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# Perspective on Indian Chemical Industry

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**Abstract**

The Indian chemical industry is one of the most dynamic and rapidly expanding sectors in the global economy, contributing significantly to national GDP, exports, and employment. This paper provides a perspective on the structure, growth drivers, and sustainability initiatives shaping the sector in 2025 and beyond. With an estimated valuation of USD 300 billion and projected growth to USD 350 billion by 2027–28, India stands as a global hub for specialty chemicals and value-added downstream products. The paper briefly highlights key segments, geographic clusters, and leading companies driving innovation and competitiveness. Furthermore, it examines the government's policy support, the industry's shift toward green chemistry, and the transition to a circular economy.

**Overview of The Indian Chemical Industry**

In 2025, Indian chemical industry is estimated at USD300 bn in value terms that contributes approx. 7% to India's GDP. It is the 6th largest in the world and 3rd largest in Asia. It contributes about 11% of total exports. It is expected to surpass USD 350 billion by the year 2027–28. Within the overall chemical industry, certain industry sectors like agrochemicals, dyes & pigments, generic pharmaceuticals (downstream chemicals), and specialty chemicals are strong and expected to deliver double digit growth in the next 5-10 years.

**Structure of the Industry**

The Indian Chemical Industry can be grouped into four main segments:

| Segment | Examples | Share of industry | Notes |
|---|---|---|---|
| Basic Chemicals (Commodities) | Caustic soda, chlorine, methanol, sulfuric acid | ~37% | Large scale, cyclical pricing |
| Petrochemicals | Polymers (PE, PP, PVC), synthetic fibers | ~25% | Linked to crude oil prices |
| Specialty Chemicals | Agrochemicals, dyes, paints, adhesives, surfactants | ~22% | High-margin, export-oriented |
| Pharmaceuticals & Fertilizers | Urea, phosphates, APIs | ~16% | Strong domestic demand |

The major Geographic Clusters within India are Gujarat, which is the largest hub constituting about 60% of chemicals output with concentration in Jamnagar, Dahej, Vapi, Hazira. Followed by state Maharashtra with industry across Navi Mumbai, Thane, Pune that are strong in specialty & dyes sector. Third state dominating is Tamil Nadu with Manali, Cuddalore having major petrochemicals & fertilizers plant. Fourth significant state is Andhra Pradesh and new state Telangana with majorly Pharma & agrochemicals plants across the twin states.

Within India, the Major Players in Basic & Petrochemicals industry segment are Reliance Industries, Indian Oil, GAIL, ONGC Petro Additions amongst other smaller ones. In the Specialty Chemicals segment, Aarti Industries, Atul Ltd, SRF, Navin Fluorine, Galaxy Surfactants constitute the majority. Across Fertilizers industry segment, IFFCO, Coromandel International, Chambal Fertilizers are notable names. Across Agrochemicals industry segment, UPL, PI Industries, Rallis India have a majority market share.

**Growth drivers**

The Growth Drivers of Indian Chemical Industry are mostly divided into two aspects of domestic demand and exports. Amongst the two, the Domestic Demand within India with growing middle class, its increased consumption for consumer goods, paints, detergents. Followed by growth in Exports with leading Specialty chemical segment, followed by dyes, and agrochemicals in markets of Americas, EU, Africa amongst others.

Domestically, the Indian Chemical Industry, also known as the building block industry, has significant government push within India. There is Petroleum, Chemicals & Petrochemicals Investment (PCPIR) regions where the incentives are extended by the government. There are several Production-Linked Incentive (PLI) schemes for certain chemical sub-sectors. Interestingly, Indian government has formulated a China+1 Strategy, where emphasis are given to domestic producers reducing dependence on China with a focus of sourcing within India. With ever growing population in India, there is rising demand of Agricultural needs, which in turn helps the Fertilizers and agrochemicals growth in demand that has lead to several capacity expansions announced by major producers in this segment.

With the push towards value-addition in this sector, the specialty chemical segment is slowly becoming the top growth driver within Indian chemical industry. This segment generates better margins domestically, and has high demand across export markets that in a way helps towards Indian government push towards sustainability and decarbonization.

**Indian Specialty Chemical Industry**

Specialty chemicals are defined as performance-based, value-added chemicals designed for specific applications. The Specialty chemical segment is crucial in the growing end use industry segments of automotive, agriculture, pharmaceuticals, aerospace in domestic consumption and accessible developing markets. This segment is expected to generate revenues in excess of USD92 bn by year 2030, which will be nearly 1/3rd of the total chemical industry. India has competitive advantage of lower production costs compared to its peers in western economies. India has a strong engineering & R&D talent in chemistry. The domestic diversified manufacturing base with no single customer or industry dominates. Last few years there has been a regulatory shift from China due to environmental crackdowns in China that have pushed certain global buyers to explore India. Domestic backward integration across certain segments across fluorochemicals, dyes has helped the Indian producers to affectively reduce output costs and become more and more globally competitive.

**Outlook**

India is likely to double its specialty chemicals exports in the next 5 years with strongest growth expected in Agrochemicals (driven by food security & export demand), Fluorochemicals (for EV batteries, solar), Construction chemicals (urbanization push) and Personal care surfactants (FMCG growth).

The Indian government push in areas of clean energy towards Low Emissions by minimal release of VOCs (volatile organic compounds), greenhouse gases, and toxic effluents. There is emphasis on waste minimization by recycling solvents, recovering by-products, and achieving “zero liquid discharge.” The sector widely voices opinions on green feedstocks using bio-based raw materials instead of petrochemicals. Large chemical plants highlight importance on Energy Efficiency with optimized process design, renewable power and cogeneration. Local labor laws have moved in favour of worker and community safety leading to improved occupational health standards.

Globally, EU's REACH regulations, US EPA standards, ESG investing pressures. The corporate pledges for net-zero emissions and sustainable sourcing puts pressure for Indian chemical industry players to upgrade to global environmental standards.

**Indian Chemical industry shift towards green and circular economy**

India has recently tightened National Green Tribunal (NGT) and CPCB norms. There is focus towards "Zero Liquid Discharge" rules in chemical clusters like Vapi, Ankleshwar. Government at both centre and local level, with Industry Push have commissioned schemes of PLI for Advanced Chemistry Cell batteries (clean tech materials), PCPIR policy promoting integrated chemical hubs with CETPs (Common Effluent Treatment Plants). There are industry associations like Indian Chemical Council (ICC) that focuses on Responsible Care® certification for safe, sustainable chemical manufacturing.

There is drive towards creating a circular economy within the chemical industry. The circular economy means for chemical materials are kept in use for as long as possible, waste is minimized, and products are designed for reuse, recycling, or regeneration. For chemicals, this helps in reducing raw material use through efficiency, reusing chemicals or by-products in other processes, recycling waste into feedstock or new products, replacing hazardous materials with safer and renewable alternatives.

**Conclusion**

The Indian chemical industry is in a high-growth, strategic transition phase, moving from being primarily a commodity and bulk chemicals producer to becoming a global hub for specialty, sustainable, and circular chemical solutions.

Overall, India is positioned to double its chemical exports in the next 5–7 years, provided it invests in feedstock security, clean technology adoption, and R&D for value-added products. The winners will be companies that combine cost competitiveness with global-quality, sustainable production.

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