

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 **Bed Linen, Table Linen etc.. & Children's Picture, Drawing or Colouring books** and imports of **Electric Filament and Acyclic Hydro Carbons** 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-6302 &4903 for export and 8539 & 2901 for import) and the latest finalized data available on the UN Comtrade Database up to year 2020 and on the DGCI&S Database up to May'2022. So, trends from 2017 to 2020 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 Bed Linen, Table Linen etc.. & Children's Picture, Drawing or Colouring books and imports of Electric Filament and Acyclic Hydro Carbons. 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 Bed Linen etc. with their shares in percentage.**
- **Table 2 : World's top 10 Exporters of Bed Linen etc. with their shares in percentage.**
- **Table 3 : World's top 10 Importers of Bed Linen etc. with their shares in percentage.**
- **Annex- I : Top 3 sources of Bed Linen etc. of World's top 3 Importers.**
- **Table 4 : India's top 10 destination of Children's Drawing or Colour Books with their shares in percentage.**
- **Table 5 : World's top 10 Exporters of Children's Drawing or Colour Books with their shares in percentage.**
- **Table 6 : World's top 10 Importers of Children's Drawing or Colour Books with their shares in percentage.**
- **Annex-II : Top 3 sources of Children's Drawing or Colour Books of World's top 3 Importers.**
- **Table 7 : India's top10 Sources of Electric Filament with their shares in percentage.**
- **Table 8 : World's top 10 Importers of Electric Filament with their shares in percentage.**
- **Table 9 : India's top 10 Sources of Acyclic Hydrocarbons with their shares in percentage.**
- **Table 10 : World's top 10 Importers of Acyclic Hydrocarbons with their shares in percentage.**

EXPORT

Items covered this week

Bed Linen, Table Linen etc...

Linen is a textile made from the fibers of the flax plant. Linen is very strong, absorbent, and dries faster than cotton. Because of these properties, linen is comfortable to wear in hot weather and is valued for use in garments. It also has other distinctive characteristics, notably its tendency to wrinkle.

Linen textiles appear to be some of the oldest in the world; their history goes back many thousands of years. Dyed flax fibers found in a cave in South-eastern Europe (present-day Georgia) suggest the use of woven linen fabrics from wild flax may date back over 30,000 years. Linen was used in ancient civilizations including Mesopotamia and ancient Egypt, and linen is mentioned in the Bible. In the 18th century and beyond, the linen industry was important in the economies of several countries in Europe as well as the American colonies.

Textiles in a linen weave texture, even when made of cotton, hemp, or other non-flax fibers, are also loosely referred to as "linen".

Many products can be made with linen: aprons, bags, towels (swimming, bath, beach, body and wash towels), napkins, bed linens, tablecloths, runners, chair covers, and men's and women's wear. Linen fabric has been used for table coverings, bed coverings and clothing for centuries. The significant cost of linen derives not only from the difficulty of working with the thread but also because the flax plant itself requires a great deal of attention. In addition, flax thread is not elastic, and therefore it is difficult to weave without breaking threads. Thus linen is considerably more expensive to manufacture than cotton.

Over the past 30 years the end use for linen has changed dramatically. Approximately 70% of linen production in the 1990s was for apparel textiles, whereas in the 1970s only about 5% was used for fashion fabrics.

Linen uses range across bed and bath fabrics (tablecloths, bath towels, dish towels, bed sheets); home and commercial furnishing items (wallpaper/wall coverings, upholstery, window treatments); apparel items (suits, dresses, skirts, shirts); and industrial products (luggage, canvases, sewing thread).^[40] It was once the preferred yarn for hand-sewing the uppers of moccasin-style shoes (loafers), but has been replaced by synthetics.

Nowadays, linen is one of the most preferred materials for bed sheets due to its durability and hypoallergenic properties. Linen can be up to three times stronger than cotton. This is because the cellulose fibers in linen yarn are slightly longer and wrapped tighter than those found in cotton yarn. This gives it great durability and allows linen products to be long-lasting.

Linen is also used extensively by artisan bakers. Known as a *couche*, the flax cloth is used to hold the dough into shape while in the final rise, just before baking. The *couche* is heavily dusted with flour which is rubbed into the pores of the fabric. Then the shaped dough is placed on the *couche*. The floured *couche* makes a "non stick" surface to hold the dough. Then ridges are formed in the *couche* to keep the dough from spreading.

Flax is grown in many parts of the world, but top quality flax is primarily grown in Western European countries and Ukraine. In recent years bulk linen production has moved to Eastern Europe and China, but high-quality fabrics are still confined to niche producers in Ireland, Italy and Belgium, and also in countries including Poland, Austria, France, Germany, Sweden, Denmark, Belarus, Lithuania, Latvia, the Netherlands, Spain, Switzerland, Britain and Kochi in India. High-quality linen fabrics are now produced in the United States for the upholstery market and in Belgium.

In 2020, according to the United Nations' repository of official international trade statistics, China was the top exporter of linen by trade value, with a reported US \$ 7.65 Billion in exports; Pakistan (US \$ 3.25 Billion), India (US \$ 1.42 Billion) were also major exporters in the world.

These are broadly classified under H.S. Code-6302.

Table - 1

India's Top 10 destination of Bed Linen, Table Linen etc (H.S Code-6302)

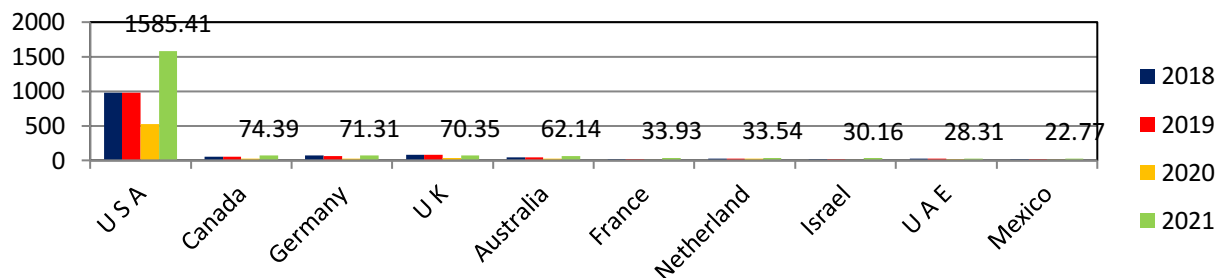
Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	U S A	982.15	62.03	975.69	61.52	525.53	63.79	1585.41	69.66
2.	Canada	51.39	3.25	53.31	3.36	25.30	3.07	74.39	3.27
3.	Germany	73.67	4.65	60.12	3.79	29.31	3.56	71.31	3.13
4.	U K	76.76	4.85	82.26	5.19	35.98	4.37	70.35	3.09
5.	Australia	43.36	2.74	43.03	2.71	24.20	2.94	62.14	2.73
6.	France	17.66	1.12	17.84	1.13	10.16	1.23	33.93	1.49
7.	Netherland	27.26	1.72	29.62	1.87	20.62	2.50	33.54	1.47
8.	Israel	17.69	1.12	17.70	1.12	10.94	1.33	30.16	1.33
9.	U A E	28.54	1.80	27.40	1.73	12.74	1.55	28.31	1.24
10.	Mexico	18.85	1.19	15.34	0.97	8.39	1.02	22.77	1.00
	Others	246.02	15.54	263.54	16.62	120.68	14.65	263.47	11.58
	Total	1583.34	100	1585.85	100	823.84	100	2275.77	100

Source: DGCI&S.

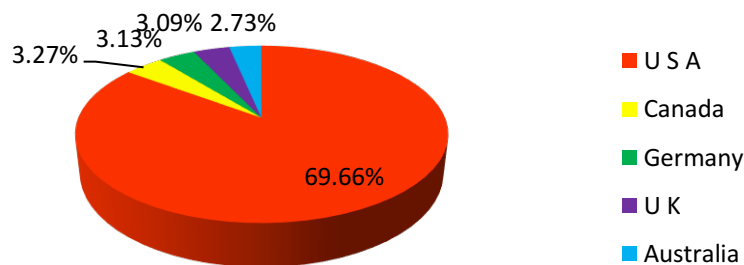
Note : India's Export including re-export

Leading importers of Bed Linen, Table Linen etc.. from India from 2018-2021(Values in M USD)

Data label given on the basis of 2021



India's top 5 destinations of Bed Linen, Table Linen etc.. by percentage India in 2021:



Bed Linen, Table Linen etc.. is exported to over 200 countries . In the year 2021, India has exported Bed Linen, Table Linen etc.. worth of US \$ 2.27 Billion, showing the rise of more than 275% compared to the year 2020. USA is the largest market for Linen Fabrics export from India, in 2021 USA imported US \$ 1.58 Billion worth Bed Linen, Table Linen etc.. from India which was almost 70% share of India's total export.

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It was distantly followed by Canada and Germany with 3.27% and 3.17% share. The top 10 countries in total shared the share of 88.42% of the Bed Linen, Table Linen etc.. export value from India.

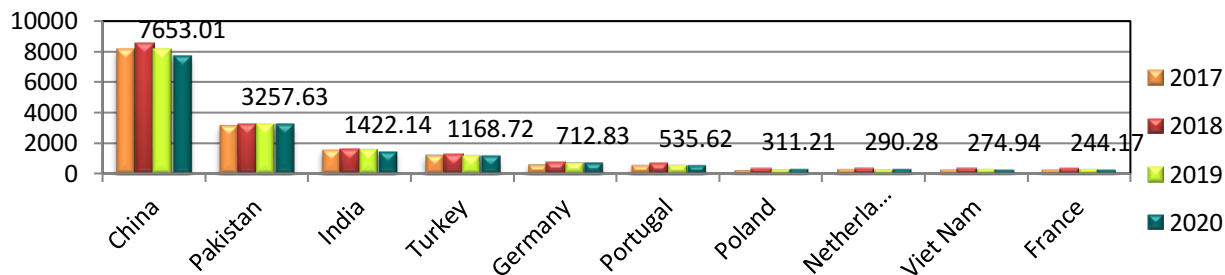
Table-2
World's Top 10 exporter of Bed Linen, Table Linen etc (H.S Code-6302)

Rank	Countries	2017		2018		2019		2020	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	China	8127.15	42.70	8495.39	42.59	8126.40	41.85	7653.01	41.78
2.	Pakistan	3137.59	16.48	3242.86	16.26	3251.67	16.75	3257.63	17.78
3.	India	1545.54	8.12	1583.82	7.94	1585.92	8.17	1422.14	7.76
4.	Turkey	1228.63	6.45	1206.51	6.05	1199.28	6.18	1168.72	6.38
5.	Germany	585.81	3.08	709.48	3.56	731.43	3.77	712.83	3.89
6.	Portugal	555.60	2.92	663.63	3.33	557.41	2.87	535.62	2.92
7.	Poland	212.54	1.12	261.86	1.31	257.55	1.33	311.21	1.70
8.	Netherlands	295.62	1.55	273.72	1.37	278.16	1.43	290.28	1.58
9.	Viet Nam	241.42	1.27	283.61	1.42	318.48	1.64	274.94	1.50
10.	France	259.90	1.37	302.38	1.52	307.06	1.58	244.17	1.33
	Others	2844.34	14.94	2923.41	14.66	2802.84	14.44	2447.23	13.36
	Total	19034.14	100	19946.66	100	19416.21	100	18317.79	100

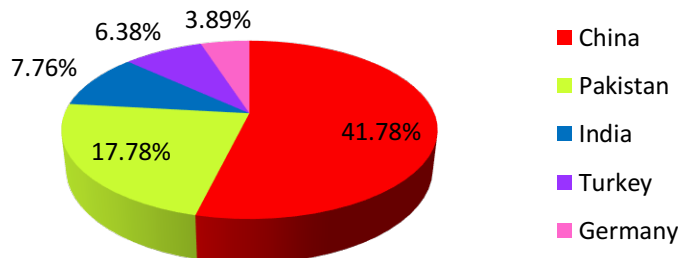
Source: UN Comtrade

World's Leading Exporters of Bed Linen, Table Linen etc (H.S Code-6302) of from 2017 to 2020 (Values in M USD)

Data label given on the basis of 2020



Country wise world's top 5 exporter of Bed Linen, Table Linen etc by percentage in 2020 :



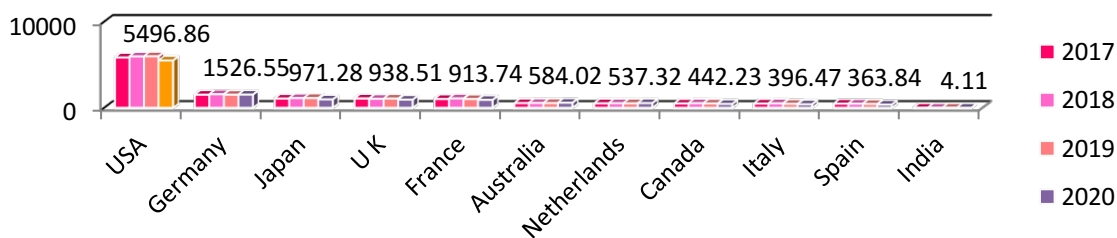
In 2020, the world exports of Bed linen, table linen, toilet linen and kitchen linen exceeded US \$ 18.3 billion, down from US \$ 19.41 Billion in 2019. China was the top exporter of Bed linen, table linen, toilet linen and kitchen linen exported at about US \$ 7.65 Billion, accounted 41.78% share of world export in 2020. It was followed by Pakistan, exported the same in that year at about US \$ 3.25 Billion. **India** was the 3rd largest exporter of Bed linen, table linen, toilet linen and kitchen linen in the world with 7.76% share.

Table-3
World's top 10 Importers of Bed Linen, Table Linen etc (H.S Code-6302)

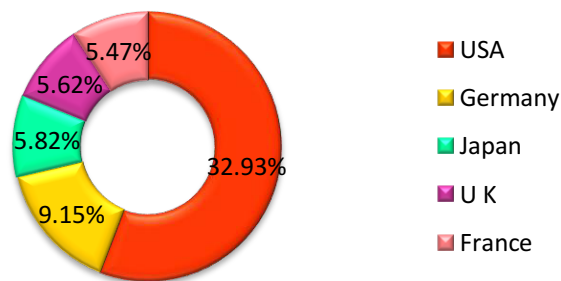
Rank	Countries	2017		2018		2019		2020	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	5845.33	32.88	5969.79	32.46	5980.91	32.79	5496.86	32.93
2.	Germany	1515.75	8.53	1573.70	8.56	1510.72	8.28	1526.55	9.15
3.	Japan	1068.22	6.01	1119.25	6.09	1126.53	6.18	971.28	5.82
4.	U K	1075.47	6.05	1040.19	5.66	1063.99	5.83	938.51	5.62
5.	France	1017.77	5.73	1085.55	5.90	1012.98	5.55	913.74	5.47
6.	Australia	535.64	3.01	557.33	3.03	544.89	2.99	584.02	3.50
7.	Netherlands	516.11	2.90	524.73	2.85	516.25	2.83	537.32	3.22
8.	Canada	494.38	2.78	525.49	2.86	499.40	2.74	442.23	2.65
9.	Italy	490.05	2.76	518.72	2.82	457.94	2.51	396.47	2.38
10.	Spain	478.22	2.69	476.28	2.59	445.62	2.44	363.84	2.18
94.	India	9.84	0.06	12.13	0.07	7.24	0.04	4.11	0.02
	Others	4728.61	26.60	4990.20	27.13	5075.96	27.83	4515.94	27.06
	Total	17775.39	100	18393.35	100	18242.44	100	16690.87	100

Source : UN Comtrade

Leading Bed Linen, Table Linen etc. importers of world from 2017 to 2020 (Values in million USD)
Data label given on the basis of 2020



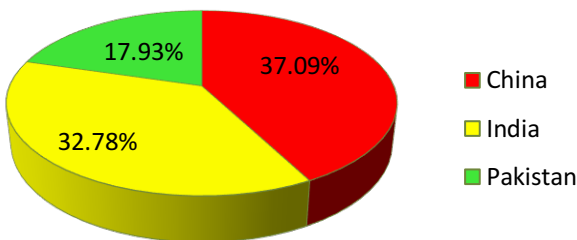
Country wise world's leading importers of Bed Linen, Table Linen etc. by percentage in 2020



Global purchases of imported Bed Linen, Table Linen etc. cost a total US \$ 16.69 billion in 2020. In that year, imported of the commodity depreciated by 8.51% from US \$ 18.24 billion during 2019. USA consumed the highest dollar worth of imported Bed Linen, Table Linen etc. during 2020 with purchases valued at US \$ 5.5 billion or 32.93% of the world total. In second and third place were Germany and Japan at 9.15% and 5.82% of globally imported Bed Linen, Table Linen etc. in 2020. In that year India's share only 0.02% of world total import value of Bed Linen, Table Linen etc.

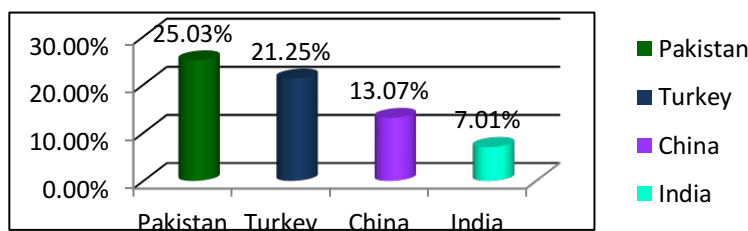
Annexure-1
Sources of world's top 3 importers of Bed Linen, Table Linen etc (H.S Code-6302)

i) Top 3 Sources of Bed Linen, Table Linen etc... to USA in 2020 by percentage:



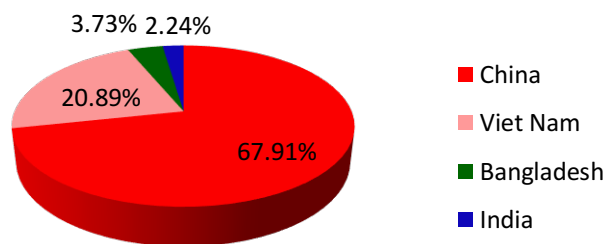
USA imports most of its requirements of Bed Linen, Table Linen etc.. from China with 37.09 % share of USA's total import in 2020. India exports 32.78% share to USA in the same year and hold the 2nd major source of the commodity to USA & Pakistan was in the 3rd position with export of 17.93% share of USA's total import. (Source : UN Comtrade)

ii) **Top 3 Sources of Bed Linen, Table Linen etc... to Germany in 2020 by percentage:**



25.03% of Bed Linen, Table Linen etc.. Imports of Germany comes from Pakistan in 2020, followed by Turkey (21.25%) and China (13.07%). In the same year India exported 7.01% of Linen, Table Linen etc.. to Germany. (Source : UN Comtrade)

iii) **Top 3 Sources of Bed Linen, Table Linen etc... to India in 2020 by percentage**



Japan's 3 major source countries of Bed Linen, Table Linen etc.. in 2020 were China (67.91%), Viet Nam(20.89%) and distantly Bangladesh (3.73%) in 2020. India is also suit as a source of Bed Linen, Table Linen etc.. to Japan, exports with 2.24% share of Japan's total import of the commodity in 2020. (Source: UN Comtrade)

Children's picture, Drawing or Colour Books

Children's Drawing or colouring book is a type of book containing line art to which people are intended to add colour using crayons, coloured pencils, marker pens, paint or other artistic media. Traditional colouring books and colouring pages are printed on paper or card. Some colouring books have perforated edges so their pages can be removed from the books and used as individual sheets. Others may include a story line and so are intended to be left intact. Today, many children's colouring books feature popular cartoon characters. They are often used as promotional materials for animated motion pictures. Colouring books may also incorporate other activities such as connect the dots, mazes and other puzzles. Some also incorporate the use of stickers.

Paint books and colouring books emerged in the United States as part of the "democratization of art" process, inspired by a series of lectures by British artist Joshua Reynolds, and the works of Swiss educator Johann Heinrich Pestalozzi and his student Friedrich Fröbel.

Drawing or Colouring books are widely used in schooling for young children for various reasons. For example, children are often more interested in colouring books rather than using other learning methods; pictures may also be more memorable than simply words. Colouring may also increase creativity in painting, according to some research.

As a predominantly non-verbal medium, colouring books have also seen wide applications in education where a target group does not speak and understand the primary language of instruction or communication. Colouring books are also said to help to motivate students' understanding of concepts that they would otherwise be uninterested in.

Colouring books have seen wide application in the health professions as educational tools. One nurse, trying to limit the trauma of surgery, described in an academic publication how the use of a colouring book "might help the child to understand what was going to happen to him. They are also used in rehabilitation of accident victims to aid recovery of hand-eye coordination, and they are used with autistic children both for entertainment and for their soothing effect. Colouring books have been used to explain complicated medical conditions to children. Children's art, especially a drawing, represents one of the delights of childhood. The child's artistic endeavors are mainly produced for pleasure and the exploration of art media. They can also be used for developmental and therapeutic assessment.

Children's drawings obviously show artistic development and expression. In educational and clinical settings, they can be vehicles for assessing a child's personality, intellectual development, communication skills, and emotional adjustment. Children's drawings can also aid in helping to diagnose learning disabilities. Law enforcement officers, social workers, and counselors often have children draw traumatic events, especially when they lack the communication skills to explain what they have witnessed or experienced. Children may also feel distanced from the traumatic event by drawing it and talking about what is happening in the picture, as if discussing a character in a book or on television.

Colour analysis has often been a means of determining a child's emotional state. A lot of black or red recurring in a child's drawing may be a troublesome sign. Black often is an indication of depression or feeling hopeless or restricted. Red may indicate intense anger. Blues and greens are usually calm colours, and yellows and oranges often indicate cheerfulness. Therapists are not ordinarily concerned if a child does one drawing in one of the troublesome colours, but may want to investigate a series of dark drawings, especially if the content is also frightening or disturbing. Therapists may use the therapeutic session as a means of emotional release and may encourage a child to create drawings that express their deep fears and angers. Drawings in this case are not assessment instruments, but become therapeutic tools.

These are broadly classified under H.S. Code-4903.

Table - 4

India's Top 10 destination of Children's Drawing or Colour Books (HS Code -4903)

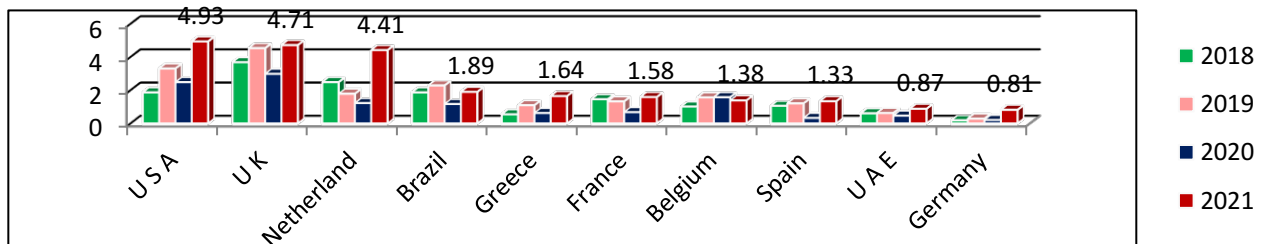
Rank	Countries	2018		2019		2020		2021	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	U S A	1.86	9.66	3.30	14.83	2.48	17.22	4.93	17.10
2.	U K	3.68	19.09	4.53	20.37	2.98	20.69	4.71	16.31
3.	Netherland	2.48	12.84	1.78	8.00	1.22	8.45	4.41	15.30
4.	Brazil	1.86	9.62	2.28	10.23	1.16	8.07	1.89	6.55
5.	Greece	0.54	2.78	1.09	4.91	0.62	4.29	1.64	5.69
6.	France	1.45	7.52	1.32	5.92	0.67	4.64	1.58	5.47
7.	Belgium	1.01	5.26	1.56	7.00	1.57	10.88	1.38	4.77
8.	Spain	1.05	5.46	1.20	5.37	0.32	2.21	1.33	4.62
9.	U A E	0.60	3.13	0.62	2.78	0.46	3.16	0.87	3.01
10.	Germany	0.18	0.93	0.28	1.28	0.20	1.35	0.81	2.81
	Others	4.57	23.71	4.30	19.32	2.74	19.04	5.30	18.37
	Total	19.29	100	22.25	100	14.42	100	28.84	100

Source: DGCI&S

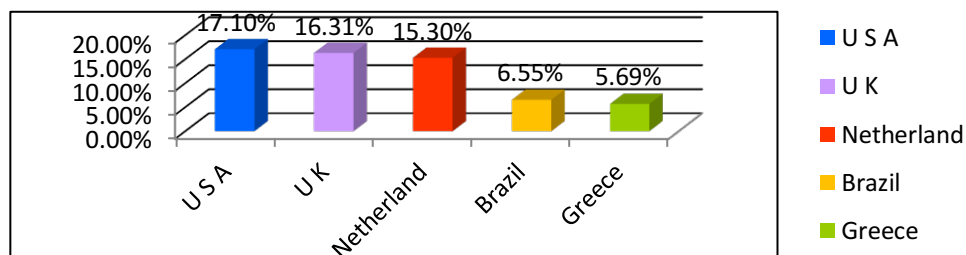
Note : India's Export including re-export

India's major destination Children's drawing or Colour Books from 2018-2021(Values in M USD)

Data label given on the basis of 2021



India's top 5 destinations of Children's drawing or Colour Books by percentage in 2021:



In the year 2021, India has exported of Children's Pictures, Drawing or Colour Books worth of US \$ 28.84 million. USA is the largest market for the Commodity group export from India. In 2021, USA imported US \$ 4.93 million worth Children's Pictures, Drawing or Colour Books from India, which was accounted 17.10% of world import. Followed by UK and Netherland with the Children's Pictures, Drawing or Colour Books shipment value being US \$ 4.71 Million and US \$ 4.41 million. The top 10

countries in total shared the share of 81.63% of the Children's Pictures, Drawing or Colour Books export value from India.

Table - 5

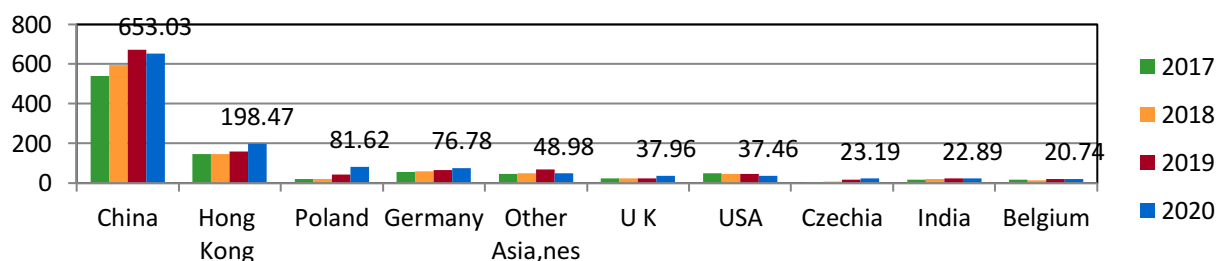
World's Top 10 exporters of Children's drawing or Colour Books (HS Code –4903)

Rank	Countries	2017		2018		2019		2020	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	China	538.62	53.27	595.67	54.12	673.58	53.25	653.03	48.71
2.	Hong Kong	145.21	14.36	146.65	13.32	160.38	12.68	198.47	14.81
3.	Poland	19.29	1.91	21.65	1.97	42.15	3.33	81.62	6.09
4.	Germany	54.78	5.42	58.48	5.31	67.16	5.31	76.78	5.73
5.	Other Asia,nes	46.32	4.58	48.33	4.39	68.05	5.38	48.98	3.65
6.	U K	22.45	2.22	23.02	2.09	24.50	1.94	37.96	2.83
7.	USA	50.40	4.98	46.14	4.19	47.45	3.75	37.46	2.79
8.	Czechia	4.50	0.45	6.46	0.59	16.03	1.27	23.19	1.73
9.	India	16.39	1.62	19.33	1.76	22.26	1.76	22.89	1.71
10.	Belgium	16.15	1.60	15.04	1.37	20.74	1.64	20.74	1.55
	Others	97.02	9.60	119.90	10.89	122.58	9.69	139.41	10.40
	Total	1011.13	100	1100.66	100	1264.87	100	1340.52	100

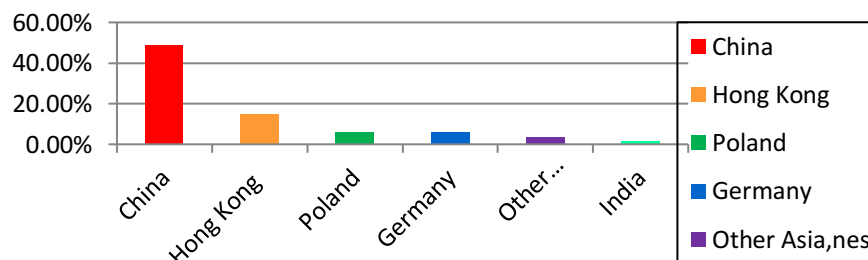
Source: UN Comtrade

Top world exporters of Children's drawing or Colour Books from 2017 to 2020 (Values in M USD)

Data label given on the basis of 2020



Export trends in world's leading Children's drawing or Colour Books exporters by percentage in 2020:



In 2020 total export of Children's drawing or Colour Books was US \$1.34 Billion. Between 2019 and 2020 the exports of Children's drawing or Colour Books increased by 6%, from US \$1.26B to US \$1.34B. In 2020 China is the top country by Children's drawing or Colour Books export in the world, exported US \$ 653 million that accounts for 48.71% of the world export. Hong Kong and Poland constituted the 2nd and 3rd largest supplier of Children's drawing or Colour Books to the world, comprising 14.81% and 6.09% of

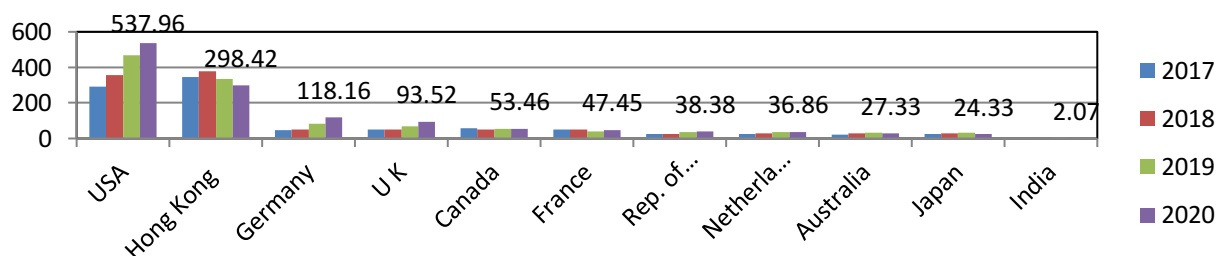
World export. **India** also an important exporter of the commodity, and holds 9th rank in the world with 1.71% share of total global export value of Children's drawing or Colour Books in 2020.

Table - 6
World's Top 10 Importers of Children's drawing or Colour Books (HS Code –4903)

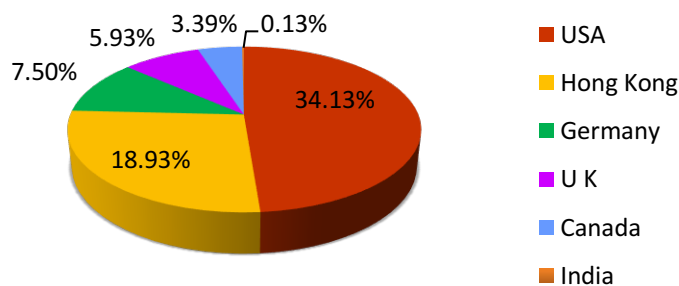
Rank	Countries	2017		2018		2019		2020	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	292.89	24.40	355.44	26.50	469.26	31.38	537.96	34.13
2.	Hong Kong	344.23	28.67	376.53	28.07	336.74	22.52	298.42	18.93
3.	Germany	46.94	3.91	49.14	3.66	83.21	5.56	118.16	7.50
4.	U K	51.72	4.31	51.68	3.85	67.44	4.51	93.52	5.93
5.	Canada	56.50	4.71	51.72	3.86	54.41	3.64	53.46	3.39
6.	France	52.13	4.34	49.37	3.68	39.08	2.61	47.45	3.01
7.	Rep. of Korea	24.64	2.05	26.16	1.95	37.81	2.53	38.38	2.44
8.	Netherlands	25.75	2.15	30.76	2.29	35.20	2.35	36.86	2.34
9.	Australia	21.06	1.75	28.20	2.10	30.87	2.06	27.33	1.73
10.	Japan	25.27	2.10	30.59	2.28	34.07	2.28	24.33	1.54
48.	India	0.97	0.08	1.12	0.08	2.26	0.15	2.07	0.13
	Others	258.37	21.52	290.47	21.66	305.02	20.40	298.36	18.93
	Total	1200.47	100	1341.17	100	1495.36	100	1576.30	100

Source :UNComtrade

Top world importers of Children's drawing or Colour Books from 2017 to 2020 (Values in M USD)
Data label given on the basis of 2020



Country wise leading global Importer of Children's drawing or Colour Books by percentage in 2020



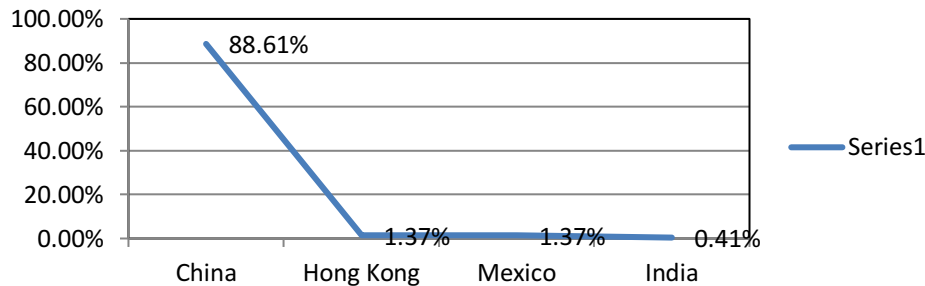
The USA imported around US \$ 538 million worth of Children's drawing or Colour Books in 2020, making it the leading importer of Children's drawing or Colour Books worldwide that year. Germany

followed in second place, importing around US \$ 298.42 million worth of the commodity. The import value Children’s drawing or Colour Books into India amounted to US \$2.07 million in the year 2020 and ranked in 48th position in the world with the share of 0.13% of total Global import.

Annexure-II

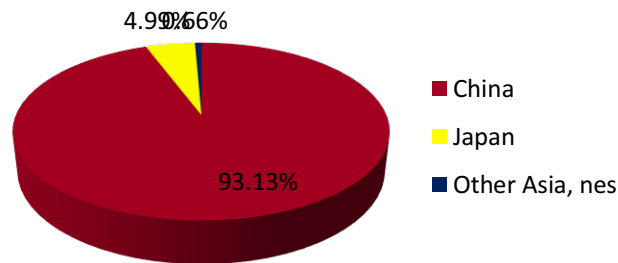
Sources of world’s top three importers of Children’s Drawing and Colour Books (HS Code 4903).

i) Top 3 Sources of Children’s drawing or Colour Books to USA in 2020 by percentage:



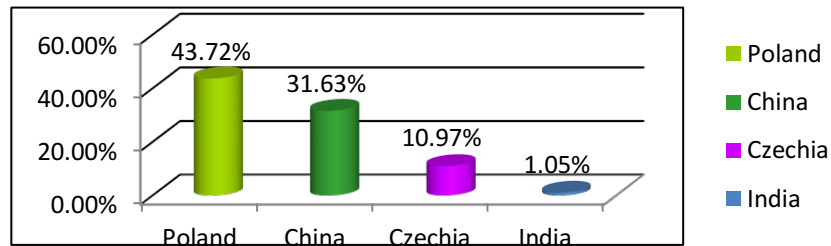
USA’s source most of its Children’s drawing or Colour Books came from China with 88.61% share of its import of the commodity in 2020. Hong Kong and Mexico are found to be the 2nd and 3rd largest exporters of Children’s drawing or Colour Books to USA by 1.37%% and 1.37% shares of USA’s total import respectively in 2020. apparently the projection shows that India’s contribution in this regards is very negligible, only 0.41% share. (Source: UN Comtrade)

ii) Top 3 Sources of Children’s drawing or Colour Books to Hong Kong in 2020 by percentage:



93.13% share of Children’s drawing or Colour Books imports to Hong Kong came from China in 2020, it was distantly followed by Japan (4.99%) and Other Asia, nes (0.66%). (Source: UN Comtrade)

iii) **Top 3 Sources of Children’s Drawing and Colour to Germany in 2020 by percentage:**



With 43.72% share of Germany’s total import of Children’s drawing or Colour Books , Poland became the largest source of it to Germany in 2020. China (31.63%) and Czechia (10.97%) were other major sources of Children’s drawing or Colour Books to Germany in that year. India’s share was only 1.05% share of Germany’s total import in 2020. (Source : UN Comtrade)

IMPORT

Electric Filament

An electrical filament is a thread of metal, usually tungsten, which is used to convert electricity into light in incandescent light bulbs (as developed in 1874 by Alexander Lodyg in and in 1878 by Joseph Wilson Swan, among others), and into heat in vacuum tube devices.

The first successful light bulb filaments were made of carbon (from bamboo), later placed with tungsten.

An electrical current travels through the filament and because of the electrical resistance of the filament makes it white-hot and generates light and heat. It is normally in a vacuum or an oblige or insert gas in side a glass enclosure to stop oxidation. Small amounts of a halogen can be added to facilitate transport of evaporated tungsten atoms back to the filament, resulting in significantly prolonged life time when use the higher temperatures, which is exploited in halogen lamps. Electrical filaments are used in hot cathode so various types of vacuum tubes and electron guns as sources of electrons.

There are several different types of filament configuration available and it all depends on the lamp itself, and what characteristics are required. Some of these include but are not limited to C-6, CC-6, C-2V, CC-2V, C-8, CC-88, C-2F, CC-2F, C-Bar, C-Bar-6, C-8I, C-2R, CC-2R, Axial.

The carbon-filament bulb was actually highly inefficient, but it banished the soot and fire hazards of coal-gas jets and thus soon gained wide acceptance. Indeed, thanks to the incandescent lamp, electric lighting became an accepted part of urban life by 1900. The carbon-filament bulb was eventually succeeded by the more efficient tungsten-filament incandescent bulb, which was developed by George Coolidge of the General Electric Company and first appeared in 1908. In 1911 the drawn tungsten filament was introduced. In 1913 filaments were coiled, and bulbs were filled with inert gas—at first nitrogen alone and later nitrogen and argon in proportions varied to suit the wattage. These steps increased efficiency. Beginning in 1925, bulbs were “frosted” on the inside with hydrofluoric acid to provide a diffused light instead of the glaring brightness of the unconcealed filament. The double-coiled filament used today was introduced about 1930. With these improvements, the filament lamp became the principal form of electric lamp for domestic use until it began to lose favour to the more-efficient fluorescent lamp.

In 2019, Electric Filament were the world's 377th most traded product, with a total trade of \$8.14B. Between 2018 and 2019 the exports of Electric Filament decreased by -12.7%, from \$9.32B to \$8.14B. Trade in Electric Filament represent 0.045% of total world trade.

In 2020 the top exporters of Electric Filament were China (\$2.76B), Germany (\$1.29B), Japan (\$541M), United States (\$446M), and Poland (\$411M). Where as in the same year the top importers of Electric Filament were USA(US \$ 3.1B), Germany (US\$908M), France (USA \$826M), China (US \$ 617M).

These are broadly classified under H. S. Code 8539

Table - 7

India's Top 10 Sources of Electric Filament (HS Code :8539)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	China	125.43	58.82	99.00	54.28	42.40	53.49	89.73	53.34
2.	Germany	32.14	15.07	26.88	14.74	11.43	14.42	18.92	11.25
3.	Korea RP	10.64	4.99	9.54	5.23	5.01	6.32	10.56	6.28
4.	Japan	9.37	4.40	9.06	4.97	3.65	4.60	9.10	5.41
5.	Poland	6.48	3.04	7.80	4.27	4.35	5.48	8.11	4.82
6.	Belgium	0.79	0.37	0.97	0.53	0.76	0.96	5.94	3.53
7.	U S A	6.13	2.88	6.22	3.41	2.29	2.89	5.02	2.98
8.	Singapore	2.45	1.15	3.34	1.83	1.79	2.26	3.17	1.88
9.	Netherland	0.69	0.32	0.56	0.31	0.53	0.67	2.36	1.40
10.	Hong Kong	4.18	1.96	6.89	3.78	1.84	2.32	2.20	1.31
	Others	14.93	7.00	12.14	6.66	5.22	6.58	13.13	7.81
	Total	213.22	100	182.40	100	79.26	100	168.23	100

Source: DGCI&S

Note : India's Import including re-import

There is a total of 66 countries India imports Electric Filament, Discharge Lamps from. The Electric Filament, Discharge Lamps import in 2021 stood at US \$ 168.23 Million and US \$ 213.22 Million in 2018, which shows a negative growth of 21.11% from the 2018 of India's import value of Electric Filament. Major three source countries of Electric Filament to India in 2021 are China (4 US \$ 89.73 Million), Germany (US \$ 18.92 Million), Rep. of Korea (US \$ 10.56 Million). These 3 countries in total sold US \$ 119.21 Million value of Electric Filament to India which rounds up to 70.87% of the total Electric Filament import into India.

Table - 8

World Top 10 Importer of Electric Filament (HS Code :8539)

Rank	Countries	2017		2018		2019		2020	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	USA	1702.20	14.88	3068.11	19.01	3244.19	20.24	3174.82	22.40
2.	Germany	728.72	6.37	1020.75	6.33	1047.46	6.53	908.26	6.41
3.	France	586.46	5.13	800.36	4.96	844.82	5.27	825.67	5.82
4.	China	800.89	7.00	1006.82	6.24	822.83	5.13	617.55	4.36
5.	Japan	223.87	1.96	625.67	3.88	568.33	3.55	493.18	3.48
6.	Netherlands	324.51	2.84	429.28	2.66	573.86	3.58	471.36	3.33
7.	U K	455.49	3.98	465.42	2.88	490.15	3.06	446.99	3.15
8.	Russia	182.94	1.60	388.80	2.41	379.79	2.37	372.71	2.63
9.	Canada	245.84	2.15	469.86	2.91	386.68	2.41	371.51	2.62
10.	Indonesia	220.36	1.93	331.93	2.06	351.54	2.19	339.94	2.40
20.	India	162.45	1.42	177.37	1.10	212.62	1.33	182.41	1.29
	Others	5802.38	50.74	7351.48	45.56	7107.37	44.34	5970.45	42.12
	Total	11436.10	100	16135.84	100	16029.64	100	14174.85	100

Source :UNComtrade

Global Imports of Electric Filament, the top five importers of Electric Filament in 2020 were United States (US \$ 3.17 B), Germany (US \$ 908 M), France (US \$ 826 M)China (US \$ 617.55 M) and Japan (US \$ 493.18 M), accounted for 22.40%, 6.41%, 5.82%, 4.36% and 3.48% respectively of world import value of Electric Filament. The import value of tea into India amounted to US \$ 182.41 million in the year 2020 and ranked in 20th position in the world with the share of 1.29% of total Global import value of Electric Filament. This was decrease from the previous year.

2. Acyclic Hydrocarbons

In organic chemistry, a **hydrocarbon** is an organic compound consisting entirely of hydrogen and carbon. Hydrocarbons are examples of group 14 hydrides. Hydrocarbons are generally colourless and hydrophobic with only weak odours. Because of their diverse molecular structures, it is difficult to generalize further. Most anthropogenic emissions of hydrocarbons are from the burning of fossil fuels including fuel production and combustion. Natural sources of hydrocarbons such as ethylene, isoprene, and monoterpenes come from the emissions of vegetation.

Saturated hydrocarbons are the simplest of the hydrocarbon types. They are composed entirely of single bonds and are saturated with hydrogen. The formula for acyclic saturated hydrocarbons (i.e., alkanes) is C_nH_{2n+2} . The most general form of saturated hydrocarbons is $C_nH_{2n+2(1-r)}$, where r is the number of rings. Those with exactly one ring are the cycloalkanes. Saturated hydrocarbons are the basis of petroleum fuels and are found as either linear or branched species. Substitution reaction is their characteristic property (like chlorination reaction to form chloroform). Hydrocarbons with the same molecular formula but different structural formulae are called structural isomers. As given in the example of 3-methylhexane and its higher homologues, branched hydrocarbons can be chiral. Chiral saturated hydrocarbons constitute the side chains of biomolecules such as chlorophyll and tocopherol.

Hydrocarbons can be gases (e.g. methane and propane), liquids (e.g. hexane and benzene), waxes or low melting solids (e.g. paraffin wax and naphthalene) or polymers (e.g. polyethylene, polypropylene and polystyrene).

The term 'aliphatic' refers to non-aromatic hydrocarbons. Saturated aliphatic hydrocarbons are sometimes referred to as 'paraffin'. Aliphatic hydrocarbons containing a double bond between carbon atoms are sometimes referred to as 'olefins'.

The predominant use of hydrocarbons is as a combustible fuel source. Methane is the predominant component of natural gas. The C^6 through C^{10} alkanes, alkenes and isomeric cycloalkanes are the top components of gasoline, naphtha, jet fuel and specialized industrial solvent mixtures. With the progressive addition of carbon units, the simple non-ring structured hydrocarbons have higher viscosities, lubricating indices, boiling points, solidification temperatures, and deeper color. At the opposite extreme from methane lie the heavy tars that remain as the lowest fraction in a crude oil refining retort. They are collected and widely utilized as roofing compounds, pavement composition (bitumen), wood preservatives (the creosote series) and as extremely high viscosity shear-resisting liquids.

Some large-scale non-fuel applications of hydrocarbons begins with ethane and propane, which are obtained from petroleum and natural gas. These two gases are converted either to syngas or to ethylene and propylene. These two alkenes are precursors to polymers, including polyethylene, polystyrene, acrylates, polypropylene, etc. Another class of special hydrocarbons is BTX, a mixture of benzene, toluene, and the three xylene isomers. Global consumption of benzene in 2021 is estimated at more than 580 million tons, which will increase to 60 million tons in 2022.

Acyclic hydrocarbons global imports valued USD 25.4 billion in 2019, while exports stood at USD 23.8 billion. That import and export dollar amounts were declined as compared to the previous year. The latest global trade data available with us shows that China tops in world's acyclic hydrocarbons imports, while the United States of America stood as the largest export country of acyclic hydrocarbons in last year. Here is a complete overview of acyclic hydrocarbons import and export market.

China stood as the largest import country of acyclic hydrocarbons in 2020, which imported the chemical worth USD 4 billion. Other major import countries of acyclic hydrocarbons were Belgium, Germany, Netherlands, United States, South Korea, France, India.

These are broadly classified under H. S. Code 2901.

Table - 9
India's Top 10 Source Countries of Acyclic Hydrocarbons (HS Code : 2901)

Rank	Countries	2018		2019		2020		2021	
		Value (million \$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	U S A	701.83	64.12	623.64	69.62	328.52	71.28	638.72	66.18
2.	U A E	6.06	0.55	14.19	1.58	8.33	1.81	53.20	5.51
3.	China	57.56	5.26	46.91	5.24	26.75	5.80	46.94	4.86
4.	Singapore	56.24	5.14	33.86	3.78	8.54	1.85	32.65	3.38
5.	Thailand	21.33	1.95	16.00	1.79	8.32	1.80	28.13	2.91
6.	Korea RP	55.46	5.07	24.63	2.75	13.50	2.93	25.40	2.63
7.	Saudi Arab	25.17	2.30	13.01	1.45	15.54	3.37	24.50	2.54
8.	Romania	24.88	2.27	25.30	2.82	8.40	1.82	23.60	2.45
9.	Malaysia	7.61	0.70	22.92	2.56	6.26	1.36	23.51	2.44
10.	Qatar	16.19	1.48	16.75	1.87	5.08	1.10	13.76	1.43
	Others	122.19	11.16	58.57	6.54	31.64	6.86	54.73	5.67
	Total	1094.52	100	895.79	100	460.89	100	965.15	100

Source: DGCI&S

Note : India's Import including Re-import

The value of imports of Acyclic hydrocarbons to India totalled US\$ 965.15 million in 2021. Sales of Acyclic Hydrocarbons to India increased by more than 52% in value terms compared to 2020. Major five source countries of Acyclic Hydrocarbons to India in 2021 are USA (US \$ 638.72 Million), UAE (US \$ 53.20 Million), China (US \$ 46.94 Million), Singapore (US \$ 32.65 Million) and Thailand (US \$ 28.13 Million). These 5 countries in total exported US \$ 799.64 Million value of Acyclic Hydrocarbon to India which rounds up to 82.84% of the total Acyclic Hydrocarbons import into India.

Table - 10
World Top 10 Importer of Acyclic Hydrocarbons (HS Code :2901)

Rank	Countries	2017		2018		2019		2020	
		Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)	Value (million\$)	Share (%)
1.	China	6208.27	25.94	7087.77	25.29	5894.72	24.68	4222.07	22.69
2.	Belgium	1979.07	8.27	2130.29	7.60	1771.42	7.42	1241.24	6.67
3.	Germany	1600.74	6.69	2011.61	7.18	1930.39	8.08	1241.02	6.67
4.	USA	1242.52	5.19	1723.48	6.15	1455.95	6.10	1131.03	6.08
5.	Rep. of Korea	1131.58	4.73	1186.43	4.23	1027.46	4.30	1093.43	5.88
6.	Netherlands	1248.71	5.22	1395.45	4.98	1518.01	6.36	906.37	4.87
7.	Indonesia	865.96	3.62	965.64	3.45	820.65	3.44	760.70	4.09
8.	India	705.08	2.95	1096.87	3.91	895.08	3.75	747.24	4.02
9.	Other Asia,nes	1026.64	4.29	968.99	3.46	768.74	3.22	637.81	3.43
10.	France	1016.52	4.25	1268.63	4.53	914.98	3.83	605.10	3.25
	Others	6908.09	28.86	8188.14	29.22	6885.51	28.83	6020.47	32.36
	Total	23933.19	100	28023.31	100	23882.93	100	18606.48	100

Source :UNComtrade

The imports of the three major importers of acyclic hydrocarbons, namely China, Belgium and Germany, represented more than one- third of total imports in 2020. In value terms, China (US \$ 4.22 B), Belgium (US \$ 1.24 B) and Germany (US \$ 1.24 B) constituted the countries with the highest levels of imports in 2020, together accounting for 36% share of global imports of Acyclic Hydrocarbons. India experienced the highest growth rate of the value of imports, among the main importing countries and ranked in 8th position in the world with 4.02% share of Global import of Acyclic Hydrocarbon in 2020.

