



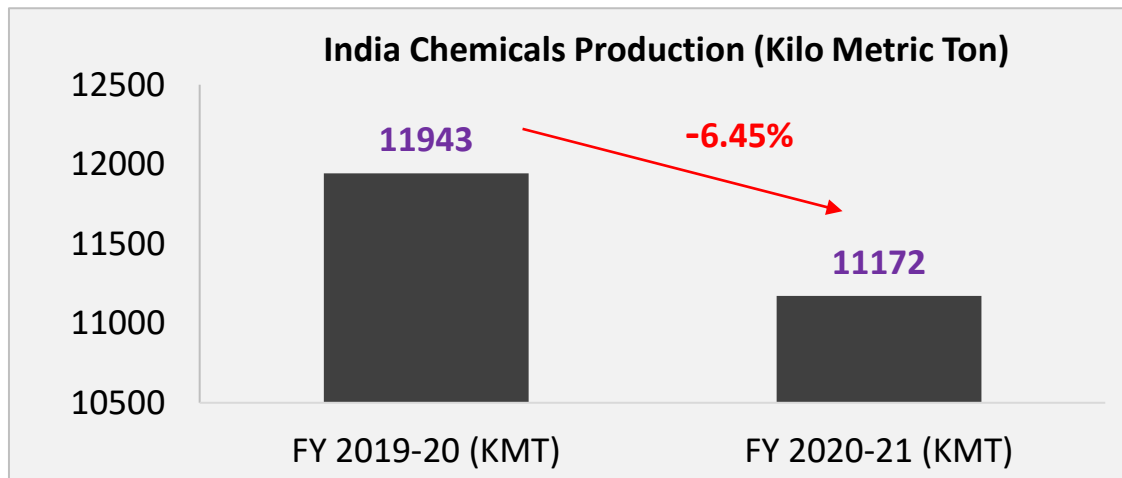
# Indian Chemical Industry

## Disruptions Assessment due to COVID-19

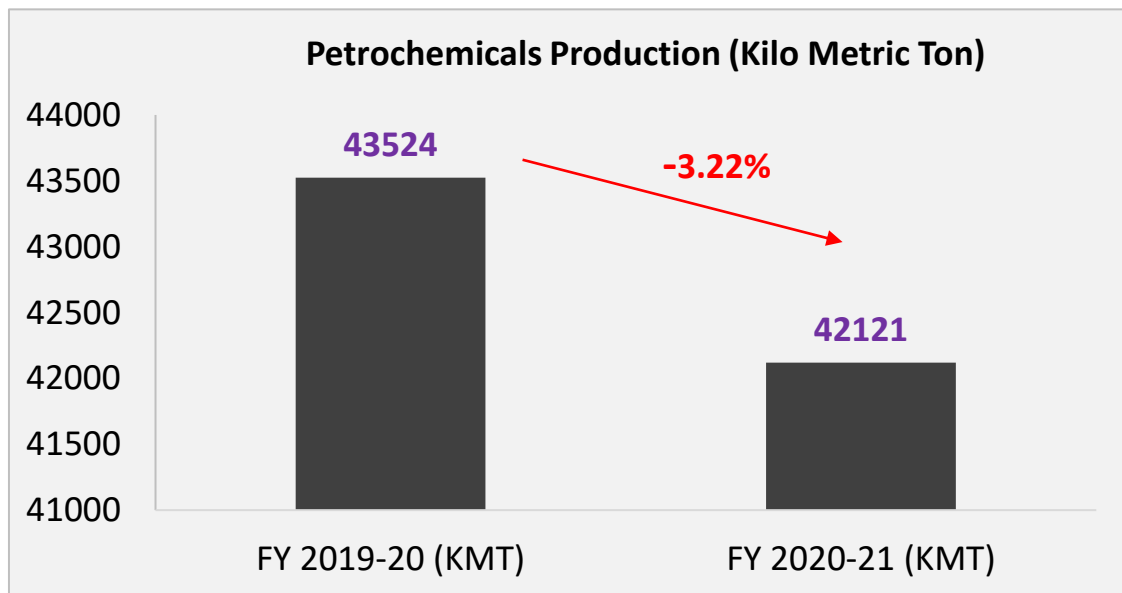
# Indian Chemical Industry Production Statistics: FY'20 versus FY'21



Note: FY refers April-March



Source: Ministry of Chemicals and Fertilizers

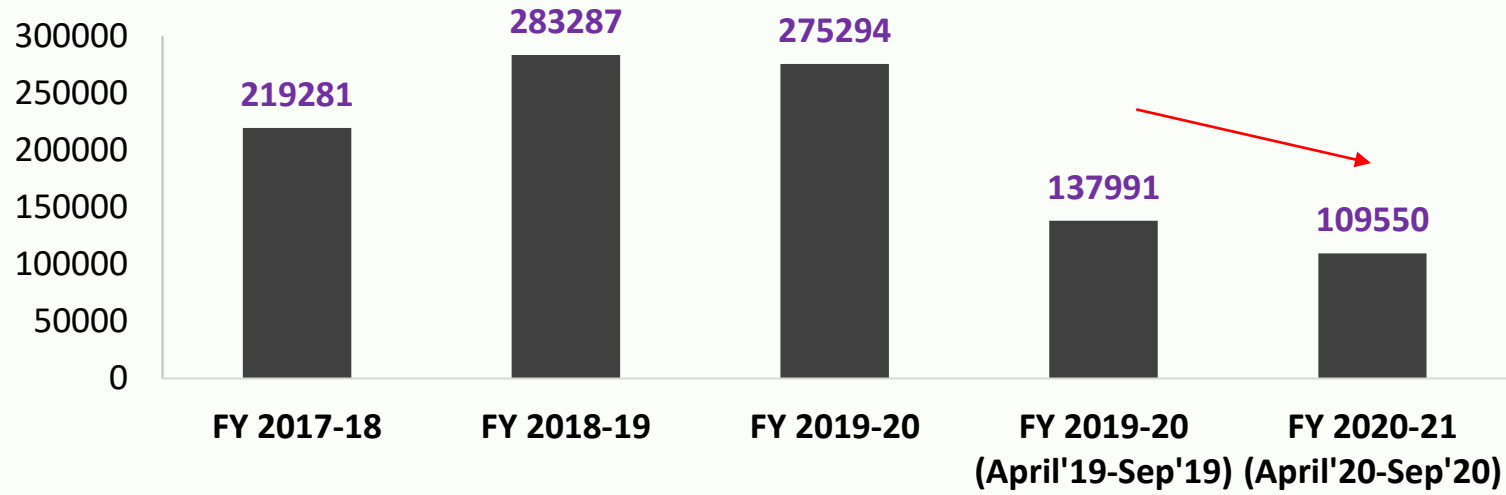


India Chemicals production	Kilo Metric Ton		
	FY'20	FY'21	% Change
Alkali Chemicals	8457	7776	-8.04%
Inorganic Chemicals	1063	929	-12.66%
Organic Chemicals	1847	1886	2.13%
Pesticides & Insecticides	192	255	32.54%
Dyes and Pigments	384	327	-14.90%
<b>Total</b>	<b>11943</b>	<b>11172</b>	<b>-6.45%</b>

India Petrochemicals Production	Kilo Metric Ton		
	FY'20	FY'21	% Change
Synthetic fiber	3893	3163	-18.75%
Fiber intermediate	5359	5059	-5.59%
Polymers	12404	12144	-2.10%
Synthetic rubber	358	341	-4.64%
Detergent intermediates	715	736	3.04%
Performance plastics	1672	1520	-9.10%
Olefins	11835	12039	1.72%
Aromatics	4925	4805	-2.44%
Other chemicals	2364	2314	-2.12%
<b>Total</b>	<b>43524</b>	<b>42121</b>	<b>-3.22%</b>

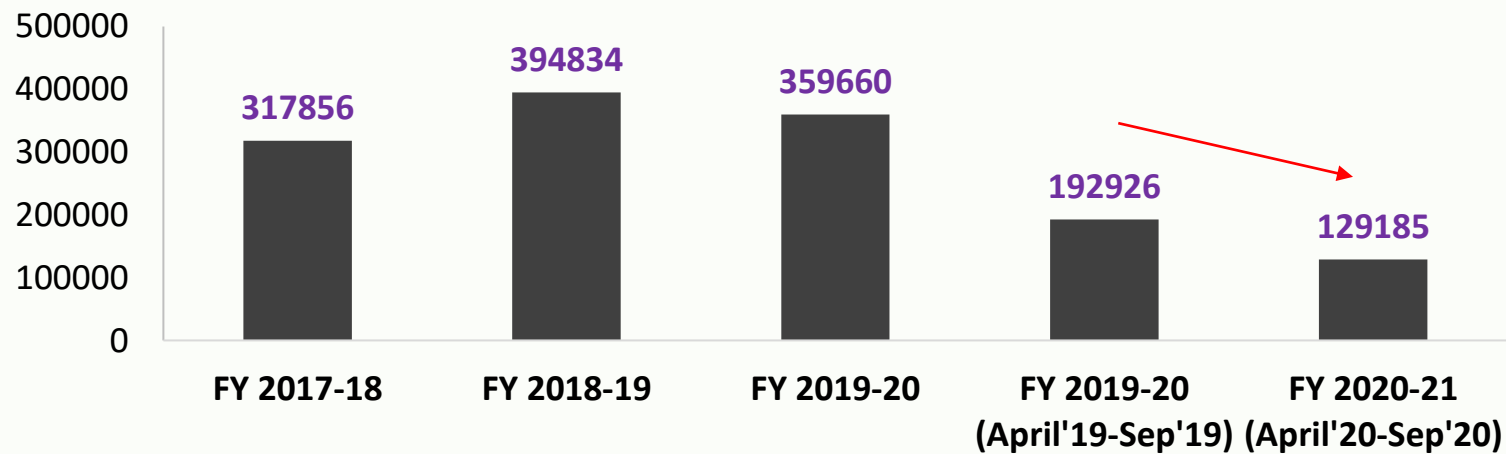
# India Export and Import Statistics: Impact during COVID-19

## Chemical Exports: India - ₹ (Crore)



Source: Department of Chemicals & Petro-Chemicals, GOI

## Chemical Imports: India - ₹ (Crore)



Source: Department of Chemicals & Petro-Chemicals, GOI

### Key Insights:

#### Exports:

During April'20 to Sep'20 Exports declined **-20.6%** due to COVID-19

#### Imports:

During April'20 to Sep'20 Imports declined by **-33%** due to COVID-19

Excludes: pharma products and fertilizers

# COVID Impact on Indian Chemical Industry

Positive and negative impact segments

## Supply chain disruptions

Frieght charges increase, raw material shortages / availability etc.  
Domestic transportation impacted

## Export – Import impact

Impact on India export of chemicals  
Impact on India import of chemicals

## Halt in production

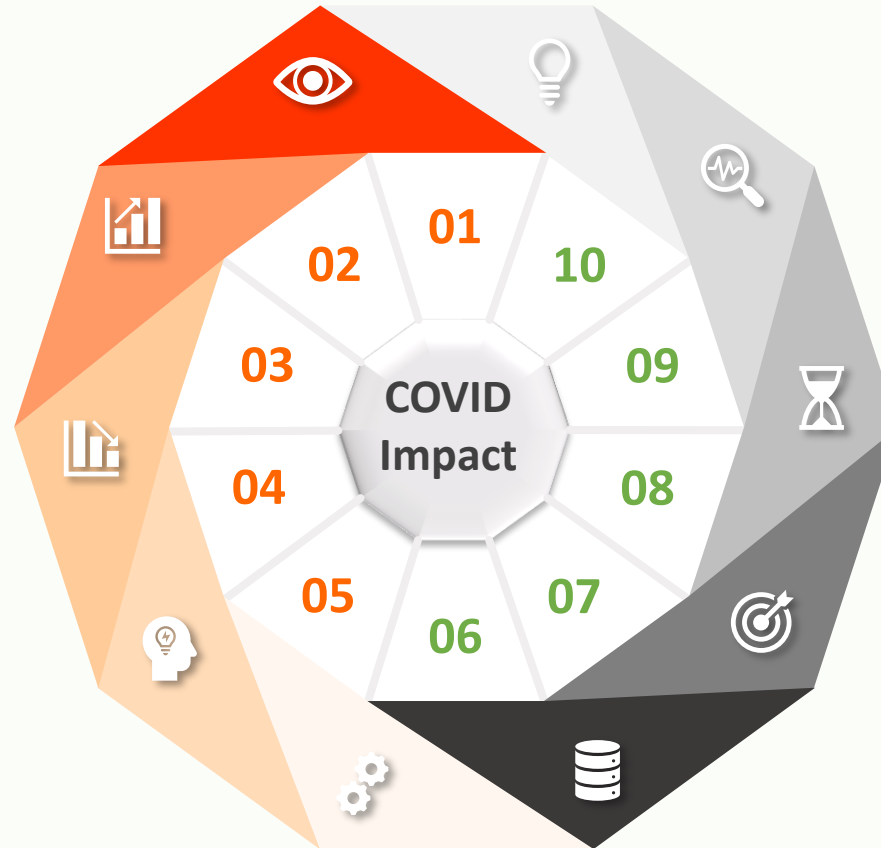
Halt of production facilities  
Capacities under utilization issues

## Manpower availability

Manpower availability (contract workers, working capital issues, etc.)

## Special regulatory restrictions

Special regulations on safety and hygiene



**Note:** Negative impact factors are showcased on left and positive impact factors at right side of slide

## Innovative business models

Remotely delivery solutions to create value for customers

## Remote functioning

Virtual interactive initiatives, Remote functioning of operations and services

## Govt Support and policies

Atmanirbhar Bharat, economy revival packages by RBI especially to MSMEs, etc.

## Boost in demand for specialty chemicals

Specialty chemicals scenario during pandemic

## Emerging Collaborations

Emerging collaboration between stakeholders (esp. MSMEs and informal sectors)

# COVID Impact on Indian Chemical Industry



DISRUPTIONS	CHALLENGES	OPPORTUNITIES
Demand destruction followed by “K” shaped recovery	Drastic changes in demand pattern; High volatility in chemical prices	Adjustment in product mix, Move up the value chain
Supply chain & logistics disruption	Non-availability of imported raw material, containers, delays in custom clearances Unprecedented hike in freight cost	Develop alternate local sources; reduce dependence on imports Bold steps for end-to-end manufacture → PLI Multi modes in transportation
Manpower and Labour restrictions	Limited availability of manpower, labour shortages	Outsourcing of Manpower; Work from Home, Increased use of technology
Shift in Geopolitical forces at global level	Capacity constraints, Scale up production at short notice; procure adequate raw materials	China + 1 strategy favouring India Supply gap created by China Focus Asia Pacific near markets
Financial cycle disruptions	Delayed collections/working capital management	Growth in electronic transactions shortening of payment cycle

**Thank You**