



Chemicals and Petrochemicals India scenario

Overview

6th

Rank in the world in the production of chemicals

3rd

Rank in the world in polymer consumption

3rd

Rank in Asia in the production of chemicals by output

2.11%

Contribution to India's GDP

7.7%

Chemicals sector growth in 2017

**25.74
million
MT**

Total production of major chemicals including petrochemicals in 2016-17

**USD
403
billion**

Estimated value of Indian Chemical industry by 2025

4

Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) announced by Government of India

70,000+

Commercial products covered by highly diversified Indian chemical sector



Chemical Industry Segmentation

Key segments of Indian Chemical Industry

Basic chemicals

Petrochemicals, man-made fibres, industrial gases, fertilizers, chlor-alkali and other organic and inorganic chemicals

69%

Share of Alkali chemicals in total production of major chemicals

Specialty chemicals

Dyes and pigments, leather chemicals, construction chemicals, personal care and other specialty chemicals

16%

India's contribution to global production of dyes & dye intermediates

15%

India's share in global production of colorant chemicals

Agrochemicals

Insecticides, herbicides, fungicides and other crop protection chemicals

4th

Rank in the world in agrochemicals production

Chemicals and Petrochemicals – FDI & Exports

**USD 14.43
billion**

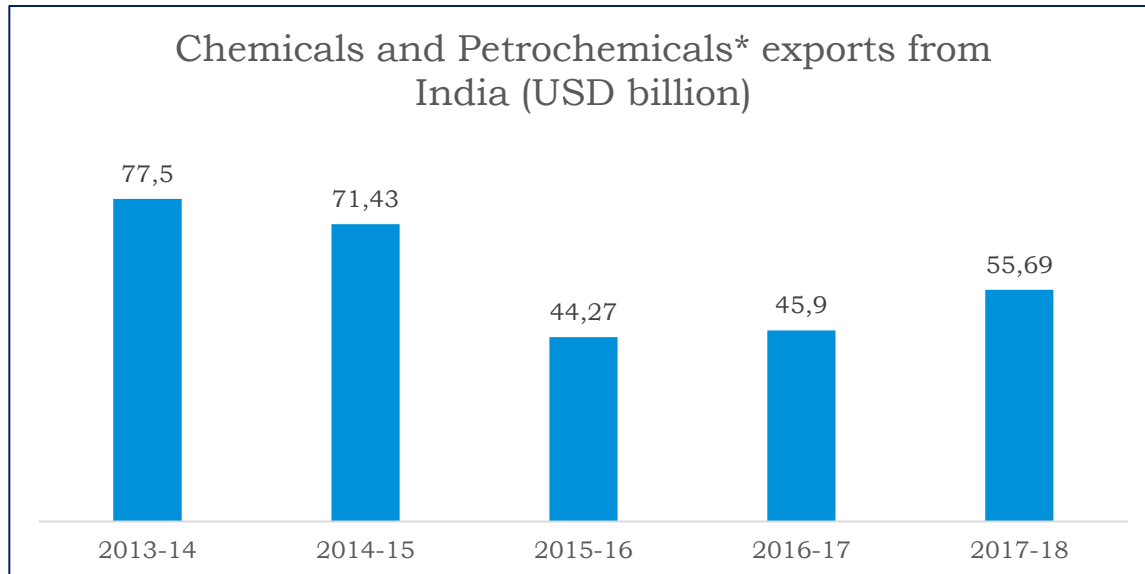
Cumulative FDI received by chemicals sector in India from April 2000 to December 2017, accounting for 4% of the total FDI received

18.53%

Contribution of chemicals exports to India's total exports in 2017-18

**USD 55.69
billion**

Chemicals and petrochemicals* exports from India in 2017-18



Petroleum products (67.1% of the total chemicals exports) and Organic chemicals (12.8%) were the top exported chemical commodities from India in 2017-18



Tamil Nadu scenario

Overview

~ 6%

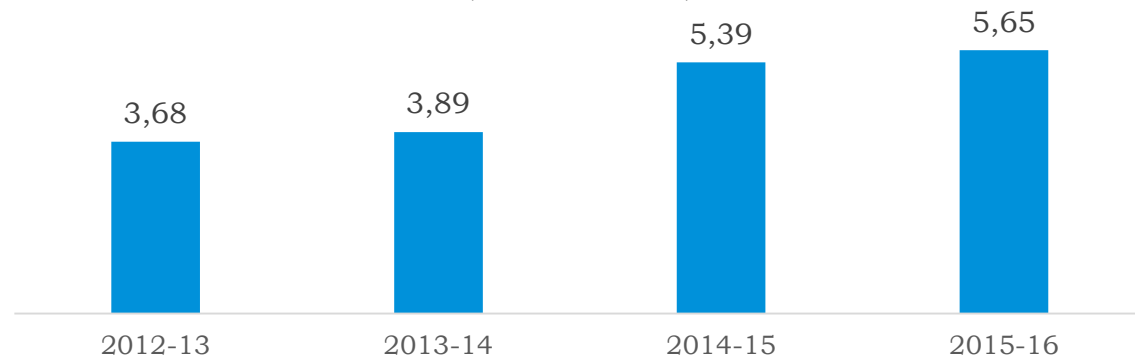
Tamil Nadu's contribution to India's total chemicals output

2588

Number of chemical factories in Tamil Nadu

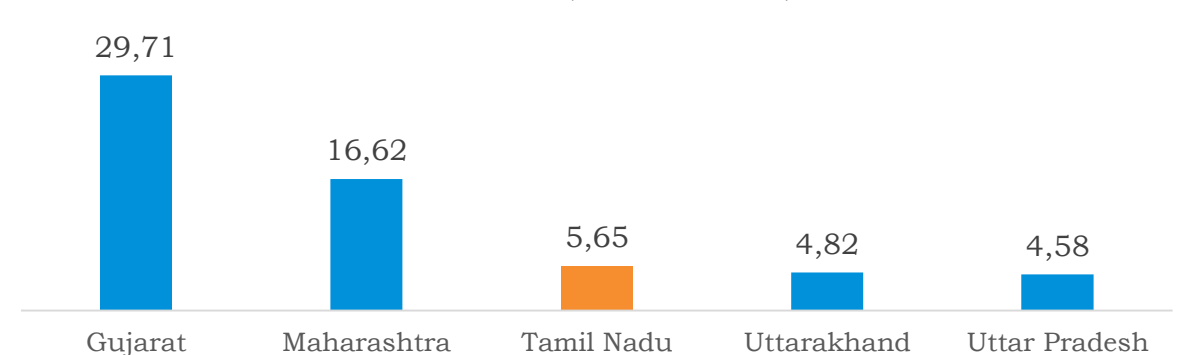
The chemicals output grew at a CAGR of 15.3% between 2012-13 and 2015-16

Year-wise Tamil Nadu's chemicals output (USD billion)



Tamil Nadu ranked 3rd in total chemicals output in India

State-wise comparison of total chemicals output in 2015-16 (USD billion)



Polymers industry

Tamil Nadu is a leader amongst the south Indian states in terms of plastics production and consumption

9
lakh+
tonne

Plastics consumption in Tamil Nadu

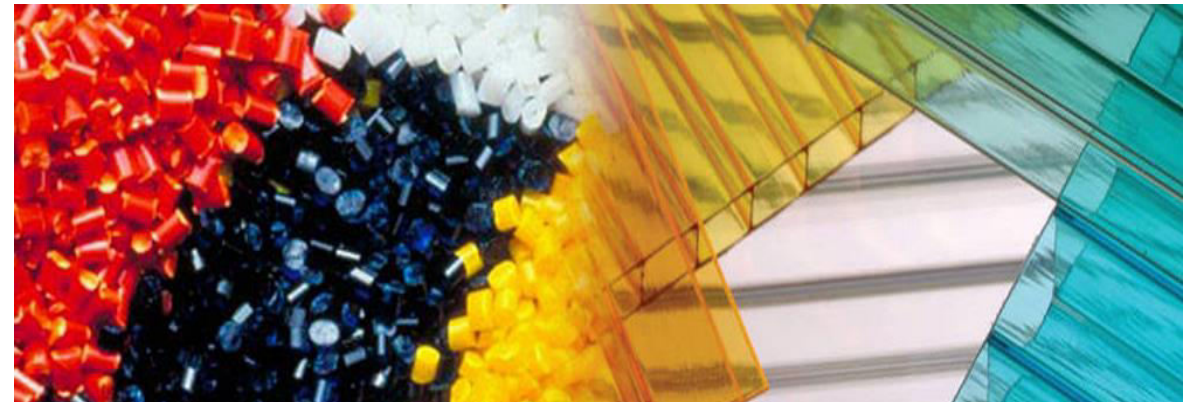
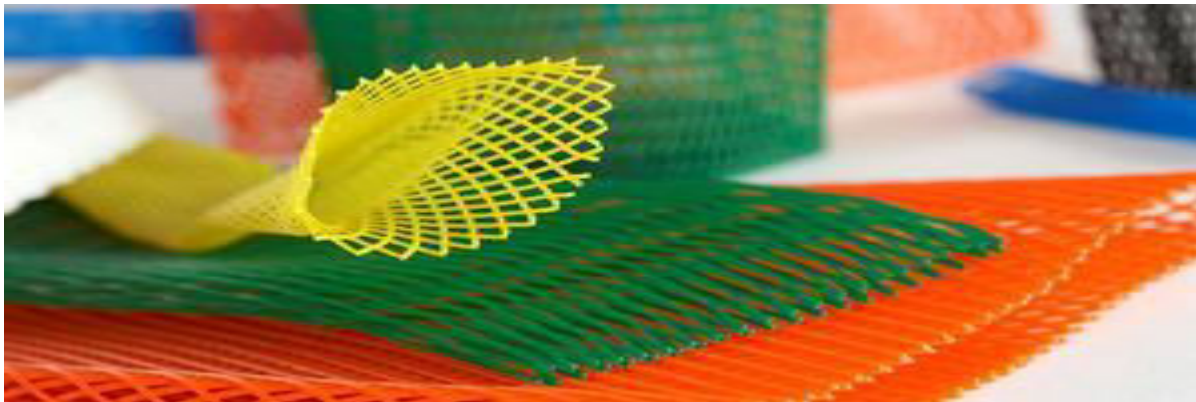
INR
18,000
crore

Approx. revenue generated by plastics related business in Tamil Nadu

10
lakh+

Direct and indirect employment provided by 8000+ small and medium enterprises in Tamil Nadu

Plastic manufacturers from Chennai are known for specialty plastics and especially those for automobile, electronic, hardware sectors, etc.

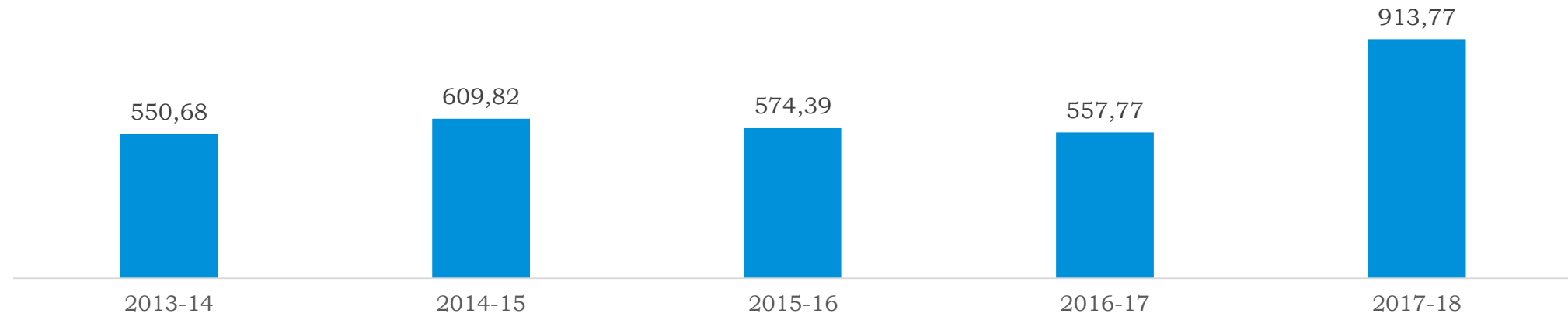


Exports from Tamil Nadu

The chemicals exports from the state grew at a CAGR of 13.5% between 2013-14 & 2017-18

The state ranks 7th in terms of chemical exports in India

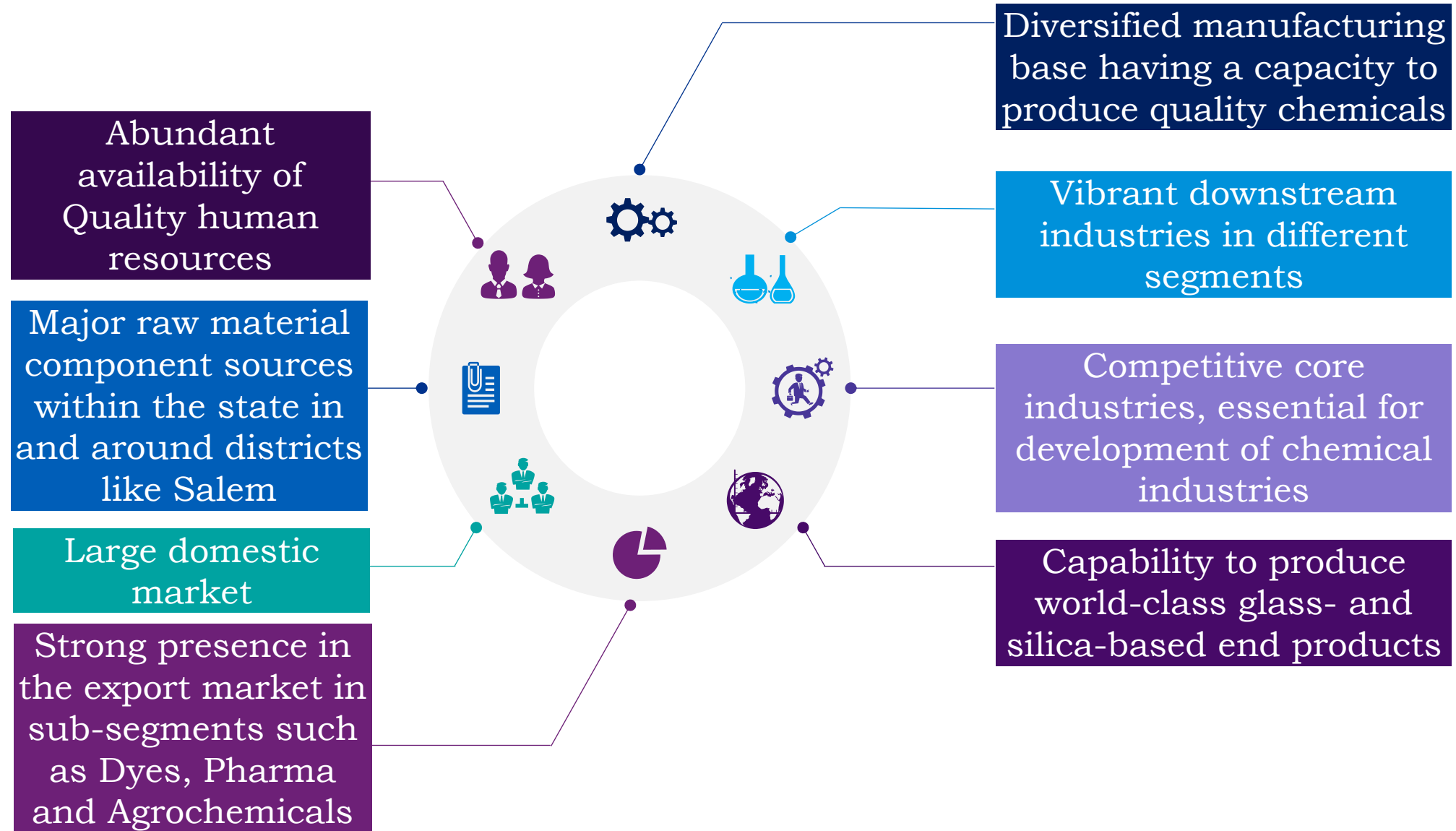
Chemicals & Petrochemicals* exports from Tamil Nadu (USD million)


















Petroleum products (38% of the total chemicals exports), Residual chemical & allied products (15%) and Other misc. chemicals (15%) were the top three exported commodities from Tamil Nadu in 2017-18

Tamil Nadu is emerging as a major exporter of basic chemicals

Chemical sector strengths



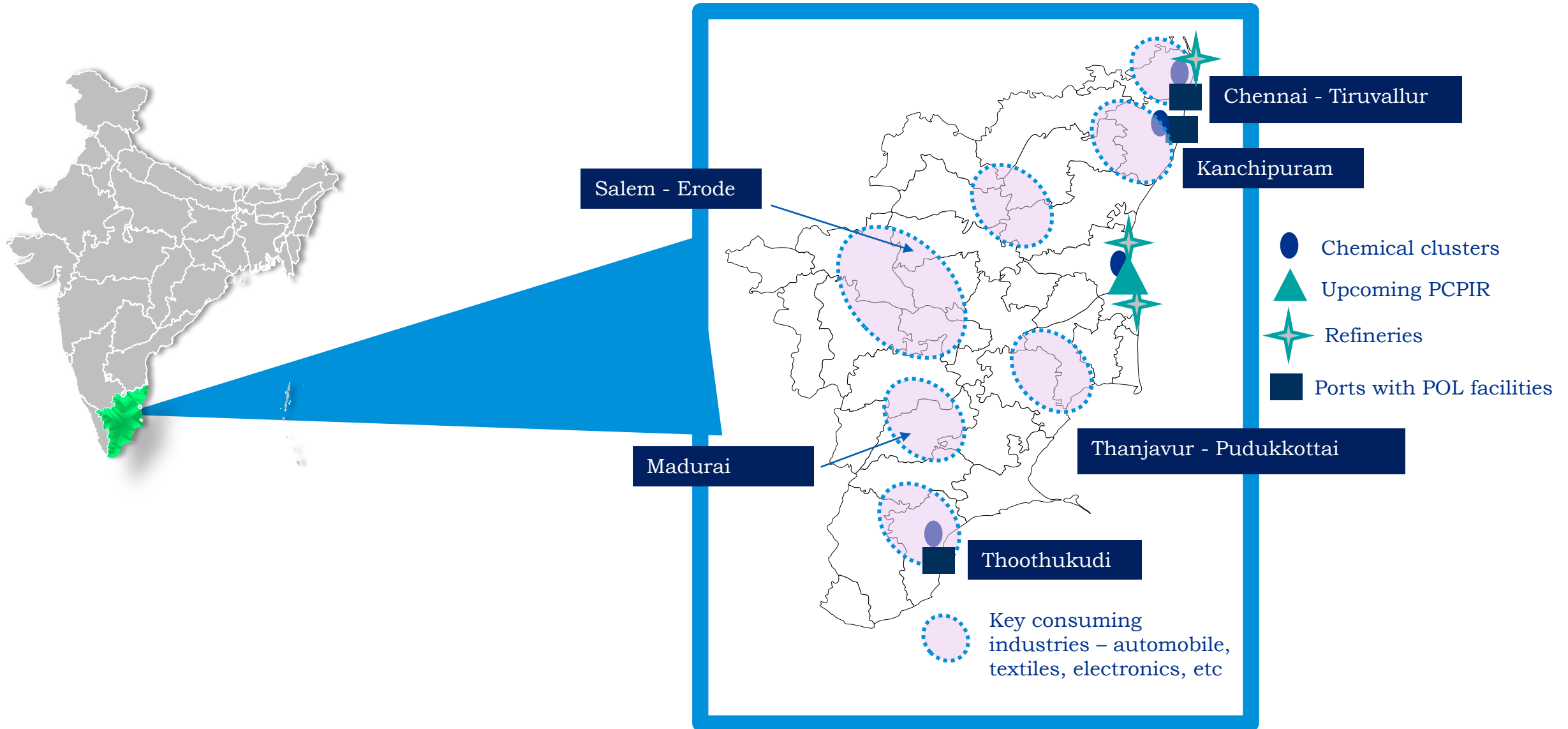
India's leading chemical and petrochemical manufacturers have a base in Tamil Nadu

<p>Refineries (17.5 MMTPA)</p>	<ul style="list-style-type: none"> ▶ CPCL Manali ▶ NOCL Cuddalore ▶ CPCL Narimanam 	 	<p>Chlor-Alkali plants (1 MMTPA)</p>	<ul style="list-style-type: none"> ▶ DCM Shriram ▶ SPIC ▶ DCW ▶ Chemplast Sanmar 	   
<p>Glass manufacturing (1 MMTPA)</p>	<ul style="list-style-type: none"> ▶ Asahi ▶ Harsha Group ▶ Saint Gobain 	  	<p>Soda Ash plants (0.2 MMTPA)</p>	<ul style="list-style-type: none"> ▶ Alkali Tuticorin ▶ SIEL 	 
<p>Petrochemical complexes (1 MMTPA)</p>	<ul style="list-style-type: none"> ▶ CPCL Manali ▶ CPCL Narimanam 		<p>Chemical Fertilizer plants (1.94 MTPA)</p>	<ul style="list-style-type: none"> ▶ MFL Manali ▶ SPIC Tuticorin ▶ TACL Tuticorin 	  



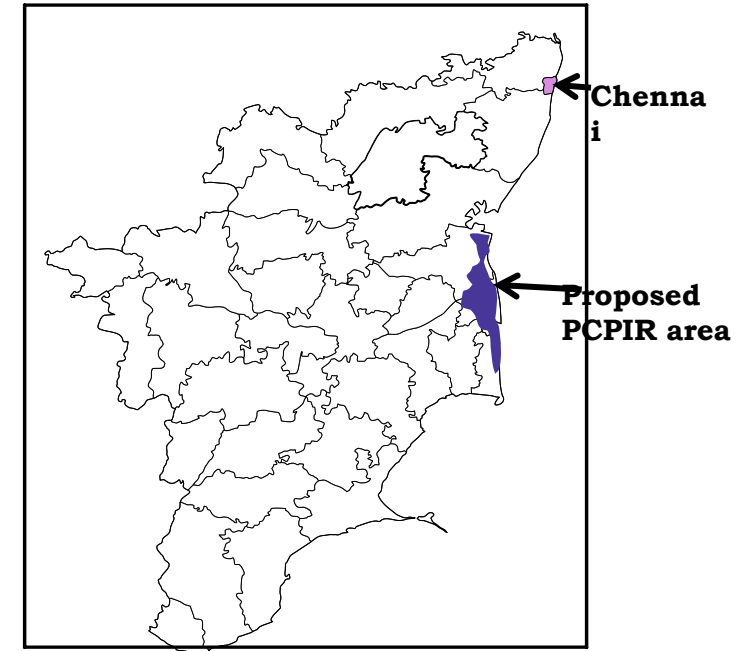
Infrastructure support

Chemical Clusters



Petroleum, Chemicals & Petrochemicals Investment Region (PCPIR)

- Planned by Tamil Nadu Industrial Development Corporation (TIDCO), the region is spread over an area of 257 sq. km. of brownfield area in the coastal districts of Cuddalore and Nagapattinam
- Expected to generate **employment for 737,000+ people**
- Planned investments:
 - Deep sea port with FSRU for import of LNG
 - Gas based power plant
 - Petrochemicals complex through partnership with private co-promoters
 - Petrochemical downstream plants and fertilizer complex



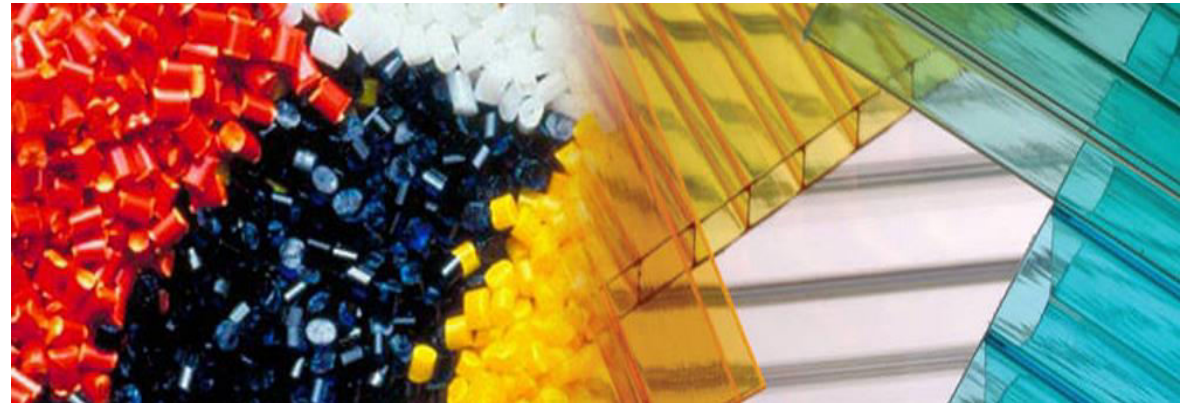
Special Purpose Vehicle (SPV) named TNPCPIR Company Ltd would be formed to manage the project and TNPCPIR Development authority will be formed to develop and manage the PCPIR area

Polymer Industries Park

A Polymer Industries Park is being established by TIDCO in Tiruvallur district

- Area – 306 acres in Voyalur and Kattupalli villages, Ponneri Taluka
- Estimated cost – INR 264 crore
- Site development work to commence in September 2018
- Infrastructure created will be able to accommodate 84 medium and small scale plastic component manufacturing units

A Special Purpose Vehicle (SPV) named Tamil Nadu Polymer Industries Park Limited (TPIPL) has been formed as a JV between TIDCO & SIPCOT for its implementation



Institutions

CIPET: Institute of Plastics Technology (IPT)

- An ISO 9001:2008 certified institution for its Academic and Technology Support Services and Plastics Testing Centre, accredited by NABL for Quality Control and Testing of raw materials and products of plastics
- The campus, spread across 8 acres, includes the laboratories, class rooms, various departments, library, cafeteria, hostel, sports ground, etc.

CIPET: School for Advanced Research in Polymers (SARP)

- Advanced Research School for Technology and Product Simulation (ARSTPS) joined as R&D wing of CIPET
- Offers high-end solutions for complex & critical engineering problems through our dedicated team of scientists

Hazardous Waste Treatment Storage and Disposal Facility

- Implemented by Industrial Water Management Association (IWMA) through M/s. Tamil Nadu Waste Management Limited in Tiruvallur district, in order to dispose of hazardous industrial waste by suitably converting the waste
- Spread across 52+ acres of land
- 2600+ industries in Tamil Nadu benefitted



Specific opportunities

Investment Opportunities

Agrochemicals manufacturing

- India ranked 4th in the world in agrochemicals production
- Huge domestic market for insecticides, herbicides & other crop protection chemicals

Dyes & Dye intermediates

- The booming textiles & apparels industry will result in increase in demand of dyes and dye intermediates

Pigments and coating products

- India contributes 15% to the global production of colorant chemicals
- Huge demand in sectors such as automobiles, aerospace, etc.

Specialty chemicals

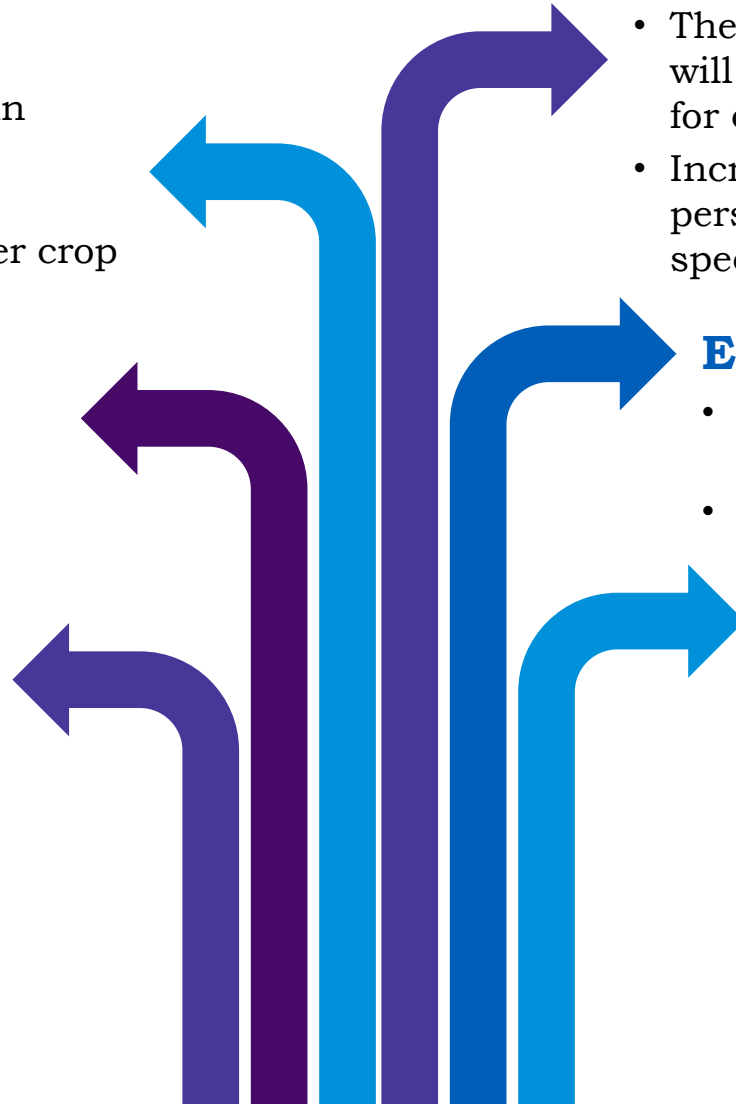
- The increasing rate of urbanization will lead to a surge in the demand for construction chemicals
- Increase use of chemicals in personal care will also boost the specialty chemicals segment

Engineering Polymers

- India is 3rd largest consumer of polymers in the world
- Huge domestic market

Paints & Varnishes

- Tamil Nadu is the leader in automobile sector in India
- Significant opportunities to set-up paint manufacturing units to cater to the increasing demand



Government Policy Support

Category	Investment Range (INR crores) (Area wise)		
	A Districts (Chennai, Tiruvallur, Kancheepuram)	B Districts (Other than A & C)	C Districts (Southern districts)
Mega Projects	Above 500 – 1500 and creating an employment of 300 in 3 years	Above 350 – 1000 and creating an employment of 200 in 4 years	Above 200 – 500 and creating an employment of 100 in 4 years
Super Mega A	Above 1500 – 3000 and creating an employment of 400 in 5 years	Above 1000 – 2000 and creating an employment of 300 in 5 years	Above 500 – 1500 and creating an employment of 250 in 5 years
Super Mega B	Above 3000 – 5000 and creating an employment of 600 in 6 years	Above 2000 – 4000 and creating an employment of 400 in 6 years	Above 1500 – 3000 and creating an employment of 350 in 6 years
Ultra Mega	Above 5000 and creating an employment of 700 in 7 years	Above 4000 and creating an employment of 600 in 7 years	Above 3000 and creating an employment of 500 in 7 years

“Southern Districts” means the Districts of Theni, Dindigul, Madurai, Sivagangai, Ramanathapuram, Virudhunagar, Tirunelveli, Thoothukudi and Kanniyakumari

Standard Incentives

Capital Subsidy

- Subsidy ranging from INR 30 Lakhs to INR 2.25 crores
- 50% additional subsidy for industries set up in SIPCOT Industrial Parks (other than Southern districts)
- For investments made in B & C category districts, an additional 10% & 25% subsidy for industries located outside the SIPCOT Industrial Parks

Stamp duty concession

- 50% to industries located in SIPCOT parks in A & B districts and 100% in the case of Southern Districts

Environmental Promotion Infrastructure Subsidy

- Subsidy of INR 30 lakhs or 25% of Capital cost whichever is less
- Apart from the above, Industries adopting Zero Effluent or Waste Water Discharge, Clean Development Mechanism and Emissions Trading Mechanism will be given a higher amount of subsidy

Electricity tax exemption

- Period of exemption depends upon the quantum of investment and the employment criteria prescribed

Incentives for Industrial Promotion in Southern Districts



- Higher fiscal benefits
- SIPCOT will allot lands at 50% of the cost in its existing and new industrial parks
- SIPCOT will acquire & allot Land for new ventures in case SIPCOT Industrial parks are not available
- 50% exemption from Stamp Duty for land privately purchased by investors; and 100% exemption in case of units in SIPCOT Industrial Parks
- 25% additional back ended capital subsidy; linked to investment and employment in the case of industries located outside SIPCOT Industrial Parks

Investment Promotion Facilitators - Key Contacts

TN Industrial Guidance and Export Promotion Bureau
19-A, Rukmani Lakshmiopathy Road,
Egmore, Chennai-600 008
Phone: 91-44-2855 3118
Website: www.investingintamilnadu.com

Tamil Nadu Industrial Development Corporation Limited (TIDCO)
19-A, Rukmini Lakshmiopathy Road,
Egmore, Chennai-600 008
Phone: 91-44-2855 4421
E-mail: cmd.tidco@nic.in
Website: www.tidco.com

State Industries Promotion Corporation of Tamil Nadu (SIPCOT)
19-A, Rukmini Lakshmiopathy Road, Egmore, Chennai-600 008
Phone: 91-44-2855 4787
E-mail: sipcot@md3.vsnl.net.in
Website: www.sipcot.com

Tamil Nadu Industrial Investment Corporation Limited (TIIC)
New no: 692, Anna Salai, Nandanam,
Chennai-600 035
Phone: 91-44-2433 1203
Fax: 91-44-2434 7209
E-mail: ho@tiic.in
Website: www.tiic.org

Tamil Nadu Urban Infrastructure Financial Services Ltd.
19, T P Scheme Road,
Raja Muthaipuram, Ramakrishna Nagar.
R A Puram Chennai – 600 028
Phone: 91-44-24643103
E-mail: md@tnuifsl.com
Website: www.tnuifsl.com

Electronics Corporation of Tamil Nadu Limited (ELCOT)
692, M.H.U. Complex, II Floor, Anna Salai,
Nandanam, Chennai-600 035
Phone: 91-44-6551 2330
E-mail: secyit@tn.nic.in
Website: www.elcot.in

Tamil Nadu Small Industries Development Corporation (TANSIDCO)
Thiru Vi Ka Industrial Estate,
Chennai - 600 032
Phone: 91-44-2250 1461, 2250 1422, 2250 0185, E-mail:
sidco@vsnl.com
Website: www.sidco.tn.nic.in

Thank you