



// उद्यमात् सकल समृद्धिः //
MAHARASHTRA INDUSTRIAL
DEVELOPMENT CORPORATION
MIDC

CHEMICAL SECTOR

**Magnetic
Maharashtra**

Attractions Unlimited



MAHARASHTRA: The Enduring Leader

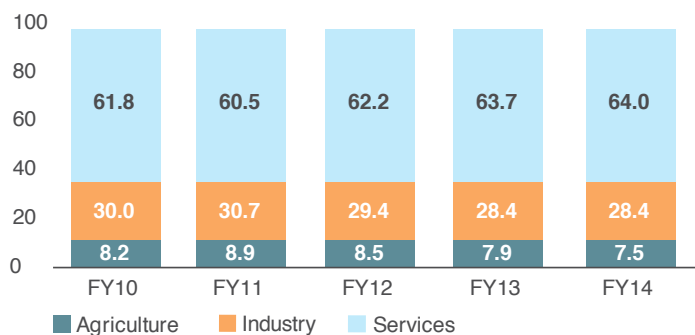
- Strategically located with a long coastline and borders with several states
- Progressive Government taking measures to facilitate industrial infrastructure
- Presence of large number of diverse industries and a well-developed service sector
- 'Financial and Trade' capital of India
- Presence of specialized institutes that offer skilled resources for industries and services sector
- Accounts for 30 percent of the total FDI inflow in India



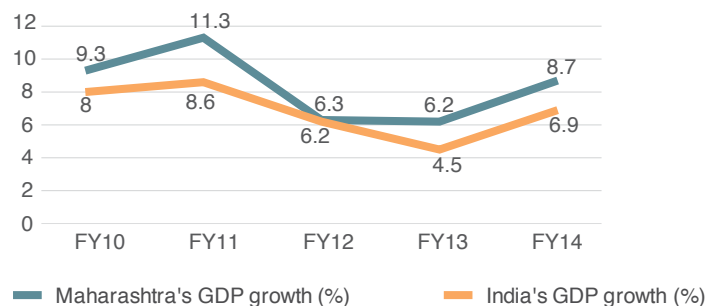
MAHARASHTRA: Economic Profile

One of the biggest contributors to Indian economy, the state has been growing at a faster pace than all-India average in most periods and is expected to continue the momentum

Maharashtra's GDP composition (%)

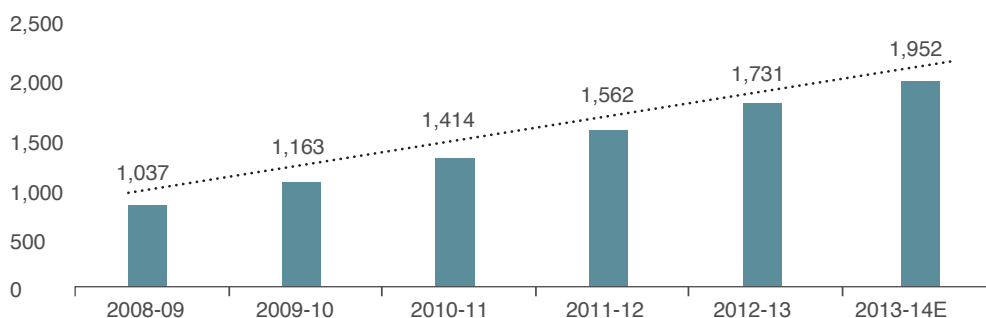


Economic growth (%)



Source: CSO

Per Capita Income (in USD)



Manufacturing sector average contribution to Maharashtra's GSDP is **20.9%**

Per Capita Income of Maharashtra is estimated at **1,952 USD** at current prices for the year 2013-14

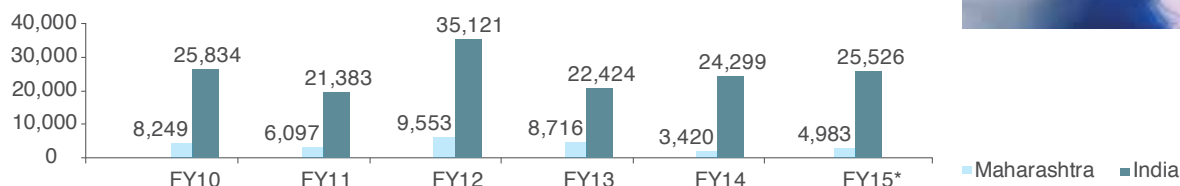
Source: "FDI Statistics" DIPP ; CMIE ; *Estimated

MAHARASHTRA: Investment Profile

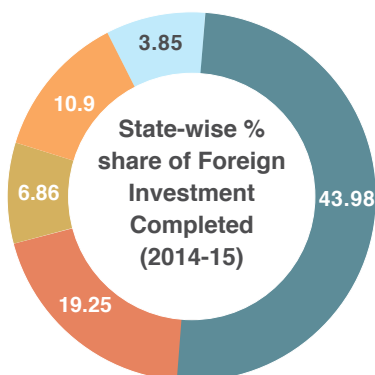
Attracts the highest FDI in the country; expected to maintain its lead in the future as well

FDI inflow

FDI inflow and state contribution (USD million; %)

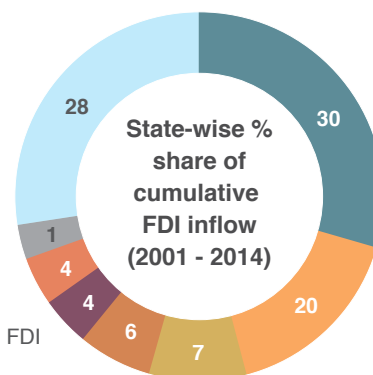


■ Maharashtra
■ Gujarat
■ Telangana
■ Karnataka
■ Tamil Nadu



Number of Foreign Private Sector Investment Projects completed in 2014-15 were worth: **USD 6.27 bn**

■ Maharashtra
■ Delhi
■ Tamil Nadu
■ Karnataka
■ Gujarat
■ Andhra Pradesh
■ West Bengal
■ Others



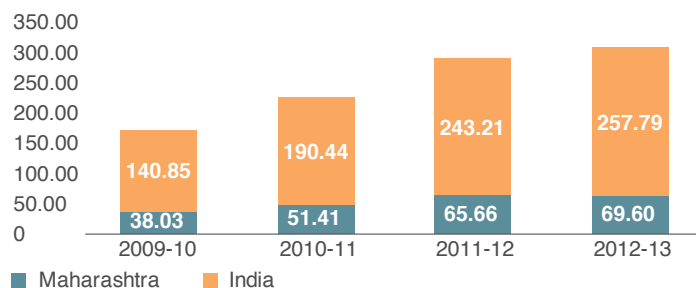
Maharashtra's share in the total FDI inflow in India during the period 2001-2014 was: **30%**

Maharashtra has attracted USD 70.95 billion of FDI over the 2000 – 2014, which is highest among all states in India

Source: Economic Survey of Maharashtra 2014-15

MAHARASHTRA: Exports Profile

Export Trends (in Billion USD)

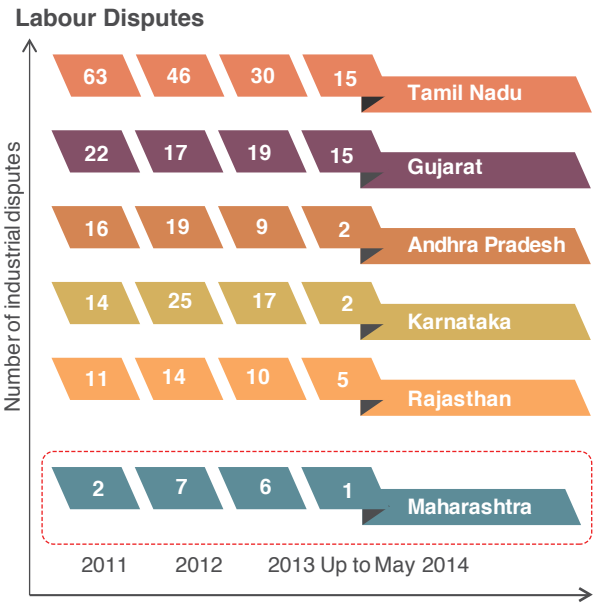


The main products exported from the State are:

- Gems & Jewellery • Software • Textiles • Readymade garments
- Cotton yarn • Metal & metal products • Agro-based products
- Engineering items • Drugs & pharmaceuticals
- Plastic & plastic items
- Contribution of 27% of total exports in India
- Maharashtra's export totalled USD 65.7 billion over 2012-13
- Initiatives like giving awards based on export performance

Source: Economic Survey of Maharashtra 2014-15

MAHARASHTRA: Skilled Manpower



The state is one of the most industry-friendly states with one of the lowest labour disputes

Institutes

Streams	No. of Institutes	Enrolments per year
General Education (Art, Science, Commerce)	3300	15.20 lacs
Engineering	1,074	5.43 lacs
Architecture	75	10 thousand
MBA/MMS and PGDM	516	36 thousand
Hotel Management and Catering Technology	23	868
Pharmacy	462	38 thousand
Masters in Computer Application	148	15 thousand
Industrial Training Institutes	766	1.05 lacs
Medical Education	293	28.5 thousand

- State has more than 6,000 institutes that enroll over 2.5 million students per annum
- State has the well-renowned Indian Institute of Technology (IITs) at Powai in Mumbai
- Home to reputed R&D institutes, viz. BARC, C-DAC, Tata Institute of Fundamental Research

Source: Economic Survey of Maharashtra, 2014-15 Provisional Data; Ministry of Labour & Employment, GoI

MAHARASHTRA: Infrastructure Profile - Road

Road Type	Road Length (km) (As of March 2012)
National Highway	4,376
State Highway	34,157
Major District Highway	50,256
Other District Highway	47,529
Village Roads	1,06,601
Total Road Length	2,42,919

- Well Connected to other parts of India through 18 National Highways
- Total road length of 2,42, 919 km
- Road density of 133.41 km per 100 sq km of area
- 93 km Mumbai-Pune Expressway is India's first six-lane concrete road

Planned Road Infrastructure Projects

<ul style="list-style-type: none">• Mumbai Trans Harbour Link (MTHL) is a proposed 22 km, freeway grade road bridge connecting Mumbai and Navi Mumbai. When completed, it would be the longest bridge in India.• Mumbai – Aurangabad – Nagpur expressway connecting two major cities of Maharashtra which will save more time

Mumbai – Nagpur Expressway to connect capital cities of Maharashtra, i.e. Mumbai and Nagpur by a highway of 6 lanes via Ghoti, Aurangabad and Amravati at the cost of INR 30,000 crore. The Expressway would be equipped with optical fiber network, CCTV and Wi-Fi coverage and will shorten the Mumbai-Nagpur distance to an eight-hour drive. Technology parks, smart cities, and educational complexes would be built along the route of the Expressway.

Source: Economic Survey of Maharashtra, 2013-14

MAHARASHTRA: Infrastructure Profile - Rail

The unique and innovative RO-RO (roll on – roll off) service of Konkan Railway which carried piggy back trucks on railway flat wagons and 3.5 lakhs goods have been carried so far

- Well Connected to other parts of India through 5,984 km railway network
- Headquarters of Central and Western Railways in Mumbai
- Western Railways include country's western coast including the Mumbai Port
- Suburban Railways carry around 6.94 million passengers every day

Planned Rail Infrastructure Projects

- Railway line of 33.7 km connecting Dighi Port with the nearest rail head Roha on Konkan Railway, which is part of one of the projects of connecting ports with rail
- **Metro rail projects are planned for cities such as Mumbai, Nagpur and Pune**

Source: Economic Survey of Maharashtra, 2013-14



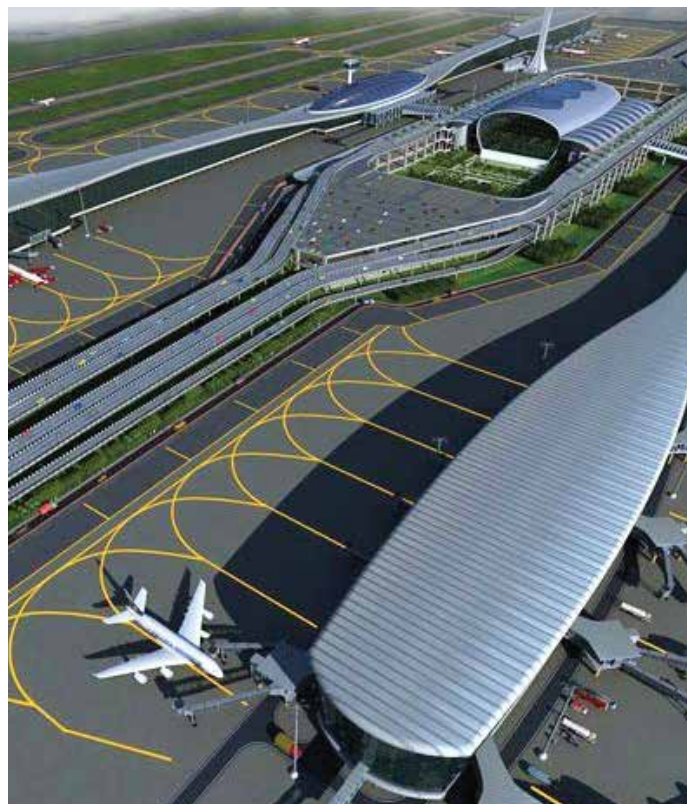
MAHARASHTRA: Infrastructure Profile - Airport

- Three International and Seven Domestic Airports
- Total Traffic in Mumbai airport and Pune airport was around 31 million and 4 million in 2014
- Total Cargo handled at Mumbai, Pune was 1.81 lakhs MT and 0.21 lakhs MT
- Terminal T2 is a state-of-the-art world-class terminal with capacity to handle 40 million passengers per annum

Navi Mumbai International Airport (Planned)

- In order to reduce congestion in Mumbai International Airport, an additional airport has been proposed at Navi Mumbai. It is expected to be commissioned by 2019 with an initial capacity of 10 million passengers per annum

Source: Economic Survey of Maharashtra 2014-15; IBEF, AAI: Airport Authority of India



MAHARASHTRA: Infrastructure Profile - Port

Port-Rail Connectivity

- For Jaitapur Port Project, a special purpose vehicle is being formed between Konkan Railway Corp, Maharashtra Maritime Board and JSW Jaigad Port to lay a 33.7 km rail line to connect the port to the railway network
- Two principal Ports along 720 km coastline: Mumbai Port Trust (MbPT) and Jawaharlal Nehru Port Trust (JNPT)
- 53 Minor Ports
- MbPT and JNPT handled 416.55 lakh MT and 480.73 lakh MT of cargo traffic over 2014-15
- Special committee set up to fast track all ports projects greater than INR 1000 cr

Planned Port Infrastructure Project at Karanja

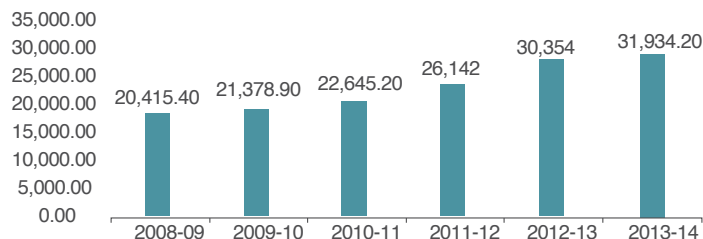
- Karanja Port Project, a multipurpose terminal facility, is being set up along 1,000 meter waterfront over 200 acres of inter-tidal zone. This facility will serve as a complement to the existing MbPT and JNPT ports and will ease the cargo traffic congestion in the area

Source: Economic Survey of Maharashtra 2014-15; IBEF, AAI: Airport Authority of India



MAHARASHTRA: Infrastructure Profile - Power

Installed Power Capacity (MW)



- Total electricity generated during 2013-14: 91 billion kW
- Industrial sector is the largest consumer of the electricity
- Private sector contribution to total installed capacity is the highest with 54.5%
- Special committee set up to fast track all ports projects greater than INR 1000 cr

Planned Power Infrastructure Projects across the State

- Solar power projects of 130 MW capacity have been commissioned by MAHAGENCO
- GoM has adopted the policy of achieving the target of renewable purchase obligation up to 10 percent

Source: Economic Survey of Maharashtra, 2013-14

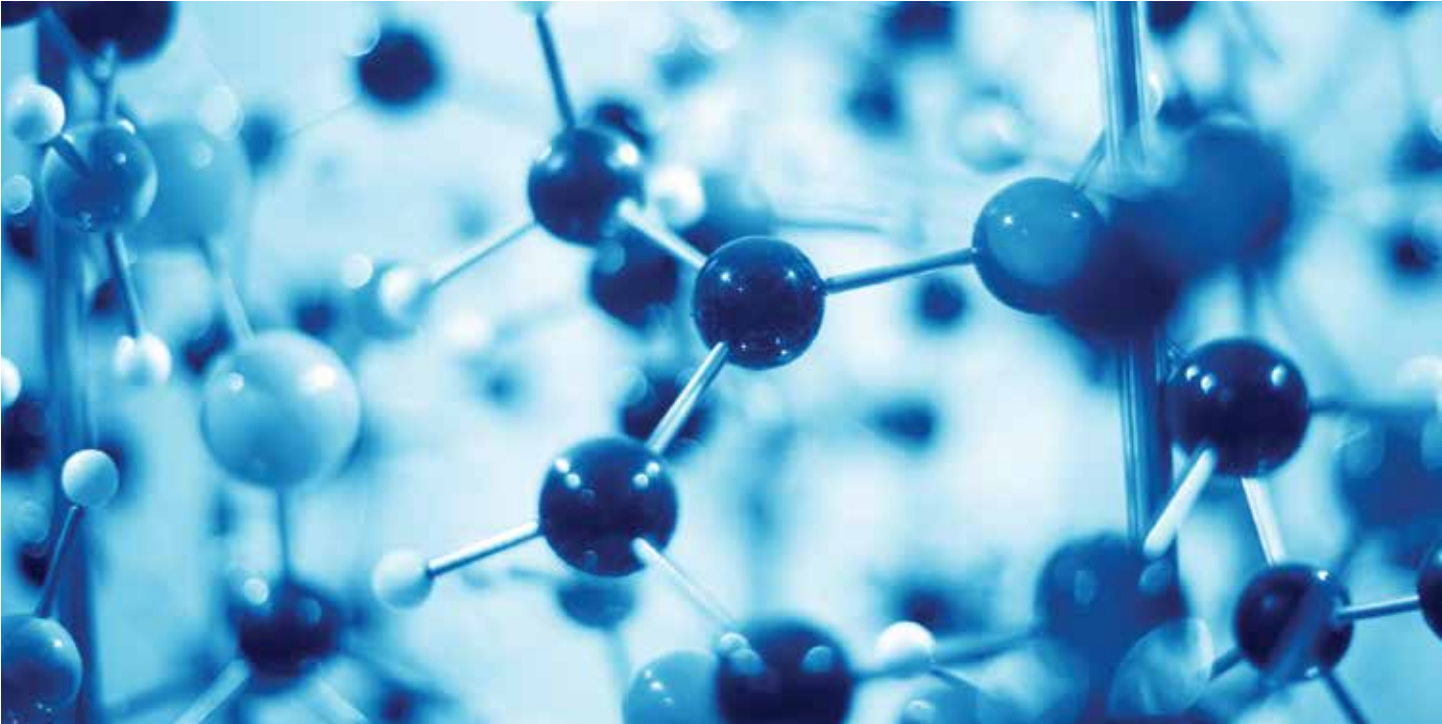


MAHARASHTRA: Chemical Sector

India

- India accounted for 3 percent of global chemicals production with a value of 136.5 Billion USD (as of 2013)
- Volume, India occupied 3rd position in Asia and 6th in the world in chemicals production with a production of 19,300 thousand metric tonnes (as of 2013-14)
- Chemicals sector is among the top five exporters from India and accounted for more than 4 percent of the country's exports in 2014
- Indian chemicals sector attracted a total FDI inflow of more than USD10 billion during April 2000 to February 2015
- The sector contributed ~6 percent to India's GDP in 2013
- The sector produces over 80,000 products for downstream sectors such as automobiles, construction & engineering, consumer durables, food processing, pharmaceuticals & personal care

Country/Region	No. of Institutes	Share in global sales (%)
China	1,228	31.5%
Central & Eastern Europe	682	17.5%
United States	635	16.3%
Other Asia-Pacific	484	12.4%
Others	233	7.4%
Japan	211	5.0%
Latin America	172	4.4%
Western Europe	136	3.5%
India	118	3.0%



MAHARASHTRA: Chemical Sector

Accounts for nearly 17 percent of chemical production in the country

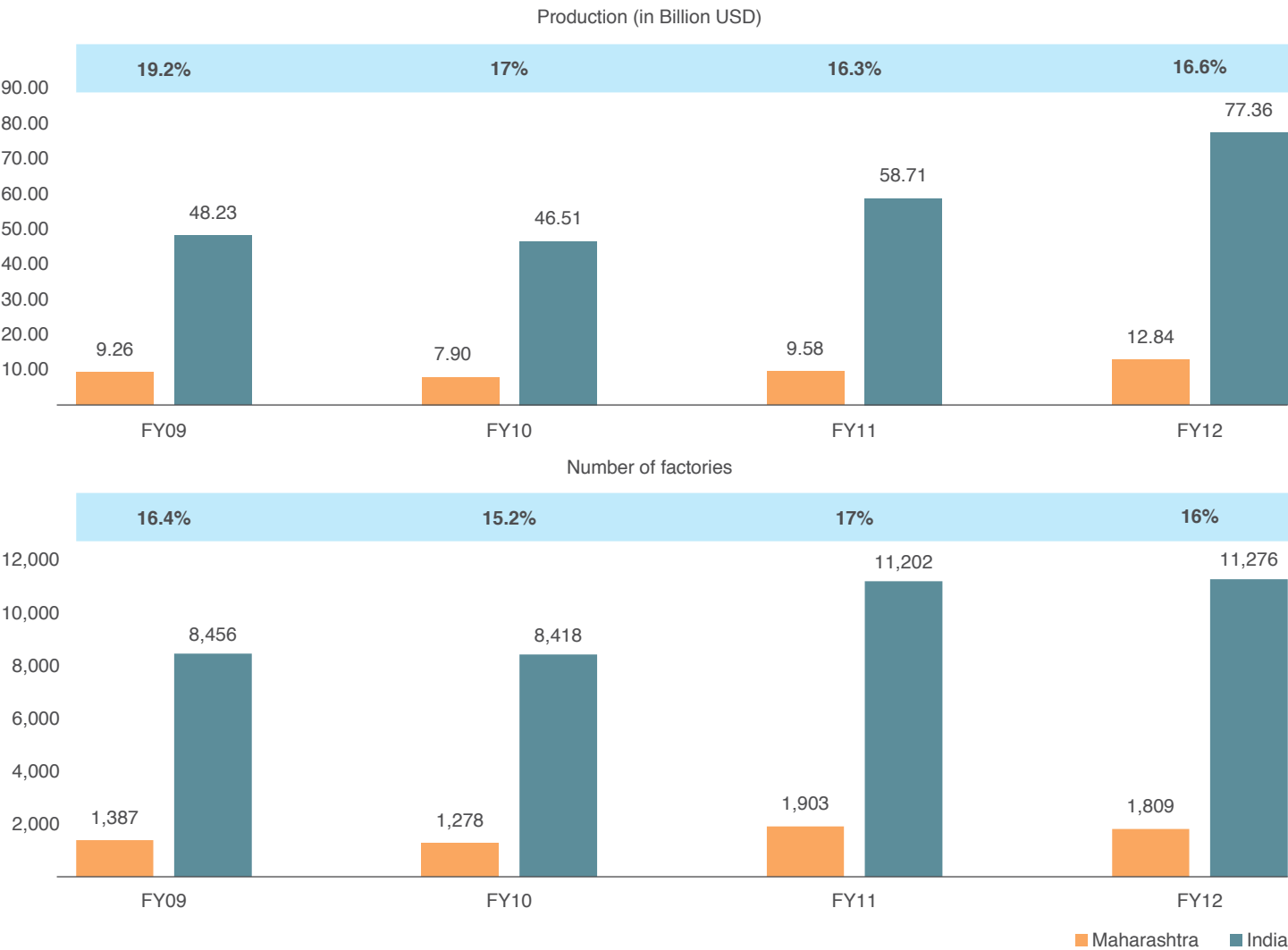
Maharashtra

- Maharashtra is one of the leading states in India in chemical

and petrochemical production

- The state **houses ~16 percent** of the total number of **chemical factories** and **~17 percent of chemical production** in India
- Though there are several **chemical zones** in the state that provide the necessary infrastructure, chemical zones located at **Mumbai/Thane**, and **TTC** are **popular**

Maharashtra is among India’s leading states to house one of the highest number of chemical factories and production



MAHARASHTRA: Chemical Sector

Organisations from a wide array of chemical sub-sectors are present in the state

List of Large and Medium units in the state as of FY14

Alkali chemical units

Bilt Graphic Paper Products Century Rayon Reliance Industries Limited	Tata Chemicals Ltd. United Phosphorus Ltd.
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Inorganic chemical units

SKI Carbon Black (India) Pvt. Ltd
 United Phosphorus Ltd.

Organic chemical units

Amines & Plasticizers Ashok Alco-Chem. Ltd. Deepak Fertilizers and Petrochem Corporation Hindustan Organic Chemicals Ltd. Jindal Drugs Limited Laxmi Organic Industries	Mysore Petrochemicals Rashtriya Chemicals & Fertilizers Ltd. Sadhana Nitro Chem SI Group – India Limited Thirumalai Chemical Limited
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Pesticides units

Cheminova India Ltd. Dow Agro Sciences India Pvt. Ltd. Excel Industries Ltd. Gharda Chemicals Ltd. Hikal Limited	Indofil Industries Ltd. Isagro (Asia) Agrochemicals Pvt. Ltd. Rallis India Ltd. Spectrum Ethers Ltd. Sudarshan Chem. Industries
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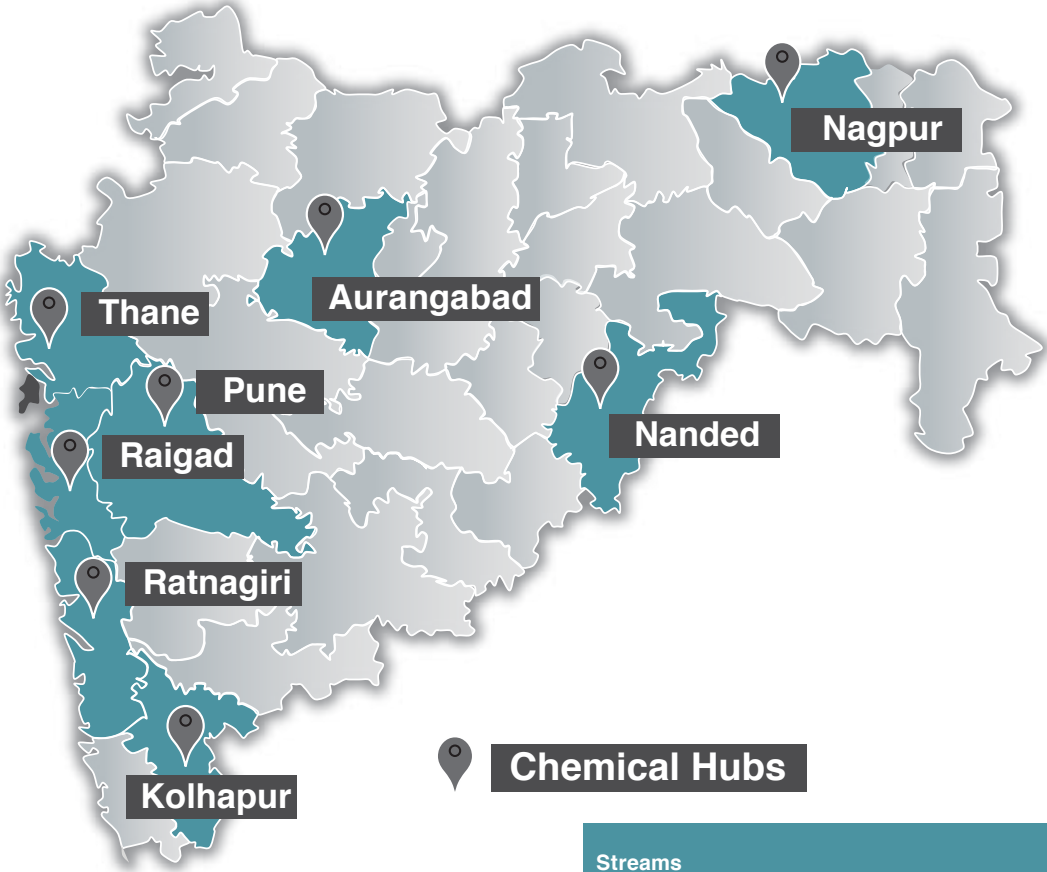
Dyes & dyestuff units

Astik Dyestuff Pvt Ltd Clariant Chemicals Chromatic India Lona Industries Ltd.	Neelikon Food Dyes & Chemicals Ltd. Pidilite Industries Ltd. Rathi Dye Chem Pvt. Ltd. Shree Chakra Organics Pvt. Ltd
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MAHARASHTRA: Ecosystem for Chemical Sector

Well-developed ecosystem translated into a successful chemical sector in the state

Chemical Zones in Maharashtra



Major Chemical Zones

- Chemical Zones:** The state has 13 chemical zones at Ambernath, Badalapur, Butibori, Dombivali, Kalyan–Bhiwandi, Kurkumbh, Lote Parshuram, Mahad, Patalganga, Roha, Taloja, Tarapur, and TTC. MIDC has planned to set up liquid waste management in these industries

Dedicated Institutes

Presence of chemical institutes such as:

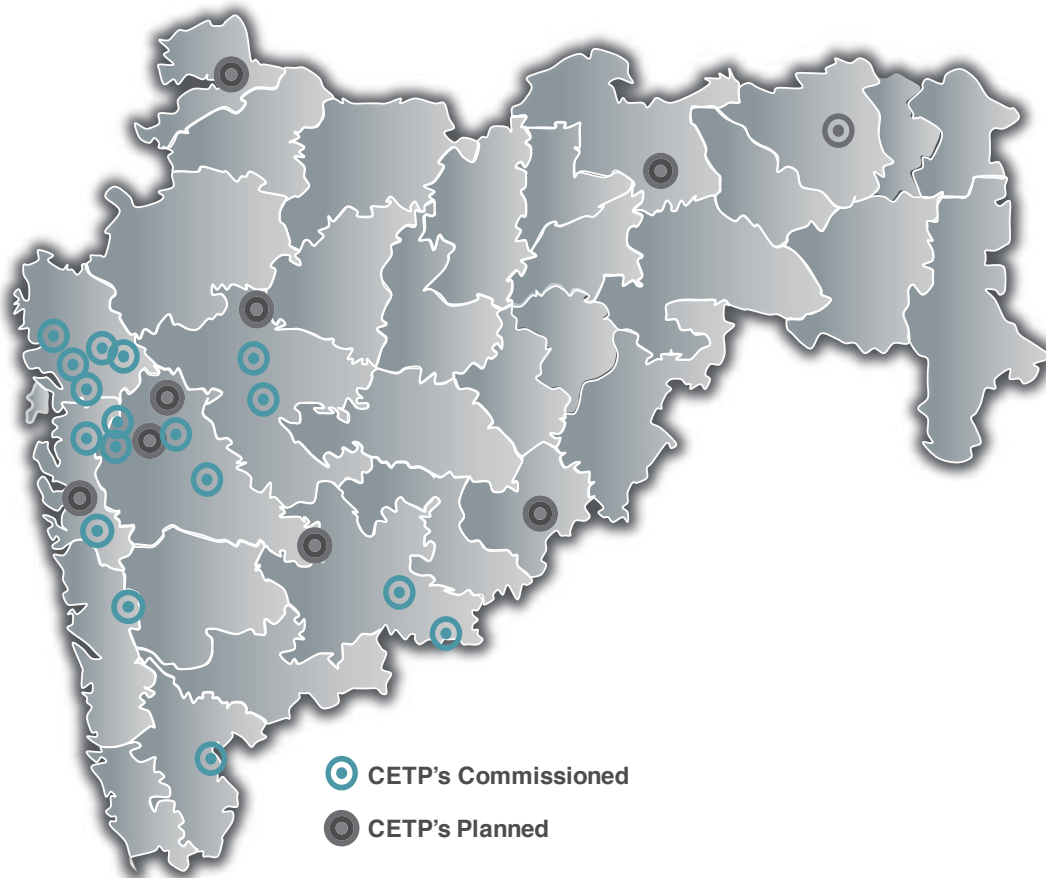
- Indian Institute of Technology, Bombay
- Institute of Chemical Technology, Mumbai
- National Chemical Laboratories, Pune
- Visvesvaraya National Institute of Technology, Nagpur

Streams	No. of Institutes	Enrolments per year
General Education (Arts, Science, Commerce)	2,181	15,20,316
Biotechnology	23	1,056
Pharmacy	471	37,929
Medical Education	292	16,469
MBA/MMS and PGDM	478	35,791
Industrial Training Institutes	828	1,06,427

MAHARASHTRA: Ecosystem for Chemical Sector

Well-developed ecosystem translated into a successful chemical sector in the state

CETP locations in Maharashtra



Common Effluent Treatment Plants (CETPs)

- Maharashtra has 18 operational CETPs and another 4 are under construction. Together the capacity of these treatment plants is ~258 MLD. Another 13 have been planned

Common Hazardous Waste Treatment Plants (CHWTPs)

- The state has 4 CHWTPs at Taloja, TTC, Ranjangaon and Butibori, which is one of the highest in the country. The aggregate capacity of these plants is 250,000 MT per

annum. In addition, two more CHWTPs have been proposed in the state

Sewage Treatment Plants (STPs)

- There is 1 operational STP at Hinjewadi with a capacity of 4 MLD, while another 1 is under construction at Waluj of same capacity and 1 more has been proposed

Landfills

- The state has proposed 3 landfills

Others

- State has well-developed and expanding infrastructure – electricity, ports, airports, road and rail
- It also offers a conducive labour environment that can be gauged from one of the lowest number of labour strikes in the country, compared to its peers

Policy & Regulatory Support for the Chemical Sector

Progressive policies aimed at increasing the
'competitive advantage' of businesses

Fiscal Support	VAT + CST Abatement Stamp Duty Exemption Electricity Duty Exemption Plus, a host of other benefits...	Non-Fiscal Support	Skill Development Single Window Clearance (SWC) Investor Facilitation Investor After Care Cell
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Special Incentives

Mega and Ultra Mega projects
can qualify for fiscal incentives
up to **100% of the fixed capital
investment**

10% additional incentive
is provided by the state if the project creates
double the employment required for the eligibility

Policy Incentives

- Incentives are provided as per the firm's categorisation (MSME/LSI), classification of industrial area and the benefit is provided for a specified period
- Package scheme of incentives for new industrial units/expansion units in state's developing regions awarded to pharmaceuticals and biotechnology units, medical and surgical appliances, cold storages (pharma products can be stored). For mega/ultra mega projects, incentives will be decided by high power committee
- Maharashtra Scheme for Biotech provides fiscal and non-fiscal incentives under different programmes

Other Government Initiatives

The state government has announced several incentives to support the sector

Government of India initiatives

- Removal of licensing requirements except for hazardous chemicals
- Entrepreneurs permitted to set up chemical industries under Industrial Entrepreneurs' Memorandum (IEM) route
- Petroleum, chemicals and petrochemical investment regions (PCPIR) developed for setting-up manufacturing facilities. PCPIR may include industrial parks, SEZs, EoUs, free trade and warehousing zones. Benefits available under the relevant policy/legislation will remain valid
- 100 percent FDI permitted under automatic route and 24 percent permitted in products reserved for MSMEs such as fireworks and incense sticks, laundry soaps, wax candles, safety matches etc.
- Fiscal benefits in the form of concession on customs duty and incentives for R&D activities are also provided

- GoI is also considering setting-up a R&D fund under PPP, augmenting testing centers to function as certifying agencies for testing raw materials and plastic products, formation of clusters, establishing specialized vocational training centers in clusters, among others
- In addition, the GoI is also planning to set-up reverse SEZs for chemical sector, beginning with Iran to meet specifically meet demand for speciality chemicals

State-level initiatives

States offer additional incentives for industrial projects in areas such as:

- Subsidized land cost
- Exemption on sale/lease of land
- Investment subsidies/tax incentives
- Special incentive packages for mega projects
- Subsidies for backward areas
- Relaxation in stamp duty
- Incentives for power tariff
- Concessional rate of interest on loans, etc.



Key Players in the Chemical Sector

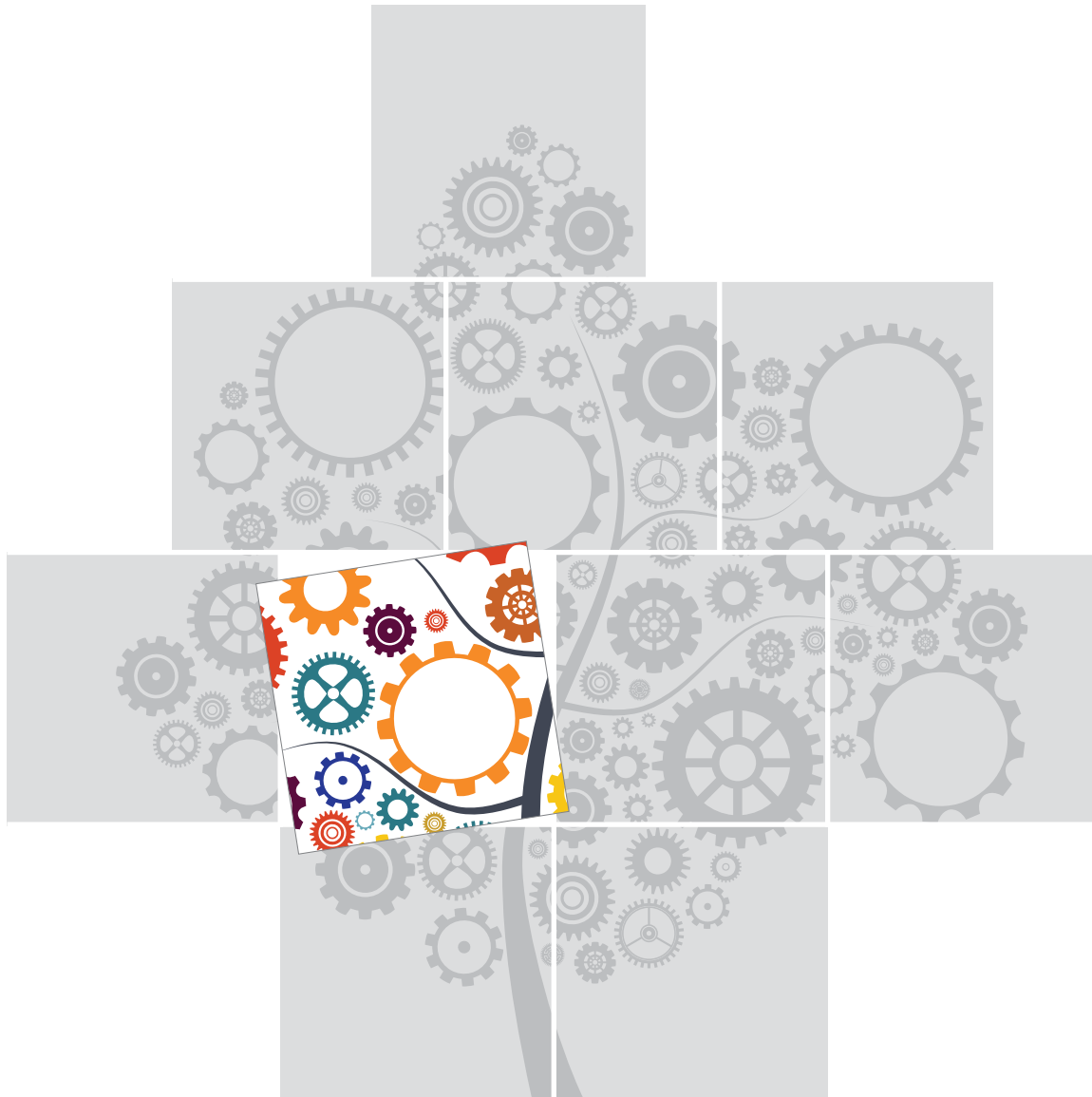


NOCIL LIMITED



WESTMAN CHEMICALS PRIVATE LIMITED





Maharashtra Industrial Development Corporation

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Knowledge Partner 