

Making India a Global Agrochemical Manufacturing Hub

Kearney Perspectives

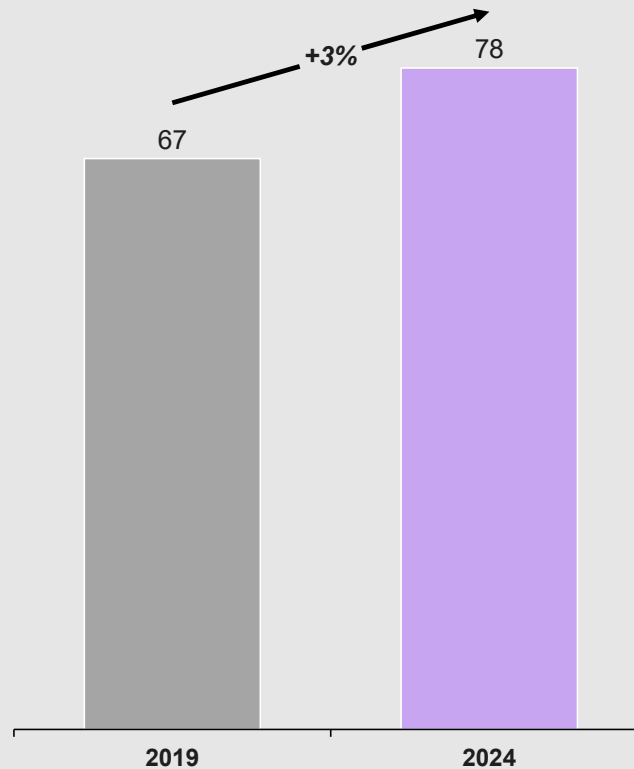
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Globally, crop protection chemicals market is going through significant disruptions and headwinds

Global Crop Protection Market Size (USD Bn, 2020-25)



Source: Allied Market Research, Grand View Research

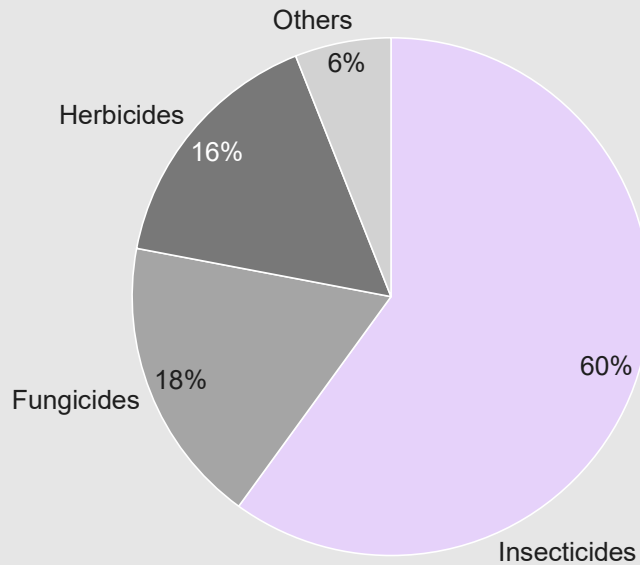
Key Sector Trends

-  Significant **M&A driving consolidation** in the industry
-  **Players moving from product sales to service/solution offerings** to solve farmers' issues
-  **Digital disruption** in the industry leading to new business models and offerings
-  **Long Term Regulatory headwinds** in Europe driven by sustainability concerns
-  **Movement of supply chain away from China** due to environmental clampdown, regulatory and geopolitical reasons
-  **Growth in Organic Farming / Precision Agriculture**

Indian Agrochem market is worth USD ~6 Bn, with India being the 4th largest producer and exporting ~50% of its production...


Indian Crop Protection Market

Total Size: USD ~6 Bn,
projected to grow at 7-8% annually for the next 5 years



~50% production in India is exported to other markets

Key Growth driver for Indian Market

- 1 Underpenetrated market – low per capita usage** 
- 2 Need to improve yield with limited arable land available** 
- 3 Rising farm income and farmer awareness** 
- 4 Thrust to generic market- off patent active ingredients** 
- 5 China's environmental clampdown – move to India, huge export potential** 

...with potential to become a global export powerhouse

Attractive cost of operations

- India's unit cost of factory **labor at less than \$2 per hour is lower than most industrial nations** giving it a powerful tool to become a manufacturing hub despite increasing automation of businesses

Skilled manpower at competitive cost

- **India is ranked fourth in the world** in terms of total count of **doctoral graduates** with 24,000+ every year
- Increasing share of young working population, **India can leverage its demographic dividend** over next few decades

Recognition of International quality standards and regulations

- India is a **trusted partner** to maintain international quality standards and IP protection for CSM and in licensing projects

Continuing potential for import substitution

- Kearney detailed analysis indicates potential for substituting several Agrochem intermediate imports with domestic manufacturing
- E.g. INR 600 Cr of imports of CCMT (largest volume from Switzerland); INR ~460 Cr of imports of DMPAT (largest volume from China)



Note: CCMT: 2-Chloro-5-Chloromethyl-Thiazole; DMPAT: O-Dimethyl Phosphoramido Thioate

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Global players are actively looking to India as the destination for Custom Synthesis and Manufacturing

India as next contract mfg. hub

- Significant cost advantage driven by low labor costs
- Availability of trained professionals
- Reputation for IP protection
- Large & growing domestic market

“We are increasingly diversifying away from China. Even if environmental regulations and trade war situation resolves, we do not see our dependence on China to go back to previous levels”

- CPO, leading global player

“There has been a heavy impact because several of our products are single-sourced (China). Considering environmental regulations, the suppliers that can deliver have increased their prices continuously, leading to a 200 percent rise over past 12 months. We are seeking alternate opportunities”

- Executive at a global chemical firm

1. Custom Synthesis and Manufacturing
Source: Kearney

How do global players evaluate CSM¹ provider



Business model and strategic fit

- Business model and ambition: Contract manufacturer vs. Agrochemicals company
- Company’s attitude & experience in partnerships with MNCs
- Ability to invest
- Organization size, structure and stability



Capabilities

- Custom synthesis capability – assorted operations, chemistries, kilo lab & pilot plants
- Technical staff and competency
- Project mgmt. & implementation
- Supply chain infrastructure and capabilities –handling, in-bound / out-bound transportation, inventory mgmt. (incl. VMI)
- QA / QC mgmt., waste handling



Cost Leadership

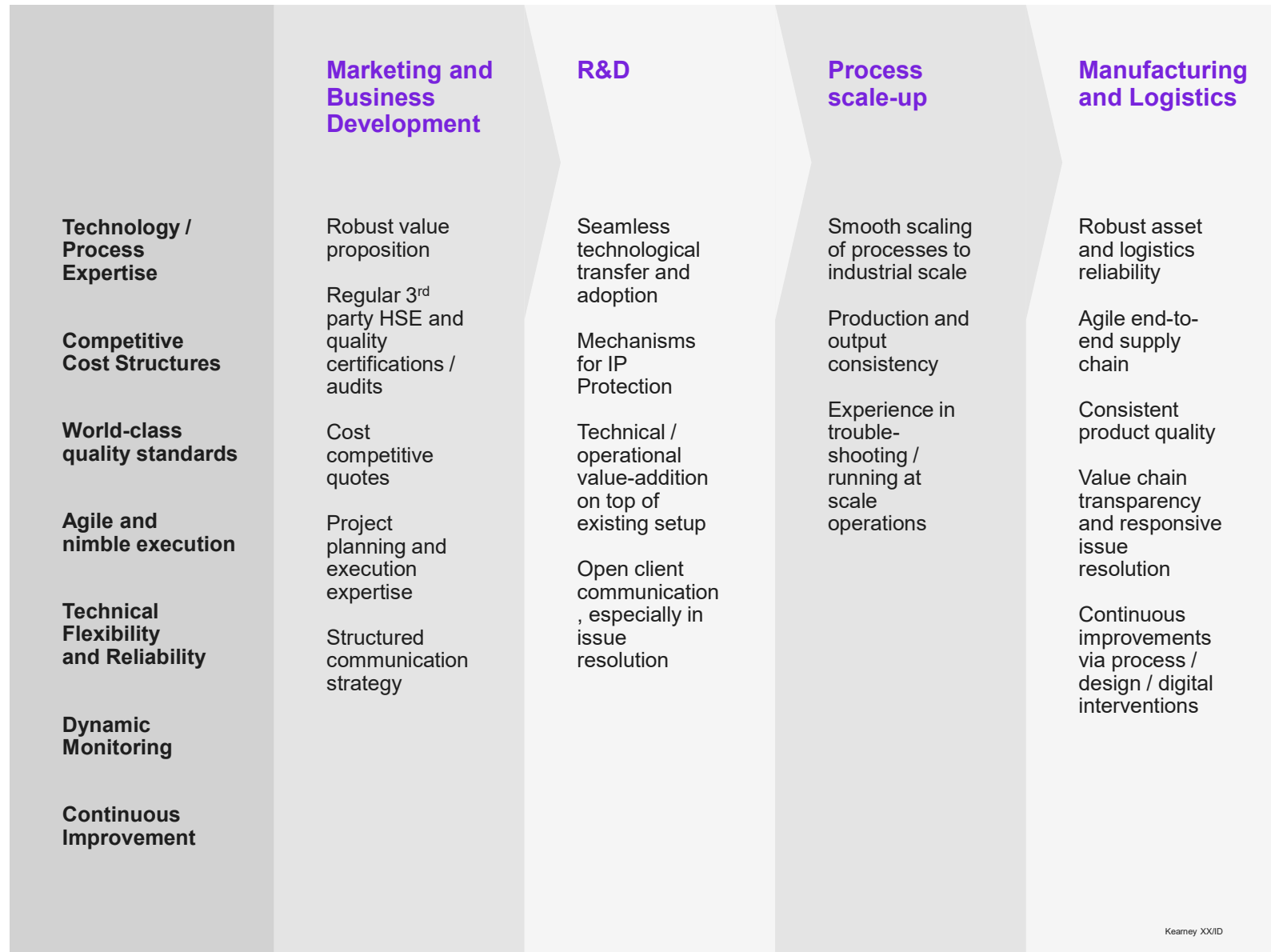
- Current cost competitiveness – willingness to share cost structure, profit formula vs industry benchmarks
- Engagement in continuous improvement efforts with partners



Risks

- IP protection incl. any country specific risks
- SHE performance
- Regulatory compliance and right to operate (registration etc.)
- Long-term financial viability

Indian manufacturers will need a comprehensive capability building process to gear up for global scale



The government has taken commendable measures to help build India's competitiveness in chemicals; More measures in this direction can help India emerge as a global leader

Six development themes		Action items
1.	From India scale to Global scale	<ul style="list-style-type: none"> – Focus on achieving scale through growing top companies in each sector, while aiding small-scale entrepreneurs – Free trade agreements for preferential market access to advance export capabilities
2.	From Arbitrage to Capability Advantage	<ul style="list-style-type: none"> – Move away from labor, cost, and regulatory arbitrage as key advantages to increasing innovation, promoting high-value industries and institutionalizing best-in-class global industry standards in Indian manufacturing; includes: <ul style="list-style-type: none"> – Manufacturing technology upgrades (from factory automation to improvements in supply chain visibility) – Sector-specific skill development programs – Product portfolio expansion towards more complex, high-value goods – Strict enforcement of regulations around labor laws, sustainability, and other good manufacturing practices
3.	Stability in Policy Environment	<ul style="list-style-type: none"> – Define a clear direction and roadmap for evolution of regulatory framework – Minimize surprises/shocks in policy making
4.	Help industry build a culture of Sustainability, Safety, and Quality	<ul style="list-style-type: none"> – Government can strengthen on-ground inspection and execution capabilities to ensure a better culture of compliance, sustainability and safety on the ground
5.	Financial incentives and speed of execution	<ul style="list-style-type: none"> – Institutionalize financial incentives for cost-parity (production incentive schemes, reduced energy costs, optimized lending rates etc.), but also improve speed of implementation, especially for mature industries; includes: <ul style="list-style-type: none"> – Faster government approvals for capacity expansion (land / environment) – Faster government approvals in day-to-day operations (import / export clearance)
6.	Infrastructure inputs to infrastructure outcomes	<ul style="list-style-type: none"> – Chemical parks/manufacturing shared facilities with well developed infrastructure – Improve rate of logistics and supply chain infrastructure development by focusing on outcomes

Thank You

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