



# INDIA - CHINA TRADE RELATIONSHIP

**THE TRADE GIANTS OF PAST,  
PRESENT AND FUTURE**

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**PHD RESEARCH BUREAU  
PHD CHAMBER OF COMMERCE AND INDUSTRY**



# **India – China Trade Relationship: The Trade Giants of Past, Present and Future**

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## **India – China Trade Relationship: The Trade Giants of Past, Present and Future**

### **1. Introduction**

The relationship between the two giants of Asia, and the world, has been progressing at a tremendous pace. Both nations have witnessed their share of ups-and-downs over the years. India and China today represents Asia's two largest and most dynamic economies which are emerging as new trend setters in international relations. The history of bilateral relations between India and China dates back to mid 1980s<sup>1</sup>.

The process of dialogue initiated by the governments of the two countries at that point of time was quite helpful in identifying the common trade interests. Efforts were initiated to make the most of their economic strengths so as to further the economy relations between India and China. In the year 1984, India and china entered into a Trade Agreement, which provided them with the status of Most Favored Nation (MFN). It was in 1992 that the India and China got involved in a full-fledged bilateral trade relation.

The year 1994 marked the beginning of a new era in the India- China economic relations. In this year a double Taxation Agreement was signed between India and China. The government of both the countries also took the necessary initiative to turn into dialogue partners in the Association of Southeast Asian Nations (ASEAN). In 2003, Bangkok Agreement was signed the two countries. Under this agreement both India and china offered some trade preferences to each other. India provided preferences on tariff for 217 products export from India. In 2003, India and China entered into an agreement to initiate open border trade via the Silk Route.

The two countries have also shown interest to take part in a multilateral trade system as per the WTO commitments. China has already been the top trading partners of India in the recent time. The economic relation between the two countries is considered to be one of the most significant bilateral relations in the contemporary global economic scenario and this trend is expected to continue in the years to come. Today, China is India's largest trading partner; whereas India is within the top ten of China's trading partner.

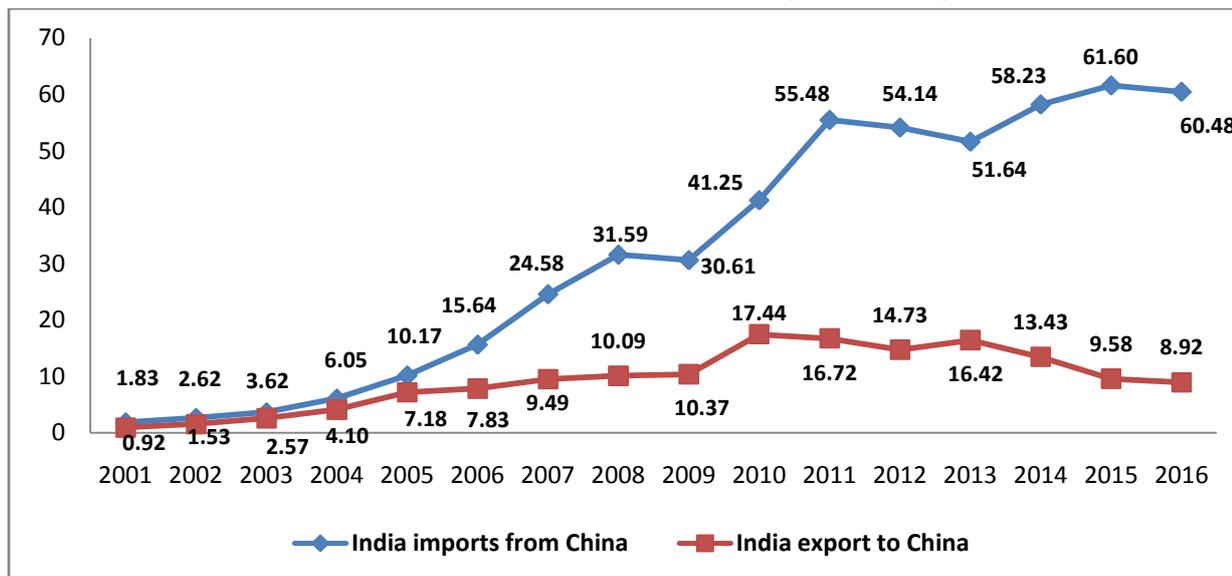
### **2. Bilateral Trade: Dynamics and Direction**

The bilateral trade between India and China has grown four-fold in the past decade. But the trade was tilted more in favour of China. India had unfavorable balance of trade with China. While China continues to enjoy a huge favourable balance of trade vis-à-vis most other smaller states of the South Asian region, it is only the India-china trade that has remained to be China's most balanced trade in South Asia. However, both these nations are growing very fast and can propel the future world economy with a pool of the world's largest skilled work force.

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<sup>1</sup> Singh, Joginder (2014); A Comparative Study of India-China Bilateral Trade; PP 269

### India – China Trade at a Glance (USD Billion)



Source: PHD Research Bureau; Compiled from Trade Map Database

In 2013, China overtook UAE to become India’s biggest trading partner. Presently, China is India’s 4<sup>th</sup> biggest export destination whereas the biggest import source. The trade figures between India and China witnessed a tremendous jump from USD 2.71 billion in 2001 to around 70 billion in 2016. Importantly, majority of the trade remained in favour of China as it exported around 60.48 billion and imported 9 billion during 2016.

China share in India’s total trade stood at around 11% during 2016. Further, its share in India’s total exports stood at 3.7% whereas its share in India’s overall imports stood at 16% during the same period. Comparatively, the growth of India’s imports from China was laggard with respect to exports. The trend in trade deficit gap for India exponentially widened over the years.

### India – China Trade Statistics

	2001	2006	2011	2016
<b>India's imports from China (USD billion)</b>	<b>1.83</b>	<b>15.64</b>	<b>55.48</b>	<b>60.48</b>
CAGR (%)	-	53.6%	28.8%	1.7%
Share in India's total imports	3.6%	8.8%	12.0%	17.0%
<b>India's exports to China (USD billion)</b>	<b>0.92</b>	<b>7.83</b>	<b>16.72</b>	<b>8.92</b>
CAGR (%)	-	53.4%	16.4%	-11.8%
Share in China's total imports	0.4%	1.0%	1.0%	0.6%

Source: PHD Research Bureau; Compiled from Trade Map Database

Despite rising presence of Chinese products in India, breakdown of India – China trade era into four periods reveal a different story. During 2001-06, the growth rate of imports from China were 53.6%, which were reduced to 28.8% during 2006-11 and further diminished to 1.7% during 2011-16.

Although, the trend in exports from India also remained lackluster during the same period, with growth rate in exports to China entering into negative trajectory of -11.8% during 2011-16.



Astoundingly, India's share in China's imports stood at a meagre 0.6% during 2016 revealing insignificant presence of Indian products in Chinese markets.

### India – China Trade at a Glance (April – October 2017)

USD Million	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17
<b>India's exports to China</b>	<b>978.46</b>	<b>751.37</b>	<b>754.56</b>	<b>793.64</b>	<b>908.29</b>	<b>1036.95</b>	<b>1224.6</b>
<b>Growth (Y-o-Y)</b>	40.08%	3.69%	20.85%	31.85%	60.08%	38.21%	72.13%
<b>India's imports from China</b>	<b>5904.12</b>	<b>5942.42</b>	<b>6237.88</b>	<b>6026.38</b>	<b>6489.53</b>	<b>6939.07</b>	<b>5907.76</b>
<b>Growth (Y-o-Y)</b>	64.75%	28.80%	16.67%	19.46%	20.55%	29.72%	4.22%

Source: PHD Research Bureau; Compiled from Ministry of Commerce and Industry

Interestingly, during April – October 2017, India's export growth to China witnessed a surge from 40% in April 2017 to 72.13% in October 2017 whereas India's import growth from China shrunk from 64.7% to 4.22% during the same period previous year.

### India's top ten import items from China

HS code	Product label	India's imports from China (USD Billion)				Share in 2016 (In %)	CAGR 2011-16 (In %)
		2001	2006	2011	2016		
<b>85</b>	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	0.21	3.77	13.24	20.87	34.5%	9.5%
<b>84</b>	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	0.22	3.09	9.79	10.73	17.7%	1.8%
<b>29</b>	Organic chemicals	0.29	1.62	4.08	5.59	9.2%	6.5%
<b>39</b>	Plastics and articles thereof	0.02	0.32	1.21	1.84	3.0%	8.7%
<b>89</b>	Ships, boats and floating structures	0.00	0.09	1.44	1.78	2.9%	4.4%
<b>72</b>	Iron and steel	0.01	0.50	1.99	1.65	2.7%	-3.7%
<b>31</b>	Fertilizers	0.01	0.10	2.73	1.54	2.5%	-10.8%
<b>90</b>	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical	0.04	0.18	0.92	1.31	2.2%	7.3%
<b>73</b>	Articles of iron or steel	0.01	0.78	1.45	1.20	2.0%	-3.7%
<b>87</b>	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.01	0.19	1.01	1.14	1.9%	2.5%
<b>Total value of top ten import items</b>		<b>0.82</b>	<b>10.64</b>	<b>37.86</b>	<b>47.64</b>	<b>78.8%</b>	<b>4.7%</b>
<b>Rest of the products</b>		<b>1.01</b>	<b>5.00</b>	<b>17.62</b>	<b>12.84</b>	<b>21.2%</b>	<b>-6.1%</b>
<b>Total Imports from China</b>		<b>1.83</b>	<b>15.64</b>	<b>55.48</b>	<b>60.48</b>	<b>100.0%</b>	<b>1.7%</b>

Source: PHD Research Bureau; Compiled from Trade Map Database



India's top ten imports from China comprise of 79% of the overall imports from China. The majority of the share is held by Electrical equipments (HS-85) at 34.5%, followed by Mechanical appliances (17.7%) and Organic Chemicals (9.2%) among others.

Interestingly, top ten importable products from China witnessed a positive rise of 4.7% during 2011-16, whereas the rest of the products witnessed a fall of -6.1% during the same period. Among top imports, electrical products (HS 85) grew by 9.5% followed by plastic products (HS 39) at 8.7% and Optical, photographic and other medical devices (HS 90) at 7.3% during the same period.

### India's top ten export items to China

HS code	Product label	India's exports to China (USD Billion)				Share in 2016 (In %)	CAGR 2011-16 (In %)
		2001	2006	2011	2016		
52	Cotton	0.07	0.70	2.80	1.26	14.2%	-14.7%
26	Ores, slag and ash	0.25	3.61	4.30	1.17	13.1%	-23.0%
29	Organic chemicals	0.10	0.52	0.86	0.79	8.8%	-1.8%
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances	0.00	0.06	1.62	0.70	7.9%	-15.4%
74	Copper and articles thereof	0.00	0.40	1.87	0.64	7.2%	-19.3%
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	0.05	0.15	0.47	0.51	5.7%	1.5%
84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	0.01	0.18	0.37	0.47	5.2%	4.5%
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	0.01	0.07	0.33	0.39	4.4%	3.6%
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal	0.00	0.05	0.30	0.27	3.0%	-2.1%
39	Plastics and articles thereof	0.11	0.40	0.62	0.27	3.0%	-15.4%
<b>Total value of top ten import items</b>		0.62	6.15	13.54	6.46	72.5%	-13.8%
<b>Rest of the products</b>		0.30	1.68	3.18	2.46	27.5%	-5.0%
<b>Total exports to China</b>		<b>0.92</b>	<b>7.83</b>	<b>16.72</b>	<b>8.92</b>	<b>100.0%</b>	<b>-11.8%</b>

Source: PHD Research Bureau; Compiled from Trade Map Database

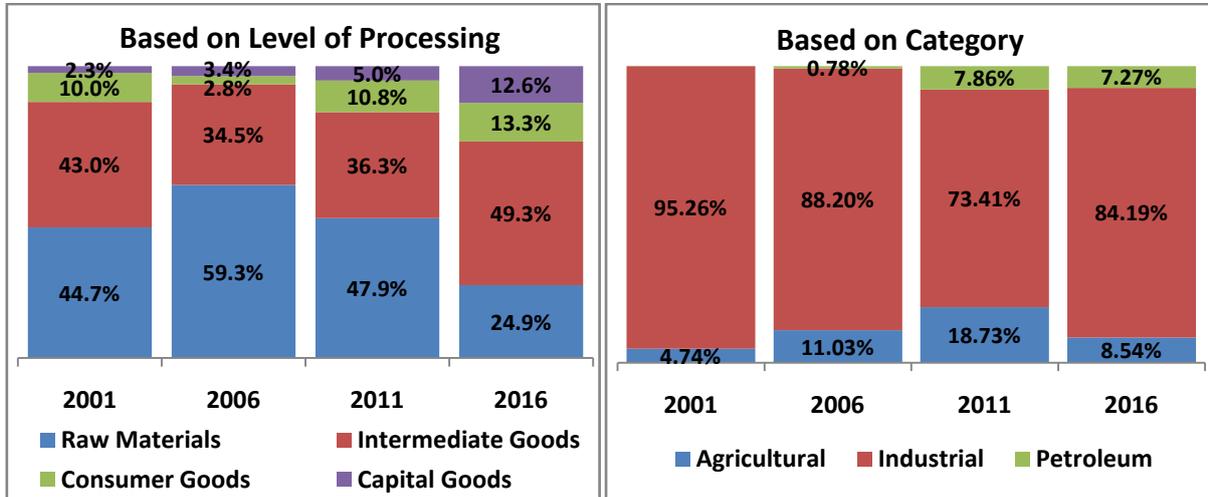
India's top ten export items to China comprise of 73% of the overall exports to China. The majority of the share is held by Cotton (HS 52) at 14.2%; followed by Ores, Slag and ash (HS 26) at 13.1% and Organic Chemicals (HS 29) at 8.8% among others.

Contrary to the rise in imports of top ten products from China, growth rate of exports of India's top ten items to China fell by a drastic -13.8% during 2011-16. The exportable products that witnessed majority of the fall include Ores, slag and ash (HS 26) by -23%, followed by Copper (HS 74) by -19.3%, Plastic products (HS 39) and mineral fuels (HS 27) by 15.4% each and cotton (HS 52) by -14.7% among other during the same



period. Machinery and Mechanical appliances witnessed highest positive growth of 4.5% among top ten exportable products to China during the same period.

### India's Exports to China

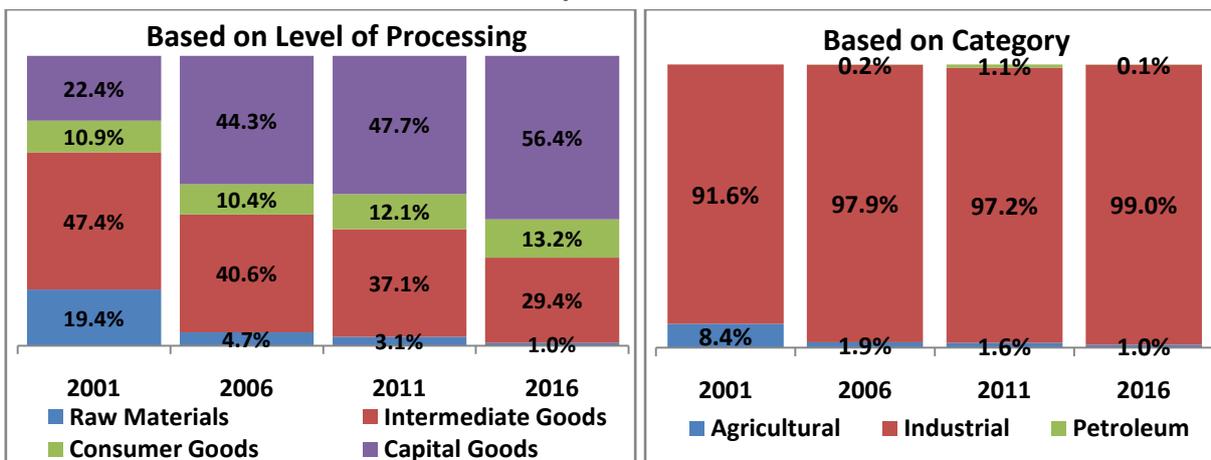


Source: PHD Research Bureau; Compiled from World Integrated Trade Database

Based on level of processing, India's exports to China shifted from Raw materials to Intermediate goods over the decade. Around 60% of the exports to China were focused on Raw materials in 2006. However, during 2016, share of raw materials fell to 25%, which compensated to the rise in share of intermediate goods from 34.5% in 2006 to 50% in 2016.

Conversely, based on category front, India's industrial export share to China fell from 95% to 84% during 2001-16. The fall in share was compensated with the rise in share of Petroleum products and Agricultural products. The share of petroleum exports to China from India grew by 7 percentage points during 2001-16.

### India's Imports from China



Source: PHD Research Bureau; Compiled from World Integrated Trade Database

Based on level of processing, India's import pattern from China witnessed a dramatic shift. The share of Capital goods grew from 22.4% in 2001 to 56.4% in 2016. This substantial jump in share of



capital goods was compensated for the loss in share of intermediate goods and raw materials. The import share of intermediate goods from China fell from 47.4% to 29.4%, whereas share of raw materials fell from 20% to 1% during the same period. Conversely, based on category, around 99% of the imports by India from China are industrial products and merely 1% is agriculture products indicating higher level of reliance on industrial products from China.

Of the total imports, it has been analyzed that around 70% of the imports from China including electrical equipments, sound recorders and parts thereof; mechanical appliances and parts thereof; optical and photographic instruments and parts thereof and other items are of experience nature, viz. majorly comprise of one-time use.

Less than 150 products in India have mandatory technical standards, whereas developed countries have such standards for most of their product ranges. The Bureau of Indian Standards, the body that lays down quality standards for most goods in the country, has laid down 18,000 standards, but they are all voluntary. This provides an easy passage to low-quality Chinese products to enter into Indian markets despite of imposing anti-dumping duties and countervailing duties. The cost price of low quality Chinese products is so low that despite imposing Anti-dumping duties and countervailing duties, the unit price remains lower than Indian products.

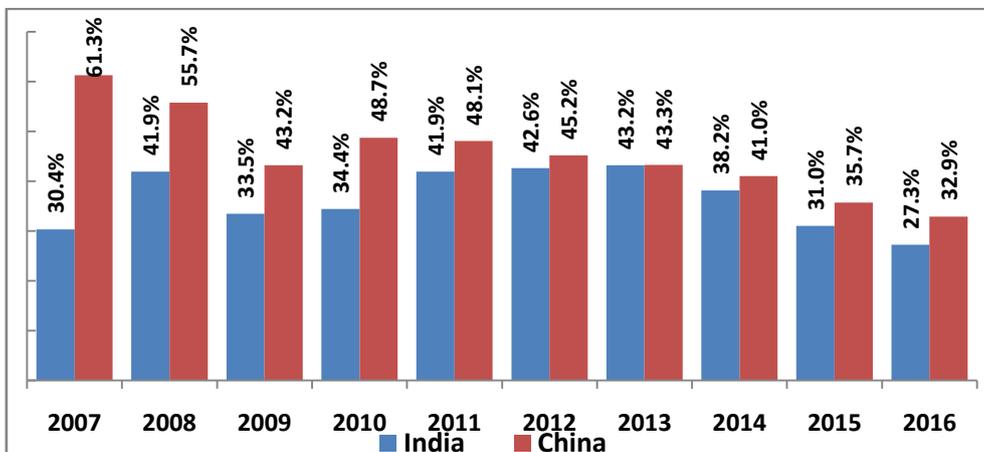
### 3. Bilateral Trade Analysis: Intensive and Extensive

To gather a comprehensive and in-depth information and pattern between India and China, an intensive-cum-secondary trade analysis has been conducted.

#### 3.1 Trade Dependence Index

The trade dependence index, or trade to gdp ratio, or the openness index is a measure of the importance of international trade in the overall economy. It gives an indication of the degree to which an economy is open to trade. Openness of an economy is determined by a large number of factors, most importantly by trade restrictions like tariffs, nontariff barriers, foreign exchange regimes, non-trade policies and the structure of national economies.

**Trade-to-GDP ratio at a Glance**



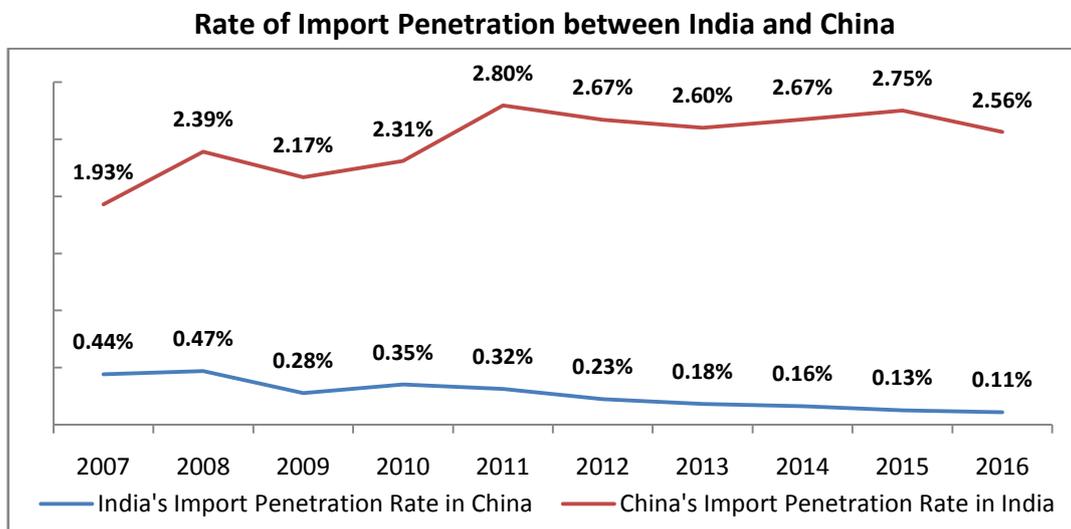
Source: PHD Research Bureau; Compiled from World Bank Database and Trade Map Database



In the recent years, India’s dependence on trade has fallen from 43% in 2013 to 27% in 2016 indicating higher inclusiveness in Gross Domestic Products and relatively lower susceptibility to external shocks and volatility, *ceteris paribus*. Conversely, China’s dependence on trade has dramatically and drastically declined from 61% in 2007 to 33% in 2016. Despite both nations stronger footprint in global ecosystem as far as products are concerned, their trade to GDP ratio remained in a comfortable position in the recent years.

### 3.2 Rate of Import Penetration

The import penetration rate shows to what degree domestic demand (the difference between GDP and net exports) is satisfied by imports. It is also called as self-sufficiency ratio. The index may be used as the basis of specific policy objectives targeting self-sufficiency. It may provide an indication of the degree of vulnerability to certain types of external shocks.



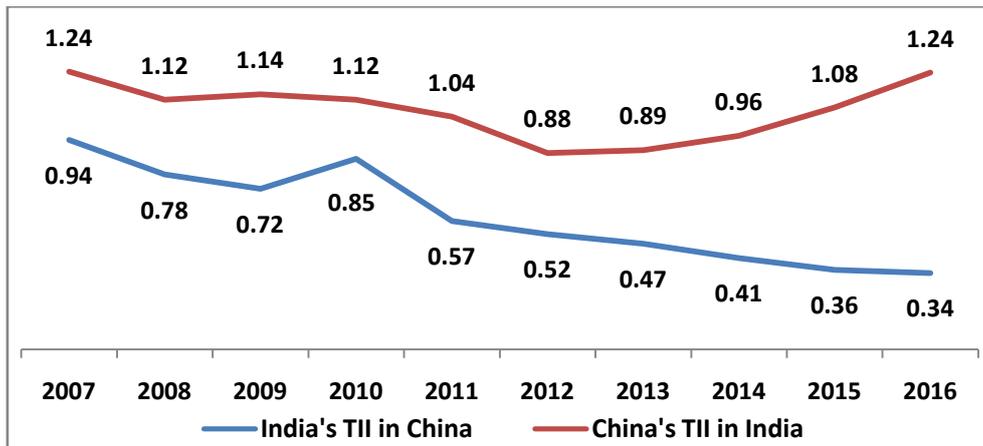
Source: PHD Research Bureau; Compiled from World Bank Database and Trade Map Database

Over the years, products from China have deeply penetrated into the Indian markets. As indicated from the chart above, China’s import penetration in India increased from 1.9% in 2007 to 2.6% in 2016. Although the trend has witnessed a decline in the recent years due to various developments in trade relations, it will take India nearly a decade to have a comfortable trade balance scenario with China. On the other hand, India’s import penetration rate in China’s market has remained abysmally low and has fallen to a new low in the recent years. India’s import penetration rate in China fell from 0.44% in 2007 to 0.11% in 2016.

### 3.3 Trade Intensity Index

TII or Trade Intensity Index is a uniform export share that describes whether a country exports more or less to a destination than world does on average. TII value greater than 1 indicates an intense trade relationship.

### Trade Intensity Index between India and China at a Glance



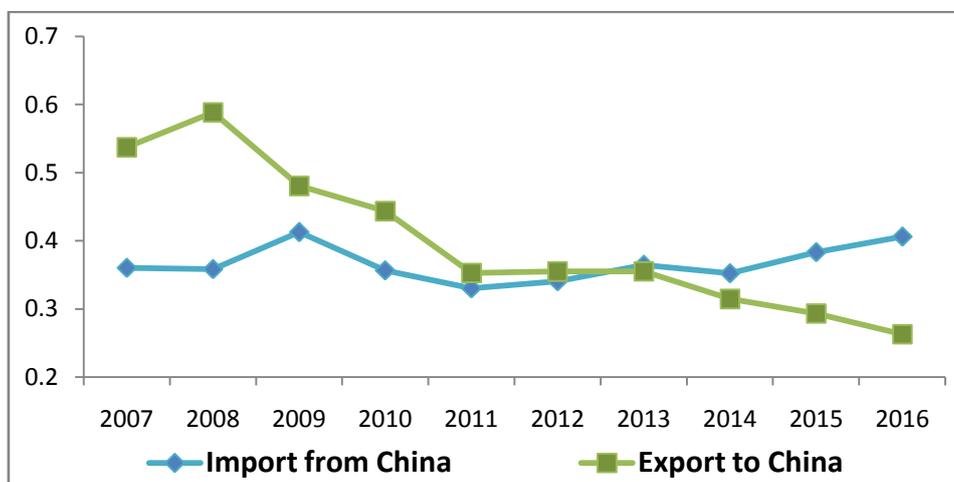
Source: PHD Research Bureau; Compiled from World Integrated Trade Database

Substantiating the claims of Import Penetration Rate, China has created a significant presence in India’s ever growing consumer market. China has an intense export relationship with India, however, vice versa is not true. India’s export relationship with China has remained laggard and abysmal since the beginning of their trade relationship. China’s TII in India grew from 0.88 in 2012 to 1.24 in 2016 whereas India’s TII in China has consistently fallen from 0.94 in 2007 to 0.34 in 2016 indicating an unintense presence of Indian products in China’s market.

### 3.4 Hirschman Herfindahl Index

HHI or Hirschman-Herfindahl Index is used to estimate the export concentration of India and China in each other’s market. HHI as 1 indicates least diversified portfolio of exports whereas 0 indicates a perfectly diversified portfolio. It is assumed that diversification of exports are essential for developing countries as it gives them the space to develop competence over a broader range of manufactured commodities. Nations grow through entrepreneurial dynamism and not by depending on what they have traditionally done well.

### Hirschman Herfindahl Index between India and China

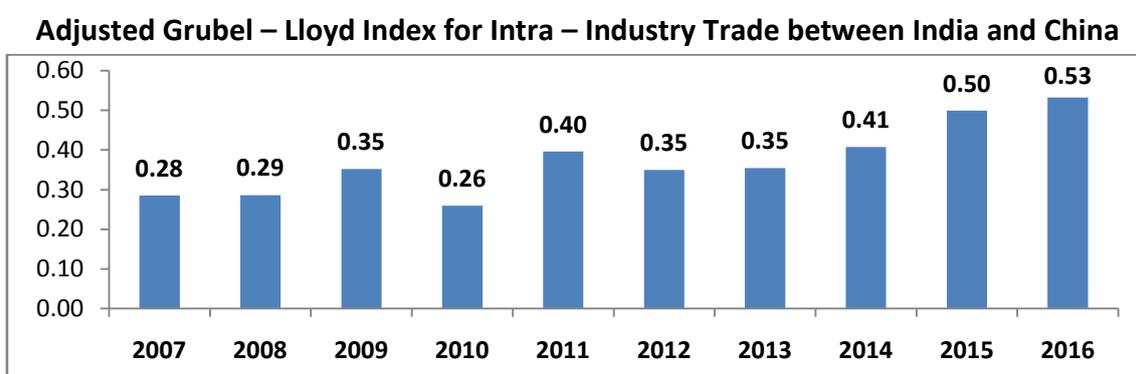


Source: PHD Research Bureau; Compiled from World Integrated Trade Database

As illustrated from the chart above, India’s imports from China are highly concentrated on fewer products compared to India’s export to China. India’s exports to China are evidently very diverse as far as product categories are concerned (at HS-02). The trend in Hirschman Herfindahl Index suggests that over the years India’s export basket to China has expanded making it less susceptible to any volatility in China whereas China’s export basket to India has become concentrated.

### 3.5 Grubel Lloyd Index for Intra Industry Trade

Additionally, GLI or Grubel-Lloyd Index helps in measuring the scale of intra-industry trade between nations. Nations can hugely benefit from Intra-industry trade due to economies of scale. GLI value 0 indicates pure inter-industry trade whereas 1 indicates pure intra-industry trade.



Source: PHD Research Bureau; Compiled from World Integrated Trade Database; at HS-02

The intra-industry trade relationship between India and China has expanded consistently over the years. Around 53% of the trade between India and China is in the form of intra-industry, or similar products. This share has increase from 28% in 2007 to 53% in 2016.

### 3.6 Trade Cost Analysis

Trade cost analysis provides an optimal viewpoint to access the overall cost as a percentage of overall export, which is incurred during trade between two nations. Trade costs are the price equivalent of the reduction of international trade compared with the potential implied by domestic production and consumption in the origin and destination markets. Higher bilateral trade costs result in smaller bilateral trade flows.

**India’s trade cost scenario with China (in advalorem %)**

	2010	2011	2012	2013	2014	2015
<b>Agriculture</b>	166.63	164.25	162.10	167.26	184.53	212.88
<b>Manufacturing</b>	98.59	99.91	102.66	93.10	-	-
<b>Total Trade</b>	102.64	102.81	105.03	100.30	-	-

Source: PHD Research Bureau; Compiled from World Integrated Trade Database

Despite being contiguous nations, India and China witnessed extremely high trade cost. Trade cost for agricultural products rose exorbitantly from 166% in 2010 to 213% in 2015. Although the data



for manufacturing trade cost is not available for the recent years, the overall trade cost eased to 100% on the back of lower manufacturing trade cost during 2013. Both India and China needs to reduce the extra barriers imposed on agricultural products to boost the agri-products trade and reduce the ever rising trade costs.

The crux of the above analysis suggests that despite rising complementarities in each other's market, both the nations are not able to intensify their trade relationship, perhaps due to different priorities at hand. Nevertheless, both the nations should zero in on the removal of different bottlenecks in doing trade with each other and note that with rising complementarity, both the nations should focus on grasping this opportunity. Further, the trade relationship and regime should be revisited to arrive at a balance trade mechanism. The regime should not favour any one nation; in this case the trade highly favours China whereas India is left with a huge trade deficit in its balance of trade.

#### 4. Tariff Analysis

A tariff is a tax imposed by a country on an imported item. It adds to the cost of imported goods and is one of several trade policies that a country can enact. The data on tariffs imposed by China on different products imported from India (at HS-02) level revealed some startling figures.

The average tariff imposed by China on Dairy products from World was 10.79% compared to 2% on India during 2011. Similarly, tariffs on products like Edible fruit and nuts, coffee and tea, products of milling industry, preparations of meat and fish, cocoa, beverages, residues from food industry, footwear, lead and articles thereof, railways, ships and boats, and aircrafts are lower in case of India compared to the average tariff imposed by China on world.

#### Tariff Scenario in China (Simple Average in percentage terms)

HS Code	Product Name	Tariffs imposed by China			
		2011		2016	
		World	India	World	India
01	Live animals	5.25		4.69	5.4
02	Meat and edible meat offal	13.48		11.59	
03	Fish and crustaceans, mollusks and other aquatic	8	9.05	6.97	8.85
04	<b>Dairy produce; birds' eggs; natural honey; edible</b>	<b>10.79</b>	<b>2</b>	<b>11.04</b>	
05	Products of animal origin, not elsewhere specified	8.15	9.38	7.06	12.67
06	Live trees and other plants; bulbs, roots and the	7.06	8.59	8.05	8.96
07	Edible vegetables and certain roots and tubers	7.55	9.2	8.05	8.5
08	<b>Edible fruit and nuts; peel of citrus fruit</b>	<b>14.64</b>	<b>16.5</b>	<b>13.05</b>	<b>8</b>
09	<b>Coffee, tea, maté and spices</b>	<b>11.35</b>	<b>10.75</b>	<b>11.3</b>	<b>10.33</b>
10	Cereals	38.33	38	16.55	21.75
11	<b>Products of the milling industry; malt; starches;</b>	<b>21.64</b>	<b>11.67</b>	<b>17.75</b>	<b>11.67</b>
12	Oil Seeds and oleaginous fruits; miscellaneous	5.67	7.25	5.98	9.72
13	Lac; Gums, resins and other vegetable saps and ext	9.98	10.07	11.16	12.04
14	Vegetable plaiting materials; vegetable products n	5.16	7.88	4.99	7.88



15	Animal or vegetable fats and oils	11.1	12.12	11.31	12.8
16	<b>Preparations of meat, of fish or of crustaceans, m</b>	<b>8.9</b>	<b>7.45</b>	<b>7.04</b>	<b>6.63</b>
17	Sugars and sugar confectionery	25.18	43.33	19.17	25.17
18	<b>Cocoa and cocoa preparations</b>	<b>8.09</b>	<b>9.7</b>	<b>8.14</b>	<b>7.6</b>
19	Preparations of cereals, flour, starch or milk; pa	14.37	18.36	15.22	17.26
20	Preparations of vegetables, fruit, nuts or other p	16.65	20.21	16.26	19.75
21	Miscellaneous edible preparations	17.56	21.13	17.16	20.7
22	<b>Beverages, spirits and vinegar</b>	<b>15.42</b>	<b>11.9</b>	<b>15.62</b>	<b>12.63</b>
23	<b>Residues and waste from the food industries;</b>	<b>3.69</b>	<b>4</b>	<b>4.44</b>	<b>2.98</b>
24	Tobacco and manufactured tobacco substitutes	25.6	33.5	26.55	29.25
25	Salt; sulphur; earths and stone; plastering	2.23	2.95	2.57	3.26
26	Ores, slag and ash	0.28	0.42	0.15	0.42
27	Mineral fuels, mineral oils and products of their	3.88	4.52	4.46	6.87
28	Inorganic chemicals; organic or inorganic compound	4.51	5.19	4.68	5.39
29	Organic chemicals	5.05	5.63	4.97	5.76
30	Pharmaceutical products	3.79	3.57	3.87	4.04
31	Fertilizers	15.78	4.5	9.48	14.42
32	Tanning or dyeing extracts; tannins and their	6.37	7.06	6.16	7.16
33	Essential oils and resinoids; perfumery, cosmetic	10.19	11.49	10.04	12.8
34	soap, organic surface-active agents, washing	7.64	8.79	7.74	8.64
35	Albuminoidal substances; modified starches; glues;	7.91	8.04	7.83	8.04
36	Explosives; pyrotechnic products; matches;	7.24		7.08	
37	Photographic or cinematographic goods	10.19	9.42	10.85	11.38
38	Miscellaneous chemical products	5.99	6.79	5.91	7.28
39	Plastics and articles thereof	6.62	7.28	6.38	7.4
40	Rubber and articles thereof	9.46	11.27	9.27	11.28
41	Raw Hides and skins (other than fur-skins)	6.79	8.01	6.55	7.88
42	Articles of leather; saddlery and harness; travel	11.49	13.01	10.95	13.02
43	Furskins and artificial fur; manufactures thereof	15.98	17.8	14.37	17.95
44	Wood and articles of wood; wood charcoal	3.3	5.32	3.1	4.76
45	cork And articles of cork	4.91	8.4	5.03	8.4
46	Manufactures of straw, of esparto	6.32	8.93	6.24	8.92
47	Pulp of wood or of other fibrous cellulosic	0	0	0	0
48	Paper and paperboard; articles of paper pulp, of p	6.43	6.43	6.5	6.88
49	Printed books, newspapers, pictures and other prod	3.58	3.21	3.57	3.81
50	Silk	7.73	9.13	7.08	9.1
51	Wool, fine or coarse animal hair; horsehair yarn a	11.88	15.14	8.48	9.1
52	Cotton	6.59	7.64	6.75	8.2
53	Other vegetable textile fibres; paper yarn and	6.58	8.07	6.66	8.51
54	Man-Made filaments; strip and the like of man-made	6.43	7.76	6.06	8.13
55	Man-made staple fibres	6.89	8.14	6.5	8.33
56	Wadding, felt and nonwovens; special yarns; twine,	7.14	8.18	6.54	7.96
57	Carpets and other textile floor coverings	11.09	12.74	10.59	12.82
58	Special woven fabrics; tufted textile fabrics;	8.43	9.82	7.98	9.78
59	Impregnated, coated, covered or laminated textile	7.83	8.81	7.41	8.91
60	Knitted or crocheted fabrics	7.89	8.73	7.37	8.59
61	Articles of apparel and clothing accessories, knit	12.51	12.43	12.01	12.09



62	Articles of apparel and clothing accessories, not	12.94	13.02	12.35	13.04
63	Other made-up textile articles; sets; worn	12.05	14.33	11.75	14.56
64	<b>Footwear, gaiters and the like; parts of such</b>	<b>14.55</b>	<b>12.89</b>	<b>14.09</b>	<b>12.89</b>
65	Headgear and parts thereof	14.55	17.73	12.42	14.86
66	Umbrellas, sun umbrellas, walking sticks,	10.01	11.33	9.05	11.33
67	Prepared feathers and down and articles made of	17.77	18.75	15.98	19.92
68	Articles of stone, plaster, cement, asbestos, mica	10.86	13.31	10.47	13
69	Ceramic products	9.71	10.48	10.77	11.44
70	Glass and glassware	10.72	12.01	10.74	13
71	Natural or cultured pearls, precious or semi-precious	11.8	14.18	10.18	13.65
72	Iron and steel	4.72	5.35	4.77	5.63
73	Articles of iron or steel	8.18	9.07	8.21	9.59
74	Copper and articles thereof	5.08	6.31	5.21	7.44
75	Nickel and articles thereof	4.45	5.87	4.35	5.9
76	Aluminum and articles thereof	7.1	8.73	7.26	8.56
78	<b>Lead and articles thereof</b>	<b>3.61</b>	<b>4</b>	<b>3.92</b>	<b>3</b>
79	Zinc and articles thereof	3.52	4	3.83	5
80	Tin and articles thereof	4.78	5.5	4.99	6.33
81	Other base metals; cermets; articles thereof	5.53	7.7	5.34	7.36
82	Tools, implements, cutlery, spoons and forks, of b	8.77	10.15	8.85	10.24
83	Miscellaneous articles of base metal	9.43	10.86	9.17	11.09
84	Nuclear reactors, boilers, machinery and mechanical	6.16	7.01	6.19	6.94
85	Electrical machinery and equipment and parts there	5.54	6.29	5.54	6.44
86	<b>Railway or tramway locomotives, rolling stock</b>	<b>3.91</b>	<b>4.5</b>	<b>3.25</b>	<b>3</b>
87	Vehicles other than railway or tramway rolling stock	12.12	12.89	11.61	14.15
88	<b>Aircraft, spacecraft, and parts thereof</b>	<b>1.43</b>	<b>1</b>	<b>1.34</b>	<b>1</b>
89	<b>Ships, boats and floating structures</b>	<b>6.75</b>	<b>3</b>	<b>6.96</b>	
90	Optical, photographic, cinematographic, measuring,	5.42	6.67	5.32	6.6
91	Clocks and watches and parts thereof	13.05	16.18	12.51	15.91
92	Musical instruments; parts and accessories of such	15.72	17.41	15.58	17.74
93	Arms and ammunition; parts and accessories thereof	12.73		12.21	
94	Furniture; bedding, mattresses, mattress supports,	4.97	6.31	5.95	7.74
95	Toys, games and sports requisites; parts	8	6.09	7.95	8
96	Miscellaneous manufactured articles	15.81	18.42	15.11	18.67
97	Works of art, collectors' pieces and antiques	7.48	9	7.05	7.73

Source: PHD Research Bureau; Compiled from World Integrated Trade Database

The overall tariff structure revealed that certain products from India attracted comparatively higher tariffs. The tariff on products such as Tobacco (29.25%); sugars and sugar products (25.17%); cereals (21.75%); edible preparations (20.7%); prepared feathers and articles thereof (19.92%); preparations of vegetables, fruits, nuts (19.75%); miscellaneous manufactured articles (18.67%); furskins and artificial fur (17.95%); musical instruments (17.74%); preparations of cereals, flour, starch or milk (17.26%); clocks and watches and parts thereof (15.91%); headgear and parts thereof (14.86%); other made-up textile articles (14.56%); fertilizers (14.42%); vehicles other than railway or tramway (14.15%); natural or cultured pearls (13.65%); articles of apparel and clothing accessories, not knitted (13.04%); articles of leather, saddlery and harness (13.02%); articles of



stone, plaster, cement, asbestos, mica (13%); glass and glassware (13%); carpets and other textile floor coverings (12.82%); animal or vegetable fats and oils (12.8%); essential oils and resinoids, perfumery, cosmetics (12.8%) among others.

## 5. Non-tariff Barriers Analysis

Export prospects of a country are not completely determined by tariff reduction or tariff elimination. While every country tries to maximize its export prospects by gaining market access to the other country, the importing country equally tries to restrict the access of the exporting countries because in the event of import surge its own sensitive sectors get weakened. In context to that, they protect their sensitive sectors by raising non-tariff measures (NTMs). Non-tariff barriers (NTMs) can take various forms. Broadly these can be categorized as import policy barriers, standards, testing, labelling and certification requirements, anti-dumping and countervailing measures, export subsidies and domestic support government procurement.

Unlike tariffs that directly increase the price of imports and indirectly limit the cost of imports. NTMs tend to have a significant trade-reducing affect that is on par with tariffs. With tariffs on various products coming down each year, the onus of restricting surging imports lies on variety of non-trade measures.

### Various Non-Tariff Barriers imposed by China on World (as on 31<sup>st</sup> June 2017)

	In force	Initiated
<b>SPS</b>	118	1074
<b>TBT</b>	102	1085
<b>Anti-dumping</b>	95	5
<b>Countervailing</b>	4	1
<b>Safeguards</b>	2	0
<b>Quantitative Restrictions</b>	42	0
<b>Tariff Rate Quotas</b>	10	0
<b>State Trading Enterprises</b>	171	0

Source: PHD Research Bureau; Compiled from WTO's Integrated Trade Intelligence Portal (I-TIP)

Majority of the non-tariff barriers imposed by China are State Trading Enterprises (171), followed by Sanitary and Phytosanitary Measures (118), Technical Barriers to Trade (102) among others. Also, China has resorted to newly initiated SPS and TBT in the recent years to curb rising imports from across the globe.

### Various Non-Tariff Barriers imposed by India on World (as on 31<sup>st</sup> June 2017)

	In force	Initiated
<b>SPS</b>	29	135
<b>TBT</b>	2	100
<b>Anti-dumping</b>	248	80
<b>Countervailing</b>	1	1
<b>Safeguards</b>	3	0



<b>Quantitative Restrictions</b>	59	0
<b>Tariff Rate Quotas</b>	3	0
<b>State Trading Enterprises</b>	29	0

Source: PHD Research Bureau; Compiled from WTO's Integrated Trade Intelligence Portal (I-TIP)

Conversely, Majority of the non tariff measures imposed by India were Anti dumping duties (248); followed by Quantitative restrictions (59) and Sanitary and Phytosanitary Measures and State Trading Enterprises (29 each) among others. Further, in the recent years, India has resorted more towards implementing newer SPSs, TBTs and Antidumping duties. Interestingly, around anti dumping duties were imposed on 93 Chinese products whereas 40 new initiatives were started by India<sup>2</sup>.

Less than 150 products in India have mandatory technical standards, whereas developed countries have such standards for most of their product ranges. The Bureau of Indian Standards, the body that lays down quality standards for most goods in the country, has laid down 18,000 standards, but they are all voluntary. This provides an easy passage to low-quality Chinese products to enter into Indian markets despite of imposing anti-dumping duties and countervailing duties. The cost price of low quality Chinese products is so low that despite imposing Anti-dumping duties and countervailing duties, the unit price remains lower than Indian products.

Around 90 products from China are under the anti-dumping duty ambit. However, merely putting anti-dumping duties won't help curbing imports as unit value of certain products are so low that despite anti-dumping duty the final value remains lower than unit value of the same product from different countries.

It is imperative for us to assess whether the Chinese imports are substituting or complementing the domestic production in India with specific emphasis on sectors like Steel, Urea and other chemicals, Electronics, Telecom and consumer products of mass consumption. Additional duties on imports of intermediate and capital goods from China might become counterproductive in case those products are utilized to propel the domestic production in India.

India is one of the largest manufacturers of generic drugs. But it has not been able to export to China because of China's protectionist policies. While Indian pharmaceutical companies exporting generic drugs to the United States and Europe, as most of the drugs have received FDA and EU approval, it is quite striking that China does not allow imports of drugs from India.

## 6. Conclusions

During the first decade of 21<sup>st</sup> century, the presence of Chinese products in Indian market has grown profoundly and exponentially. During 2001-2016, India's imports from China jumped to a whopping 33 times, from USD 1.83 billion to USD 60.48 billion. Astoundingly, India's trade deficit with China expanded 57 times during the same period. India's trade deficit with China narrowed

<sup>2</sup> The lists of products are annexed with the research paper in the end.



marginally to USD 51.57 billion in 2016-17 from USD 52.69 billion in 2015-16. However, the magnitude of trade deficit is exorbitant.

In 2016, India was the 7th largest export destination for Chinese products, and the 27th largest exporter to China. India - China trade in the first four months of 2017 increased by 19.92% year-on-year to USD 26.02 billion. India's exports to China increased by 45.29% year-on-year to USD 5.57 billion while India's imports from China saw a year-on-year growth of 14.48% to USD 20.45 billion. The Indian trade deficit with China has further increased by 6.07% year-on-year to USD 14.883 billion during the same period.

With industrialization gaining pace, India's import pattern with China has shifted dramatically from intermediate goods to capital goods. India's import share of capital goods from China jumped from 47% in 2011 to 57% in 2016 whereas share of intermediate goods fell from 37% to 29% during the same period. China has been able to enhance its footprint in India to a greater extent. The intensity of Chinese products in Indian market has been continuously rising since 2009. Conversely, Indian products have a weak intensity in China's market and have been consistently falling over the years.

On the diversification front, China's basket of exports to India is highly concentrated and intensive towards fewer selected products. This enhances the situation of high volatility due to higher reliance on fewer products.

Total FDI inflows from China to India between April 2000 and September 2017 stood at USD 1.738 billion wherein China's share was roughly 0.49% which rightfully indicates that China is not a significant and substantial investor in India as compared to Singapore, Mauritius and Switzerland. Conversely, in recent years, China has invested heavily in billions of dollars in various countries. Unlike trade, levels of investment between China and India remain relatively low. Though an estimated 100 companies from each country have offices in the other, cumulative bilateral FDI is less than USD 500 million. Cross-border investment remains low because Chinese and Indian companies are still in the early stages of learning how to operate and succeed in each other's economies.

Due to cheap labour and economies of scale, china offers low-priced imports such as textiles and clothing, electronic devices, machinery, etc. Further, exploiting the huge Indian market to dump their products and indirectly killing Indian units. Chinese products are affecting our manufacturing units and many of them have had to shut their shops. There are so many Chinese toys in the market that Indian toy industry is finding very hard to survive. In the last 5 years, many of the Indian toy companies have been shut down.

Going ahead, with the shift in taste and preferences for Chinese products coupled with growing and competitive Indian production capabilities and shift in the consumption patterns of Indian consumers, the fame of Chinese products in Indian market will further witness a decline in the coming years.

### Appendix 1: List of Chinese products under the Anti-dumping duty by India

S. No.	HS Code	Product Description	Initiation Date	In Force Date
1	293627	Vitamin-C	26-May-97	16-Apr-98
2	29332920	Metronidazole	29-Jul-99	17-Apr-00
3	283410	Sodium Nitrite -I	4-Nov-99	23-May-00
4	281700, 381230	Zinc Oxide-I	8-Dec-00	9-Apr-01
5	283110, 283210	Sodium Hydrosulphite -I	20-Dec-00	28-Mar-01
6	29222914, 85451101, 85451109, 85451901, 85451909	Paracetamol	30-Jan-01	6-Sep-01
7	281511, 281512	Caustic Soda-III	14-May-02	26-Dec-02
8	7005, 70051010, 70051090, 70052110, 70052190, 70052910, 70052990, 70053010, 70053090	Float Glass	5-Jul-02	7-Jan-03
9	23099010, 29362800	Vitamin-E	27-Aug-02	17-Mar-03
10	9017, 90171000, 90173010, 90173029, 901780, 90178010, 90178090, 901790, 90189099	Measuring Tapes	22-Oct-02	4-Apr-03
11	29336100	Melamine	10-Sep-03	2-Apr-04
12	59021000	Nylon Tyre Cord Fabric-II	29-Oct-03	26-Jul-04
13	580610	Narrow Woven Fabric	9-Jun-04	14-Feb-05
14	381210, 381220, 381230	Certain Rubber Chemicals-I	7-Jul-04	27-Sep-05
15	390461	Polytetrafluoro-ethylene-II (PTFE)	27-Jul-04	17-Oct-05
16	381210, 381220, 381230	Certain Rubber Chemicals-II	17-Aug-04	7-Jul-05
17	293319	1-Phenyl-3-Methyl-5-Pyrazolone	1-Dec-04	10-Jan-06
18	290542	Pentaerythritol-II	4-Feb-05	20-Oct-05
19	540332, 540333, 540341	Viscose Filament Yarn	7-Apr-05	24-May-06
20	500710, 500720, 500790	Silk Fabric	18-May-05	31-May-06
21	54021	Nylon Filament Yarn	4-Jul-05	29-Mar-06
22	292511	Saccharin	4-Jul-05	6-Jun-06
23	392071	Cellophane Transparent film	27-Sep-05	30-Mar-06
24	54024	Partially Oriented Yarn (POY)-III	13-Dec-05	2-Aug-06
25	401120, 401130, 401290, 401310	New Non Radial Bias Tyres-	30-Dec-05	9-Oct-06
26	73030030, 73030090	Ductile Iron Pipe	23-Feb-06	14-Sep-07
27	293621	Vitamin -A Palmitate-II	23-Mar-06	28-Mar-07



28	870870	Wheels	31-May-06	29-Mar-07
29	39042110	Poly Vinyl Chloride (PVC) (suspension grade)	28-Jun-06	23-Jan-08
30	28092010	Phosphoric Acid - Technical Grade and Food Grade	4-Jul-06	14-Sep-07
31	283340	Peroxosulphates (Persulphates)	28-Jul-06	19-Mar-07
32	37013000, 37040090, 37051000, 76069190, 76069290, 84425020	Presensitized Positive Offset Aluminium plates	24-Aug-06	25-Sep-07
33	294200	Ceftriaxone Sodium Sterile	4-Apr-07	30-Nov-07
34	29420090	Diclofenac Sodium	4-Jun-07	10-Apr-08
35	32041967	Sulphur Black	26-Jun-07	11-Apr-08
36	2902, 2907, 2909, 2917, 2921, 2925, 2930, 2933, 2934, 2935, 2942, 3810, 3811, 3812, 3815	Certain Rubber Chemicals-III	6-Jul-07	5-May-08
37	8539	Compact fluorescent lamps (CFL)	30-Aug-07	21-Nov-08
38	85232920, 85232950, 85232970, 85234040, 85234050, 85234060, 85234080, 85234090, 85235290, 85238050, 85238090, 85239010, 85239040, 85239050, 85239090	Digital Versatile Disc Recordable (DVD-R's)	20-Nov-07	23-Jul-08
39	392690	Cable Ties	1-Jan-08	31-Oct-08
40	540247	All Fully Drawn Yarn	6-May-08	11-Nov-09
41	4411	Plain Medium Density Fibre Board	6-Jun-08	8-Oct-09
42	8477101	Plastic Processing Machinery	8-Jul-08	23-Mar-10
43	5309	Flax Fabrics	3-Oct-08	21-Dec-09
44	84775100	Tyre Curing Press	16-Oct-08	8-Jan-10
45	7219	Cold Rolled Flat Products of Stainless Steel	25-Nov-08	20-Feb-10
46	73261910, 73261990, 73269099, 87085000, 87089900	Front Axle Beam and Steering Knuckles	8-Dec-08	12-Apr-10
47	28030010	Carbon Black	26-Dec-08	28-Jan-10
48	550410	Viscose Staple Fibre	19-Mar-09	26-Jul-10
49	851762, 851770	Synchronous Digital Hierarchy (SDH) transmission equipment	21-Apr-09	16-Dec-10
50	28366000	Barium Carbonate	16-Jun-09	7-Feb-11



51	29322100	Coumarin	10-Jul-09	20-Aug-10
52	29033919	1,1,1,2 tetra-flouroethane	19-Aug-09	15-Jul-11
53	3904	PVC paste Resin	3-Nov-09	26-Jul-11
54	7019	Glass Fibres	8-Jan-10	4-Mar-11
55	391810, 391890, 391990, 392010, 392049, 392190, 392690	PVC flex films	1-Feb-10	25-Aug-11
56	845230	Sewing Machine Needles	20-May-10	22-Jun-11
57	292142	Paranitroaniline	8-Jun-10	9-Sep-11
58	283620	Soda Ash	20-Aug-10	3-Jul-12
59	7013	Opal Glassware	26-Aug-10	23-Nov-11
60	390210, 391400, 392690, 550340, 560313, 560394, 560410, 560490, 560890, 590310, 590390, 591110, 591131, 591190	Geogrids/Geostrips/Geostrapes	20-Dec-10	24-Jan-12
61	732591	Grinding Media Balls ( excluding forged grinding media balls)	23-May-11	16-Jul-12
62	370130, 370400, 370510, 760691, 760692, 844250	Digital Offset Printing Plates	13-Jun-11	3-Dec-12
63	680919, 680990	Plain Gypsum Plaster Board	21-Jul-11	12-Apr-13
64	292310	Choline Chloride	25-Oct-11	21-Dec-12
65	292151	Meta Phenylene Diamine	19-Jun-12	11-Mar-14
66	282990	Sodium Perchlorate	27-Jun-12	6-Sep-13
67	29214290, 29215990	4,4 Diamini Stilbene 2,2 Disulphonic Acid (DASDA)	26-Jul-12	23-Jan-14
68	28047020	Red Phophorus	28-Sep-12	19-Mar-14
69	870870	Cast Aluminium Alloy Wheels	10-Dec-12	22-May-15
70	38011000, 38019000, 83119000, 85354010, 85451100, 85451900, 85459090, 85471090	Graphite Electrodes of all diameters	20-May-13	13-Feb-15
71	31025000	Sodium Nitrate	5-Jun-13	10-Feb-15
72	85235100	USB Flash Drives	21-Jun-13	22-May-15
73	8546	Electrical Insulators	5-Sep-13	11-Apr-15
74	84701000	Electronic Calculators	18-Oct-13	29-May-15
75	700420	Sheet Glass	20-Dec-13	13-Mar-15
76	291815	Sodium Citrate	28-Feb-14	20-May-15
77	7219, 7220	Hot rolled flat products of Stainless Steel 304 series	11-Mar-14	5-Jun-15



78	2912291	Hexamine	25-Mar-14	21-Sep-15
79	320411, 320416, 320417, 320419, 320490, 320611, 320649	Diketopyrrolo Pyrrole Pigment Red 254 ( DPP Red 254)	20-Jun-14	17-Aug-15
80	294200	Gliclazide	28-Aug-14	8-Dec-15
81	29332950	Albendazole	11-Sep-14	14-Dec-15
82	39241010, 39241090, 39249090, 39264049, 39269099	Melamine Tableware and Kitchenware products	28-Oct-14	4-Dec-15
83	50020010	Mulberry Raw Silk	9-Dec-14	20-Jan-16
84	29183040	Methyl Acetoacetate	7-Jan-15	31-May-16
85	29031200	Methylene Chloride	7-Apr-15	31-May-16
86	29173600	Purified Terephthalic Acid (PTA)	18-Jun-15	5-Jul-16
87	87169010	Axle for trailers	28-Dec-15	29-Nov-16
88	27040010, 27040020, 27040030, 27040090	Low ash metallurgical coke	30-Dec-15	25-Nov-16

Source: PHD Research Bureau; Compiled from WTO Database



## Appendix 2: List of Chinese products under the Anti-Dumping Duty by India (initiated but not in force)

S. No.	HS Code	Product Description	Initiation Date
1	7304	Seamless tubes pipes and hollow profiles of Iron	08-Jul-15
2	6907, 6908, 6914	Glazed/unglazed porcelain/vitrified tiles	13-Oct-15
3	850610	AA dry cell batteries	20-Oct-15
4	38170011	Linear alkyl benzene	07-Dec-15
5	7607	Aluminum foil	15-Dec-15
6		Aluminum radiators, aluminum radiator sub-assemblies and aluminum radiator core	01-Jan-16
7	540244, 540269, 540411	Elastomeric filament yarn	27-Jan-16
8	8503	Castings of wind operated electricity generators/windmills	01-Feb-16
9	7208, 7211, 7225, 7226	Hot rolled flat products of alloy or non-alloy steel in coils of a width up to 2100mm and thickness up to 25mm and Hot rolled flat products of alloy or non-alloy steel not in coils of a width up to 4950mm and thickness up to 150mm	11-Apr-16
10	7209, 7211, 7225, 7226	Cold rolled/cold reduced flat steel products of iron or non-alloy steel or other alloy steel, of all widths and thickness, not clad, plated or coated	19-Apr-16
11	294110	Amoxicillin	27-Apr-16
12	401290, 401310	New and unused pneumatic radial tyres with or without tubes and/or flap of rubber having nominal rim code above 16" used in buses and lorries/trucks	03-May-16
13	282911	Sodium Chlorate	12-May-16
14	270740	Crude naphthalene	01-Jun-16
15	290290	Refined naphthalene	01-Jun-16
16	7213, 7227	Wire rod of alloy or non-alloy steel	02-Jun-16
17	560311, 560391	Non woven fabric	15-Jun-16
18	700319, 700510, 700529, 700530, 700719	Textured tempered glass whether coated or uncoated	23-Jun-16
19	721011, 721012, 721030, 721041, 721049, 721050, 721061, 721069, 721070, 721090, 721210, 721220, 721230, 721240, 721250, 721260, 722550, 722592, 722599, 722611,	Colour coated, pre-painted flat products of alloy and non-alloy steel	29-Jun-16



	722699		
20	294190	O-Acids	21-Sep-16
21		Ofloxacin	04-Oct-16
22	292910	Toluene Di-isocyanate (TDI)	05-Oct-16
23	382440	Sulphonated naphthalene formaldehyde	13-Oct-16
24	290721	Resorcinol	13-Oct-16
25	290721	Ceramic tableware and kitchenware	13-Oct-16
26	-	Polyester Staple Fibre	3-Feb-17
27	-	Fishing Net	4-Mar-17
28	-	Isobutyl Benzene (IBB)	8-Apr-17
29	-	Toys	8-Apr-17
30	-	Methyl Ethyl ketone or MEK	9-Feb-17
31	-	Monoisopropylamine' (MIPA)	16-Feb-17
32	-	Rubber Chemicals, namely, MOR and MBTS	19-Feb-17
33	-	Dimethylacetamide or DMAC	20-Mar-17
34	-	Phosphorus Pentoxide or P2O5	20-Mar-17
35	-	High Tenacity Polyester Yarn	20-Jun-17
36	-	Acrylic Fibre	20-Apr-17
37	-	Ceramic Rollers	20-Apr-17
38	-	Veneered Engineered Wooden Flooring	21-Feb-17
39	-	Solar Cells whether or not assembled partially or fully in modules or panels or on glass or some other suitable substrates	21-Jul-17
40	-	Belting Fabric	23-Aug-17
41	-	Pentaerythritol	24-Jan-17
42	-	Glassware	30-Mar-17
43	-	Playing Cards	31-Mar-17

Source: PHD Research Bureau; Compiled from WTO Database

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## PHD Research Bureau

PHD Research Bureau; the research arm of the PHD Chamber of Commerce and Industry was constituted in 2010 with the objective to review the economic situation and policy developments at sub-national, national and international levels and comment on them in order to update the members from time to time, to present suitable memoranda to the government as and when required, to prepare State Profiles and to conduct thematic research studies on various socio-economic and business developments.

The Research Bureau has been instrumental in forecasting various lead economic indicators national and sub-national. Many of its research reports have been widely covered by media and leading newspapers. Recently, the Research Bureau has undertaken various policy projects of Government of India including Framework of University-Industry Linkages in Research assigned by DSIR, Ministry of Science & Technology, Study on SEZ for C&AG of India, Study on Impact of Project Imports under CTH 9801 for C&AG of India and has attracted a World Bank Project on free trade zones.

Research Activities	Comments on Economic Developments	Newsletters	Consultancy
<ul style="list-style-type: none"> <li>• Research Studies</li> </ul>	<ul style="list-style-type: none"> <li>• Macro Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Economic Affairs Newsletter (EAC)</li> </ul>	<ul style="list-style-type: none"> <li>• Trade &amp; Inv. Facilitation Services (TIFS)</li> </ul>
<ul style="list-style-type: none"> <li>• State Profiles</li> </ul>	<ul style="list-style-type: none"> <li>• States Development</li> </ul>	<ul style="list-style-type: none"> <li>• Global Economic Monitor (GEM)</li> </ul>	<ul style="list-style-type: none"> <li>• Business Research Consultancy</li> </ul>
<ul style="list-style-type: none"> <li>• Impact Assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Trade &amp; Inv. Facilitation Services (TIFS) newsletter</li> </ul>	
<ul style="list-style-type: none"> <li>• Thematic Research Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Foreign exchange market</li> </ul>	<ul style="list-style-type: none"> <li>• State Development Monitor (SDM)</li> </ul>	
<ul style="list-style-type: none"> <li>• Releases on Economic Developments</li> </ul>	<ul style="list-style-type: none"> <li>• International Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Forex and FEMA Newsletter</li> </ul>	
	<ul style="list-style-type: none"> <li>• Global Economy</li> </ul>		



## Team, PHD Research Bureau

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**Chief Economist**

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<b>Ms. Abha Chauhan</b> <b>Research Associate</b> State Level Developments		<b>Ms. Kriti Khurana</b> <b>Research Associate</b> Macro and Financial Indicators
<b>Ms. Sunita Gosain, Secretarial Assistant</b> Secretarial and Administrative Processes		



## Studies Undertaken by PHD Research Bureau

### A: Thematic research reports

1. Comparative study on power situation in Northern and Central states of India (September 2011)
2. Economic Analysis of State (October 2011)
3. Growth Prospects of the Indian Economy, Vision 2021 (December 2011)
4. Budget 2012-13: Move Towards Consolidation (March 2012)
5. Emerging Trends in Exchange Rate Volatility (Apr 2012)
6. The Indian Direct Selling Industry Annual Survey 2010-11 (May 2012)
7. Global Economic Challenges: Implications for India (May 2012)
8. India Agronomics: An Agriculture Economy Update (August 2012)
9. Reforms to Push Growth on High Road (September 2012)
10. The Indian Direct Selling Industry Annual Survey 2011-12: Beating Slowdown (March 2013)
11. Budget 2013-14: Moving on reforms (March 2013)
12. India- Africa Promise Diverse Opportunities (November 2013)
13. India- Africa Promise Diverse Opportunities: Suggestions Report (November 2013)
14. Annual survey of Indian Direct Selling Industry-2012-13 (December 2013)
15. Imperatives for Double Digit Growth (December 2013)
16. Women Safety in Delhi: Issues and Challenges to Employment (March 2014)
17. Emerging Contours in the MSME sector of Uttarakhand (April 2014)
18. Roadmap for New Government (May 2014)
19. Youth Economics (May 2014)
20. Economy on the Eve of Union Budget 2014-15 (July 2014)
21. Budget 2014-15: Promise of Progress (July 2014)
22. Agronomics 2014: Impact on economic growth and inflation (August 2014)
23. 100 Days of new Government (September 2014)
24. Make in India: Bolstering Manufacturing Sector (October 2014)
25. The Indian Direct Selling Industry Annual Survey 2013-14 (November 2014)
26. Participated in a survey to audit SEZs in India with CAG Office of India (November 2014)
27. Role of MSMEs in Make in India with reference to Ease of Doing Business in Ghaziabad (Nov 2014)
28. Exploring Prospects for Make in India and Made in India: A Study (January 2015)
29. SEZs in India: Criss-Cross Concerns (February 2015)
30. Socio-Economic Impact of Check Dams in Sikar District of Rajasthan (February 2015)
31. India - USA Economic Relations (February 2015)
32. Economy on the Eve of Union Budget 2015-16 (February 2015)
33. Budget Analysis (2015-16)
34. Druzhba-Dosti: India's Trade Opportunities with Russia (April 2015)
35. Impact of Labour Reforms on Industry in Rajasthan: A survey study (July 2015)
36. Progress of Make in India (September 2015)
37. Grown Diamonds, A Sunrise Industry in India: Prospects for Economic Growth (November 2015)
38. Annual survey of Indian Direct Selling Industry 2014-15 (December 2015)
39. India's Foreign Trade Policy Environment Past, Present and Future (December 2015)
40. Revisiting the emerging economic powers as drivers in promoting global economic growth (February 2016)
41. Bolstering MSMEs for Make in India with special focus on CSR (March 2016)
42. BREXIT impact on Indian Economy (July 2016)
43. India's Exports Outlook (August 2016)
44. Ease of Doing Business : Suggestive Measures for States (October 2016)
45. Transforming India through Make in India, Skill India and Digital India (November 2016)
46. Impact of Demonetization on Economy, Businesses and People (January 2017)
47. Economy on the eve of Budget 2017-18 (January 2017)
48. Union Budget 2017-18: A budget for all-inclusive development (January 2017)
49. Annual Survey of Indian Direct Selling Industry 2015-16 (February 2017)
50. Worklife Balance and Health Concerns of Women: A Survey (March 2017)

51. Special Economic Zones: Performance, Problems and Opportunities (April 2017)
52. Feasibility Study (socio-Economic Survey) of Ambala and Rohtak Districts in Haryana (March 2017)
53. Goods and Services (GST): So far (July 2017)
54. Reshaping India-Africa Trade: Dynamics and Export Potentiality of Products in Africa (July 2017)
55. Industry Perspective on Bitcoins (July 2017)
56. Senior Housing: A sunrise sector in India (August 2017)
57. Current state of the economy (October 2017)
58. Equitable finance to fulfill funding requirements of Indian Economy (October 2017)
59. India-Israel Relations: Building Bridges of Dynamic Trade (November 2017)
60. Role of Trade Infrastructure for Export Scheme (TIES) in Improving Export Competitiveness (November 2017)
61. The Wall of Protectionism: Rise and Rise of Protectionist policies in the Global Arena (November 2017)

### B: State profiles

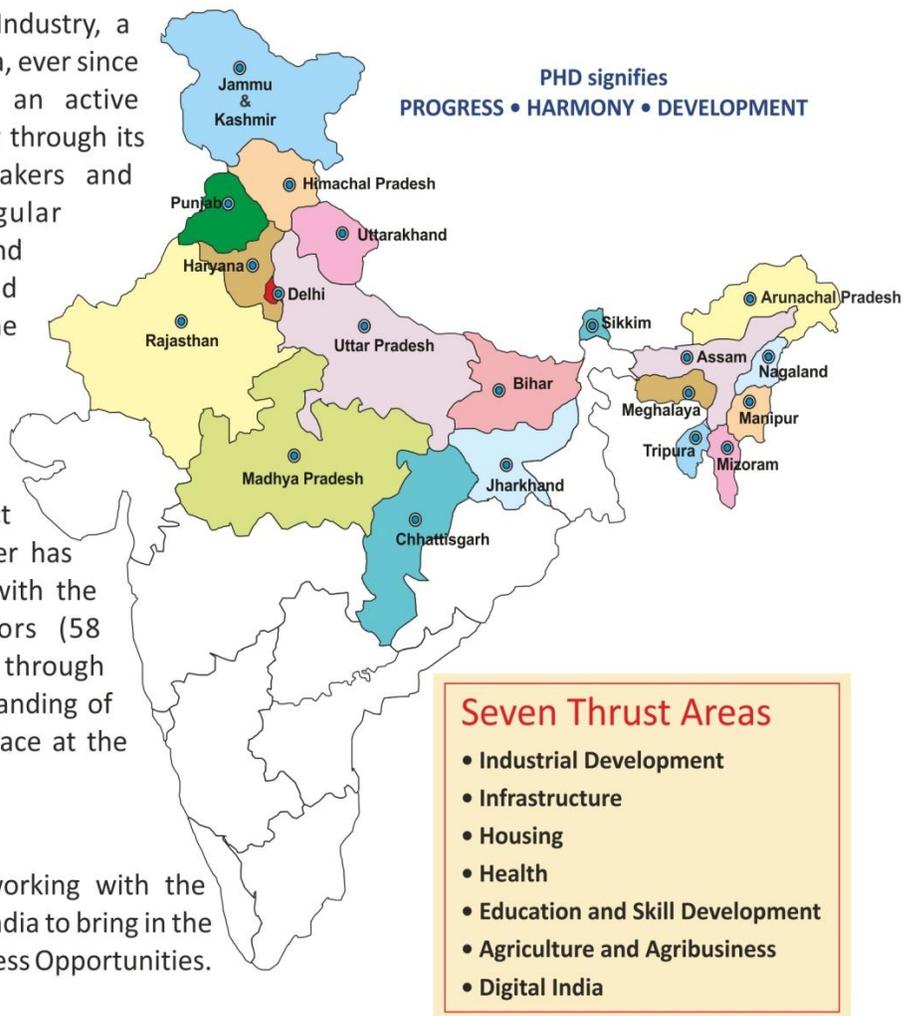
62. Rajasthan: The State Profile (April 2011)
63. Uttarakhand: The State Profile (June 2011)
64. Punjab: The State Profile (November 2011)
65. J&K: The State Profile (December 2011)
66. Uttar Pradesh: The State Profile (December 2011)
67. Bihar: The State Profile (June 2012)
68. Himachal Pradesh: The State Profile (June 2012)
69. Madhya Pradesh: The State Profile (August 2012)
70. Resurgent Bihar (April 2013)
71. Life ahead for Uttarakhand (August 2013)
72. Punjab: The State Profile (February 2014)
73. Haryana: Bolstering Industrialization (May 2015)
74. Progressive Uttar Pradesh: Building Uttar Pradesh of Tomorrow (August 2015),
75. Suggestions for Progressive Uttar Pradesh (August 2015)
76. State profile of Telangana- The dynamic state of India (April 2016)
77. Smart Infrastructure Summit 2016- Transforming Uttar Pradesh (August 2016)
78. Smart Infrastructure Summit 2016-Transforming Uttar Pradesh : Suggestions for the State Government (August 2016)
79. Rising Jharkhand: An Emerging Investment Hub (February 2017)
80. Punjab: Roadmap for the New Government Suggestions for the Industrial and Socio-Economic Development – Focus MSMEs ease of doing business (May 2017)
81. Prospering Himachal Pradesh: A Mountain of Opportunities (August 2017)



## About the PHD Chamber

**P**HD Chamber of Commerce & Industry, a leading Industry Chamber of India, ever since its inception in 1905, has been an active participant in the India Growth Story through its Advocacy Role for the Policy Makers and Regulators of the Country. Regular interactions, Seminars, Conference and Conclaves allow healthy and constructive discussions between the Government, Industry and International Agencies bringing out the Vitals for Growth. As a true representative of the Industry with a large membership base of 48000 direct and indirect members, PHD Chamber has forged ahead leveraging its legacy with the Industry knowledge across sectors (58 Industry verticals being covered through Expert Committees), a deep understanding of the Economy at large and the populace at the micro level.

At a Global level we have been working with the Embassies and High Commissions in India to bring in the International Best Practices and Business Opportunities.



**“We Walk Our Talk”**

**PHD CHAMBER OF COMMERCE AND INDUSTRY**

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