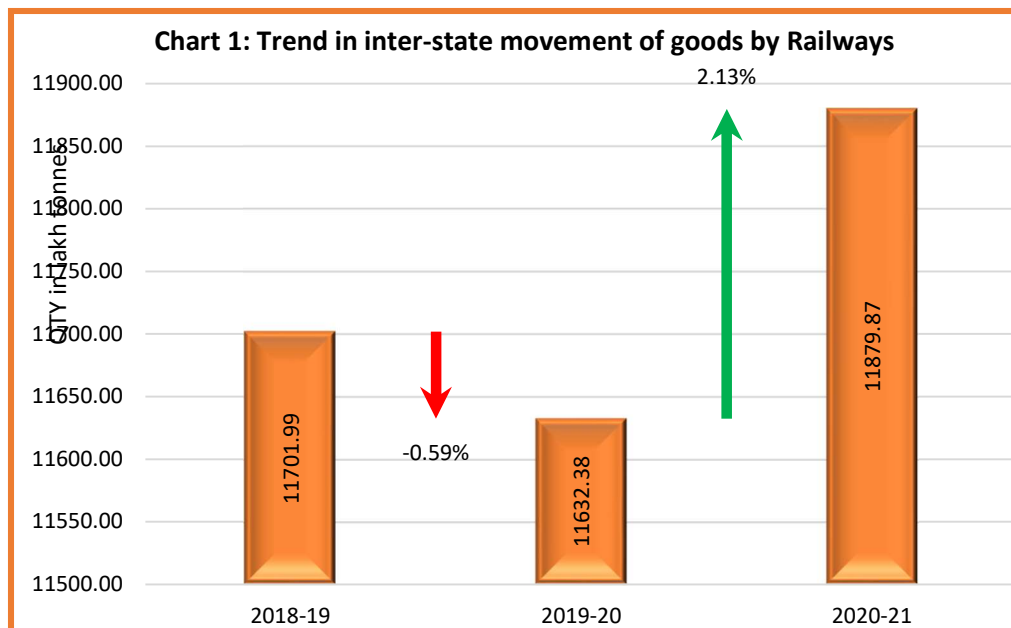


Chapter I

Inter-state movements/flows of goods by Railways in 2020-21

Rail is one of the important modes of inter-state movement of goods in India. Indian Railways is transporting commodities such as food grains, edible oil, salt, sugar, coal, cement, milk, vegetables and fruits, to different parts of the country using freight trains.

During 2020-21, total 11879.87 lakh tonnes of goods were transported by rail within India, including internal movement, which shows a positive growth of 2.13 % over 11632.38 lakh tonnes in 2019-20.



During 2020-21, total outward/inward movement of goods by rail was of 7706.2 lakh tonnes, a decline by 0.12% over 7715.3 lakh tonnes in 2019-20.

State wise movement by Rail

Outward Movement by Rail

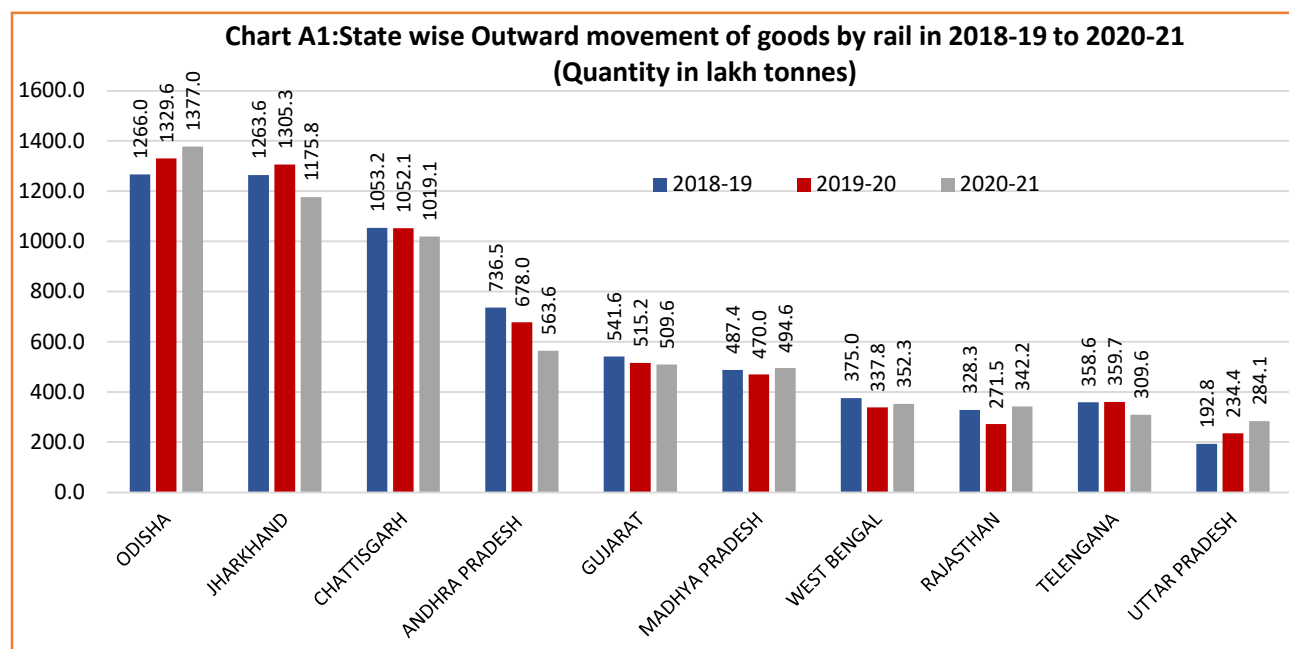
The top 10 contributing states in total outward movement of goods by rail in 2020-21 have a total share 83.41%. The decline of 1.92% in total outward movement of goods from these top contributing 10 states in 2020-21 over 2019-20 explains the decline in the total outward movement of goods in India.

As shown in table A1, Odisha is the largest state in terms of total outward movement of goods in 2020-21, with share 17.87% followed by Jharkhand (15.26%) and Chhattisgarh (13.22%).

**Table A1: Trend in outward movement of goods of top 10 most contributing states by Rail
(Quantity in lakh tonnes)**

STATE	2018-19	2019-20	2020-21	Share in 2018-19	Share in 2019-20	Share in 2020-21	Growth in 2020-21 over 2019-20
Odisha	1266.0	1329.6	1377.0	16.14	17.23	17.87	3.56
Jharkhand	1263.6	1305.3	1175.8	16.11	16.92	15.26	-9.92
Chattisgarh	1053.2	1052.1	1019.1	13.43	13.64	13.22	-3.14
Andhra Pradesh	736.5	678.0	563.6	9.39	8.79	7.31	-16.87
Gujarat	541.6	515.2	509.6	6.90	6.68	6.61	-1.09
Madhya pradesh	487.4	470.0	494.6	6.21	6.09	6.42	5.23
West bengal	375.0	337.8	352.3	4.78	4.38	4.57	4.29
Rajasthan	328.3	271.5	342.2	4.18	3.52	4.44	26.03
Telangana	358.6	359.7	309.6	4.57	4.66	4.02	-13.95
Uttar Pradesh	192.8	234.4	284.1	2.46	3.04	3.69	21.19
Top 10 states	6603.0	6553.7	6427.9	84.17	84.95	83.41	-1.92
Rest	1241.9	1161.5	1278.3	15.83	15.05	16.59	10.05
Total	7844.8	7715.3	7706.2	100.00	100.00	100.00	-0.12

From the chart A1, it is clear that outward movement of goods from Odisha in 2020-21 was more than that in 2019-20 and 2018-19 while outward movement of goods from Jharkhand and Chhattisgarh were less than that in previous two years.



Inward Movement by Rail

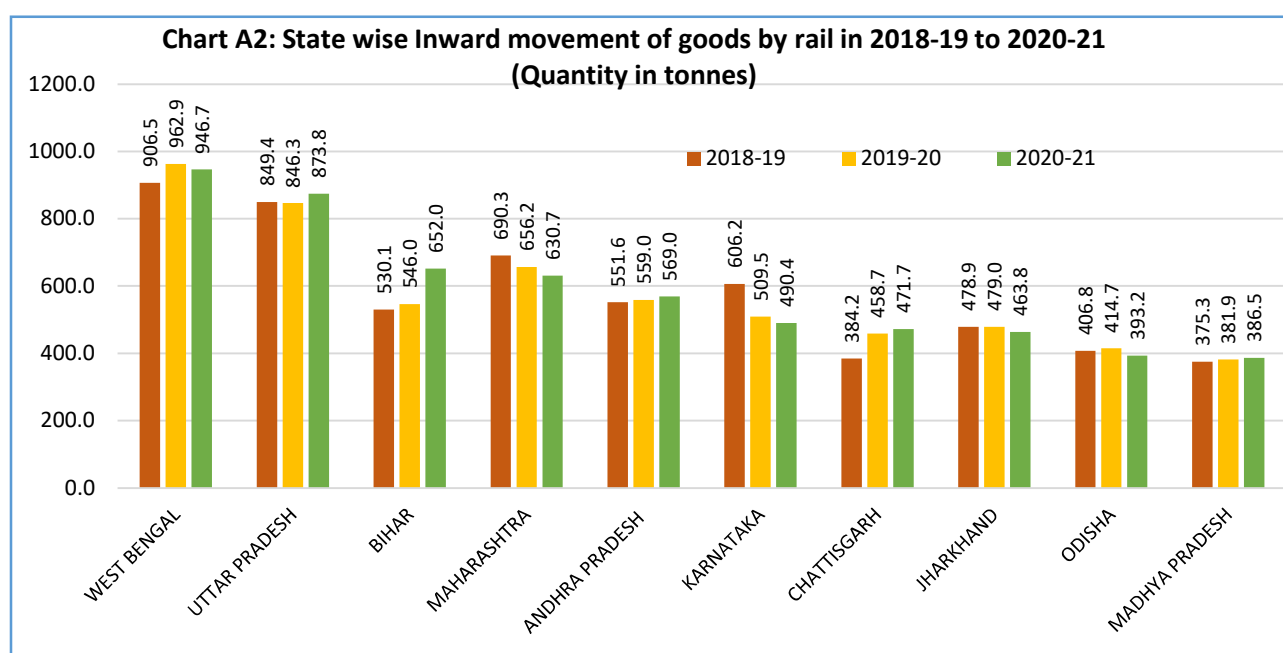
The top 10 contributing states in total inward movement of goods by rail in 2020-21 have a total share 76.27% which was an increase by 1.09% over 2019-20.

**Table A2: Trend in internal movement of goods of top 10 most contributing states by Rail
(Quantity in lakh tonnes)**

STATE	2018-19	2019-20	2020-21	Share in 2018-19	Share in 2019-20	Share in 2020-21	Growth in 2020-21 over 2019-20
West Bengal	906.5	962.9	946.7	11.56	12.48	12.29	-1.68
Uttar Pradesh	849.4	846.3	873.8	10.83	10.97	11.34	3.25
Bihar	530.1	546.0	652.0	6.76	7.08	8.46	19.41
Maharashtra	690.3	656.2	630.7	8.80	8.51	8.18	-3.89
Andhra Pradesh	551.6	559.0	569.0	7.03	7.24	7.38	1.80
Karnataka	606.2	509.5	490.4	7.73	6.60	6.36	-3.75
Chattisgarh	384.2	458.7	471.7	4.90	5.95	6.12	2.83
Jharkhand	478.9	479.0	463.8	6.11	6.21	6.02	-3.18
Odisha	406.8	414.7	393.2	5.19	5.37	5.10	-5.19
Madhya Pradesh	375.3	381.9	386.5	4.78	4.95	5.01	1.20
Top 10 state	5779.5	5814.1	5877.7	73.67	75.36	76.27	1.09
Rest	2065.3	1901.2	1828.5	26.33	24.64	23.73	-3.82
Total	7844.8	7715.3	7706.2	100.00	100.00	100.00	-0.12

As shown in table A2, West Bengal is the largest state in terms of total inward movement of goods in 2020-21, with a share of 12.29%, followed by Uttar Pradesh (11.34%) and Bihar (8.46%).

From the chart A2, it is clear that inward movement of goods to West Bengal in 2020-21 was less than that in 2019-20 but more than 2018-19 while inward movement of goods to Uttar Pradesh and Bihar in 2020-21 were more than that in previous two years.



Internal movement by Rail

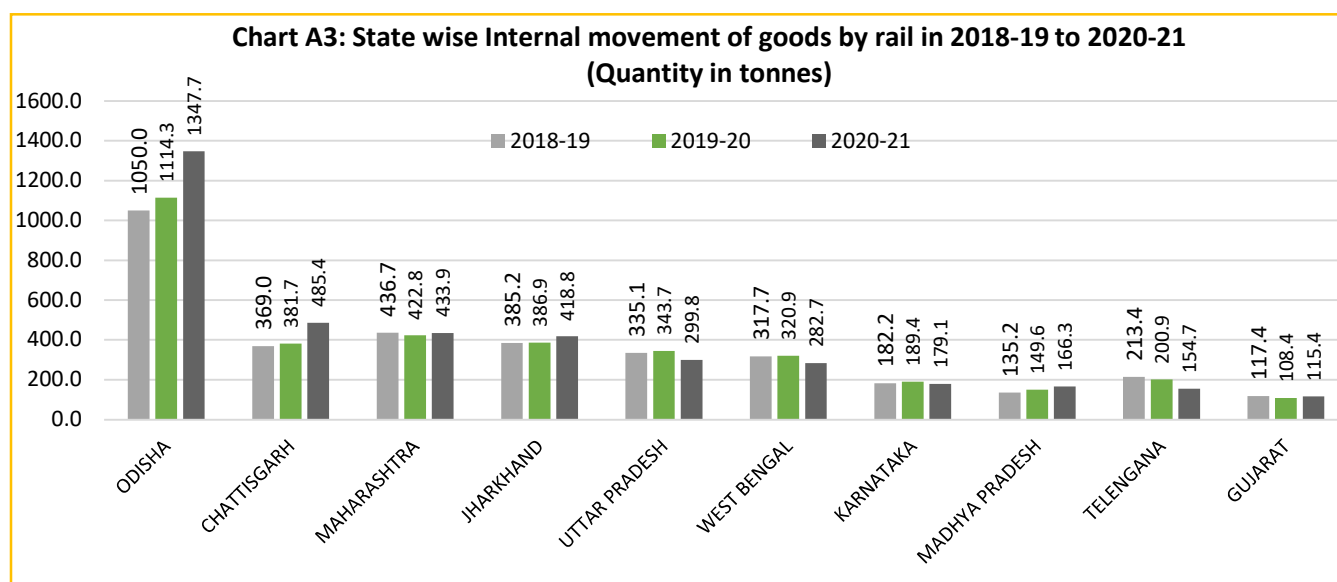
During 2020-21, total internal movement of goods of goods by rail was of 4173.7 lakh tonnes, with positive growth of 6.66% over 3917.1 lakh tonnes in 2019-20.

Table A3: Trend in internal movement of goods of top 10 most contributing states by Rail (Quantity in lakh tonnes)

STATE	2018-19	2019-20	2020-21	Share in 2018-19	Share in 2019-20	Share in 2020-21	Growth in 2020-21 over 2019-20
Odisha	1050.0	1114.3	1347.7	27.22	28.45	32.29	20.95
Chhattisgarh	369.0	381.7	485.4	9.57	9.74	11.63	27.15
Maharashtra	436.7	422.8	433.9	11.32	10.79	10.40	2.62
Jharkhand	385.2	386.9	418.8	9.99	9.88	10.04	8.26
Uttar Pradesh	335.1	343.7	299.8	8.69	8.77	7.18	-12.76
West bengal	317.7	320.9	282.7	8.24	8.19	6.77	-11.93
Karnataka	182.2	189.4	179.1	4.72	4.84	4.29	-5.46
Madhya Pradesh	135.2	149.6	166.3	3.51	3.82	3.99	11.16
Telangana	213.4	200.9	154.7	5.53	5.13	3.71	-23.02
Gujarat	117.4	108.4	115.4	3.04	2.77	2.77	6.45
Top 10 state	3541.9	3618.8	3883.8	91.83	92.38	93.06	7.32
Rest	315.3	298.4	289.9	8.17	7.62	6.94	-2.85
TOTAL	3857.2	3917.1	4173.7	100.00	100.00	100.00	6.55

Table A3 is showing internal movements, i.e., within state movements of goods by top 10 states aggregating to 93.06% of total internal movement of goods in 2020-21 in India.

As shown in table A3, internal movement of goods occurred mostly in Odisha with share 32.29% of total internal movement of goods in India, followed by Chhattisgarh (11.63%) and Maharashtra (10.4%).



From the chart A3, it is clear that internal movement of goods within Odisha in 2020-21 was highest compared to 2018-19 and 2019-20.

Commodity wise movement by Rail

State to State Movement by Rail

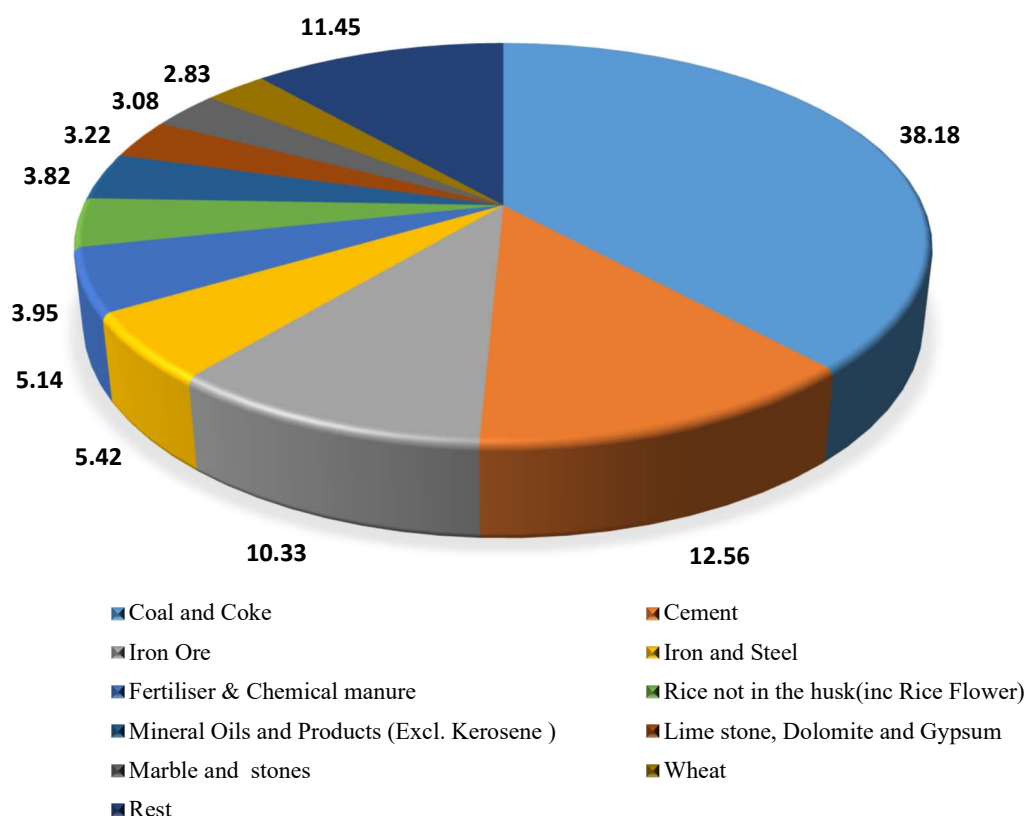
Table B1: Trend in state-to-state movement of goods of top 10 commodity groups by rail (Quantity in lakh tonnes)

Commodity	2018-19	2019-20	2020-21	Share in 2018-19	Share in 2019-20	Share in 2020-21	Growth in 2020-21 over 2019-20
Coal and Coke	3435.36	3398.50	2942.37	43.79	44.05	38.18	-13.42
Cement	947.61	886.32	967.88	12.08	11.49	12.56	9.20
Iron Ore	782.31	830.88	795.79	9.97	10.77	10.33	-4.22
Iron and Steel	409.39	378.33	417.80	5.22	4.90	5.42	10.43
Fertiliser & Chemical manure	378.73	382.58	396.48	4.83	4.96	5.14	3.63
Rice not in the husk (inc Rice Flower)	190.58	175.84	304.27	2.43	2.28	3.95	73.04
Mineral Oils and Products (Excl. Kerosene)	283.81	293.99	294.55	3.62	3.81	3.82	0.19
Lime stone, Dolomite and Gypsum	256.00	246.79	248.34	3.26	3.20	3.22	0.63
Marble and Stones	189.60	178.30	237.61	2.42	2.31	3.08	33.27
Wheat	144.18	142.33	218.45	1.84	1.84	2.83	53.48
Top 10 Commodity	7017.57	6913.84	6823.55	89.45	89.61	88.55	-1.31
Rest	827.25	801.43	882.66	10.55	10.39	11.45	10.14
All commodities	7844.82	7715.27	7706.21	100.00	100.00	100.00	-0.12

Total state-to-state movement of top 10 commodity groups by rail was 6283.55 lakh tonnes, contributing 88.55% in total state-to-state movement of goods during 2020-21. This was slightly less than 2019-20 and 2018-19. Total movement of these commodity groups within India declined by 1.31% in 2020-21 over 2019-20.

Table B1 is showing that 'Coal and Coke' was the dominant commodity group that was transported from one state to another in 2020-21 and its share was 38.18% in total state-to-state movement of goods. This, however, was a decline by 13.42% in 2020-21 over 2019-20. Next two mostly transported commodity groups were 'Cement' with share of 12.56% and 'Iron Ore' with share of 10.33% in total state-to-state movement of goods in 2020-21.

Chart B1: Share of top 10 commodity groups in state-to-state movement of goods in 2020-21 by rail



Internal movement by Rail

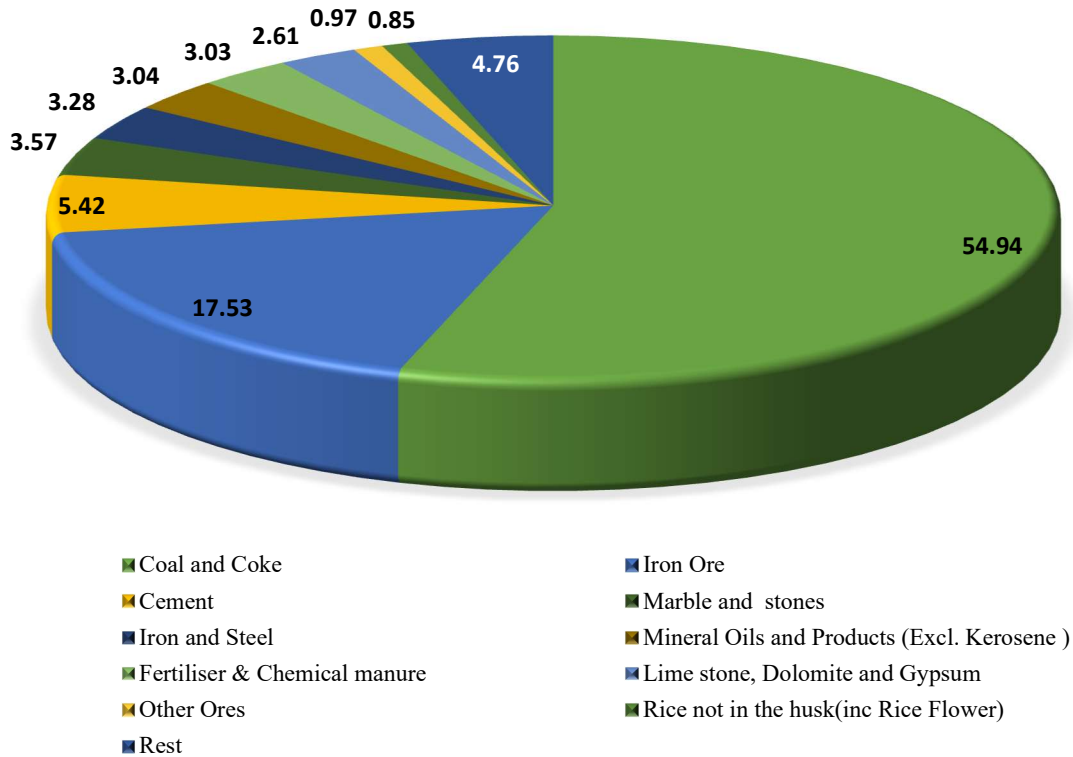
Table B2: Trend in internal movement of top 10 commodity groups by rail (Quantity in lakh tonnes)

Commodity	2018-19	2019-20	2020-21	Share in 2018-19	Share in 2019-20	Share in 2020-21	Growth in 2020-21 over 2019-20
Coal and Coke	2331.55	2235.30	2292.93	60.45	57.06	54.94	2.58
Iron Ore	535.43	629.09	731.81	13.88	16.06	17.53	16.33
Cement	220.97	213.30	226.02	5.73	5.45	5.42	5.96
Marble and stones	125.77	139.23	149.13	3.26	3.55	3.57	7.11
Iron and Steel	104.01	127.07	136.88	2.70	3.24	3.28	7.72
Mineral Oils and	133.36	143.34	127.06	3.46	3.66	3.04	-11.36
Fertiliser & Chemical manure	118.03	117.54	126.65	3.06	3.00	3.03	7.75
Lime stone, Dolomite and Gypsum	90.56	101.54	108.80	2.35	2.59	2.61	7.16
Other Ores	28.68	31.79	40.39	0.74	0.81	0.97	27.03
Rice not in the husk	22.48	19.62	35.39	0.58	0.50	0.85	80.33
Top 10 Commodity	3710.86	3757.81	3975.04	96.21	95.93	95.24	5.78
Rest	146.32	159.31	198.62	3.79	4.07	4.76	24.68
All commodities	3857.17	3917.12	4173.66	100.00	100.00	100.00	6.55

Total internal movement of top 10 commodity groups by rail was 3975.04 lakh tonnes, contributing 95.24% in total internal movement of goods during 2020-21. Total internal movement of these commodity groups increased by 5.78% in 2020-21 over 2019-20.

Table B2 is showing that Coal and Coke, Cement and Iron Ore were transported internally in 2020-21 mostly with share 54.94%, 17.53% and 5.42 % respectively in 2020-21. These three commodity groups maintained their position in total internal movement of goods in 2018-19, 2019-20 and 2020-21.

Chart B2: Share of top 10 commodity groups in internal movement in 2020-21 by rail



From chart B1 and B2, it is clear that ‘Coal and Coke’ was the dominant commodity group that was transported from one state to another in 2020-21.

Commodity by State wise movement by Rail

Table C1 is showing that Jharkhand is highest in exporting Coal & Coke to other states while table C2 is showing that West Bengal is maximum in-taker of it.

Table C1: Outward movement of top 5 commodities from top 3 states (Quantity in lakh tonnes)

Commodity	State	2018-19	2019-20	2020-21
Coal and Coke	Jharkhand	882	913	780
	Odisha	553	513	563
	Chattisgarh	628	607	491
	All State	3,435	3,398	2,942
Cement	Chattisgarh	171	185	201
	Rajasthan	175	130	176
	Madhya Pradesh	171	162	168
	All State	948	886	968
Iron Ore	Odisha	427	513	468
	Chattisgarh	146	156	176
	Jharkhand	104	118	83
	All State	782	831	796
Iron and Steel	Odisha	113	105	123
	Jharkhand	92	94	100
	Karnataka	83	71	68
	All State	409	378	418
Fertiliser & Chemical manure	Gujarat	139	147	154
	Andhra Pradesh	75	65	63
	U.P.	43	43	40
	All State	379	383	396

Table C2: Inward movement of top 5 commodities to top 3 states (Quantity in lakh tonnes)

Commodity	State	2018-19	2019-20	2020-21
Coal and Coke	West Bengal	347	359	355
	U.P.	324	352	311
	Maharashtra	383	371	279
	All State	3,435	3,398	2,942
Cement	U.P.	212	188	222
	West Bengal	153	153	157
	Bihar	133	125	141
	All State	948	886	968
Iron Ore	Andhra Pradesh	162	197	250
	West bengal	196	251	186
	Chattisgarh	110	132	123
	All State	782	831	796
Iron and Steel	West Bengal	43	46	57
	Maharashtra	52	44	51
	U.P.	48	44	45
	All State	409	378	418
Fertiliser & Chemical manure	U.P.	59	65	63
	Maharashtra	35	31	40
	Madhya Pradesh	36	39	39
	All State	379	383	396

Chart C1 – C3 are showing that Odisha is highest in using rail for inter-state movement of Coal & Coke as well as for Iron Ore and Iron & Steel in 2020-21.

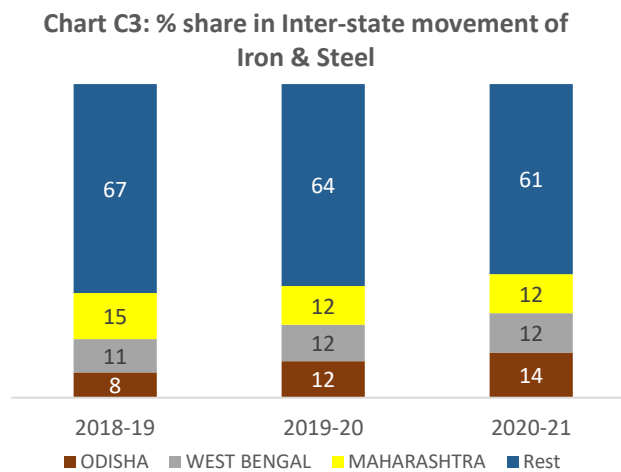
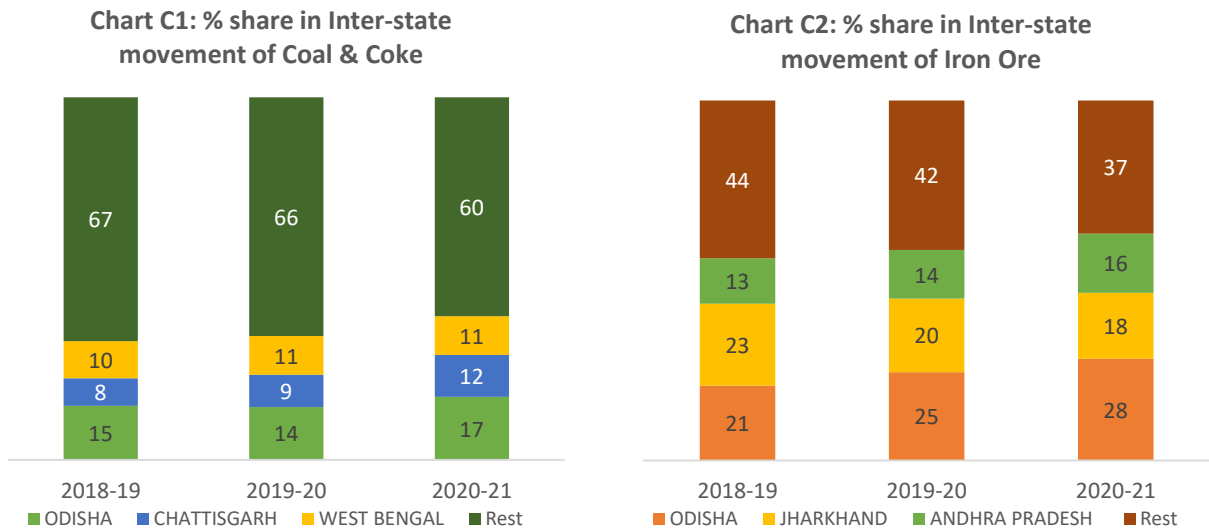


Chart C4 and C5 are showing that U.P. is highest in transporting Cement and Fertiliser & Chemical manure by rail in 2020-21.

