

CHEMICALS



March 2024

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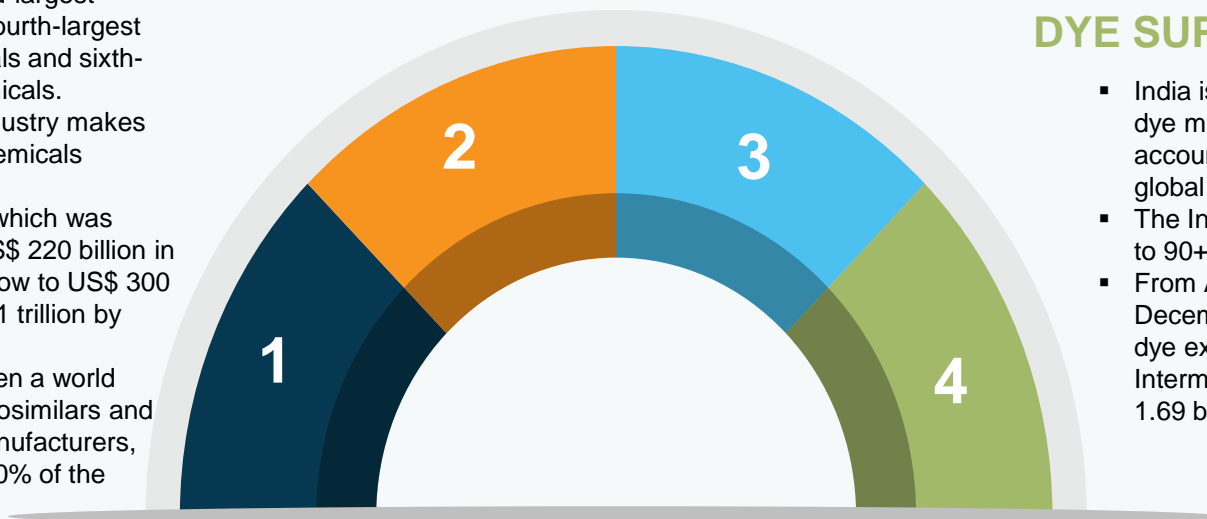
Executive summary

2. HIGHLY DIVERSIFIED

- The Indian chemicals industry is highly diversified, covering >80,000 products and employing >2 million people.
- A network of 200 national laboratories and 1,300 R&D centres provides a strong base to the Indian chemical industry to drive innovations.
- The chemical industry is expected to contribute US\$ 300 billion to India's GDP by 2025.

1. GLOBAL POSITION

- Globally, India is the third-largest consumer of polymers, fourth-largest producer of agrochemicals and sixth-largest producer of chemicals.
- The Indian chemicals industry makes up 3.4% of the global chemicals industry.
- India's chemical sector, which was estimated to be worth US\$ 220 billion in 2022, is anticipated to grow to US\$ 300 billion by 2025 and US\$ 1 trillion by 2040.
- India has traditionally been a world leader in generics and biosimilars and major Indian vaccine manufacturers, contributing more than 50% of the global vaccine supply.



3. STRONG GROWTH IN SPECIALTY CHEMICALS

- The Indian specialty chemicals sector is expected to increase at a CAGR of 12.4%, from US\$ 32 billion in 2019 to an estimated US\$ 64 billion by 2025.
- Also, ICRA's ratings indicate improved exports and a positive outlook for agrochemicals and surfactants.
- On February 15th, 2023, Indian Specialty Chemical Manufacturer' Association (ISCMA) signed an MoU with USIIC to promote trade in specialty chemicals.

4. LARGEST GLOBAL DYE SUPPLIER

- India is the world leader in dye manufacturing, accounting for 16%-18% of global dyestuff exports.
- The Indian Dye is exported to 90+ countries.
- From April 2023 to December 2023, India's dye exports (Dyes and Dye Intermediates) totaled US\$ 1.69 billion.

Notes: GDP: Gross Domestic Product, FDI: Foreign Direct Investment, CAGR: Compounded Annual Growth Rate

Source: Department of Chemicals and Petrochemicals, Nirmal Bang Group



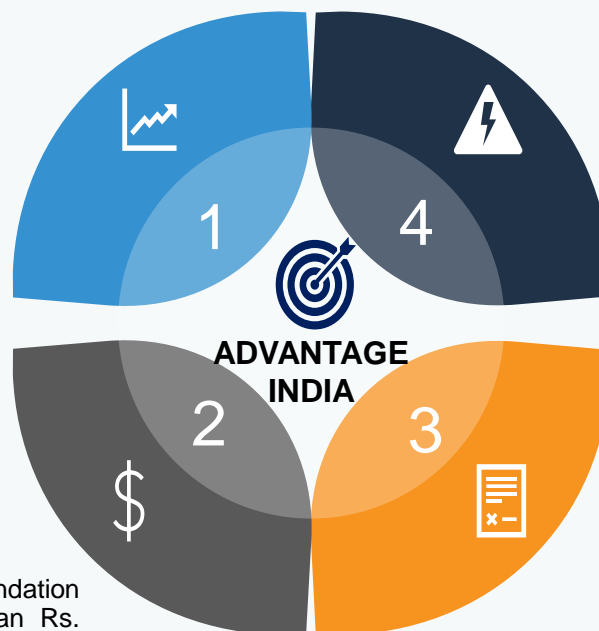
Advantage India

1. Growing demand

- ▶ Rise in demand from end-user industries such as food processing, personal care and home care is driving the development of different segments in India's specialty chemicals market.
- ▶ India is the 6th largest producer of chemicals in the world and 3rd in Asia, contributing 7% to India's GDP.
- ▶ According to a McKinsey report, Chemicals and petrochemicals demand in India is expected to nearly triple and reach US\$ 1 trillion by 2040.

2. Increasing investments and spending

- ▶ FDI inflows in the chemicals sector (other than fertilizers) reached US\$ 22.07 billion between April 2000-December 2023.
- ▶ Prime Minister, Mr. Narendra Modi, laid the foundation stone of development projects worth more than Rs. 50,700 crore (US\$ 6.11 billion) on September 14, 2023.
- ▶ An investment of Rs. 8 lakh crore (US\$ 107.38 billion) is estimated in the Indian chemicals and petrochemicals sector by 2025.
- ▶ The "Power and Renewable Energy Manufacturing Zone, Narmadapuram," whose construction is anticipated to cost about Rs. 460 crore (US\$ 55.5 million), would contribute to the economic growth and employment generation of the area.



4. Opportunities

- ▶ India's specialty chemicals companies are expanding their capacities to cater to rising demand from domestic and overseas.
- ▶ With global companies seeking to de-risk their supply chains, which are dependent on China, the chemical sector in India has the opportunity for a significant growth.
- ▶ The Dahej PCPIR project in Bharuch, comprising 180 existing and 650 under construction industrial units has attracted an investment of Rs. 1 lakh crore (~US\$ 12 billion) and is expected to generate 32,000 jobs.
- ▶ The Odisha government accepted investment applications worth ~US\$ 345.3 million in the metal, cement, chemical, plastic, food processing and manufacturing sectors in April 2021. This is likely to generate 2,755 jobs.

3. Policy support

- ▶ Under the Interim Budget 2024-25 the government allocated Rs. 192.21 crore (US\$ 23.13 million) to the Department of Chemicals and Petrochemicals.
- ▶ The PLI plan for the National Programme on Advanced Chemistry Cell Battery Storage has been approved by the Union Cabinet as of May 2021.
- ▶ PLI schemes were introduced to promote Bulk Drug Parks, with a budget of Rs. 1,629 crore (US\$ 213.81 million).
- ▶ Government to open 25,000 Jan Aushadhi Kendras to make medicines available at affordable prices.

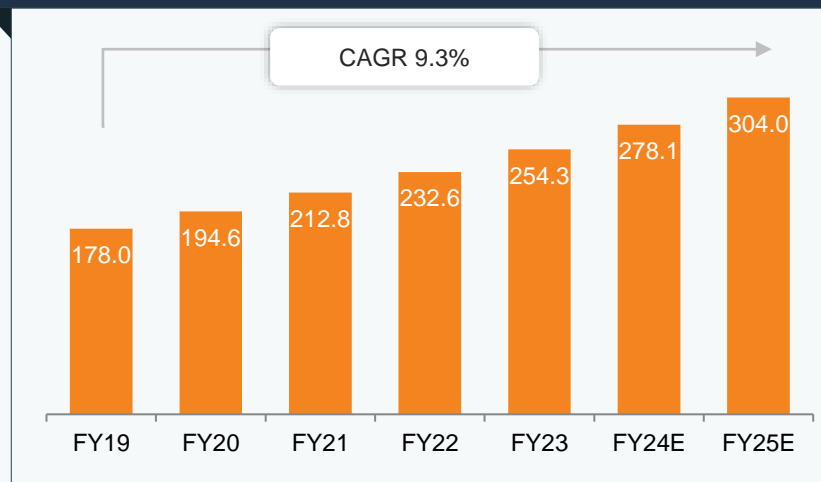
Source: Budget 2024-25, News Articles, DPIIT



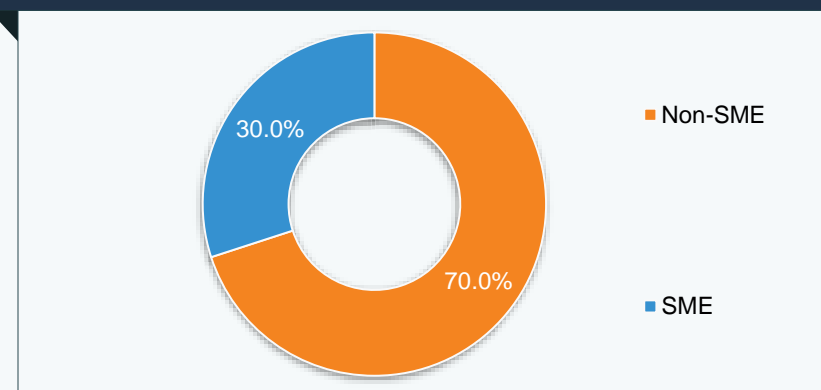
Chemicals market in India

- Chemicals industry in India covers >80,000 commercial products.
- India accounts for 2.5% of the world's global chemical sales, exporting to more than 175 countries.
- India is the 6th largest producer of chemicals in the world and 3rd in Asia, contributing 7% to India's GDP.
- The industry is expected to reach US\$ 304 billion by 2025 at a CAGR of 9.3%, driven by rising demand in the end-user segments for specialty chemicals and petrochemicals segment.
- Chemicals and petrochemicals demand in India is expected to nearly triple and reach US\$ 1 trillion by 2040.
- During April-December 2023, India's dye exports (Dyes and Dye Intermediates) totaled US\$ 1.69 billion.
- Specialty chemical companies are seeking import substitutions while exploring export opportunities to accelerate their business.
- India is the third largest polymer consumer in the world and is expected to consume 60 million tonnes by 2040.
- Gross bank credit for Chemicals and Chemical products grew by 4.2% in December 2023 as compared to the previous month.
- The agrochemicals market in India is expected to register an 8.6% CAGR to reach US\$ 7.4 billion between 2021 and 2026.
- Specialty chemicals account for 20% of the global chemicals industry's US\$ 4 trillion, with India's market expected to increase at a CAGR of 12% to US\$ 64 billion by 2025. This gain would be driven by a healthy demand growth (CAGR of 10-20%) in the export/end-user industries.

Chemical industry market size (US\$ billion)



Chemical Industry Revenue Share in FY22



Chemical's market is split into five key segments

Chemical's Market

Bulk chemicals



Petrochemicals & polymers



Fertilisers



Specialty chemicals

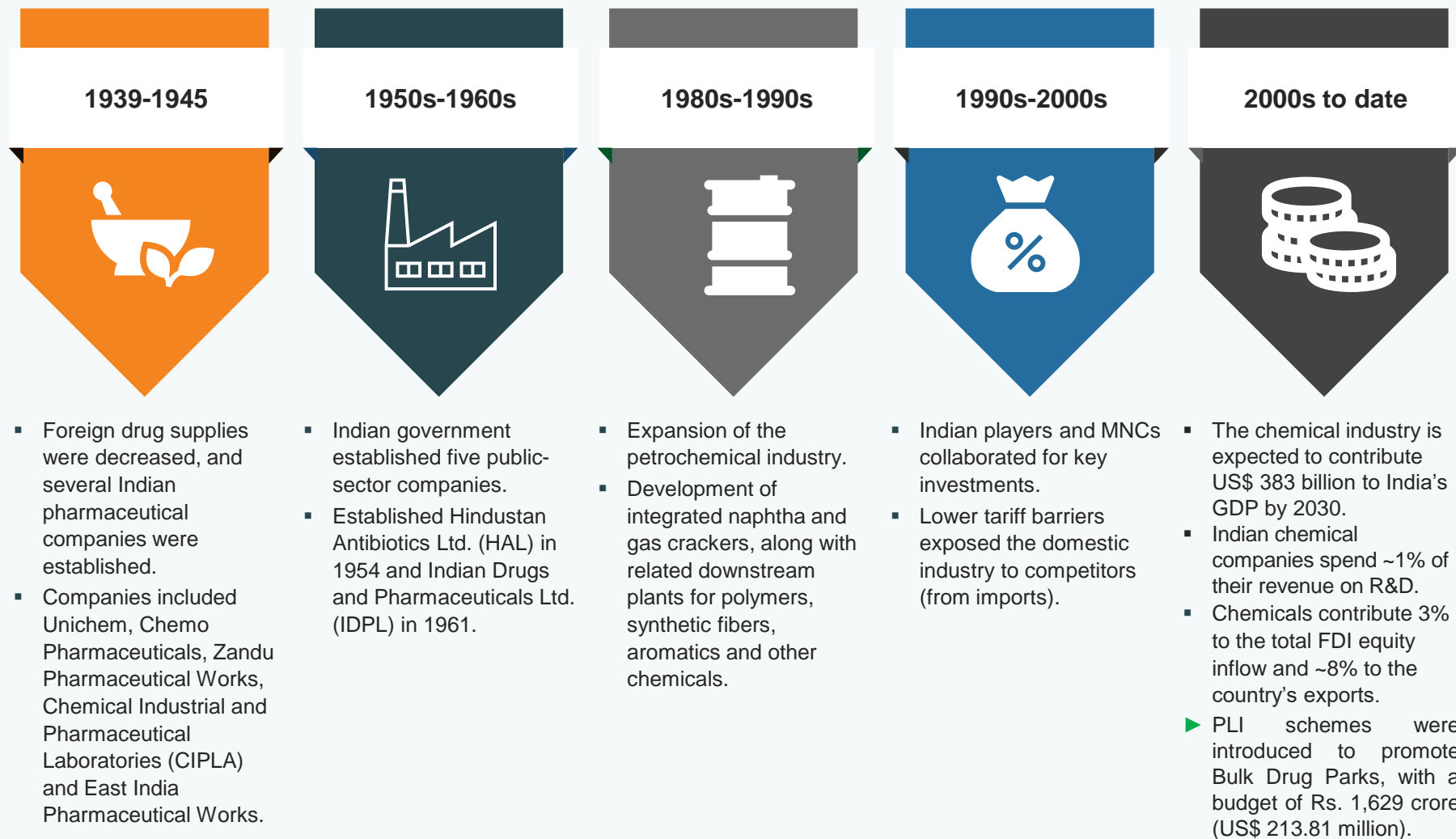


Agrochemicals



- These are groups of chemicals, which are manufactured on a large scale and further divided into organic, inorganic and alkali chemicals
- These chemicals are derivative of several chemical compounds such as hydrocarbons, which are derived from crude oil or natural gas
- These provide nutrients for plant growth; are divided into organic/inorganic and natural/synthetic. Further, these can be broadly classified into phosphate, potassium and nitrogenous
- These are derivatives of basic chemicals that are manufactured for specific end-use solutions. The characteristics of these chemicals include high-value, high R&D and low volume
- These chemicals are used to protect crops against insects and pests and include fungicides, herbicides, and insecticides, among others. These chemicals can be applied in water irrigation, seeds, soils and crops

Evolution of the Indian chemical sector



Source: KPMG report, News Articles

Key players in the chemical sector...(1/2)

Indian Companies

1

PIDILITE INDUSTRIES LIMITED

Adhesives, sealants, waterproofing solutions, construction chemicals, industrial resins, and polymers.



2

TATA CHEMICALS LIMITED

Gypsum, soda ash, soda bicarbonate, cement, salt, marine chemicals and crushed refined soda.



3

UNITED PHOSPHORUS LIMITED

Crop protection, herbicide, fungicide, insecticide, water conservation, seed treatments, adjuvants, biosolutions and fumigants.



4

GUJARAT FLUOROCHEMICALS LIMITED

Caustic soda, special chlorine derivatives, sodium chlorate, caustic potash, chloromethane, phosphoric acid, hydrogen peroxide and water treatment solutions.



5

RELIANCE INDUSTRIES LIMITED

Polymers, elastomers, polyesters, aromatics, fibre-intermediates and advanced materials.



Note: This list is indicative
Source: Company website

Key players in the chemical sector...(2/2)

International Companies

1

BASF INDIA LIMITED

Fungicide, herbicide, insecticide, industrial gases, alcohols and aldehydes, glycol ethers, glycol ether acetates and esters.



2

E.I. DU PONT INDIA PRIVATE LIMITED

Adhesives, digital printing inks and packaging materials & solutions.



3

MITSUBISHI CHEMICAL INDIA PRIVATE LIMITED

Industrial chemicals, basic petrochemicals, solvents and methyl methacrylate monomer & derivatives acrylonitrile & related products.



4

SABIC INDIA PRIVATE LIMITED

Aromatics, chlor-alkali, ethanolamines, ethoxylated surfactants, glycols, linear alpha olefins, natural detergent alcohol and olefins.



5

EXXONMOBIL COMPANY INDIA PRIVATE LIMITED

Butyl, ethylene propylene diene (EPDM) rubber, polyethylene products, polymer modifiers, polyolefin plastomers & elastomers and polypropylene.



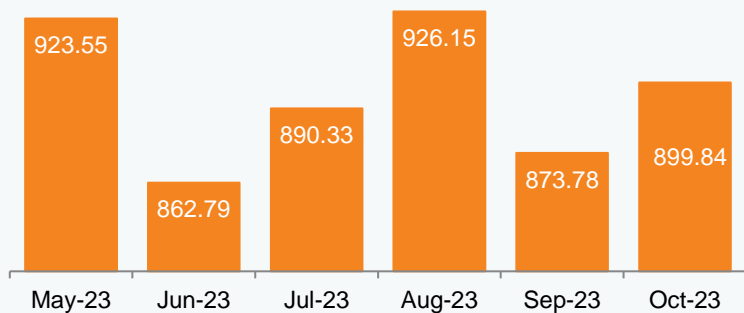
*Note: This list is indicative
Source: Company website*

Recent Trends and Strategies

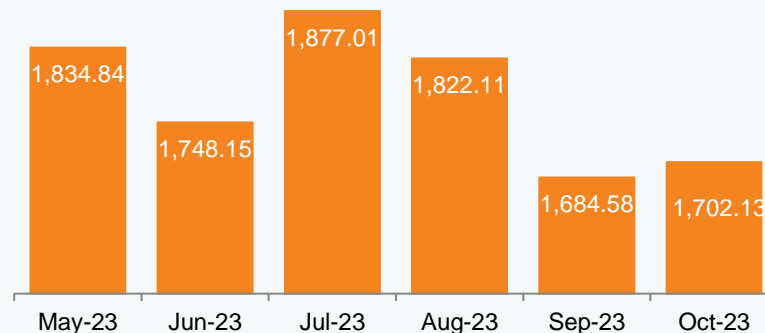


Chemical sector production capacity

Production of Chemicals ('000 MT)



Production of Petrochemicals ('000 MT)



- Major chemical production reached 899.84 million metric tonnes (MMT) in October 2023, while petrochemical production reached 1,702.13 MMT.
- In October 2023, production levels of various chemicals were as follows:
 - Soda Ash: 226.87 MMT
 - Caustic Soda: 285.46 MMT
 - Liquid Chlorine: 207.88 MMT
 - Formaldehyde: 20.66 MMT
 - Pesticides and Insecticides: 21.14 MMT

Notes: MT: metric tonnes

Source: Department of Chemicals and Petrochemicals

Chemical sector import and export statistics

- From April 2023 to December 2023, exports of organic chemicals stood at US\$ 5.49 billion & inorganic stood at US\$ 1.50 billion.
- Imports of organic chemicals were US\$ 11.21 billion and inorganic chemicals US\$ 5.01 billion from April 2023 to December 2023.
- From April 2023 to December 2023, exports of castor oil, essential oil, and cosmetics and toiletries stood at US\$ 2.92 billion.
- Imports of castor oil, essential oil, and cosmetics and toiletries are US\$ 1.98 billion during April-December for FY2023-24.
- From April-December 2023, the export of agrochemicals was US\$ 3.12 billion, dyes were US\$ 1.56 billion and the other dye intermediates were US\$ 125.53 million.
- The import of agrochemicals was US\$ 1.11 billion, dyes were US\$ 226.33 million and the other dye intermediates were US\$ 969.07 million during April-December 2023.
- India exported to more than 175 countries in 2022-23. The major export destinations were the USA, China and new destinations viz. Turkey, Russia and North-East Asian Countries (Hongkong, Japan, Korea RP, Taiwan, Macao, Mongolia).
- Around 50% of the agro-chemicals are exported from India to the world. India is the top producer and exporter of castor oil, with 85-90 % of total global exports in the world.
- India holds a strong position in international trading of chemicals and ranks 9th in exports and 6th in imports at a global level (excluding pharmaceuticals).

Imports and Exports of Chemicals (US\$ million) – FY24



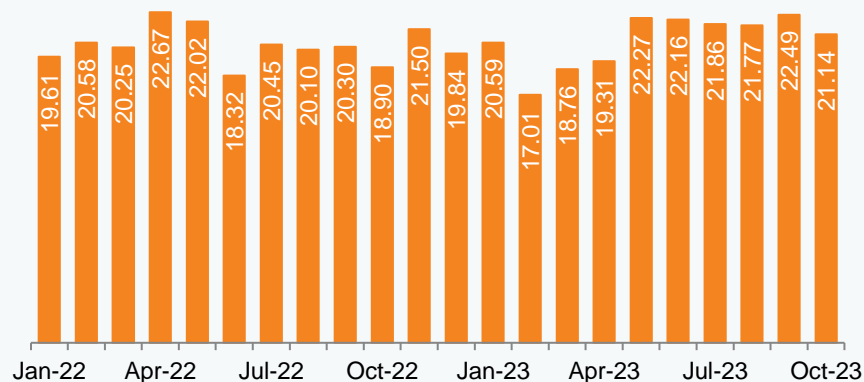
Source: Department of Chemicals and Petrochemicals, Directorate General of Commercial Intelligence and Statistics

Agrochemical trends in India

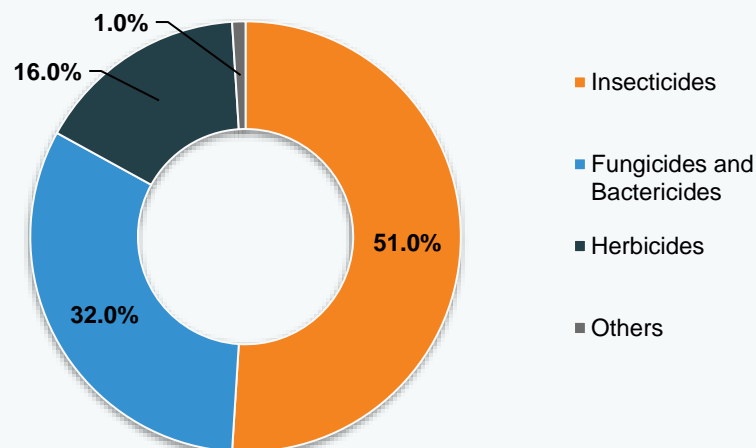
- Globally, India is the fourth-largest producer of agrochemicals after the United States, Japan and China.
- India is the fourth net exporter of agrochemicals and the thirteenth-largest exporter of pesticides and disinfectants. The country's exports have increased on account of low-cost manufacturing, availability of technically trained manpower, seasonal domestic demand, overcapacity, competitive pricing and strong presence in generic pesticide manufacturing.
- The rise in demand in the agricultural segment is driving the growth of agrochemicals in India
- In October 2020, the government urged players in the agrochemicals industry to come out with new molecules of global standards for the farmers' benefit, while CropLife India, the industry body, pitched for stable policies and regulatory regimes to boost growth in the sector
- According to Expert Market Research (EMR), the market is expected to increase at a CAGR of 8.6% between 2021 and 2026 to reach ~US\$ 7.4 billion.
- Agrochemicals in India is currently a US\$ 5.5 billion market, growing at a CAGR of 8.3%. By 2040, it is expected to account for almost 40% of India's overall chemicals exports.
- India's agrochemicals export stood at US\$ 3.12 billion, while imports stood at US\$ 1.11 billion between April 2023 to December 2023.

Source: Ministry of Chemical & Petrochemical Statistics, News Articles

Pesticides and Insecticides Production ('000 MT)

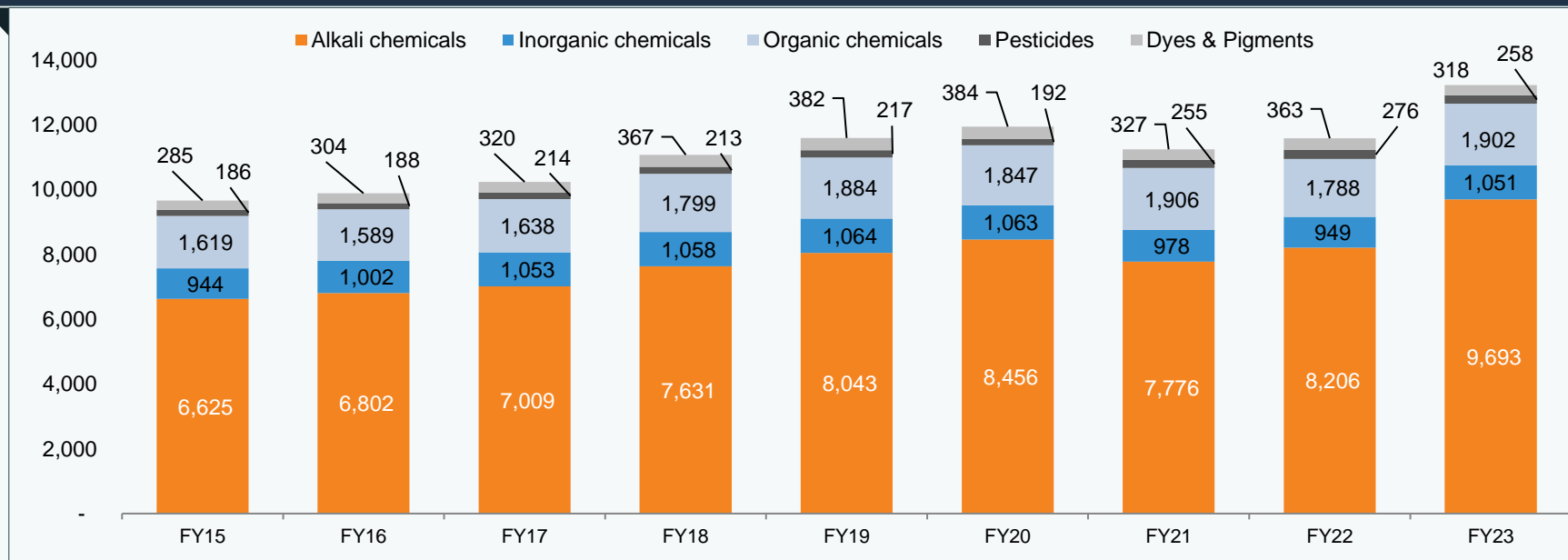


Consumption of Agrochemicals by Segments in India – 2021 (MT, Technical Grade)



Chemical trends in India

Chemical Production in 2015-2023 (MMT)



- In 2022-23 (April-March), Alkali chemicals stood at 73.3% of the total chemical production.
- Government initiatives such as the promotion of small and mid-sized 'Sodium Bicarbonate' and 'Ammonia' processing industries in proximity to soda ash manufacturing units are likely to boost demand for soda ash in the country.
- The specialty chemicals market in India would grow faster than China, increasing its market share to 6% by 2026 from 3-4% in fiscal 2021. A shift in the global supply chain brought on by the China+1 strategy and a resurgence in domestic end-user demand was expected to fuel significant revenue growth of 18–20% in 2022 and 14–15% in 2023.

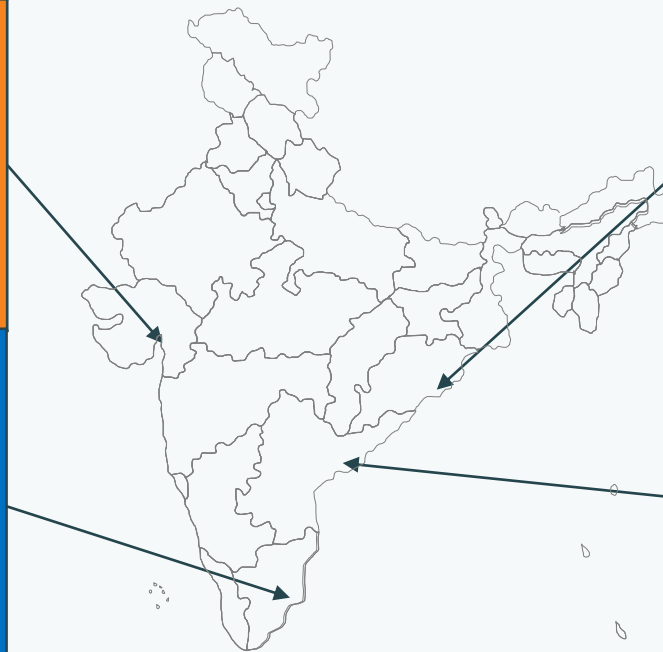
Note: *for FY20 and FY21 Pesticide includes production of Pesticides and Insecticides, *Until February 2022, ** Until September 2022

Source: Ministry of Chemical & Petrochemical Statistics

Petroleum, chemicals and petrochemicals investment region (PCPIR)

To promote investments and development in this sector, Indian government approved four PCPIRs

Location/Region	Dahej
Actual Investment	Rs. 1,12,873 crore (US\$ 14.78 billion)
Total Area	453 Sq. Kms
Actual employment generated	1.84 lakh
Anchor Tenant	ONGC Petro-additional Ltd.
Location/Region	Cuddalore - Nagapattinam
Actual Investment	Rs. 8,100 crore (US\$ 1.06 billion)
Total Area	257 Sq. Kms
Actual employment generated	13,950
Anchor Tenant	Nagarjuna Oil Corporation Ltd.



Location/Region	Paradeep
Actual Investment	Rs. 45,000 crore (US\$ 5.89 billion)
Total Area	284.15 Sq. Kms
Actual employment generated	38,000
Anchor Tenant	Indian Oil Corporation Ltd.
Location/Region	Vishakhapatnam
Actual Investment	Rs. 43,744 crore (US\$ 5.73 billion)
Total Area	604 Sq. Kms
Actual employment generated	1.1 lakh
Anchor Tenant	Hindustan Petroleum Corporation Ltd.

- PCPIR in Dahej, Gujarat attracted more investments compared with the other three cities-wherein various Indian and multinational companies such as ONGC, GACL, OPAL, BASF and LANXESS have opened facilities. The Gujarat Infrastructure Development Corporation (GIDC) has made an investment of around Rs. 17,317 crore (US\$ 2.09 billion) for infrastructure development in the PCPIR.
- In December 2020, the PCPIR policy is being completely redesigned. Under the new PCPIR Policy 2020-35, it has been targeted to attract a combined investment of US\$ 142 billion (Rs. 10 lakh crore) by the year 2025, Rs. 15 lakh crore (US\$ 213 billion) by 2030 and Rs. 20 lakh crore (US\$ 284 billion) by 2035 in all the PCPIRs across the country.
- The four PCPIRs are expected to generate employment for ~33.83 lakh people. ~3.50 lakh persons were employed in direct and indirect activities related to PCPIRs by the end of 2020.

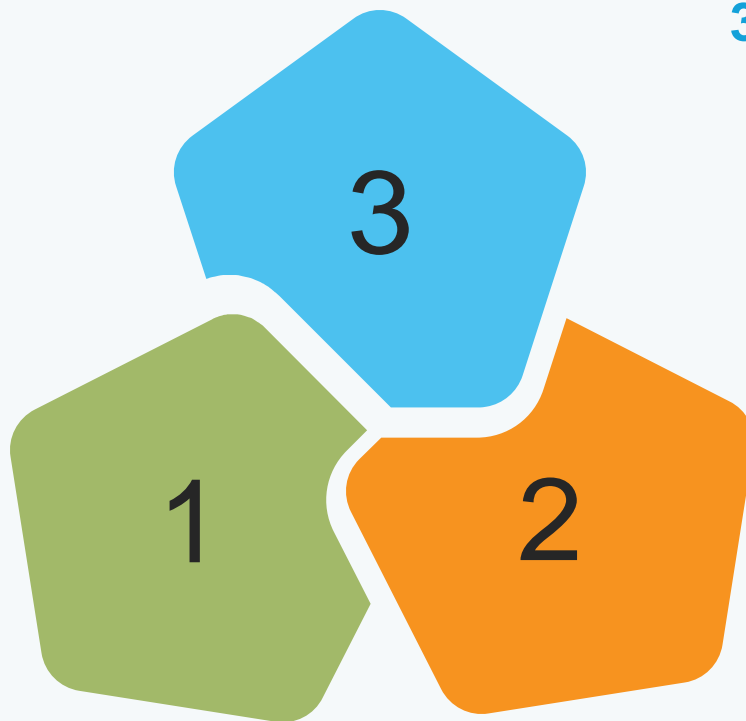
Source: Federation of Indian Chambers of Commerce and Industry, News Articles

Chemical players focusing on sustainable development

Indian chemical companies are investing in innovative solutions, focusing on issues such as water, environmental impact, raw materials, safety over lifecycle and energy use

1. Tata Chemicals

- Tata Chemicals commissioned a solar photo-voltaic plant to save energy.
- With an aim to control greenhouse gas emissions, it proposed to establish a 150 kWp grid-connected solar photovoltaic power plant on the rooftop terrace of the electrical substation.
- In January 2023, Tata Chemicals Europe signed a pact with Essar-backed Vertex for the sale of low-carbon hydrogen.
- Tata Chemicals intended to invest about Rs. 8,000 crore (US\$ 967.45 million) over the next 2-3 years as capex on an expansion spree that includes scaling businesses sustainably.



2. Kanoria Chemicals & Industries Limited

- The company's AlcoChem Ankleshwar Division runs 'waste to wealth' programme, which involves treatment of effluent and recycling water by a 'Reverse Osmosis' process developed by the company.
- In February 2023, the company is setting up a new formaldehyde plant with 300 TPD capacity at the existing manufacturing facility at GIDC, Ankleshwar in Gujarat.

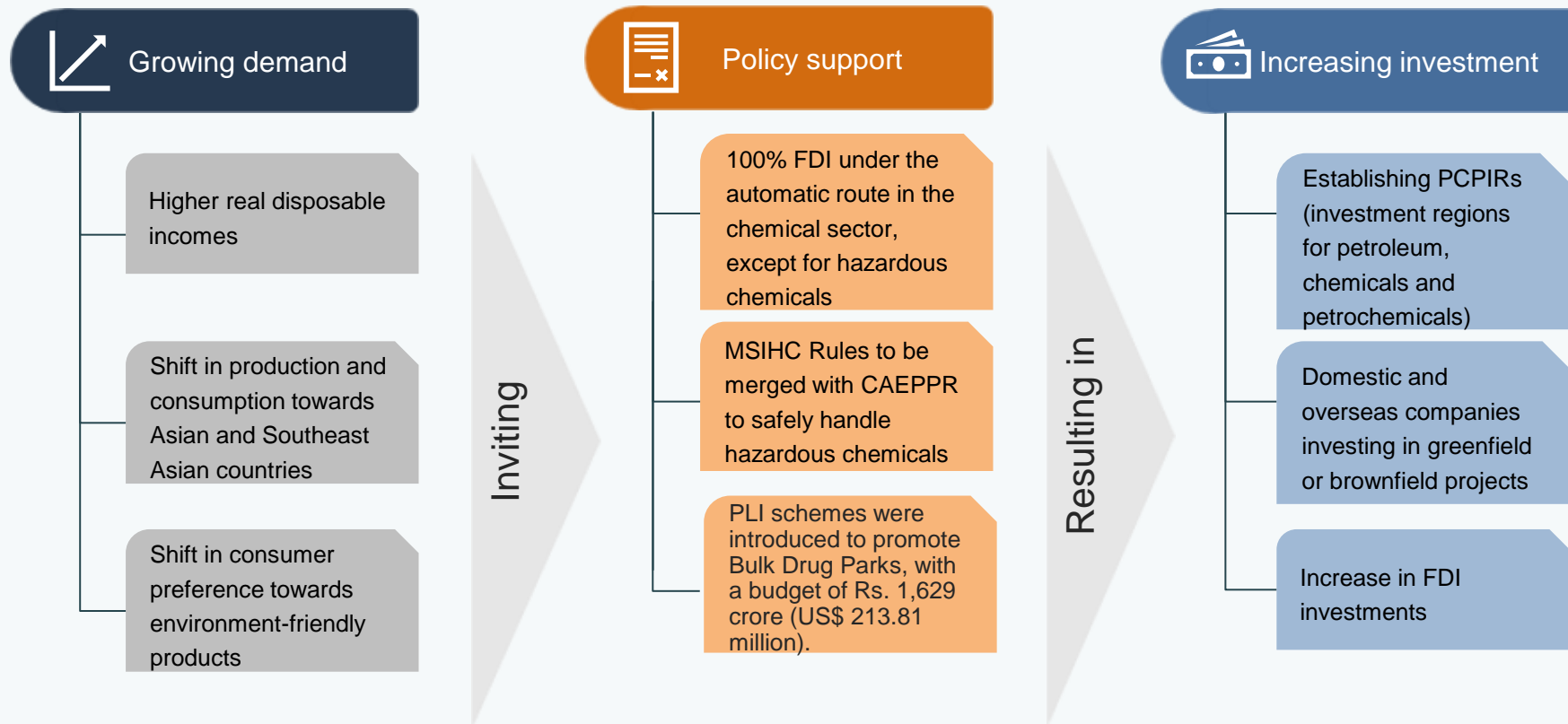
3. Reliance Industries

- Reliance Industries (RIL), which operates the world's largest refining facility in Jamnagar, Gujarat, aims to become a net carbon zero corporation by 2035.
- In March 2023, Reliance Industries announced to set up a 10 GW solar project in Andhra Pradesh.
- In June 2023, Reliance was planning to invest Rs. 75,000 crore (US\$ 9.06 billion) over 5 years to expand its oil to chemical business.
- As of December 2023, RIL's Jamnagar Refinery produces ISCC-Plus certified circular polymers, CircuRepol™ (PP) and CircuRelene™ (PE), from chemically recycled pyrolysis oil, thereby enabling circular economy through chemical recycling.

Source: News Articles



Strong demand and policy support driving investments



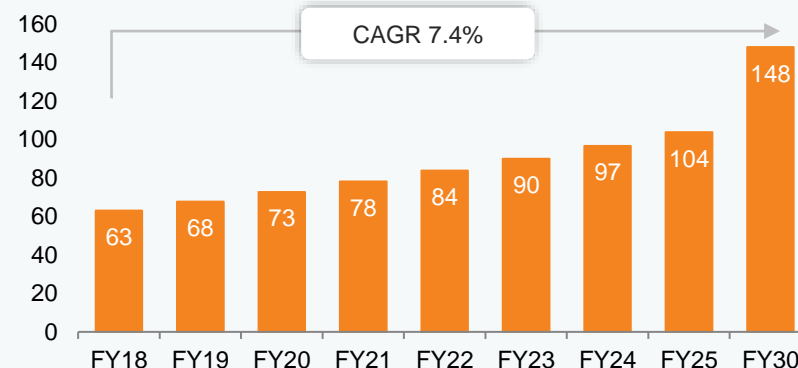
Notes: MSIHC: Manufacture Storage and Import of Hazardous Chemicals, CAEPPR: Chemical Accidents Emergency Planning, Preparedness and Response
Source: News Articles

Key growth drivers...(1/2)

Rise in domestic demand

- By 2030, India is likely to have ~80% of the households in the middle-income group.
- The growing middle-class and increasing urbanisation is driving the demand for personal care, agrochemicals, food, paints & coatings resulting into higher consumption of chemicals per capita.

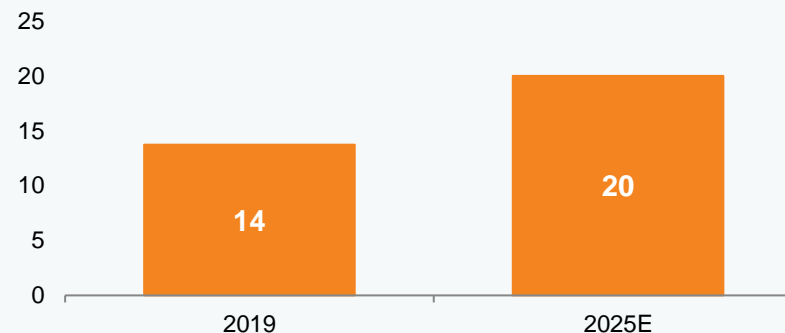
Middle-class Growth in India (million)



Government aims to boost manufacturing share in GDP to 20% by 2025

- Government considers the manufacturing sector to be a key focus area and has contacted ~1,450 companies worldwide to manufacture in India.
- The government plan includes 2-3 autonomous zones which does not have labor and land laws.
- ~300 companies are actively pursuing production plans in mobiles, electronics, medical devices and textiles.

Manufacturing as % of GDP



Source: National Council of Applied Research, World Economic Forum

Key growth drivers...(2/2)

1

EMERGING MANUFACTURING HUBS

The dedicated integrated manufacturing hubs under Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIR) policy to attract an investment of Rs. 20 lakh crore (US\$ 276.46 billion) by 2035.

2

RISE IN DISINFECTANT DEMAND POST COVID-19

With increasing demand for disinfection of personal and public places post COVID-19, the chloro-alkali, ethanol, personal care, and surfactant industry is expected to record significant growth in near future.

3

FOREIGN INVESTMENT

Presence of prominent global players, such as BASF, Dow Chemicals, Bayer and others, 100% FDI in the chemicals sector and stringent laws on anti-dumping to drive the Indian chemical market.

4

SKILLED AND LOW-COST MANPOWER

The skilled and low-cost labour, world-class engineering and strong R&D set-up enable chemicals industries in India.

5

GROWING END USE INDUSTRIES

Demand from packaging, construction, automotive and other industries to drive the Indian chemical market.

Note: This list is indicative
Source: Company website

Key industries driving growth

2. WATER TREATMENT

- Increasing urbanisation and population is driving the demand for safe drinking water. Moreover, rising awareness of hygiene among the people is leading to excessive water consumption.

3. TEXTILE, FLAVOURS & FRAGRANCES

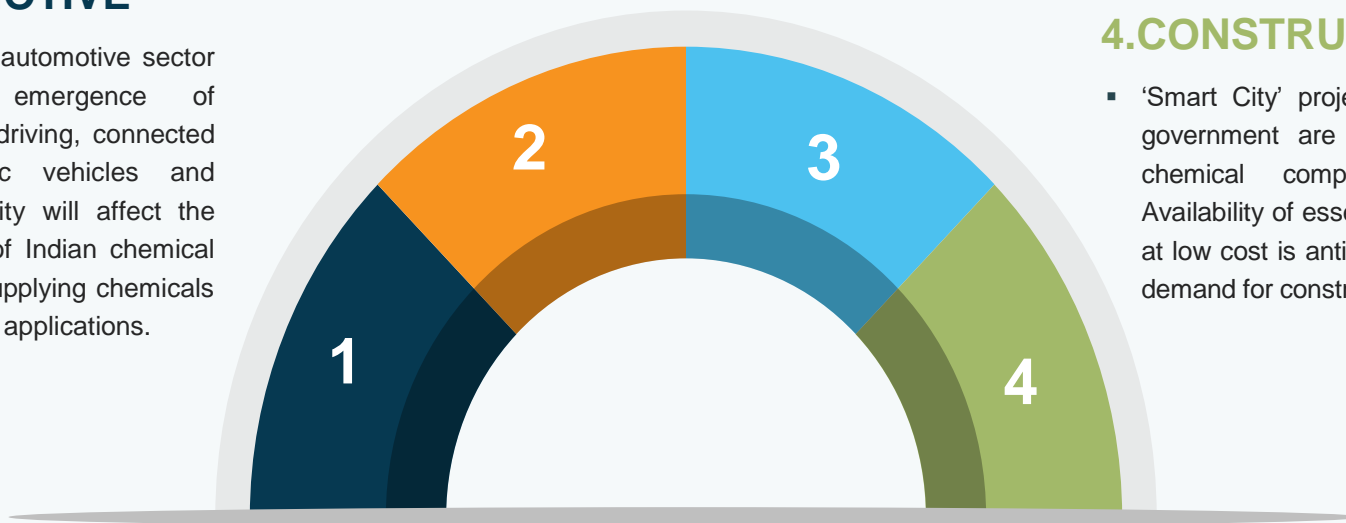
- India has witnessed increasing demand for wide range of cosmetic chemicals, health care products and hygiene products that use specialty chemicals, polymers and oleo chemicals. This segment is likely to outperform other segments.

1. AUTOMOTIVE

- Disruption in automotive sector with the emergence of autonomous driving, connected cars, electric vehicles and shared mobility will affect the value chain of Indian chemical companies supplying chemicals to automotive applications.

4. CONSTRUCTION

- 'Smart City' projects by the Indian government are driving growth of chemical companies in India. Availability of essential raw materials at low cost is anticipated to increase demand for construction chemicals.



Source: News Articles

Recent developments and investments by key players (1/2)

1

Rise in production

- In Bina, Madhya Pradesh, the Prime Minister, Mr. Narendra Modi, laid the foundation stone of development projects worth more than Rs. 50,700 crore (US\$ 6.11 billion) on September 14, 2023. The refineries will produce about 1,200 Kilo-Tonnes Per Annum (KTPA) of ethylene and propylene, vital components for various sectors like textiles, packaging, and pharma, among others.
- In July 2022, NTPC Renewable Energy Limited (NTPC REL) and Gujarat Alkalies and Chemicals Limited (GACL) signed an MoU to participate in the establishment of India's first commercial-scale Green Ammonia and Green Methanol plants.
- From August 2021-August 2022, India sold 3.27 crore bottles of nano urea and planned to produce 6.0 crore bottles of nano urea by the end of FY22-23.

2

M&As

- In June 2023, Himadri Specialty Chemical invested Rs. 58 crore (US\$ 7.01 million) in Sicona Battery Technologies Pty Ltd, (Sydney) for a 12.79% stake.
- In June 2023, Mumbai-based UPL Ltd, will hive off its specialty chemicals business on a slump sale basis to wholly-owned arm UPL Specialty Chemicals Ltd for Rs. 3,572 crore (US\$ 431.96 million).
- In December 2022, GMM Pfaudler Ltd has entered into an agreement on December 8, 2022, to acquire Mixel France SAS and its wholly owned subsidiary Mixel Agitator Co. Ltd. for US\$ 7.63 million.

3

Self-reliant in fertilisers

- In 2023, India became self-reliant in fertiliser production and reduce import dependency, by establishing new units covering an investment of Rs.400 billion. At present, Indian fertiliser production stands at 42-45 million tonnes and imports at 18 million tonnes

4

Public-private partnership (PPP) model

- In March 2023, Chennai awaits more bio-CNG plants to enable switch to clean energy.
- The Department of Atomic Energy (DAE) is constructing India's first research reactor on a public-private partnership (PPP) model.

Source: Company Websites, News Sources,

Recent developments and investments by key players (2/2)

5

Skills and technical support

- In August 2023, the Prime Minister announced a subsidy of US\$ 120.93 billion (Rs. 10 lakh crore) for providing cheaper Urea to farmers.
- Central Institute of Petrochemicals Engineering & Technology (CIPET), under the Ministry of Chemicals and Fertilisers, will establish two new 'Centres for Skilling and Technical Support' (CSTS) at Bhagalpur, Bihar and Varanasi, Uttar Pradesh. This will act as a catalyst for development and growth of new and existing industries in the region.
- In September 2021, CareerLabs, India's first profile building EdTech start-up, announced an industry certification programme for chemical engineers in partnership with Dr. Reddy's Laboratories Ltd. The partnership aims at opening avenues for students to pursue highly rewarding careers in the pharmaceutical industry and concurrently meet the ever-increasing demand for chemical engineers to cater to the need of the hour with relevant skill development.
- In June 2021, the Rubber Skill Development Council (RSDC) announced that it is expanding its vertical to cover the chemicals and petrochemicals sectors and will be now known by the name Rubber, Chemical, Petrochemical Skill Development Council (RCPSDC). The council will implement skill training programmes in chemicals and petrochemicals verticals for the youth across country.

6

International collaboration and investments

- In December 2022, GMM Pfaudler Ltd has entered into an agreement on December 8, 2022, to acquire Mixel France SAS and its wholly owned subsidiary Mixel Agitator Co. Ltd. for US\$ 7.63 million.
- In September 2022, Royal Society of Chemistry (RSC) and CSIR work together to support chemistry in schools across India.
- In September 2022, Spanish perfume maker Puig acquired a controlling stake in Kama Ayurveda Pvt. owning 85% in the company.
- In May 2022, a global investment firm, PAG acquired Optimus group along with consortium partners CX Partners and Samara Capital.
- Advent International acquired a majority position in Avra Labs in January 2022, uniting it with two other businesses it had previously acquired, RA Chem Pharma and ZCL Chemicals.
- In 2021, the chemicals industry bagged PE/VC investments of a total of US\$ 74 millions as compared to US\$ 53 million in 2020.
- The government is planning to hold roadshows in eight overseas markets for the proposed investors' summit planned in January 2022, with focus on the petrochemicals sector, and is eager to attract investors to its newly launched Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) near the upcoming crude oil refinery in Pachpadra village (in Barmer district, Rajasthan).
- In October 2021, Rosneft, Russia, launched a large-scale petrochemical production development programme in India with investments worth ~US\$ 750 million at the current implemented stage.

Source: Company Websites, News Sources,

Opportunities



OPPORTUNITIES

Specialty chemicals – international demand to drive growth

- Specialty chemical companies in India have started accelerating their capex plan on the back of strong growth visibility and emerging opportunities
- Due to growing environmental concerns, many chemical companies in China ceased activities in 2018; this led to an increase in manufacturing of specialty chemicals in the Indian market to ensure uninterrupted supply
- The Indian chemical industry is expected to further grow with a CAGR of 11-12% by 2027, increasing India's share in the global specialty chemicals market to 4% from 3%.
- As per a report of EY, the industry is currently estimated to be worth US\$ 220 billion, with growth of almost 9% per year between 2020 and 2025 to reach US\$ 300 billion by the fiscal year 2025. By FY 2040, the industry is predicted to reach US\$ 1 trillion in value.

Key growth drivers in the end-user industry for specialty chemicals include the following:

- Paints & coatings: Increase in urbanisation, increase in middle-income households, high replacement demand and increase in per capita income.
- Textile: Increase in Indian export, increase in urbanisation and higher disposal income.
- Construction: Low expenditure on admixtures compared with China and the US.
- Home care: Increased consumption.

Subsegments	User Industries
Paints & Coatings	Construction, Automotive
Special Polymers	Packaging Automotive
Construction Chemicals	Infrastructure, Real Estate
Paper Chemicals	Printing, Packaging
Textile Chemicals	Apparel, Technical Textile
Water Chemicals	Industrial Water, Municipal Water
Cosmetic Chemical	Bath, Shower, Haircare
Flavours & Fragrances	Food Processing, Personal Care
Agro Chemicals	Agriculture, Exports
Home Care Surfactants	Laundry Care, Dishwashing
Colourants	Textile, Exports

Source: Department of Chemicals and Petrochemicals

Favourable initiatives by government

- 1

 - A 2034 vision for the chemicals and petrochemicals sector has been set up by the government to explore opportunities to improve domestic production, reduce imports and attract investments in the sector. The government plans to implement production-link incentive system with 10-20% output incentives for the agrochemical sector; to create an end-to-end manufacturing ecosystem through the growth of clusters.
- 2

 - 100% FDI is allowed in the chemical sector under automatic route with exception to few hazardous chemicals
- 3

 - In April 2023, Cabinet approved the National Medical Devices Policy, 2023.
- 4

 - Industrial licensing is approved in most sectors, except for few hazardous chemicals. The Indian Government supports the industry in research & development, reduced the basic customs duty on several products and offers support through the 'Make in India' campaign
- 5

 - Four Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs) were set up as the investment regions for petroleum, chemicals and petrochemicals along with associated services
- 6

 - The Government of India is considering launching a production-linked incentive (PLI) scheme in the chemical sector to boost domestic manufacturing and exports.

Source: Department of Chemicals and Petrochemicals,

Chemical industry: Exploring new opportunities

2. ALTERNATIVE AND LOW-COST FEEDSTOCK

- In November 2020, NextChem, and Indian Oil Corp. Ltd. (IndianOil) signed a memorandum of understanding (MOU) to use NextChem technologies to build industrial projects to support industrialisation of India's sustainable development.
- The projects would emphasis on recycling of plastics, production of biofuels from renewable feedstock and circular fuels and non-recyclable waste chemicals.

3. GLOBAL FOOTPRINT AND CUSTOMER SEGMENTS

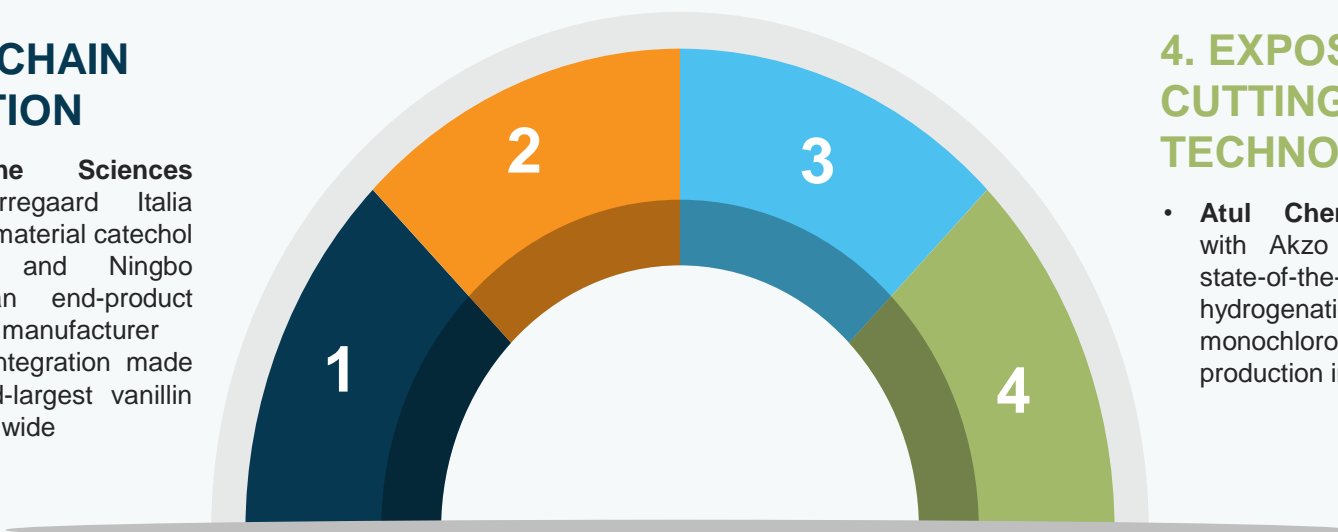
- **Aarti Industries** generates >40% revenue from the global markets.
- **UPL** has presence in multiple markets with >30% of its revenue generated from Latin America.
- **SH Kelkar** has completed several strategic acquisitions, including China-based Anhui Ruibang Aroma and Italy's Creative Flavours and Fragrances; this helped expand its portfolio, improve technological platforms and gain access to new markets.

1. VALUE-CHAIN INTEGRATION

- **Camlin Fine Sciences** acquired Borregaard Italia Spa54, a raw-material catechol manufacture, and Ningbo Wanglong, an end-product vanillin flavour manufacturer
- The vertical integration made CFS the third-largest vanillin producer worldwide

4. EXPOSURE TO CUTTING-EDGE TECHNOLOGIES

- **Atul Chemicals**, partnered with Akzo Nobel to access state-of-the-art eco-friendly hydrogenation technology for monochloroacetic acid (MCA) production in India.







Many Indian chemical companies are focussing on attaining scale to build their margins and enhance environmental sustainability

Source: Company Website, News Articles

Key Industry Contacts



Key Industry Contacts

Agency		Contact Information
 <p>रसायन एवं पेट्रो-रसायन विभाग DEPARTMENT OF CHEMICALS & PETRO-CHEMICALS</p>	<p>Department of Chemicals & Petrochemicals</p>	<p>Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilisers, 341-(C), A-wing, 3rd floor, Shastri Bhawan, New Delhi-110001 Phone: +91 11 23383428 Fax: +91 11 23073682(F) Email: samir.biswas@gov.in Website: https://chemicals.nic.in</p>
 <p>ICC Indian Chemical Council</p>	<p>Indian Chemical Council</p>	<p>Sir Vithaldas Chambers, 6th Floor 16 Mumbai Samachar Marg, MUMBAI - 400 001 Phone: +91 22 61144000 / 22048043 Email: iccmumbai@iccmail.in, events@iccmail.in Website: www.icmaindia.com</p>
 <p>AMAI</p>	<p>Alkali Manufacturers Association of India</p>	<p>Alkali Manufacturers Association of India, 3rd Floor, Pankaj Chambers, Commercial Complex Preet Vihar, Vikas Marg, Delhi 110092 Phone: +91 11 22432003, 22410150 Fax: +91 11 22468249 Email: hkanand@ama-india.org, info@ama-india.org Website: www.ama-india.org</p>
 <p>ISCMA</p>	<p>Indian Specialty Chemical Manufacturers' Association</p>	<p>1156, Bole Smruti, Suryavanshi Kshatriya Sabhagriha Marg, Off. Veer Savarkar Marg, Dadar (West), Mumbai - 400 028 Phone: +91 22 2446 5003 Email: info@iscma.in, iscma@email.com Website: www.iscma.in</p>



Glossary

- CAGR: Compound Annual Growth Rate
- Capex: Capital Expenditure
- MMTPA: Million metric tons per annum
- CENVAT: Central Value Added Tax
- EHTP: Electronic Hardware Technology Park
- EPCG: Export Promotion Capital Goods Scheme
- FDI: Foreign Direct Investment
- FY: Indian Financial Year (April to March); So, FY10 implies April 2009 to March 2010
- LCD: Liquid Crystal Display
- R&D: Research and Development
- US\$: US Dollar
- Wherever applicable, numbers have been rounded off to the nearest whole number

Exchange rates

Exchange Rates (Fiscal Year)

Year	Rs. Equivalent of one US\$
2004-05	44.95
2005-06	44.28
2006-07	45.29
2007-08	40.24
2008-09	45.91
2009-10	47.42
2010-11	45.58
2011-12	47.95
2012-13	54.45
2013-14	60.50
2014-15	61.15
2015-16	65.46
2016-17	67.09
2017-18	64.45
2018-19	69.89
2019-20	70.49
2020-21	73.20
2021-22	74.42
2022-23	78.60

Exchange Rates (Calendar Year)

Year	Rs. Equivalent of one US\$
2005	44.11
2006	45.33
2007	41.29
2008	43.42
2009	48.35
2010	45.74
2011	46.67
2012	53.49
2013	58.63
2014	61.03
2015	64.15
2016	67.21
2017	65.12
2018	68.36
2019	69.89
2020	74.18
2021	73.93
2022	79.82
2023	82.61
2024*	83.09

Note: *- Until February 2024

Source: Foreign Exchange Dealers' Association of India

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