 startups, roughly 1 in 100 startups emerging as unicorns and creating impact at the global stage. Youngsters today are keen not only on securing their future but also of the underserved.

Healthtech and biotech entrepreneurship in India today is cutting-edge but has inclusivity, equity and sustainability as its core pillars. While striving to be world-leaders we are principled upon "leave no one behind". This fundamental change is paving the way for a sustainable model for growth for Viksit Bharat and our own vision of a Viksit Jagat.

Recent examples of such pioneering work in healthtech and biotech are Bengaluru-based Bugworks, one of a handful of efforts worldwide to disrupt the antibiotics space for the first time in 6 decades, Stringbio, one of the top 5 synthetic bio companies in the world decarbonising the environment by harnessing greenhouse gases to develop proteins for clean and sustainable food production. Mumbai based ImmunoAct, is revolutionising therapeutics for cancer, MedGenome, based in Kochi is a global leader in genomics-driven diagnostics and advancing precision medicine through their proprietary South Asian genetic database. These are solutions that are global changemakers and all are rooted in India.

The federal and state government policies have been instrumental in creating an enabling ecosystem for this startup boom. Three factors that have contributed to this success have been a strong focus on firstly, establishing deep roots across Tier 1, 2 or 3 cities, secondly to have the state venture where venture capital firms cannot, viz. Inject funds or risk capital at the early stage and thirdly to nurture curiosity and latent innovation talent in the young population especially at the school or university stage.

The Global North has fostered state-of-the-art infrastructure through its long-term investment and policies in research and innovation. But gold standards may no longer remain gold as the hub for growth is gearing up for a change of base. India with its hugely diverse population in terms of geography and socio-economic conditions provides the best platform for inspiring and creating sustainable innovations and thus opportunity, for a very divergent society. This maps very easily to a very divergent world. India has thus become a serious contender for game changing solutions that impact globally not just in LMICs but also in developed nations overburdened by resource-intensive ways to progress.

Ultimately knowledge is for the humankind without borders. The juncture has come where the global biotech sector needs to make some smart bets. As human society gets more and more connected, economies get linked and progress truly becomes universal, working in silos, isolation in research and innovation, reinventing the wheel in one corner of the world while the other corner already has a solution, will not be the most profitable for human progress.

What will make Indian biotech leapfrog to global leadership will be to have this realisation fast and open up the innovation landscape through international collaborations that encourage mutual participation in solving societal challenges. In other words, promote going global with the local.

Platforms such as Startup Mahakumbh, which is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) and Startup India, driven by industry bodies such as FICCI, TiE, IVCA, Assocham, Nasscom and Bootstrap Foundation, go a long way in enabling convergence of stakeholders from every sphere of the ecosystem not only nationally but also globally.

Let us come together at the Startup Mahakumbh, taking place from April 3 to 5, 2025, at Bharat Mandapam, New Delhi, to drive innovation. Together, we can change lives.

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