

India's International Trade of Four Specific Commodities in the Recent Past Some Insights

Preface

The study uses trade indicators to analyse merchandise export and import data in a way that should be useful for the purpose of policy. The indicators provide a glimpse of the trade patterns of the world and the performance of India in comparison to various other countries. They have been used in the case of India's exports of **Household Copper Articles & Fruit Juice (including Grapes Must)** and imports of **Sunflower Seeds, Oil or Cotton Seed Oil and Platinum, Unwrought, Semi manufactured or in Powder form** to indicate the possible directions policy may take.

The data used in this study has been sourced from the Export Import Data Bank of the DGCI&S, Department of Commerce, and Government of India and from the United Nations Comtrade Database. Introduction notes of each commodities has been sourced from the various sights –viz Wikipedia, Britannica, The Economic Times etc.

Computations are based on data at ITC-HS four-digit level (ITC-HS Code-7418 & 2009 for export and 1512 & 7110 for import) and the latest finalized data available on the UN Comtrade Database up to year 2021 and on the DGCI&S Database up to December'2022. So, trends from 2018 to 2021 have been shown when we extract the data from UN Comtrade and from 2018 to 2021 have been shown when we extract the data from DGCIS Data base.

In this report, we will see various analysis and aspects of India's Precious as well as International export trade of Household Copper Articles & Fruit Juice (including Grapes Must) and imports of Sunflower Seeds, Oil or Cotton Seed Oil and Platinum, Unwrought, Semi manufactured or in Powder form. We will use both the 4 digit Commodity codes.

Trends in India's as well as International Trade i.e. Exports and Imports of above four Commodities are given below in different tables :

- Table 1 :India's top 10 Export destination of Household Copper Articles swith their shares in percentage.
- Table 2 : World's top 10 Exporters of Household Copper Articles with their shares in percentage.
- Table 3 : World's top 10 Importers of Household Copper Articles with their shares in percentage.
- Annex- I : Top 3 sources of Household Copper Articles of World's top 3 Importers.
- Table 4 : India's top 10 destination of Fruit Juice (including Grapes Must) with their shares in percentage.
- Table 5 : World's top 10 Exporters of Fruit Juice (including Grapes Must) with their shares in percentage.
- Table 6 : World's top 10 Importers of Fruit Juice (including Grapes Must) with their shares in percentage.
- Annex-II : Top 3 sources of Fruit Juice (including Grapes Must) of World's top 3 Importers.
- Table 7 : India's top10 Sources of Sunflower Seeds, Oil or Cotton Seed Oil with their shares in percentage.
- Table 8 : World's top 10 Importers of Sunflower Seeds, Oil or Cotton Seed Oil with their shares in percentage.
- Table 9 : India's top 10 Sources of Platinum with their shares in percentage.
- Table 10 : World's top 10 Importers of Platinum with their shares in percentage.

EXPORT

Household Copper Articles and parts thereof

Few metals in human history have been as influential and beneficial to mankind as copper. Copper has a history dating back at least 10,000 years and is still used as an intricate component in almost all modern electronics, telecommunication equipment and plumbing, as well as countless other household products that many people around the country use every day.

Copper's unique properties as a mineral and an element have cemented the metal as a keystone in technological and engineering advancements dating as far back as the ancient Sumerians. The metal offers high ductile strength, malleability, corrosion resistance and high thermal and electrical conductivity. It is found within our bodies and is also a vital part of the diets of humans, animals and plants. Copper-rich foods include certain types of beans, almonds, peas, broccoli, whole wheat and chocolate.

When combined with other metals like tin, nickel and zinc, copper produces a range of alloys that increase its strength and other useful properties, making it one of the most versatile metals to use in engineering as well. In addition to providing the basis for more than 400 alloys, copper is also one metal that offers near endless recycle-ability.

When gathering for a long-awaited meal with friends and family, a copper table top might be just the kind of centerpiece to your kitchen or dining room that you can be proud to show off. Copper table tops are unique as they can come in a variety of designs, textures, finishes, and patinas. Rich copper colors can evolve and change over time, creating a rustic look for your next holiday gathering. As with sinks, copper table tops are easy to clean and require little maintenance to keep them shining brightly.

With excellent thermal conductivity, copper has long been used by gourmet chefs because of the metal's ability to quickly transfer and evenly distribute heat. Nearly every style of pot, pan and dish you can imagine can be made from copper, allowing for excellent performance, a lifetime of longevity and beautiful additions to any home kitchen. Even if you aren't a world-famous chef, practicing your culinary skills with copper cookware will provide you with a better tool for the job, with superior functionality and heat distribution as well as minimal cleaning requirements. In addition to cookware, copper can also be used to manufacture cups, flasks and other kitchen utensils. As a metal that has been used for thousands of years, copper can withstand quite a bit of weathering and can always be recycled. For those seeking a durable cup or flask that can last for ages, copper offers superior performance and longevity and will be in the family for many years.

These are broadly classified under **H.S. Code-7418**.

Table - 1

India's Top 10 destination of Household Articles of Copper (H.S Code-7418)

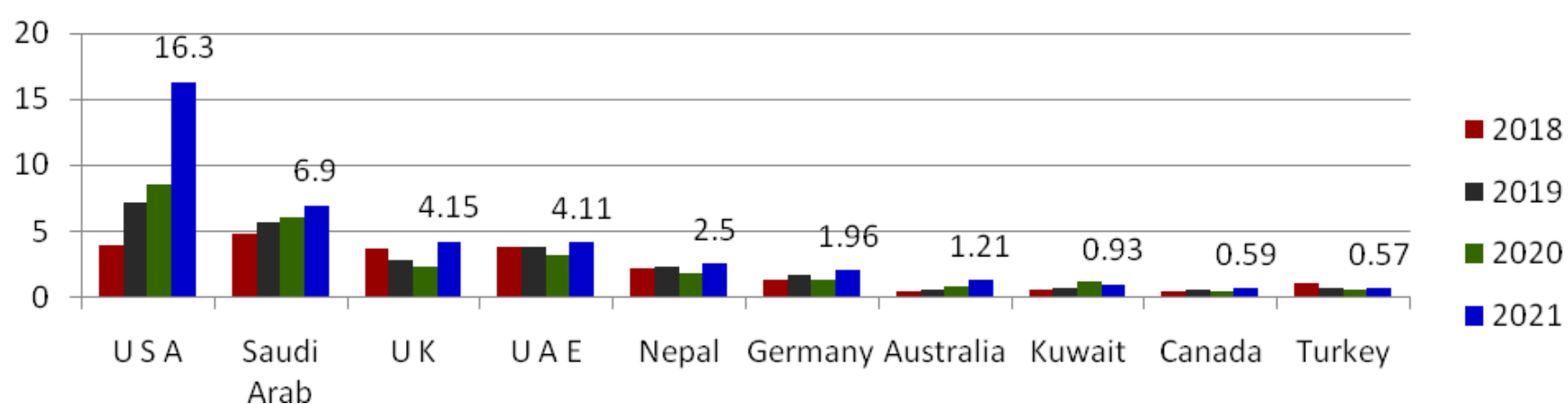
Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	U S A	3.88	13.86	7.09	22.49	8.50	26.99	16.30	34.39
2.	Saudi Arab	4.80	17.12	5.66	17.95	6.03	19.13	6.90	14.56
3.	U K	3.67	13.10	2.72	8.64	2.21	7.00	4.15	8.77
4.	U A E	3.74	13.36	3.72	11.80	3.13	9.95	4.11	8.66
5.	Nepal	2.07	7.40	2.21	7.00	1.78	5.65	2.50	5.27
6.	Germany	1.24	4.41	1.61	5.09	1.22	3.87	1.96	4.14
7.	Australia	0.32	1.13	0.53	1.68	0.72	2.28	1.21	2.55
8.	Kuwait	0.47	1.69	0.65	2.08	1.16	3.67	0.93	1.96
9.	Canada	0.39	1.40	0.47	1.50	0.41	1.30	0.59	1.25
10.	Turkey	0.98	3.49	0.61	1.95	0.56	1.77	0.57	1.21
	Others	6.46	23.05	6.25	19.82	5.80	18.39	8.17	17.23
	Total	28.02	100	31.53	100	31.52	100	47.38	100

Source: DGCI&S.

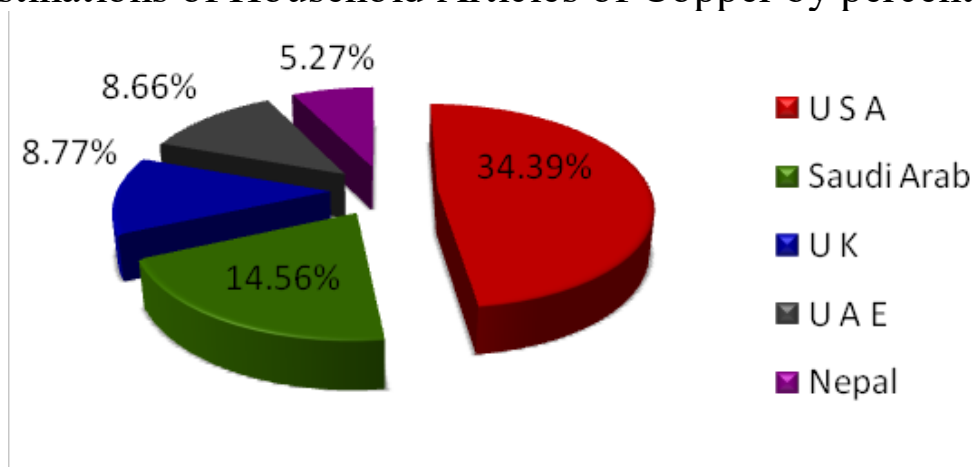
Note : India's Export including re-export

Leading importers of Household Articles of Copper from India for 2018-2021(in million \$)

Data label given on the basis of 2021



India's top 5 destinations of Household Articles of Copper by percentage India in 2021:



Under the review period the data shows the year wise trends of Household Copper Articles and parts thereof export from India, In the year 2018 the total value of Household Copper Articles and parts thereof export from India was US \$ 28.02 million. Whereas the data of 2021 states the export value of US \$ 47.38 million. India's Household Copper Articles and parts thereof export value to USA is around US \$ 16.30 million, which holds the top position with the share of 34.39% of the total value. With 14.56% and 8.77% share of India's total export of Household Copper Articles and parts thereof Saudi Arab and UK takes 1st and 2nd runner up position respectively in 2021.

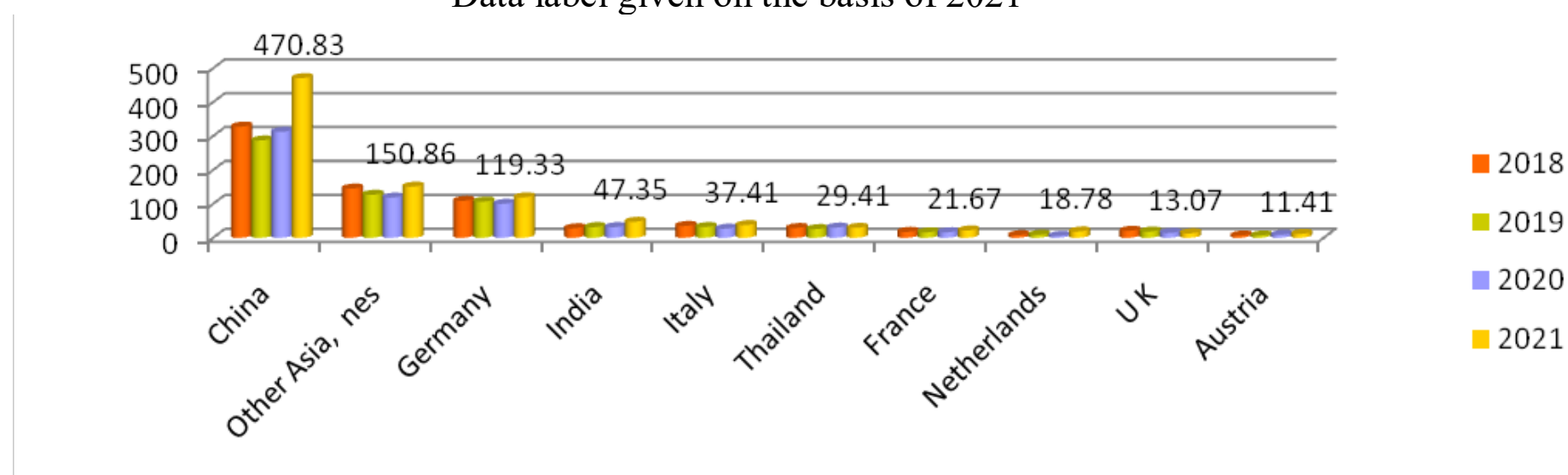
3
Table-2

World's Top 10 exporter of Household Copper Articles (H.S Code-7418)

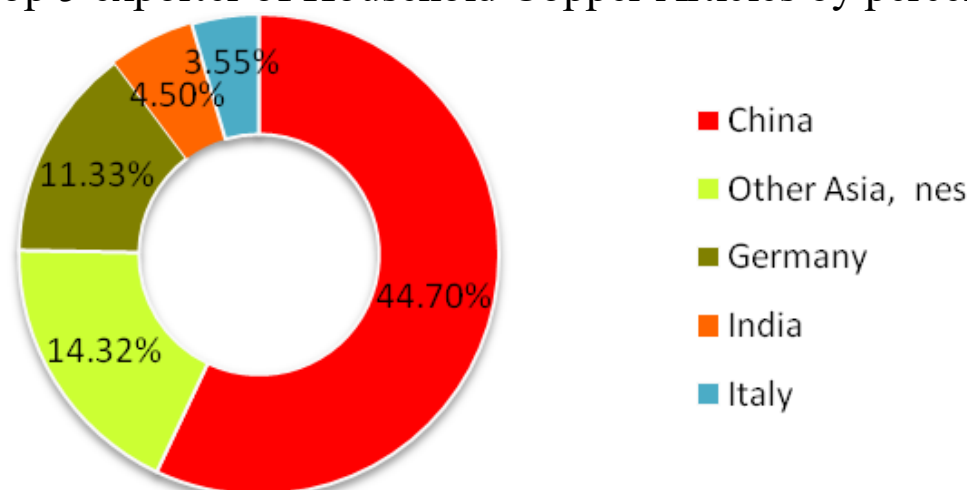
Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	China	327.99	37.63	287.14	36.54	312.50	39.95	470.83	44.70
2.	Other Asia, nes	145.43	16.68	127.00	16.16	118.67	15.17	150.86	14.32
3.	Germany	109.15	12.52	106.75	13.58	100.32	12.82	119.33	11.33
4.	India	28.08	3.22	31.42	4.00	31.43	4.02	47.35	4.50
5.	Italy	35.02	4.02	31.72	4.04	26.96	3.45	37.41	3.55
6.	Thailand	28.97	3.32	25.71	3.27	30.20	3.86	29.41	2.79
7.	France	17.53	2.01	16.04	2.04	16.32	2.09	21.67	2.06
8.	Netherlands	7.80	0.89	8.86	1.13	5.57	0.71	18.78	1.78
9.	U K	20.59	2.36	18.37	2.34	14.45	1.85	13.07	1.24
10.	Austria	6.96	0.80	6.80	0.86	8.83	1.13	11.41	1.08
	Others	144.19	16.54	126.11	16.05	117.06	14.96	133.10	12.64
	Total	871.70	100	785.92	100	782.31	100	1053.24	100

Source: UN Comtrade

World's top Exporters of Household Copper Articles from 2018-2021(in million USD)
Data label given on the basis of 2021



Country wise world's top 5 exporter of Household Copper Articles by percentage in 2021 :



In 2021, the world exports of Household Copper Articles and parts thereof exceeded US \$1.05 billion. It has increased to 34.63% from the previous year. China was the top exporting country by Household Copper Articles and parts thereof exports value in the world. As of 2021, the commodity group exports worth value in the China was US \$ 470.83 million accounts for almost 44.70% of the world's exports value. Other Asia,nes ranked in second that year, with the said export with a share of 14.32% of global export. Germany ranked in 3rd in the world in the same year, with 11.33% share globally. With 4.50% India occupied the 4th position in ranking among the world's largest exporting countries of Household Copper Articles in 2021.

Table-3

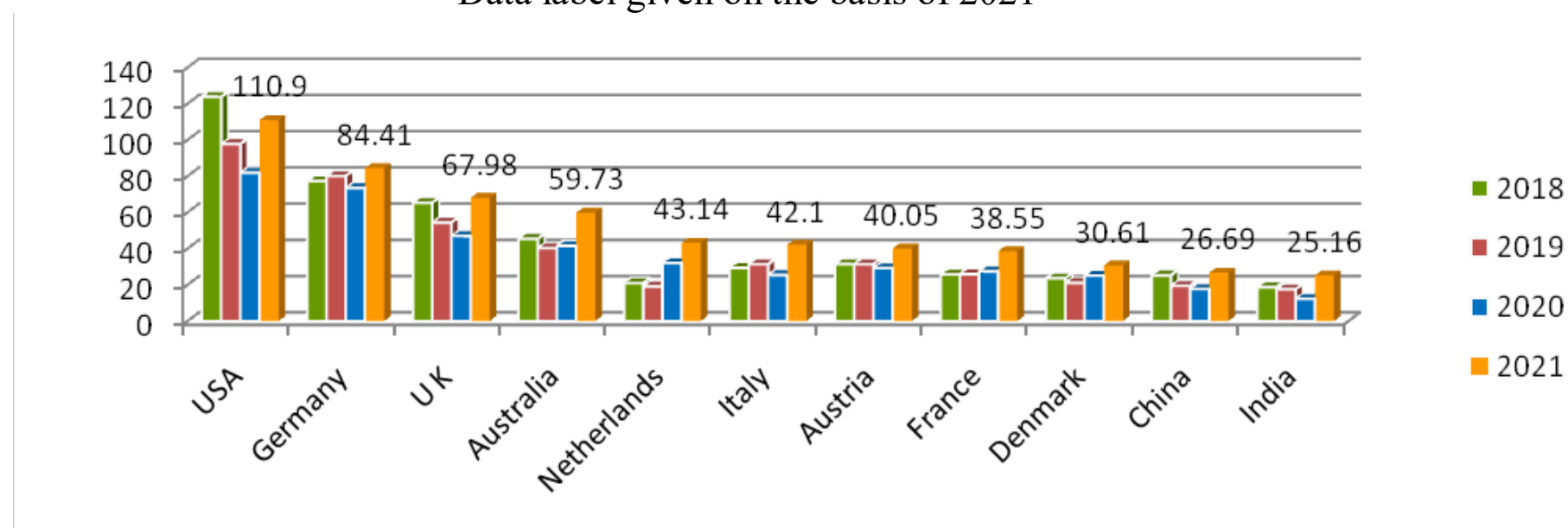
World's top 10 Importers of Household Copper Articles (H.S Code-7418)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	123.78	15.35	97.73	13.18	81.92	11.65	110.90	11.61
2.	Germany	77.30	9.59	80.09	10.80	73.42	10.45	84.41	8.84
3.	U K	65.31	8.10	54.35	7.33	46.98	6.68	67.98	7.12
4.	Australia	45.41	5.63	40.27	5.43	41.46	5.90	59.73	6.25
5.	Netherlands	20.96	2.60	19.16	2.58	32.03	4.56	43.14	4.52
6.	Italy	29.33	3.64	31.37	4.23	25.39	3.61	42.10	4.41
7.	Austria	31.46	3.90	31.42	4.24	29.27	4.16	40.05	4.19
8.	France	25.73	3.19	25.87	3.49	27.42	3.90	38.55	4.04
9.	Denmark	23.65	2.93	21.07	2.84	25.07	3.57	30.61	3.21
10.	China	25.24	3.13	19.49	2.63	17.70	2.52	26.69	2.79
11.	India	18.66	2.31	17.56	2.37	12.31	1.75	25.16	2.63
	Others	319.35	39.61	303.19	40.88	289.92	41.25	385.67	40.38
	Total	806.18	100	741.59	100	702.89	100	954.99	100

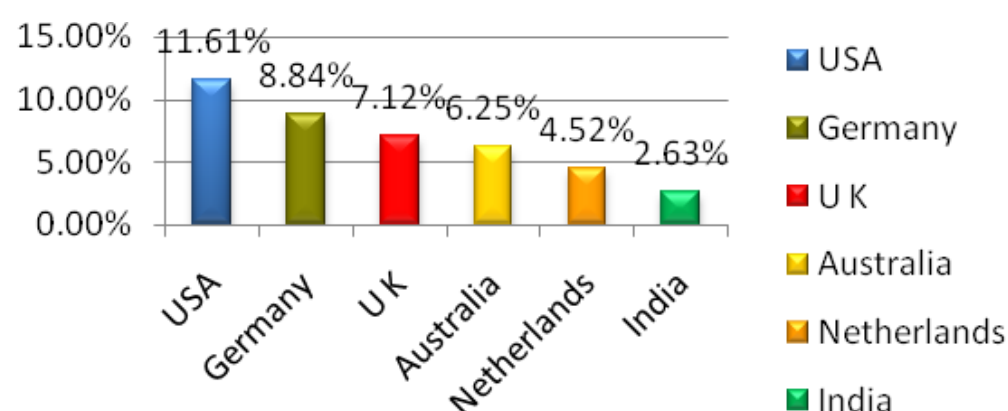
Source : UN Comtrade

Leading Household Copper Articles importers of world from 2018-2021(in million USD)

Data label given on the basis of 2021



Country wise world's top 3 importers of Household Copper Articles by percentage in 2021

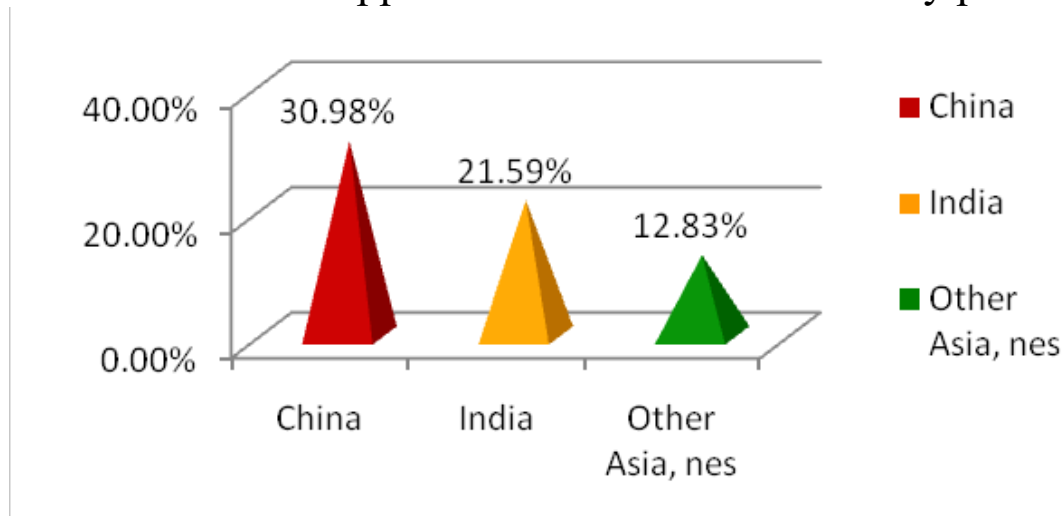


In 2021, the world imports of Household Copper Articles and parts thereof was almost US \$ 955 million. It was US \$ 702.89 million in the previous year. In 2021 with Household Copper Articles and parts thereof imported by USA with imports valued at approximately US \$ 110.90 million, accounted for 11.61 % of world import value of it, which makes USA as largest importer of the commodity group in world . Germany and UK ranked in second and third that year, with the share of 8.84% and 7.12% of global import respectively. In the same year Household Copper Articles and parts thereof by India 2.63% share of world import, which makes India as 11th largest importer of Household Copper Articles and parts thereof in the world.

Annexure-1

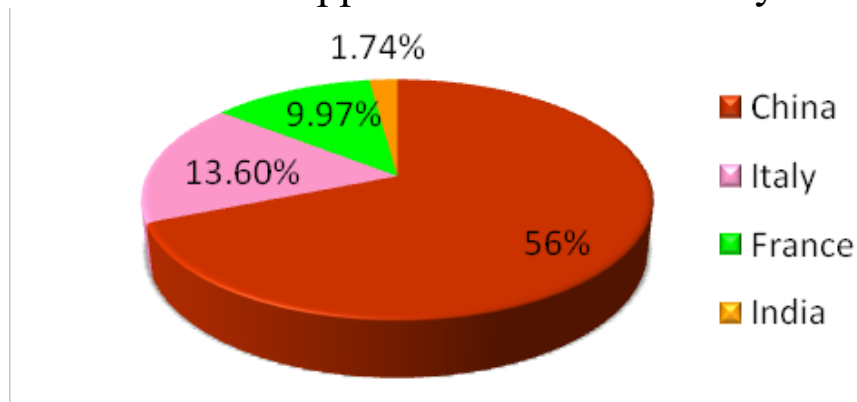
Sources of world's top 3 importers of Household Copper Articles (H.S Code-7418)

(i) Top 3 Sources of Household Copper Articles to USA in 2021 by percentage:



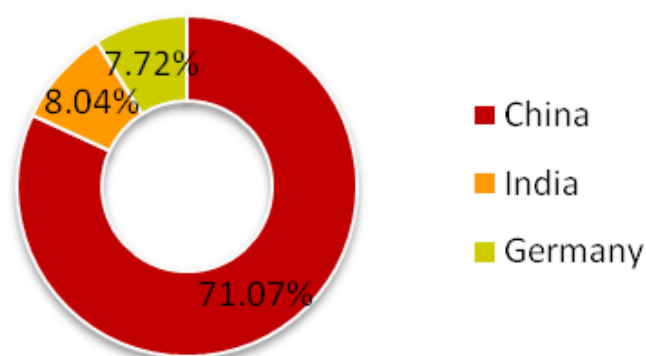
USA imported most of its Household Copper Articles from China, 30.98% share of USA's total import value of Household Copper Articles came from China in 2021. In that Household Copper Articles exported by **India** to USA was 21.59% share USA's total import, which makes India as a 2nd largest source country of it to USA. It was followed by Other Asia, nes (12.83%). **(Source : UN Comtrade)**

ii) Top 3 Sources of Household Copper Articles to Germany in 2021 by percentage:



Germany is dependent for most of its requirements of Household Copper Articles on China. In 2021 Germany has imported 56% share of its total import of Household Copper Articles from China, which was followed by Italy (13.60%) and France (9.97%). In the same year India's share was 1.74% of Germany's total import. **(Source : UN Comtrade)**

iii) Top 3 Sources of Household Copper Articles to UK in 2021 by percentage:



China was the largest source country of Household Copper Articles to UK in 2021. China exports 71.07% of the Commodity group to UK in 2021, In the same year **India** has exported to UK 8.04 % share of UK's total import of Household Copper Articles and occupied the 2nd largest source of it to UK, which was followed by Germany with 7.72% share. **(Source: UN Comtrade)**

Fruit Juice (including Grapes Must)

Juice is a drink made from the extraction or pressing of the natural liquid contained in fruit and vegetables. It can also refer to liquids that are flavored with concentrate or other biological food sources, such as meat or seafood, such as clam juice. Juice is commonly consumed as a beverage or used as an ingredient or flavoring in foods or other beverages, as for smoothies. Juice emerged as a popular beverage choice after the development of pasteurization methods enabled its preservation without using fermentation (which is used in wine production).

Groups of grape pits dated to 8000 BCE show early evidence of juice production; although it is thought that the grapes may have been alternatively used to produce wine.^[citation needed] One of the first regularly produced juices was lemonade, appearing in 16th-century Italy, as an import, after its conception in the Middle East. Orange juice originated in the 17th century. In the 18th century, James Lind linked citrus fruits to the prevention of scurvy, which, a century later, led to the implementation of the Merchant Shipping Act of 1867, requiring all ocean-bound British ships to carry citrus-based juice on board.

Juice is prepared by mechanically squeezing or macerating (sometimes referred to as cold pressing) fruit or vegetable flesh without the application of heat or solvents. For example, orange juice is the liquid extract of the fruit of the orange tree, and tomato juice is the liquid that results from pressing the fruit of the tomato plant. Juice may be prepared in the home from fresh fruit and vegetables using a variety of hand or electric juicers. Many commercial juices are filtered to remove fiber or pulp, but high-pulp fresh orange juice is a popular beverage. Additives are put in some juices, such as sugar and artificial flavours. Common methods for preservation and processing of fruit juices include canning, pasteurization, concentrating, freezing, evaporation and spray drying.

After the fruits are picked and washed, the juice is extracted by one of two automated methods. In the first method, two metal cups with sharp metal tubes on the bottom cup come together, removing the peel and forcing the flesh of the fruit through the metal tube. The juice of the fruit, then escapes through small holes in the tube. The peels can then be used further, and are washed to remove oils, which are reclaimed later for usage.

After the juice is filtered, it may be concentrated in evaporators, which reduce the size of juice by a factor of 5, making it easier to transport and increasing its expiration date. Juices are concentrated by heating under a vacuum to remove water, and then cooling to around 13 degrees Celsius. About two thirds of the water in a juice is removed. The juice is later reconstituted, a process in which the concentrate is mixed with water and other factors to return any lost flavor from the concentrating process. Juices can also be sold in a concentrated state, in which the consumer adds water to the concentrated juice as preparation.

Juices are then pasteurized and filled into containers, often while still hot. If the juice is poured into a container while hot, it is cooled as quickly as possible. Packages that cannot stand heat require sterile conditions for filling. Chemicals such as hydrogen peroxide can be used to sterilize containers.

Juices are often consumed for their perceived health benefits. For example, orange juice with natural or added vitamin C, folic acid, and potassium. Juice provides nutrients such as carotenoids, polyphenols and vitamin C that offer health benefits.

High consumption of fruit juice with added sugar may be linked to weight gain, but not all studies have shown this effect. If 100% from fruit, juice can help meet daily intake recommendations for some nutrients. Research suggests that 100% fruit juice is not associated with increased risk of diabetes. A 2018 review concluded that 100% fruit juice increases the risk of tooth decay in children but there is "no conclusive evidence that consumption of 100% fruit juice has adverse health effects".

These are broadly classified under **H.S. Code-2009**.

Table - 4

India's Top 10 destination of Fruit Juice (H. S. -2009)

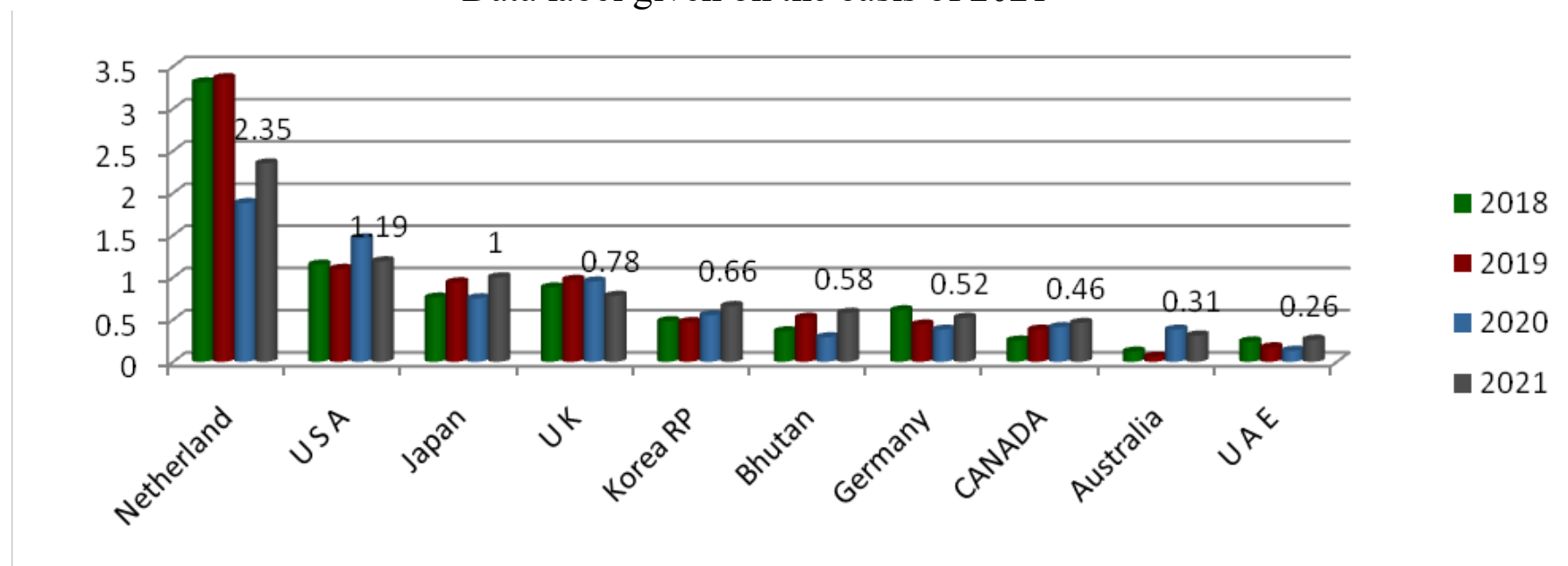
Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	Netherland	3.31	30.56	3.36	28.00	1.88	19.78	2.35	23.96
2.	U S A	1.15	10.59	1.10	9.13	1.46	15.38	1.19	12.15
3.	Japan	0.76	7.01	0.94	7.85	0.75	7.93	1.00	10.20
4.	U K	0.88	8.10	0.97	8.11	0.95	9.99	0.78	7.90
5.	Korea RP	0.48	4.40	0.47	3.91	0.55	5.81	0.66	6.71
6.	Bhutan	0.36	3.31	0.52	4.35	0.29	3.10	0.58	5.95
7.	Germany	0.61	5.65	0.44	3.70	0.38	4.04	0.52	5.25
8.	CANADA	0.25	2.27	0.38	3.14	0.41	4.32	0.46	4.72
9.	Australia	0.12	1.11	0.06	0.53	0.38	4.03	0.31	3.14
10.	U A E	0.24	2.25	0.17	1.44	0.13	1.38	0.26	2.65
	Others	2.68	24.75	3.58	29.84	2.30	24.24	1.70	17.36
	Total	10.83	100	12.01	100	9.49	100	9.82	100

Source: DGCI&S

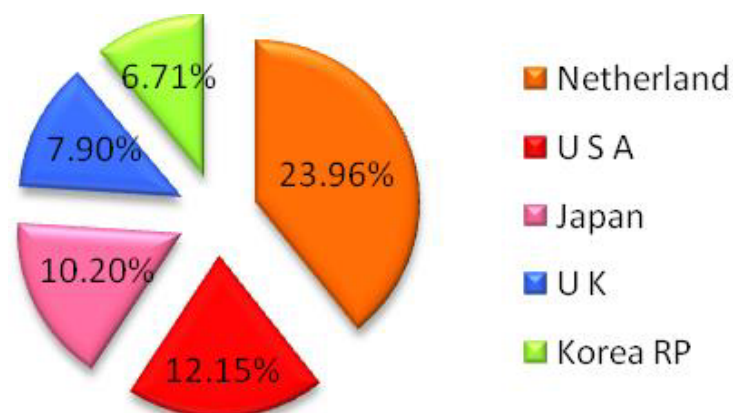
Note : India's Export including re-export

India's major destination Fruit Juice from 2018-2021(Values in million USD)

Data label given on the basis of 2021



India's top 5 destinations of Fruit Juice by percentage in 2021:



In the year 2021, India has exported Fruit Juice worth of US \$ 9.82 USD which was 3.47% more compared to previous year. In the year 2021 Fruit Juice has exported from India majorly to Netherlands, USA and Japan. In 2021 India has exported US \$ 2.35 Million of Fruit Juice to Netherlands, which holds the top position with the share of 23.96 % of the total export of India. With the share of 12.15% and 10.20% , USA and Japan takes 1st runner up and 2nd runner up position in the global importers of Fruit Juice from India.

Table - 5

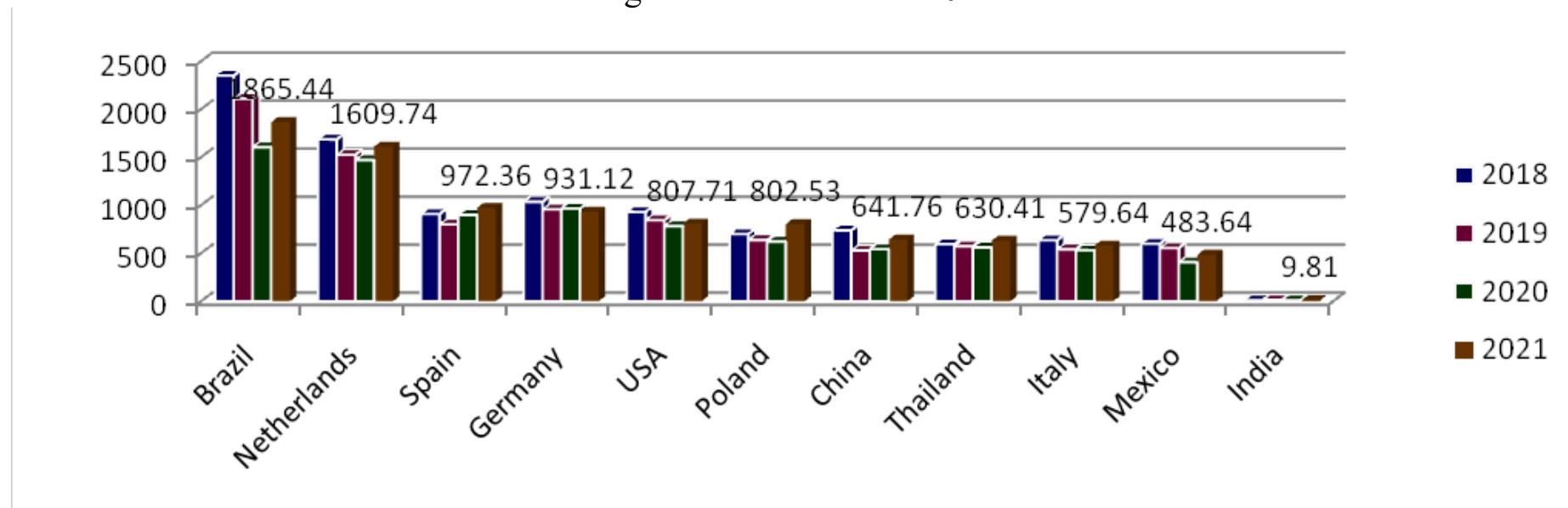
World's Top 10 exporters of Fruit Juice (H. S. -2009)

Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	Brazil	2350.58	15.24	2109.91	15.06	1603.33	12.17	1865.44	12.50
2.	Netherlands	1684.86	10.92	1524.65	10.88	1470.58	11.16	1609.74	10.78
3.	Spain	908.50	5.89	799.82	5.71	898.56	6.82	972.36	6.51
4.	Germany	1035.41	6.71	956.22	6.82	964.57	7.32	931.12	6.24
5.	USA	929.81	6.03	844.31	6.02	781.99	5.94	807.71	5.41
6.	Poland	699.82	4.54	637.37	4.55	620.55	4.71	802.53	5.38
7.	China	738.20	4.78	527.61	3.76	541.32	4.11	641.76	4.30
8.	Thailand	594.26	3.85	571.94	4.08	560.76	4.26	630.41	4.22
9.	Italy	635.17	4.12	540.85	3.86	531.20	4.03	579.64	3.88
10.	Mexico	598.60	3.88	553.70	3.95	406.49	3.09	483.64	3.24
69.	India	10.75	0.07	12.03	0.09	9.46	0.07	9.81	0.07
	Others	5242.63	33.98	4935.66	35.22	4786.25	36.33	5594.30	37.47
	Total	15428.60	100	14014.05	100	13175.05	100	14928.46	100

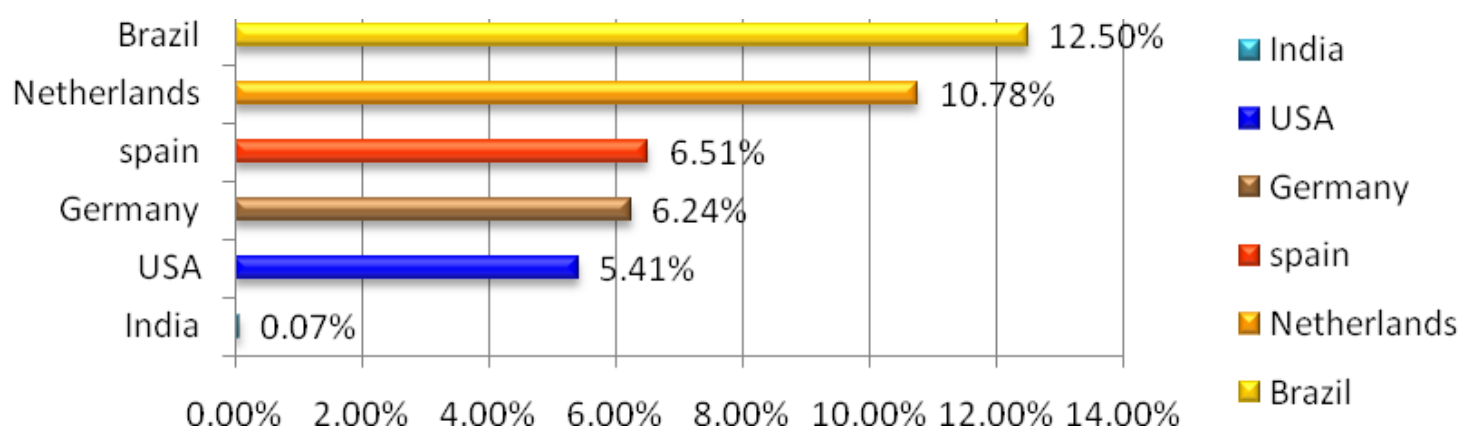
Source: UN Comtrade

Top world exporters of Fruit Juice from 2018 to 2021 (Values in million USD)

Data label given on the basis of 2021



Export trends in world's leading Fruit Juice exporters by percentage in 2021:



In 2021, the value of fruit juice exported globally reached almost US \$ 15 billion and US \$ 13.17 billion in 2020, which shows a growth of more than 13% from the 2020. Brazil was the leading exporter in 2021, exported US \$ 1.86 billion of Fruit Juice (including Grapes Must) to the world, which was accounted by 12.50% share of Global total. Which was followed by Netherlands (US \$ 1.61 billion) and Spain (US \$ 972.36 million). India has exported only US \$ 9.81 million of Fruit Juice to the different countries through out the year.

Table - 6

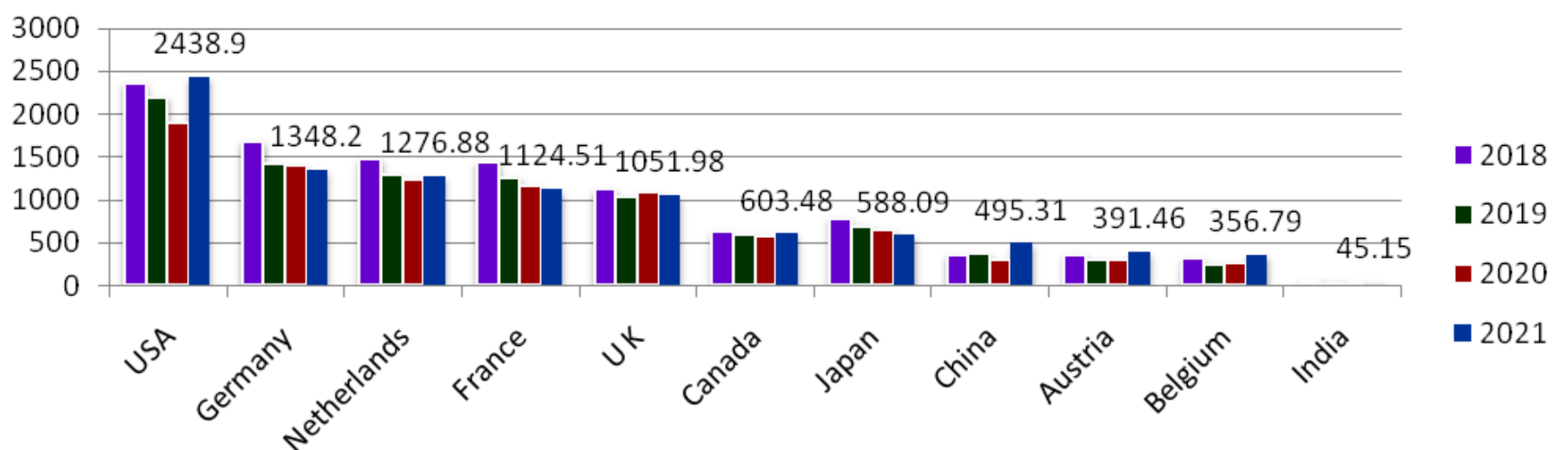
World's Top 10 Importers of Fruit Juice (H. S. -2009)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	2363.23	14.62	2199.90	15.12	1895.43	13.78	2438.90	16.44
2.	Germany	1680.38	10.40	1413.89	9.72	1401.45	10.19	1348.20	9.09
3.	Netherlands	1474.00	9.12	1283.28	8.82	1242.15	9.03	1276.88	8.61
4.	France	1443.95	8.93	1251.86	8.60	1160.19	8.44	1124.51	7.58
5.	U K	1118.66	6.92	1038.98	7.14	1080.81	7.86	1051.98	7.09
6.	Canada	621.21	3.84	589.55	4.05	581.20	4.23	603.48	4.07
7.	Japan	779.99	4.83	692.97	4.76	651.23	4.74	588.09	3.96
8.	China	353.14	2.18	365.01	2.51	302.59	2.20	495.31	3.34
9.	Austria	363.62	2.25	295.32	2.03	300.24	2.18	391.46	2.64
10.	Belgium	311.52	1.93	252.86	1.74	266.63	1.94	356.79	2.40
42.	India	47.81	0.30	42.97	0.30	27.44	0.20	45.15	0.30
	Others	5606.22	34.68	5125.52	35.22	4843.84	35.22	5117.99	34.49
	Total	16163.73	100	14552.11	100	13753.20	100	14838.74	100

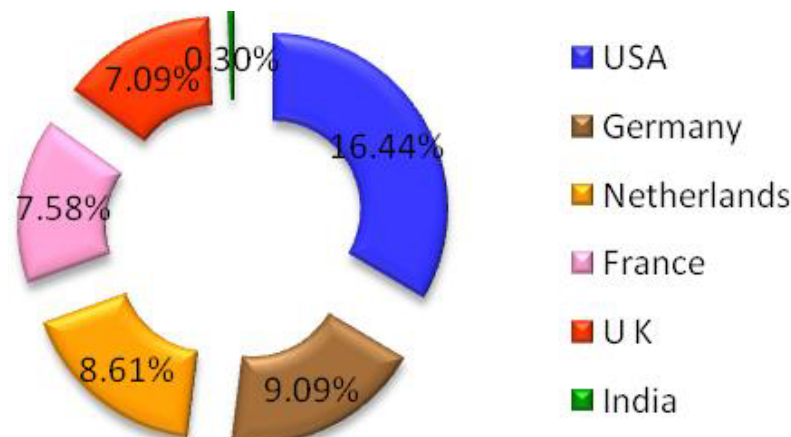
Source :UNComtrade

Top world importers of Fruit Juice from 2018 to 2021 (Values in million USD)

Data label given on the basis of 2021

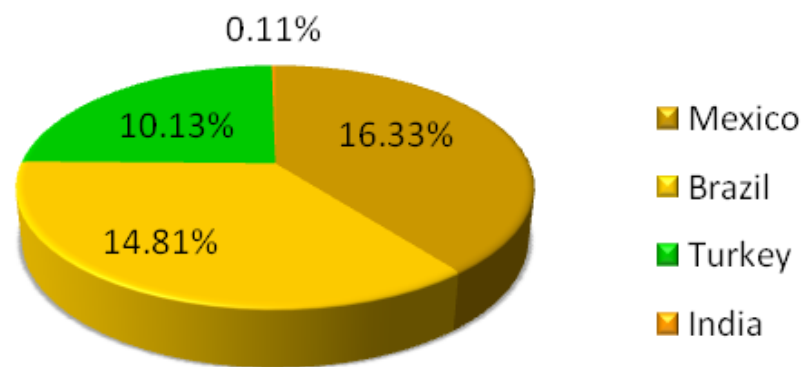


Country wise leading global Importer of Fruit Juice by percentage in 2021

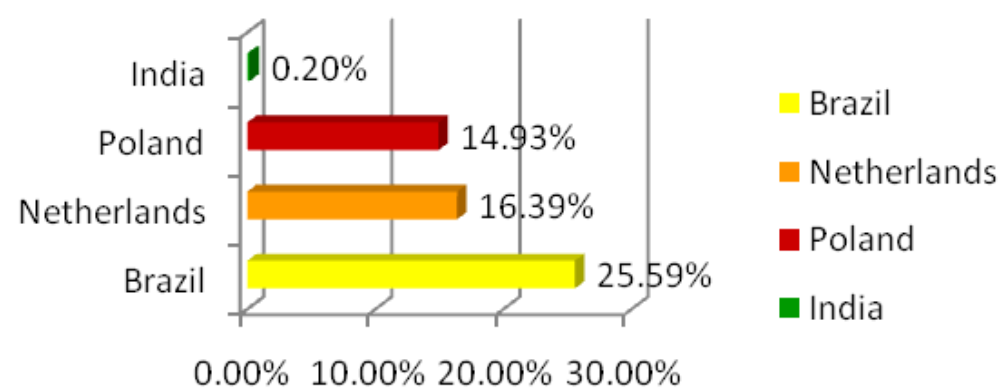


The USA (US \$ 2.43 billion), Germany (\$1.34 billion) and Netherlands (US \$ 1.27 billion) were the key importers of Fruit Juice (including Grapes Must) across the globe in 2021, together comprising 34.14% of global total import. In this year **India** has imported only US \$ 45.15 million worth value of Fruit Juice (including Grapes Must) from the world which was accounted only 0.30% share of world import and it was deficit trade balance for India. This year World import of the commodity group has risen by more than 7.90% from the year 2020.

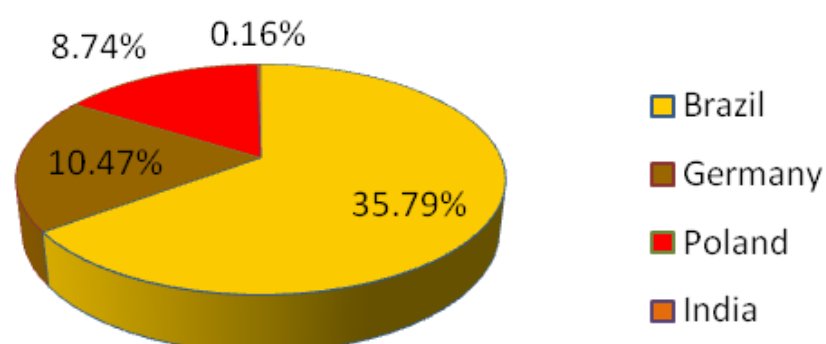
Annexure-II

Sources of world's top three importers of Fruit Juice (H. S. -2009)**i) Top 3 Sources of Fruit Juice to USA in 2021 by percentage:**

USA, the largest importer of Fruit juice in the world, imported 16.33% of its total requirements of Fruit Juice from Mexico in 2021. In the same year Brazil and Turkey was the 2nd and 3rd largest source country of the commodity group to USA, exports 14.81 % and 10.13% share respectively. India's share was only 0.11% to USA in that year. **(Source: UN Comtrade)**

ii) Top 3 Sources of Fruit Juice to Germany in 2021 by percentage:

25.59% share of Fruit Juice imports to Germany came from Brazil in 2021, it was followed by Netherlands (16.39%) and Poland (14.93%). In the same year Germany imported 0.20%% share of its total import of Fruit Juice from **India**. **(Source: UN Comtrade)**

iii) Top 3 Sources of Fruit Juice to Netherlands in 2021 by percentage:

With 35.79% share of Netherland's total import of Frit Juice, Brazil became the largest source of it to Netherlands in 2021. Germany, the 2nd largest source for the commodity group of Netherlands with 10.47% share, it was followed by Poland with 8.74% share of Netherland's total import of Fruit Juice in 2021. India has exported only 0.16% share of Fruit Juice to Netherland in the same year. **(Source : UN Comtrade)**

IMPORT

Sunflower Seed, Sunflower or Cotton Seed Oil

The **sunflower seed** is the seed of the sunflower . There are three types of commonly used sunflower seeds: linoleic, high oleic, and sunflower oil seeds. Each variety has its own unique levels of monounsaturated, saturated, and polyunsaturated fats. The information in this article refers mainly to the linoleic variety.

For commercial purposes, sunflower seeds are usually classified by the pattern on their husks. If the husk is solid black, the seeds are called black oil sunflower seeds. The crops may be referred to as oilseed sunflower crops. These seeds are usually pressed to extract their oil. Striped sunflower seeds are primarily eaten as a snack food; as a result, they may be called confectionery sunflower seeds.

In 2020, global production of sunflower seeds was 50 million tonnes, led by Russia and Ukraine with 53% of the world total combined (table). Argentina, China, and Romania also contributed significant volumes.

Sunflower seeds are more commonly eaten as a snack than as part of a meal. They can also be used as garnishes or ingredients in various recipes. The seeds may be sold as in-shell seeds or dehulled kernels. The seeds can also be sprouted and eaten in salads.

In a 100-gram serving, dried whole sunflower seeds provide 584 calories and are composed of 5% water, 20% carbohydrates, 51% total fat and 21% protein (table). The seeds are a rich source (20% or higher of the Daily Value, DV) of protein (42% DV), dietary fiber (36% DV), many B vitamins (23–129% DV) and vitamin E (234% DV). The seeds also contain high levels of dietary minerals, including magnesium, manganese, phosphorus, iron and zinc (40–94% DV).

Half of a 100-gram serving is fat, mainly monounsaturated and polyunsaturated fats, principally linoleic acid. Additionally, the seeds contain phytosterols which may contribute toward lower levels of blood cholesterol.

Sunflower oil is the non-volatile oil pressed from the seeds of the sunflower (*Helianthus annuus*). Sunflower oil is commonly used in food as a frying oil, and in cosmetic formulations as an emollient.

Sunflower oil is primarily composed of linoleic acid, a polyunsaturated fat, and oleic acid, a monounsaturated fat. Through selective breeding and manufacturing processes, oils of differing proportions of the fatty acids are produced. The expressed oil has a neutral taste profile. The oil contains a large amount of vitamin E.

As of 2017, genome analysis and development of hybrid sunflowers to increase oil production are under development to meet greater consumer demand for sunflower oil and its commercial varieties. In 2018, Ukraine and Russia together accounted for 53% of the world's production of sunflower oil. In 2018, world production of sunflower oil was 18 million tonnes, led by Ukraine and Russia as the leading producers accounting together for 53% of the world total.

In 2022, there is a global shortage of sunflower oil due to the 2022 Russian invasion of Ukraine which has led to over 50% drop in the availability of sunflower oil. Due to the shortages many brands are reforming their recipes by switching to rapeseed oil to allow the production of their products to continue.

Several varieties of sunflower oil seeds have been developed by standard plant breeding methods, mainly to vary the amounts of oleic acid and linoleic acid which, respectively, are the predominant monounsaturated and polyunsaturated fats in sunflower oil Sunflower oil is a rich source of vitamin E (tables).

Refined sunflower oil is used for low-to-extremely-high-temperature cooking. As a frying oil, it behaves as a typical vegetable triglyceride. Unrefined sunflower oil is a traditional salad dressing in Eastern European cuisines. Sunflower oil is also an ingredient in sunflower butter. Methods for cooking snack foods, such as potato chips or French fries, may use sunflower oil.

These are broadly classified under **H. S. Code 1512**.

Table - 7

India's Top 10 Source Countries of Sunflower Seeds, Oil or Cotton Seed Oil (HS Code : 1512)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	Ukraine	1852.21	95.86	1519.48	84.50	1564.71	75.47	1832.13	74.88
2.	Russia	0.00	0.00	156.47	8.70	352.89	17.02	303.37	12.40
3.	Argentina	72.82	3.77	108.80	6.05	128.08	6.18	233.08	9.53
4.	Nepal	0.00	0.00	0.00	0.00	4.13	0.20	36.16	1.48
5.	Romania	0.00	0.00	6.86	0.38	0.00	0.00	22.38	0.91
6.	Benin	0.00	0.00	1.85	0.10	1.71	0.08	14.00	0.57
7.	Indonesia	0.00	0.00	0.00	0.00	0.00	0.00	3.35	0.14
8.	Spain	0.05	0.00	0.07	0.00	0.13	0.01	0.92	0.04
9.	U S A	4.58	0.24	0.75	0.04	0.85	0.04	0.50	0.02
10.	Netherland	0.03	0.00	0.00	0.00	0.01	0.00	0.30	0.01
	Others	2.54	0.13	3.93	0.22	20.73	1.00	0.45	0.02
	Total	1932.22	100	1798.21	100	2073.26	100	2446.64	100

Source: DGCI&S

Note : India's Import including Re-import

The Sunflower Seeds, Oil or Cotton Seed Oil import to India in 2021 stood at US \$ 2.44 Billion and US \$ 2.07 Billion in 2020, which shows a growth of more than 18.84% from the 2020. Among the top importing countries, India imported the highest dollar worth of Sunflower Seeds, Oil or Cotton Seed Oil from Ukraine with shipments in 2021 valued at US \$ 2.44 Billion which is greater than the previous year. In second place was Russia, from which India imported around US \$ 303.37 Sunflower Seeds, Oil or Cotton Seed Oil. Which was followed by Argentina exported US \$ 233.08 Million worth of Sunflower Seeds, Oil or Cotton Seed Oil to India in that year. The top 10 countries shared 99.08% of the Sunflower Seeds, Oil or Cotton Seed Oil import to India.

Table - 8

World Top 10 Importer of Sunflower seeds, Oil or Cotton Seed Oil (HS Code : 1512)

Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	India	1904.16	18.85	1797.68	17.66	2079.74	16.87	2447.94	16.23
2.	China	572.07	5.66	920.90	9.05	1565.52	12.70	1348.26	8.94
3.	Turkey	416.66	4.13	438.15	4.30	708.63	5.75	1205.15	7.99
4.	Netherlands	434.85	4.31	526.64	5.17	751.85	6.10	968.75	6.42
5.	Spain	430.30	4.26	471.29	4.63	522.75	4.24	805.44	5.34
6.	Italy	511.66	5.07	526.53	5.17	507.66	4.12	741.88	4.92
7.	Germany	408.99	4.05	463.42	4.55	467.39	3.79	627.88	4.16
8.	Belgium	382.95	3.79	374.89	3.68	531.63	4.31	543.07	3.60
9.	Ethiopia	75.67	0.75	138.25	1.36	394.56	3.20	445.61	2.95
10.	U K	293.82	2.91	328.34	3.23	317.62	2.58	415.07	2.75
	Others	4669.42	46.23	4193.42	41.19	4484.29	36.36	5532.30	36.68
	Total	10100.56	100	10179.50	100	12331.64	100	15081.36	100

Source :UNComtrade

In the year 2021, around US \$ 15.08 Billion of s Sunflower Seeds, Oil or Cotton Seed Oil were imported globally. Inida was by far the leading importer of Sunflower Seeds, Oil or Cotton Seed Oil. with an annual import value of US \$ 2.44 Billion in 2021, accounted for nearly 16.23% share of world import of Sunflower Seeds, Oil or Cotton Seed Oil, which was followed by China (8.94%) and Turkey (7.99%). The import value of Sunflower Seeds, Oil or Cotton Seed Oil into The global import of Sunflower Seeds, Oil or Cotton Seed Oil has increased more than 22% during the year 2021 compare to that than the year 2020.

Platinum, unwrought, Semi manufacture or in powder form

Platinum is a chemical element with the symbol **Pt** and atomic number 78. It is a dense, malleable, ductile, highly unreactive, precious, silverish-white transition metal. Its name originates from Spanish *platina*, a diminutive of *plata* "silver"

Platinum is a member of the platinum group of elements and group 10 of the periodic table of elements. It has six naturally occurring isotopes. It is one of the rarer elements in Earth's crust, with an average abundance of approximately 5 µg/kg. It occurs in some nickel and copper ores along with some native deposits, mostly in South Africa, which accounts for ~80% of the world production. Because of its scarcity in Earth's crust, only a few hundred tonnes are produced annually, and given its important uses, it is highly valuable and is a major precious metal commodity.

Platinum is one of the least reactive metals. It has remarkable resistance to corrosion, even at high temperatures, and is therefore considered a noble metal. Consequently, platinum is often found chemically uncombined as native platinum. Because it occurs naturally in the alluvial sands of various rivers, it was first used by pre-Columbian South American natives to produce artifacts

Platinum is used in catalytic converters, laboratory equipment, electrical contacts and electrodes, platinum resistance thermometers, dentistry equipment, and jewelry. Platinum is used in the glass industry to manipulate molten glass which does not "wet" platinum. As a heavy metal, it leads to health problems upon exposure to its salts; but due to its corrosion resistance, metallic platinum has not been linked to adverse health effects.

Pure platinum is currently less expensive than pure gold, having been so continuously since 2015, but has been twice as expensive or more, mostly prior to 2008. In early 2021, the value of platinum ranged from US\$1,055 to US\$1,320 per troy ounce.

Platinum is an extremely rare metal,^[23] occurring at a concentration of only 0.005 ppm in Earth's crust. It is sometimes mistaken for silver. Platinum is often found chemically uncombined as native platinum and as alloy with the other platinum-group metals and iron mostly. Most often the native platinum is found in secondary deposits in alluvial deposits. The alluvial deposits used by pre-Columbian people in the Chocó Department, Colombia are still a source for platinum-group metals. Another large alluvial deposit is in the Ural Mountains, Russia, and it is still mined.

In nickel and copper deposits, platinum-group metals occur as sulfides (e.g., (Pt,Pd)S), tellurides (e.g., PtBiTe), antimonides (PdSb), and arsenides (e.g. PtAs₂), and as end alloys with nickel or copper. Platinum arsenide, sperrylite (PtAs₂), is a major source of platinum associated with nickel ores in the Sudbury Basin deposit in Ontario, Canada. At Platinum, Alaska, about 17,000 kg (550,000 ozt) was mined between 1927 and 1975. The mine ceased operations in 1990.^[26] The rare sulfide mineral cooperite, (Pt,Pd,Ni)S, contains platinum along with palladium and nickel. Cooperite occurs in the Merensky Reef within the Bushveld complex, Gauteng, South Africa.

Archaeologists have discovered traces of platinum in the gold used in ancient Egyptian burials as early as 1200 BCE. For example, a small box from burial of Shepenupet II was found to be decorated with gold-platinum hieroglyphics. However, the extent of early Egyptians' knowledge of the metal is unclear. It is quite possible they did not recognize there was platinum in their gold.

Of the 218 tonnes of platinum sold in 2014, 98 tonnes were used for vehicle emissions control devices (45%), 74.7 tonnes for jewelry (34%), 20.0 tonnes for chemical production and petroleum refining (9.2%), and 5.85 tonnes for electrical applications such as hard disk drives (2.7%). The remaining 28.9 tonnes went to various other minor applications, such as medicine and biomedicine, glassmaking equipment, investment, electrodes, anticancer drugs, oxygen sensors, spark plugs and turbine engines.

Platinum is a precious metal commodity; its bullion has the ISO currency code of XPT. Coins, bars, and ingots are traded or collected. Platinum finds use in jewellery, usually as a 90–95% alloy, due to its inertness. It is used for this purpose for its prestige and inherent bullion value. Jewellery trade publications advise jewellers to present minute surface scratches (which they term patina) as a desirable feature in an attempt to enhance value of platinum products.

These are broadly classified under **H. S. Code 7110**.

Table - 9

India's Top 10 Sources of Platinum (HS Code : 7110)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	U K	98.50	34.25	148.83	53.12	173.16	33.31	208.25	37.30
2.	Germany	53.94	18.75	30.19	10.78	86.38	16.62	142.69	25.56
3.	South Africa	66.87	23.25	64.41	22.99	117.87	22.68	94.86	16.99
4.	U S A	14.64	5.09	15.11	5.39	97.35	18.73	52.82	9.46
5.	Italy	7.95	2.76	10.76	3.84	10.80	2.08	19.41	3.48
6.	Russia	7.39	2.57	0.00	0.00	19.98	3.84	13.46	2.41
7.	U A E	0.14	0.05	0.70	0.25	0.77	0.15	8.77	1.57
8.	Belgium	5.97	2.08	0.00	0.00	1.82	0.35	7.91	1.42
9.	Hong Kong	0.47	0.16	1.52	0.54	4.26	0.82	4.52	0.81
10.	Ecuador	0.00	0.00	0.00	0.00	0.00	0.00	1.51	0.27
	Others	31.75	11.04	8.66	3.09	7.42	1.43	4.15	0.74
	Total	287.63	100	280.17	100	519.81	100	558.35	100

Source: DGCI&S

Note : India's Import including re-import

Among the top importing countries, India imported the highest dollar worth of Platinum from UK with shipments in 2021 valued at US \$ 208.25 Million which is greater than the previous year Platinum shipments from UK into India. In second place was Germany, from which India imported around US \$ 142.69 Million worth of Platinum and South Africa stood at third position from where India imported US \$ 94.86 million of Platinum in the same year. The top 10 countries shared 99.26% of the Platinum import to India. The dollar value of Platinum import in 2021 stood at US \$ 558.35 million, which shows a increasing by 7.41 from the previous year import value which was US \$ 519.81 Million in 2020.

16
Table - 10

World Top 10 Importer of Platinum (HS Code : 7110)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	5996.06	18.31	6812.71	16.59	11289.48	18.10	18351.78	20.29
2.	U K	3830.66	11.70	6412.13	15.61	9408.81	15.09	11857.82	13.11
3.	Germany	4402.55	13.44	5193.63	12.64	6952.60	11.15	11496.22	12.71
4.	Japan	4148.72	12.67	4590.47	11.18	6969.26	11.18	11355.63	12.56
5.	China	3199.68	9.77	3668.42	8.93	7968.36	12.78	10010.89	11.07
6.	Hong Kong	3249.23	9.92	4438.31	10.80	5960.85	9.56	6912.53	7.64
7.	Italy	1514.08	4.62	1716.65	4.18	2727.35	4.37	4219.77	4.67
8.	Switzerland	1254.38	3.83	1907.29	4.64	3118.02	5.00	3408.61	3.77
9.	Rep of Korea	666.07	2.03	1134.05	2.76	1807.09	2.90	2977.49	3.29
10.	Canada	415.41	1.27	672.58	1.64	1283.30	2.06	2190.25	2.42
15.	India	285.63	0.87	280.65	0.68	520.19	0.83	557.54	0.62
	Others	3790.50	11.57	4250.09	10.35	4356.57	6.99	7104.02	7.85
	Total	32752.96	100	41076.98	100	62361.87	100	90442.52	100

Source :UNComtrade

In value terms, platinum imports amounted to US \$ 90.44 Billion in 2021. Which was drastic increase by 45 % from 2020. Global platinum import peaked of US \$ 90.44 Billion in 2021. USA (US \$ 18.35 B) was the largest importer for platinum, making up 20.29% of total imports. UK (US \$ 11.85 B) took the second position in the ranking, followed by Germany (US \$ 11.49 B) All these countries together took more than 46% share of total imports. **India** (US \$ 557.54 M) occupied the 15th largest importer of the commodity group with 0.62% share of global total import in 2021.