



Confederation of Indian Industry
125 Years: 1895-2020

NOVEL CORONAVIRUS IN CHINA

AN IMPACT ANALYSIS

16 February 2020

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Introduction

The outbreak of Covid-19 in China is expected to have significant global economic impact:

- Economic slowdown – China's GDP is expected to decelerate by 1-1.25 percentage point over 2020 due to halting of economic activities in key production centres. As of 14th February, 48 cities and 4 provinces are in lockdown mode. This will have knock-on impact on global economic growth as China accounts for 19.71% of global GDP at purchasing power parity. It is estimated that global GDP will suffer an impact of -0.5%.
- Trade – China is the world's largest exporter and second largest importing nation, accounting for 13% of world exports and 11% of world imports. The lockdown affecting 500 million people in the country will deeply impact its consumption of goods.
- Supply chain disruption – With China as the world's largest manufacturer and exporter, closure of its industries for a significant time period is likely to impact production centres across the world. China is currently the top supplier of goods for over 100 countries.
- Commodities – Oil demand is expected to fall by 30% due to the fall in Chinese consumption and this will also resonate in other commodities.
- Logistics – Shipping rates have already fallen to record lows.

Impact on India

The above factors will impinge on Indian industry to a large extent.

India continues to have a very high import dependence on China. Of the top 20 products (at the two-digit HS code) that India imports from the world, China accounts for a significant share in most of them (Table 1 – given in Annexure). Further, of the top 20 products (at the two-digit HS code) that India purchased from China in 2018, the average share of China in India's total imports of the product is close to 30% (Table 2 – given in Annexure).

China accounts for 45% of India's total electronics imports. One-third of machinery and almost two-fifths of organic chemicals that India purchases from the world comes from China. Automotive parts and fertilisers are other items where China's share in India's import is more than 25%. India sources about 65-70% of active pharmaceutical ingredients and close to 90% of certain mobile phone parts from China.

Going deeper into the top 20 products at the 4-digit HS code level that India imports from China, it is found that these comprise two-fifths of its total imports from that country (Table 3 – given in Annexure). These also further add to reliance on China as they account for 43% of the total imports of India from the world of these products.

This extremely high import dependence on China has significant ramifications for Indian industry due to the current outbreak of Coronavirus in China. As on date, China has reported more than 60,000 cases of the Novel Coronavirus Pneumonia (NCP). Hubei is the worst effected province with more than 49,000 cases, followed by other provinces such as Guangdong, Henan, Zhejiang, Hunan, Anhui, Jiangxi, Jiangsu, Chongqing and Shandong. The epidemic has also spread to 24 other countries, 8 of which are from East Asia and South East Asia regions.

In exports, China is India's 3rd largest export partner and accounts for 5% share. The impact will be felt in key sectors such as organic chemicals, plastics, fish products, cotton, ores, etc.

Most of the Indian companies are situated in the eastern part of China. About 72% of Indian companies in China have their presence in cities like Shanghai and Beijing and in provinces of Guangdong, Jiangsu and Shandong. Further, their business partners are located across China. These companies operate in various sectors such as Industrial Manufacturing, Manufacturing Services, IT & BPO, Logistics, Chemicals, Airlines and Tourism.

As per our analysis, some of the sectors in India that have been impacted / are likely to be impacted by coronavirus in China include shipping, pharmaceuticals, automobiles, mobiles, electronics, textiles, etc. Further, supply chain disruptions are expected to affect several associated industries and markets. Overall, hitherto, the impact of Coronavirus on Indian industry has been moderate.

I. Sector-wise impact on Indian industry

CII conducted a quick impact analysis on Indian companies doing business with China across various sectors. The feedback from CII members is given as below:

1. Shipping industry

Severely tanking freight rates on the back of the coronavirus epidemic in China has impacted the business of cargo movement service providers. While there have been complaints of shipment delays between India and China, there are serious concerns regarding the overall earnings of Indian shipping companies in the first quarter of 2020. There has been a sharp drop in the dry bulk cargo movement since the third week of January 2020, as the shutdown in China has meant that ships cannot enter Chinese ports. Further, as per our members, realization per day per vessel has declined by more than 75-80% in dry bulk trade.

2. Auto industry

The impact on Indian companies in this sector varies depending on the extent of their business with China. The shutdown in China has prohibited the imports of various components affecting both the Indian auto manufacturers and the auto component industry. However, current levels of inventory seem to be sufficient for the Indian industry at the moment. In case the shutdown in China persists, it is expected to result in an 8-10% contraction of Indian auto manufacturing in 2020.

However, for the fledgling EV industry, the impact of Coronavirus may be greater. China is dominant in the battery supply chain as it accounts for around three-quarters of battery manufacturing capacity. The Indian EV industry is dependent on Chinese imports to a large extent especially for lithium chemicals that are used to make cathodes and battery cells as India seeks to build lithium-ion battery manufacturing plants.

3. Pharmaceuticals industry

Though India is one of the top formulation drug exporters in the world, the Indian pharma industry relies heavily on imports of bulk drugs (APIs and intermediates that give medicines their therapeutic value).

India imported around INR249 billion worth of bulk drugs in FY19 that account for approximately 40 per cent of the overall domestic consumption. This is a year-on-year increase of around 30 per cent from FY18. Though Indian players have the technical

capabilities, they have been more focused on value added products or formulations and have been unable to compete with China due to cost disadvantage. Imports from China have been on a steady rise over the years (from 62 per cent in FY12 to 68 per cent in FY19) due to the low-cost advantage enjoyed by Chinese manufacturers. In FY19, India imported INR174 billion worth of APIs from China while exporting merely INR 16 billion worth of APIs.

With India's API imports from China averaging almost 70 per cent of its consumption by value, importers are at the risk of supply disruptions and unexpected price movements. For many critical antibiotics and antipyretics, dependency on imports from China is close to 100 percent. These APIs require large capacities of fermentation boilers, a USP of Chinese manufacturers, giving an upper hand to Chinese manufacturers.

The value addition in India is mainly through formulation, packaging and distribution. Indian pharmaceutical companies typically keep inventories of approximately 45 days of the bulk drug, required in formulation.

CII has been advocating for reducing dependency on China for APIs and intermediates for several years and released two reports in 2014 and 2017 elaborating on our high share of imports from China, key contributors to dependency and recommendations to bend the curve and reduce dependency in National Interest.

Favourable policies, fast approval mechanisms, infrastructure investment, R&D encouragement, land reforms, access to capital, cost of utilities, availability and cost of raw material, scale of operations, technology efficiencies, etc are some of the factors for China's API industry growth. India needs to improve on all above to revive its domestic API industry and reduce dependency on China, at least for essential APIs, crucial for public health security. Government can play role of key enabler.

Currently, Indian manufacturers do not have a compelling case to manufacture APIs locally, due to inadequate infrastructure, increased compliances, time taking cumbersome process for environmental clearances from state and central pollution control boards, lost capacities and lack of incentives and support from government to restart the production.

The coronavirus outbreak continues to disrupt supplies of pharmaceutical ingredients from China. This has resulted in shortages and potential price increases of generic drugs including anti-infectives in India. Indian pharmaceutical companies are now running close to exhausting their supply of raw material (API) and considering supply from other countries. However, it has not reached a level of crisis at this point in time as enough

stocks and viable alternatives are available. The industry is also seeking to ensure the adequacy of APIs for essential drugs in case supplies from China are indefinitely disrupted. It is advised to avoid speculation and panic.

Delivery and tracking of consignments are still uncertain within China whether inward or outward. Though, there is some clarity on the movements from coastal areas but clearing from ports still remains ambiguous. As an example, certain pharma importers are facing challenges in securing supplies of a critical raw material for paracetamol intermediate. This can only be sourced from central China. Indian pharma companies have placed orders but are unclear on the status of delivery. Any stock out may further worsen situation of paracetamol in India.

4. Chemicals Industry

Local dyestuff units in India are heavily dependent on imports of several raw materials including chemicals and intermediates, from China. Delayed shipments from China and a spike in raw material prices are affecting the dyes and dyestuff industry, especially in Gujarat. It was found that nearly 20% of the production has been impacted due to the disruption in raw material supply.

China is a major supplier of speciality chemicals for textiles especially Indigo which is required for denim. The business in India is likely to get affected and people are securing their supplies. However, it is also an opportunity since US and EU will try and diversify their markets and mitigate the China risk. Some of this business can be diverted to India if taken advantage of.

5. Textiles Industry

Many garment/textile factories in China have halted operations owing to the outbreak of coronavirus, adversely affecting exports of fabric, yarn and other raw materials from India. The disruption is expected to slow down cotton yarn exports by 50%, leading to a severe impact on the spinning mills in India. Due to this slowdown in the flow of goods and hence revenue, textile units may be hampered in making annual interest and repayments to financial institutions, thereby defaulting their dues. This will also adversely impact the demand from cotton farmers, who were already witnessing subdued prices and fear that the said price may fall further if the China crisis continues unabated. It may be mentioned that India already has a price disadvantage against countries like Vietnam, Pakistan and Indonesia which have duty free access to China for export of cotton yarn.

On the other hand, the coronavirus issue in China unfolds a big opportunity for all those industries where China is a major exporter, including textiles. Indian fibre and yarn industry have enough capacity and capability (quality/ supply chain efficiencies) to service many of the markets vacated by China.

While Indian companies can look to meeting the gap from China in other countries, they must be assured regarding possible dumping once Chinese supply is restored.

6. Solar Power Sector

Solar Power project developers in India continue to source solar modules from China. Modules account for nearly 60% of a solar project's total cost. Chinese companies dominate the Indian solar components market, supplying about 80% of solar cells and modules used here, given their competitive pricing. Chinese vendors have intimated Indian developers about delays happening in production, quality checks and transport of components, due to the outbreak. As a result, Indian developers have started facing a shortfall of raw materials needed in solar panels/cells and limited stocks.

There is an extended work stoppage in eight provinces, many being key solar manufacturing hubs. Within the eight provinces that extended work stoppages, notably Jiangsu province was home to a number of 'Solar Module Super League' (SMSL) members major manufacturing hubs, including Canadian Solar, LONGi Group, Trina Solar, Q-CELLS and JA Solar. Zhejiang province is home to some of JinkoSolar's manufacturing operations, the largest SMSL, while JA Solar also has manufacturing operations in the province.

Further, the PV inverter companies such as SolarEdge and Enphase Energy had contract manufacturers in affected provinces of Guangdong and Anhui, respectively. Bodies such as the National Energy Administration, the Chinese Photovoltaic Industry Association and the State Grid Corporation of China have expressed warnings to the energy industry to slow down the rate of connection deadlines for large-scale projects. It is estimated that output will suffer until around the middle of the year because of the outbreak, but if it is contained by June, recovery might kick in for the third quarter.

This has resulted in the following issues rising for the Indian Solar industry:

- a. Ship container companies have stopped picking up load from China ports and transporting them to different countries, including India.

- b. Solar prices are expected to rise with the cost of PV modules increasing, as a result of the virus outbreak. This is due to a shortage in module glass and wafers needed to create these systems
- c. Essentially, production rates for much-needed materials for solar have come to a halt, or at least, significantly decreased. Quarantine of those residing in affected areas has resulted in factory usage plummeting.

7. Electronics Industry

China is a major supplier both for the final product as well as the raw material used in electronics industry. India's electronics industry is fearing supply disruptions, production reduction, impact on product prices due to heavy dependence on electronics component supply – directly & indirectly - and local manufacturing.

The spread of coronavirus could have pushed down the sales of top electronic companies and smart phone makers which have major supplies to India. However, most vendors had already made provisions for inventory due to the Chinese Lunar New Year holiday hence, there may not be an immediate impact in the current quarter. Though factories in China have not yet opened, there could be a significant drop in supplies affecting the production in India, if the problem persists beyond 3 weeks. Disruptions beyond the end of February will have a serious impact on the entire electronics industry.

Semiconductors and active components cannot unfortunately be substituted so quickly. Equipment not using actives too are beginning to face shortages of passive and PCBs. A few alternatives for components are available in Japan, South Korea and in some cases in Germany, France & Italy. These companies are of course now experiencing a surge in demand.

With regard to the mobile handsets industry, only about 10 - 12% of the components are sourced locally in India and the remaining 88% are still dependent on countries outside India, with China being a key exporter. The mobile phone industry in India has started running out of stocks and if the situation does not normalize by next week, then serious disruptions are expected for the industry. It is expected that smartphone sales may fall 10-15% in the January-March quarter, but a sharper impact is expected in the April-June period, and four to five-week delays in new launches.

Delay in the supply of components, non-availability of flights and shipment for transportation of material/components and short supply might cause some negative pressure on prices of the components and eventually products may stop coming in time.

Local manufacturing of components is being considered. Indian industry can take the opportunity of inviting companies from Japan, Korea, Taiwan, Europe and US that are presently in the supply chain, to set up alternative plants in India.

8. IT Industry

The extended Lunar New Year holidays in China have adversely impacted the revenue and growth of Indian IT companies, operating out of China. IT companies are heavily dependent on manpower and are not able to operate due to restriction in movement of people arising from lockdown and quarantine issues. Consequently, they are not able to complete/deliver the existing projects in time and are also declining new projects.

Further, the global customers for Indian IT companies in China have started looking for other service providers in alternate locations such as Malaysia, Vietnam, etc.

9. Tourism and Aviation

Although the inflow of Chinese tourists to India is around 3% of the total inbound, they were among the top 10 spenders by nationality. Owing to the coronavirus, India stands to lose the inflow of tourists not just from China, but other East Asian regions also such as Korea, Taiwan, Hongkong, Singapore, etc, severely impacting the tourism sector revenue. The inflow of tourists from other sectors such as Europe and the US is also likely to decline as many travellers are cancelling/rescheduling their plans.

It is projected that Indian tour operators will incur significant losses because of cancellations from tourists from China and other countries due to the coronavirus outbreak. Further, international tourists have been cancelling travel to the Southern state of Kerala where some cases of the disease have been confirmed. India annually earns nearly \$30 billion from foreign tourist arrivals and this figure may be adversely impacted. Outbound tourists from India too are cutting down travel, particularly after the cruise liner outbreak in Japan, which will affect tour operators.

The aviation sector has also been impacted by the spread of Coronavirus. The outbreak has forced Indian carriers to cancel and temporarily suspend flights operating from India to China and Hong Kong. Carriers such as Indigo and Air India have halted operations to China. The temporary suspension of flights to China and Hong Kong would lead to Indian carriers missing out on gross revenue targets.

It may be mentioned that in the past the airline industry has proven resilient to shocks, including pandemics. Even in the outbreak of SARS, monthly international passenger

traffic returned to its pre-crisis level within nine months. Owing to the severity of Coronavirus, it is expected that the recovery from this epidemic will take a longer time. This is compounded by a very strong growth of the Chinese air transport market over the recent years which means that an additional 450 million passengers fly to, from and within China per year compared with a decade ago.

No. of Tourist arrivals from China and International Tourist Receipts

Source: India Tourism at a Glance 2019, Ministry of Tourism

S.No	Source Country	FTAs	Percentage (%) Share
1	Bangladesh	2256675	21.37
2	United States	1456678	13.80
3	United Kingdom	1029758	9.75
4	Sri Lanka	353684	3.35
5	Canada	351040	3.32
6	Australia	346486	3.28
7	Malaysia	319172	3.02
8	China	281768	2.67
9	Germany	274087	2.60
10	Russian Fed	262309	2.48
Total top 10 Countries		6931657	65.65
Others		3626272	34.35
G.Total		10557929	100.00

Source: Bureau of Immigration, Govt. of India
P: Provisional

In 2018, 2.81 lakh Chinese tourists visited India. In 2019, the Ministry of Tourism made conscious efforts to attract Chinese tourists. The number of visits made by Chinese to India registered robust growth during the first three quarters of this year, making India a trendy destination for Chinese tourists, according to a report published by China's online travel agency C-trip.

Data from C-trip showed that the number of visits made by Chinese to India surged by over 70 percent during the January-September period. Further, Ministry of Tourism reduced the visa fees and extended visa validity.

Based on the above measures, the number of Chinese Tourists visiting India in 2020 would have been around 5 lakhs. The Indian Association of Tour Operators have pegged the estimated loss of USD 500 million because of cancellations from tourists from China and other countries due to Coronavirus outbreak, a cost that could rise four-fold if the problem persists throughout the year.

On 13 Feb 2019, in order to prevent the spread of coronavirus in India, the Ministry of Civil Aviation has decided to expand the universal screening for all passengers arriving in flights from Japan, South Korea, Thailand, and Singapore besides the flights from China and Hongkong.

Expected loss from Western markets

- The foreign inbound leisure tourists, business travelers, MICE travelers, wedding guests from USA, UK, France, Germany and even from the Middle East are cancelling and deferring travel. It is difficult to put a number to a loss from these markets, but it will be substantial, especially if there are any travel advisories issued against traveling to South Asia in the future.
- Outbound India Market: The ever-growing India outbound market that almost totaled 2 million in 2019 is expected to crawl in H1 of 2020 as international visits are deferred or cancelled.

II. Logistical Issues

Material supplies from China are significantly impacting Indian industry due to following supply chain factors at the Chinese end:

1. Restrictions faced by transport operators
 - a. Hometown of the driver as a crucial factor for entry
 - b. City entrance control - for people/transportation etc.
 - c. Strict mobility measures - drivers need to observe 14 days quarantine before & after making delivery to other notified provinces.
 - d. Submission of health certificates – Either long term health certificate (to be applied 48 hours in advance) or temporary certificate (to be applied for same day use) is mandatory.

2. Transportation Control – Challenges
 - a. Some cities have closed tollgates making it difficult to deliver to customers in that city.
 - b. Lack of uniformity in city traffic control policies.
 - c. Lack of efficiency, as only emergency supplies for virus control are being allowed to be transported.

3. Shipping lines schedule disruptions
 - a. No loading or unloading at Chinese ports are being allowed
 - b. Vessels are being re-routed to avoid Chinese ports, and blank sailing issues are being faced
 - c. Vessels from other importing countries are not plying on the China-India route due to lack of full load of the containers.
 - d. The above stated shipping line and vessel issues are also causing delay in imports from other countries like Thailand to India.

III. Industry Survey in China

CII has done a snap survey to understand the challenges being faced by Indian companies operating in China owing to coronavirus. The feedback received is summarized below:

1. Impact on Revenue/ Growth

- a. Extended holidays have reduced productivity which has a direct impact on revenues and growth. Businesses have been closed since 24th January 2020 and are expected to resume operations only by 20th February 2020 (cannot be said for certain). Overall, companies foresee a dip in revenue by 15-20% in Q1 and Q2 over previous year. It is expected that businesses will get normalized only by Q3.
- b. The companies have to still incur the fixed costs. i.e. wages & salary, office rent, statutory overheads and interest especially for manufacturing companies despite nil operations. Loss of revenue for months of February and March 2020 is expected to result in cash crunch as fixed costs need to be borne without any sales or only part sales.
- c. Unexpected costs have gone up to cater to the safety and wellbeing of employees returning to work, like providing facemasks (3 times a day), office quarantine (3 times a day), transport for pickup/drop and hand sanitizers. In some cases, companies have had to procure laptops and arrange work from home or 14 days accommodation for people returning to the cities in lieu of the restrictions imposed by local communities on people coming from other cities.
- d. Input costs may be affected due to shortages in supply. Cost of freight may also go up which will have a direct impact on companies' revenues and profitability in the short run.

2 Other Challenges

- a. Local governments have imposed tight conditions on companies operating i.e. if any operator / employee is found to be infected during work, penalties will be imposed.

- b. Increased scrutiny on Health and Environmental Safety Standards is ongoing and can be expected to be further reinforced as there is little tapering in the number of cases.
- c. The biggest challenge for Indian industry operating in China will be retaining and recruiting talent as most of the persons will now prefer to work near their home and avoid travel to far distances.
- d. Since movement of people and goods will be controlled for considerable period of time, both lead-time of delivery and cost is likely to be increased.
- e. Local governments, for e.g. Guangzhou, have already announced a temporary appropriation law that allows government agencies to take possession of private property in order to deal with the crisis. If taken against Indian companies or individuals, it will pose a substantial risk since the compensation mechanism might not be efficient or fair. Thus, Indian companies have to prepare contingency plans and legal strategy for such scenarios.
- f. Indian companies which source products from China or export from India may face the risk of Chinese companies not being able to comply with their obligations. Most well-drafted contracts have a force majeure clause that will determine what happens in such circumstances.
 - i. If such contracts are governed by Chinese law, the Chinese companies can invoke statutory provision and also obtain certificates from CCPIT to claim force majeure protection. Indian companies are required to immediately review their contracts and determine their exact position.
 - ii. If such contracts are governed by Indian law, there are judicial precedents but no statutory provisions. Again, such contracts will have to be reviewed to determine exact ramifications.
- g. Several PSUs and government agencies in India which employ Chinese companies as EPC contractors or suppliers for infrastructure projects must also review their contracts to ascertain impact of the disruption caused due to virus outbreak.

IV. Recommendations for Policy

The Covid outbreak is likely to continue for a few weeks before it tapers off. The Chinese Government has prioritised resumption of economic activity in phases. However, the timeline for normalisation is likely to be protracted over at least two quarters.

China is facing a quarantine-like situation with movement of goods and people to and from the country facing a lockdown. While the situation for human impact is very serious, the economic impact will cascade into loss of employment, markets, and small enterprises. For India as well as other countries, strategies for minimising risks and managing the situation are required. At the same time, for India, the current scenario also offers it a chance to position itself as a viable alternative to sourcing from China, and unless quick action is taken, the benefits may pass on to competitor nations such as Vietnam, Thailand, Malaysia and Bangladesh.

India needs to activate a three-pronged strategy:

- I. Import side – Minimize risks to key sectors arising from supply chain disruptions
- II. Export side – Leverage opportunities to be an alternative destination
- III. Domestic manufacturing – Keep the supply chains running and leverage excess capacity.

1. Imports

With India being strongly dependent on China for certain products, it is important to segregate essential and non-essential imports from China.

Essential imports would cover those which have strong impact on health, employment and small businesses or are widely used intermediates required by several sectors.

Non-essential imports would be those goods where temporary higher prices and non-availability of supplies can be absorbed by customers.

Under essential imports, the sectors to be covered would include:

- i. Pharmaceuticals, including antibiotics
- ii. Auto parts
- iii. Fertilisers
- iv. Medical devices
- v. Inorganic chemicals
- vi. Textiles

These are categories where at the 4-digit HS Code level, India's imports from China are more than \$1 billion. The pharma sector is particularly vulnerable as it is a matter of health of Indian citizens as also has an unduly high dependency on China.

These sectors require special support from the Government on an urgent basis. Further, tourism, shipping and aviation are two other sectors where considerable impact could disrupt livelihoods.

Among products that can be addressed with less urgency are the following:

- i. Mobile phones
- ii. Computers
- iii. Integrated circuits and micro-assemblies
- iv. Other electronic parts

The following actions would help in derisking supply chains from China:

a. Utilisation of excess capacity

Currently, Indian manufacturing companies are operating at low capacity utilisation. They are unable to ramp up their production due to subdued demand conditions in the country. Restrictions on imports from China offers a chance to build up production to 100% and beyond capacity. However, companies are fearful that this would change as soon as production returns to normal in China, if sooner than expected.

The Government may offer a buy-back guarantee of purchase of additional production of the items that are currently being sourced from China. This would be particularly relevant in the case of APIs which can be produced in India.

b. Reducing import duties

Indian companies are importing majorly from China due to lower price points offered by the country. The Indian Government has imposed higher customs duties on a number of items in the recent past. These have also raised landed cost of such goods being imported from other countries. Given that the world will now be looking at alternatives to China, global prices of these products are likely to go up.

There is a strong case for removing the higher customs duties imposed on certain products that primarily are sourced from China but may need to be sourced from other countries now. The Government may reconsider recent imposition of higher duties.

c. Addressing capital requirements

There are companies which might be able to quickly install production facilities for enhanced production of goods coming from China. However, these would require additional machinery and equipment as well as intermediates and raw materials which might be more expensive to procure in India. Setting up production facilities will also immediately require additional funds.

The Government may offer credit with a backstop facility of guarantee for companies which have the capability to start immediate production of items that can feed into domestic consumption.

d. Avoiding NPAs

With supply chains disrupted, many enterprises will face working capital shortages and be unable to meet their credit obligations. This will particularly impact smaller firms which can go under, leading to huge disruption in jobs and incomes.

The Government may consider a one-time emergency waiver of NPA regulations given the exigencies of the situation under a Force Majeure clause so that enterprises need not worry about the impact on their credit ratings.

e. Alternative sources of imports

While domestic production can be one way to mitigate the impact of import restrictions from China, the other way would be to look at overseas suppliers. Overseas suppliers are known to Indian companies as imports from China account for about 30% of their global imports of top 20 products imported from China. There is need to identify other countries which can provide the same products (Table given below).

Due to higher costs of these other suppliers which are likely to go up in the current situation, the Government may consider a subsidy on imports of these products.

Since many of the identified products have USA as the second or third largest exporter, a trade deal could be beneficial.

2. Exports

In order to avail of the unprecedented opportunity to position itself as a production hub for the world and an alternative to China, policy actions need to be instituted urgently, once the domestic supply situation is more amenable.

- The Government should establish an inter-ministerial task force with industry participation to create awareness on India as a sourcing destination.
- Encourage collaboration in component industry by creating forum where industry can come together to buy components
- Encourage Chinese companies to set up in India so they are not vulnerable to these supply chain challenges
- Enhance export credit and insurance schemes for exporters
- Ensure higher incentives to exporters that are certified for quality products
- Provide support for attaining quality certifications
- Release all pending dues and refunds on an urgent basis to ensure fund availability to exporters
- Leverage Indian missions overseas to support marketing of Indian products and undertake intensive branding promotion and set up dedicated export promotion agency in key markets
- Encourage state governments to collaborate for arranging special export missions overseas and to contribute to national branding
- Build up competencies in trade facilitation and transport/logistics to Chinese standards

Sectoral recommendations

a. Tourism, shipping and aviation

To combat the loss of revenue from China and expected loss from Western markets, Indian tourism should focus on the below:

- These sectors would seek an advisory declaration from the Government which would help them to avoid rescinding on contractual obligations. Such a feature could also help them to retain their credit availability and minimise impact.

- Domestic Tourism: Incentivise domestic travellers and promote domestic tourism consumption. This will have both short term and long-term gains for the sector.
- The Udaan III scheme can focus on supporting domestic airlines to off-beat destinations, which will help the sector to have 100 airports as mentioned in Budget 2020.
- Inbound Tourism: Provide limited period 'open skies' policy between western-bound destinations till October 2020
- Undertake promotion in emerging source markets, especially Middle East, and existing markets like UK, Sri Lanka and Australia.

b. Electronics and electrical equipment

- At risk are:
 1. Such electrical equipment which have substantial electronic input i.e electronic meters
 2. Motors using permanent magnet
- Encourage local manufacturing with incentives
- Explore opportunities in key manufacturing hubs of Korea and Taiwan for sourcing of such materials where local capacities will take time
- Urgently announce the electronic components policy as stated in Budget 2020-21, which includes capital subsidy as well as production subsidy. Government can announce the alternate scheme of M-SIPS and production subsidy policy to attract investment.
- Fumigation, inspection and clearance services at outlet ports should be strengthened to ensure that import clearances happen rapidly.

c. Shipping Industry

- With impact of reduction of trade movements, the Indian industry has requested the government to announce this as a 'force majeure' situation in order to help the Indian shipping companies to put up their position as a genuine case of delay in delivery of goods with its clients.
- Also, as a result of drastic income loss arising out of this situation, a few of the shipping companies have also requested the government to support by getting their bank loan repayments extended without penalty till the issue is sorted.

d. Pharmaceuticals Industry

Current situation due to coronavirus in China leading to depleting stocks of APIs, Key Starting Materials [KSMs] and intermediates in India is a compelling case for Indian government to declare API as a strategic sector.

While Indian industry has a stock of 30-40 days in hand, government should take active measures by procuring KSMs, APIs, intermediate or basic chemicals to safeguard national security, at least for National List of Essential Medicines (NLEMs). Fast and close coordination between various ministries and concerned departments to expedite approvals is the need of the hour. There are a large number of brown API units/firms where capacity utilisation is only 40%. These firms may be permitted to produce APIs which are being imported.

Environment permission should be given to manufacture any API on submission self-certification to comply with the pollution load requirement. This process can help yield immediate results in the least possible time to combat the situation arising out of likely supply disruptions caused by Coronavirus outbreak. Allow production in closed units due to pollution order to re-open and commence production of API.

Additional recommendations are:

- API Industry being the life-line of country, it should be declared as an Infrastructure Industry with the provision for five years moratorium with pay-back period of 25 years. Tax Holiday should be announced.
- Reduce approval timelines for new facilities to boost investment in the sector. Single-window clearance mechanism can help simplify the approval process. In

addition, support existing units to expand into new/other products.

- The environmental clearance process can be rationalised and made time-bound. Reduce approval timelines for new facilities to boost investment in the sector. Single-window clearance mechanism can help simplify the approval process. In addition, support existing units to expand into new/other products.
- The Government needs to ensure that the cost of utilities in India is at par with China. It can be achieved by investment in captive power plants and generation of steam as a by-product of electricity.
- Price controls wear down the incentives to invest in and expand the manufacturing of critical APIs, leading to high imports from China. To promote the use of indigenously manufactured APIs, price exemptions/ incentives should be announced for finished formulations both for Schedule I and non-scheduled categories as in DPCO 2013.
- India needs to build capacities for manufacturing its own KSMs to strengthen eventual APIs production.
- PSUs can help in securing the supply chain for critical APIs. The Indian Government should take proactive steps by leveraging its own manufacturing units for meeting the demand of critical APIs and intermediaries that cannot be addressed by the private sector due to their commercial non-viability.
- Manufacturers of complex APIs such as anti-cancer products could be entitled to higher incentives. Manufacturers of these products from their basic stage may be given star status similar to export houses. Indigenous manufacturer of complex APIs who export APIs or dosage forms made using their APIs should get higher export incentives; in short, incentivise innovation
- For high strategic value APIs/intermediates that cannot be manufactured in-house and are being largely imported from China, either due to cost, shortage of raw materials or challenges pertaining to environmental hazards, the Indian Government could consider signing Memorandum of Understanding (MOU) with some friendly countries to mitigate China's monopoly in imports.
- Government can look at taking policy measures to ensure availability and stock of intermediates like RM in the making of paracetamol drugs in India.

- It may also be considered to ensure tracking and priority clearance of certain metals like Sodium and Magnesium as such metals are largely only available with China.

e. Textiles Industry

Budget 2020-21 announced reimbursement of embedded state levies and India-centric costs like VAT on fuel, coal cess, electricity duty, inverted duty on inputs like pulp, and inherent logistics disadvantage which should be provided immediately.

f. Solar Power Sector

- It will be important to look at the completion schedule of solar projects in the next two quarters and re-look at the import strategies for solar module sourcing.
- This is also an opportunity for Make in India for the solar sector to build a strong and competitive domestic solar manufacturing industry.
- The solar plants which were to be commissioned in June and onwards have started getting impacted as they need their module supplies now. This amounts to about 2 to 4GW planned in this period. Going forward, if this condition continues to impact the sector for more than 10 to 15 days, the completion of the projects will be difficult so will the future bids.
- Further, the existing domestic manufacturers for solar need to ramp up their production to capacity and the Government may consider subsidizing the delta (about 3 to 5 cents) till this crisis tides over. This will help in running the Indian capacity at a higher percentage and also not slow the completion of projects.
- Solar module producers in SEZ may be exempted from 25% safeguard duty on imports of cells and modules for domestic facilities.
- Use of green cess or coal cess for supporting domestic industry is highly recommended.

Conclusion

The present coronavirus outbreak is a serious pandemic of unforeseen proportions. As of now, there is no end in sight despite strong efforts being made by the Chinese Government. With some support from the Government, Indian enterprises will be strengthened in facing the multiple adverse impacts of this outbreak.

Annexure

Table 1: Exploring Alternative Import Sources, 2018 (\$ million)

HS Code	Product	India's imports from China	Total Imports from World	Share of China in Total Imports %	Top 3 Exporters, other than China and Hong Kong
8517	Electrical aparts fr line telephone/telegraphy, including telephone sets with cordless handset carrier-current line system; videophone	7,222.01	16,861.72	42.8	Viet Nam USA UAE
8471	Automatic data processing machines and units	2,996.47	6371.52	47.0	Mexico USA Germany
8542	Electronic integrated circuits and micro-assembles	2,796.37	8751.79	32.0	South Korea Taiwan Singapore
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including pho	2,021.22	3186.26	63.4	Japan Malaysia USA
3105	Mnrl/chemical fertilisers with two/three of the frtlsng elements n,p and k; other fertilisers smaller goods in tblts/like from in pkt of	1,529.55	3376.67	45.3	Russia Morocco USA
2933	Heterocyclic compounds with nitrogen	1,408.71	2041.33	69.0	Ireland, Belgium, Switzerland

2941	Antibiotics	1,110.93	1456.68	76.3	Switzerland, Italy, USA
8507	Elctrc accumultrs,incl separators therefor w/n rectangular(incl sq)	1,009.02	1711.48	59.0	South Korea Japan USA
8528	Reception aparatus,wh/not incorprtnng radiobrodcast recivrs/sound/video rcordng/ reproducing aparatus,video monitors	883.13	2046.41	43.2	Mexico Slovakia Poland
8504	Electrical transformers, static converters (for example, rectifiers) and inductors	811.71	2161.9	37.5	Germany USA Japan
8708	Parts and accessories of the motor vehicles of headings 8701 to 8705	805.72	4715.06	17.1	Germany USA Japan
8414	Air/vacuum pumps, air /other gas compressors and fans; ventilating/recycling hoods incorprtnng a fan,w/n fitted with filters	800.9	1824.88	43.9	Germany USA Japan
8529	Parts suitable for use solely / principally with apprts of hdgs nos 8525 to 8528	733.44	1383.31	53.0	South Korea Taiwan USA
3808	Insctcds,rdntcds,fngcds,h rbcds,antsproutngprdcts and plntgrwth rgltrs- dsinfctnts etc in pckngs/as artcls (slphr- trtd bn	705.62	1332.92	52.9	Germany USA France

2704	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon	674.3	1729.17	39.0	Poland Mozambique Colombia
7304	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	611.05	978.46	62.5	Japan Germany Italy
8714	Prts and accssrs of vehicles of hdg 8711-8713	586.07	696.09	84.2	Taiwan Japan Italy
8415	Airconditioning machines, compressing motor-drvn fan and elements for change temperature and humidity ,including those machines in which humidity cannt be s	565.65	1204.99	46.9	Thailand Mexico USA
9801	Project goods	553.28	2375.56	23.3	
8525	transmission aparats for radio, telephony etc w/n incprtrng reception apprts/sound recording/reproducing apprts;tv cameras	552.26	1600.92	34.5	USA Japan Germany
	Total imports of top 20 products	28,377.4 1	65807.12	43.1	

Source: For India's imports from China and the world: EIDB, Department of Commerce; Top 3 exporters: Intracen

Table 2: Share of China in India's top 20 imports at 2-digit HS code level, 2018 (US\$ millions)

Product code	Product label	India's imports world	India's imports China	Share of imports from China %
		2018	2018	2018
'TOTAL		507,580.00	73,738.22	14.5
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...	168,590.36	1,143.65	0.68
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	65,026.83	425.70	0.65
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	52,399.60	23,348.69	44.56
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	43,231.92	13,649.63	31.57
'29	Organic chemicals	22,578.51	8,520.0	37.73
'39	Plastics and articles thereof	15,190.74	2,691.03	17.71
'72	Iron and steel	11,968.53	1,362.76	11.39
'15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...	10,164.90	16.36	0.16
'90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	9,455.63	1,610.79	17.04
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, ...	7,262.36	1,059.55	14.59
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	6,223.50	1,571.62	25.25
'38	Miscellaneous chemical products	5,939.79	1,390.74	23.41

'31	Fertilisers	5,899.29	1,652.68	28.01
'26	Ores, slag and ash	5,489.14	35.68	0.65
'76	Aluminium and articles thereof	5,479.03	1,096.59	20.01
'89	Ships, boats and floating structures	5,350.65	712.14	13.31
'74	Copper and articles thereof	5,124.20	231.67	4.52
'73	Articles of iron or steel	4,992.28	1,723.51	34.52
'40	Rubber and articles thereof	3767.88	303.84	8.06
'08	Edible fruit and nuts; peel of citrus fruit or melons	3764.19	5.79	0.15

Table 3: Share of China in India's top 20 imports from China 2018 (US\$ millions)

HS Code	Product	Imports from world 2018	Imports from China 2018	Share of China in India's imports %
'TOTAL	All products	507,580.00	73,7382.22	14.53
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	52,399.60	23,348.69	44.56
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	43,231.92	13,649.63	31.57
'29	Organic chemicals	22,578.51	8,519.96	37.73
'39	Plastics and articles thereof	15,190.74	2,691.03	17.71
'73	Articles of iron or steel	4,992.28	1,723.51	34.52
'31	Fertilisers	5,899.29	1,652.67	28.01
'90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	9,455.62	1,610.78	17.04
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	6,223.49	1,571.61	25.25
'38	Miscellaneous chemical products	5,939.79	1,390.73	23.41
'72	Iron and steel	11,968.52	1,362.76	11.39

'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...	168,590.36	1,143.65	0.68
'76	Aluminium and articles thereof	5,479.02	1,096.59	20.01
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, ...	7,262.35	1,059.54	14.59
'94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; ...	1,844.68	1,050.82	56.96
'89	Ships, boats and floating structures	5,350.65	712.14	13.31
'70	Glass and glassware	1,339.27	595.00	44.43
'99	Commodities not elsewhere specified	2,383.70	573.91	24.08
'59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable ...	880.45	549.60	62.42
'68	Articles of stone, plaster, cement, asbestos, mica or similar materials	1,004.86	542.51	53.99

Table 4: India's imports from China, top 20 products at 4-digit HS Code, US \$ million

HS Code	Product	2017-18	2018-19	Total Imports from World	Share of China in Total Imports %
8517	Electrical aparts fr line telephone/telegraphy, including telephone sets with cordless handset carrier-current line system; videophone	15,394.15	7,222.01	16,861.7	42.8
8471	Automatic data processing machines and units	3,681.31	2,996.47	6371.52	47.0
8542	Electronic integrated circuits and micro-assemblies	711.66	2,796.37	8751.79	32.0
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including pho	3,900.20	2,021.22	3186.26	63.4
3105	Mnrl/chemical fertilisers with two/three of the frtlsg elements n,p and k; other fertilisers smaller goods in tblts/like from in pkt of	805.92	1,529.55	3376.67	45.3
2933	Heterocyclic compounds with nitrogen	1,250.57	1,408.71	2041.33	69.0
2941	Antibiotics	919.16	1,110.93	1456.68	76.3

8507	Elctrc accumultrs,incl separators therefor w/n rectangular(incl sq)	782.86	1,009.02	1711.48	59.0
8528	Reception aparatus,wh/not incorprtng radiobrodcast recivrs/sound/video rcordng/ reproducing aparatus,video monitors	838.1	883.13	2046.41	43.2
8504	Electrical transformers, static converters (for example, rectifiers) and inductors	857.87	811.71	2161.9	37.5
8708	Parts and accessories of the motor vehicles of headings 8701 to 8705	877.95	805.72	4715.06	17.1
8414	Air/vacuum pumps, air /other gas compressors and fans; ventilating/recycling hoods incrprtng a fan,w/n fitted with filters	722.18	800.9	1824.88	43.9
8529	Parts suitable for use solely / principally with apprts of hdgs nos 8525 to 8528	1,024.15	733.44	1383.31	53.0
3808	Insctcds,rdntcds,fngcds,h rbcds,antsproutngprdcts and plntgrwth rgltrs-dsinfctnts etc in pckngs/as artcls (slphr-trtd bn	726.69	705.62	1332.92	52.9
2704	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon	581.45	674.3	1729.17	39.0

7304	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	362.26	611.05	978.46	62.5
8714	Prts and accssrs of vehicles of hdg 8711-8713	446.16	586.07	696.09	84.2
8415	Airconditioning machines, compressing motor-drvn fan and elements for change temperature and humidity ,including those machines in which humidity cannt be s	685.79	565.65	1204.99	46.9
9801	Project goods	609.54	553.28	2375.56	23.3
8525	transmission aparats for radio, telephony etc w/n incrpntng reception apprts/sound recording/reproducing apprts;tv cameras	561.29	552.26	1600.92	34.5
	Total imports of top 20 products	35,739.26	28,377.41	65807.12	43.1
	Total imports from China	76,380.70	70,319.64	-7.94	
	Share of imports from China %	46.8	40.4		