

Freight Operation

Revenue earning freight traffic handled during 2015-16 was 1101.51 million tonnes. NTKMs earned during the year were 654 billion. Total loading and freight output, inclusive of non-revenue traffic, were 1108.62 million tonnes and 656 billion NTKMs respectively. Commodity-wise loading of revenue earning traffic was as follows:

	Tonnes carried*		Absolute Variation over last year	Percentage to total
	2014-15	2015-16		
Coal				
i) for steel plants	53.91	52.06	-1.85	4.73
ii) for washeries	0.99	1.09	0.1	0.10
iii) for thermal power houses	367.29	371.81	4.52	33.75
iv) for other public users	123.62	126.87	3.25	11.52
Total	545.81	551.83	6.02	50.10
Raw material for steel plants except iron ore	18.28	20.29	2.01	1.84
Pig iron and finished steel				
i) from steel plants	28.25	29.59	1.34	2.69
ii) from other points	14.59	15.20	0.61	1.38
Total	42.84	44.79	1.95	4.07
Iron ore				
i) for export	2.49	2.13	-0.36	0.19
ii) for steel plants	69.43	78.63	9.2	7.14
iii) for other domestic users	40.85	36.18	-4.67	3.28
Total	112.77	116.94	4.17	10.62
Cement	109.80	105.35	-4.45	9.56
Foodgrains	55.47	45.73	-9.74	4.15
Fertilizers	47.41	52.23	4.82	4.74
Mineral Oil (POL)	41.10	43.24	2.14	3.93
Container service				
i) Domestic containers	10.50	9.04	-1.46	0.82
ii) EXIM containers	37.88	36.79	-1.09	3.34
Total	48.38	45.83	-2.55	4.16
Balance other goods	73.40	75.28	1.88	6.83
Total	1095.26	1101.51	6.25	100

* Excludes loading on Konkan Railway.

The following tables show the growth of freight traffic over the years:

I. Revenue earning freight traffic (excl. KRCL)

Year	Tonnes (Millions)	Index (1950-51 = 100)	Net Tonne Kms (Millions)	Index (1950-51 = 100)	Lead (Kms)	Index (1950-51 = 100)
1950-51	73.2	100.0	37,565	100.0	513	100.0
1960-61	119.8	163.7	72,333	192.6	603	117.6
1970-71	167.9	229.4	110,696	294.7	659	128.5
1980-81	195.9	267.6	147,652	393.1	754	147.0
1990-91	318.40	435.0	235,785	627.7	741	144.4
2000-01	473.50	646.9	312,371	831.5	660	128.7
2012-13	1,008.09	1,377.2	649,645	1,729.4	644	125.5
2013-14	1,051.64	1,436.7	665,810	1,772.4	633	123.4
2014-15	1,095.26	1,496.3	681,696	1,814.7	622	121.2
2015-16	1,101.51	1,504.80	654,481	1,742.26	594	115.79

II. Movement of bulk commodities in the last four years

Sl. No.	Commodity group	2012-13		2013-14		2014-15		2015-16	
		Million Tonnes	Percent age	Million Tonnes	Percent age	Million Tonnes	Percent age	Million Tonnes	Percent age
1.	Coal	496.42	49.24	508.06	48.31	545.81	49.83	551.83	50.1
2.	Foodgrains	49.03	4.86	55.10	5.24	55.47	5.06	45.73	4.15
3.	Iron & Steel	35.31	3.50	38.95	3.70	42.84	3.91	44.79	4.07
4.	Iron ore	111.4	11.05	124.27	11.82	112.77	10.30	116.94	10.62
5.	Cement	105.87	10.50	109.80	10.44	109.80	10.03	105.35	9.56
6.	POL (Mineral oils)	40.61	4.03	41.16	3.91	41.10	3.75	43.24	3.93
7.	Fertilizers (Chemical manures)	46.21	4.58	44.70	4.25	47.41	4.33	52.23	4.74
8.	Limestone and Dolomite	19.64	1.95	20.71	1.97	21.20	1.94	23.53	2.14
9.	Stones (including gypsum) other than marble	11.77	1.17	11.61	1.10	14.98	1.37	15.04	1.37
10.	Salt	4.77	0.47	4.65	0.44	4.99	0.46	5.02	0.46
11.	Sugar	2.95	0.29	3.00	0.29	2.69	0.25	3.39	0.31
	Total	923.98	91.66	962.01	91.48	999.06	91.23	1007.09	91.43
12.	Commodities other than above	84.11	8.34	89.63	8.52	96.20	8.77	94.42	8.57
	Grand Total	1008.09	100.00	1051.64	100.00	1,095.26	100.00	1101.51	100.00

III. Freight Train Kilometres and Wagon Kilometres

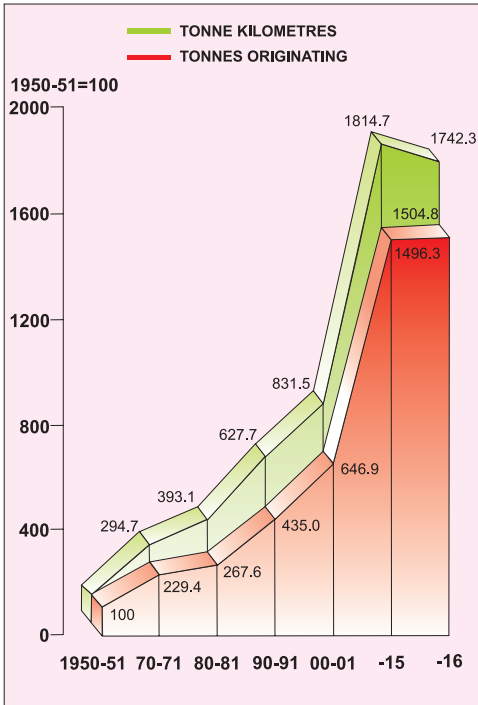
Year	Freight train kms.		Wagon kilometres@ (in terms of 4- wheelers)	
	Total (Million)	Per running track km per day	Total (Million)	Percentage of loaded to total
1950-51	112	5.2	4,370	70.7
1960-61	161	6.9	7,507	70.5
1970-71	202	7.7	10,999	69.7
1980-81	199	7.2	12,165	69.5
1990-91	245	8.5	19,230	65.5
2000-01	261	8.7	27,654	60.9
2010-11	368	11.6	17,749	66.5
2013-14	419	12.8	19,546	65.1
2014-15	402	12.1	18,930	65.2
2015-16	393	11.7	18,708	64.0

@ From 2010-11 onward figure in terms of 8 - wheelers

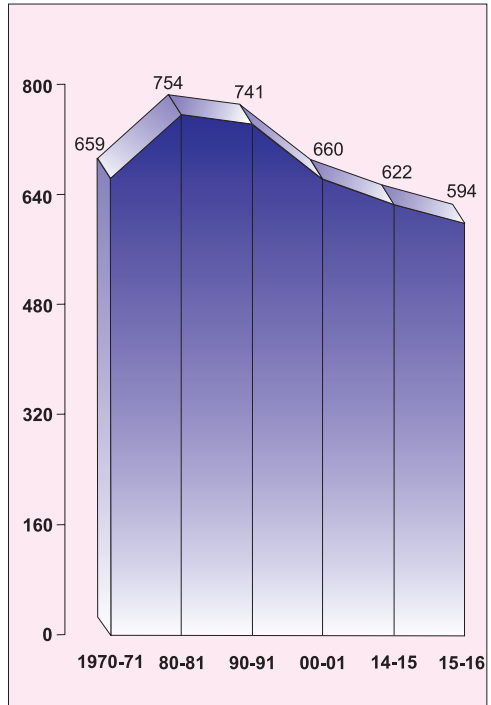
IV. Tonnes Originating, Net Tonne Kms. and Earnings from bulk commodities in 2015-16

S. No.	Commodity group	Tonnes originating		Net tonne kilometres		Earnings	
		In million	%age to total	In Million	%age to total	₹ in crore	%age to total
1	Coal	551.83	50.1	280,700	42.89	49,349.65	46.15
2	Foodgrains	45.73	4.15	60,126	9.19	7,754.27	7.25
3	Iron & steel	44.79	4.07	40,443	6.18	7,182.29	6.72
4	Iron ore	116.94	10.62	32,420	4.95	6,896.27	6.45
5	Cement	105.35	9.56	55,959	8.55	8,851.47	8.28
6	POL (Mineral oils)	43.24	3.93	29,326	4.48	5,926.97	5.54
7	Fertilizers (Chemical manures)	52.23	4.74	43,700	6.68	6,553.41	6.13
8	Limestone & dolomite	23.53	2.14	13,056	1.99	2,255.21	2.11
9	Stones (incl.gypsum) other than marble	15.04	1.37	7,415	1.13	1,292.82	1.21
10	Salt	5.02	0.45	7,782	1.19	760.56	0.71
11	Sugar	3.39	0.31	6,047	0.92	619.31	0.58
	Total	1007.09	91.43	576,974	88.16	97,442.23	91.12
12	Commodities other than above	94.42	8.57	77,507	11.84	9,498.32	8.88
	Grand Total	1101.51	100.00	654,481.00	100.00	106,940.55	100.00

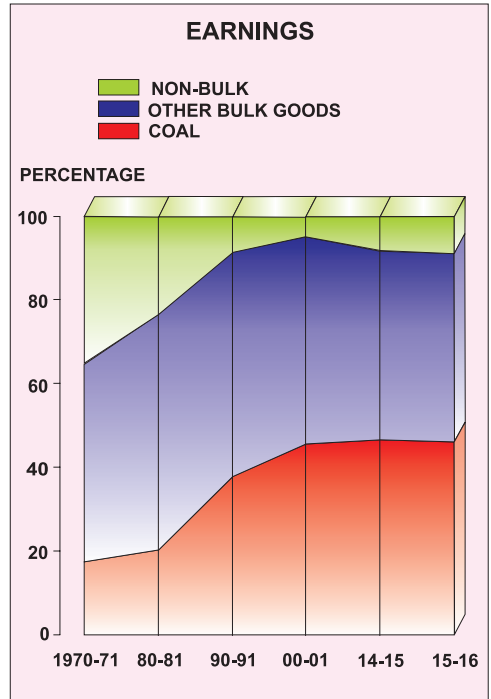
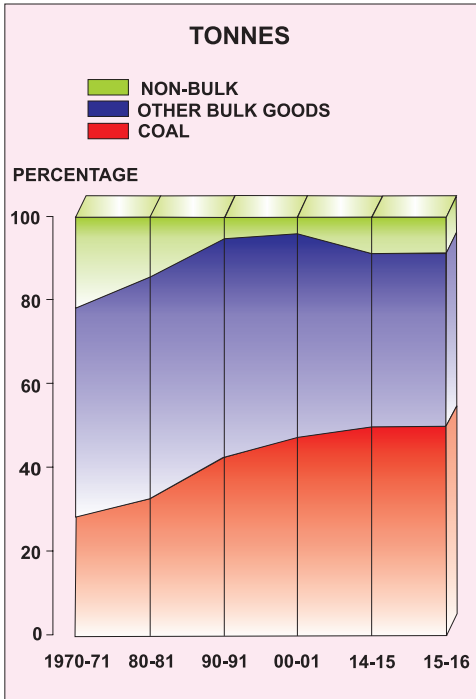
**INDEX OF GROWTH OF FREIGHT
(REVENUE TRAFFIC)**



**AVERAGE LEAD OF FREIGHT (KMS.)
(REVENUE TRAFFIC)**



SHARE OF BULK COMMODITIES IN FREIGHT TRAFFIC



V. Some selected efficiency indices of freight operation during the last four years

			2012-13	2013-14	2014-15	2015-16
Net tonne kilometres per wagon per day@	BG		8,453	8,547	8,113*	7,510
	MG		905	1,271	1,029	365
Wagon kilometres per wagon per day@	BG		265.5	264.5	220.0*	214.5
	MG		47.9	52.8 &	27 *	16
Net tonne kilometres per engine hour	Diesel	BG	15,933	15,574	16,010*	14,926
		MG	2,390	3,453	5,494*	2,234
	Electric	BG	24,133	21,319	20,412*	19,297
		MG				
Net tonne kilometres per engine day on line	Diesel	BG	3,03,200	2,72,634	2,62,123*	2,42,570
		MG	2,40,88	31,183	17,833*	3,083
	Electric	BG	4,49,110	4,08,790	3,34,934	3,34,273

* revised @ From 2010-11 onward figure in terms of 8 - wheelers

VI. Share of Tonnage, Earnings and Net tonne kms. of 30 selected commodities in 2015-16

S No	Commodity group	Tonnes Originating		Earnings		Net Tonne Kms.	
		in thousand	%age to Total	₹ in crore	%age to Total	in millions	%age to Total
1	Total coal	5,51,830	50.10	49,349.65	46.15	2,80,700	42.89
2	Iron ore	1,16,943	10.62	6,896.27	6.45	32,420	4.95
3	Cement	1,05,347	9.56	8,851.47	8.28	55,959	8.55
4	Chemical manures	52,227	4.74	6,553.41	6.13	43,700	6.68
5	Food grains	45,733	4.15	7,754.27	7.25	60,126	9.19
6	Iron & steel	44,789	4.07	6,896.27	6.71	40,443	6.18
7	Mineral oils	43,238	3.93	5,926.97	5.54	29,326	4.48
8	Total exim container	36,794	3.34	3,661.90	3.42	33,036	5.05
9	Limestone & dolomite	23,533	2.14	2,255.21	2.11	13,056	1.99
10	RMC carried in General Service Wagons	11,194	1.02	685.33	0.64	3,355	0.51
11	Stone other than marble and gypsum	10,759	0.98	724.72	0.68	418	0.64
12	Total domestic container	9,040	0.82	1,181.77	1.11	12,394	1.89
13	Ores other than manganese and iron	7,538	0.68	468.46	0.44	2,284	0.35
14	Non-ferrous metal	5,207	0.47	565.48	0.53	2,816	0.43

15	Salt	5019	0.46	760.56	0.71	7782	1.19
16	Cement manufactured	4616	0.42	379.57	0.35	2342	0.36
17	Gypsum	4283	0.39	568.10	0.53	2816	0.43
18	Sugar	3391	0.31	619.31	0.58	6047	0.93
19	Jute manufactured	3366	0.31	388.98	0.36	2698	0.41
20	Lime	2510	0.23	476.20	0.45	3485	0.53
21	Edible oils	1810	0.16	243.90	0.23	2127	0.32
22	Fruits & vegetable fresh	1179	0.11	127.55	0.12	1794	0.27
23	Manganese ores	1068	0.10	96.96	0.09	549	0.08
24	Caustic soda	977	0.09	69.06	0.06	423	0.06
25	Wood unwrought (other than firewood)	928	0.08	67.23	0.06	762	0.12
26	Soda ash	501	0.05	113.84	0.11	829	0.13
27	Bamboos	499	0.05	36.78	0.03	537	0.08
28	Fodder oil cake	265	0.02	68.04	0.06	676	0.10
29	Sand	239	0.02	50.05	0.05	430	0.07
30	Dry Grass	212	0.02	42.10	0.04	492	0.08

Freight Rates:

During the year 2015-16, Freight rates of all classes were increased by 10%. However, the classification of following commodities was reduced as under:-

S. No.	Commodity	Existing class	Revised Class
1	Salt for Human consumption	110	100
2	Cement	150	140
3	Coal and Coke	150	145
4	Limestone, Dolomite & Manganese ore	160	145
5	Iron or Steel	180	165
6	Pig Iron	160	150
7	Iron ores	180	165
8	Petroleum Products	200	180

The distance slabs beyond 1500 kms has been revised from 250 kms to 125 kms.

Freight Marketing :

Private Freight Terminals (PFT):

To facilitate rapid development of the network of freight terminals with private investment so as to provide efficient and cost effective logistics services with warehousing solution to end users, a new scheme namely Private Freight Terminal (PFT) was introduced and further liberalized in 2015. Approval for development of 81 PFTs has been given. 37 PFTs have already been notified, which are functioning.

Liberalized Wagon Investment Scheme (LWIS) :

The scheme allows investment by end users (viz. producers, manufactures and consumers of goods) in Special Purpose Wagons (SPW) and High Capacity Wagons (HCW). 3 rakes have been inducted and approval has been given for procurement of 5 more rakes during the financial year 2015-16.

Wagon Leasing Scheme:

The Wagon Leasing Scheme (WLS) which was introduced on 15.04.2008 aims for induction of rakes on lease basis through PPP route. As per the policy, the procurement of wagons through leasing route is permitted for only Special Purpose Wagons (SPW), High Capacity Wagons (HCW) and wagons for container movement. The leasing companies lease out rakes to end users, logistics providers. 6 rakes have been inducted during the financial year 2015-16.

Automobile Freight Train Operator Scheme (AFTO):

With a view to increase IR's market share in transportation of automobile sector, 'Automobile Freight Train Operator Scheme (AFTO)' was launched, which permits procurement and operation of special purpose rakes by private parties. During 2015-16, 3 rakes of BCACBM wagons have been inducted.

Special Freight Train Operator Scheme (SFTO) :

To increase Rail share in the non-traditional commodities like molasses, edible oil, fly ash, caustic soda, chemicals, petrochemicals, alumina & bulk cement Special Freight Train Operator Scheme (SFTO)Scheme has been launched. During 2015-16, 3 rakes of BRNA wagons have been inducted.

Claims:

IR paid ₹ 11.56 crore as claim compensation for goods/parcel/luggage in the year 2015-16 as compared to ₹ 6.69 crore paid in 2014-15. The trend of claims settlement in the preceding five years is given below:

Year	No. of claims received	No. of claims paid	Gross amount of compensation paid (₹ in crore)
2011-12	23,587	4,217	8.98
2012-13	18,715	3,305	26.15
2013-14	18,133	2,927	2.33
2014-15	15,450	2,561	6.69
2015-16	12,607	1,468	11.56