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# Telangana turns catalyst for innovation

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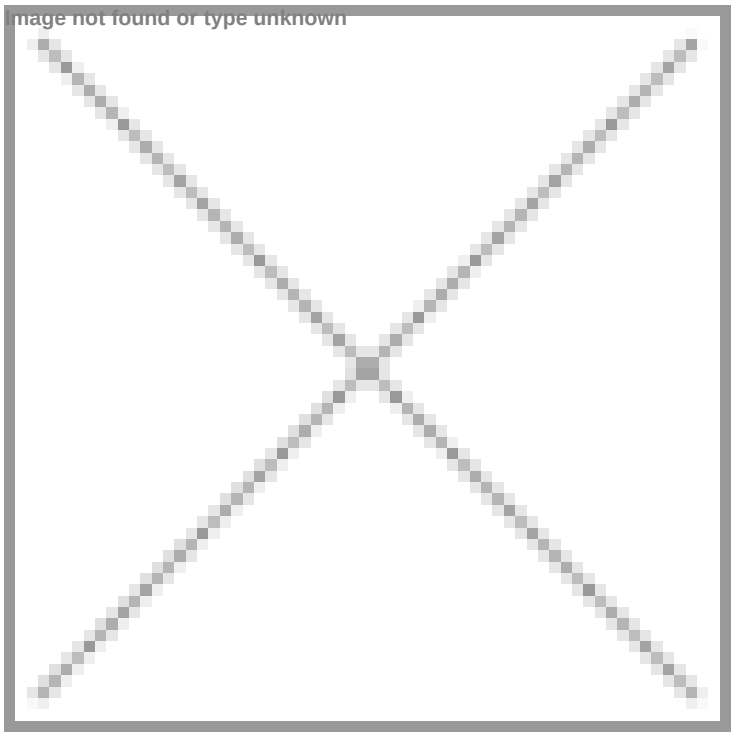
**Telangana is at a pivotal moment in its journey as a global life sciences hub. As healthcare value chains shift from scale-led manufacturing to innovation-driven, technology-intensive models, the State has moved decisively to position itself ahead of this curve. Anchored by Hyderabad's globally trusted pharmaceutical and vaccine base, and strengthened by growing capabilities in research, clinical development, digital health, and advanced manufacturing, Telangana is charting a deliberate transition toward higher-value, science-led growth. The unveiling of the Next-Gen Life Sciences Policy 2026–30 signals this strategic intent with clarity and ambition, setting the stage for its next phase of global leadership. Let's explore further.**




The global life sciences industry is undergoing a structural transformation. Supply chain resilience, advanced therapeutics, precision medicine, and sustainable bio-manufacturing are no longer future priorities—they are immediate imperatives. Telangana's Next-Gen Life Sciences Policy 2026–30, unveiled at the World Economic Forum Annual Meeting in Davos, represents a timely and strategic response to these shifts. With clear targets for investment, high-quality job creation, frontier R&D, clinical research, and talent development, the policy signals the State's intent to move from being a leading manufacturing base to a fully integrated global life sciences innovation ecosystem. Strong investor momentum and Hyderabad's rising global visibility make this the perfect moment to examine how policy, infrastructure, science, and industry are converging to shape Telangana's next phase of growth.

**From Manufacturing Leadership to Ecosystem Leadership**

For over two decades, Telangana—anchored by Hyderabad—has been a trusted pharmaceutical and vaccine manufacturing powerhouse. The State today accounts for nearly 40 per cent of India's pharmaceutical production and contributes close to one-third of global vaccine output. With more than 269 US FDA-approved manufacturing facilities, Telangana has earned deep regulatory credibility across highly regulated global markets.

However, as global industry dynamics evolve, leading life sciences hubs are increasingly defined not by volume alone, but by their ability to conceive, develop, clinically validate, and scale innovation.

This inflection is articulated clearly by **Kiran Mazumdar-Shaw, Executive Chairperson, Biocon Limited**, who observes that the global life sciences industry is transitioning from "scale-led growth to an innovation-driven, value-centric model." Telangana's Next-Gen Life Sciences Policy directly aligns with this shift by prioritising frontier R&D, advanced manufacturing platforms, and precision medicine—areas that demand deep scientific capability, long-term capital, and ecosystem-level coordination.

Over the next five years, this strategic repositioning will elevate Telangana from being a critical manufacturing node in global supply chains to a co-creator of next-generation therapies, platforms, and healthcare solutions.

**Frontier R&D as a Core Growth Driver**

A defining feature of the policy is its strong emphasis on frontier R&D and advanced manufacturing. By actively promoting technologies such as biologics and biosimilars, cell and gene therapy, mRNA platforms, CRISPR technologies, antibody-drug conjugates, oligonucleotides, peptides, and precision fermentation, the policy signals a decisive move toward science-led growth.

These platforms represent a step change from traditional small-molecule manufacturing. They are characterised by high entry barriers, complex regulatory pathways, and strong intellectual property creation—factors that favour ecosystems with deep scientific infrastructure and skilled talent.

Over the next five years, this focus is expected to drive three structural shifts within Telangana's life sciences ecosystem:

1. **Higher value creation per investment**, as advanced therapies and platforms command premium global valuations.
2. **Tighter integration between research and manufacturing**, enabling faster translation from lab to market.
3. **Stronger global innovation partnerships**, particularly with multinational biopharma companies seeking end-to-end capabilities in regulated markets.

This direction is reinforced by **Krishna Kanumuri, Managing Director and Chief Executive Officer, Sai Life Sciences**, who notes that the policy creates "a compelling platform for companies to continue partnering with global innovators and advancing high-quality R&D from India for the world." Over the medium term, such innovation-led investments are likely to anchor long-term capabilities rather than short-cycle, capacity-driven expansions.

**Genome Valley and Cluster-Led Growth**

The expansion of Genome Valley and the planned establishment of a Bio-Innovation and Bio-Manufacturing Cluster in collaboration with the Government of India will be central to translating policy intent into on-ground outcomes. Genome Valley's evolution—from India's first organised life sciences park into a globally networked innovation cluster—illustrates Telangana's ambition to compete with leading international hubs such as Boston-Cambridge, San Francisco Bay Area, and Greater Tokyo.

Cluster-led development enables dense collaboration between startups, multinational companies, CROs, CDMOs, academia, and regulators. Over the next five years, this density is expected to significantly reduce time-to-market for complex therapies, lower entry barriers for startups through shared infrastructure, and encourage cross-pollination of talent and ideas.

**Satish Reddy, Chairman, Dr. Reddy's Laboratories Limited**, underscores the importance of such ecosystems, noting that strong research and industry integration is essential to "translate scientific advances into meaningful health and economic outcomes." Telangana's policy reflects this thinking by positioning infrastructure as a catalyst for innovation rather than merely a real estate intervention.

**Clinical Research and Evidence-Driven Healthcare**

Another transformative pillar of the policy is its focus on strengthening the clinical research ecosystem. Globally, pharmaceutical and biotech companies are grappling with rising clinical trial costs, prolonged approval timelines, and patient recruitment challenges. Telangana's proposed measures—faster approvals, disease-specific clinical registries, and the operationalisation of initiatives such as the Clinical Innovation Sandbox—directly address these constraints.

Over the next five years, these interventions are likely to position Telangana as a preferred destination for clinical trials, real-world evidence generation, and precision medicine research, particularly for diseases with relevance to emerging markets.

This aligns with the broader global perspective articulated by **Shyam Bishen, Head of the Centre for Health & Healthcare and Member of the Executive Committee, World Economic Forum**, who emphasises that the future of healthcare will be shaped by ecosystems that bring together science, technology, talent, and policy coherence. Telangana's focus on privacy-compliant digital health records and clinical registries lays the foundation for population-scale, data-driven healthcare innovation.

**Scaling the Pharma Services Opportunity**

The policy's explicit focus on expanding the pharma services ecosystem—particularly Contract Research Organisations (CROs) and Contract Development and Manufacturing Organisations (CDMOs)—reflects a clear understanding of global outsourcing trends. As innovator companies seek flexibility, speed, and high-quality partners across the discovery-to-commercialisation continuum, service-led models are becoming central to global life sciences value chains.

Telangana's ambition to scale the pharma services sector from an estimated $2 billion to approximately $10 billion over the coming years represents a significant growth opportunity. Over the next five years, this expansion is expected to generate high-skill employment, strengthen global client linkages, and diversify the State's life sciences revenue base beyond product manufacturing.

This trajectory resonates with **Madeleine Roach, Executive Vice President, Business Operations, Sanofi**, who highlights the importance of advanced biomanufacturing, talent ecosystems, and regulatory excellence in redefining how global pharmaceutical companies serve patients worldwide.

**MedTech, Diagnostics, and the Convergence of Biology and Engineering**

The policy's focus on diagnostics, medical electronics, and MedTech reflects the growing convergence of biology, engineering, and data science in modern healthcare. As healthcare systems worldwide shift toward early diagnosis, minimally invasive interventions, and remote patient monitoring, MedTech innovation is becoming a critical pillar of healthcare delivery.

The expansion of the Medical Devices Park and targeted support for diagnostics manufacturing are expected to strengthen Telangana's MedTech ecosystem over the next five years—reducing import dependence while integrating domestic capabilities into global supply chains.

**Majid Kaddoumi, Executive Vice President, Eurasia, Medtronic**, notes that forward-looking policy frameworks are essential for accelerating MedTech-led innovation. The presence of global engineering and innovation centres in Hyderabad underscores the State's growing role in high-end medical technology development.

**Talent as the Cornerstone of Long-Term Competitiveness**

Among the most enduring impacts of the Next-Gen Life Sciences Policy will be its emphasis on talent development. The proposed Telangana School of Life Sciences and associated skilling platforms reflect a recognition that sustainable competitiveness depends on a future-ready workforce.

Over the next five years, industry-aligned curricula, structured internships, certification programmes, and lifelong learning pathways will help build talent pools in biologics, advanced analytics, artificial intelligence, regulatory sciences, and health economics. This focus on employability and inclusion ensures that sectoral growth translates into broad-based socio-economic impact.

**Dr Satyanarayana Chava, Executive Director and Chief Executive Officer, Laurus Labs**, describes the policy as "unique and transformative," noting that it lays out a clear roadmap for leadership in emerging areas of healthcare through innovation-driven growth.

**Sustainability and Responsible Bio-Manufacturing**

Sustainability is increasingly becoming a decisive factor in global life sciences competitiveness. Telangana's Green Pharma City—with its emphasis on zero liquid discharge, centralised waste management, energy efficiency, and net-zero practices—positions the State at the forefront of sustainable bio-manufacturing.

Over the next five years, this focus will enhance Telangana's attractiveness to global companies facing rising ESG expectations from regulators, investors, and customers, while also ensuring environmentally responsible industrial growth.

**A Five-Year Outlook: From Participation to Global Leadership**

Taken together, Telangana's Next-Gen Life Sciences Policy 2026–30 is poised to reshape the State's life sciences industry in three fundamental ways over the next five years:

1. **Elevating Telangana's role** from a manufacturing hub to a global innovation partner.
2. **Deepening ecosystem integration**, connecting science, industry, policy, and talent.
3. **Embedding sustainability, resilience, and long-term value creation** into growth.

As **Shakthi M. Nagappan, Chief Executive Officer, Telangana Life Sciences**, notes, the policy anticipated global shifts toward advanced manufacturing, deep innovation, and clinical research—trends now reinforced by national priorities and global industry movements.

With strong leadership, disciplined execution, and global alignment, Telangana is positioning itself not merely to participate in the future of life sciences—but to help define it. The next five years will be critical in consolidating Hyderabad and the State at large as a globally integrated, innovation-led life sciences ecosystem that is competitive, sustainable, and future-ready.

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