# STATISTICS OF INLAND WATER TRANSPORT 2013-14





Government of India
Ministry of Road Transport & Highways
Transport Research Wing
New Delhi

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# SECRETARY MINISTRY OF SHIPPING GOVERNMENT OF INDIA

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#### **PREFACE**

Transport Research Wing (TRW) in the Ministry of Road Transport and Highways is the nodal agency for providing information/data on various facets of Shipping and Inland Water Transport. The present issue "Statistics of Inland Water Transport 2013-14" is the 21<sup>st</sup> issue in the series.

The present volume gives an overview of the current status of Inland Water Transport (IWT). Besides it consists of 8 sections covering navigable waterways and infrastructure, cargo movement on waterways, commodity/route wise cargo movement, IWT activities across States/UTs, IWT activities undertaken by private and public sector companies, plan outlays/expenditure for IWT sector, accidents related to inland waterways and Inland Waterways in select countries.

Though, the information contained in the volume is obtained from a large number of source agencies spread across both public and private sector, with the cooperation of the various stakeholders, we have been successful in reducing the time lag in bringing out collated data to less than a year. We hope to receive their continued cooperation in future also.

I take this opportunity to thank all who have contributed to improve and complete this issue. Suggestions from the users of information are welcome to improve quality and coverage. The officers and staff of the TRW deserve special mention for the considerable effort put in by them leading to the release of this publication.

(Rajive Kumar)

New Delhi December 2014

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# CONTENTS

Tables	SUBJECT	Page No.
	INI AND WATERWAYS TRANSPORT. AN OVERVIEW	*
	INLAND WATERWAYS TRANSPORT - AN OVERVIEW	i-xvii
	SECTION - 1 : NAVIGABLE WATERWAYS & INFRASTRUCTURE	
4.4	Necitoral la Waterman de la dis	4.15.5
1.1 1.2	Navigable Waterways in India Infrastructure Facilities Available on National Waterways	1 to 5 6 to 9
1.3	Infrastructure Facilities Available on State Waterways	10 to 11
	,	
	SECTION - 2 : CARGO MOVED ON VARIOUS WATERWAYS	
2.1	Cargo Movement on National Waterways	12
2.2	Details of Cargo Moved on National Waterways	13 to 27
	SECTION - 3 : COMMODITY-WISE ROUTE-WISE CARGO CARRIED,	
	FREIGHT EARNED, INCOME AND EXPENDITURE OF CIWTC	
3.1	Traffic and Freight Earnings of Central Inland Water Transport Corporation (CIWTC)	28
3.2	Cargo Carried and Freight Earned by CIWTC - Commodity-wise	29
3.3	Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms.  Performed by CIWTC	30 to 31
3.4	Income and Expenditure of CIWTC	32
3.5	Source-wise Earnings of CIWTC	33
3.6	Financial Position of CIWTC	34
	SECTION - 4 : IWT ACTIVITIES - STATE-WISE	
	SECTION - 4. INT ACTIVITIES - STATE-WISE	
	Number of IWT Vessels with valid Certificate of Survey - By Type	35
4.2	Number of Passengers and Cargo Carried By Inland Water Vessels	36
	SECTION - 5 : IWT ACTIVITIES - PRIVATE COMPANIES/PUBLIC	
	UNDERTAKINGS	
5.1	IWT Vessels with valid Certificate of Survey -Owned by	37 to 39
0.1	Private Companies/Public Undertakings - By Type	07 10 00
5.2	Cargo/Passengers Carried and Freight Collected - Company	40 to 42
	SECTION - 6 : PLAN OUTLAY & EXPENDITURE FOR IWT SECTOR	
6.1	Plan Wise Financial Performance of IWT Sector from 10th Five Year Plan to	43
	11th Five Year Plan including part of 12th Five Year Plan	

Tables	SUBJECT	Page No.
	SECTION - 7 : INLAND WATERWAYS TRANSPORT ACCIDENTS	
7.1	No. of Accidents, Persons Injured and Killed by Drowning (Boat Capsize) during 2013	44
	SECTION - 8 : INLAND WATERWAYS IN SELECT COUNTRIES	
8.1	Length of Navigable Inland Waterways in Europe and USA in 2005 and 2008	45
8.2	Length of Navigable Inland Waterways by Permissible Carrying Capacity of Vessels - 2008	46 to 47
8.3	Inland Waterways Vessels in Service at the end of 2008	48
8.4	Goods Transport by Type of Transport on National Territory 2008	49
	APPENDICES	
	Appendix- I	
	Appendix- II	

# **Inland Water Transport: An Overview**

#### **INTRODUCTION**

India is endowed with a variety of navigable waterways comprising river systems, canals, back waters, creeks, and tidal inlets. However, navigation by mechanized crafts is possible only over a limited length covering about half of the reported navigable waterways. The navigable waterways are confined to a few States and location specific. The Inland Water Transport (IWT) is functionally important in regions covered by the Brahmputra and the Ganges in the North East and Eastern parts of the country, Kerala, Goa and in the deltas of the rivers of Krishna and Godavari where IWT offers natural advantages. IWT has an important role to play in many parts of the country since it offers an economic, energy efficient, employment intensive and almost pollutant free mode of transport service. In spite of the merits of IWT, its operation is constrained by several factors like shallow water, narrow width during dry weather, siltation and bank erosion, inadequate vertical and horizontal clearances in a large number of overhead structures making navigation throughout the year a daunting task.

#### POLICY INITIATIVES AND MILESTONES

- 2. Before 1950, there was no proper institutional set up for the development of IWT. A beginning was made during the First Plan when the Ganga-Brahmaputra Water Transport Board was set up as a Joint Venture of the Central Government and State Governments of Uttar Pradesh, Bihar, West Bengal and Assam. Its objective was to coordinate the efforts of the participating Governments in developing water transport on the Ganga and Brahmaputra Systems. Subsequently, the Government of India established the Inland Water Transport Directorate in the then Ministry of Shipping and Transport in 1965. In March, 1967, the Ganga-Brahmaputra Water Transport Board was merged with the IWT Directorate. Also, Central Inland Water Transport Corporation Ltd. (CIWTC) was set up at Kolkata in 1967 after taking over the assets and liabilities of the erstwhile River Steam Navigation Company Ltd.
- 3. In pursuance of the recommendations of the National Transport Policy Committee (NTPC), the Inland Waterways Authority of India (IWAI) was set up on October 27, 1986 by an Act of Parliament in 1985 for development, maintenance and regulation of National Waterways for shipping and navigation in the country. Three basic IWT related infrastructure for development of waterways are:
- (a) Fairway or navigational channel with desired width and depth

- (b) Terminals for berthing of vessels, loading/unloading of cargo and for providing interface with road and rail; and
- (c) Navigational aid for safe navigation.
- 4. The Ministry of Shipping is entrusted with the overall responsibility of development of inland water transport in the country. Besides, assistance is being provided to States by the Central Government under Centrally Sponsored Schemes to develop waterways, terminals, navigational aids and undertake survey and studies related to IWT. The assistance under this scheme used to be upto 50% by way of loan on reimbursement basis. However, the pattern of assistance was revised in 2002-03 to 100% in the form of grant under the scheme to the North Eastern States, (including Sikkim) and 90% grant to other states for the development of Inland Water Transport. An Inland Vessel Building Subsidy Scheme was also in place since April, 2002 upto 31st March 2007. Under this scheme, subsidy up to 30% cost of Inland Vessel built in India for operation on National Waterways (NWs), Sunderbans and Indo-Bangladesh protocol routes could be availed. With a view to attract private sector participation in IWT a number of promotional measures and fiscal incentives have been provided. IWAI Act was amended in September 2001 to facilitate promotion of Joint Venture by IWAI; equity participation of Government/IWAI has been limited to a ceiling of 40% for BOT project; Tax exemptions similar to National Highways notified for IWT and customs duty concessions for specified IWT equipments were notified in 2002.

#### INLAND WATERWAYS AUTHORITY OF INDIA

- 5. The Inland Waterways Authority of India (IWAI) was set up under the Inland Waterways Authority of India Act, 1985 is entrusted with the regulation and development of Inland Waterways for the purpose of inland shipping and navigation. Its important functions are:
- (i) Conducting surveys and investigations and techno-economic feasibility for developing inland water transport mode;
- (ii) Development and regulation of National Waterways for shipping and navigation by providing conservancy measures, river training works, setting up infrastructural facilities etc.;
- (iii) Other connected/subsidiary functions include regulation of traffic, coordination with other modes of transport for movement on the National Waterways maintenance of Pilot age etc;
- (iv) To assist and advise central and State Government on matters relating to Inland Water Transport.

#### Box 1: Inland Water Transport (IWT): A Historical Perspective

The commercial history of India gives a glorious account of growth of navigation on inland waterways. The location of a large number of towns on waterways, which were also centers of trade and commerce, much before railways, indicate the value of this mode in the past.

The era of mechanical propulsion in India started in 1823 when the first propelled craft-Diana-weighing 89 tonnes, sailed with passengers from Kulpi road to Calcutta, a distance of 80 kms on the Hooghly. In 1834, a regular monthly steamer service was established between Calcutta and stations upstream on the Ganga for carrying the East India Company's officials and stores. In 1842, a regular fortnightly service grew up between Calcutta and Agra on the river Yamuna. By 1863, a regular steam service commenced between Calcutta and Assam. A network of steamer services soon developed extending as far as Garh-Mukteshwar on the river Ganga in Uttar Pradesh, about 645 kms from Allahabad, and Ayodhya on the river Ghagra, about 325 kms at its confluence with the Ganga.

In the 19th century navigation by power crafts and country boats played a dominant role in development of trade and commerce along river banks and catchment areas of the navigable river and canal system. Bulk of traffic was, however, carried in country boats plying from Delhi and Nepal border to Assam. At its peak in 1876-77 country boat traffic registered at Calcutta were about 180,000 cargo boats, at Hooghly 124,000 cargo boats, and at Patna about 62,000 cargo boats.

The advent of railways and extension of its network marked a turning point for water-transport in India. To start with, construction of main railway lines gave a spurt to river traffic as the two modes supplemented each other, with waterways providing feeder service to railways. This complementarily between IWT and railways was, however, short-lived. The decline of navigation started by about 1860. By that time extension of East Indian Railways had begun to make itself felt. With an increase in rail network new centers of economic activity away from waterways developed. Gradually, IWT lost its superiority.

Source: Chapter 15, Inland Water Transport, Report of the National Transport Policy Committee, Government of India, Planning Commission, May 1980

#### NAVIGABLE WATERWAYS & INFRASTRUCTURE

6. Length of waterways along with its navigable length is an indicator of inland water potential of a state. Table 1 gives Total and Navigable length of Waterways reported across States/UTs. It is observed that the maximum length of waterways is in the State of Assam with 5290 kms followed by West Bengal with 4741 kms. However, the ratio of the navigable length to the total length of the river/canal better reflects the potential for IWT.

As per the available data presented in Table 1, it is observed that the ratio of navigable length to the total length is about 97% in the State of West Bengal; by contrast, in case of Gujarat the ratio of navigable length to total length is a mere 15.62%. Other States with good inland water transport prospects are Goa, Maharashtra and Bihar where waterways navigable length is 90.84, 73.22 and 62.4% respectively of the total length of rivers/lands/lakes reported by these states. Fourteen states have reported river length as well as navigable length for 137 rivers. These 137 rivers have total length of 28511 Km of which 45.83% is navigable length.

Table 1: Total and Navigable Length of Waterways in different States –2013-14 (In kms) *								
State	Total Length of the Rivers/	Navigable	Percentage of Navigable					
	Canals/ Lakes in State (Km.)	Length (Km.)	Length to Total Length					
Andhra Pradesh	3579	804	22.46					
Assam	5290	1713	32.38					
Bihar	2229	1391	62.40					
Goa	273	248	90.84					
Gujarat	653	102	15.62					
Karnataka	2862	1215	42.45					
Kerala	2779	845.2	30.41					
Maharashtra	631	462	73.22					
Orissa	1378	508	36.87					
Nagaland**	937	375	40.02					
Mizoram	787	372	47.27					
Tamil Nadu	27	12	44.44					
Uttar Pradesh**	2345	425 @	18.12					
West Bengal	4741	4593	96.88					

<sup>...</sup> Not Available \*\* Pertains to 2007-08,

#### CARGO MOVEMENT ON MAJOR WATERWAYS

7. Table 2 provides a snap view of cargo moved on the three national waterways, waterways of Goa and Maharashtra which carry most of the cargo traffic on India's Inland Waterways. The total cargo movement on India's waterways comprising the three national waterways and waterways in the State of Goa and Maharashtra was 322.63 lakhs tonnes in 2013-14 as against 412.52 lakhs tonnes in 2012-13, reflecting a decrease of 21.79%. The decline in the total cargo movement in 2013-14 over 2012-13 is mainly attributed to the decline in cargo movement on Goa Waterways, due to ban on iron ore mining/export by the Supreme Court of India w.e.f. 5<sup>th</sup> October, 2012. In terms of tonnage, Goa and Maharashtra accounted for 1.8% and 76.8% respectively of the total cargo volume in 2013-14 with balance 21.4% being accounted by the 3 National Waterways. In terms of tonne km (movement of one tonne of cargo over a distance of one km) also, there was a decrease of 21.04% in 2013-14 over

<sup>@</sup> Navigable length Pertains to NW I for Allahabad-Buxar stretch in Uttar Pradesh.

<sup>\*</sup> The information for each State has been compiled for only those rivers for which both Total length & Navigable length have been reported by the State.

2012-13. Maharashtra waterways accounted for more than 75% of the total cargo movement on inland waterways across India. In case of Goa and Maharashtra, high volume of cargo movement was carried over relatively short average distances of about 45.08 Kms and 18.94 Kms respectively leading to their intensive use. However, in the three National Waterways the volume of cargo traffic was relatively much small. In case of National Waterway II (The Brahmaputra) and National Waterway III (Champakara canal, Udyogmandal canal and West Coast canal) the distance traversed by cargo was on an average around 24 Kms and 11 Kms respectively in 2013-14. In case of National Waterway I (Ganga- Bhagirathi-Hooghly) the average distance over which cargo moved was relatively much longer at around 553 Kms.

Sl. No.	Details of Weterway	Cargo Moved (	lakh tonnes)	Tonne Kms (in	lakh)
SI. 1NO.	Details of Waterway	2012-13	2013-14	2012-13	2013-14
1	National Waterway No. I	27.16(6.6)	33.49(10.4)	15119(49.4)	18512(76.5)
2	National Waterway No. II	24.27(5.9)	24.75(7.7)	580(1.9)	594(2.5)
3	National Waterway No. III	12.36(3.0)	10.66(3.3)	139(0.5)	116(0.5)
	Sub Total NWs	63.79(15.5)	68.90(21.4)	15838(51.7)	19222(79.5)
4	Goa Waterways	106.77(25.9)	5.99(1.8)	10240(33.4)	270(1.1)
5	Maharashtra Waterways	241.96(58.7)	247.74(76.8)	4551(14.9)	4691(19.4)
	Grand Total	412.52(100.0)	322.63(100.0)	30629(100.0)	24183(100.0)

Source:

(i) Inland Waterways Authority of India for National Waterways

- (ii) Data for Goa Waterways include the data received from Ports department, Govt of Goa and the data received from the Mormugao Port Trust (MPT).
- (iii) Maharashtra Maritime Board for Maharashtra Waterways.

#### Note

- 1. Cargo handled in Kolkata-Bangladesh-Kolkata route is included in the traffic on National Waterway No. I. The route is a link between NW-I & NW-II through Bangladesh
- 2. Figure within brackets indicates percentage to the total.

#### NATIONAL WATERWAYS (NW)

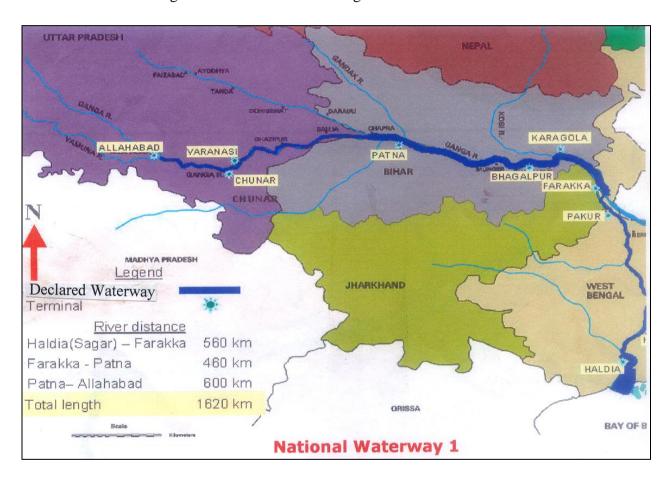
#### **Box 2: Criteria for declaration of National Waterway**

- It should possess capability of navigation by mechanically propelled vessels of minimum 300 tonnes (DWT) capacity (45m x 8m x1.2m);
- It should have a fairway of minimum 40m wide channel with 1.4m depth in case of rivers and minimum 30m wide channel with 1.8m depth in case of canals. Exception may be given in case of irrigation-cum-navigation canals based on request of the concerned State Govt in order to safeguard the interest of irrigation;
- It should be a continuous stretch of minimum 50 kms; the only exception to be made to waterway length is for urban conglomerations and intra-port traffic; and
- It should pass through and serve the interest of more than one States or connect a vast and prosperous hinterland and major port, or either pass through or connect a strategic region where development of navigations is considered necessary to provide logistic support for economic development or national security, or connect place not served by any other mode of transport.
- 8. The Three waterways that have been declared as National Waterways are:
  - (a) Allahabad-Haldia stretch (1620 kms) of Ganga-Bhagirathi-Hooghly river system was declared National Waterway- 1 in October, 1986.
  - (b) Sadiya-Dhubri stretch (891 kms) of the Brahmaputra river was declared National Waterways-II in September, 1988.
  - (c) Kottapuram-Kollam stretch (168 kms) of the West Coast Canal along with Champakara canal (14 kms) and Udyogmandal canal (23 kms) was declared National Waterways-III in February, 1993.

#### National Waterways-I (The Ganga-Bhagirathi-Hooghly)

9. The National Waterway No. 1 has been divided into three stretches for operational convenience and is being developed for shipping and navigation. Over the years, schemes for river conservancy works have been undertaken along with the issues connected with river depth and navigability, repair of vessels, terminal maintenance and other related works. Least Available Depth (LAD) of 2m round the year is being maintained between Haldia and Patna (1020 km) and; LAD of 1.5m between Patna-Varanasi (363 km) for most part of the year. However, LAD of 1.5 metre is maintained only for 4-5 monsoon months in a year between Varanasi and Allahabad stretch (237 Km).

The volume of freight movement on National Waterways-I was 33.49 lakh tonnes in 2013-14 as against 27.16 lakh tonnes in 2012-13 reflecting an increase of 23.31 %. Although the volume of cargo movement by CIWTC, VIVADA IWL and IWAI vessels have decreased in 2013-14 over 2012-13, the volume of cargo moved by other private operators increased considerably during 2013-14 as compared to 2012-13. CIWTC and VIVADA IWL moved 0.08 lakh tonnes and 2.12 lakh tonnes of cargo respectively during 2013-14 as against 0.21 lakh tonnes and 2.47 lakh tonnes respectively during 2012-13. IWAI vessels moved 0.10 lakh tonnes cargo on NW-I in 2013-14 as against 0.16 lakh tonnes cargo on NW-I in 2013-14 as against 24.32 lakh tonnes cargo on NW-I in 2012-13.



10. The composition of cargo movement on National Waterway I over the years is shown in Table 3 below. Building material accounted for 59.6% of total cargo movement along the NW-I during 2013-14.

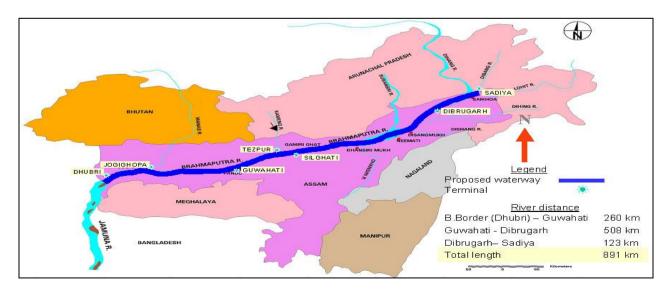
Table 3: Composition of Cargo Moved on National Waterway- I (In Tonnes)								
Name of the Commodity	2009-10	2010-11	2011-12	2012-13	2013-14			
Building Material	1388365(75.6)	1492395 (79.5)	1529401 (46.2)	1727685 (63.6)	1997301 (59.6)			
Fertilizers	-	7500 (0.4)	-	52000 (1.9)	36800 (1.1)			
Food items	1434 (0.1)	9110 (0.5)	15000 (0.5)	345179 (12.7)	394935(11.8)			
Miscellaneous	145000 (7.9)	41984 (2.2)	22509 (0.7)	13842 (0.5)	11476 (0.3)			
Mix	-	-	1459428(44.1)	21800 (0.8)	8250 (0.2)			
Ore/Minerals	25283 (1.4)	2648 (0.1)	550 (neg.)	229000 (8.4)	112000 (3.3)			
POL/POL products	277030 (15.0)	324111 (17.3)	281954 (8.5)	247341 (9.1)	212063 (6.3)			
Coal	-	-	1205 (neg.)	79590 (2.9)	561456 (16.8)			
Iron steel	-	-	-	-	14857(0.4)			
Total NW I	1837112 (100.0)	1877748 (100.0)		2716437 (100)	3349138 (100)			

Note: Figure within brackets indicates percentage to the total.

Neg. - negligible

#### National Waterways No. II (The Brahmaputra)

11. Since its declaration as National Waterway II various developmental activities have been taken up on the Sadiya-Dhubri stretch of Brahmaputra. Some of the schemes undertaken to improve navigability include river conservancy works such as bandalling, channel marking and hydrographic surveys. Pilotage services have also been provided to the vessels plying on this waterway. River conservancy works for maintaining navigable depth are taken up on a year to year basis. LAD of 2 metres between Dhubri and Dibrugarh (768 km) is maintained for most part of the year. However, between Dibrugarh and Sadiya, LAD of 1.5 metres could be maintained only during monsoon months.



12. The total cargo traffic on NW II was 24.75 lakh tonnes during 2013-14 as against 24.27 lakh tonnes during 2012-13 reflected a very small increase. Commodity-wise composition of cargo movement indicates that there is no single item with significant share on this waterway during the year 2013-14. The cargo moved on this waterway is of a mixed nature.

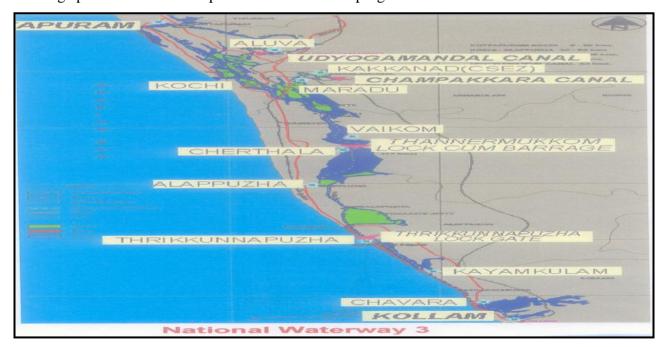
Table 4: Composition of Cargo Moved on National Waterway - II (In Tonnes)								
Commodity	2009-10	2010-11	2011-12	2012-13	2013-14			
Building Material	745 (0.4)	-	-	-	-			
Food items	336 (0.2)	600 (neg.)	-					
	182260	2163145	2406448	2426805	2475349			
Miscellaneous	(99.4)	(100.0)	(100.0)	(100.0)	(100.0)			
Mix	-	-	-	-	-			
Ore/Minerals	-	-	-	-	-			
POL/POL Products	-	-	-	-	-			
	183341	2163745	2406448	2426805	2475349			
Total NW II	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)			

Note: Figure within bracket indicates percentage to the total.

Neg. – negligible

#### The National Waterway No. III (West Coast Canal)

13. The National Waterway No. III consists of three main stretches viz. Champakara Canal, Udyogmandal canal and West Coast canal. It runs parallel to the coastline Fairway maintenance works including maintenance, dredging, channel marking are taken up on a year to year basis. Capital dredging for widening and deepening of canal has been completed between Kochi and Thakazhi jetty and large parts of Kochi-Kottapuram stretch is under progress.



14. The total volume of cargo moved on National Waterway III has been fluctuating over the past few years. It has, however, gone down from 12.36 lakh tonnes in 2012-13 to 10.66 lakh tonnes in

2013-14 recording a decrease of 13.75%. The cargo composition of freight traffic shows that Fertilisers (24.7%), food items (1.7%), POL/POL products (2.3%) and chemicals (11.7%) were the major commodities moved through NW-III during 2013-14.

Table 5: Com	Table 5: Composition of Cargo Moved on National Waterway - III (In Tonnes)							
Commodity	2009-10	2010-11	2011-12	2012-13	2013-14			
Chemicals	-	96804 (11.0)	61005 (4.5)	89074 (7.2)	124782 (11.7)			
Fertilisers	248917 (37.3)	328468 (37.1)	308807 (23.0)	306034 (24.8)	262974 (24.7)			
Food items	199400 (29.9)	144740 (16.3)	131720 (9.8)	141000 (11.4)	18000 (1.7)			
Mix	34868 (5.2)	94067 (10.6)	687946 (51.2)	538670 (43.6)	606760 (56.9)			
Ore/Minerals	52452 (7.9)	59546 (6.7)	15063 (1.1)	72163 (5.8)	28542 (2.7)			
POL/POL products	131560 (19.7)	162069 (18.3)	139229 (10.4)	89462 (7.2)	24948 (2.3)			
Total NW III	667197 (100.0)	885694 (100.0)	1343770 (100.0)	1236403 (100.0)	1066006 (100.0)			
Note: Figure w	ithin brackets in	ndicate percentag	ge to the total		·			

15. The total cargo moved through all the three National Waterways (NW) increased by 8.01% to 68.90 lakh tonnes during 2013-14 from 63.79 lakh tonnes during 2012-13. In 2013-14, share of cargo moved in volume terms across the three national waterways i.e NW I, (The Ganga- Bhagirathi-Hooghly) NW II (The Brahmaputra) and NW III (Champakara canal, Udyogmandal canal and west Cost canal) has been 48.6%, 35.9%, and 15.5% respectively of the total cargo moved in national waterways. In terms of tonne kilometers, the share of NW I, NW II and NW III is 96.3%, 3.1% and 0.6% of the total tonne kilometers moved. The high share of NW I in tonne kilometers reflect long average distance traversed by cargo of 553 kms compared with an average distance of about 24 kms for NW II and average distance of 11 kms for NW III in the year 2013-14. Table 6 gives cargo movement of National Waterways in Tonnage and Tonne Kilometers.

Table	Table 6: Cargo Movement on National Waterways								
Sl.	Details of Waterway	Cargo	Moved	Tonne Kms					
No.		( lakh ]	Tonnes)	(in lakh )					
		2012-13	2013-14	2012-13	2013-14				
1	National Waterway	27.16(42.6)	33.49(48.6)	15119(95.5)	18512(96.3)				
1	No. I								
2	National Waterway	24.27(38.0)	24.75(35.9)	580(3.7)	594(3.1)				
2	No. II								
2	National Waterway	12.36(19.4)	10.66(15.5)	139(0.9)	116(0.6)				
3	No. III								
	Total NWs	63.79(100.0)	68.90(100.0)	15838(100.0)	19222(100.0)				

Source: Inland Waterways Authority of India for National Waterways. Cargo handled in Kolkata-Bangladesh-Kolkata route is included in the traffic on National Waterway No.I. The route is a link between NW-I & NW-II through Bangladesh

Note: Figure within brackets indicate percentage to the total

16. The movement of Building material has shown significant increase and POL/POL Products has shown decrease on the National Waterways in 2013-2014. The details of the commodities moved on the National Waterways is presented in Table 7.

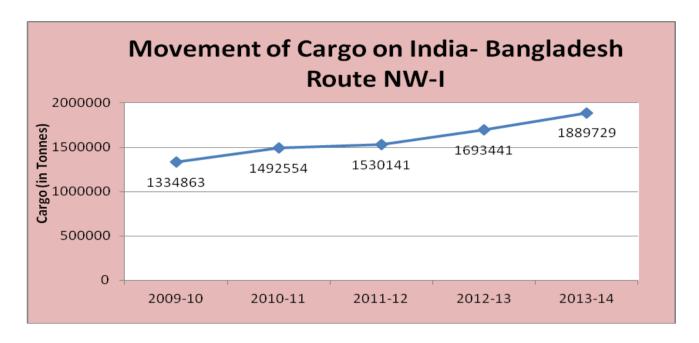
Table 7: Composition of Cargo Moved on national waterways (In tonnes)								
Commodity	2009-10	2010-11	2011-12	2012-13	2013-14			
Building Material	1389110	1492395	1529401	1727685	1997301 (29)			
	(51.6)	(30.3)	(21.7)	(27.1)				
Chemicals	-	96804 (2.0)	61005 (0.9)	89074 (1.4)	124782 (1.8)			
Fertilisers	248917 (9.3)	335968 (6.8)	308807 (4.4)	358034 (5.6)	299774 (4.4)			
Food items	201170 (7.5)	154450 (3.1)	146720 (2.1)	486179 (7.6)	412935 (6.0)			
Miscellaneous	327260	2205129	2428957	2440647	2486825			
	(12.2)	(44.7)	(34.4)	(38.3)	(36.1)			
Mix	34868 (1.3)	94067 (1.9)	2147374	560470 (8.8)	615010 (8.9)			
			(30.4)					
Ore/Minerals	77735 (2.9)	62194 (1.3)	15613 (0.2)	301163 (4.7)	140542 (2.0)			
POL/POL	408590	486180 (9.9)	421183 (6.0)	336803 (5.3)	237011(3.4)			
Products	(15.2)							
Coal	-	-	1205 (0.0)	79590 (1.2)	561456(8.1)			
Iron & Steel	-	-	-	-	14857(0.2)			
	2687650	4927187	7060265	6379645	6890493			
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)			
Note: Figure with	in brackets ind	icate percentag	e to the total					

#### Box: 3- Indo-Bangladesh Protocol for Inland Water Transport

An Inland Water Transit and Trade Protocol exist between India and Bangladesh under which inland vessels of one country can transit through the specified routes of the other country. The existing protocol routes are (i) Kolkata-Pandu-Kolkata, (ii) Kolkata-Karimganj-Kolkata, (iii) Rajshahi-Dhulian-Rajshahi and (iv) Pandu-Karimganj-Pandu. For inter-country trade, four ports of call have been designated in each country. These are: Haldia, Kolkata, Pandu and Karimganj in India and Narayanganj, Khulna, Mongla and Sirajganj in Bangladesh. Under the protocol, 50:50; cargo sharing by India and Bangladesh vessels is permitted both for transit and inter country trade. While the protocol permits vessels of either country to carry Indo- Bangladesh trade cargo and prohibits one country's vessels carrying intra- country traffic of the other, Bangladesh vessels are permitted to carry Indian domestic cargo transiting Bangladesh.

#### Cargo carried on Indo -Bangladesh Waterway Route

17. Movement of cargo along India Bangladesh route of National Waterways I have shown growth of 11.59% in year 2013-14 over that in 2012-13. The cargo moved over this route has increased to 1889729 tonnes in 2013-14 against 1693441 tonnes in 2012-13. The graph inserted below depicts trend in cargo movement on India-Bangladesh route National Waterway-I during the years 2009-10 to 2013-14.



18. The table 8 shows the cargo and the main commodities carried on India-Bangladesh route on National Waterway-I during the years 2009-10 to 2013-14.

Table 8: Mov	Table 8: Movement of Cargo (in Tonnes) on India- Bangladesh route of NW I*(Tonnes)								
Route	2009-10	2010-11	2011-12	2012-13	2013-14	Commodities			
India to Bangladesh	1334863	1492554	1530141	1693441	1889729	Flyash, Salt in bulk, Rice, Wheat POL, Coal, Slag Gypsum, HSD, Edible Oil, Iron Ingots, Cement, Bone crushed, Cement Clinker, Dolomite Powder			
Total	1334863	1492554	1530141	1693441	1889729				
*Data pertains to cargo carried on Indian registered vessels only.									

#### TWO NEW NATIONAL WATERWAYS

- 19. Two new water ways have been declared by the Government as National Waterways.
  - (i) The Kakinada Puducherry stretch of Canals and the Kaluvelly Tank; Bhadrachalam –
     Rajahmundry stretch of River Godavari and Wazirabad Vijayawada stretch of River Krishna (NW-4, 1095 km); and
  - (ii) The Talcher –Dhamra stretch of river Brahmani, Geonkhali-Charbatia stretch of East Coast Canal, Charbatia-Dhamra stretch of Matai river and Mangalgadi- Paradip stretch of Mahanadi delta rivers (NW5,623 km Gazette notifications for both these

waterways were published on 25.11.2008. Detailed Project Reports (DPR) for these new NWs is being prepared.

# NATIONAL WATERWAY 4 (KAKINADA-PUDUCHERRY CANALS WITH GODAVARI AND KRISHNA RIVERS)

- 20. The stretches of the waterway (1095 kms) which has been declared as National Waterways (NW) are as follows:
  - (i) Godavari river from Bhadrachalam to Rajahmundry 171km.
  - (ii) Krishna River from Wazirabad to Vijayawada- 157 km.
  - (iii) Kakinada canal from Rajahmundry-50 km.
  - (iv) Eluru canal from Rajahmundry to Vijayawada-139 km.
  - (v) Commamur canal from Vijayawada to Peddaganjam lock-113 km.
  - (vi) North Buckingam canal from Peddaganmjam lock to Chennai-34 km.
  - (vii) South Buckingham canal from Chennai to Mercanum-103; and
  - (viii) Kaluvelli tank from Mercanum to Puducherry-22km.
- 21. The waterway is located in the States of Andhra Pradesh (888Km), Tamil Nadu (205 km) and Union Territory of Puducherry (2 Km). Out of 1095 km, 50 km stretch within Chennai city (from Ennore to Muthukadu) is not envisaged for development due to encroachment of canal. This waterway runs through rural and Urban centres like Chennai, Vijayawada, Rajahmundry, Kakinada, Eluru, Bhadrachalam &Wazirabad and hence provide a vital link between rural areas and Urban centres Besides bulk cargo namely coal, cement fertilizers etc. it would help movement of agriculture products from rural area to Urban centres and industrial goods from Urban centres to rural areas. Further it also connects sea ports of Kakinada, Krishnapatnam, Ennore and Chennai and will facilitate import/export of cargo from/to hinterland. The waterway is proposed to be developed with 32 m wide and 1.8m deep navigational channel for Godavari river, Krishna river and North and South Buckingham canal while for Kakinada, Eluru and comamur canals with 14 m wide and 1.6m deep navigational channel The Estimated Cost of development of National Waterways at 2008-09 prices is (Rs. 1372 crore).
- 22. The Government of Andhra Pradesh has suggested for making availability of water in rivers and Irrigation canals for 330 days in a year for navigation. After the construction of dams at Polavaram in Godavari and Pulichinthala in Krishna by the year 2014-15, the development of waterway in Andhra Pradesh has been planned in two Stages as given below:-
- 23. Under stage I, 583 km of water way will be completed by the year 2013-14. Stage II works will be taken up after completion of construction of dams at Polavaram across Godavari river and at

Pulichintala across Krishna river. Under Stage-II, 462km of waterway will be completed by the year 2016-17.

24. In addition to the above mentioned cargo transportation by the environment friendly mode of water transport, the development of this waterway will provide social benefits e.g. employment generation, reduction in pollution, providing port- hinterland connectivity, reduction in road maintenance and road accidents, increase in economic activities etc.

# NATIONAL WATERWAYY-5 (EAST COAST CANAL ALONG WITH BRAHMANI RIVER AND MAHANADI DELTA).

25. The stretches of the water way which have been declared as National waterway (NW) are as follows.

(i) East Coast Canal (Geonkhali-Charbatia)	217 km.
--	---------

(ii) Matai River (Charbatia- Dhamra) 40 km.

(iii) River Brahmani (Talcher-Dhamra) 265 km.

(iv) Mahanadi delta river (Mangalgadi-Paradip) 101 km.

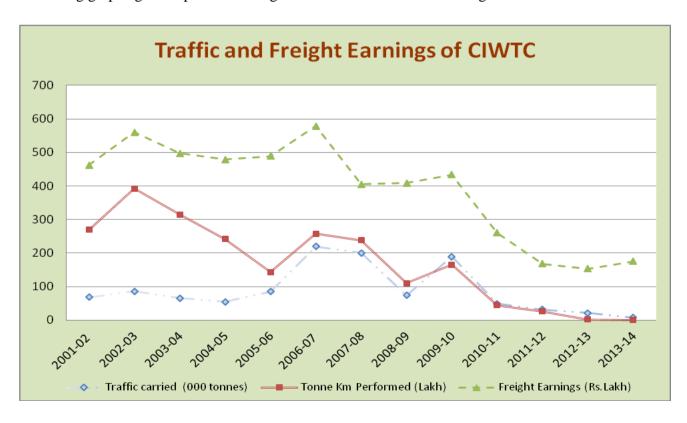
Total 623 km.

- 26. The waterway is located in the States of West Bengal (91) km) and Orissa (523km). For Brahmani- Kharsua-Dhamra River, Matai river and Mahanadi delta portion (406 km), the waterway is proposed to be developed with 45 m wide and 2m deep navigational channel while for East Coast Canal portion (217 km), with 32 m wide and 1.5 deep navigational channels. Developmental works envisaged are as follows:
  - (i) Widening of narrow canal
  - (ii) Dredging, Excavation
  - (iii) Bank protection
  - (iv) Construction of barrages in Brahmani river at 5 placed
  - (v) Repair of locks
  - (vi) Modification of bridges & roads
  - (vii) Navigational aids
  - (viii) Setting up of IWT terminals (all terminals are in Orissa)

The estimated cost of development of National Waterway at 2002 price is Rs. 1526 crore.

#### CENTRAL INLAND WATER TRANSPORT CORPORATION (CIWTC LTD)

- 27. Central Inland Water Transport Corporation Ltd. (CIWTC) was established as a Government of India undertaking in the year 1967. (CIWTC took over the assets and liabilities of the River Steam Navigation Company Ltd. which was looking after Inland Water Transport services on river Barak). It is primarily responsible for transportation of cargo through inland waterways spread across Kolkata-Bangladesh-Assam and Allahabad-Haldia-Budge. It is operating on different routes on National Waterways-I and II including the protocol routes through Bangladesh and other parts of the country in Eastern and Northern India.
- 28. River services Division (RSD) is the division of CIWTC Ltd., which has its main terminal at Kolkata and branch offices at Haldia, Patna, Karimganj, Badarpur, Dhubro, Pandu and Guwahati. For running, repair and maintenance of its own crafts, the RSD has two workshops, one at Kolkata (West Bengal) and the other at Pandu (Assam).
- 29. The cargo carried by CIWTC decreased by 61.27% in the year 2013-14 to 8250 tonnes against 21300 tonnes in 2012-13, but the total freight earnings have gone up by 13.6% from Rs.153.72 lakh in 2012-13 to Rs.174.63 lakh in 2013-14. The non-commodity earnings of CIWTC showed a positive growth of 27.63% as it reached Rs. 172.83 lakh in 2013-14 from Rs. 135.42 lakh in 2012-13. Following graphs gives a picture of long term trend in traffic and earning of CITWC.



#### IWT ACTIVITIES - STATE GOVERNMENT

30. The number of vessels deployed and volume of cargo carried on Inland Waterways across the reporting States & UTs is given in Table 9.

Table 9: Number of Inland Water Vessels and Cargo Carried – State wise								
	Number of Vessels				Volume of Cargo Carried (thousand			
State/UT						ton	nes)	
	2010-11	2011-12	2012-13	2013-14	2010-11	2011-12	2012-13	2013-14
Andhra	111	111						
Pradesh	111	111	•••	•••	• • •	•••	• • •	• • •
Assam		209	22	173		37.72	71.79	338.53
Bihar	21	138	138	138		2.40	2.40	2.40
Goa	188	172	313	159	14563.49	14469.90	3275.82	284.17
Karnataka	39	473	66	66	1033.80	3887.00	78.40	58.72
Kerala	13495	5513	13821	13689	5285.56	5756.12	5555.21	2831.87
Maharashtra	781	603	577	588	14870	19950	24196	24774
Orissa	281	279	342					
West Bengal	2561	2635	2623	2042	9987	9996	10347	11452
TOTAL								
(reporting	17477	10133	17902	16855	40739.85	54099.14	43526.62	39741.69
states)								

<sup>...</sup> Not Available

#### PERFOMANCE OF COMPANIES ENGAGED IN IWT

- 31. The data received from 26 IWT companies shows that amongst the private companies the maximum number of cargo vessels were held by the Sesa Goa Ltd., Goa followed by West Bengal Surface Transport Corporation and Jindal ITF Ltd. The Maximum cargo of 1003.36 thousand tonnes was carried by Sesa Goa Ltd, Goa.
- 32. Cargo moved by top 10 private companies along with the number of cargo vessels employed in 2013-14 is given below in Table 10.

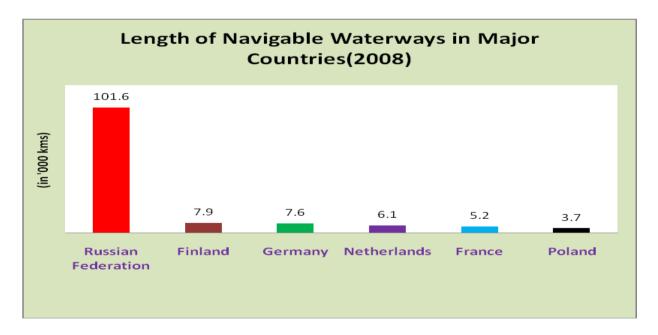
Table 10: Top ten Private Companies - Cargo moved and Vessels Operated 2013-14							
Name of the Company	No. of Vessels	Cargo moved ('000 tonnes)					
1. Sesa Sterlite Ltd. Goa.	32	1003.36					
2. VIVADA Inland Waterways Ltd, Kolkata	14	495.62					
3. Sesa Resources Ltd Goa	3	163.20					
4. Eastern Navigation Pvt. Ltd, Kolkata	11	56.34					
5. Jindal ITF Ltd.	18	40.21					
6. Soham Shipping Private Ltd.	4	25.27					
7.West Bengal Surface Transport Corporation	26	23.28					
8. CIWTC, Kolkata	-	8.25					
9. Jain Navigation	2	7.26					
10. K.S. Singhi	1	3.31					

#### INLAND WATERWAYS TRANSPORT ACCIDENTS

33. The total number of accidents on inland waterways during the year 2013 was 523 out of which 114 were reported in Uttar Pradesh followed by Bihar with 100 accidents. The number of deaths during the year due to boat mishaps were highest in Uttar Pradesh at 152 followed by Bihar at 87. A striking feature observed in all the States (Table No. 7.1) is that the number of persons died due to boat mishaps is more than the number of persons injured on waterways unlike in the road accidents.

#### INLAND WATERWAYS IN SELECT COUNTRIES

34. The maximum length of Navigable Inland Waterways belongs to Russian Federation with 101,612 Kms followed by Finland with 7,983 Kms, Germany with 7,565 Kms., Netherlands with 6,102 Kms., France with 5,200 Kms and Poland with 3,660 Kms. in the year 2008. However, the maximum quantity of Goods carried was in Germany at 246 million tones, followed by Russian Federation at 150 million tones and Belgium at 130 million tones.



Source: Annual Bulletin of Transport Statistics for Europe & North America, 2011(UN Publication).

# **SECTION - 1**

# NAVIGABLE WATERWAYS AND INFRASTRUCTURE

Table No. 1.1

#### Navigable Waterways in India

					(In Kms.)
				2013-14	
SI. No.		State/River	s/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1			2	3	4
		•		•	
1	AND	IRA PRADESH			
	(i)	Godavari		1530	171
	(ii)	Krishna		1400	157
	(iii)	Others **		649	476
		Total		3579	804
2.	ASS/	ΔM			
	(i)	Brahmaputra		2800	891
	(ii)	Borak		900	152
	(iii)	Subansiri		468	111
	(iv)	Dhansiri		135	25
	(v)	Manash		375	104
	(vi)	Aie			64
	(vii)	Beki		85	55
	(viii)	Jiabhoroli		90	60
	(ix)	Puthimari			64
	(x)	Disang		25	25
	(xi)	Kopili Dikhow		50 92	50 40
	(xii) (xiii)	Katakhal/Dhaleswari		92 150	120
	(xiv)	Sonai			48
	(XV)	Mahura		•••	32
	(xvi)	Buridihing		120	80
	(xvii)	Chiri			42
	(xviii)				64
	,	Total		5290	2027
2	ВІНА	D			
٥.	(I)	N Damodar			
	(ii)	Ganga		510	 510
	(iii)	Gandak		300	300
	(iv)	Koshi		233	160
	(v)	Ghaghra		100	100
	(vi)	Sone		226	31
	(vii)	Mahananda		140	
	(viii)	Burhi Gandak		400	
	(ix)	Punpun		200	
	(x)	Phalgu Harihar		300	
	(xi)	Kiul Kari Kashi		100	
	(xii)	Kari Koshi Chandan		150	•••
	(xiii) (xiv)	Karamnasha		100 144	
	(XIV)	Others		860	 290
	(^v)	Total		<b>3763</b>	1391
		i Viui		0.00	1001

Table No. 1.1

#### Navigable Waterways in India

				(In Kms.)
SI. No.		State/Rivers/Canals/Lakes	2013-14 Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
4	(i) (ii) (iii) (iv) (v) (vi) (vii)	GOA Mandovi Zuari Mapusa Chapora Tiracol Sal Others Total	78 68 27 34 29 20 17 273	66 68 27 32 23 15 17
5	GUJA (i) (ii) (iii) (iv) (v)	RAT * Narmada Tapti Ambica Auranga Purna Total	161 140 136 75 141 <b>653</b>	50 15 20 4 13
6	(i) (ii) (iii) (iv) (v) (vi) (vii) (ix) (x) (xi) (xiii) (xiii)	Sharavathi Tungabhadra Malaprabha Ghataprabha Krishna Cauvery Kabini Gurupur Gangolli Bheema Udyavara Netravathi Kali Total	80 375 230 160 325 270 117 80 48 860 37 96 184 2862	27 375 230 160 125 34 30 20 20 125 14 26 29 1215
7	(i) (ii) (iii) (iv) (v) (vi) (viii) (ix) (xi) (xii) (xiii) (xiv) (xvi) (xvi) (xvi) (xvii) (xviii)	Manjeswar Uppala Shiriya Mogral Chandragiri Chittari Nileswar Karingode Kavvayi Peruvamba Ramapuram Kuppam Valapattanam Anjara Kandy Telcicherry Mahe	16 50 67 34 105 25 46 64 31 51 19 82 110 48 28 54 74	3.2  4.8  12.8  11.2 24 9.6 16 6.4 24 44.8 27.2 21.6 24 9.6 24.8

#### Table No. 1.1 (Contd...)

#### Navigable Waterways in India

				(In Kms.)
			2013-14	
SI.		Otata/Dissana/Ossals/IIIslas	Total Length of the	A1. 1. 1.
No.		State/Rivers/Canals/Lakes	Rivers/Canals/Lakes	Navigable
				Length
1		2	in the State 3	4
			<u> </u>	
		12.11.1		
	(xix)	Kallai	22	9.6
	(xx)	Chaliyar	169	68.4
	(xxi)	Kadalundy	130	43.2
	(xxii)	Tirur	48	9.6
	(xxiii)	Bharathappujha	209	40
	. ,	Keecheri	51	
		Puzhakkal	29	
	. ,	Karivannur	48	24
		Chalakkudy	130	
				16
		Periyar	244	72
		Muvattei puzha	121	25.6
	. ,	Meenachil	78	41.6
	٠,	Manimala	90	54.4
	,	Pamba	176	73.6
		Achan coil	128	32
		Pallickal	42	2
	(xxxv)	Kallada	121	40
	(xxxvi)	Ithikkara	56	16
	(xxxvii	Ayroor	17	1
		Vamanapuram	88	11.2
		Mamom	27	1
	(xL)	Karamana	68	
	(xLi)	Neyyar	56	
	(//	Total	3092	845.2
		· otal	3332	0.0.2
8	MAHA	ARASHTRA		
·	(i)	Dande River	2	1
	(ii)	Pangere River	2	i 1
	(iii)	Girye River	3	1
	(iv)	Kajali River	35	5
		Kalbadevi River	10	2
	(v)			
	(vi)	Are River	6	1
	(vii)	Jog River	10	5
	(viii)	Kelshi River	10	3
	(ix)	Savitri River(Bankot to Mahad)	45	40
	(x)	Kal River	6	4
	(xi)	Vaitarna River	24	9
	(xii)	Ulhas River	32.5	28
	(xiii)	Mahim River(Bay)	1.5	1
	(xiv)	Amba River	23	20
	(xv)	Patalganga River/Creek (Aware to Kharpada)	11	6.5
	(xvi)	Kundalika River	16	16
	(xvii)	Mandad River(Rajpuri to Mandad)	14	10
	(xviii)	Mhasla River(Turmad to Mhasla)	9	5
	(xix)	Vashisti River(Dabhol to Govalkot)	45	38
	(xx)	Jagbudi River(Karambavne to Khed)	20	20
	(xxi)	Shastri River/Jaigad Creek(Jaigad to Kurudunda)	45	40
	(xxii)	Rajapur River(Musakazi to Rajapur)	30	30
		Vagothan River/Vijaydurg Creek(Vijaydurg to		
	(xxiii)	Kharepatan)	38	22
	(xxiv)	Gad River(Kalaval Creek)	13	7
	٠,	Terekhol River/Creek(Terekhol to Banda)	28	28
		Karli River(Malva)	23	13
		Others	129	105
	(22,411)	Total	631	<b>462</b>
		I Otal	031	702

Table No. 1.1

#### Navigable Waterways in India

	_		0040.44	(III Killa.)
SI. No.		State/Rivers/Canals/Lakes	2013-14 Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
	l .	<u> </u>		
9	ORISS	SΔ		
0	(i)	Mahanadi	493	199
	(ii)	Brahmani	541	277
	(iii)	Baitarani	344	32
	(iv)	Subarnarekha		50
	(v)	Budha Balanga		35
	(ví)	Dhamara		20
	(vii)	Salandi		17
	(viii)	Panchputra		21
	(ix)	Parnei	•••	45
	(x)	Hatel	•••	30
	(xi)	Bansagadal		32
	(xii)	Hansua		37
	(xiii)	Tirkota		18
	(xiv)	Jamboo		6
	(xv)	Gobari	•••	16
	(xvi)	Ramchandi	•••	16
	,	Kharansi	•••	14
	. ,	Batigharia	•••	14
	(xix)	Birupa	•••	110
	(xx)	Genguti	•••	45
	(xxi)	Luna	•••	37
	(xxii)	Pradhi	•••	20 15
		Kadha	•••	30
		Kusavadra	•••	25
	(xxvi)		•••	9
	. ,	Rajua		7
		Makara		, 11
		Others **	•••	367
	(XXIX)	Total \$	1378	1555
		· · · · · · · · · · · · · · · · · · ·		
10	ТАМІІ	- NADU		
. •	(i)	Anantha Victoria Marthandavarna	27	12
	(ii)	North Buckingam Canal	58	
	(iii)	Central Buckingam Canal	7	•••
	(iv)	South Buckingam Canal	105	
	` ,	Total	197	12
11	UTTA	R PRADESH***		
•	(i)	Gomti	960	
	(ii)	Rapti	778	
	(iii)	Ghaghra	1116	
	(iv)	Ganga	2345	425 #
	(v)	Sai	760	
	(vi)	Tons	485	
		Total	6444	
12		BENGAL		
	(i)	Hooghly	580	580
	(ii)	Mahananda Ainu	206	58
	(iii)	Ajoy	174	174
	(iv)	Jalangi	232	232

#### Navigable Waterways in India

			2013-14	
SI. No.		State/Rivers/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
	(v) (vi) (vii) (viii) (ix) (x) (xi) (xii)	Dwarka Bakreswar Damodar Dwarekeswar Silabati Kumari Ichamati Others@ Total	129 102 437 103 135 347 232 2064	129 102 437 103 135 347 232 2064 <b>4593</b>
13	NAGA (i) (ii) (iii) (iv) (v) (v) (vi) (vii)	ALAND*** Doyans Tizu/Zungki Dhansiri/Chathe Dikhu Tapi-Yangnyu Tsurang/Disai Others Total	185 287 170 120 95 60 20	105 90 75 52 18 15 20 <b>375</b>
14	(i) (ii) (iii) (iv) (v) (v)	RAM  R. Tlawng (Dhaleswari)  R. Kolodyne (Chhimtuipui)  Khawthlang Tuipui  R. Tuichawrg  Tul River  Others	185 138 128 174 138 24 <b>787</b>	81 80 63 73 51 24 <b>372</b>

<sup>\*</sup> Relates to 2012-13

<sup>\*\*</sup> Including Canals.

\*\*\* Relates to 2007-08

@ Includes 268 Kms. each of Total Length and Navigable Length pertaining to canals.

...: Not available

# Navigable length Pertains to NW I for Allahabad-Buxar stretch in Uttar Pradesh is available.

<sup>\$</sup> Total length is less than navigable length as length of canals is not provided whereas navigable length of canals is provided.
Source: IWT Dierctorate of states & IWAI.

# Table No. 1.2

# Infrastructure Facilities Available on National Waterways (As on 31-3-2014)

	Avai	lability and Capacity of Ter	minals				
Navigational Channel	Depth (Meters) about 330 days in a year	Place	Size of Vessels that can be accomodated (DWT)	No. of Berths	Cargo Handling Equip. and their Capacity	Type and Extent of Storage Facility Available	Remarks
1	2	3	4	5	6	7	8
National Waterway No.1  1. Haldia - Farakka (560 Km)	2.8 to 3.0	(i) Haldia	1500	Two(Floating)		One godown of size 12x30m and open storage (1630 sq.m.).	Being used for loading of fly ash, embark/disembark of tourists and logistic support. About 3 lakhs MT fly-ash loaded in 2013-14
		(ii) a) BISN, Kolkata (ii) b) G.R. Jetty-2,Kolkata	1500 3000	One(Floating) Fixed RCC Jetty 70 m berth		Open storage One transit shed of size 25m x 46m and open storage ( 4000 sqm)	Being used for embark/disembark of tourists & logistics support. Completed and being operational since Nov. 2013
		(iii) Botanical garden, Kolkata	1500	One(Floating)			Being used for embark/disembark & logistics support.
		(iv)Shantipur	600	One(Floating)			Being used for embark/disembark of tourists.
		(v) Swaroopganj (vi) Katwa	- 600	- One(Floating)	-	-	DGPS station is commisioned in the office premises. Being used for embark/disembark & logistics support.
		(vii) Hazardwari	600	One (floating)	***		Being used for embark/disembark of tourists.
		(viii) Pakur (Putimari) (ix) Farakka		One(fixed) One(fixed) And Two(Floating)	 -	One covered godown	Owned by Farakka Barrage Project(FBP).  The berth and godown are owned by FBP. Floating jetties (IWAI) being used for embark/disembark of tourists and logistic support.
2. Farakka - Barh	2.1 to 2.5	(x)Manglaghat (Rajmahal)	600	One(Floating)		-	Being used for embark/disembark of tourists and logistics support.
(400 km)		(xi) Samudarghat(Sahibganj)	600	One(Floating)		-	Being used for loading of stone chips and embark/disembark facility.
		(xii) Bateshwarsthan	600	One (Floating)		-	Being used for embark/disembark of tourists and logistic support.
		(xiii) Bhagalpur	600	One(floating)		Open storage	Being used for embark/disembark of tourists and logistic support. One DGPS station is commisioned and being operational at Bhargalpur.
		(xiv) Munger	600	One (Floating)		-	Being used for embark/disembark of tourists and logistic support.
		(xv) Semaria	600	One(floating)			Being used for embark/disembark of tourists.

#### Table No. 1.2 (Contd...)

#### Infrastructure Facilities Available on National Waterways (As on 31-3-2014)

Navigational Channel		ailability and Capacity of Ter							
Navigational Online	Depth (Meters) about 330	Place	Size of Vessels that can be	No. of Berths	Cargo Handling Equip. and their	Type and Extent of Storage Facility Available	Remarks		
1	2	3	4	5	6	7	8		
<b>3. Barh-Ghazipur</b> (290 km)	1.6 to 2.0	(xvi) a) Patna	600	1 Fixed RCC ( Low & High) Jetties of 50m & 70m berth respectively	2 Shore cranes Container crane	Open storage and one Transit Shed of 45 x 15m	Low and high level permanent Jetties are operational since 2008 & 2012 respectively and capable for handling of containers & general cargo. Besides storage facility and bunkering facility are also available. One DGPS station is commissioned and being operational at Patna		
		(xvi) b) Patna	600	One (Floating)	Crane Pontoon		Being used for embark/disembark of tourists and logistic support during lean season		
		(xvii) Buxar	600	One (Floating)			Being used for embark/disembark of tourists and logistic support		
4. Ghazipur-Allahabad	1.2 to 1.5	(xviii) Ghazipur/ Rajghat	600	One(floating)			Being used for embark/disembark of tourists and logistic support		
(370 km) * In Chunar- Allahabad stretch (198 km) no river conservancy works was undertaken		(xix) Varanasi	600	One(floating)	-	Land measuring of 5.586 hectare is available for open storage	Being used for embark/disembark and logistic support. In addition, an IWT intermodal terminal and DGPS station are to be taken up. Land measuring 5.568 Hect. has been acquired for setting up terminal facility.		
		(xx) Allahabad	600	One (floating)		Land measuring of 8.759 hectare is available for open storage	Being used for embark/disembark of tourists and logistic support Land measuring 8.759 Hect. has been acquired for setting up terminal faciliity.		

#### Note:

<sup>1)</sup> Floating terminals with pontoon/crane can be shifted and provided at any location along waterway on need basis.

<sup>2)</sup> Night navigation aids have been provided in Tribeni and Varanasi with Day channel marking provided in Tribeni- Allahabad stretches of NW-1.

<sup>3)</sup> River notices are issued on fortnightly during lean season and monthly basis during flood season.

#### Table No. 1.2 (Contd...)

#### Infrastructure Facilities Available on National Waterways (As on 31-3-2014)

Navigational Channel	Av	Availability and Capacity of Terminals										
Navigational Chainlei	Depth (Meters)	Place	Size of Vessels	No. of Berths	Cargo Handling	Type and Extent of	Remarks					
1	2	3	4	5	6	7	8					
National Waterways No. 2												
1. Bangladesh Border- Pandu	2.5	(a) Dhubri	600	One(floating)	Crane prontoon -		Storage facility is being developed     DGPS station is commissioned     Ro- Ro terminal is being constructed.					
(255 km)							,					
,		(b) Jogighopa	600	One(floating)	Crane prontoon	Open storage facility available	DGPS station is commissioned					
		(c) Pandu	600	One(low level RCC jetty)	One Container crane of 7.5 T capacity, two tyre mounted crane of 20 T capacity	2 transit sheds of 75 x 21 m each	Construction of one high level jetty is also completed					
2. Pandu-Neamati (374 km)	2.5	(d) Tezpur	600	One(floating)	Crane prontoon	- Open storage facility	DGPS station is commissioned.					
		(e) Silghat	600	One(floating)	-	available						
		(f) Neamati	600	One (floating)	Crane prontoon	-						
3. Neamati-Dibrugarh	2.0	(g) Bogibeel	600	One (floating)	-	-						
(139 km)		(i) Sengajan/Panbari	600	One (floating)	Crane prontoon	-						
4. Dibrugarh-Sadiya (Oriumghat)	1.5	(j) Oakland/ Dibrugarh	600	One(floating)	-	-	DGPS station is commissioned.					
(123 km)		(k) Oriumghat	600	One (floating)	_	_						

#### Note:

<sup>1)</sup> Floating pontoons can be provided at any location along waterway on demand.

<sup>2)</sup> Night navigation facilities are available between Bangladesh Border and Silghat.

<sup>3)</sup> Thalweg servery are conducted and river notices issued on regular monthly/fortnightly basis.

<sup>4)</sup> For providing Differential Global Positioning System (DGPS) connectivity on the entire waterway, DGPS stations have been setup at Dhubri, Jogighopa, Slighat and Dibrugarh.

# Table No. 1.2 (Contd...)

#### Infrastructure Facilities Available on National Waterways (As on 31-3-2013)

Navigational Channel		ailability and Capacity of Term		1	1		1
	Depth (Meters)	Place	Size of Vessels		Cargo Handling	Type and Extent of	Remarks
1	2	3	4	5	6	7	8
National Waterways No. 3							
1. Kochi-Kottapuram (30 km)	2.0	(a) Kottapuram	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity.
2. Udyogmandal Canal (23 km)	2.0	(b) Aluva	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity.
3. Champakara Canal (14 km)	2.0	(c) Ernakulam GC (Maradu)	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity. A proposal for alternative road connectivity for container/heavy traffic by aquiring 2871 sqm land @ Rs 11.45 Cr. through State Govt is in progress.
		(d) Kakkanad (CSEZ)					Only Land for terminal acquired. It shall be developed later.
		(e) Vaikkom	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity.
		(f) Chertala	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm Covered storage (20m x 20m) and open storage (approx. 1500-	Terminal has a road connectivity.
		(g) Alapuzha					Terminal is under construction through CPWD.
4. Kochi - Chavara (107 km)	2.0	(h)Trikunnapuzha	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity.
		(I)Kayamkulam	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a narrow road connectivity. A proposal for alternative road connectivity examined.
		(j) Chavara				2000 04,	Only land for terminal acquired. The terminal will be developed later.
5. Chavara- Kollam (31 Km)	1.5	(k) Kollam	350.0	One fixed	One 18 T crane & 3 T Fork lift	300 Sqm Covered storage (20m x 25m) and open storage (approx. 1500- 2000 Sqm)	Terminal has a road connectivity.
6. CPT Area	2.2	(I) Willingdon island	16 TEU	One fixed berth for container vessels	5 T Crane through agency	5000 sqm open storgae	These terminals have been constructed for container movement to International Container Trashipment Terminal. Operation commenced w.e.f. 23.02.2011.
		(m) Bolgatty island	16 TEU	One fixed berth for container vessels	40 T Crane through agency	8000 sqm open storgae	

Channel marks for 24 hrs navigation provided on the entire waterway.
 Thalweg servery and river notices are issued on monthly basis.

# Table No. 1.3

# Infrastructure Facilities Available on State Waterways (As on 31-3-2014)

				Ava	ailability	and Capacit	y of Termina	als
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	Cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
1	ANDHRA PRADESH Godavari River	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Kakinada Canal Samarlakota Canal	2.98/1.98 2.17/1.95	Z-Medaoadu to Kovvur Dowlaiswaram- Kakinada	 				
	G.E. Banak Canal	2.86/2.13	Vemagiri- Tallarevu					
	Amalapuram Canal Krishna River	2.225/1.890	Bobbarlanka-Challapalli Lock					
	Eluru Canal Ryves Canal	 				 	 	Through the canals noted in Col.(1) are designed for Navigation Canal long back i.e. 100 to 150 years
	Polraj Canal							at present no Inland Water Facility is being utilized.
	Campbell Canal							
	Bantumilli Canal							
	Bandar Canal							
	K.E.B. Canal		<del></del>	<del></del>				
2	BIHAR	2 metres	(I) (a) Sahebganj- Manihari	134'x31'	2 Nos.	Nil	Nil	-
				80'x15'x7"	1 Nos.	Nil	Nil	-
				55x13'3"x4'8'	1 Nos.	Nil	Nil	-
			(II) Kahalgaon-Tintanga	60'x16'x6'	2 Nos.	Nil	Nil	-
			(III) Sultanganj - Agwani	70'x18'x6'	2 Nos.	Nil	Nil	-
			(IV) (a) Munghyr- Raighat	56'x14'x6' 58'x16'x5'8 47'x13'x5'8	1 Nos. 1 Nos. 1 Nos.	Shore crane- 2 Pontoon crane-2 Container		-
				60'x16'x5'5'	1 Nos.	crane-1	Godown	
			(V) Buxar-Ujirghat	-	-	-	-	At IWAI terminal
3	GOA							
	Panaji Port (River Mandoi)	3.30 metres	Panaji	75 Mtrs Length	1	-	-	Ports jetty being used by vessels calling in the Ports

#### Infrastructure Facilities Available on State Waterways (As on 31.3.2014

				Ava	ailability	and Capaci	ty of Termina	ls
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	Cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
4	ORISSA Balugaon Sector							
	Balugaon-K.Prasad	Varies between 2 to 10 metres	Lake Chilka	30 ft and above	2	-	NA	Passenger waiting hall & Jetty are available at Balugaon & Krishna Prasadgarh.
	Balugaon-Kalijai	2 to 10 Metres	Lake Chilka	40 ft and above	2	-	-do-	Block wall at kalijai is available for berthing & landing. kalijai.
	Balugaon-Nuapada	2 to 4 Metres	Lake Chilka	30 ft	2	-	-do-	No Jetty and waiting hall is available at Nuapada.
	Balugaon-Satapada	2 to 4 Metres	Lake Chilka	30 ft	2	-	-do-	Passenger waiting hall & Jetty are available at Satapada.
	Astarang Sector							
	Nuagarh-Sribantpur	2 to 10 Metres	River Devi	26 ft	3	-	-do-	Jetty & Wating hall is available for the services of passenger.
	Chandabali Sector							
	Chandbali-Rajnagar	Varies between 7 to 10 metres	River Baitarani/ Brahmani	52 ft	13	-	-do-	Jetty & waiting hall are available at Chandbali, Nalitapatia, Chardia & Raj Nagar.
	Chandbali-Talucha	Varies between 7 to 20 metres	Baitarani/Kharastrota/	50 ft	10	-	-do-	-
	Chandbali-Aradi	Varies between 7 to 18 meters	Brahmani	35'	3		-do-	Both Jetty and waiting hall is available at Aradi.
5	TAMILNADU Periyar Lake in Kerala ( Under lease in T.N. )	41.46	Thekkady	Vessel 1 (kannagi) Length-8.5m Breadth-3m Depth-1.4m Vessel 2(Jairatna) Length-11.5m Breadth-2.4m Depth-1.6m	-			-
	Anantha Victoria Marthandavarma Canal (AVM)	4 m (Average)	Kanyakumari District of Tamil Nadu	3.5 m	-	-	-	-
6	MIZORAM							
	1. R. Tlawng	1.4	(a) Sairang	5 Tonnes Power Vessel	1	-	RCC Building	300 tonnes capacity
	2. R. Tlawng	1.2	(b) Bairabi	5 Tonnes Power Vessel	1	-	RCC Building	300 tonnes capacity

Source : State Govts.

SECTION - 2

# CARGO MOVED ON VARIOUS WATERWAYS

## Cargo Movement on National Waterways, Goa & Maharashtra Waterways

	Dataile of Waterway	Dist. (17.11)	Cargo (lakh T		Tonne Kms (in lakh)	
SI.No.	Details of Waterway	Distance (Kms)	2012-13	2013-14	2012-13	2013-14
1	2	3	4	5	6	7
1	National Waterway No. I	1620	27.16	33.49	15119	18512
	(Allahabad-Haldia stretch of					
	Ganga – Bhagirathi – Hooghly					
	river system)					
2	National Waterway No. II	891	24.27	24.75	580	594
	(Sadiya-Dhubri stretch of					
	Brahmaputra River system)					
3	National Waterway No. III	205	12.36	10.66	139	116
	(Kollam-Kottapuram stretch					
	of West Coast Canal along					
	with Champakara Canal					
	and Udyogmandal Canal)					
	Sub Total NWs	2716	63.79	68.90	15838	19222
4	Goa Waterways	202	106.77	5.99	10240	270
5	Maharashtra Waterways	453	241.96	247.74	4551	4691
	Grand Total	3371	412.52	322.63	30629	24183

Source: Inland Waterways Authority of India for National Waterways

Data for Goa Waterways include the data received from Ports department, Govt of Goa and the data received from the Mormugao Port Trust (MPT)

Maharashtra Maritime Board for Maharashtra Waterways

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
A.	CIWTC(^)					
1	Haldia-Budge-Budge	74	4400			POL, Waste Oil Pulses,Logs,Salt,Iron Ore,Steel, Fly Ash,Aluminium block, Fertilizer,
	(I)Saugar-Diamond Harbour/Haldia /Kolkatta/	4.4.400	.====			Container, ODC,Sand Clips
•	Kolkatta Internal	144/80	15235	19650	•••	F
3	Kolkata-Karimganj-Badarpur	1218			•••	Fly ash, Food Grains
4	Haldia-Gorma Island	30	1650	•••		Boulder
5	Patna-Kolkata	530	1500			Stone-Chips
6	Haldir-Internal	2	8250	1650		Sand, Clips
7	Haldir-Jamuria	1096	208			ODC
8	Kolkata- Ichamati River at Basirhat  Sub Total (A)	2	31243	21300	8250 <b>8250</b>	Sand, Clips
В.	VIVADA IWL					<u> </u>
J.	Haldia-Kolkata	100				HSD/FO/LDO
2	Haldia-Rudge-Budge	78	109630	95072	66607	FO, LDO, HSD
3	Haldia-NSD	106	66245	52969	54595	LO,HSD, Lube Oil, FO
4	Haldia-Surinam	48	2088			FO
5	Budge-Budge-NSD	21	4513	2656		MSD, HF
6	Budge-Budge-Surinam	48	249		•••	FO, HSD
7	Budge-Budge-KPD	21	245	916	•••	FO, HSD
8	Haldia-Namkhana	46	4343	3923	305	HF, HSD
9	Budge-Budge-Pujali	5			434	LDO
10	Haldia-Haldia Oil Barge	3			16948	HSD
11	Haldia-Haldia Oil Jetty	4	70600	66057	70724	FO
12	Surninam-KPD	4	70	1031	140	FO
13	Surninam-NSD	1	79		140	HSD, HF
14	Haldia-HOB	3	23622	24717		1100,111
15	KPD-KPD	1	270	2-7/1/	•••	
16	Budge Budge - Kolkatta	21	0		2310	HF, HSD
	Sub Total (B)		281954	247341	212063	

 $<sup>^{\</sup>wedge}\,\,$  : Data for the year  $\,$  2010-11, 2011-12 & 2012-13 is taken from monthly returns.

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
C.	OTHER PRIVATE OPERATORS	-			-	
1	TIRUPATI VESSEL( P)LTD.					
1	Kolkatta-Mongla (Bangla desh)					Flyash
2	Kolkatta-Khulna (Bangla desh)	507	90062			Flyash
3	Kolkatta-Narayangani (B'Desh)	894	233722			Flyash
4	Budge- Budge(Kol)- Khulna	497		99534	104484	Flyash
5	Budge- Budge Narayanganj	884		285858	308004	Flyash
6	Kolkatta-Ashuganj	998	722			ODC Kargo
2	RELIANCE EXPORT CORPORATION					
<b>2</b> 1	Kolkata-Narayanganj(B'Desh)	894	16244			Flyash
2	Haldia-Narayanganj(B'Desh)	836	1106	•••	•••	Flyash
				•••		•
3	Kolkatta-Khulna (Bangla desh)	-	74.0	7450	•••	Flyash
4	T.T.Shed-Narayanganj	910	710	7153		Flyash
5	Budge- Budge Narayanganj	884	-	-	2646	Flyash
6	IWAI BISN Jetty-Narayanganj	909	-	-	1374	Flyash
3	Maitrayee Shipping & Logistics					
1	Kolkatta-Khulna (B'Desh)	507	14006			Flyash
2	Kolkatta-Narayanganj (B'Desh)	894	63886			Flyash
3	Haldia-Karimganj	1253				Spnoge Iron
4	IWAI BISN Jetty-Narayanganj	909	8588	4955	7494	Flyash
5	Kolkatta (SR Jetty)-Naryanganj	910	760			Flyash
6	IWAI BISN Jetty-Khulna	522	3637	699	636	Flyash
7	T.T.Shed-Narayanganj	910		25233	11184	Flyash
8	T.T.Shed-Mongla	510		2180		Flyash
9	Budge Budge- Naryanganj	884		44984	33923	Flyash
10	Budge Budge- Khulna	497		2525		Flyash
11	Sri Ram Jetty - Narayanganj	905	-	-	2790	Flyash
12	Budge Budge - Karimganj	1332	-	-	642	Flyash
	D // Chinaina					
4	P K Shipping					<b>-</b>
1	Kolkata-Khulna (B. Desh)	507	770			Flyash
2	Kolkata-Narayanganj(B. Desh)	894	149444			Flyash, Slg, MS wired rod
3	Budge- Budge Narayanganj	884		101227	20130	Flyash
4	Narayanganj- T.T.Shed	910		500		Cement
5	K.P.Dock-Narayanganj	910	•••	787	3836	HR Steel Coils & Plates
6	Haldia H.D.CKarimganj	1274		2225		Coal

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
7	Kolkatta-Karimganj	1358		1554		ODC Kargo
8	T.T.Shed-Ashuganj	1048	867			Steel Shed
9	NSD Kolkatta-Narayanganj	895	1223			Flyash
10	Kolkatta-Mongla (Bangla desh)	494	996			Flyash
11	NSD Kolkatta-Ashuganj	1046	5591			ODC Kargo
12	Sri Ram Jetty-Narayanganj	905	-	-	24073	Flyash
13	K.P.Dock-Khulna	523	-	-	1622	Dolomite Powder, Steel Sheet
5	SOHAM COMMERCIAL					
1	Kolkata- Khulna(B' Desh)	424				Flyash
2	Kolkata-Narayanganj (B' Desh)	894	1155			Flyash
3	Kolkatta(Sri Ram Jetty)-Narayanganj	905	10923	761		Flyash
4	T.T.Shed-Narayangani	910	3624	50139	81267	Flyash
5	T.T.Shed-Khulna	523	-	-	745	Flyash
6	Khulna - FSEZ Jetty(Falta), Kolkatta, India	472	-	-	291	Jute Carpet, Baking Cloth
7	KPD - Narayanganj	910	-	-	1329	Steel Coil
6	RENAISSANCE IMPEX Pvt Ltd					
1	Kolkata-Narayanganj ( B'Desh)	894	15841			Slag,Flyash,MS wire Rod
2	Haldia-Narayanganj	780		***		Flyash, Slag
3	IWAI BISN Jetty-Narayanganj	909	28875	16137	44463	Flyash
4	IWAI BISN Jetty-Mongla	519	864			Flyash
5	IWAI BISN Jetty-Karimganj Assam	1357	405	1950		Flyash, HDPE Bags, Coal
6	Sri Ram Jetty-Narayanganj	905	31230	21657	992	Flyash
7	Sri Ram Jetty-Khulna	528	1778	•••	•••	Flyash
8	Karimganj Assam-IWAI BISN Jetty	1357	172	900	•••	Coal
9	Kolkatta(T.T.Shed)-Narayanganj	896	25651			Flyash
10	IWAI Haldia Jetty- Narayanganj	826		4767	2805	Flyash
11	Shri Ram Jetty- Mongla	505		998		Flyash
12	TT Shed-Narayanganj	910		22759	12469	Flyash
13	Budge Budge Naryanganj	884		18549	52074	Flyash
14	Budge Budge Karimganj	1332		558		Flyash
15	Kolkatta-Khulna	507	1320			Flyash
16	KPD - Mongla	510	-	-	1184	Prime Hot Roll Non Alloy Steel Coils

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
7	Rivering Shipping & Logistics					
1	Kolkata-Narayanganj	894	20693			Flyash
2	Kolkatta (BISN Jetty)-Narayanganj	895	1270			Flyash
3	Kolkatta(BB)-Khulna	507	3837			Flyash
4	IWAI Haldia Jetty-Khulna	439	2513	1450		Flyash
5	Budge- Budge (Kol)- Khulna	497		6039	2666	Flyash
6	Budge Budge Naryanganj	884		17223	26210	Flyash
7	TT Shed-Narayanganj	910		7274	5812	Flyash, Coal dust
8	K P Dock- Khulna	523		1997		Wheat
9	Sri Ram Jetty-Khulna	518		2574		Flyash
10	Sri Ram Jetty-Narayanganj	905		8091	10484	Flyash
11	IWAI Haldia Jetty-Narayanganj	826	2699		10852	Flyash
12	K P Dock- Mongla	510	-	-	1157	Maize
13	NSD - Mongla	508	-	-	850	Maize
0	GLOBAL SHIPPING & Forwarding					
<b>8</b> 1	Kolkata-Khulna	507	3216			Flyash
2		507 894	3216 2757	•••	•••	,
3	Kolkata-Narayanganj(B' Desh) Haldia-Mongla(B' Desh)	694 413		•••		Flyash Flyash
3 4	Kolkata-Mongla(B' Desh)	494	 1546	•••	•••	Flyash
		884		3266	1466	•
5 6	Budge Budge-Narayanganj	497	•••			Flyash
6 7	Budge Budge-Khulna IWAI BISN Jetty-Khulna	497 522	9880	4646 2938	5494 813	Flyash
8		909	9880 1848			Flyash
9	IWAI BISN Jetty-Narayanganj T.T.Shed-Khulna	523	1040	810 -	 570	Flyash Flyash
10	IWAI Haldia Jetty - Khulna	523 522	-	_	2193	Flyash
11	,	910			1688	•
11	T.T.Shed-Narayanganj	910	-	-	1000	Flyash
9	COASTAL CONNEXIONS					
1	Kolkata-Narayanganj(B' Desh)	894	25812			Flyash
2	Haldia-Narayanganj	780				Flyash
3	Haldia-Khulna	446				Flyash
4	Kolkata-Khulna	507	5325			Flyash
5	Budge Budge-Narayanganj	884		10643		Flyash
6	Budge Budge-Karimganj	1332		1331	400	Flyash
7	Budge Budge-Khulna	497		2277	3698	Flyash
8	IWAI BISN Jetty-Narayanganj	909	8738	3693	5443	Flyash
9	BISN Jetty-Narayanganj	1357		1030		Flyash
10	IWAI BISN Jetty-Karimganj	1357		2170		Flyash

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
11	BISN Jetty-Karimganj	1357		415		Coal
12	IWAI BISN Jetty-Khulna	532	4299			Flyash
13	IWAI Haldia Jetty-Khulna	439	5023	2268	3372	Flyash
14	IWAI Haldia Jetty-Narayanganj	826	7928	4725	2078	Flyash
15	Karimganj( Badarpur, Assam) - Narayanganj	478	-	-	455	Cement Clinker
10	KANISHKA SHIPPING LINES					
1	Kolkata-Narayanganj(B' Desh)	758				Flyash
2	Budge Budge-Narayangani	884		69689	63636	Flyash
3	IWAI Haldia Jetty-Narayanganj	826	36923	116523	99999	Flyash
4	Sri Ram Jetty-Khulna	518		1078		Flyash
5	T.T.Shed-Narayanganj	910	200	2406	15294	Flyash, Tyre
6	Sri Ram Jetty-Narayanganj	905	11380	750	1277	Flyash
7	IWAI BISN Jetty-Khulna	522		520		Flyash
8	IWAI BISN Jetty-Narayanganj	895	4099		2850	Flyash
9	T.T. Shed - Mongla	510	-	-	2113	Flyash
11	Eastern Navigation Pvt Ltd., Kolkatta					
1	Kolkatta-Zamania	1065	1415	380	•••	ODC Cargo
2	Kolkatta-Silghatghat	1748		165		ODC Cargo
3	Kolkata- Ballia	923	2306	•••	•••	ODC (NW1)
4	Kolkatta-Fatua	854		• • • •		Flyash, Boiler Drum, Stator(OD
5	Haldia-Ashuganj	933	300			ODC (NW1)
6	Kolkatta-Bhaktiyarpur	928	1776			ODC Cargo
7	Haldia-Silghatghat	1664		96	•••	ODC Cargo
8	Haldia-Balia	1028	1258	•••	•••	ODC (NW1)
	Haldia-Zamania	1170 1284	1177	•••		ODC (NW1)
9			842		•••	ODC (NW1)
10	Haldia-Karimganj, Assam	1204				
10 12	A.K.Navigation					
10 <b>12</b> 1	A.K.Navigation  Kolkata- Narayanganj	894	3190			Flyash
10 12 1 2	A.K.Navigation  Kolkata- Narayanganj T.T.Shed-Narayanganj	894 910		1625		Flyash
10 12 1 2 3	A.K.Navigation  Kolkata- Narayanganj T.T.Shed-Narayanganj T.T.Shed-Khulna	894 910 523	3190 			Flyash Wheat
10 12 1 2	A.K.Navigation  Kolkata- Narayanganj T.T.Shed-Narayanganj	894 910	3190 	1625		Flyash

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
13	Desha International					
1	Haldia- Narayanganj		•••	•••	•••	Flyash
2	Budge Budge-Narayanganj	884		163487	201933	Flyash
3	Kolkata-Narayanganj	894	151056	•••	•••	Flyash, Coal Durt, Slag, Coal
4	IWAI Haldia Jetty-Khulna	439	11981	17075	9936	Flyash
5	IWAI Haldia Jetty-Mongla	426	•••	2908	3548	Flyash
6	Haldia-Khulna	***	•••	•••		Flyash
7	Budge Budge-Khulna	497	•••	2626	4759	Flyash
8	IWAI BISN Jetty-Narayanganj	909	7071	5445	1216	Flyash
9	IWAI BISN Jetty-Karimganj	1357	1655	1285		Flyash
10	BISN Jetty-Karimganj(Badarpur)	1357		550		Coal
11	Kolkatta-Khulana	507	13212			Flyash
12	Sri Ram Jetty-Mongla	505		1306		Flyash
13	Sri Ram Jetty-Khulna	518	1025	7719	5568	Flyash
14	Sri Ram Jetty-Narayanganj	905	10646	34963	84687	Flyash
15	T.T.Shed-Mongla	510		2836	531	Wheat, Soyabean Extraction
16	T.T.Shed-Khulna	523		2400		Wheat
17	T.T.Shed-Narayanganj	910	5854	24444	44291	Flyash,Wheat,Coal
18	K.P.Dock-Mongla	510		22614	2658	Wheat,Maize
19	K.P.Dock-Khulna	523		30083		Wheat
20	IWAI Haldia Jetty-Narayanganj	826	123831	183804	244897	Flyash
21	IWAI BISN Jetty-Khulna	532	600		606	Flyash
22	Karimganj Assam-IWAI BISN Jetty	1367	135			Coal
23	Karimganj Assam-T.T.Shed	1368	598			Coal
24	Budge Budge- Mongla	484	-	-	1438	Flyash
25	IWAI BISN Jetty (kol)- Mongla	509	-	-	1407	Flyash
26	K.P.Dock-Narayanganj	910	-	-	1450	Maize
27	NSD - Narayanganj	908	-	-	2942	Soyabean Extraction, Maize
28	NSD- Mongla	508	-	-	1347	Maize
14	Reliance Enterprise					
1	Kolkata-Narayanganj	894	20883			Flyash
2	Haldia-Narayanganj	836	895			Flyash
3	Budge Budge-Narayanganj	884		2277	12367	Flyash
4	Budge Budge-Khulna	497		698		Flyash
5	Sri Ram Jetty-Khulna	518		612		Flyash
6	Kolkatta-Khulna	507	4808			Flyash
7	IWAI BISN Jetty-Narayanganj	909	2342	2994	699	Flyash
8	T.T.Shed-Narayanganj	910	1115	8983	12425	Flyash
9	IWAI Haldia Jetty-Narayanganj	826	-	-	1358	Flyash
10	IWAI Haldia Jetty-Khulna	439	_	_	2131	Flyash
11	Sri Ram Jetty-Narayanganj	905	_	_	4779	Flyash

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
15	Saha Oversees Corporation			· <del>·</del>	•	
1	Kolkata-Narayanganj	894	36617			Flyash
2	Budge Budge-Narayanganj	884		5138		Flyash
3	Sri Ram Jetty-Khulna	518		1855		Flyash
4	T.T.Shed-Narayangani	910	13617	8721		Flyash
5	Kolkatta (Sri Ram Jetty)-Narayanganj	910	33764			Flyash
6	IWAI BISN Jetty-Narayangani	895	3903			Flyash
7	Kolkatta-Khulna	507	960		•••	flyash
16	C. Day & Brothers					
1	Kolkata-Narayangani	894	32683			Flyash
2	Budge Budge-Narayangani	884		23597	52610	Flyash
3	Budge Budge-Khulna	497		586	600	Flyash
4	Kolkatta-Khulna	507	486			Flyash
5	Kolkatta(BISN Jetty)-Narayangani	895	840			Flyash
6	Sri Ram Jetty-Khulna	518		758		Flyash
7	Sri Ram Jetty-Narayanganj	905	4444	1362	5782	Flyash
8	IWAI Haldia Jetty-Khulna	439		950	4919	Flyash
9	IWAI BISN Jetty-Narayanganj	909		930		Flyash
10	IWAI Haldia Jetty-Narayanganj	826	34016	4723	5886	Flyash
11	Haldia-Khulna	449	5412			Flyash
12	T.T.Shed-Narayanganj	910	2738	13652	4736	flyash, Ironfines
13	IWAI BISN Jetty - Khulna	522	-	-	905	Flyash
17	Fortune Cargo (India Pvt Ltd)					
1	Kolkata-Narayangani	894	33085			Flyash
2	Budge Budge-Narayanganj	894		16185	29765	Flyash
3	IWAI Haldia Jetty-Narayangani	826		692	780	Flyash
4	T.T.Shed-Narayanganj	910		5129	2167	Flyash
5	Haldia-Narayanganj	805	•••			Flyash
6	IWAI BISN Jetty-Khulna	522		755	633	. iyasii
7	IWAI BISN Jetty-Narayanganj	909	4117	1112		Flyash
8	Kolkatta-Khulna	507	1402			Flyash
9	IWAI Haldia Jetty-Khulna	449	1883	•••		Flyash
18	Sea Water Transport Co. Pvt Ltd					
1	Haldia-Narayangani	805				Flyash
2	T.T.Shed-Khulna	523		2239		Wheat
3	Haldia-Mongla	405		2200		Flyash
	i ididid Morigid	700			***	i iyasii

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
5	Kolkatta BISN Jetty-Kulna	532	1136			Flyash
6	IWAI Haldia Jetty-Khulna	449	4470			Flyash
7	IWAI Haldia Jetty-Mongla	426	-	-	1140	Flyash
8	IWAI BISN Jetty-Khulna	522	-	-	1080	Flyash
19	ABC India Ltd					
1	Kolkata-Tejpur	1701				ODC (BO Route)
2	Kolkata-Ashuganj (B'desh)	998				0_0 (_0,
20	Krishna Shipping & Logistics					
1	Budge Budge-Narayanganj	884		5288		Flyash
2	Budge Budge-Karimgani	1332		590		Flyash
3	Kolkata-Narayanganj	894	17863			Flyash
4	T.T. Shed-Narayanganj	910		5667		Flyash
5	Kolkatta-Pandu	1432		485		ODC Cargo
6	T.T. Shed-Ashugani	1048	622			Iron ingots
7	IWAI BISN Jetty-Narayanganj	895	1110			Flyash
8	Haldia-Narayanganj	836	13702			Fly Ash
21	Neli					
1	Budge Budge-Narayanganj	884		4128	19337	Flyash
2	Budge Budge-Khulna	497		1640		Flyash
3	IWAI Haldia Jetty-Narayangani	826		768		Flyash
4	Sri Ram Jetty-Mongla	505		648		Flyash
5	Sri Ram Jetty-Khulna	518		602		Flyash
6	Budge Budge-Karimgani	1332		494		Flyash
7	Kolkatta-Narayanganj	894	15428			Flyash
8	IWAI BISN Jetty-Karimganj	1357		580		Flyash
9	IWAI BISN Jetty-Narayanganj	909	1909	2468	6147	Flyash
10	T.T. Shed - Narayanganj	910	-	-	834	Flyash
22	Ajbela Navigation					
1	Kolkatta-Narayanganj	894	12307			Flyash
2	Sri Ram Jetty-Khulna	518		 1850		Flyash
3	Sri Ram Jetty-Narayanganj	905	•••	8841	 15712	Flyash
4	Kolkatta-Khulna	507	3472			•
	Kolkatta-Khulna K.P.Dock-Khulna	507 523		 671 <i>1</i>	•••	Flyash Wheat
5 6		523 910	•••	6714	 E7E0	
7	T.T.Shed-Narayanganj	523		4226	5752	Flyash
8	T.T.Shed-Khulna Kolkatta (S R Jetty)-Narayanganj	523 897		1497	•••	Wheat Flyash
8 9			1186	•••	•••	•
9	Kolkatta BISN Jetty-Narayanganj	895	701	•••		Flyash

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
10	_	884		19712	11268	-
10	Budge Budge-Narayanganj Budge Budge-Khulna	497	•••	19712 591		Flyash
12	IWAI Haldia Jetty-Mongla	426	•••	1250	•••	Flyash
13	IWAI Haldia Jetty-Khulna	439	842	2726	•••	Flyash Flyash
14	IWAI Haldia Jetty-Narayanganj	836	7948		3456	Flyash
15	IWAI BISN Jetty - Narayanganj	909	7946		703	Flyash
13	IWAI BISM Setty - Marayanganj	909	-	-	703	i iyasii
23	Marshal Corporation Ltd.					
1	BISN Jetty-Karimganj	1367	569			Flyash
2	Karimganj Assam-IWAI Bisn Jetty	1367	300			Coal
24	Spring Professional Services Pvt. Ltd					
1	T.T.Shed, Kolkatta-Ashuganj	1048	306			Galvanised Steel Plain Sheet
25	Reach Asia					
1	Kolkatta-Jogighopa, Assam	1392		372		ODC Cargo
2	Haldia-Balia	1028	629			ODC Cargo
26	Netincon Marketing Pvt. Ltd.					
1	K.P.Dock-Khulna	510	•••	2600	•••	Wheat
27	Duttson					
1	T.T.Shed-Narayanganj	910		3847		Flyash
2	IWAI BISN Jetty-Narayanganj	909		738	7917	Flyash
3	Budge Budge-Narayanganj	884		2181	9659	Flyash
4	IWAI Haldia Jetty - Mongla	426	-	-	740	Flyash
5	IWAI Haldia Jetty - Narayanganj	826	-	-	10942	Flyash
6	IWAI Haldia Jetty - Khulna	439	-	-	3721	Flyash
7	IWAI BISN Jetty-Khulna	522	-	-	2010	Flyash
8	IWAI BISN Jetty-Karimganj	1357	-	-	2337	Flyash, Spare parts
9	Budge Budge-Karimganj	1332	-	-	507	Flyash
10	Karimganj( Badarpur) - Narayanganj	478	-	-	1200	Cement Clinker
28	J.D.Shipping					
1	Budge Budge-Narayanganj	884		2854	6550	Flyash
2	Sri Ram Jetty( Kol) - Narayanganj	905	-	-	3828	Flyash
3	Sri Ram Jetty( Kol) - Khulna	518	-	-	512	Flyash
4	Sri Ram Jetty( Kol) - Mongla	505	-	-	642	Flyash
5	IWAI Haldia Jetty - Narayanganj	826	-	-	996	Flyash
6	KP Dock - Mongla	510	-	-	931	Steel plate, beams, columns, angels
7	KP Dock - Narayanganj	910	-	-	2221	Machinery

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
29	Ganga Water Transport					
1	K.P.Dock-Mongla	510		2700		Wheat
2	K.P.Dock-Narayanganj	910		510	2733	Non Alloyed Hot Rolled Steel Coil
3	Budge Budge - Khulna	497			683	Flyash
30	Bertling Logistic India Pvt.Ltd.					
1	Haldia-Balia	1028		337		ODC Cargo
31	Venketesh Logistics					
1	Haldia-Bhaktiyarpur	885		310		ODC Cargo
32	All Cargo Logistics Ltd.					
1	Haldia-Zamania	1170		1150		ODC Cargo
2	Haldia - Biswanath Chareli, Assam(NW2)	1730	-	-	2223	ODC Cargo
33	Prism Logistics Pvt.Ltd.					
1	Haldia-Allahabad	1512		762	599	ODC Cargo
34	Safehand Logistics					
1	IWAI BISN Jetty - Karimganj (Badarpur	1357	-	-	1150	Flyash
2	Budge Budge - Narayanganj	884	-	-	1753	Flyash
3	IWAI Haldia Jetty - Narayanganj	826	-	-	582	Flyash
35	Shun Shing India Private Ltd.					
1	Budge Budge - Narayanganj	884	-	-	15604	Flyash
36	Jindal ITF Ltd.					
1	Sagar - Farakkar	540	-	-	197456	Coal
37	AFS Logistics Pvt. Ltd.					
1	AWAI Haldia Jetty - Fatuha	910	-	-	1400	Fertilizers
2	Fatuha - Kolkatta	805	-	-	1400	Fertilizers
38	Lee & Muirhead Pvt. Ltd.					
1	Haldia - Sirsa	1471	-	-	343	ODC Cargo
39	Boxco India Pvt. Ltd.					
1	Haldia - Geonkhali	43	-	-	642	ODC Cargo
40	КОРТ					
1	Kolkatta-Sandheads	232	4975			Iron Ore
2	Kolkatta-Sagar	146	627174	115000	85000	Iron Ore, Iron & Steel ,Other/Misc.
3	Kolkatta-Diamond Harbour	78	408749			
4	DH-KPD	78	69873			

## Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
5	Sagar-Kolkatta	146		496000	764000	Iron
6	Kolkatta-Diamond Harbour			2000		
7	Haldia-Sagar	39	330064			
						Iron Ore, Sugar, Pet Cock, Pulse Cokjing, Fertilizer,
8	Diamond Harbour-Kolkatta	78		122000	176000	Limestone, Cooking oil
9	Haldia-BB	78	10175			
10	Budge Budge-Internal	5	72			
11	Kolkatta-Budge Budge	21	51			
12	KPD-Budge Budge	21	45			

	Sub Total ( C )	- 2994556	2431380	3118793	<del>-</del>
)	IWAI Vessels				
1	Rajmahal-Kolkata				China Clay, SilicaSano
2	Rajmahal -Patna		300		Cement
3	Haldia-Karimganj				Bitumin, Edible-Oi
1	Kolkatta-Pandu				TT Shed
5	Pandu-Kolkatta				Jute Bales
6	Samdhaghatj-Manihari		15216	8832	Stone chips
7	Haldia_Pandu				Edibleoil
3	Samdaghat-Patna	300	900	1200	Stonechips
)	Samdaghat-Doriganj	1120			Stonechips
0	Chunar-Balia	574			Cement
1	Samdaghat-Munger	300			Stonechips
	Sub Total (D)	- 2294	16416	10032	<del>_</del> _
	Total (NW-I) (A+B+C+D)	3310047	2716437	3349138	<u> </u>

## Details of Cargo Moved on National Waterways (National Waterway No.II)- BRAHMAPUTRA

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
Α	Organised Cargo			396		
В	IWTD Assam*		1982360	1965239	1981935	Goods
С	Unorganised Sector		424088	461170	493414	Goods, Passengers,Bicycle, M.Cycle,Animals
	Sub Total (A+B+C)		2406448	2426805	2475349	<u>-</u> -
	Total (NW-II)(A+B+C)		2406448	2426805	2475349	<del>-</del> -

<sup>\*:</sup> Provisional data subject to receipt of final report from IWTD, Govt. of Assam, Data extrapolated considering

## Details of Cargo Moved on National Waterways (National Waterway No.III) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
A.	CHAMPAKARA CANAL					
1	KSINC					
	Cochin Port-FACT-CD	21.5	107122	3444	124954	Raw Suiphur, Rock Phosphate α Phosphoric Acid etc Sulpher,Rock
	Q10 Berth-CPT-Fact, CD BPCL Irumbanam-Ship Bunkring	21 16	 1011	157186 		Phosphate,Phosphoric Acid Furnace Oil
2	LOTS Shipping & Trading				•••	· aass s
2	2010 ompping a Trading					Raw Sulphur, Rock Phosphate & Phosphoric Acid & Stone
	Cochin Port-FACT-CD	21.5	41144		158509	aggregates Phopharic Acid,Sulphur,Rock
	Q10 Berth-CPT-Fact, CD ICTT-Cochin Shipyard	21 5	122077 6	184393		Phosphate Container no. 1
				00005		
	BPCL Irumbanam-Fact, PD (dist.in Ch. Canal) DP World-Cochin Shipyard	16.5	4478	23835	•••	Furnace Oil 20 ft Container-1 no.
	Vallarpadam-Cochin Shipyard	5 5	1 2	•••	•••	20 π Container-1 no. Container no. 1
	Q5 berth-Cochin Shipyard	3	1			20 ft Container-1 no.
3	Kerala Backwater Navigation					
	Cochin Port FACT CD	21.5	20041		23786	Rock Phosphate, Sulphur
	Sub Total		295883	368858	307249	_
			233003	300030	307243	_
В.	UDYOGMANDAL CANAL					
1	LOTS Shipping & Trading*					Zibframe, Sulphur, Furnance oil,
	Cochin Port FACT-UD	20	35243		50774	Zinc Zinc Zinc
	BPCL/IOC FACT PD	14	9843			Stone aggregate, Furnance oil
	Alwa MULAVUKADUD	10			•••	Aggregate
	BPCL FACT UD	20	8575			Phosphoric Acid, Furnace Oil
	Alwa-Pizhala, UD	10				Aggregate
	BPCL Irumbanam- FACT PD	11		23835		Furnace Oil
	BPCL Irumbanam- FACT UD	17			***	Furnace Oil
	Bolgaty-W.Island	3.7				Various Commodity
	Q10 CPT-Fact, UD	20	56554	46543		Phospharic Acid, Sulphur
	Q6 Berth CPT-Binani Zinc Ltd.	22		72163		Zinc.
	Q5 Berth CPT-Binani Zinc Ltd.	22	9707		28542	Zinc.
	do Botti ot i Bittati Elito Etai					

## Details of Cargo Moved on National Waterways (National Waterway No.III) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

SI.	No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1		2	3	4	5	6	7
		BPCL Fine Art Jetty-DP World	4	598			Furnace Oil
		Irumbanam-Fact PD(Dist. In UDL. Canal)	11	9818			Furnace Oil
		IOC-Fact, PD	20/17	1344	36732		Furnace Oil
		South Coal Berth-Q10 Berth CPT	6	634			Furnace Oil
		South Coal Berth-Quter Roads	3/2	8343	110		Furnace Oil
		SCB-ICTT	4	1780			Furnace Oil
		South Coal Berth-Vallarpaban	4		2150		Furnace Oil
		South Coal Berth-Ship Side	4	1692			Furnace Oil
		IOC (near BTO berth)-Fact, UD	27	5135			Furnace Oil
		IOC (near BTO berth)-Fact, PD	17	17200			Furnace Oil
		BPCL fine art Jetty-Fact, PD	14	13916			Furnace Oil
		Willinbgdon island- Bolgaty-Bolgaty Williangdon					
		Island	3.7	667086	523480	598190	commodities in container
		Cochin Port-BPCL, Matrix Bharat	1_	939			Furnace Oil Bunkering
		Cochin Port-Matrix Bharat	5	1060			Furnace Oil Bunkering
		BPCL-VIlarapadam	2	149	•••		Furnace Oil Bunkering
2		KSINC*					
		Orabia Dark FACT LID	0.4	7050		00770	Rock Phosphate , Sulphur,
		Cochin Port-FACT UD	21	7653	0=40	23779	Phospharic Acid
		Q10 Berth, CPT-Fact UD	20	289	3542	•••	Phospharic Acid,
3		Kerala Back Water Navigation					
		Fact Willingdon Island Fact UD	20				Sulphur. Phospharic Acid
		Fact ,CD - FACT, PD	14.5			5954	Lag
4		Logos Agencies					
		Aluva Terminal-Sea	23.5	1969	2726	2491	Liquid Effluent
5		Amrok Industrial & Investments					
		Aluva Terminal-Sea	23.5		74		Liquid Effluent
6		Cochin Bunkers					
		BPCL, Irumbanam - Fact PD	27.5			7113	Furnance oil
		IOC( BPT berth) - Fact PD	17			15344	Furnance oil
		Sub Total		863354	711355	732187	_

## Details of Cargo Moved on National Waterways (National Waterway No.III) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

(In tonnes)

SI. No.	River/Stretch	Approximate Distance (Kms)	2011-12	2012-13	2013-14	Cargo generally moved
1	2	3	4	5	6	7
C.	THE WEST COASTAL CANAL					
1	KSINC Ltd*.					
	Fine Arts Jetty- Vypeen	4	131720	141000	18000	Potable water
	ErnaKulum terminal-Cochin port	5	31963			POL(Bunkering to Ship)
	Ernakulum Vypeen Island	4				Potable water
	Cochin port Ships	5				POL
2	Travancore Cements Ltd.					
						Lime shell with clay & other
	Vaikom- Chitramangalam	20	20850	15190	8570	impurities
	Kayamkulam-Chavra	17		•••		Sand
	Sub Total		184533	156190	26570	_
						 Tank
	Total (NW-III) (A+B+C)		1343770	1236403	1066006	<del>_</del>
	Total Cargo Moved on National Wa	aterways (NW-I+N	W-II+NW-III) 7060265			_
				6379645	6890493	

Source : Inland Waterways Authority of India /

CIWTC

... : Not available.

## SECTION - 3

# COMMODITY-WISE ROUTE-WISE CARGO CARRIED, FREIGHT EARNED, INCOME & EXPENDITURE OF CIWTC

## Traffic and Freight Earnings of Central Inland Water Transport Corporation (CIWTC)

Period	Traffic carried (000 tonnes)	Tonne Km Performed (Lakh)	Total Earnings (Rs.Lakh)
1	2	3	4
1981-82	75	780	163
1982-83	122	813	135
1983-84	201	928	210
1984-85	255	1184	372
1985-86	304	1621	501
1986-87	321	1566	581
1987-88	288	1434	452
1988-89	304	1415	485
1989-90	410	1163	566
1990-91	385	1197	581
1991-92	289	639	427
1992-93	312	1111	640
1993-94	242	1033	552
1994-95	331	968	781
1995-96	325	994	837
1996-97	188	677	718
1997-98	243	524	802
1998-99	141	311	815
1999-00	251	525	1202
2000-01	106	283	641
2001-02	68	269	462
2002-03	86	392	560
2003-04	66	315	497
2004-05	54	242	479
2005-06	85	143	489
2006-07	220	257	578
2007-08	200	238	405
2008-09	74	110	409
2009-10	189	165	434
2010-11	49	44	260
2011-12	31	26	168
2012-13	21	2	153
2013-14	8	0.15	175

Source : CIWTC, 2013-14

Note :Total freight earned includes towing /hire/detention charges/ additional freight/godown rent/misc. charges etc. as detailed in Table 3.3.

## Cargo Carried And Freight Earned by CIWTC-Commodity-wise

		2011-12		2012	2-13	2013	3-14
SI.	Commodity	Tonnes	Freight	Tonnes	Freight	Tonnes	Freight
No.		Carried	Earned	Carried	Earned	Carried	Earned
			(Rs.		(Rs.		(Rs.
			Lakh)		Lakh)		Lakh)
_1	2	3	4	5	6	7	8
1	Fly Ash	-	-	-	-	-	-
2	Pol	-	-	-	-	-	-
3	Cut Bamboo	-	-	-	-	-	-
4	Sand Clips	8250	1.81	19800	4.32	8250	1.80
5	Slag	-	-	-	-	-	-
6	Waste Oil	4400	10.03	-	-	-	-
7	Aluminium Block	200	1.00	-	-	-	-
8	Boulder	1650	0.33	-	-	-	-
9	Cement/W.Cement	-	-	-	-	-	-
10	Cement Clinkers	-	-	-	-	-	-
11	Peas	15000	15.15	1500	3.00	-	-
12	Pet Cake/Personal Effect	-	-	-	-	-	-
13	ODC	243	7.61	-	10.98	-	-
14	Stone Clips	1500	7.55	-	-	-	-
15	Misc.	-	-	-	-	-	
	SUB TOTAL	31243	43.48*	21300	18.30*	8250	1.80
	* this relates to commodit	y-wise earni	ngs				
The	Non Commodity Earnings	are as unde	r:				
	Activity						
	Vessel hire, Godown	-	124.86	-	135.42	-	172.83

Vessel hire, Godown	-	124.86	-	135.42	-	172.83
Rent, Storage ,Towage etc.	_	-	_	-	_	-
SUB TOTAL	-	124.86	-	135.42	-	172.83
GRAND TOTAL	31243	168.34	21300	153.72	8250	174.63

Note :The figures are compiled on the basis of the monthly data received from CIWTC.

	Table No. 3.3	Commo	odity-wise, Route-	wise Cargo	Carried, Fr	eight Earne	ed and Ton	ne Kms. Pe	erformed b	y CIWTC - 2	011-12 to 20	013-14
SI.	Route	Distance	Commodity		Tonnes Carr	ied	Freight	t Earned(Rs.	n Lakh)	Tonne/I	Kms(in Lakh)	Performed
No.		(in Kms)		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Haldia-Budge-Budge		Waste Oil Pol	4400 -	- -	- -	10.03	- -	-	3.27 -	-	- -
	Haldia-Budge-2		TOTAL	4400	-	-	10.03	-	-	3.27	-	<u> </u>
2	Haldia-Ghormalsland	415 1060	Boulders	1650	-	-	0.33	-	-	0.25	-	-
			TOTAL	1650	-	-	0.33	-	-	0.25	-	-
3	Haldia-Internal	02	Sand Clips	8250	1650	-	1.81	0.36	-	0.15	0.03	-
-			TOTAL	8250	1650	-	1.81	0.36	-	0.15	0.03	-
4	Patna-Kolkata	530	Stone Chips	1500	-	-	7.55	-	-	7.95	-	-
			TOTAL	1500	-	-	7.55	-	-	7.95		-
5	Haldia-Jamuria (UP)	1096	ODC	208			6.51	10.98	-	2.28	-	-
			TOTAL	208			6.51	10.98	-	2.28	-	-

SI.	Route	Distance	Commodity	Tonnes Carried		Freight Earned(Rs.in Lakh)			Tonne/Kms(in Lakh) Performed			
No.		(in Kms)		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1	2	3	4	5	6	7	8	9	10	11	12	13
6	Lighterage	44-144	Peas	15000	1500	-	15.15	3.00	-	12.00	1.20	-
	Operation at Saugar		Logs	-	-	-	-	-	-	-	-	-
	/Haldia Diamond		Containers	-	-	-	-	-	-	-	-	-
	Harbour-Kolkata		Fertilizer	-	-	-	-	-	-	-	-	-
	Kolkata-Internal		ODC	35	-	-	1.10	-	-	0.02	-	-
			Sand- Clips	-	18150	8250	-	3.96	1.80	-	0.33	0.15
			A.Block	200	-	-	1.00	-	-	0.01	-	-
			TOTAL	15235	19650	8250	17.25	6.96	1.80	12.03	1.53	0.15
7	Misc.											
	Tug Hire and											
	Godown Rent			-	-	-	124.86	135.42	172.83	-	-	-
			Grand Total	31243	21300	8250	168.34	153.72	174.63	25.93	1.56	0.15

Note: The figures are compiled on the basis of the monthly data received from CIWTC.

## Income And Expenditure Of C.I.W.T.C. (For The Year Ending 31st March)

(Rs. lakhs)

	·			
SI.No.	Item	2012	2013*	2014#
1	2	3	4	5
A.	INCOME	2059.42	1874.31	16274.00
(i)	Earnings (Operational)	130.54	153.73	129.00
(ii)	Earnings (Others)	1928.88	1720.58	16145.00
В	EXPENDITURE	3368.18	4266.89	1654.00
(i)	Materials & Stores Consumed	32.86	62.25	68.00
(ii)	Decrease/Increase in Work in Progres	-37.85	-2.56	-
iii)	Employees Remuneration & Benefits	872.82	861.66	904.00
(iv)	Repairs & Maintenance	49.92	3.70	6.00
(v)	Power & Fuel	45.61	32.09	34.00
(vi)	Other Expenses	305.43	264.06	330.00
(vii)	Interest	1626.93	253.75	-
(viii)	Depreciation	332.83	313.87	312.00
(ix)	Provisions	139.63	2478.07	-
С	Profit/Loss (A-B)	-1308.76	-2392.58	14620.00

Source : CIWTC

\* Revised Figures # Unaudited

Note: Provision includes Income Tax adjustment and sale of vessels.

## **Source-wise Earning of CIWTC**

(Rs. in lakhs)

SI.No.	Name of Service		Year	
		2011-12	2012-13 *	2013-14 #
1	2	3	4	5
	A.Earnings (Operational)			
	Transportation & Allied			
	Activities:			
	Freight	42.48	16.05	1.80
	Dredging	-	-	-
	Ferries & Charter	88.06	137.68	127.20
	Sales pending finalisation	-		
	TOTAL (A)	130.54	153.73	129.00
	B.Earnings (Others)			
	Investment/one time grant	-	-	-
	Interest on Short Term Deposit	1019.05	851.73	273.66
	Interest on:			
	Mobilisation Amount	-	-	-
	Sunderban Conservancy Amount	-	-	-
	Port Maintenance	-	-	-
	Sale of Scrap	-	-	-
	Rent	31.41	2.79	1.39
	Surplus on sale of assets			
	Retired from Operation	-	-	-
	Miscellaneous Receipts	5.60	4.40	1.77
	Govt. Grant (Salary & Wages)	872.82	861.66	15868.18
	Profit on exchange			
	TOTAL B	1928.88	1720.58	16145.00
	TOTAL (A+B)	2059.42	1874.31	16274.00

<sup>#</sup> Unaudited

<sup>\*</sup> Revised Figures

## **Financial Position of CIWTC**

(Rs. in Lakh)

SL. No.	Item	2011-12*	2012-13*	2013-14#
1	2	3	4	5
A.	LIABILITIES			
	<ul> <li>(a) Paid up capital</li> <li>(b) Reserves &amp; Surplus(Capital Reserve)</li> <li>(c) Accumulated Loss</li> <li>(d) Borrowings <ul> <li>i) From Govt. of India</li> <li>ii) From Others</li> </ul> </li> <li>(e) Trade dues and other current liabilities (including provisions) and interest accrued thereon</li> </ul>	13048.48 10909.93 -28559.33 - - - 21914.82	13048.48 10909.93 -30951.91 - - 15738.66	13048.48 10909.93 -16377.00 - - - 4318.59
	TOTAL (A)	17313.90	8745.16	11900.00
В.	ASSETS			
	(f) Gross Asset (g) Less Depreciation (h)Less Provision	11119.36 7837.87 _	11012.02 8049.29 -	11012.02 8358.02 -
	<ul><li>(i) Net Fixed Assets (f-g-h)</li><li>(j) Capital work in progress</li><li>(k) Investment</li></ul>	3281.49 37.85	2962.73 40.42	2654.00 40.00
	(I) Current Assets, Loans and Advances	13994.56	5742.01	9206.00
	(m) Miscellaneous expences and losses not written off	- -	- -	- -
	TOTAL (B)	17313.90	8745.16	11900.00
C.	Working Capital ( I-e) (o) Additional provision	-7920.26	-9996.65	4887.41
	for Gratuity	571.69	594.73	612.17
	(p) Total Working Capital	-7348.57	-9401.92	4275.24
	Capital employed (i+p)	-4067.08	-6439.19	6929.24
	Net worth (a-(c+m)) for F.Y.2012-2013	(-)15510.85	(-)17903.43	(-)3328.52

Source: CIWTC # Unaudited \* Revised **SECTION - 4** 

## IWT ACTIVITIES – STATE-WISE

Number of IWT Vessels With Valid Certificate of Survey...By Type (As on 31st March) Table No. 4.1

SI.	State/			Self Propelled	1				No	n-Self Prope	lled		
No.	UT/Year	Cargo	Passe	Cargo	Tugs	Total	Dumb	Dumb	Dumb	Boats	Others	Total	Grand
	017104	ou.go	nger	cum	and	(Col.3	Barges	Tank	Flat	200.0	0	(Col.8	Total
			90.	Passenger	Pushers	to 6)	24.900	ers				to 12)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh					•							
•	2012			43		43				17	51	68	111
	2013												
	2014												
2	Assam		•••	•••		•••	•••	•••	•••	•••			•••
_	2012		120	10	6	136	15			13	45	73	209
	2012	1	1		4	6	7		9			16	22
	2013	15	114	23	6	158	, 15					15	173
2	Bihar	13	114	23	O	130	13	•••	•••	•••	••	13	173
3	2012	1	19*	74*	6	100	5			9	24	38	138
	2012	1	19*	74 74*	6	100	5		•••	9	24	38	138
	2013	1	19*	74 74*	6	100	5 5		•••	9	24 24	38	138
4	Goa	ı	19	74	0	100	5	•••	•••	9	24	30	130
4		470				470							470
	2012	172				172			•••	•••			172
	2013	264	45			311	2		•••			2	313
_	2014	81@	38		2	121	2		•••		36	38	159
5	Karnataka												
	2012		109	66		175				298		298	473
	2013	• • • •	61	5		66						••	66
_	2014		61	5		66						••	66
6	Kerala												
	\$2012	71	140	44	10	265				5248		5248	5513
	2013	153	200	69	10	432				4665	8724	13389	13821
	2014	134	143	55	5	337				4413	8939	13352	13689
7	Maharashtra												
	2012		233		370	603							603
	2013		201		376	577							577
	2014		250		338	588							588
8	Orissa												
	2012		279			279							279
	2013		342			342							342
	2014												
9	West Bengal												
	2012	85	263	5	73(A)	426	659			1550		2209	2635
	2013	94	227	6	69(A)	396	690			1537		2227	2623
	2014	57	219	3	29	308	51	3	3	1646	31	1734	2042
10	Tamil Nadu	٠.		ŭ			٠.	•	ŭ		٠.		
	2012									2		2	2
		•••	•••		•••	•••	•••	•••	•••	2	•••	2	
	2013	•••	•••		•••	•••	•••	•••	•••	2	•••	2	2
	2014			 2 and 2013 r									

<sup>(</sup>A) Includes 42 and 29 other vessels for 2012 and 2013 respectively.

<sup>...</sup> Not available/Nil

<sup>\$:</sup> From 2011-12 onwards, unlicenced vessels and country boats have been excluded

\* Vessels are with various agencies in Bihar, and probably they are not certified registered as Bihar does not have IV rule as yet @ vessel count reduced due to mining ban

## Number of Passengers and Cargo Carried By Inland Water Vessels (Year Ending 31st March)

SI. No.	State/UT/Year	Powered Vessels Employed for cargo (Nos.)	Powered Vessels Employed for passengers (Nos.)	Quantity of cargo carried (000' tonnes)	Total No. of passengers carried (000)
1	2	3	4	5	6
1	Andhra Pradesh				_
	2012				
	2013				
	2014				
2	Assam				
	2012	66	66	37.72#	11345.53
	2013	56	56	71.79@	7656.00
	2014	56	56	338.53@	7043.84
3	Bihar				
	2012	1	83	2.40	578.00*
	2013	1	83	2.40	578.00*
	2014	1	83	2.40	578.00
4	Goa(a)				
	2012	172	-	14469.90	***
	2013	264	45	3275.82	14076.00
	2014	81	38	284.17	1450.00
5	Karnataka				
	2012	66	15	58.80**	1648.70**
	2013	66	66	78.40**	1884.56**
	2014	66	66	58.72**	2089.96**
6	Kerala				
	2012	77	644	5756.12	8410.69
	2013	66	632	5555.21	24752.82
	2014	38	180	2831.87	15323.71
7	Maharashtra				
	2012			19950.00	17147.80
	2013			24196.00	17608.00
	2014			24774.00	17802.00
8	Orissa				
	2012		9		126.00
	2013		10		124.00
	2014				
9	West Bengal				
	2012	61	263	9996.00(b)	43832.00
	2013	76	227	10347.00(b)	42976.00
	2014	57	219	11452.00	43619.00

<sup>(</sup>a) Excludes traffic reported by Mormugao Port for Iron Ore movement which is 29.00 million tonnes in 2011-12 & 7.40 million tonnes in 2012-13 & 0.31 million tonnes in 2013-14.

<sup>(</sup>b) No. of vehicles carried LCT 39618, 40807 and 39952 for the year 2010-11, 2011-12 & 2012-13 respectively.

<sup>578\*</sup> based upon passengers travelling on unregistered vessels plying in various rivers. ...: Not Available

<sup>#:</sup> in addition to cargo, LMV 51716 nos, Bicycle 209104 nos, Motor Cycles 125198 nos, and Animals 11300 nos for 2011-12
\*\*: The traffic of passengers & cargo is only operation of Ferry Service across the river in rural area.

<sup>@</sup> Cargo includes LMV's, Bicycles, Motor Cycles and Animals etc.

<sup>\$</sup> No iron ore export due to mining ban.

## **SECTION - 5**

## IWT ACTIVITIES – PRIVATE COMPANIES/UNDERTAKINGS

## IWT Vessels With Valid Certificates of Survey-Owned By Responding Private Companies/Undertakings By Type (As on 31st March)

			Non-Self								
OL 14-	Company/ Undertaking and Year	Туре	of vessel	opelled Carry	ing capacity	Propelled					
SI. No.		Cargo (No.)	Passenger (No.)	Cargo(in Tonnes)	Passenger(in No.)	(Dumb Barges) (No.)					
1	2	3	4	5	6	7					
1	S.V.Salgaocar, Goa		-		•						
	2012	3		962							
	2013	3		-							
	2014	3				•••					
2	D.V.Salgaocar, Goa										
	2012	3		307							
	2013	3		_							
	2014	3									
3	V.M.Salgaocar Sales Inte	rnational									
3	2012	2		693							
4 S	2013	2		-							
	2014	2									
4	Sesa Resource Ltd Goa										
	2012	3		3237							
	2013	3		3237							
	2014	3		3237							
5	*Sesa Sterlite Ltd, Goa										
	2012	32(a)		41697							
	2013	35(a)		44255							
	2014	32(a)		41714							
6	Sociedade De Fomento II	nd. Ltd. Goa									
	2012	2		2434							
	2013	2		2434							
	2014	2		2434							
7	CIWTC, Kolkata.										
	2012	4 (b)		1961		12					
	2013	8 (b)		3909		16					
	2014	7(b)		3690		10					
•											
8	Indo-Swiss Trading Co. F	wikata.	2	110	270						
	2012		2	118	270	•••					
	2013		=	118	270 270						
	2014 2 118 270										
9	Vivada Inland Waterways										
	2012	10	4								
	2013	10	4		•••						
	2014	9	5								

## IWT Vessels With Valid Certificates of Survey-Owned By Responding

Private Companies/Undertakings By Type (As on 31st March)

			Self P	ropelled		Non-Self						
	Company/ Undertaking	Type	of vessel		ing capacity	Propelled						
SI. No.	and Year	Cargo (No.)	Passenger (No.)	Cargo(in Tonnes)	Passenger(in No.)	(Dumb Barges) (No.)						
1	2	3	4	5	6	7						
			-									
10	West Bengal Surface Tra	nsport Corpora	tion Ltd.									
	2012	3	20									
	2013	3	20									
	2014	2	24									
11	Hooghly Nadi Jalapath P. Samity, Kolkata.	aribahan Samal	oaya									
	2012		37									
	2013		34									
	2014		34									
12	West Bengal Tourism Development Corporation limited, Kolkata.											
	2012		3									
	2013		3									
	2014		3									
13	Eastern Navigation (P) Lt	d., Kolkata.										
	2012	8	3									
	2013	8	3									
	2014	10	1									
4.4	Duadaan Baatina Camus	Kallista										
14	Pradeep Boating Compa	•										
	2012	2 2	••••	•••	•••	•••						
	2013	2	••••		•••							
	2014	2	••••		•••							
15	Costa River Transport Pv	t Itd Goa										
13	2012	3		5122								
	2012	3	•••	5122		***						
	2013	3		5122								
	2014	Ü	•••	0.22	•••	•••						
16	<b>Ghatal Station Navigation</b>	n (P) Ltd., Kolka										
	2012		3									
	2013	•••	3	•••		•••						
	2014	•••	3		•••							
17	Diamond Harbour Munici	pality, Kolkata.										
	2012		10									
	2013		10			***						
	2014		10									

## IWT Vessels With Valid Certificates of Survey-Owned By Responding Private Companies/Undertakings By Type (As on 31st March)

	1 Tivate Co	inpanies/or	ndertakings By	ropelled	313t March	Non-Self	
	Company/ Undertaking	Type	of vessel		ng capacity	Propelled	
SI. No.	and Year	Cargo (No.)	Passenger (No.)	Cargo (in Tonnes)	Passenger(in No.)	(Dumb Barges) (No.)	
1	2	3	4	5	6	7	
18	Chandan Nagar Municipa	ality, Kolkata.					
	2012		5				
	2013		5				
	2014		5				
19	Jain Navigation						
	2012	2					
	2013	2					
	2014	2	***		•••		
20	K.S.Singhi						
	2012						
	2013	1					
	2014	1	•••	•••	***	•••	
21	Jindal ITF Ltd.						
	2012		***		•••		
	2013	2	***		•••		
	2014	18					
22	Soham Shipping Pvt.Ltd.						
	2012						
	2013	4					
	2014	4					
23	Rashmi Ore Carriers Pvt.	Ltd.					
	2012	1		1314			
	2013	1		1314			
	2014			1314			
24	Kothari Overseas Private						
	2012	1	***	1893	•••	•••	
	2013	1		1893			
	2014			1893	***		
25	Mayur Shipping Private L	imied					
	2012	1	-	1284			
	2013	1	-	1284	•••		
	2014	-	-	1284			
26	Sanghi Brothers (Indore)	Pvt Ltd.					
	2012	5		6476			
	2013	5		6476	•••		
	2014	5		6476			
	-	-					

<sup>...</sup> Not available.

Note: This table covers only those IWT operators from whom the data is received by TRW.

<sup>\*</sup> Formerly SESA Goa Ltd.

<sup>(</sup>a) Includes one Passenger Launch & one Oil Tanker

<sup>(</sup>b) 2 Pusher Tug & 2 Moter Tanker for 2012 & 5 Pusher Tug & 3 Oil Tanker for 2013,4 Pusher Tug & 3 Oil Tanker for 2014.

## Cargo/Passenger Carried And Freight Collected - By Responding Companies (Year Ending 31st March)

	ı	1	(Year End	illig ə ist i	warcii)	1		ı	
			No. of	Distance	Freight	Cargo	Carried	Passenger	Carried
SI.No.	king and Year	Type of Vessels	Powered Vessels Employed	Travelled (Kms)	Collected (Rs.in Lakh)	Cargo (in Tonnes)	TKms (in millions)	` ,	PKms
1	2	3	4	5	6	7	8	9	10
1	S. V. Salgaocar, G	oa							
	2012	Cargo	3	14035	673.60	962400	13507.28		
	2013 (f)	Cargo	-	-	-	-			
	2014 (f)	Cargo	-	-	-	-		•••	
2	D. V. Salgaocar, G	oa							
	2012	Cargo	3	13825	663.60	948000	13106.10		
	2013 (f)	Cargo	-	-	-	-			
	2014(f)	Cargo	-	-	-	-			
3	V.M.Salgaocar Sal	es International							
	2012	Cargo	2	10115	485.52	693600	7015.76		
	2013 (f)	Cargo	-	-	-	-			
	2014(f)	Cargo	-	-	-	-			
4	Sesa Resources L	td Goa							
	2012	Cargo	3	49400	(d)	793304	39189.22		
	2013	Cargo	3	18100	(d)	278224	5035.85		
	2014	Cargo	3	14800	(d)	163204	2415.41		
5	Sesa Sterlite Ltd,	Goa							
J	2012	Cargo	31	365700	(d)	6933724	2535662.87		
	2013	Cargo/Pass/Oil Tankers	35	134200	(d)	2582447	346564.39		
	2014	Cargo/Pass/Oil Tankers	32	74300	(d)	1003364	74549.94	•••	
6		nento Ind. Ltd., Goa							
	2012	Cargo	2	11770	(a)	194923	2294.24		
	2013	Cargo	2	4510	(a)	71867	324.12		
	2014*	Cargo	2	-	(a)	-	-	•••	
7	C.I.W.T.C., Kolkata	a.							
	2012	Cargo/Tug/Spcs/Dbs	3	12312	168.34	31243	384.66		
	2013	Cargo/Tug/Spcs/Dbs	1	160	153.72	21300	3.41		
	2014	Cargo/Tug/Spcs/Dbs	-	-	174.63	8250	-		
8	Indo-Swiss Tradin	g Co.Pvt. Ltd., Kolkata							
	2012	Pass.	2	15120	108.34				
	2013	Pass.	2	15610	110.25			3200	
	2014	Pass.	2	15300	143.26			2830	
9	VIVADA Inland Wa	terways Ltd., Kolkata							
	2012	Cargo/Tug/Pass/LCT	14		3755.95	794590(c)		27630	
	2013	Cargo/Tug/Pass/LCT	14		3863.78	480740(c)		28250	
	2014	Cargo/Tug/Pass/LCT	14		4024.38	495620(c)		27760	

Cargo/Passenger Carried And Freight Collected - By Responding Companies (Year Ending 31st March)

$\underline{}$			(Ye	ear Ending	g 31st Marc	ch)			
			No. of	Distance	Freight	Cargo	Carried	Passenger	Carried
SI.No.	Company/Underta king and Year	Type of Vessels	Powered Vessels Employed	Travelled (Kms)	Collected (Rs.in Lakh)	Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
10	W. Bengal Surface	Transport Corporation	n Ltd., Kolkat	а					
	2012	Pass./LCT	23		591.32	23855(b)		7123000	
	2013	Pass./LCT	23		408.32	24346(b)		15967000	
	2014	Pass./LCT	26		402.56	23281(b)		16225000	
11	Hooghly Nadi Jala	oath Paribahan Samab	Distance   Vessels   Employed   Vessels   Vesse						
	2012	Pass.			1009.49			22000000	
	2013								
	2014	Pass.							
12	_			ata					
	2012			•••					
	2013								
	2014	Pass.	3		148.27			8730	
13	Eastern Navigation	ı (P) Ltd., W. Bengal, K	olkata						
	2012	Cargo/Tug/Pass.	7		160.42			7000	
	2013	Cargo/Tug/Pass.	11		175.00				
	2014	Cargo/Tug/Pass.	11			56340			
14	Pradeen Boating C	omnany W Rengal K	olkata						
1-7	2012				1000.00	5000			
	2012	· ·							
	2013	•							
	2014	rugs	2	•••	7.50	300			
15	Costa River Transp	oort Pvt. Ltd. Goa							
	2012	Cargo	3		263.30	353900			
	2013	Cargo	3		75.10	100950			
	2014	Cargo						-	
4.0									
16		gation (P) Ltd. Kolkata			00.50			0005000	
	2012						•••		•••
	2013								•••
	2014	Pass.	3	•••	41.29	•••	•••	2629000	
17	Diamond Harbour	Municipality, Kolkata							
	2012	Pass.	10		98.32			357400	
	2013	Pass.	10		110.73			370290	
	2014	Pass.	10						
18	Chandan Nagar Mun	icipality. Kolkata							
. •	2012		5		4.60			500000	
	2012								
	2014								
	2017	1 400.	9	•••	0.40	•••	•••	. 02010	•••
				41					

Cargo/Passenger Carried And Freight Collected - By Responding Companies (Year Ending 31st March) Table No. 5.2 (Contd...)

			No. of		Freight	Cargo	Carried	Passenger	Carried
SI.No.	Company/Underta king and Year	Type of Vessels	Powered Vessels Employed	Distance Travelled (Kms)	Collected (Rs.in	Cargo (in Tonnes)	TKms (in millions)		PKms
1	2	3	4	5	6	7	8	9	10
19	Jain Navigation								
	2012	Tugs/Pass	2		14.00				
	2013	Tugs/Pass	2		17.37	5370			
	2014	Tugs/Pass	2		16.45	7260			
		3							
20	K.S.Singhi	<b>T</b>							
	2012	Tugs	•••	•••			•••		
	2013	Tugs	1		9.21	3290			
	2014	Tugs	1	•••	10.13	3310	•••	••••	
21	Jindal ITF Ltd.								
	2012								
	2013	Cargo	2		55.33	27000			
	2014	Cargo	18	•••	65.23	40210	•••	••••	
22	Soham Shipping Pvt	.Ltd.							
	2012								
	2013	Cargo	4		58.48	39850			
	2014	Cargo	4		49.72	25270	•••		
23	Rashmi Ore Carriers	Put I td							
23	2012		1	3240	104.25	151957	492.34		
	2012	Cargo	· ·					•••	
		•••	•••	•••	•••	• • • •	•••		
	2014	•••	•••		•••	•••		•••	•••
24	Kothari Overseas Pr	ivate Limited							
	2012	Cargo	1		54.36	65007			
	2013	Cargo	1		8.20	11442			
	2014	Cargo							
25	Mayur Shipping Pvt.	Limited							
	2012	Cargo	1	2475	84.52	104338	258.24		
	2013								
	2014								
26	Sanghi Brothers (Ind	lore) Pvt Ltd							
	2012	Cargo	5	3900	74.40	30134	117.52		
	2013(e)	Cargo							
	2014(c)	Cargo							
		9							

Note: This table covers only those IWT Operators from whom the data is received by TRW.

<sup>(</sup>a): transportation for self (b): data relates to no of vehicles on L.C.T.
(c):244761 no vehicles on LCT for the year 2010-11, 2011-12 & 257859 no. of vehicles on LCT for year 2012-13 and 26812 no. of vehicles on LCT for the year 2013-14
(d): Own barges plying for group company
(e): Barges not plied due to ban on mining.

(f): Ships have been baned by the Govt. Therefore cargo has been reported as 'Nil'.

\* due to stoppage of iron ore mining by Goa Govt & Hon'ble Supreme Court

\*\* Formerly SESA Goa Ltd.

Note: This table covers only those IMT Operators from whom the data is received by TPIW

## **SECTION - 6**

## PLAN-WISE OUTLAY & EXPENDITURE FOR IWT SECTOR

## PLAN WISE FINANCIAL PERFORMANE FROM 10th FIVE YEAR PLAN TO 11th FIVE YEAR PLAN AND PART OF 12th FIVE YEAR PLAN

(Rs in Cr.)

CI.		10th F	ive Year	Plan	11th I	ive Year	Plan	Fi	nancial Y	ear	Fin	ancial Ye	ar
Sl. No.	Budget head/ Waterways		2002-07)			(2007-12)			(2012-13)		(2013-14)		
NO.		B.E	R.E	Exp.	B.E	R.E	Exp.	B.E	R.E	Ехр.	B.E	R.E	Exp.
I	Grants to IWAI												
1	National Waterway 1	154.97	155.11	135.62	241.69	235.81	228.95	78.90	55.03	58.89	74.43	65.24	48.74
2	National Waterway 3	54.49	46.58	36.10	75.48	107.23	104.82	37.91	22.48	20.59	22.11	17.70	21.25
3	Others	37.60	23.88	12.99	26.00	7.59	9.57	15.21	18.60	16.63	22.26	7.06	11.59
	Sub Total - I (Grants to IWAI)	247.06	225.57	184.71	343.17	350.63	343.34	132.02	96.11	96.11	118.80	90.00	81.58
II	North Eastern Area												
4	National Waterway 2	216.28	180.60	132.15	319.29	243.17	202.07	70.99	44.80	43.33	72.00	48.21	50.25
5	Central Plan scheme for NER	17.00	0.00	0.00	16.03	15.03	6.62	3.70	3.70	1.87	3.20	3.20	1.22
6	Proposed NW-6 (Barak)	3.00	0.00	0.00	1.51	0.00	0.00	0.01	0.00	0.00	2.00	0.25	0.25
7	Development of Indo- Bangladesh	1.30	1.10	0.66	0.00	0.00	0.00	2.00	1.50	1.72	3.00	1.34	1.20
	protocol for Channel marking,												
	Dredging & Night Navigation etc.												
	Sub total - II (NER)	237.58	181.70	132.81	336.83	258.20	208.69	76.70	50.00	46.92	80.20	53.00	52.92
III	Interest Subsidy to Bank, Loan to	8.50	5.00	5.40	8.00	7.00	4.13	2.00	1.00	0.90	0.00	0.00	0.00
	IWT Enterprenuer for Inland Vessel												
	Subsidy Scheme												
IV	Tech Studies & R&D	26.00	19.00	9.09	5.00	5.00	4.32	1.00	1.00	1.00	1.00	1.00	1.00
$\mathbf{V}$	Central Plan Scheme/ CSS	40.00	65.00	52.83	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	1.21
	Grand Total	559.14	496.27	384.84	693.00	620.83	560.48	211.72	148.11	144.93	203.20	147.20	136.71

Centrally Sponsored Scheme for IWT sector was discontinued after 10th Plan

In addition to above, during the year 2013-14 an amount of Rs. 9.00 Crore was allocated in B.E. & R.E. Stage to be released to Government of Bangladesh for maintenance of Protocol routes on Inland Water Transit and Trade, out of which an amount of Rs. 8.077 Crore was released.

Source: Inland Waterways Authority of India

**SECTION - 7** 

# INLAND WATERWAYS TRANSPORT ACCIDENTS

#### Table No. 7.1

#### No. of Accidents, Persons Injured And Died by Drowning (Boat Capsize) in States During 2013.

	Drowning (Boat Capsize)							
SI. No.	State/UT	No. of Accidents	No. of	. of Persons	Died			
			Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9
	STATES		_		_	_		_
1	Andhra Pradesh	8	0	0	0	7	2	9
2	Arunachal Pradesh	0	0	0	0	0	0	0
3	Assam	21	0	0	0	14	10	24
4	Bihar	100	36	24	60	54	33	87
5	Chhattisgarh	34	0	0	0	23	12	35
6	Goa	0	0	0	0	0	0	0
7	Gujarat	13	0	0	0	15	1	16
8	Haryana	0	0	0	0	0	0	0
9	Himachal Pradesh	0	0	0	0	0	0	0
10	Jammu & Kashmir	0	0	0	0	0	0	0
11	Jharkhand	13	0	0	0	11	3	14
12	Karnataka	5	0	0	0	10	0	10
13	Kerala	17	2	0	2	15	1	16
14	Madhya Pradesh	46	0	0	0	39	12	51
15	Maharashtra	12	0	0	0	16	10	26
16	Manipur	0	0	0	0	0	0	0
17	Meghalaya	1	0	0	0	1	0	1
18	Mizoram	19	0	0	0	18	1	19
19	Nagaland	0	0	0	0	0	0	0
20	Odisha	38	10	6	16	29	13	42
21	Punjab	3	0	0	0	3	0	3
22	Rajasthan	5	0	0	0	5	0	5
23	Sikkim	0	0	0	0	0	0	0
24	Tamil Nadu	21	6	0	6	19	0	19
25	Tripura	0	0	0	0	0	0	0
26	Uttar Pradesh	114	13	5	18	118	34	152
27	Uttarakhand	1	0	0	0	2	0	2
28	West Bengal	5	13	9	22	7	0	7
	Total( States)	476	80	44	124	406	132	538
	<b>UNION TERRITORIES</b>							
29	A&N Island	0	0	0	0	0	0	0
30	Chandigarh	0	0	0	0	0	0	0
31	D&N haveli	0	0	0	0	0	0	0
32	Daman & Diu	0	0	0	0	0	0	0
33	Delhi	46	0	0	0	43	3	46
34	Lakshadweep	0	0	0	0	0	0	0
35	Pondicherry	1	0	0	0	1	0	1
Т	otal ( UTs)	47	0	0	0	44	3	47
	Total States/UTs	523	80	44	124	450	135	585

Note : The data includes boats plying in all water bodies. Source : Accidental Deaths & Suicides in India - 2013

National Crime Records Bureau, M/o Home Affairs, Govt. of India

SECTION - 8

# INLAND WATERWAYS IN SELECT COUNTRIES

### Table No. 8.1

## Length of Navigable Inland Waterways in Europe and USA in 2005 & 2008

(In Kms.)

SI.	Country	Car	nals	Rivers a	nd Lakes	Т	otal
No.		2005	2008	2005	2008	2005	2008
1	2	3	4	5	6	7	8
1	Albania						
2	Austria	_	_	351	351	351	351
3	Belgium	875	875	641	641	1516	1516
4	Bulgaria	_	_	470	470	470	470
5	Croatia	_	_	804	804	804	804
6	Czech. Republic	39	39	625	625	664	664
7	Estonia	_	_	320	335	320	335
8	Finland	125	125	7904	7858	8029	7983
9	France	3771	3577	2017	1623	5788	5200
10	Germany	2379	2379	5186	5186	7565	7565
11	Hungary	166	166	1392	1392	1558	1558
12	Kazakhstan	_	_	4032	_	4032	_
13	Kyrgyzstan	_	_	420	420	420	420
14	Lithuania	1	1	289	440	290	441
15	Poland	331	344	3307	3316	3638	3660
16	Moldova	_	_	42	42	42	42
17	Netherlands	4649	4706	1388	1396	6037	6102
18	Romania	132	132	1647	1647	1779	1779
19	Russian Federation	1244	1244	100435	100368	101679	101612
20	Serbia and Montenegro		342		1076	_	1418
21	Slovakia	39	39	134	134	173	173
22	United Kingdom	155	159	910	891	1065	1050
23	United States of America					42000	_
24	Ukraine	1156	1153	1035	1013	2191	2166

Source: Annual Bulletin of Transport Statistics for Europe & North America, 2011 (UN Publication).

Table No. 8.2

## Length of Navigable Waterways By Permissible carrying Capacity of Vessels - 2008

		Total							
SI.No.	Country	Length	upto	250-399	400-649	650-999	1000-	1500-	3000 &
	_	(Kms.)	249				1499	2999	Above
1	2	3	4	5	6	7	8	9	10
1	Albania								
	Canals								
	Rivers & Lakes								
2	Austria	_							_
	Canals								
	Rivers & Lakes	351							
3	Belgium								
	Canals	875		156	213		221	86	199
	Rivers & Lakes	641	_	182	34	_	210	162	53
4	Bulgaria		_			_			
	Canals								
	Rivers & Lakes	470							
5	Croatia								
	Canals								
	Rivers & Lakes	804	_	17	215	286	149		138
6	Czec Republic								
	Canals	39							
	Rivers & Lakes	625							
7	Estonia								
	Canals								
	Rivers & Lakes	335							
8	Finland								
	Canals	125	9			16		100	
	Rivers & Lakes	7858	4148			2909		801	
9	France								
	Canals	3577	39	2670	57	217	27	17	550
	Rivers & Lakes	1623		351	108	-	4	219	942
10	Germany								
	Canals	2379	112	239		35	1403	391	109
	Rivers & Lakes	5186	386	734	90	227	830	1870	1049
11	Hungary								
	Canals	166	-	-	-	-	-	-	-
	Rivers & Lakes	1392	-	78	451	336	147	-	380

Table No. 8.2 (Contd...)

## Length of Navigable Waterways By Permissible Carrying Capacity of Vessels - 2008

		Total	tal Carrying Capacity of Vessels (in tonnes)							
SI.No.	Country	Length	upto	250-399	400-649	650-999	1000-	1500-	3000 &	
	_	(Kms.)	249				1499	2999	Above	
1	2	3	4	5	6	7	8	9	10	
12	Kazakhstan*									
	Canals									
	Rivers & Lakes									
13	Kyrgyzstan*									
	Canals									
	Rivers & Lakes									
14	Lithuania									
	Canals	1				1				
	Rivers & Lakes	440	-	151	-	289	-	-	-	
15	Moldova									
	Canals									
	Rivers & Lakes									
16	Netherlands									
	Canals	4706	-	-	-	-	-	-	-	
	Rivers & Lakes	1396	-	-	-	-	-	-	-	
17	Poland									
	Canals	344		176	106	47			15	
	Rivers & Lakes	3316	909	893	965	350	38	55	106	
18	Romania									
	Canals	132			-	-	-	-	-	
	Rivers & Lakes	1647			-	-	-	-	-	
19	Serbia									
	Canals	342	21	321	-	-	-	-	-	
	Rivers & Lakes	1076	38	-	45	405	-	588	-	
20	Slovakia									
	Canals	39	-	-	-	-	-	-	39	
	Rivers & Lakes	134	-	-	-	-	-	-	134	
21	Ukraine									
	Canals	1153	-	-	-	-	-	-	-	
	Rivers & Lakes	1013	-	-	-	-	-	-	-	
22	United Kingdom									
	Canals	159	-	-	-	-	-	-	-	
	Rivers & Lakes	891	-	-	-	-	-	-	-	
23	Russian Fedration									
	Canals	1244								
	Rivers & Lakes	100368								
Source	· Appual Bullotin of T	ranchart C	Statistics	for Euro	o & Norti	Λ morico	2011			

Source: Annual Bulletin of Transport Statistics for Europe & North America-2011.

#### Table No. 8.3 Inland Waterways vessels in Service at the end of 2008

		Self P	ropelled Ve	ssels	D.& P.	Vessels	Tugs and Pushers		
SI. No	Country	Nos.	Carrying Capacity (Th.Tonne s)	Power (Th. KW)	Nos.	Carrying Capacity (Th.Tonnes)	Nos.	Power (Th. KW)	
1	2	3	4	5	6	7	8	9	
1	Albania								
2	Austria								
3	Belgium	1126	1387.00		244	460.00		•••	
4	Bulgaria	21	30.90	20.10	159	250.50	35	32.70	
5	Croatia	9	9.00	6.00	129	87.00	59	16.00	
6	Czec.Republic	44	44.00	19.00	173	86.00	98	27.00	
7	Estonia	7		1.21	3	1.20	2	0.22	
8	Finland	145	14.00	29.00	33	6.00	28	8.00	
9	France	903	586.00	265.00	469	550.00			
10	Germany	1319	1834.00		1082	1059.00	•••		
11	Hungary	85	-	-	329	329.00	80	-	
12	Kazakhstan(a)	-							
13	Kyrgyzstan(a)	5							
14	Lithuania	35	13.10	10.60	23	8.92	21	4.21	
15	Poland	109	68.00	33.00	431	213.00	212	57.00	
16	Republic of Moldova								
17	Romania	105			1221		256		
18	Serbia and Montenegro	67	66.00	17.20	382	438.00	122	67.00	
19	Slovakia	29	21.60	13.50	157	236.60	41	41.00	
20	Ukraine	232	159.00	120.00	593	939.00	327	144.00	
21	United Kingdom	158	40.00		287	98.00	92		
22	United States of America								
23	Russian Fedration	2492	2256.00	1051.00	7264	8542.00	8023	1829.00	

D.& P. Vessels : Dumb & Pushed Vessels

Source: Annual Bulletin of Transport Statistics for Euorpe and North America, 2011

#### Table No. 8.4

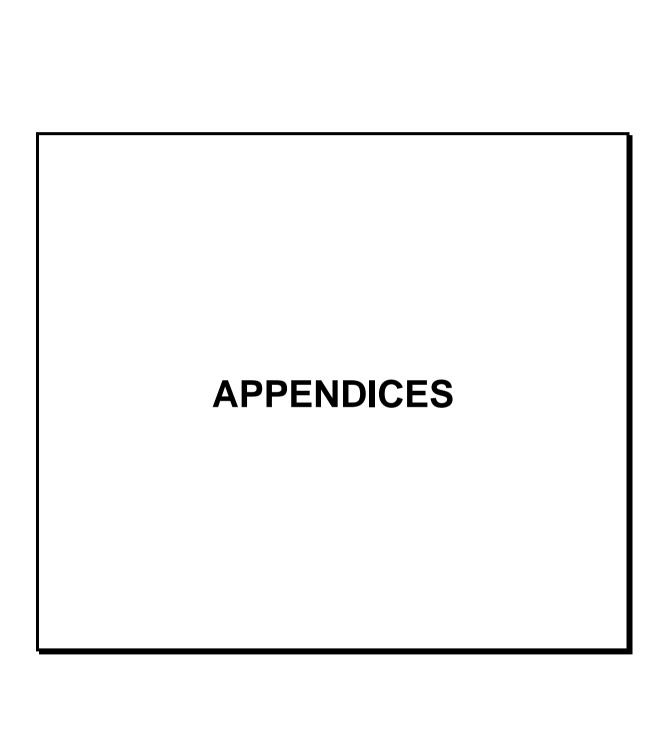
## Goods Transport by Type of Transport on National Territory - 2008

SI.	Country	Good	ods carried ('000 Tonnes)			Tonne	Tonne Kms. of Goods carried(				
No.	-	National		ational	Transit	National		ational	Transit		
			Loaded	Unloaded			Loaded	Unloaded			
1	2	3	4	5	6	7	8	9	10		
1	Albania										
2	Austria	502	2166	5731	2810	92	260	1023	983		
3	Belgium	36772	29943	53472	10163	3498	1425	3090	733		
4	Bulgaria	2544	934	3054	4425	70	191	618	2012		
5	Croatia	141	318	421	5535	31	21	27	764		
6	Czech-Republic	388	185	178	-	12	10	6	-		
7	Estonia										
8	Finland	335				80					
9	France	29570	16822	13762	9154	4476	1438	1590	1053		
10	Germany	57552	57845	107523	22742	11616	14698	23558	14189		
11	Hungary	74	3095	1795	3866	6	476	303	1462		
12	Kazakhstan										
13	Kyrgyzstan	43				8					
14	Lithuania	146				12					
15	Poland	3672	1741	342	2354	157	381	79	657		
16	Republic of Maldova	-	-	-	-	•••	-	-	-		
17	Romania	22646	3963	3563	123	4622	2043	1940	82		
18	Russian Federation	138388	10771	648	13	44559	16309	1113	34		
19	Serbia and Montenegro	4367	1324	3986	6417	414	1026	3738	10327		
20	Slovakia	84	2080	257	5950	6	46	26	1023		
21	Ukraine	7272	-	-	-	557	-	-	-		
22	United Kingdom	3659	-	-	-	164	-	-	-		
23	United States of America**	615872	•••								

Source: Annual Bulletin of Transport Statistics for Europe and North America 2011

<sup>\*:</sup> Kilometers within the territory of the reporting country.

<sup>\*\*:</sup> Data relates to 2005



#### **DEFINITIONS OF TERMS USED**

(For Section-8)

Source: Annual Bulletin of Transport Statistics for Europe and North America

#### **Navigable Inland Waterways**

A stretch of water, not part of the sea, over which craft of a carrying capacity not less than 50 tonnes can navigate when normally loaded. This term covers both navigable rivers and lakes (natural water-courses, whether or not they have been improved for navigation purposes) and canals (waterways constructed primarily for the purpose of navigation). The length of rivers and canals is measured in mid channel and length of lakes, as well as lagoons, is counted as the length between the most distant points between which the transport is performed. An inland waterway forming a common frontier between two countries is reported by both.

### Inland Water Transport (IWT) Craft

Craft having a minimum carrying capacity of 20 tonnes designed for the carriage of goods by inland waterways.

#### **Dumb Barge**

IWT craft designed for being towed and not having its own means of mechanical propulsion. The fact that a dumb barge is fitted with an auxiliary engine does not change its nature.

#### **Dumb Tanker**

Dumb barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster, etc. are to be excluded, and to be counted among dumb barges.

#### **Self-Propelled Barge**

IWT craft having its own means of mechanical propulsion, dumb barges, pushed barges and pushed-towed barges with only an auxiliary engine should be regarded as dumb, pushed or pushed-towed barges as the case may be. The fact that a self propelled barge can be used for towing does not change its nature.

#### **Self Propelled Tanker**

Self propelled barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster etc. are to be excluded and to be counted among self-propelled barges.

#### Self Propelled Craft for River-Sea Navigation

Craft having a Dead Weight capacity of at least 20 tonnes, designed for the transport of goods by river and by Sea and equipped with their own means of propulsion developing at least 37 KW.

#### **Tug**

Powdered craft developing not less than 37 KW and designed for the towing of dumb barges, pushed towed barges, rafts, but not for the carriage of goods.

#### **Pusher Craft**

Powdered craft developing not less than 37 KW and designed or fitted for the pushing of pushed or pushed-towed barges but not for the carriage of goods.

#### **Pusher Tug**

Powdered craft developing not less than 37 KW and designed or fitted for the towing of dumb barges, pushed-towed barges or rafts, and for the pushing pushed and pushed-towed barges but not for the carriage of goods.

#### **Pushed Barge**

IWT craft designed for being pushed and not having its own means of mechanical propulsion. The fact that a pushed barge is fitted with an auxiliary engine does not change its nature.

#### **Pushed Barge**

Pushed barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster etc. are to be excluded and to be counted among pushed barges.

## Carrying Capacity (also referred to as Dead Weight Capacity)

Maximum permissible weight of goods, expressed in tones, which a craft may carry according to ship's document.

#### Power (KW)

Mechanical force developed by the motive power installation in craft. This power should be measured in effective kilowatts (power transmitted to the propeller).

#### Appendix - II

#### **ABBREVIATION**

.. Not Available

- Nil

IWT Inland Water Transport

Kms. Kilometers

M.T. Metric Tonnes

CIWTC Central Inland Water Transport Corporation

IWAI Inland Waterways Authority of India

KSINC Kerala Shipping & Inland Navigation

Corporation

H.P. Horse Power

POL Petroleum Oil Lubricant

ODC Over Dimensional Cargo

LAG Liquified Amonnia Gas

FO Furnace Oil

LDO Light Diesel Oil

GC/G Cargo General Cargo

Neg/N Negligible

FBP Farakka Barage Project

IOC Indian Oil Corporation

HSD High Speed Diesel

LCT Loaded Carriage Tug

FACT Fertilisers and Chemicals Travancore Ltd.