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India's Internal Movements/Flows of Goods as per E-way Bills

PREFACE

The Directorate General of Commercial Intelligence and Statistics (DGCI&S) collects, compiles and disseminates India's Trade Statistics, both foreign trade and internal trade. As part of its publications on Internal Trade DGCI&S comes out with Reports covering Trade among States/UTs through Rail, River, Air and Coastal ship movements. However, a major part of movements of Goods takes place through Roadways which, for the past few years, was being attempted to capture.

With the introduction of Goods and Services Tax (GST) and e-way bill system Data in this area are now available from a single source. Presumably Data received from Goods and Services Network (GSTN) through the e-way bill system majorly covers movement of goods through Roadways. Though the quality of Data received is a cause of concern, at least a beginning could be made towards making these important Data available to a wider User base.

The Publication contains information on Value of all commodities (at two Digit ITCHS level) moved amongst different States/UTs through tables and diagrams. I sincerely hope that our sustained efforts in improving this publication every year will prove immensely beneficial to our users.

However, comments and suggestions for improvement of forthcoming issues are welcome.

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India's Internal Movements/Flows of Goods as per E-way Bills, 2022-23

Introduction

With the introduction of **Goods and Services Tax** (GST) across India with effect from 1st of July 2017 a very significant step was taken in the area of indirect tax reforms in India. For quick and easy movement of goods across India without any hindrance, all the check posts across the country are abolished. Using ICT based solution, the GST system provides a provision of e-Way Bill, a document to be carried by the person in charge of conveyance, generated electronically from the common portal. Using this e-Way Bill system, India in FY 2022-23 recorded movement of goods, including both Inter-State and Internal worth Rs. 94353264.75 crore.

Section-I: State wise movement of Goods

Based on the data received from Goods and Services Network (GSTN) for FY 2022-23, **Table 1** shows top States in terms of value of goods moving out to destinations outside the state but within the geographical boundary of India.

Table 1: Top 10 States' Outward Movement of Goods during 2022 - 23				
	Value (in INR Crore)	Share in Total		
Maharashtra	35533219.81	56.40%		
Delhi	2655924.67	4.22%		
Gujarat	1699558.04	2.70%		
Haryana	1435748.62	2.28%		
Tamil Nadu	1204631.93	1.91%		
Uttar Pradesh	911585.50	1.45%		
Karnataka	909885.36	1.44%		
Andhra Pradesh	559321.90	0.89%		
West Bengal	550913.35	0.874%		
Rajasthan	545349.82	0.866%		
Others	16993717.01	26.97%		
Total	62999856.01			

SOURCE: GSTN

More than half of the Outward movement of Goods in value terms was from the state of Maharashtra, followed by Delhi, Gujarat, Haryana & Tamil Nadu with shares of 4.22%, 2.70%, 2.28% & 1.91% of total Outward movement of Goods in 2022-23, respectively captured through e-Way Bill system.

Similarly, as depicted in **Table 2**, more than half of the Inward movement of Goods in value terms was to the state of Gujarat, followed by Maharashtra, Haryana, Uttar Pradesh & Tamil Nadu with shares of 23.70%, 2.05%, 2.00% and 1.90% respectively of total Inward movement of Goods in 2022-23 as per e-Way Bill system.

Table 2: Top 10 States' Inward Movement of Goods during 2022 - 23				
	(Value in INR Crore)	Share in Total		
Gujarat	34836361.22	55.30%		
Maharashtra	14932610.93	23.70%		
Haryana	1290515.10	2.05%		
Uttar Pradesh	1261719.83	2.00%		
Tamil Nadu	1194711.14	1.90%		
Karnataka	1031885.51	1.64%		
West Bengal	726437.22	1.15%		
Telangana	724383.77	1.15%		
Delhi	704668.68	1.12%		
Rajasthan	669295.74	1.06%		
Others	5627266.87	8.93%		
Total	62999856.01			

For both Outward and Inward movement of Goods, among the top 10 States 09 states were common. Andhra Pradesh featured among top 10 states for Outward movement but not for Inward movement of Goods while Telangana featured among top 10 states for Inward movement but not for Outward movement of Goods.

Internal movement of Goods in a state implies trade taking place between two parties located within the geographical boundary of a particular state. **Table 3** shows top 10 states in terms of value of Internal movement of Goods within States.

Table 3: Top 10 States' Internal Movement of Goods during 2022 - 23				
	(Value in INR Crore)	Share in Total		
Tamil Nadu	12273852.45	39.15%		
Maharashtra	4727423.21	15.08%		
Andhra Pradesh	3751328.44	11.96%		
Gujarat	1769715.07	5.64%		
Uttar Pradesh	1527363.41	4.87%		
Karnataka	1433922.15	4.57%		
Haryana	772416.52	2.46%		
West Bengal	680929.90	2.17%		
Punjab	582355.75	1.86%		
Telangana	529890.88	1.69%		
Others	3304210.97	10.54%		
Total	31353408.75			
SOURCE: GSTN				

Tamil Nadu was involved in almost 40% of such internal trade occupying the top position. It was followed by Maharashtra, Andhra Pradesh, Gujarat and Uttar Pradesh with 15.08%, 11.96%, 5.64% & 4.87% of States' total internal trade in 2022-23, respectively.

Section-II: Commodity wise movement of Goods

While the above section provided an aggregate picture in terms of total value of 'Outward', 'Inward' and 'Internal' movement of Goods in 2022-23, it did not say anything about the Commodity composition involved therein, i.e., it did not say anything about the Important Commodity groups on which this Trade took place.

In this Section an attempt is made to Illustrate about the importance of different commodity groups involved in this trade at 2 Digit **Indian Trade Classification** (ITC HS) Code level. **Table 4** illustrated the top 10 Commodity groups and their share in India's Internal Trade in 2022-23 captured through e-Way Bill system.

'Man-made staple fibers' (ITCHS Code: 55) was the top item of trade with 32.66% share of the total Trade. This item was followed by 'Rubber and Articles thereof' (ITCHS Code:40), 'Other Vegetable Textile Fibers; Paper Yarn and Fabrics' (ITCHS Code:53), 'Road Vehicles and Parts' (ITCHS Code:87), 'Plastics and Articles thereof' (ITCHS Code:39) with shares in total internal trade at 12.14%, 11.02%, 7.93% and 4.67% respectively as per e-Way Bills in 2022-23. Top 10 Commodity groups together was involved in 82.89% of total such trade in 2022-23.

Table 4: Commodity wise Movements of Goods during 2022 - 23					
ITC(HS) Code in 2 digit	CHAPTER DESCRIPTION	Value (in INR Crore)	Share in Total		
55	Man-made staple fibers	30816300.72	32.66%		
40	Rubber and Articles thereof	11458825.82	12.14%		
53	Other Vegetable Textile Fibers; Paper Yarn and Fabrics	10393220.69	11.02%		
87	Road Vehicles and Parts	7481043.20	7.93%		
39	Plastics and Articles thereof	4407946.65	4.67%		
85	Electrical Machinery & Equipment & Parts thereof; Sound & TV Recorders & Reproducers & Parts thereof	3446183.61	3.65%		
72	Iron & Steel	3409464.40	3.61%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliance; Parts thereof	3161585.49	3.35%		
88	Aircraft, Spacecraft and Parts thereof	2089857.55	2.21%		
73	Articles of Iron & Steel	1546205.07	1.64%		
	Others	16142631.53	17.11%		
	Total	94353264.75			

SOURCE: GSTN

While the above gave an aggregate picture in terms of Commodity composition involved in India's internal trade of Goods in 2022-23, a further break up in terms of Inter/Intra-State movement covering both 'Outward' & 'Inward' and 'Internal' movement of goods among/within different states in the reference period would be more insightful.

Table 5 shows that 'Man-Made Staple Fibers' (ITCHS Code:55) was the top item of trade in Inter-state trade, i.e., covering both 'Outward' & 'Inward' trade with 48.75% share of the total Inter-state Trade. It was followed by 'Other Vegetable Textile Fibers; Paper Yarn and Fabrics' (ITCHS Code: 53), 'Plastics and Articles thereof' (ITCHS Code: 39), Aircraft, Spacecraft and Parts Thereof (ITCHS Code: 88) & Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof (ITCHS Code: 84) with shares of 16.48%, 5.86%, 3.31% and 3.20% of the total Inter-state Trade respectively.

On the other hand, **Table 6** shows that 'Rubber and Articles thereof' (ITCHS Code: 40) was the top item of Trade 'withinstates'. It was followed by 'Road Vehicles and Parts' (ITCHS Code: 87), 'Iron & Steel' (ITCHS Code: 72), Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof (ITCHS Code: 85) & Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof (ITCHS Code: 84) with shares of 20.37%, 6.37%, 5.08% and 3.65% of total trade 'within states' respectively.

	Table 5: Outward/Inward Movements of Goods-Commodity wise during 2022 - 23					
ITC (HS) Code in 2 Digit	Commodity Description	Value (in INR Crore)	Share in Total			
55	Man-Made Staple Fibers	30709814.89	48.75%			
53	Other Vegetable Textile Fibers; Paper Yarn and Fabrics	10381251.80	16.48%			
39	Plastics And Articles Thereof	3694064.18	5.86%			
88	Aircraft, Spacecraft and Parts Thereof	2083263.75	3.31%			
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	2017325.86	3.20%			
85	Electrical Machinery & Equipment & Parts Thereof; Sound & Tv Recorders & Reproducers & Parts Thereof	1852091.75	2.94%			
72	Iron & Steel	1413224.00	2.24%			
87	Road Vehicles and Parts	1095104.75	1.74%			
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	758387.08	1.20%			
29	Organic Chemicals	595864.43	0.95%			
	Others	8399463.52	13.33%			
	Total	62999856.01				

	Table 6: Internal Movements of Goods-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total		
40	Rubber And Articles Thereof	11150292.93	35.56%		
87	Road Vehicles and Parts	6385938.45	20.37%		
72	Iron & Steel	1996240.40	6.37%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & Tv Recorders & Reproducers & Parts Thereof	1594091.86	5.08%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	1144259.64	3.65%		
73	Articles Of Iron & Steel	1072680.68	3.42%		
39	Plastics And Articles Thereof	713882.47	2.28%		
15	Animal Or Vegetable Fats & Oils & Their Cleavage Products; Animal Vegetable Waxes	627522.68	2.00%		
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	510103.71	1.63%		
52	Cotton	404504.13	1.29%		
	Others	5753891.79	18.35%		
	Total	31353408.74			

Section-III: Commodity by Top State-Wise movements of Goods

Section-II gave an aggregate picture in terms of Commodity composition involved in India's internal trade of Goods in 2022-23. It also broke it down in terms of Inter-State movement covering both 'Outward' & 'Inward' and 'Internal' movement of goods among/within different states. However, this Section delves further down to more disaggregated level in terms of Commodity composition covering 'Outward', 'Inward' and 'Internal' with respect to top 05 States in each type of commodity Movement.

Table 7 to Table 11 show the top 10 Commodities involved in case of 'Outward' movement of Goods in 2022-23 for each of the top 05 states ranked as per trade values.

Similarly, Table 12 to Table 16 show the top 10 Commodities involved in case of 'Inward' movement of Goods in 2022-23 for each of the top 05 States ranked as per trade values.

Table 17 to Table 21 show the top 10 Commodities involved in case of 'Internal' movement of Goods in 2022-23 for each of the top 05 states ranked as per trade values.

Table 7: Outward Movements of Goods from Maharashtra-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total	
55	Man-Made Staple Fibers	30595737.89	86.10%	
39	Plastics And Articles Thereof	3005303.81	8.46%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	261598.40	0.74%	
87	Road Vehicles and Parts	207108.73	0.58%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	187277.66	0.53%	
72	Iron & Steel	137169.69	0.39%	
29	Organic Chemicals	108878.64	0.31%	
52	Cotton	75200.47	0.21%	
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	71919.15	0.20%	
73	Articles Of Iron & Steel	68696.49	0.19%	
	Others	814328.86	2.29%	
	Total	35533219.81		

	Table 8: Outward Movements of Goods from Delhi-Commodity wise during 2022 - 23			
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total	
88	Aircraft, Spacecraft and Parts Thereof	2060847.40	77.59%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	81262.74	3.06%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	52939.95	1.99%	
72	Iron & Steel	50400.51	1.90%	
39	Plastics And Articles Thereof	46761.05	1.76%	
62	Articles Of Apparel and Clothing Accessories, Not Knitted or Crocheted	24644.95	0.93%	
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	23284.50	0.88%	
74	Copper & Articles Thereof	19429.24	0.73%	
73	Articles Of Iron & Steel	16267.76	0.61%	
48	Paper And Paperboard; Articles of Paper Pulp, Of Paper and Paperboard	16031.96	0.60%	
	Others	264054.62	9.94%	
	Total	2655924.67		

	Table 9: Outward Movements of Goods from Gujarat-Commodity wise during 2022 - 23					
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total			
39	Plastics And Articles Thereof	149018.29	8.77%			
29	Organic Chemicals	114331.08	6.73%			
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	113049.63	6.65%			
54	Man-Made Filaments	109508.03	6.44%			
38	Miscellaneous Chemical Products	81207.36	4.78%			
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	80758.59	4.75%			
87	Road Vehicles and Parts	72663.37	4.28%			
15	Animal Or Vegetable Fats & Oils & Their Cleavage Products; Animal Vegetable Waxes	70607.71	4.15%			
52	Cotton	69982.51	4.12%			
72	Iron & Steel	65025.93	3.83%			
	Others	773405.54	45.51%			
	Total	1699558.04				

	Table 10: Outward Movements of Goods from Haryana-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR crore)	Share in Total		
49	Printed Books & Other Products of Printing Industry	280214.50	19.52%		
87	Road Vehicles and Parts	156121.50	10.87%		
63	Other Made-Up Textile Articles; Sets; Worn Textile Articles; Rags	139913.63	9.74%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	133797.80	9.32%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	110631.78	7.71%		
72	Iron & Steel	61516.05	4.28%		
39	Plastics And Articles Thereof	47924.24	3.34%		
73	Articles Of Iron & Steel	34391.50	2.40%		
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	30322.48	2.11%		
10	Cereals	29345.37	2.04%		
	Others	411569.78	28.67%		
	Total	1435748.62			

Та	Table 11: Outward Movements of Goods from Tamil Nadu-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total		
87	Road Vehicles and Parts	196189.16	16.29%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	177602.09	14.74%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	151512.42	12.58%		
49	Printed Books & Other Products of Printing Industry	72271.72	6.00%		
61	Articles Of Apparel and Clothing Accessories, Knitted or Crocheted	55692.73	4.62%		
52	Cotton	48482.11	4.02%		
72	Iron & Steel	36890.36	3.06%		
40	Rubber And Articles Thereof	35036.28	2.91%		
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	29299.18	2.43%		
39	Plastics And Articles Thereof	28017.18	2.33%		
	Others	373638.72	31.02%		
	Total	1204631.93			

	Table 12: Inward Movements of Goods from ${\sf Gujarat} ext{-}{\sf Commodity}$ wise during 2022 - 23		
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total
55	Man-Made Staple Fibers	30585953.6 1	87.80%
39	Plastics And Articles Thereof	2997817.50	8.61%
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	118034.52	0.34%
29	Organic Chemicals	115838.12	0.33%
72	Iron & Steel	110016.39	0.32%
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	92154.84	0.26%
74	Copper & Articles Thereof	80315.69	0.23%
87	Road Vehicles and Parts	64811.80	0.19%
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	41702.93	0.12%
38	Miscellaneous Chemical Products	39445.92	0.11%
	Others	590269.89	1.69%
	Total	34836361.2 2	

T	Table 13: Inward Movements of Goods from Maharashtra-Commodity wise during 2022 - 23			
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total	
53	Other Vegetable Textile Fibers; Paper Yarn and Fabrics	10368424.73	69.43%	
88	Aircraft, Spacecraft and Parts Thereof	2061074.69	13.80%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	511700.76	3.43%	
72	Iron & Steel	305081.30	2.04%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	235201.68	1.58%	
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	197034.79	1.32%	
87	Road Vehicles and Parts	116737.27	0.78%	
39	Plastics And Articles Thereof	109593.57	0.73%	
29	Organic Chemicals	91055.63	0.61%	
30	Pharmaceutical Products	54885.40	0.37%	
	Others	881821.10	5.91%	
	Total	14932610.93		

1	Table 14: Inward Movements of Goods from Haryana-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	e Commodity Description		Share in Total		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	327066.56	25.34%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	161379.93	12.51%		
72	Iron & Steel	113568.23	8.80%		
87	Road Vehicles and Parts	70567.71	5.47%		
49	Printed Books & Other Products Of Printing Industry	58073.25	4.50%		
39	Plastics And Articles Thereof	56467.20	4.38%		
73	Articles Of Iron & Steel	28872.51	2.24%		
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	27732.38	2.15%		
40	Rubber And Articles Thereof	25293.57	1.96%		
30	Pharmaceutical Products	22945.80	1.78%		
	Others	398547.96	30.88%		
	Total	1290515.10			

Table	Table 15: Inward Movements of Goods from Uttar Pradesh-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts thereof	231605.70	18.36%		
49	Printed Books & Other Products of Printing Industry	118364.31	9.38%		
72	Iron & Steel	98838.07	7.83%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	82735.69	6.56%		
87	Road Vehicles and Parts	79168.28	6.27%		
39	Plastics And Articles Thereof	65461.64	5.19%		
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	39685.40	3.15%		
15	Animal Or Vegetable Fats & Oils & Their Cleavage Products; Animal Vegetable Waxes	37392.52	2.96%		
30	Pharmaceutical Products	33246.71	2.64%		
73	Articles Of Iron & Steel 27549.41		2.18%		
	Others 447672.11		35.48%		
	Total	1261719.83			

Tabl	Table 16: Inward Movements of Goods from Tamil Nadu-Commodity wise during 2022 - 23		
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts thereof	187502.90	15.69%
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	157099.95	13.15%
72	Iron & Steel	91989.08	7.70%
87	Road Vehicles and Parts	79990.36	6.70%
39	Plastics And Articles Thereof	53913.09	4.51%
52	Cotton	47188.15	3.95%
90	Optical, Measuring, Medical & Similar Instruments & Parts Thereof	40818.69	3.42%
49	Printed Books & Other Products of Printing Industry	39460.27	3.30%
73	Articles Of Iron & Steel	36933.65	3.09%
63	Other Made-Up Textile Articles; Sets; Worn Textile Articles; Rags	30822.46	2.58%
	Others	428992.55	35.91%
	Total	1194711.14	

Ta	Table 17: Internal Movements of Goods from Tamil Nadu-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total		
40	Rubber And Articles Thereof	10831869.43	88.25%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	214461.41	1.75%		
72	Iron & Steel	169508.26	1.38%		
87	Road Vehicles and Parts	128195.62	1.04%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	125632.00	1.02%		
73	Articles Of Iron & Steel	100928.43	0.82%		
52	Cotton	99393.16	0.81%		
15	Animal or Vegetable Fats & Oils & their Cleavage Products; Animal Vegetable Waxes	51016.61	0.42%		
39	Plastics And Articles Thereof	49494.13	0.40%		
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	34768.56	0.28%		
	Others	468584.84	3.82%		
	Total	12273852.45			

Tabl	Table 18: Internal Movements of Goods from Maharashtra-Commodity wise during 2022 - 23			
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total	
87	Road Vehicles and Parts	2434193.24	51.49%	
72	Iron & Steel	345008.60	7.30%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	246166.62	5.21%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	235377.39	4.98%	
73	Articles Of Iron & Steel	185216.25	3.92%	
39	Plastics And Articles Thereof	171727.62	3.63%	
15	Animal Or Vegetable Fats & Oils & their Cleavage Products; Animal Vegetable Waxes	78706.22	1.66%	
52	Cotton	72424.39	1.53%	
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	70516.08	1.49%	
29	Organic Chemicals	66226.76	1.40%	
	Others	821860.02	17.38%	
	Total	4727423.21		

Table 19: Internal Movements of Goods from Andhra Pradesh-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description (in		Share in Total	
87	Road Vehicles and Parts	3365129.53	89.71%	
72	Iron & Steel	48727.22	1.30%	
15	Animal Or Vegetable Fats & Oils & Their Cleavage Products; Animal Vegetable Waxes	31967.29	0.85%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	31091.49	0.83%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	27850.47	0.74%	
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	24251.94	0.65%	
25	Salt; Sulphur; Earths and Stone; Plastering Materials, Lime and Cement	16779.50	0.45%	
38	Miscellaneous Chemical Products	16110.43	0.43%	
52	Cotton	14638.99	0.39%	
24	Tobacco And Manufactured Tobacco Substitutes	13148.75	0.35%	
	Others	161632.84	4.31%	
	Total	3751328.44		

-	Table 20: Internal Movements of Goods from Gujarat-Commodity wise during 2022 - 23				
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total		
72	Iron & Steel	202654.22	11.45%		
15	Animal Or Vegetable Fats & Oils & their Cleavage Products; Animal Vegetable Waxes	174184.18	9.84%		
27	Mineral Fuels, Mineral Oils & Products; Bituminous Substances; Mineral Waxes	115476.44	6.53%		
39	Plastics And Articles Thereof	112154.52	6.34%		
29	Organic Chemicals	104969.89	5.93%		
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	99295.52	5.61%		
52	Cotton	86237.48	4.87%		
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	81715.60	4.62%		
54	Man-Made Filaments	67219.39	3.80%		
74	Copper & Articles Thereof	62337.73	3.52%		
	Others 663470.1		37.49%		
	Total	1769715.07			

Та	Table 21: Internal Movements of Goods from Uttar Pradesh-Commodity wise during 2022 - 23			
ITC (HS) Code in 2 Digits	Commodity Description	Value (in INR Crore)	Share in Total	
73	Articles Of Iron & Steel	489175.28	32.03%	
85	Electrical Machinery & Equipment & Parts Thereof; Sound & TV Recorders & Reproducers & Parts Thereof	204827.19	13.41%	
72	Iron & Steel	119727.04	7.84%	
84	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts Thereof	65232.25	4.27%	
15	Animal Or Vegetable Fats & Oils & Their Cleavage Products; Animal Vegetable Waxes	55253.28	3.62%	
39	Plastics And Articles Thereof	47812.93	3.13%	
87	Road Vehicles and Parts	39833.71	2.61%	
25	Salt; Sulphur; Earths and Stone; Plastering Materials, Lime and Cement	37534.64	2.46%	
30	Pharmaceutical Products	33803.06	2.21%	
17	Sugars And Sugar Confectionery	30693.11	2.01%	
	Others	403470.93	26.42%	
	Total	1527363.41		

Conclusion:

Most of the major states featured in all three types of movements of Goods, i.e., 'Outward', 'Inward' and 'Internal'. Notable exception to this was Punjab which featured in 'Internal' movement. Rajasthan & Delhi both featured in 'Outward' and 'Inward' movements only. Andhra Pradesh featured in 'Outward' and 'Internal' movement only while Telangana featured in 'Inward' and 'Internal' movement only.

As far as Commodity wise trade figures were concerned, top 05 items were 'Man-made staple fibers', 'Rubber and Articles thereof', 'Other Vegetable Textile Fibers; Paper Yarn and Fabrics', 'Road Vehicles and Parts' and 'Plastics and Articles thereof' in terms of value in that order. Out of these 05, 'Man-made staple fibers', 'Other Vegetable Textile Fibers; Paper Yarn and Fabrics' & 'Plastics and Articles thereof' featured in top 03 of the Inter-State movement of goods, i.e., both 'Outward' & 'Inward' movement of Goods in FY 2022-23. On the other hand, out of these 05, only two, i.e., 'Rubber and Articles thereof' and 'Road Vehicles and Parts' featured in top 02 of the 'Intra-State/Internal' movement of Goods in FY 2022-23.

Disclaimer

Quality of Data received from GSTN

The Data on Trade Statistics through E-Way Bill system for FY 2022-23 were received from Goods & Services Network (GSTN) through SFTP with following data fields:

SL No.	Field Name	Field Description
1	HSN	Harmonized System of Nomenclature Code
2	FROM_STATE	Origin of State from which Goods is being Transferred
3	TO_STATE	Destination State at which Goods is being Received
4	HSN_DESC	Harmonized System of Nomenclature Code Description
5	EWB_ASST_AMT	E-Way Bill Assessment Amount
6	HSN_QTY	Harmonized System of Nomenclature Code Quantity
7	HSN_UNIT	Harmonized System of Nomenclature Code Unit
8	EWB_GEN_DT_YYYMM	E-Way Bill Generated Date
9	FIN_YEAR	Calendar Year
10	DATA_MONTH	Month on which E-way bill Generated
11	CGST#	Central Goods and Service Tax
12	SGST#	State Goods and Service Tax
13	IGST#	Integrated Goods and Service Tax
14	CESS_AMT	Cess Amount

The dataset contained a total of 29,27,00,802 records covering both Inter-state and Intra-state trade data captured through E-Way Bill system for FY 2022-23.

However, the quality of Data received was abysmal and several challenges were faced during processing of these Data. Some of the key challenges are mentioned below:

1. Incorrect Commodity Codes:

Instead of the standard even digit ITC(HS) Codes, the data received had instances of null ITC(HS) Codes, 1-digit ITC(HS) Codes, 2-digit ITC(HS) Codes, 3-digit ITC(HS) Codes, 4-digit ITC(HS) Codes, 5-digit ITC(HS) Codes, 6-digit ITC(HS) Codes, 7-digit ITC(HS) Codes, 8-digit ITC(HS) Codes. These are certainly not compliant with the regulations that require a minimum of two-digit ITC (HS) Codes for certain taxpayers.

Action Taken:

- ✓ All the records where ITC (HS) Codes were either null or single digit were removed from the dataset.
- ✓ For the remaining ITC (HS) Codes, the first two digits were considered as two-digit ITC (HS) Code.

2. Commodity Description Issues:

• The HSN description field was not standard. Here some entries were complete giving a meaningful commodity description, while some others were meaningless (e.g., '??????'), and some of them were left blank or null, making validation difficult. About 9.8% of total records had 'null' Commodity description.

Action Taken:

 \checkmark HSN descriptions were not be considered for this analysis at all.

3. State Code Discrepancies:

- There were incorrect State codes like '97' and '99' found in data which could not be found in the State Code Master.
- Other state codes appeared with an additional decimal point (e.g., 1.0 instead of 01), complicating the validation process.

Action Taken:

✓ State Codes 97 & 99 and few territories surrounded by water or having very small value of trade like A&N Island, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Ladakh were clubbed as 'Others'.

4. Quantity Unit Discrepancies:

• The reported Units & Quantities were often not as per the standard units prescribed by the Customs Authority, making the quantity wise aggregation not possible.

Action Taken:

✓ Due to the fact that quantities were reported in 'Non-Standard' Units, Quantity wise analysis was not possible and is left out.

Due to the fact that quantities were reported in 'Non-Standard' Units, Quantity wise analysis was not possible and is left out.

5. E-Way Bill Assessment Amount less than GST:

 In some cases, the E-Way Bill Assessment Amount was less than the sum of the Central Goods and Service Taxes (CGST) and State Goods and Service Taxes (SGST), or the Integrated Goods and Service Tax (IGST), which should not occur. About 44% of all transactions with about 3% of value in INR Crore were reported with this characteristic.

• In few cases, CGST, SGST and the IGST all three were shown to have been levied which ideally should not have been the case. Query to GSTN on these did not yield any meaningful reply.

Action Taken:

✓ The E-Way Bill Assessment Amount & CGST, SGST and the IGST portion of the data were excluded from analysis completely due to issues flagged at Point no. 5 above.

Thus, it is evident from the above that no meaningful analysis was possible with this quality of data. However, to make something out of it, several assumptions had to be made.

Thus, the challenges encompassing the data quality and standard reporting issues and consequent assumptions made to make the dataset amenable to any kind of analysis may have a bearing on the accuracy and reliability of the inland trade statistics reported.