



#### INDIA AND BRICS ECONOMIES: EVOLVING MERCHANDISE TRADE

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#### **Abstract**

The study's objective is to investigate trade relations between India and the other BRICS countries using a 12-year data set spanning from 2012 to 2023. The paper carefully examined India's exports and imports in relation to its trade links with the other BRICS nations. The results of trade between India and the BRICS (Brazil, Russia, China, and South Africa) countries have increased over five-fold from US\$ 45.7 billion in 2007 to US\$ 241 billion in 2023, demonstrating the strong growth in bilateral trade between these countries and India. Even though China remains India's top import and export market, the other BRICS countries now account for a much larger portion of the country's overall trade value. India's trade intensity with the other BRICS nations has been analysed using the Trade Intensity Index, which reveals that all of the other BRICS nations, with the exception of China and Brazil, have increasing trade intensities with India.

Key words: Bilateral Trade, BRICS, TII (Trade Intensity Index)

#### Introduction

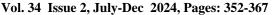
First time in St. Petersburg, Russia, the Delegates from Brazil, Russia, India and China met on the margins of G8 Outreach Summit in July 2006. Shortly thereafter, in September 2006, the group was ratified during the first BRIC Foreign Ministers' Meeting where foreign ministers of Russia, Brazil and China and the Defence Minister of India took part and confirmed their unanimous interest in multilateral collaboration(BRIC India 2021). On 16 June 2006, the first BRIC summit was held in Yekaterinburg, Russia, after several discussions. In September 2010 at BRIC Foreign Ministers' meeting in New York, South Africa has been joined as a full member with BRIC and then the group BRIC was renamed as BRICS.

BRICS is an important grouping of the world's leading economies which acted as the driven force of global economic growth over the years, through encouraging trade, cooperation, and growth among members. The BRICS nations have united throughout time, to deliberate on important issues under the three pillars of political and security, economic and financial and cultural and people to people exchanges. The head of state of each of the Member States shall hold the Presidency of BRICS, every year on a rotational basis. India hosted the 13th BRICS Summit (virtual summit) in 2021 for the third time, after 2012 and 2016.

One of the major goals which is at the heart of the BRICS is the economic cooperation between member countries which encourages trade, cooperation and growth and BRICS economies' access to markets (Alice Ivey, 2023). It has created institutions such as the CRA(Contingent Reserve Arrangement) and the NDB (New Development Bank) inmobilizing resources for infrastructure and development projects in member countries. The member nations in BRICS have enjoyed the benefits of economic growth and development through the expansion of intra-BRICS cooperation in sectors such as trade, agriculture, infrastructure, small and medium enterprises, energy, finance and banking. Now according to the World Bank data, the BRICS group, represents 24 percent of global GDP, 16 percent of world trade and about 40 per cent of the world's population and as a critical mainstay of



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world order, BRICS countries outstandingly contribute to global economic growth, trade, and capital investment. As partners in development, India and BRICS nations have shown fervour and keenness to enhance bilateral relations through initiatives that seek to strengthen their partnership in political and security, economic and financial and cultural and people to people exchanges. In this context the paper aims to explore the intensity of intra-trade relations among BRICS and the prospects for future trade.

### **Review of Literature**

In this section, we have briefly reviewed recent selected studies on intra-BRICS trade, mainly India's trade with other BRICS nations (Brazil, Russia, China and South Africa).

The impact on Indian economy has been examined by Sneha Chaudhry scrutinizing India's trade pattern with the member nations of BRICS through the secondary trade data for 10 years from 2009-2018 was used to calculate CAGR and future trade potential for Indian economy with other BRICS nations (Sneha 2019), and found the rising imports of India from Brazil, Russia and China and the increased exports to Russia and South Africa over the selected period. The major hindrances to effective trade among BRICS member countries has been identified and suggestion were given by Yarygina et.al. such as expanding tax incentive for exporters and easing the access of entrepreneurs to credit (Yarvgina et.al.2020). The intensity of trade relation between the BRICS countries has been calculated using the trade data between 2001 to 2014 and revealed that the BRICS countries are appreciative rather than competitive to each other in the various sectors analysed (Raghuramapatruni R,2015). India's strategy to emerge with leading economies through BRICS and how India-China border tension could impact India's engagement with the BRICS has been analysed (Rajan Kumar 2017) and despite of these how India and China persevere with membership and participation in BRICS and Russia's part in pacifying the turbulence has been argued (Sreeram Chaulia, 2021). The trends in trade and competitiveness between the BRICS countries as well as its implications for India has been elucidated and the results have proved the complementarity in export and import of products and a comparative advantage in some products for India (Bipul Chatterjee, et.al.2014). The sustainability of India in BRICS has been tested with the help of tools such as Trade intensity index and correlation, taking a time duration over the period 1995 to 2018 and suggested, except for China, there is great mutual dependency among the BRICS nations with some limitations (Shujauddin Khan, et.al. 2020). Over the years, BRICS has been one of the rapidly growing regional blocs and a reliable trading partner for India. Most of products from India has a comparative advantage and India's trade intensity with China is the highest among the countries in BRICS (Anand Shankar Paswan, et.al.2022). On the basis of Trade Intensity Index, with the data taken for the time period 2006 to 2015, the trade pattern of BRICS economies as well as India's trade with BRICS has been analysed and revealed that the India's trade with South Africa and Brazil renders more benefit to India than trading with Russia and China (Seema Mahlawat, 2018). The Johansen cointegration methodology and Granger causality test has been applied and the outcome of the results shows growth led exports is relevant for India, China and South Africa while export led growth is relevant to Brazil and Russia. Growth led imports is relevant for all BRICS countries except Russia which enjoys Import led growth (Chandrashekar Raghutla, et al., 2019). Bas Hooijmaaijers et al., (2021) shows there has been virtually little increase in intra-BRICS economic cooperation to yet, even with all of the promises. Chinese outward foreign direct investment in the other BRICS countries is still relatively low, with some exceptions owing to massive investment deals, and neither the absolute nor relative data clearly indicate a trend of growth over time. Overall trade has not increased significantly, and there are still a number of disparities and asymmetries. The position of India's trade competitiveness among the BRICS has been examined by (Arvinder



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**Kaur, 2018**), taking three points of time 1995, 2005, and 2015 which revealed that India was having trade deficits throughout all the study points and India was found to be the least competitive country among the BRICS member countries. It was suggested, that India's trade relation with BRICS need to be fostered by promoting make in India, SEZs, EOUs and aggravating second generation reforms to receive the expected rewards from the worldwide economy (**N Kubendran, 2020**).

### Recent Trends in trade between India and other BRICS countriesduring 2012-2023

Bilateral trade between India and BRICS has grown steadily over the years, characterized by the rise of both India and BRICS's corresponding trading activities. The robust growth in bilateral trade between BRICS nations and India epitomize the success of the growing partnership. Trade between India and BRICS (Brazil, Russia, China and South Africa) nations has risen over 5-fold from US\$ 45.7 billion in 2007 to US\$ 241 billion in 2023 (ITC Trade Map). The bilateral trade has recorded an average annual growth rate (AGR) of 8.8 percent over the period (2012-2023), with India-BRICS trade accounting for 22 percent of India's total trade and 3 percent of BRICS(Brazil, Russia, China and South Africa) in 2023, against 13 percent and 1 percent, respectively, in 2012. The strong growth in bilateral trade between India and BRICS nations has been driven by growth in exports and imports. India's exports to BRICS grew by a CAGR of 3.83 percent after 2012 to reach US\$ 34 billion in 2023, up from US\$ 28 billion in 2012. Exports to BRICS now account for 8.10 percent of India's total exports, and 0.9 percent of BRICS's imports (Table 1).

India's total export to the BRICS member countries Brazil, Russia, China and South Africa (Table 1)

Unit: US Dollar thousand

	( = ===================================	,										
Country	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016	Exported value in 2017	Exported value in 2018	Exported value in 2019	Exported value in 2020	Exported value in 2021	Exported value in 2022	Exported value in 2023
China	14729317	16416825	13434251	9539517	8914967	12500767	16503442	17278833	19008267	23036597	15084401	16241314
South Africa	4973300	5742467	5722396	3811453	3242763	4073518	4027817	3982930	3498286	5989463	8265804	8018915
Brazil	6162712	6111836	7140522	3098550	2299910	2868229	3586652	4113988	3675781	6262205	9724341	6670182
Russian Federation	2144766	2418963	2217473	1610852	1813659	2139563	2338940	2871229	2559258	3334264	2927176	4056145
Total	28010095	30690091	28514642	18060372	16271299	21582077	26456851	28246980	28741592	38622529	36001722	34986556
% of growth		10%	-7%	-37%	-10%	33%	23%	7%	2%	34%	-7%	-2%

Source: Trade Map, ITC

During the same period, India's import from BRICS (Brazil, Russia, China and South Africa), grew at a AGR of 9.2 percent, increasing to US\$ 206 billion in 2023, up from US\$ 72 billion in 2012 (Table 2), with BRICS now accounting for 30.7 percent of India's global imports and India now accounting for 4.4 percent of BRICS's global exports.

India's total import from the BRICS member countries Brazil, Russia, China and South Africa
Table 2
Unit: US Dollar thousand

Exporters	Imported value in 2012	Imported value in 2013	Imported value in 2014	Imported value in 2015	Imported value in 2016	Imported value in 2017	Imported value in 2018	Imported value in 2019	Imported value in 2020	Imported value in 2021	Imported value in 2022	Imported value in 2023
China	54140455	51635444	58230546	61641108	60479988	71890425	73845717	68402093	58798825	87535136	102249180	121929971
Russian Federation	4602156	3814120	4207629	4529850	4781758	7976972	6823232	6226189	5937619	8695038	40628245	67072021
South Africa	8034741	7351755	5993808	6279665	5092074	6882632	6615404	6634516	6673136	11070726	11166488	11350306
Brazil	5394580	3831841	5544023	4110300	3614532	5102170	4636557	3042274	3194991	4928497	7116223	6467004
Total	72171932	66633160	73976006	76560923	73968352	91852199	91920910	84305072	74604571	112229397	161160136	206819302
%of growth		-8%	11%	3.40%	-3.30%	24%	0.50%	-8.28%	-12%	50%	44%	28%

Source: ITC Trade Map







### **Product Wise Analysis**

### India's Export to BRICS (Brazil, Russia, China and South Africa):

The growth in India-BRICS trade since the early 2012s has seen slight shift in the composition of India's export basket to BRICS. In 2023, this basket was dominated by Petroleum products, Ores(Iron, Copper, Titanium), Slag, Ash, Nuclear reactors, Boilers, Machinery and Mechanical appliances, Organic Chemicals, and Vehicles other than railwaywhich together accounted for 47 percent of India's exports to BRICS (Table 3). Trend analysis depicts that the share of Cotton and Copper articles whichheld an average share of 20 percent together in the total basket in 2012-2015 had declined to 3 percent of its share in 2023, while petroleum and other products have gained prominence.

Unit: US Dollar thousand India's Major Exports to BRICS (% share in India's exports)

Unit: US Dolla	r tnousa	ana In	aia's N	tajor Ł	xports	s to BK	ICS (%	o snare	in Ina	ia's exj	orts)	
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Mineral fuels, mineral oils and products of their distillation;												
bituminous substances; mineral	20%	18%	27.50%	12.00%	9.20%	9.73%	14.49%	10.88%	6.80%	10.39%	27%	17.97%
Ores, slag and ash	9%	5.60%	2.70%	2.42%	7.16%	7.03%	4.30%	7.60%	12.23%	9.23%	3%	9.70%
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	3%	3.55%	4.26%	5.51%	6.14%	5.95%	5.62%	5.70%	4.86%	5.30%	6.16%	7.33%
Organic chemicals	5.40%	5.27%	5.21%	7.61%	8.27%	11.04%	15.01%	13.80%	11.60%	9.18%	7.70%	6.57%
Vehicles other than railway or tramway rolling stock, and parts	40/	4.000/	4.640/	6.070/	F 720/	F 060/	F 220/	F 200/	2.60%	4.040/	C 400/	6.420/
and accessories thereof  Miscellaneous chemical products	1.59%	4.90% 1.80%	4.61% 1.78%	2.36%	5.73% 3.40%	5.96% 2.87%	5.22% 3.14%	5.30% 3.50%	3.60%	4.81% 3.86%	6.40% 5.14%	6.12% 4.30%
Electrical machinery and equipment and parts thereof; sound recorders and reproduce ers, television	3.2	3.14%	2.02%	2.55%	3.66%	3.20%	4.12%	6.30%	4.47%	4.80%	3.70%	4.30%
Pharmaceutical products	3.6	4.40%	4.04	6.03%	5.90%	5.30%	4.74%	4.60%	5.15%	4.10%	3.90%	4.26%
Fish and crustaceans, molluscs and	0.83%	1.02%	0.86%		1.28%	0.90%	2.57%	5.20%	3.54%	3%	3.90%	4.02%
other aquatic invertebrates	0.83%	1.02%	0.86%	1.15%	1.28%	0.90%	2.57%	5.20%	3.54%	370	3.90%	4.02%
Iron and steel	2.09%	2.37%	1.41%	1.62%	2.11%	2.90%	1.89%	2.81%	9.26%	5.54%	2.30%	3.04%
Salt; sulphur; earths and stone; plastering materials, lime and cement	2.11%	2.30%	2.30%	3.16%	3.23%	3.06%	2.70%	2.20%	2.22%	2.05%	2.90%	2.61%
cement	2.11/0	2.3070	2.3070	3.1070	3.2370	3.0070	2.7070	2.2070	2.22/0	2.0370	2.5070	2.01/0
Cotton	13.29%	16.07	10.08%	11.19%	7.90%	5.66%	5.72%	3.80%	3.76%	4.50%	0.50%	2.50%
Copper and articles thereof	7.80%	6.43%	7.46%	7.06%	3.90%	6.422	2.42%	1%	1.77%	3.50%	1.59%	1.07%
Plastics and articles thereof	3.00%	3.16%	2.14%	2.56%	2.50%	2.75%	4.71%	4.20%	4.15%	1.70%	1.53%	1.65%

Source: ITC Trade Map

During the years 2016 to 2019, China and South Africa were the major importers of Mineral Fuels and Oils (Petroleum Products), while during 2019-2023 South Africa and Brazil tops the list. Pharmaceutical Products holds an average share of 4 to 5 percent of India's total export to BRICS since 2012 to 2023, whereas Plastics and articles have completely declined



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to 1.65 percent in 2023 from 4.71 percent in 2018. Product type Fish and crustaceans, molluscs and other aquatic invertebrates has seen an uptrend in its share of total exports, from 0.83 percent in 2012 to 4.02 percent in 2023.

### India's Imports from BRICS (Brazil, Russia, China and South Africa):

During the years 2012 to 2021 the Electrical machinery and equipment and parts (Telephone sets, smart phones and Electronic integrated circuits) from China dominated the imports basket of India and held a share at an average of 23 percent. Starting from 2022, Mineral Fuels and Oils (Petroleum Oils and Coal Briquettes) push the Electrical machinery and equipment products back and get ahead of it by taking an average share of 28 percent in the total share of imports of India from BRICS (Brazil, Russia, China and South Africa). During the year 2023, among the BRICS, India imports almost 90 per cent of its Mineral Fuels from Russia and 99 percent of its Electrical machinery and equipment products from China. Almost 50 per cent of the total imports of India from BRICS has been held by Mineral Fuels and Electrical Machinery. The share of Mineral Fuels in India's import from BRICS increased from around one-tenth in 2012 to over one-third in 2023. Table 4 depicts the sudden uptrend in the import of mineral fuels in 2022, which grew at a growth rate of 233 percent in 2023. Nuclear reactors and Boilers and Natural/Cultured pearls and precious stones were the third and fourth-largest imports of India from BRICS, whereas India depended solely on China for its Nuclear reactors and boilers and on South Africa for its Natural/cultured pearls and precious stones.

Table 4:

Unit: US Dollar thousand, India's Major Imports from BRICS (% share in India's Imports)

Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Mineral fuels, mineral oils and products of their												
distillation;  Electrical machinery and equipment and parts thereof;	18%	7%	9.10%	6.30% 25.40%	5.70%	7.80%	25.40%	23.70%	7.80%	9.60%	25.70%	20.65%
Nuclear reactors, boilers, machinery and mechanical	14%	15%	13.50%	14.10%	14.90%	14%	15.20%	16.80%	16.90%	17%	13.60%	11.71%
Natural /cultured pearls, precious / semi-precious,	9%	8%	6.10%	5.30%	5.80%	7.50%	4.60%	4%	4.30%	6.50%	4.40%	7.12%
Organic chemicals	6.60%	8%	8.80%	8.30%	7.80%	7.40%	9.60%	10%	11.10%	10.08%	8.50%	6.36%
Plastics and articles thereof	1.80%	2%	2.40%	2.20%	2.60%	2.50%	3.10%	3.60%	3.10%	3.80%	3.40%	2.81%
Fertilisers	4.40%	4%	4.10%	5.40%	2.60%	1.5	2.20%	3%	3.60%	2.80%	3.14%	2.40%
Iron and steel	4.50%	3%	4.50%	4.50%	3%	2.40%	2%	2%	1.50%	1.30%	1.64%	1.77%
Animal, vegetable or microbial fats and oils and their cleavage products;	0.50%	0.20%	0.50%	0.70%	0.60%	0.50%	0.60%	0.40%	0.90%	0.80%	1.93%	1.33%
Optical, photographic, cinematographic, measuring,	1.50%	1.20%	1.60%	1.60%	1.80%	1.70%	1.80%	1.70%	2.10%	2.20%	1.40%	1.29%



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Articles of iron or steel	2%	2%	1.90%	1.60%	1.60%	1.50%	1.90%	2.11%	1.70%	1.40%	1.18%	0.99%
Vehicles other than railway or tramway rolling stock,	1.50%	1.50%	1.50%	1.50%	1.50%	1.40%	1.70%	1.50%	1.60%	1.50%	1.13%	0.89%
Miscellaneous chemical products	0.90%	0.90%	1.10%	1%	1.10%	1.40%	1.50%	1.60%	1.70%	1.60%	1.11%	0.79%
Aluminium and articles thereof	0.80%	1%	1.00%	1.25%	1%	0.80%	1.30%	1.30%	1.02%	0.90%	0.80%	0.74%
Inorganic chemicals; organic or inorganic compounds of precious metals,	1.25%	1.30%	1.10%	1%	0.90%	0.80%	1.40%	1.15%	1.02%	0.90%	0.80%	0.71%
Man-made filaments; strip and the like of man- made textile	0.50%	0.50%	0.40%	0.40%	0.40%	0.30%	0.50%	0.60%	0.60%	0.80%	0.70%	0.60%
Sugars and sugar confectionery	0.5\$	0.8	0.70%	0.60%	1.25%	1.14%	0.60%	0.35	0.85%	0.15%	0.15	0.60%

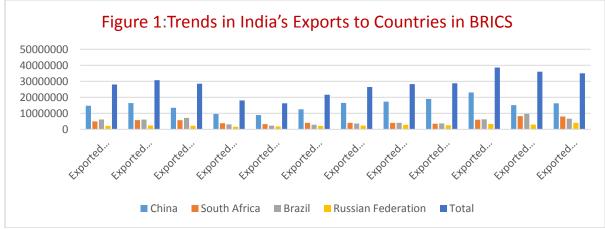
Source: ITC Trade Map

While the shares of Organic chemicals and Plastic articles maintains the average level of 8.5 percent and 3 percent respectively throughout the years 2012-2013, the shares of Fertilisers and Iron and Steel, have tumbled over the period.

# Analysis of Trade between India and BRICS by Country

In this section, a trade analysis is carried out for the four regions of BRICS (Brazil, Russia, China, and South Africa). Given the dominance of petroleum products and Electrical equipment in bilateral trade, India's trade with BRICS has been dominated by trade with China. However, over the last three years India's import from Russia and exports to both Russia and South Africa has been largely increased (Figure 1).

Unit: US Dollar thousand

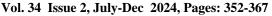


Source: ITC Trade Map

Though, China has become India's largest export destination among the BRICS countries which held a share of 46 percent in 2023, it has been declined from 59 percent in 2021. India's export to South Africa have seen a notable increase from 19 percent in 2016 to 23 percent of it share in 2023. India's export to Brazil had seen fluctuations since 2012, where it held a share of 25 percent of India's total exports to BRICS in 2014 and declined in 2017 having a share of 13 percent and again increased to having a share of 27 percent in 2022. India's export to Russia also grew reaching US\$ 4 billion in 2023 from US\$ 1.6 billion in 2016.

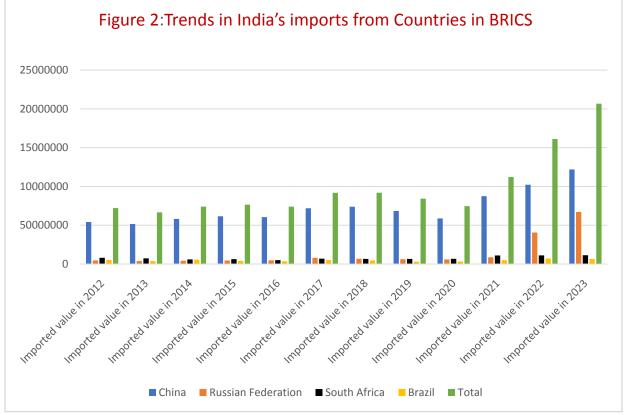


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Over the years 2012-2023, India's total value of imports from BRICS is consistently higher than the total value of India's exports to BRICS. Exports from China to India tops the list among the BRICS, which constitutes more than half of the imports of India from BRICS and held a share of 56 percent in 2023. The total value of imports from China had increased 125 times in 2023 which amount to US\$ 121 billion than its value in 2012 which amounted just US\$ 54 billion (Figure 2). Similarly, Russia which is the second-largest exporter to India. Unit: US Dollar thousand



Source: ITC Trade Map

among the BRICS countries and it's share in the total imports of India have seen a tremendous uptrend which held a share of 31 percent in 2023 from 6 percent in 2012. India's import from Russia in 2023 grew 1357 times in comparison with India's import from Russia in 2012. While, India's import from South Africa have shown an increase in its value from US\$ 8 billion in 2012 to US\$ 11 billion in 2023, but its share in the total value of India's imports from BRICS declined from 6.88 percent in 2016 to 5.2 percent in 2023. Likewise, the imports from Brazil have shown a little change in its value from US\$ 5.3 billion in 2012 to US\$ 6.4 billion in 2023 but its share in the total value of India's imports from BRICS declined from 7.47 percent in 2012 to 3 percent in 2023.

### **India's Trade with China**

India's trade with BRICS has expectedly been dominated by trade with China which has become India's largest export destination among the BRICS countries. In 2023, the exports to China were 46.4 percent in the total volume of exports to the BRICS countries. The share of Exports to China were 62 percent in 2018 and 66 percent in 2020, which got declined in 2023.







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Table: 5		lr	ndia's E	xport t	o China	a ( % of	share	in tota	l expor	ts to Cł	nina)	
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Ores, slag and ash	17.8	10.6	5.8	4.6	13.1	12.1	6.9	12.4	18.4	15.1	7.1	21.1
Fish and crustaceans, molluses and other aquatic invertebrates	1.2	1.3	0.9	1.6	1.4	1.1	3.5	8.0	4.7	4.5	8.4	7.7
Organic chemicals	6.9	6.4	7.1	9.0	8.8	13.5	18.7	18.0	12.7	10.9	10.8	7.6
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	2.3	4.5	12.0	6.1	7.9	8.1	19.0	12.1	6.3	7.6	13.2	7.3
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	2.7	3.1	3.9	5.0	5.2	5.3	5.0	4.9	3.8	4.5	6.6	5.8
Salt; sulphur; earths and stone; plastering materials, lime and cement	3.9	4.3	4.9	5.9	5.7	5.2	4.2	3.7	3.3	3.4	6.5	5.5
Cotton	24.5	29.5	20.9	20.8	14.2	9.2	8.9	6.0	5.5	7.3	1.1	5.1
Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats;	2.6	2.1	2.1	2.9	3.0	3.4	2.5	2.3	3.6	3.1	4.3	4.5
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	1.7	1.8	2.3	2.6	4.4	3.7	3.3	4.8	3.4	4.3	4.2	4.2
Coffee, tea, maté and	1.7	1.0	2.3	2.0	4.4	3.7	3.3	4.0	3.4	4.3	4.2	4.2
spices	0.3	0.2	0.2	0.2	0.3	0.3	0.6	2.6	3.2	2.9	3.1	4.0
Iron and steel	2.2	2.3	1.2	1.7	2.5	3.2	1.8	3.3	12.7	6.4	2.9	3.3
Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles	1.1	1.3	1.2	1.7	1.7	1.2	0.8	1.1	1.3	2.2	2.5	2.8
Copper and articles thereof	14.9	11.9	15.7	13.3	7.2	11.0	3.8	1.6	2.6	5.8	3.6	2.2

Source: ITC Trade Map

Among the top exports to China from India, Ores, slag and ash were the largest which includes Titanium, Copper, Iron and Chromium ores and concentrates and these accounting for 21.1 percent of India's total export to China (Table 5). Whereas Organic Chemicals which increased from 6.9 percent in 2012 to 18.7 percent in 2018 had a steep drop which amounts to just 7.6 percent in 2023. Interestingly, contributing 1.2 percent of its share in 2012, the products Fish and crustaceans, molluses and other aquatic invertebrates witnessed a notable rise in share to 7.7 percent in 2023. Mineral Fuels which were at its peak in 2018 with 19 percent of its share in total imports from India has declined to 7.3 percent in 2023. The exports of Cotton from India to China, which held a greatest share ever than any other products in 2012 had declined from 24.5 percent to 5.1 percent in 2023 (Table 5).



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Table 6.	I	ndia's	import	from C	hina ( '	% of Sl	nare in	total in	nports f	From Cl	nina)	
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Electrical machinery and equipment and parts thereof; sound recorders, television	24.2	28.0	27.4	31.4	34.5	38.3	31.6	29.2	30.3	30.1	30.0	36.2
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	18.9	18.9	16.8	17.2	17.7	17.8	18.5	20.3	21.0	21.5	21.2	20.2
Organic chemicals	8.5	10.2	10.7	10.0	9.2	9.1	11.6	12.0	13.9	13.6	13.3	10.9
Plastics and articles thereof	2.3	2.4	2.9	2.6	3.0	3.0	3.7	4.1	3.7	4.8	5.3	4.9
Optical, photographic, cinematographic, measuring, checking, precision, medical	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.1	2.7	2.8	2.2	2.2
Iron and steel	3.1	2.0	3.9	3.9	2.7	2.3	1.9	1.8	1.4	1.3	1.9	2.1
Fertilisers	5.0	4.3	4.6	5.7	2.5	1.5	2.3	3.1	2.8	3.1	2.3	2.1
Articles of iron or steel	2.6	2.6	2.4	2.0	2.0	1.9	2.3	2.5	2.1	1.9	1.9	1.7
Vehicles other than railway or tramway rolling stock, and parts and accessories	1.9	1.9	2.0	1.8	1.9	1.8	2.1	1.9	2.0	2.0	1.8	1.5
Miscellaneous chemical products	1.1	1.2	1.3	1.2	1.3	1.7	1.9	1.9	2.1	2.0	1.7	1.3
Aluminium and articles thereof	0.9	1.1	1.1	1.2	1.0	1.0	1.5	1.5	1.1	1.1	1.3	1.2
Man-made filaments; strip and the like of man-made textile materials	0.6	0.7	0.6	0.5	0.5	0.5	0.6	0.8	0.8	1.1	1.1	1.1
Natural or cultured pearls, precious or semi-precious stones, precious metals,	2.3	1.7	2.2	0.9	0.8	0.9	0.6	0.3	0.2	0.2	0.7	1.1

Source: ITC Trade Map

The top commodities which have been imported by India from China and its percent of share in the total value of imports is listed in the Table 6. During the taken period, since 2012 to 2023 Electrical machinery and equipment which includes Telephone sets, Smart phones, Electronic integrated circuits and thereof, were the top commodities among the imports of India from China. Gradually increasing from having a share of 24.2 percent in 2012, it has raised to holding 36.2 percent of the total share. These value of Electrical machinery imported from China is almost 58 percent of India's total global imports of Electrical machinery in 2023 (Trade Map - Bilateral trade between India and China). Other than that, Nuclear reactors, boilers, Organic chemicals, and Plastic and articles are the major imports of India from China.

#### India's Trade with Russia

India's export to the Russian Federation has not seen much difference in its percent of share to the total value of India's trade with BRICS, over the years 2012-2023. In 2012 it held a share of 10.16 percent in India's total exports to BRICS and in 2023 it held 11.5 percent with slightest increase. The trends in India-Russia trade since the early 2012 has seen a shift in the composition of India's export basket to Russia. Since 2012 and throughout the years until 2022 the exports to Russia were dominated by pharmaceutical products which includes Medicaments consisting of mixed or unmixed products for the rapeutic or prophylactic uses, have seen a decline in 2023 which accounted for 9.2 percent from 25.9 percent in 2013 (Table 7).









Table 7	In	idia's ex	port to	Russia	a (% of	share i	n India'	s expoi	rt to Ru	ssia)		
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Nuclear reactors, boilers, machinery	3.1	6.2	12.2	9.7	10.6	8.9	9.0	8.10	9.0	8.4	9.3	14.2
Pharmaceutical products	22.8	25.9	20.1	22.1	18.5	19.0	17.5	16.43	16.3	15.4	14.7	9.2
Organic chemicals	1.9	1.7	2.6	3.0	4.8	6.1	6.3	6.80	9.1	8.0	9.7	8.0
Iron and steel	6.1	5.5	4.8	2.7	3.0	3.8	3.3	3.68	5.1	5.8	5.5	7.9
Electrical machinery equipment & parts thereof;	12.2	8.7	3.1	3.5	4.1	3.0	10.2	18.91	13.0	15.1	6.1	6.6
Inorganic chemicals;	0.5	0.5	0.4	0.6	0.7	0.6	0.9	0.58	1.0	0.8	3.4	5.2
Miscellaneous chemical products	1.2	1.0	1.0	1.5	1.9	2.0	2.0	2.16	2.6	2.7	3.8	3.7
Fish and crustaceans, molluscs and other aquatic invertebrates	1.2	1.7	3.4	1.7	3.0	3.1	3.6	3.35	3.3	3.9	4.3	3.7
Optical, photographic, cinematographic,	0.5	0.6	0.7	0.8	1.4	1.0	1.8	1.33	1.9	2.1	2.3	3.1
Ceramic products	0.1	0.2	0.2	0.3	0.3	0.5	0.3	0.28	1.1	1.9	1.9	2.9
Coffee, tea, maté and spices	6.3	5.4	5.0	7.0	6.6	6.4	5.5	4.12	4.0	3.1	4.0	2.3
Aircraft, spacecraft, and parts thereof	8.0	5.0	5.8	5.9	6.2	4.9	1.0	1.09	0.5	0.4	0.4	1.4

Source: ITC Trade Map

Electrical machinery equipment and parts which includes Telephone sets, Smart phones and other telephones for cellular networks which accounted for 12.2 percent of India's export to Russia in 2012, had declined to 6.6 percent in 2023. Only by 2023, Nuclear reactors and Boilers has become the largest exports to Russia, which accounted for 14.2 percent from 3.1 percent in 2012.

India's import from Russia in the below Table 8shows India's dependency on Mineral Fuels such as Petroleum oil, Petroleum gas, Coal briquettes, electrical energy, etc. The share of Mineral fuels in India's import from Russia increased from just 9.6 percent of total imports from Russia in 2012 to 87.6 percent in 2023. Natural or cultured pearls which held a share of 46 percent in 2017 had a huge downfall to 2 percent in 2023.

Table: 8	India's	import	from I	Russia	(% of sl	hare in	India's	impor	t from	Russia	)	
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Mineral fuels, mineral oils	9.6	8.2	14.6	9.0	12.2	24.9	32.4	46.1	34.4	53.7	83.6	87.6
Fertilisers	11.7	10.1	9.3	14.4	8.1	4.3	5.6	7.3	10.3	5.6	6.7	3.9
Natural or cultured pearls, precious or semi-												
precious.	17.6	25.3	29.3	30.1	42.3	46.1	26.8	10.3	14.0	15.4	3.2	2.0









Animal, vegetable or microbial fats and oils and their cleavage	0.5	0.0	1.1	0.2	0.0	0.4	0.2	2.5	6.9	3.5	2.2	1.9
Iron and steel	14.7	7.0	5.8	7.9	5.1	2.8	2.5	2.4	1.4	1.5	0.8	0.9
Paper and paperboard; articles of paper pulp,	3.5	3.4	4.0	4.0	4.7	3.5	3.8	4.4	2.8	1.4	0.4	0.2
Inorganic chemicals;	1.6	2.6	2.0	1.4	1.9	1.3	1.9	1.8	1.7	1.6	0.2	0.2
Nickel and articles thereof	7.4	8.8	2.1	1.6	1.6	0.7	0.5	0.2	0.4	0.7	0.2	0.2
Nuclear reactors, boilers,	3.0	2.2	1.5	1.5	2.3	1.4	1.2	1.1	1.6	0.9	0.4	0.2
Salt; sulphur; earths and stone;	4.4	3.8	4.2	3.2	2.4	1.4	1.7	2.4	1.9	1.3	0.2	0.2
Aluminium and articles thereof	0.5	0.5	1.0	2.3	0.5	0.1	0.1	0.3	0.7	0.6	0.1	0.2
Organic chemicals	1.4	1.7	2.0	1.3	1.2	1.2	1.6	1.1	1.0	0.9	0.1	0.2
Copper and articles thereof	5.8	8.4	9.9	6.0	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Rubber and articles thereof	4.0	4.7	3.9	2.4	2.2	1.8	2.0	1.5	1.3	1.7	0.2	0.1

Source: ITC Trade Map

Likewise, India's imports of Iron and steel from Russia has a seen a steep drop from 14.7 percent of the share in 2012 to 0.9 percent in 2023. The import of Fertilisers as well, which was the second-largest imports from Russia in 2023 accounted for 3.9 percent have declined from 14.4 percent of its share in 2015. There has been an absolute drop in the imports of Copper and Rubber articles which accounted for 9.9 percent and 3.9 percent of the total imports of India from Russia in 2014 to 0.1 percent in 2023.

### India's trade with South Africa

India's top export to South Africa include Mineral Fuels (Petroleum oils, Petroleum coke, etc) which accounted for 43.9 percent of total exports to South Africa in 2023. Between the years 2018-2019 there was a slight decline in its share but again it was increased in 2023 (Table 9).

Table:9														
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023		
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	36.3	34.9	34.2	20.6	21.6	25.6	13.7	11.9	16.6	19.0	43.0	43.9		
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	19.6	18.6	15.5	20.1	19.5	20.9	21.1	24.9	18.1	19.7	19.4	19.0		
Pharmaceutical products	6.4	8.9	8.0	12.9	12.9	12.1	13.4	12.9	19.8	10.7	6.9	7.8		
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	2.9	3.7	3.5	4.3	4.3	4.1	5.2	5.7	4.6	4.6	4.3	4.7		







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Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	5.1	5.0	1.8	2.5	2.6	2.7	5.5	7.9	6.2	4.2	4.3	4.5
			-		-			-				-
Plastics and articles thereof	2.0	1.9	1.3	1.8	2.2	2.0	2.3	3.5	2.4	1.9	1.6	1.8
Cereals	3.3	3.6	2.5	2.8	3.2	1.9	1.8	1.9	2.8	1.5	1.0	1.6
Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals,	0.4	0.5	0.5	0.6	0.7	0.6	0.7	0.7	0.9	1.0	0.9	1.2
Organic chemicals	2.9	3.0	2.0	3.6	4.5	4.1	4.3	2.8	4.0	1.9	1.4	1.2
Rubber and articles thereof	1.1	0.8	1.9	0.9	1.0	1.1	1.0	1.1	1.0	0.9	0.8	1.0
Ceramic products	0.2	0.2	0.2	0.2	0.3	0.3	0.8	0.8	1.2	1.0	0.6	0.9
Miscellaneous chemical products	0.6	0.9	0.9	1.3	1.6	1.3	1.7	2.1	1.7	1.3	1.0	0.9
Essential oils and resinoids;	0.6	0.5	0.5	0.9	1.1	1.1	1.2	1.3	1.5	1.0	0.6	0.7
Articles of iron or steel	2.2	1.8	1.6	1.9	1.9	1.7	2.3	1.6	1.4	1.2	0.6	0.7
Articles of apparel and clothing accessories, knitted or crocheted	1.3	1.0	1.0	2.7	3.3	2.7	2.6	2.5	2.0	1.2	0.7	0.7
Iron and steel	1.1	2.1	0.8	1.0	0.8	1.8	0.9	0.8	0.9	4.8	1.1	0.6

Source: ITC Trade Map

Vehicles other than railway and pharmaceutical products were the products with second and third-largest share in the 19.0 percent and 7.8 percent respectively in 2023. The other major products which have been exported to South Africa were nuclear reactors, boilers, Electrical machinery, Plastic articles and Cereals.

The top products imported by India from South Africa include Natural or cultured pearls, precious stones, Mineral Fuels and Oils, Ores, slag and ash, and Iron and steel. Since 2012, Natural or cultured pearls tops the list accounted 57.8 percent of total imports from South Africa in 2012 and had a slight decrease in 2023 which held a share of 48.5 percent (Table 10).

Table :10 India's Import from South Africa (% of share in India's import from South Africa)												
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Natural or cultured pearls, precious or semi- precious stones, precious metals,	57.8	52.1	30.1	31.3	33.4	35.0	23.4	33.0	30.5	46.2	39.8	48.5
Mineral fuels, mineral oils and products of their distillation	21.6	26.9	38.5	38.7	40.3	39.7	46.8	42.0	34.9	30.2	35.5	33.8
Ores, slag and ash Pulp of wood or of other fibrous cellulosic material;	0.8	1.2	11.3	9.8	6.4	9.5	2.9	6.3	1.6	5.6	4.9	5.7 4.7
Iron and steel Inorganic chemicals;organic or inorganic compounds of	7.6	6.7	8.2	7.0	3.3	2.6	3.5	3.4	2.0	0.8	2.0	1.7
precious metals  Salt; sulphur; earths and stone; plastering materials,	0.2	0.2	0.8	0.6	0.2	0.3	0.6	0.8	0.5	0.5	1.0	0.8
Organic chemicals	0.9	1.2	1.6	1.0	1.1	0.8	1.1	1.1	0.9	0.9	0.8	0.7







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Edible fruit and nuts; peel of citrus fruit or melons	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.7
Nickel and articles thereof	0.3	0.2	0.3	0.7	0.7	0.7	0.8	0.9	0.7	0.6	0.9	0.4
Nuclear reactors, boilers, machinery and mechanical	0.9	1.3	2.4	2.1	2.9	2.2	2.0	1.9	1.1	1.0	0.4	0.3
Aluminium and articles thereof	1.3	2.0	1.4	1.7	1.8	0.9	1.2	0.9	0.6	0.4	0.3	0.3
Electrical machinery and equipment and parts	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2
Wood and articles of wood; wood charcoal	0.0	0.1	0.7	0.7	0.9	0.4	0.4	0.2	0.1	0.1	0.1	0.1
Residues and waste from the food industries;	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.1
Plastics and articles thereof	0.2	0.2	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Source: ITC Trade Map

Mineral Fuels which accounted for 46.8 percent of India's total import from South Africa has fell to 33.8 percent in 2023. Both, Natural and cultured pearls and Mineral Fuels accounted for 82.3 percent of India's total import from South Africa in 2023. Iron and steel products which was among the top five imported products of India from South Africa in 2023 with a share of just 1.7 percent, has fell from 7.6 percent of its share in 2012. The other major imports from South Africa were Ores, slag and ash, and Pulp of wood or of other fibrous cellulosic material, in 2023.

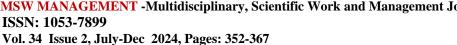
#### **India's Trade with Brazil**

India's export to Brazil had seen fluctuations over the years 2012-2023, where the total value of exports to Brazil was US\$ 6.16 billion in 2012 and remains almost the same with slight increase amounted to US\$ 6.6 billion in 2023. During the year 2017 the total value of exports declined to US\$ 2.8 billionand again have seen an increase to US\$ 9.7 billion in 2022 (Table 11).

Table 11	In	idia's e	xport t	o Brazi	I (% of	share i	in India	's expo	ort tpo	Brazil)		
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Mineral fuels, mineral oils and products of their distillation;	55.6	49.2	60.2	25.6	4.6	1.2	4.1	12.4	4.5	17.9	44.4	23.5
Miscellaneous chemical products	4.7	5.8	4.7	8.2	15.5	13.7	16.3	17.6	22.2	19.2	14.9	15.7
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	4.2	3.6	3.1	6.6	8.8	9.1	6.7	8.0	7.8	7.6	6.2	10.0
Organic chemicals	5.1	5.9	5.0	10.8	14.3	13.5	15.9	12.4	15.4	10.3	7.6	9.7
Vehicles other than railway or tramway rolling stock,	2.6	4.0	3.3	6.4	6.8	8.5	8.6	7.8	6.7	6.0	5.4	6.9
Pharmaceutical products	2.6	2.8	3.0	7.0	8.5	7.4	7.2	6.8	8.7	6.0	3.9	6.3
Electrical machinery and equipment and parts thereof; sound recorders	2.3	2.7	1.3	2.0	2.0	2.0	2.6	2.7	2.7	1.8	1.8	3.0
Rubber and articles thereof	1.0	1.7	1.4	2.1	1.2	3.0	2.3	2.4	2.1	3.1	2.1	2.8
Iron and steel	1.2	1.7	1.3	1.8	1.8	3.0	2.5	2.2	2.4	3.1	1.5	2.5









Articles of iron or steel	1.4	1.7	1.2	2.1	2.2	2.2	2.6	1.8	1.8	1.8	1.0	2.1
Tanning or dyeing extracts; tannins and their derivatives;	1.5	1.9	1.9	3.1	4.6	4.0	3.7	3.4	3.2	2.3	1.3	1.7
Aluminium and articles thereof	0.2	0.5	0.5	1.9	1.7	2.4	2.8	2.7	3.8	3.6	0.8	1.7
Man-made filaments; strip and the like of man- made textile materials	3.9	4.8	3.1	4.4	8.0	8.4	7.8	5.1	3.2	3.4	1.0	0.9

Source: ITC Trade Map

The major export to Brazil was Mineral Fuels during the years 2012 to 2015 which had a steep drop in 2016 to 2018, amounted just 1.2 percent of the total exports to Brazil from India in 2017 and again increased to 44.4 percent in 2022. The other major exports to Brazil were Miscellaneous chemical products and Nuclear Boilers which held a share of 4.7 percent and 4.2 percent of the total exports to Brazil in 2012 had increased to 15.7 percent and 10.4 percent respectively of its share in total exports.

Similar to the exports, India's import from Brazil too have seen fluctuations throughout the years 2012-2023. The total value of Imports from Brazil in 2012 was US \$5.3 billion, which fell to US\$ 3.1 billion in 2019. In 2022, the imports from Brazil had reached its peak of US\$ 7.1 billion and had a slight decline to US\$ 6.4 billion in 2023 (Table 12).

Table 12 India's import from Brazil (% of share in total imports of India from Brazil)												
Products	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018	Value in 2019	Value in 2020	Value in 2021	Value in 2022	Value in 2023
Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats;	5.9	4.2	6.7	13.0	13.5	7.6	11.7	7.4	8.5	13.7	31.0	24.6
Mineral fuels, mineral oils and products of their distillation; bituminous substances;	65.2	46.7	55.0	32.5	28.0	33.8	32.2	32.9	37.0	41.3	34.7	22.8
Sugars and sugar confectionery	7.4	14.4	9.8	12.1	25.4	20.5	12.3	8.4	19.5	3.4	3.4	20.8
Iron and steel	5.6	3.9	3.4	6.4	5.6	3.9	2.7	3.3	3.3	2.1	1.9	6.1
Natural or cultured pearls, precious or semi-precious stones, precious metals,	0.7	0.4	4.9	6.0	3.1	4.8	10.6	12.7	7.7	13.7	11.6	4.8
Ores, slag and ash	5.5	13.8	7.1	10.5	2.4	11.6	8.8	3.8	0.3	5.5	2.7	3.3
Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	1.7	2.0	1.2	1.5	1.9	1.6	3.5	5.7	2.5	2.5	1.8	2.0
Salt; sulphur; earths and stone; plastering materials, lime and cement	1.0	1.1	1.0	1.1	0.7	0.7	0.9	0.6	0.9	1.4	1.6	1.7
Wood and articles of wood; wood charcoal	0.4	0.7	0.5	1.7	2.0	1.4	1.8	2.6	1.8	1.6	1.0	1.5
Organic chemicals	1.1	2.0	1.9	3.3	2.6	2.2	3.3	2.9	3.0	2.4	1.5	1.5
Oil seeds and oleaginous fruits; miscellaneous grains, seeds and	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.1	1.4
Pharmaceutical products	0.3	0.9	1.1	1.5	1.9	1.4	1.5	2.6	2.5	1.8	1.0	1.1
Edible vegetables and certain roots and tubers	0.4	0.2	0.4	1.1	0.6	0.7	0.8	1.9	1.2	1.9	1.1	1.1

Source: ITC Trade Map





#### **Trade Intensity Index:**

According to the World Bank, Using the trade intensity index (T), one can ascertain whether the value of commerce between two nations is higher or lower than one would anticipate given their significance in global trade. It is calculated by dividing the amount of a nation's exports to a partner by the total amount of exports to that partner worldwide. It is computed as follows:

To use the Trade Intensity Index, the data has been collected from Trade Map,ITC.

Table	Table :13 Trade Intensity Index of India with other BRICS countries										
Year	TII of India with China	TII of India with Brazil	TII of India with South Africa	TII of India with Russia							
2012	0.51	1.7	3.0	0.4							
2013	0.47	1.4	3.1	0.4							
2014	0.41	1.8	3.4	0.5							
2015	0.35	1.1	2.8	0.6							
2016	0.34	1.0	2.6	0.6							
2017	0.40	1.1	2.9	0.6							
2018	0.46	1.2	2.6	0.6							
2019	0.49	1.3	2.6	0.7							
2020	0.59	1.5	3.2	0.7							
2021	0.48	1.6	3.6	0.6							
2022	0.30	1.9	4.0	0.8							
2023	0.34	1.5	4.0	1.1							

Source: ITC, Trade Map

Tij equals (xij/Xit)/(xwj/Xwt).

Where  $x_{ij}$  and  $x_{wj}$  are the values of country i's exports and of world exports to country j and where  $X_{it}$  and  $X_{wt}$  are country i's total exports and total world exports respectively. An index of more (less) than one indicates a bilateral trade flow that is larger (smaller) than expected, given the partner country's importance in world trade(Trade Indicators worldbank.org).

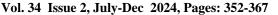
Table 13, shows the Trade Intensity Index of India with Other BRICS countries China, Brazil, South Africa and Russia for the years 2012 to 2023. Except for China and Brazil, the other BRICS countries with India have an increasing Trade Intensity. India's Trade Intensity with China had decreased gradually from 0.51 in 2012 to 0.34 in 2023 and with Brazil it has got fluctuations and have shown a declining rate of intensity. Whereas, India's Trade intensity with South Africa and Russia was increased from 3.0 and 0.4 respectively in 2012 to 4.0 and 1.1 in 2023.

#### Conclusion

One of the principles of BRICS, that trade can strengthen the solidarity between nations, has been demonstrated in the past two decades. The results of trade between India and the other BRICS countries have increased over five-fold from US\$ 45.7 billion in 2007 to US\$ 241 billion in 2023. In some of the studies where the analysis had done on the trade values of the years prior to 2012 revealed that India's trade with China was more intensive than other BRICS nations. Whereas, the trade trends during the period 2012 to 2023 from the above analysis reveals that South Africa and Russia have increasing intensity over the years than that of China. The findings of Trade Intensity Index reflect the need for closer cooperation to promote more intra-BRICS trade, and the study strongly recommends that India needs to adopt trade policies with the intention to streamline procedures for India's exports and imports to further strengthen its trade ties with the BRICS.



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