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Industry Leaders Drive CRDMO Reform, Unite Under IPSO for a Transformational Leap

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Due to lack of a clear and unified industry definition and slowing progress, the CRDMO industry leaders joined hands and formed Innovative Pharmaceutical Services Organization (IPSO) at the recently concluded BioAsia-2025 to create a strategic blueprintâ??a roadmap to define the CRDMO sector and position India as a global leader in biopharma outsourcing.



India’s Contract Research, Development, and Manufacturing Organization (CRDMO) sector is at a turning point. With immense potential for growth, it is emerging as a hub of innovation and opportunity. However, one major challenge persists—a lack of a clear and unified industry definition. This ambiguity is slowing progress, prompting industry leaders to push for decisive action.

Recognising this need, experts are advocating for a dedicated industry panel to address key challenges and shape policies that will drive the sector forward. During a recent panel discussion, leaders emphasised the urgency of creating a strategic blueprint—a roadmap to define the CRDMO sector and position India as a global leader in biopharma outsourcing.

Seizing the moment at BioAsia-2025, industry leaders announced the formation of the Innovative Pharmaceutical Services Organization (IPSO)—a dedicated industry body uniting 11 leading CRDMO companies. This strategic alliance is set to accelerate India’s dominance in biopharma innovation, ensuring a stronger, more structured future for the sector.

Role of IPSO

With expertise spanning drug discovery, development, bio-manufacturing, and process innovation, IPSO aims to foster industry collaboration, strengthen policy advocacy, and enhance India’s regulatory and supply chain infrastructure. Industry leaders emphasize that India’s CRDMO sector, currently valued at $3-3.5 billion, has the potential to scale up to $22-25 billion by 2035, driven by the global shift in pharma outsourcing, rising demand for biologics, and India’s established strengths in chemistry and process innovation.

However, industry leaders felt that achieving this ambitious growth requires overcoming key challenges, including streamlining regulatory pathways, improving access to capital, developing a specialised talent pool, and strengthening supply chain resilience. In view of all these challenges, IPSO is set to play a pivotal role in addressing the gaps, ensuring India emerges as a preferred global destination for pharmaceutical R&D and advanced manufacturing.

Collective action

Industry experts revealed that IPSO will serve as a platform for advocacy, policy engagement, and industry collaboration, driving the next wave of biotech and pharmaceutical growth. "The Indian CRDMO sector is positioned for major transformation, with the potential to become a leader in serving the global biopharma and wider life sciences outsourcing market models. Realising this opportunity will require change and collaboration among all stakeholders in the Indian CRDMO ecosystem," stated **Peter Bains, CEO Designate, Syngene International Ltd**.

Manni Kantipudi, CEO and Whole Time Director, Aragen Life Sciences Ltd, echoed this sentiment, emphasising the need to scale capabilities in new modalities and build a resilient supply chain.

The Boston Consulting Group (BCG)’s Managing Director & Partner in the Healthcare practice, Vikash Agarwalla emphasised the importance of collective action from both industry and policymakers, stating that unlocking the sector's full potential will require a combined effort. **Smruthi Suryaprakash, a partner from BCG**, added that Indian CRDMOs must aggressively expand capabilities in high-growth areas like biologics and gene therapies, while addressing regulatory bottlenecks and scaling talent development.

Stress on Policy

Many industry leaders, including Peter Bains (Syngene), Manni Kantipudi (Aragen), Krishna Kanumuri (Sai Lifesciences), Nandini Piramal (Piramal Pharma), and Ramesh Subramaniam (PI Health Sciences), Guilano Perfetti (Jubilant Biosys), and Akhil Ravi (Aurigene Pharmaceutical Services) among others who were part of a panel discussion stressed on a unified industry definition, strategic workforce development, and a policy-driven roadmap to unlock the full potential of India’s CRDMO sector.

As IPSO takes charge, the industry is now positioned to drive breakthrough innovations in emerging modalities like ADCs, RNA therapeutics, and cell & gene therapies, paving the way for India’s rise as a global life sciences powerhouse.

India's CRDMO Sector Poised to grow at $25 Billion by 2035

During a panel discussion industry experts revealed that India is witnessing a transformative era for the CRDMO sector, with projections indicating a potential surge to $22-25 billion by 2035.

Revealing details from a recent report, "Unleashing the Tiger: Indian CRDMO Sector 2025," published by BCG noted that India is strategically positioned to become a global leader in pharmaceutical innovation. This report reveals that India's established prowess in small molecule capabilities coupled with its sustainable cost advantages and burgeoning expertise in biologics, is attracting significant attention from global pharmaceutical giants seeking to diversify and secure their supply chains.

The report also revealed that India's CRDMO market is experiencing a remarkable 15 per cent compound annual growth rate (CAGR), significantly outpacing global industry averages. This robust growth is fueled by several key factors. Notably, India maintains a significant cost advantage over Western nations, which enables faster project startup times and reduced overall development expenses.

Furthermore, it also highlighted that the global supply chain realignments, driven by geopolitical uncertainties and the desire for resilience, are unlocking a substantial $10 billion opportunity for Indian CRDMOs.

Adding to this, the Western pharmaceutical companies which are actively seeking alternative destinations and hubs to mitigate risks and ensure uninterrupted supply, India is rightly positioned to capitalise on their requirements.

Moreover, the rapid growth of new modalities, such as Antibody Drug Conjugates (ADCs), DNA & RNA therapeutics, and cell and gene therapies, presents a significant opportunity for India to leapfrog in innovation, as these advanced modalities are witnessing annual growth rates of 25-35 per cent, demanding specialised CRDMO services that India is increasingly equipped to provide.

The Indian government's commitment to fostering a self-sufficient, innovation-driven ecosystem is evident in substantial funding initiatives, with over Rs 25,000 crore allocated to support biotech and pharmaceutical innovation. While India currently holds a 2-3 per cent share of the $140-145 billion global CRDMO market, its potential for growth is immense, as the confluence of favourable factors positions India to become a dominant player.

Global pricing pressures and policies like the US Inflation Reduction Act are accelerating off-shoring, further driving demand for cost-effective CRDMO services. Additionally, growing investments in research and development, coupled with infrastructure enhancements, are strengthening India's innovation capabilities.

Talent Gap and Fostering Scientific Curiosity

Industry leaders voiced concerns over talent acquisition in the CRDMO sector, despite India’s abundant knowledge pool. The industry requires 12,000–15,000 additional chemists in the next five years, highlighting an urgent talent gap. “Quality is as crucial as quantity. Though India produces 50,000 chemistry postgraduates annually, they need proper training,” said **Dr Ramesh Subramaniam, Global CEO of PI Health Sciences Ltd, United States.**

Akhil Ravi, CEO of Aurigene Pharmaceutical Services (a fully owned subsidiary of Dr. Reddy's Laboratories) emphasised immediate strategic intervention. He advocated industry-government collaboration to establish finishing schools for industry-specific training. Some firms have also launched in-house training universities to ensure a skilled workforce.

Krishna Kanumuri, MD & CEO of Sai Lifesciences India, stressed the need to revive scientific curiosity, hindered by an execution-focused industry. Encouraging innovation, techniques like flow chemistry, and promoting research careers from the 12th grade were seen as crucial long-term solutions, including attracting Indian scholars back from abroad.

Strengthening International Partnerships

Giuliano Perfetti, CEO & MD, Jubilant Biosys Ltd, Italy emphasised the importance of international collaboration, particularly with Europe. "European companies are actively seeking alternatives to China, presenting an opportunity for deeper engagement with India’s CRDMO sector." However, he stressed the need for India to "ensure compliance with global quality and Health, Safety, and Environment (HSE) standards." Regulatory alignment between India and Europe was deemed essential for fostering long-term investment and collaboration.

Capital Deployment

India’s CRDMO sector faces a significant capital deployment gap compared to China. Dr Ramesh Subramaniam emphasised the urgent need for increased investment, highlighting that a single CRDMO in China deploys more capital annually than most of the Indian industry combined. To unlock its full potential, India's capital deployment must increase 4-5 times over the next decade.

For the industry to scale in line with market opportunities, it must grow 5-10 times its current size. Given the capital-intensive nature and long life cycles of pharmaceutical development, investors must adjust their return expectations. However, India’s high cost of capital remains a challenge, necessitating financial innovations to improve capital efficiency.

Beyond capital, the sector faces multiple hurdles that must be addressed for sustainable growth. By 2035, India requires a 6-7 times expansion of its talent pool, necessitating industry-ready curricula and upskilling initiatives. Streamlining regulatory approvals and establishing a CRDMO-focused framework are crucial to accelerating drug development and attracting investments. Strengthening the supplier ecosystem by incentivizing local manufacturers and setting up Innovation Parks can reduce import reliance.

Industry experts suggest that designating CRDMO as a “sunrise sector” would improve capital access and attract private investment. Coupled with strategic investments, policy interventions, and global partnerships, India can emerge as a global CRDMO hub, driving economic growth, job creation, and pharmaceutical leadership.

Raw Material Divide

Another critical challenge lies in raw material sourcing. Akhil Ravi pointed out, "Due to regulatory challenges and historical limitations, India lacks certain critical raw materials.” Overcoming this requires developing safe and efficient processes for hazardous chemistry and leveraging the country's robust oil and gas sector. "Government support in the form of grants and incentives, similar to China’s biotech funding, could accelerate progress," he suggests. This call for strategic government intervention highlights the need for a collaborative approach to enhance domestic manufacturing.

Underscoring the proactive stance of industry leaders in tackling critical issues, he said, "We've recognised the challenges faced by the CRDMO sector and have come together independently to address them by taking it to the government and the policy makers.”

Road Ahead

Industry leaders highlighted that academia plays a crucial role in addressing the talent shortage in India’s CRDMO sector, with nearly 70 per cent of professionals holding PhDs. However, private universities remain underutilised. Dr Subramaniam highlights the need for stronger industry-academia collaboration to integrate graduates into the workforce. Salary expectations remain a challenge, requiring competitive entry-level packages and hands-on training initiatives to attract top talent.

It was also stressed that government policies also play a key role in accelerating growth. Peter Bains stresses the need for regulatory reforms to reduce bureaucratic hurdles and improve business efficiency. Establishing a CRDMO park, similar to SEZs (Special Economic Zones), could streamline approvals and facilitate global trade. Attracting international talent and re-shoring critical technologies remain key concerns.

Industry leaders also discussed investment trends and supply chain diversification. **Nandini Piramal, Chairperson of Piramal Pharma Ltd**, noted the uncertainty surrounding the Biosecure Act, while Krishna Kanumuri highlighted differing investor expectations. Peter Bains revealed that Rs 2,000 crore has been invested in the sector over three years, emphasising the need for continued funding to attract global customers.

Despite geopolitical challenges, India’s emerging supply chains present a sustainable opportunity.Overall, the experts agree that industry collaboration, policy reforms, and talent development are critical to positioning India as a global CRDMO hub.

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