

# **STATISTICS OF INLAND WATER TRANSPORT 2012-13**



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

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सत्यमेव जयते

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Ministry of Road Transport & Highways  
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New Delhi**

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## P R E F A C E

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 2012-13" is the 20<sup>th</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.

In this volume, a theme paper on 'Cargo Movement on National Waterways', has also been included. The paper analyses trend in cargo movement on three National Waterways I, II & III during 2001-02 to 2012-13.

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.

(Dr.Vishwapati Trivedi)

December, 2013

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# **Cargo Movement on National Waterways in India**

Inland Water Transport (IWT) is a fuel efficient, employment intensive and environment friendly mode of transportation. It is recognized all over the world for its inherent advantage of being the cheapest mode of transport for bulk haulage over long distance between places situated along the waterfront. Its energy efficiency, low pollution and potential for employment generation are universally accepted.

India is richly endowed with navigable waterways, comprising rivers, canals, backwaters, creeks, etc. It is estimated that about 15500 km of the waterways could be used for passenger and cargo movement. Inland Water Transport is important only in few States, namely, Assam, West Bengal, Bihar, Mumbai, Goa and Kerala. Also, it is operational only in restricted stretches of Ganga-Bhagirathi-Hooghly rivers; the Brahmaputra river; the Barak river; the rivers in Goa; the backwaters in Kerala; inland waters in Mumbai and the deltaic regions of the Godavari-Krishna rivers. About 60-70 million tonnes of cargo is being moved annually by inland water transport during the past few years.

In India, the capacity of Inland Water Transport is under-utilised, because most navigable waterways suffer from hazards like shallow water and narrow width of channel during dry weather; silting of river beds and erosion of banks; absence of adequate infrastructural facilities like terminals for loading and berthing and surface road links.

The 'Inland Waterways Authority of India (IWAI)' was set up under the 'Inland Waterways Authority of India Act, 1985' to optimally develop and harness the potential of Inland Waterways in the country. The IWAI has been established for the development and regulation of inland waterways for shipping and navigation and for matters connected therewith or incidental thereto. The Inland Waterways Authority of India Act, 1985, empowers the Government to declare waterways with potential for development of shipping and navigation as National Waterways.

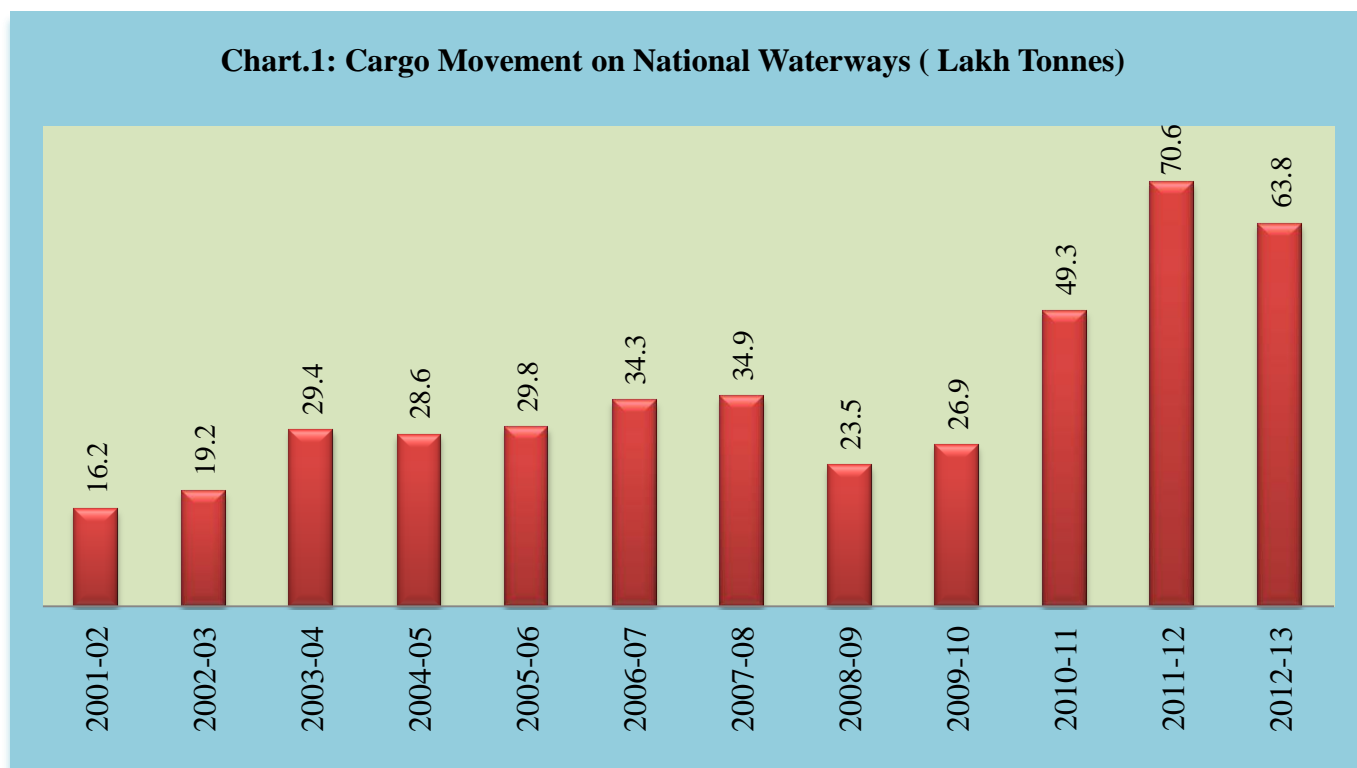
Presently, the IWAI is operating three waterways: (i) Allahabad-Haldia stretch (1620 km) of the Ganga-Bhagirathi-Hooghly river system in UP, Bihar, Jharkhand and West Bengal as the National Waterway No-I, (ii) Sadiya-Dhubri stretch (891 km) Brahmaputra River in Assam as the National Waterway No-II and (iii) Kollam-Kottappuram stretch of West Coast Canal (168 km) along with Champakara canal (14km) and Udyogmandal canal (23km) in Kerala as the National Waterway No-

III. Two new National Waterways IV & V have been notified. However, they are yet to be operationalised.

The objective of this theme paper is to study the trend of cargo movement on the routes of the National Waterways and the percentage share of cargo moved on the three National Waterways individually over the total cargo moved on all National Waterways in India between the year 2001-02 and 2012-13, using the data from the Publications 'Inland Water Transport in India', published by Ministry of Shipping, Government of India.

### **Cargo Movement on National Waterways**

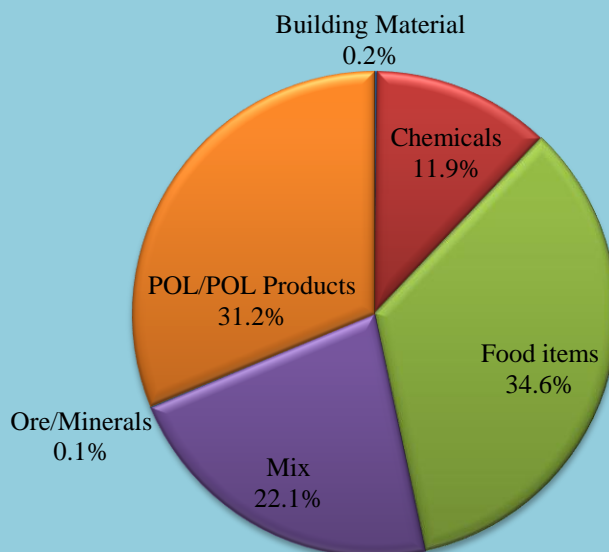
The total cargo moved on three National Waterways has shown four-fold increase over the period 2001-02 to 2012-13, from 16.2 lakh tonnes in 2001-02 to 63.8 lakh tonnes in 2012-13. The cargo moved on National Waterways exhibits an almost increasing trend during the last twelve years except for the years 2004-05, 2008-09 and 2012-13 when the total cargo moved declined as compared to that in the previous year. The total cargo movement on three National Waterways from 2001-02 to 2012-13 is given in Chart 1.



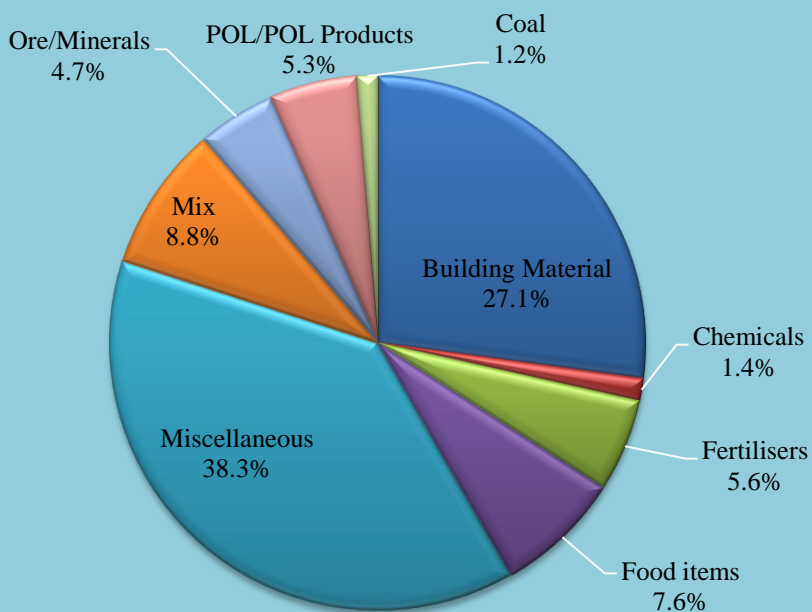


The commodity composition of the cargo movement on three National Waterways for the years 2001-02 and 2012-13 is presented in Charts 2 and 3 respectively.

**Chart.2: Composition of Cargo Moved on National Waterways ( 2001-02)**



**Chart.3: Composition of Cargo Moved on National Waterways ( 2012-13)**

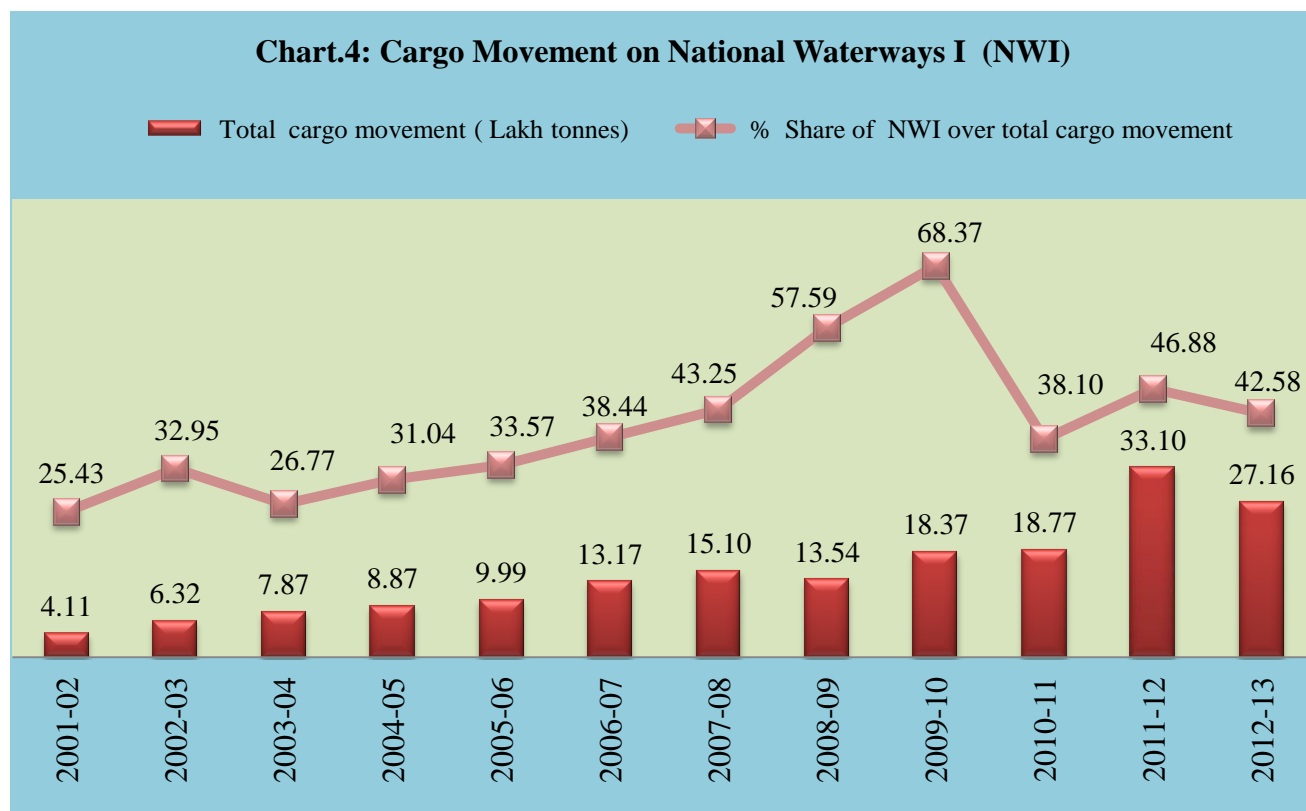


It may be seen from charts 2 and 3 that POL/POL Products and Food Items had a major share in the cargo moved in 2001-02, while Building Material and Miscellaneous Items contributed about 65% of the cargo moved on National Waterways during 2012-13.

## Cargo Movement on National Waterway I

The year on year movement of cargo on National Waterway I (NW-I) and the percentage share of cargo moved on NW-I to the total cargo moved on National Waterways from 2001-02 to 2012-13 is given in Chart4.

The total cargo moved in a year on National Waterway-I has increased in 10 out of 12 years except for the years 2008-09 and 2012-13, when the cargo moved in a year declined by 10.33% and 17.95% respectively compared to the cargo moved in the previous year. The total cargo moved on National Waterway-I was 27.16 Lakh tonnes in the year 2012-13 as against 4.11 lakh tonnes in the year 2001-02 recording CAGR of 18.73%. During the last twelve years, the highest year to year growth in the cargo movement on National Waterway-I at 76.35% was achieved in the year 2011-12.

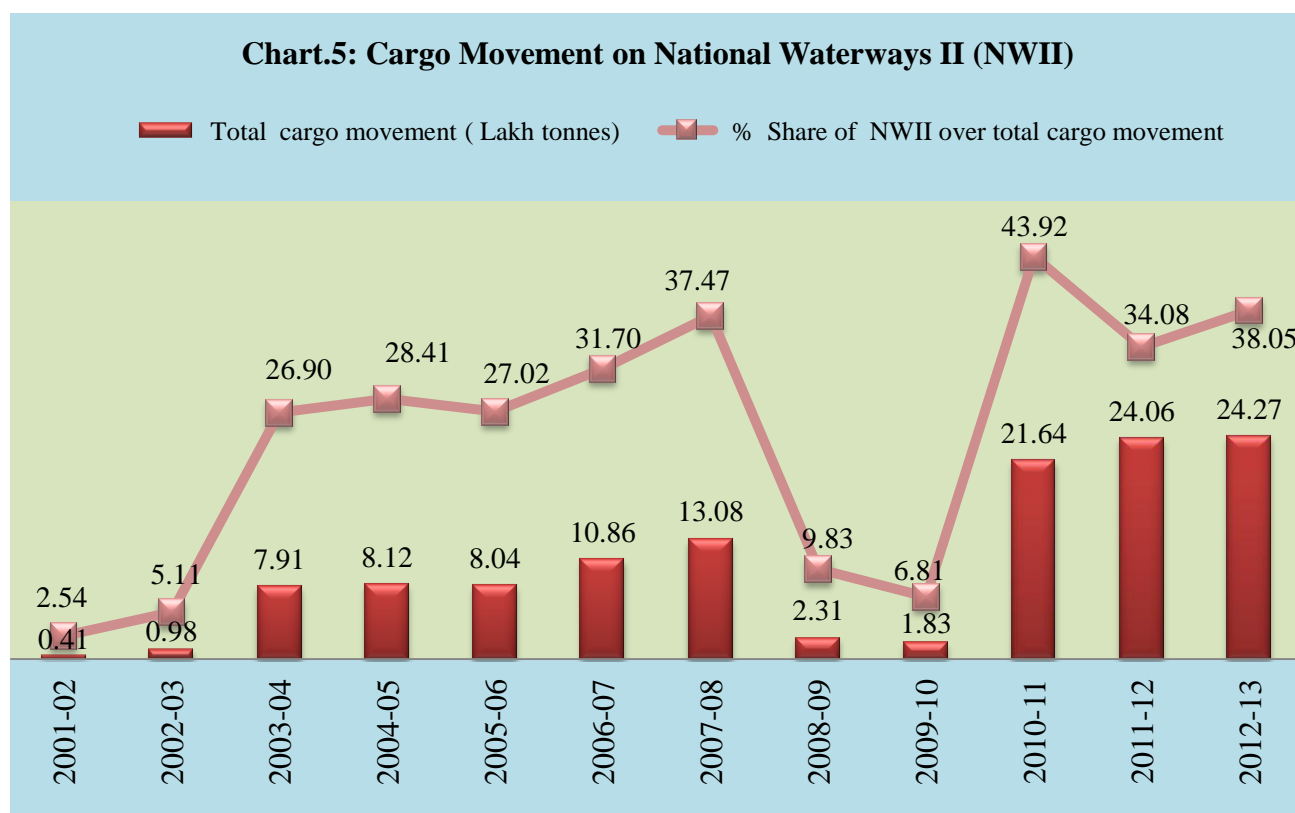


The percentage share of cargo moved on National Waterway-I over the total cargo moved on all the three National Waterways has increased from 25.43% in 2001-02 to 42.58% in 2012-13.

## Cargo Movement on National Waterway II

The total cargo moved on National Waterway II was 0.41 Lakh tonnes only in 2001-02, which increased to 24.27 Lakh tonnes in 2012-13 recording a CAGR of 44.92%. The share of cargo moved on National Waterway II in the total cargo moved on National Highways increased from 2.54% in 2001-02 to 38.05% in 2012-13.

The percentage share of cargo moved on National Waterway II over the total cargo moved on National Waterways and movement of total cargo on National Waterway II between the years 2001-02 and 2012-13 is given in Chart 5.

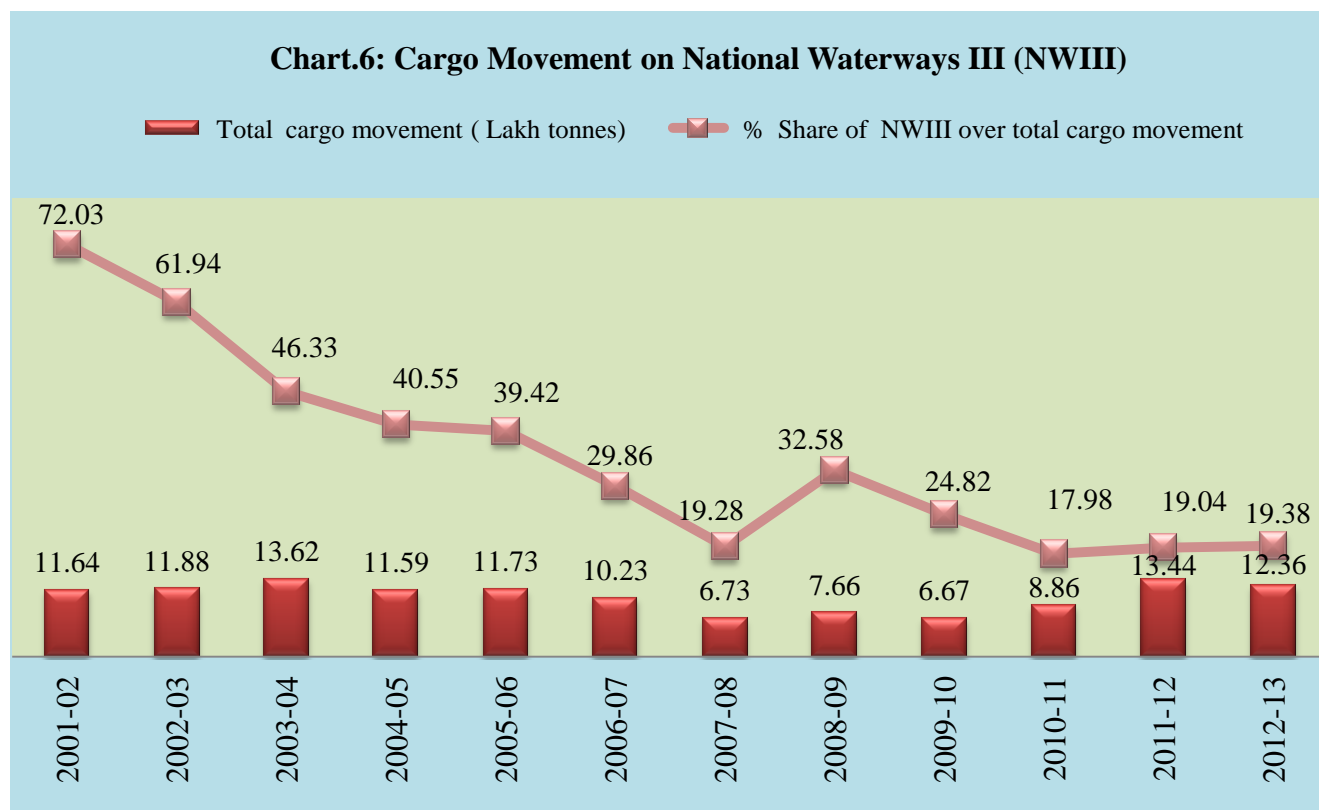


The cargo moved on National Waterway II has shown an increasing trend during the last twelve years, except for the two years 2008-09 and 2009-10.

## Cargo Movement on National Waterway III

Chart 6 shows cargo movement on the route of National Waterway III and the percentage share of cargo moved on National Waterway III to the total cargo moved on National Waterways during 2001-

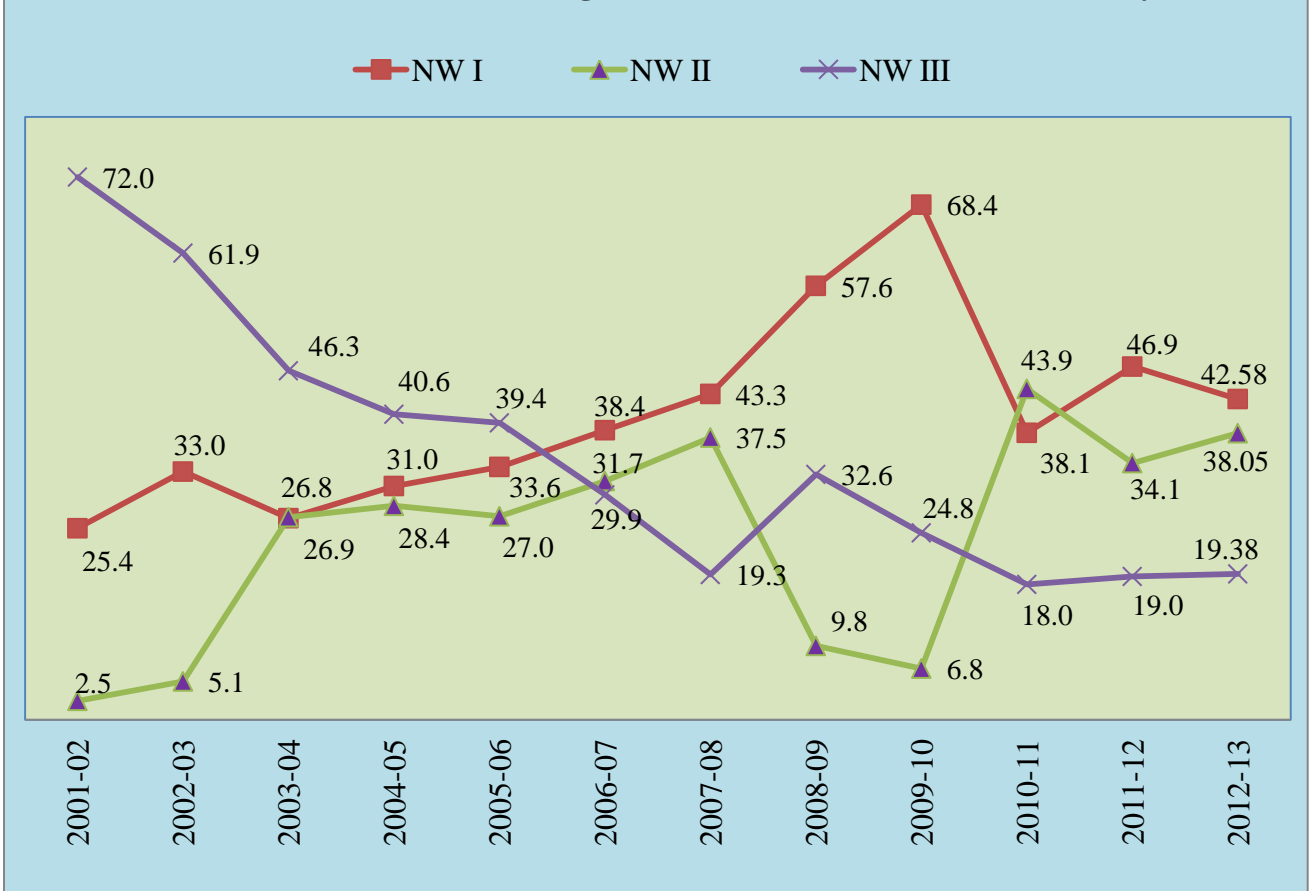
02 to 2012-13. Cargo movement on NW-III in tonnage has varied from 6.67 lakh tonnes in 2009-10 to 13.62 tonnes in 2003-04.



The total cargo moved on the route of National Waterway III was more than 11 lakhs tonnes during 2001-02 to 2005-06 which decreased to 6.67 lakhs tonnes in 2009-10 and thereafter it picked up to 13.44 lakhs tonnes in 2011-12. The percentage share of cargo moved on National Waterway III over the total cargo moved on National Waterways is indicating a visibly clear decreasing trend from 72.03% during the year 2001-02 to 19.38% during the year 2012-13.

The percentage share of cargo moved on the three national waterways during the period 2001-02 to 2012-13 is given in chart 7.

**Chart.7. % Share of Cargo Moved on the three National Waterways**



## Conclusion:

On the basis of above trend analysis of cargo moved on the different waterways, following conclusions may be drawn.

1. While the volume of cargo moved on National Waterways I & II has increased several folds, on the National Waterway III, the cargo has marginally increased. As a consequence, the percentage shares of cargo moved on National Waterways I and II have shown an upward trend, while the share of National Waterways III has declined substantially.
2. The commodity composition of the total cargo moved on NW-I, II and III taken together has changed over the period under study. POL/POL Products and Food Items contributed about two-third of the cargo moved on National Waterways in 2001-02, while Building Material and Miscellaneous Items had a major share in the cargo moved on National Waterways during 2012-13.

# **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 Brahmaputra 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 31<sup>st</sup> 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 19<sup>th</sup> 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 complementarity 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 Uttar Pradesh with 6444 kms followed by Assam with 5290 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 78.29, 73.22 and 62.40% 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 136 rivers. These 136 rivers have total length of 25832 Km of which 48.47% is navigable length.

<b>Table 1 : Total and Navigable Length of Waterways in different States –2012-13 (In kms)</b>			
<b>State</b>	<b>Total Length of the Rivers/ Canals/ Lakes in State (Km.)</b>	<b>Navigable Length (Km.)</b>	<b>Percentage of Navigable Length to Total Length</b>
Andhra Pradesh	3260	730	22.39
Assam <sup>#</sup>	5290	1713	32.38
Bihar <sup>##</sup>	2229	1391	62.40
Goa	258	202	78.29
Gujarat	653	102	15.62
Karnataka	2862	1215	42.45
Kerala <sup>###</sup>	2779	845.2	30.41
Maharashtra	631	462	73.22
Orissa <sup>####</sup>	1378	508	36.87
Nagaland <sup>**</sup>	937	375	40.02
Mizoram	787	372	47.27
Tamil Nadu \$	27	12	44.44
Uttar Pradesh <sup>**</sup>	6444	425 @	
West Bengal	4741	4593	96.88
... Not Available ** Pertains to 2007-08, @ Navigable length Pertains to NW I for Allahabad-Buxar stretch in Uttar Pradesh. # Pertains to 2 rivers. There are 24 others rivers in Assam having navigable length of 1541 Kms whose total length is not available. ## Pertains to 6 rivers. There are 9 others rivers in Bihar having total length of 1534 Kms whose navigable length is not available. ### Pertains to 34 rivers. There are 7 others rivers in Kerala having total length of 313 Kms whose navigable length is not available. #### Pertains to 3 rivers. There are 26 others rivers in Orissa having navigable length of 1142 Kms whose total length is not available. \$ Pertain to one river. There are 3 of the canals having total length of 170 kms.			

## **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 decreased to 412.52 lakhs tonnes in 2012-13 from 704.79 lakh tonnes in 2011-12, reflecting a decrease of 41.47%. The decline in the total cargo

movement in 2012-13 over 2011-12 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 25.9% and 58.7% respectively of the total cargo volume in 2012-13 with balance 15.5% 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 19.6% in 2012-13 over 2011-12. Maharashtra waterways accounted more than 50.0% 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 96 Kms and 19 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 2012-13. In case of National Waterway I (Ganga- Bhagirathi-Hooghly) the average distance over which cargo moved was relatively much longer at around 557 Kms.

**Table 2: Cargo Movement on Waterways**

Sl. No.	Details of Waterway	Cargo Moved ( lakh Tonnes)		Tonne Kms (in lakh )	
		2011-12	2012-13	2011-12	2012-13
1	National Waterway No. I	33.10(4.7)	27.16(6.6)	14546(38.2)	15119(49.4)
2	National Waterway No. II	24.06(3.4)	24.27(5.9)	613(1.6)	580(1.9)
3	National Waterway No. III	13.44(1.9)	12.36(3.0)	132(0.3)	139(0.5)
	Sub Total NWs	70.60(10.0)	63.79(15.5)	15291(40.1)	15838(51.7)
4	Goa Waterways	434.69(61.7)	106.77(25.9)	19009(49.9)	10240(33.4)
5	Maharashtra Waterways	199.5(28.3)	241.96(58.7)	3798(10.0)	4551(14.9)
	Grand Total	704.79(100.0)	412.52(100.0)	38098(100.0)	30629(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. Average IWT distance of 50kms for the data received from Govt of Goa and 40.6kms for the data received from Mormugao Port Trust.
3. 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 x 1.2m);
- 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.

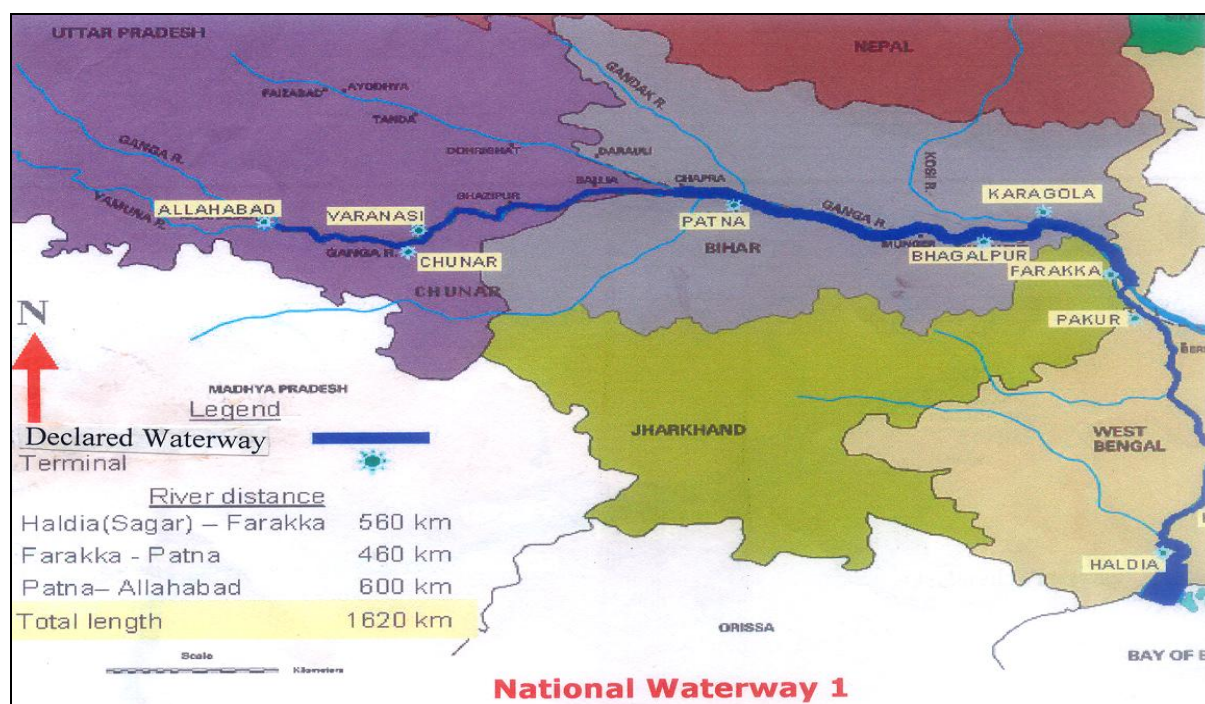
8. The Three waterways that have been declared as National Waterways are:

- (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 27.16 lakh tonnes in 2012-13 as against 33.10 lakh tonnes in 2011-12 reflecting a decline of 17.95 %. Although the volume of cargo movement by CIWTC, VIVADA IWL and other private operators

have decreased in 2012-13 over 2011-12, the volume of cargo moved by IWAI vessels has increased considerably during 2012-13 as compared to 2011-12. IWAI vessels moved 16.42 thousand tonnes cargo on NW-I in 2012-13 as against 2.29 thousand tonnes moved during 2011-12.

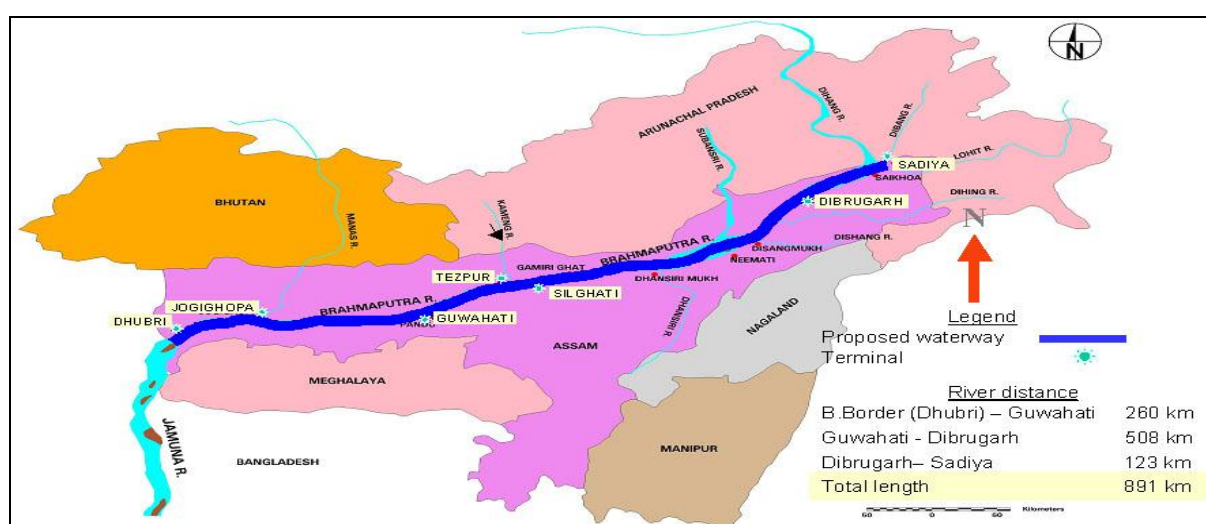


10. The composition of cargo movement on National Waterway I over the years is shown in Table 3 below. Building material accounted for 63.6% of total cargo movement along the NW-I during 2012-13.

<b>Table 3 : Composition of Cargo Moved on National Waterway- I (In Tonnes)</b>					
<b>Name of the Commodity</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Building Material	835585 (61.7)	1388365(75.6)	1492395 (79.5)	1529401 (46.2)	1727685 (63.6)
Fertilizers	-	-	7500 (0.4)	-	52000 (1.9)
Food items	42352 (3.1)	1434 (0.1)	9110 (0.5)	15000 (0.5)	345179 (12.7)
Miscellaneous	42814(3.2)	145000 (7.9)	41984 (2.2)	22509 (0.7)	13842 (0.5)
Mix	-	-	-	1459428(44.1)	21800 (0.8)
Ore/Minerals	96358 (7.1)	25283 (1.4)	2648 (0.1)	550 (neg.)	229000 (8.4)
POL/POL products	337189 (24.9)	277030 (15.0)	324111 (17.3)	281954 (8.5)	247341 (9.1)
Coal	-	-	-	1205 (neg.)	79590 (2.9)
<b>Total NW I</b>	<b>1354298 (100.0)</b>	<b>1837112 (100.0)</b>	<b>1877748 (100.0)</b>	<b>3310047 (100.0)</b>	<b>2716437 (100)</b>
<b>Note: Figure within brackets indicates percentage to the total. Neg. - negligible</b>					

## **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.



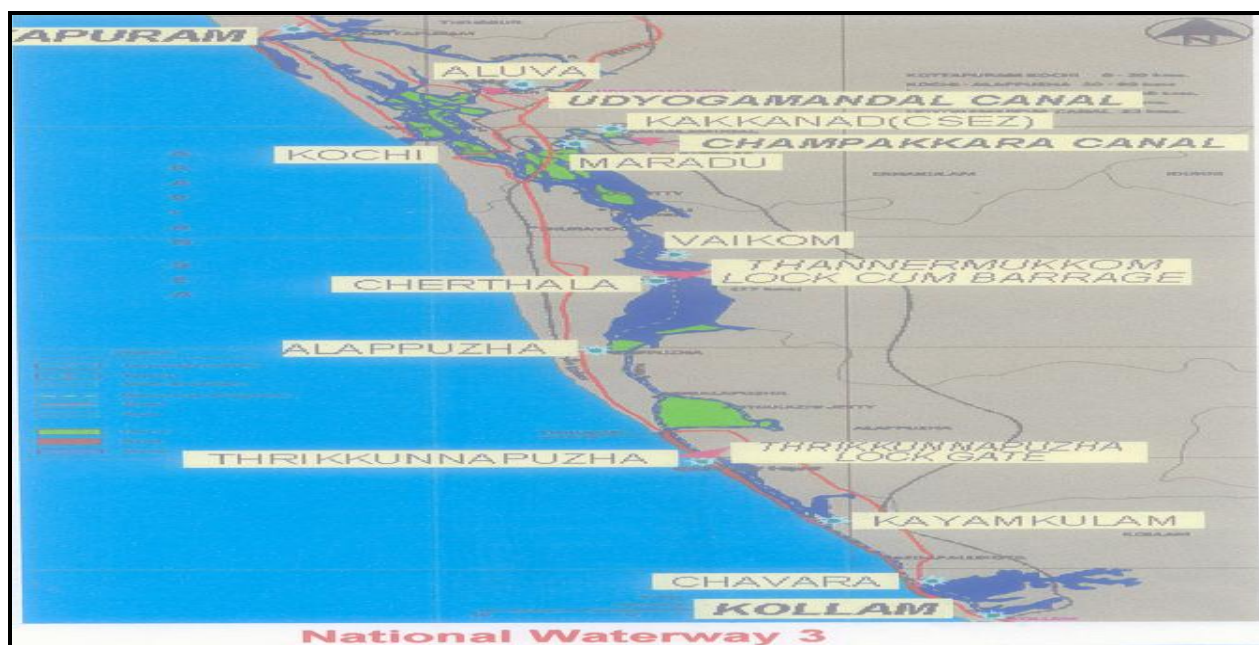
12. The total cargo traffic on NW II was 24.27 lakh tonnes during 2012-13 as against 24.06 lakh tonnes during 2011-12 reflected a very small increase. Commodity-wise composition of cargo movement indicates that there is no single item with significant share on this waterway during the year 2012-13. The cargo moved on this waterway is of a mixed nature.

<b>Table 4 : Composition of Cargo Moved on National Waterway - II (In Tonnes)</b>					
<b>Commodity</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Building Material	5100 (2.2)	745 (0.4)	-	-	
Food items	-	336 (0.2)	600 (neg.)	-	
Miscellaneous	225040 (97.3)	182260 (99.4)	2163145 (100.0)	2406448 (100.0)	2426805 (100.0)
Mix	-	-	-	-	
Ore/Minerals	-	-	-	-	
POL/POL Products	1169 (0.5)	-	-	-	
<b>Total NW II</b>	<b>231309 (100.0)</b>	<b>183341 (100.0)</b>	<b>2163745 (100.0)</b>	<b>2406448 (100.0)</b>	<b>2426805 (100.0)</b>
<b>Note: Figure within bracket indicates percentage to the total.</b>					
<b>Neg. – negligible</b>					



### **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 13.44 lakh tonnes in 2011-12 to 12.36 lakh tonnes in 2012-13 recording a decrease of 8.04%. The cargo composition of freight traffic shows that Fertilisers (24.8%), food items (11.4%), POL/POL products (7.2%) and chemicals (7.2%) were the major commodities moved through NW-III during 2012-13.

<b>Table 5 : Composition of Cargo Moved on National Waterway - III (In Tonnes)</b>					
<b>Commodity</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Chemicals	-	-	96804 (11.0)	61005 (4.5)	89074 (7.2)
Fertilisers	327824 (42.8)	248917 (37.3)	328468 (37.1)	308807 (23.0)	306034 (24.8)
Food items	-	199400 (29.9)	144740 (16.3)	131720 (9.8)	141000 (11.4)
Mix	308218 (40.2)	34868 (5.2)	94067 (10.6)	687946 (51.2)	538670 (43.6)
Ore/Minerals	44953 (5.9)	52452 (7.9)	59546 (6.7)	15063 (1.1)	72163 (5.8)
POL/POL products	85219 (11.1)	131560 (19.7)	162069 (18.3)	139229 (10.4)	89462 (7.2)
<b>Total NW III</b>	<b>766214 (100.0)</b>	<b>667197 (100.0)</b>	<b>885694 (100.0)</b>	<b>1343770 (100.0)</b>	<b>1236403 (100.0)</b>
<b>Note : Figure within brackets indicate percentage to the total</b>					

15. The total cargo moved through all the three National Waterways (NW) decreased by 9.65% to 63.79 lakh tonnes during 2012-13 compared with 70.60 lakh tonnes during 2011-12. In 2012-13, 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 42.6%, 38.0%, and 19.4% 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 95.5%, 3.7% and 0.9% of the total tonne kilometers moved. The high share of NW I in tonne kilometers reflect long average distance traversed by cargo is 557 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 2012-13. Table 6 gives cargo movement of National Waterways in Tonnage and Tonne Kilometers.

<b>Table 6 : Cargo Movement on National Waterways</b>					
<b>Sl. No.</b>	<b>Details of Waterway</b>	<b>Cargo Moved ( lakh Tonnes)</b>		<b>Tonne Kms (in lakh )</b>	
		<b>2011-12</b>	<b>2012-13</b>	<b>2011-12</b>	<b>2012-13</b>
<b>1</b>	<b>National Waterway No. I</b>	33.10(46.9)	27.16(42.6)	14546(95.1)	15119(95.5)
<b>2</b>	<b>National Waterway No. II</b>	24.06(34.1)	24.27(38.0)	613(4.0)	580(3.7)
<b>3</b>	<b>National Waterway No. III</b>	13.44(19.0)	12.36(19.4)	132(0.9)	139(0.9)
	<b>Total NWs</b>	<b>70.60(100.0)</b>	<b>63.79(100.0)</b>	<b>15291(100.0)</b>	<b>15838(100.0)</b>
<b>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 &amp; NW-II through Bangladesh</b>					
<b>Note : Figure within brackets indicate percentage to the total</b>					

16. The movement of Building material has shown significant increase and POL/POL Products has shown decrease on the National Waterways in 2012-2013. The details of the commodities moved on the National Waterways is presented in Table 7.

<b>Table 7: Composition of Cargo Moved on national waterways ( In tonnes)</b>					
<b>Commodity</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Building Material	840685 (35.8)	1389110 (51.6)	1492395 (30.3)	1529401 (21.7)	1727685 (27.1)
Chemicals	-	-	96804 (2.0)	61005 (0.9)	89074 (1.4)
Fertilisers	327824 (13.9)	248917 (9.3)	335968 (6.8)	308807 (4.4)	358034 (5.6)
Food items	42352 (1.8)	201170 (7.5)	154450 (3.1)	146720 (2.1)	486179 (7.6)
Miscellaneous	267854 (11.4)	327260 (12.2)	2205129 (44.7)	2428957 (34.4)	2440647 (38.3)
Mix	308218 (13.1)	34868 (1.3)	94067 (1.9)	2147374 (30.4)	560470 (8.8)
Ore/Minerals	141311 (6.0)	77735 (2.9)	62194 (1.3)	15613 (0.2)	301163 (4.7)
POL/POL Products	423577 (18.0)	408590 (15.2)	486180 (9.9)	421183 (6.0)	336803 (5.3)
Coal	-	-	-	1205 (0.0)	79590 (1.2)
<b>Total</b>	<b>2351821 (100.0)</b>	<b>2687650 (100.0)</b>	<b>4927187 (100.0)</b>	<b>7060265 (100.0)</b>	<b>6379645 (100.0)</b>
<b>Note : Figure within brackets indicate percentage to the total</b>					

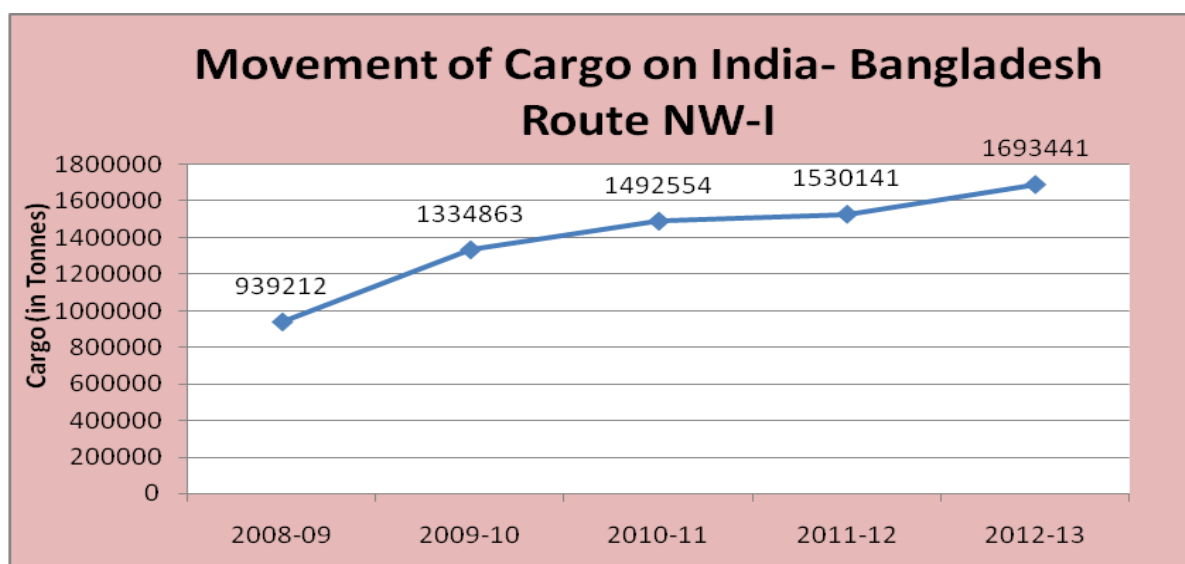
### **Box: 3- Indo-Bangladesh Protocol for Inland Water Transport**

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 10.67% in year 2012-13 over that in 2011-12. The cargo moved over this route has increased to 1693441 tonnes in 2012-13 against 1530141 tonnes in 2011-12. The graph inserted below depicts trend in cargo movement on India-Bangladesh route National Waterway-I during the years 2008-09 to 2012-13.





18. The table 8 shows the cargo and the main commodities carried on India-Bangladesh route on National Waterway-I during the years 2008-09 to 2012-13.

<b>Table 8: Movement of Cargo ( in Tonnes) on India- Bangladesh route of NW I*(Tonnes)</b>						
<b>Route</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>Commodities</b>
India to Bangladesh	939212	1334863	1492554	1530141	1693441	Flyash, Salt in bulk, Rice, Wheat POL, Coal, Slag Gypsum, HSD, Edible Oil, Iron Ingots
Bangladesh to India	-	-	-	-	-	Cement, Bone crushed
<b>Total</b>	<b>939212</b>	<b>1334863</b>	<b>1492554</b>	<b>1530141</b>	<b>1693441</b>	
<b>*Data pertains to cargo carried on Indian registered vessels only.</b>						

## TWO NEW NATIONAL WATERWAYS

19. Two new water ways have been declared by the Government as National Waterways.
- 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
  - 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 Buckingham canal from Peddaganjam 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)	217km.
(ii) Matai River (Charbatia- Dhamra)	40 km.
(iii) River Brahmani (Talcher-Dhamra)	265 km.
(iv) Mahanadi delta river (Mangalgadi-Paradip)	<u>101 km.</u>
<b>Total.</b>	<b>623 km.</b>

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)

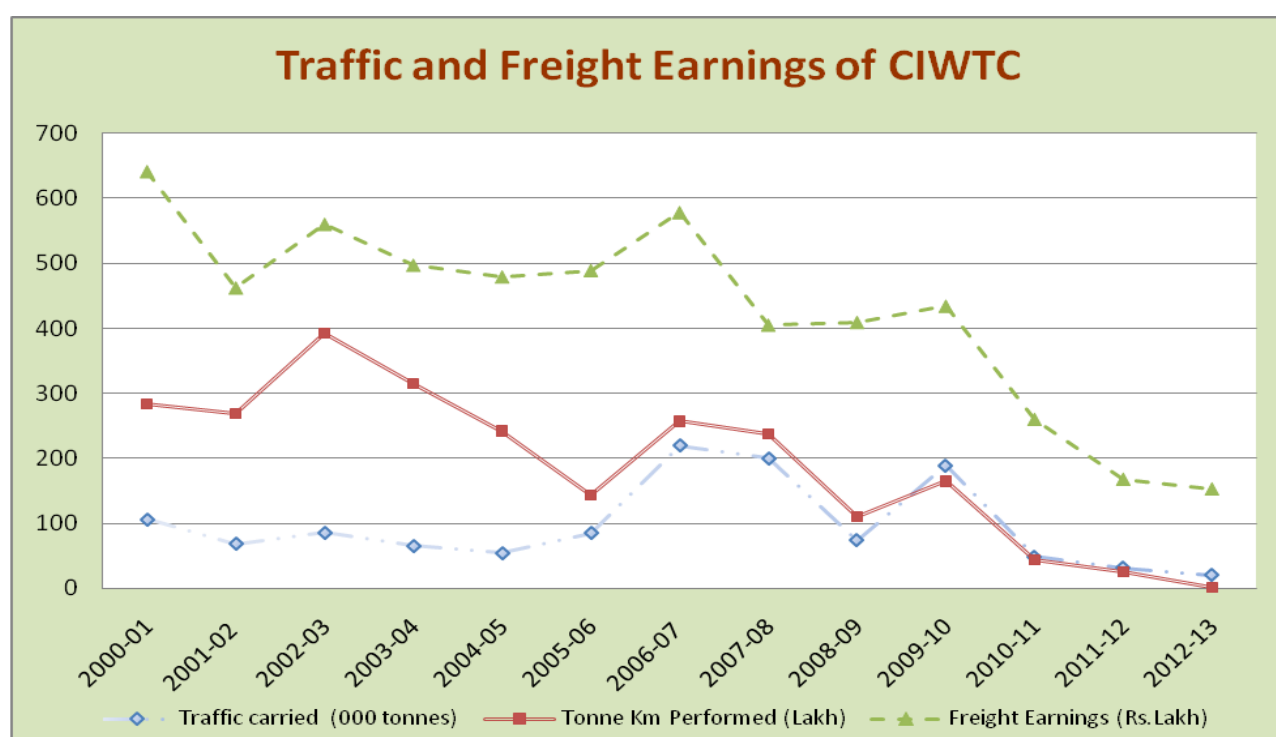
The estimated cost of development of National Waterway at 2002 price is Rs. 1526 crore.

## 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.

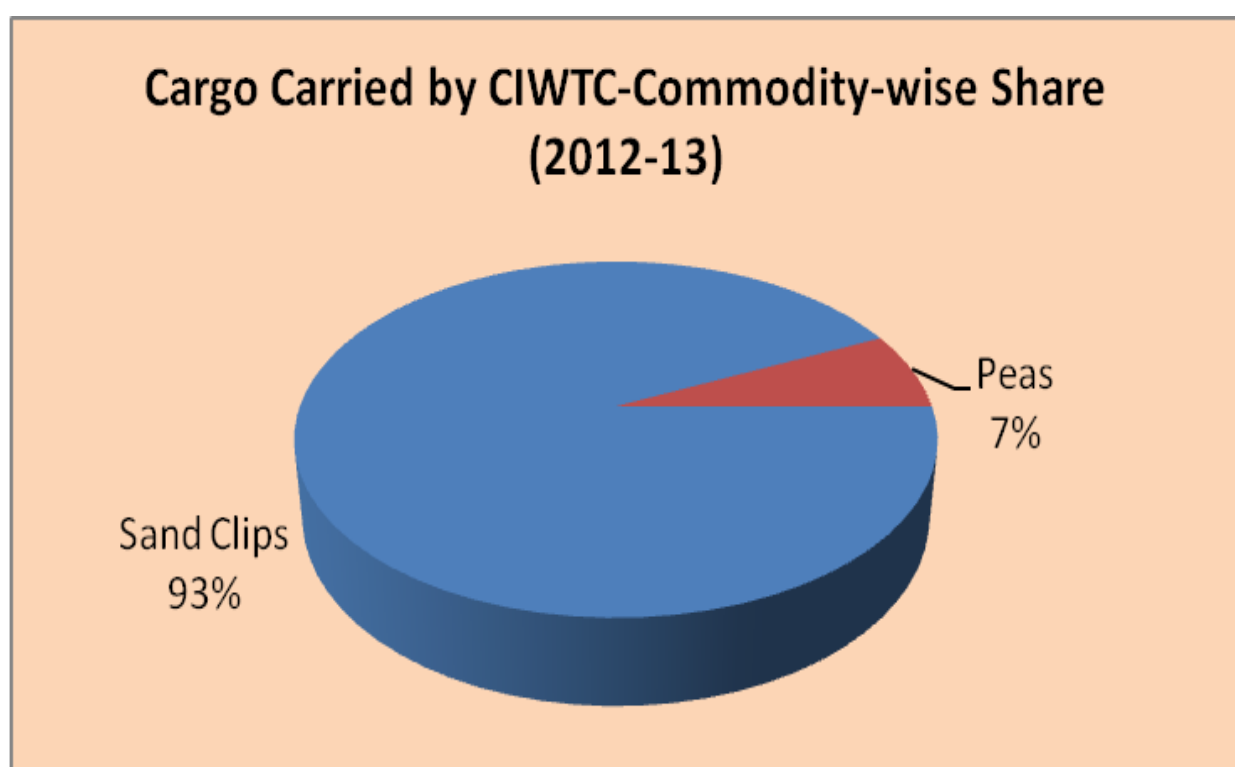
28. River services Division (RSD) is the division of CIWTC Ltd., which has its main terminal at Kolkata and branch offices at Haldia, Patna, Karimganj, Badarpur, Dhubro, Pandu and Guwahati. For running, repair and maintenance of its own crafts, the RSD has two workshops, one at Kolkata (West Bengal) and the other at Pandu (Assam).

29. The cargo carried by CIWTC decreased by 31.8% in the year 2012-13 to 21300 tonnes against 31243 tonnes in 2011-12. The total freight earnings have also gone down by 8.68% from Rs. 168.34 lakh in 2011-12 to Rs.153.72 lakh in 2012-13. The non-commodity earnings of CIWTC showed a positive growth of 8.46% as it reached to Rs. 135.42 lakh in 2012-13 from Rs. 124.86 lakh in 2011-12. Following graphs gives a picture of long term trend in traffic and earning of CITWC.



30. The maximum cargo carried during 2012-13 was on the Saugar/Haldia Diamond Harbour-Kolkata route with freight volume of 19650 tonnes, freight earnings of Rs. 6.96 lakh and performance of 1.53 lakh tonne kms. The cargo carried on this route registered an increase of 28.98% but the freight earned showed a decline of 59.65% in 2012-13 over the previous year.

31. Haldia-Internal route had second largest share of 7.75% in cargo carried (1650 tonnes) by CIWTC on different routes in 2012-13. Commodity wise share in cargo carried by CITWC in 2012-13 is given in chart below:



#### **IWT ACTIVITIES – STATE GOVERNMENT**

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

<b>Table 9: Number of Inland Water Vessels and Cargo Carried – State wise</b>								
<b>State/UT</b>	<b>Number of Vessels</b>				<b>Volume of Cargo Carried ( thousand tonnes)</b>			
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
<b>Andhra Pradesh</b>	111	111	111	...	...	...	...	...
<b>Assam</b>		...	209	22	...	...	37.72	71.79
<b>Bihar</b>	21	21	138	138	...	...	2.40	2.40
<b>Goa</b>	193	188	172	313	13897.38	14563.49	14469.90	3275.82
<b>Karnataka</b>	39	39	473	66	986.75	1033.80	3887.00	78.40
<b>Kerala</b>	9756	13495	5513	13821	5092.08	5285.56	5756.12	5555.21
<b>Maharashtra</b>	691	781	603	577	12510.00	14870.00	19950.00	24196.00
<b>Orissa</b>	260	281	279	342	...	...	...	...
<b>West Bengal</b>	2484	2561	2635	2623	17705.00	9987.00	9996.00	10347.00
<b>TOTAL (reporting states)</b>	<b>13555</b>	<b>17477</b>	<b>10133</b>	<b>17902</b>	<b>50191.21</b>	<b>40739.85</b>	<b>54099.14</b>	<b>43526.62</b>

... Not Available

#### **PERFORMANCE OF COMPANIES ENGAGED IN IWT**

33. The data received from 28 IWT companies shows that amongst the private companies the maximum number of cargo vessels were held by the Sesa Goa Ltd., Goa followed by Soham Shipping and Vivada Inland Waterways Ltd. Kolkata. The Maximum cargo of 2582.44 thousand tonnes was carried by Sesa Goa Ltd, Goa.

34. Cargo moved by top 10 private companies along with the number of cargo vessels employed in 2012-13 is given below in Table 10.

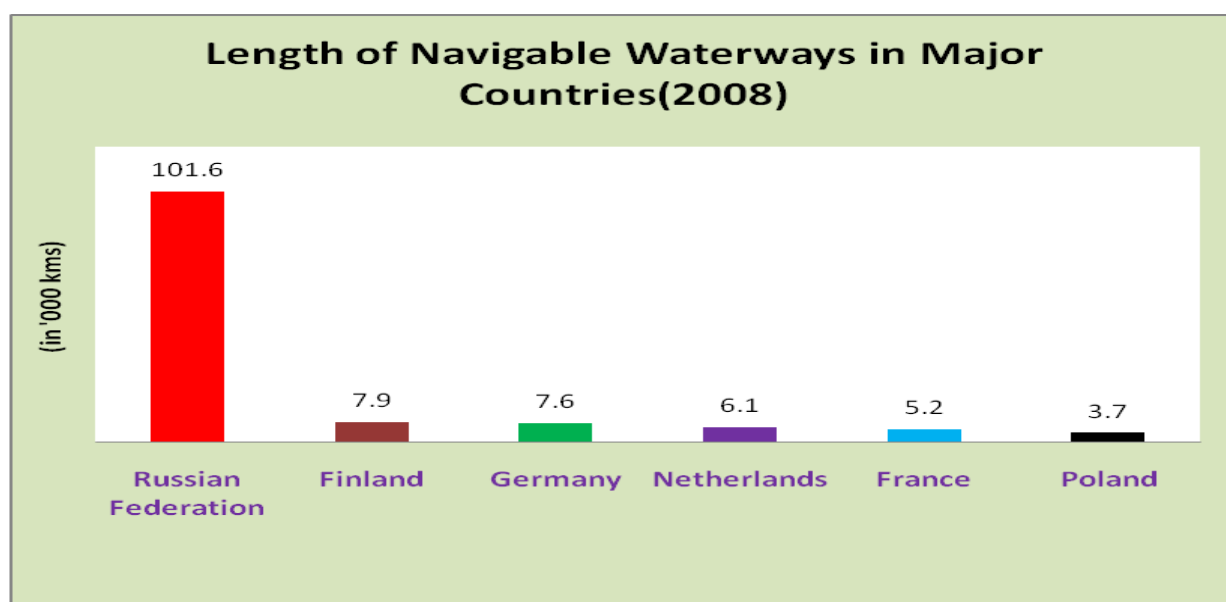
<b>Table 10 : Top ten Private Companies Cargo moved and Vessels Operated 2011-12</b>		
<b>Name of the Company</b>	<b>No. of Vessels</b>	<b>Cargo moved ('000 tonnes)</b>
1. Sesa Goa Ltd. Goa.	33	2582.44
2. VIVADA Inland Waterways Ltd, Kolkata	14	480.74
3. Sesa Resources Ltd Goa	3	278.22
4. Costa River Transport Pvt. Ltd.,Goa	3	100.95
5. Sociedade De Fomento Ind Ltd,Goa	2	71.86
6. Eastern Navigation Private Ltd.	7	40.60
7.Soham Shipping	18	39.85
8.Jindal ITF Ltd.	2	27.00
9.CIWCT, Kolkata	3	21.30
10. Kothari Overseas Private Ltd.	1	11.44

## INLAND WATERWAYS TRANSPORT ACCIDENTS

35. The total number of accidents on inland waterways during the year 2012 were 599 out of which 126 were reported in Gujarat followed by both Uttar Pradesh and Madhya Pradesh with 107 accidents. The numbers of deaths during the year due to boat mishaps were highest in Gujarat at 150 followed by Madhya Pradesh at 112. 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

36. 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.)

Sl. No.		State/Rivers/Canals/Lakes	2012-13	
			Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
1	<b>ANDHRA PRADESH</b>			
	(i)	Godavari	1530	171
	(ii)	Krishna	1400	402
	(iii)	Others **	330	157
		<b>Total</b>	<b>3260</b>	<b>730</b>
2.	<b>ASSAM</b>			
	(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	50	50
	(xii)	Dikhow	92	40
	(xiii)	Katakhal/Dhaleswari	150	120
	(xiv)	Sonai	...	48
	(xv)	Mahura	...	32
	(xvi)	Buridihing	120	80
	(xvii)	Chiri	...	42
	(xviii)	Jiri	...	64
		<b>Total</b>	<b>5290</b>	<b>2027</b>
3.	<b>BIHAR</b>			
	(I)	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	100	...
	(xii)	Kari Koshi	150	...
	(xiii)	Chandan	100	...
	(xiv)	Karamnasha	144	...
	(xv)	Others	860	290
		<b>Total</b>	<b>3763</b>	<b>1391</b>

Table No. 1.1 (Contd...)

## Navigable Waterways in India

(In Kms.)

Sl. No.	State/Rivers/Canals/Lakes	2012-13	
		Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1	2	3	4
4	<b>GOA</b>		
	(i) Mandovi	76	65
	(ii) Zuari	56	45
	(iii) Mapusa	26	20
	(iv) Chapora	34	25
	(v) Tiracol	29	15
	(vi) Sal	20	15
	(vii) Others	17	17
	<b>Total</b>	<b>258</b>	<b>202</b>
5	<b>GUJARAT</b>		
	(i) Narmada	161	50
	(ii) Tapti	140	15
	(iii) Ambica	136	20
	(iv) Auranga	75	4
	(v) Purna	141	13
	<b>Total</b>	<b>653</b>	<b>102</b>
6	<b>KARNATAKA</b>		
	(i) Sharavathi	80	27
	(ii) Tungabhadra	375	375
	(iii) Malaprabha	230	230
	(iv) Ghataprabha	160	160
	(v) Krishna	325	125
	(vi) Cauvery	270	34
	(vii) Kabini	117	30
	(viii) Gurupur	80	20
	(ix) Gangolli	48	20
	(x) Bheema	860	125
	(xi) Udyavara	37	14
	(xii) Netravathi	96	26
	(xiii) Kali	184	29
	<b>Total</b>	<b>2862</b>	<b>1215</b>
7	<b>KERALA</b>		
	(i) Manjeswar	16	3.2
	(ii) Uppala	50	...
	(iii) Shiriya	67	4.8
	(iv) Mogral	34	...
	(v) Chandragiri	105	12.8
	(vi) Chittari	25	...
	(vii) Nileswar	46	11.2
	(viii) Karingode	64	24
	(ix) Kavvayi	31	9.6
	(x) Peruvamba	51	16
	(xi) Ramapuram	19	6.4
	(xii) Kuppam	82	24
	(xiii) Valapattanam	110	44.8
	(xiv) Anjara Kandy	48	27.2
	(xv) Telcicherry	28	21.6
	(xvi) Mahe	54	24
	(xvii) Kuthiadi	74	9.6
	(xviii) Korapuzha	40	24.8

Table No. 1.1 (Contd...)

## Navigable Waterways in India

(In Kms.)

Sl. No.	State/Rivers/Canals/Lakes	2012-13	
		Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1	2	3	4
(xix)	Kallai	22	9.6
(xx)	Chaliyar	169	68.4
(xxi)	Kadalundy	130	43.2
(xxii)	Tirur	48	9.6
(xxiii)	Bharathappujha	209	40
(xxiv)	Keecheri	51	...
(xxv)	Puzhakkal	29	...
(xxvi)	Karivannur	48	24
(xxvii)	Chalakkudy	130	16
(xxviii)	Periyar	244	72
(xxix)	Muvattei puzha	121	25.6
(xxx)	Meenachil	78	41.6
(xxxi)	Manimala	90	54.4
(xxxii)	Pamba	176	73.6
(xxxiii)	Achan coil	128	32
(xxxiv)	Dallickal	42	2
(xxxv)	Kallada	121	40
(xxxvi)	Ithikkara	56	16
(xxxvii)	Ayroor	17	1
(xxxviii)	Vamanapuram	88	11.2
(xxxix)	Mamom	27	1
(xL)	Karamana	68	...
(xLi)	Neyyar	56	...
	<b>Total</b>	<b>3092</b>	<b>845.2</b>
<b>8</b>	<b>MAHARASHTRA</b>		
(i)	Dande River	2	1
(ii)	Pangere River	2	1
(iii)	Girye River	3	1
(iv)	Kajali River	35	5
(v)	Kalbadevi River	10	2
(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 Kundalika River)	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
(xxiii)	Vagothan River/Vijaydurg Creek(Vijaydurg to Kharepatan)	38	22
(xxiv)	Gad River(Kalaval Creek)	13	7
(xxv)	Terekhol River/Creek(Terekhol to Banda)	28	28
(xxvi)	Karli River(Malva)	23	13
(xxvii)	Others	129	105
	<b>Total</b>	<b>631</b>	<b>462</b>

Table No. 1.1 (Contd...)

## Navigable Waterways in India

(In Kms.)

Sl. No.	State/Rivers/Canals/Lakes	2012-13	
		Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1	2	3	4
9	<b>ORISSA</b>		
	(i) Mahanadi	493	199
	(ii) Brahmani	541	277
	(iii) Baitarani	344	32
	(iv) Subarnarekha	...	50
	(v) Budha Balanga	...	35
	(vi) 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
	(xvii) Kharansi	...	14
	(xviii) Batigharia	...	14
	(xix) Birupa	...	110
	(xx) Genguti	...	45
	(xxi) Luna	...	37
	(xxii) Devi	...	20
	(xxiii) Pradhi	...	15
	(xxiv) Kadha	...	30
	(xxv) Kusavadra	...	25
	(xxvi) Daya	...	9
	(xxvii) Rajua	...	7
	(xxviii) Makara	...	11
	(xxix) Others **	...	367
	<b>Total \$</b>	<b>1378</b>	<b>1555</b>
10	<b>TAMIL NADU</b>		
	(i) Anantha Victoria Marthandavarna	27	12
	(ii) North Buckingham Canal	58	...
	(iii) Central Buckingham Canal	7	...
	(iv) South Buckingham Canal	105	...
	<b>Total</b>	<b>197</b>	<b>12</b>
11	<b>UTTAR PRADESH***</b>		
	(i) Gomti	960	...
	(ii) Rapti	778	...
	(iii) Ghaghra	1116	...
	(iv) Ganga	2345	425 #
	(v) Sai	760	...
	(vi) Tons	485	...
	<b>Total</b>	<b>6444</b>	
12	<b>WEST BENGAL</b>		
	(i) Hooghly	580	580
	(ii) Mahananda	206	58
	(iii) Ajoy	174	174
	(iv) Jalangi	232	232

Table No. 1.1 (Contd...)

## Navigable Waterways in India

(In Kms.)

Sl. No.		State/Rivers/Canals/Lakes	2012-13	
			Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
	(v)	Dwarka	129	129
	(vi)	Bakreswar	102	102
	(vii)	Damodar	437	437
	(viii)	Dwarekeswar	103	103
	(ix)	Silabati	135	135
	(x)	Kumari	347	347
	(xi)	Ichamati	232	232
	(xii)	Others@	2064	2064
		<b>Total</b>	<b>4741</b>	<b>4593</b>
13		<b>NAGALAND***</b>		
	(i)	Doyans	185	105
	(ii)	Tizu/Zungki	287	90
	(iii)	Dhansiri/Chathe	170	75
	(iv)	Dikhu	120	52
	(v)	Tapi-Yangnyu	95	18
	(vi)	Tsurang/Disai	60	15
	(vii)	Others	20	20
		<b>Total</b>	<b>937</b>	<b>375</b>
14		<b>MIZORAM</b>		
	(i)	R. Tlawng (Dhaleswari)	185	81
	(ii)	R. Kolodyne (Chhimtuipui)	138	80
	(iii)	Khawthlang Tuipui	128	63
	(iv)	R. Tuichawrg	174	73
	(v)	Tul River	138	51
	(vi)	Others	24	24
		<b>Total</b>	<b>787</b>	<b>372</b>

\*\* 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.

\$ Total length is less than navigable length as length of canals is not provided whereas

Source: IWT Directorate of states &amp; IWAI.

Table No. 1.2

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

Navigational Channel	Availability and Capacity of Terminals						
	Depth (Meters) about 330 days in a year	Place	Size of Vessels that can be accommodated (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
<b>National Waterway No.1</b>							
<b>1. Haldia - Farakka</b> (560 Km)	2.5	(a) Haldia	600	One(Floating)	One EOT crane of capacity 1 Ton.	One godown of size 12x30m and open storage (1630 sq.m.).	Being used for embarking and logistic support.
		(b) G.R. Jetty (BISN), Kolkata	600	One(Floating)	-	Open storage	Being used for embarking and logistic support.
		(c) Botanical garden, Kolkata	600	One(Floating)	-	-	Being used for embarking and logistic support.
		(d) Putimari (pakur)	600	One(fixed)	-	-	Owned by Farakka Barrage Project.
		(e) Farakka	600	One(fixed)	-	One covered godown	Both the berth and godown are owned by Farakka Barrage Project
		(f) Hazardwari	600	one (floating)	-	-	Being used for embarking/disembarking of tourists.
		(g)Shantipur	600	One(Floating)	-	-	Being used for embarking/disembarking of tourists.
		(h) Katwa	600	One(Floating)	-	-	one DGPS station is being set up at Swaroopganj
<b>2. Farakka - Patna</b> (460 km)	2.0	(i) Rajmahal(Manglaghat)	600	One(Floating)	-	-	Being used for embarking/disembarking of tourists.
		(j) Samudarghat(Sahibganj)	600	One(Floating)	-	-	Being used for loading of stone chips and embarking/disembarking.
		(k) Bhagalpur	600	One(floating)	-	Open storage	Being used for embarking and logistic support. one DGPS station is being set up at Bhargalpur
		(l) Semaria	600	One(floating)	-	-	Being used for embarking/disembarking of tourists.
		(m) Patna	600	One (floating) and one (fixed)	Pontoon with crane facility and shore crane	Open storage and one godown of 45 x 15 m	Low level permanent berth capable of handling containers and general cargo. Besides storage facility, bunkering facility, weigh bridge etc. and one container crane also available. Project for high level jetty also approved.
		(n) Bateshwarsthan	600	One (Floating)	-	-	Being used for embarking/disembarking of tourists.
		(o) Munger	600	One (Floating)	-	-	Being used for embarking/disembarking of tourists and logistic support.
<b>3. Patna-Varanasi</b> (363 km)	1.5	(p) Buxer	600	One (Floating)	-	-	Being used for embarking/disembarking of tourists and logistic support.
		(q) Ghazipur/Kaithy	600	One (floating)	-	-	Being used for embarking/disembarking of tourists and logistic support.
<b>4. Varanasi-Allahabad</b> (237 km)	0.8	(r) Varanasi	600	One(floating)	-	-	Being used for embarking/disembarking and logistic support. Further IWT intermodal terminal and DGPS station are to be taken up.
		(s) Allahabad	600	One (floating)	Pontoon with crane	Open storage	Being used for embarking/disembarking of tourists and logistic support.

1) One fixed terminal at GR Jetty-2 (Kolkata) is under construction.

2) Floating terminals with pontoon/crane can be provided at any location along waterway on demand.

3) Night navigation aids have been provided between Tribeni and Varanasi

4) River notices are issued on fortnightly/monthly basis.

5) For providing Differential Global Positioning System (DGPS) connectivity on the entire waterway three DGPS stations are operational at Swaroopganj (WB), Bhagalpur (Bihar), Patna (Bihar), and the construction of one more DGPS station at Varanasi (UP) is planned.

Table No. 1.2 (Contd...)

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

Navigational Channel	Availability and Capacity of Terminals						Remarks
	Depth (Meters) about 330 days in a year	Place	Size of Vessels that can be accommodated (DWT)	No. of Berths	Cargo Handling Equip. and their Capacity	Type and Extent of Storage Facility Available	
1	2	3	4	5	6	7	8
<b>National Waterways No. 2</b>							
<b>1. Bangladesh Border-Pandu</b> (255 km)	2.5	(a) Dhubri	600	One(floating)	Crane pontoon	-	Project for construction of one permanent terminal sanctioned & were awarded to CPWD for construction. DGPS stations under construction.
		(b) Jogighopa	600	One(floating)	Crane pontoon	Open storage facility being developed	DGPS station is commissioned
		(c) Pandu	600	One(low level RCC jetty)	One Container handling crane	One container 2 transit sheds of 75x21 m crane of 75 T each capacity, two type mounted crane of 20T capacity,3 pontoon,2 crane pontoon	Construction of one high level jetty is under progress.
<b>2. Pandu-Neamati</b> (376 km)	2.5	(d) Tezpur	600	One(floating)	Crane pontoon	-	DGPS station is being setup.
		(e) Silghat	600	One(floating)	-	-	
<b>3. Neamati-Dibrugarh</b> (137 km)	2.0	(f) Neamati	600	One (floating)	Crane pontoon	-	
		(g) Bogibil	600	One (floating)	-	-	
		(h) Kanangchhapari	600	One (floating)	-	-	
		(i) Sengjan/Panbari	600	One (floating)	Crane pontoon	-	
<b>4. Dibrugarh-Sadiya (Oriumghat)</b> (123 km)	1.5	(j) Oakland/ Dibrugarh	600	One(floating)	-	-	DGPS station is operational at Dibrugarh.
		(k) Oriumghat	600	One (floating)	-	-	

Note:

- 1) Floating pontoons can be provided at any location along waterway on demand.
- 2) Night navigation facilities are available between Bangladesh Border and Silghat and can be extended upto Oriumghat/Sadiya on demand.
- 3) River notices are available on regular fortnightly/monthly basis.
- 4) for providing Differential Global Positioning System (DGPS) connectivity on the entire waterway, DGPS stations are planned at Dhubri, Jogighopa, Silghat and Dibrugarh. Out of these locations, DGPS station at Jogighopa has been commissioned.

Table No. 1.2 (Contd...)

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

Navigational Channel	Availability and Capacity of Terminals						
	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
<b>National Waterways No. 3</b>							
1. Kochi-Kottapuram (34 km)	1.2	(a) Kottapuram	350.0	One fixed	One 18 T crane & T Fork lift	3 400 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
2. Udyogmandal Canal (23 km)	2.0	(b) Aluva	350.0	One fixed	One 18 T crane & T Fork lift	3 401 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
3. Champakara Canal (14 km)	2.0	(c) Ernakulam GC (Maradu)	350.0	One fixed	One 18 T crane & T Fork lift	3 402 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(d) Kakkanad (CSEZ)		One fixed	One 18 T crane & T Fork lift	3 403 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
4. Kochi-Alapuzha (63 km)	2.0	(e) Vaikkom	350.0 350.0	One fixed	One 18 T crane & T Fork lift	3 404 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	Only Land for terminal acquired
		(f) Chertala	350.0	One fixed	One 18 T crane & T Fork lift	3 405 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(g) Alapuzha				406 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
5. Alapuzha-Kollam (71 km)	1.5	(h) Trikunnappuzha	350.0	One fixed	One 18 T crane & T Fork lift	3 407 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	The terminal is under construction
		(i) Kayamkulam	350.0	One fixed	One 18 T crane & T Fork lift	3 300 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(j) Chavara					Only land for terminal acquired
		(k) Kollam	350.0	One fixed	One 18 T crane & T Fork lift	3	
		(l) willingdon island	12 TEU	one berth for container vessels	5 T Crane through agency	5000 sqm open storgae	
6. CPT Area	2.2	(m) Bolgatty island	12 TEU	one berth for container vessels	40 T Crane through agency	8000 sqm open storgae	These terminals have been constructed for container movement to ICTT, Operation commenced w.e.f. 23.02.2011.
Notes: 1) Channel marks for 24 hrs navigation provided on the entire waterway. 2) River notices are issued on fortnightly basis.							



Table No. 1.3

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

Sl. No.	Navigational Channel	Depth (Meters)	Availability and Capacity of Terminals					Remarks
			Place	Size of vessels that can be accommodated (DWT)/dimension	No. of berths	cargo handling equip. and their capacity	Type and extent of storage facility available	
1	2	3	4	5	6	7	8	9
1	ANDHRA PRADESH	NIL	NIL	NIL	NIL	NIL	NIL	NIL
2	BIHAR	2 metres	(I) (a) Sahebganj-Manihari	134'x31' 80'x15'x7"	2 Nos. 1 Nos.	Nil Nil	Nil Nil	- -
				55x13'3"x4'8'	1 Nos.	Nil	Nil	-
			(II) Kahalgaoon-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 60'x16'x5'5'	1 Nos. 1 Nos. 1 Nos. 1 Nos.	Shore crane-2 Pontoon crane-2 Container crane-1	- - - Godown	- - - At IWAI terminal
			(V) Buxar-Ujirghat	-	-	-	-	-
3	GOA							
	Panaji Port (River Mandoi)	3.30 metres	Panaji	75 Mtrs Length	1	-	-	Ports jetty being used by vessels calling in the Ports
4	KARNATAKA	Nil	Nil	Nil	Nil	Nil	Nil	-
5	ORISSA							
	<u>Balugaon Sector</u>							
	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. Waiting hall is available at 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.

Table No. 1.3 (Contd...)

## Infrastructure Facilities Available on State Waterways (As on 31.3.2013)

Sl. No.	Navigational Channel	Depth (Meters)	Availability and Capacity of Terminals					
			Place	Size of vessels that can be accommodated (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
<b>Astarang Sector</b>								
	Nuagarh-Sribantpur	2 to 10 Metres	River Devi	26 ft	3	-	-do-	Jetty & Wating hall is available for the services of passenger.
<b>Chandabali Sector</b>								
	Chandabali-Rajnagar	Varies between 7 to 10 metres	River Baitarani/ Brahmani	52 ft	13	-	-do-	Jetty & waiting hall are available at Chandabali, Nalitapatia, Chardia & Raj Nagar.
	Chandabali-Talucha	Varies between 7 to 20 metres	Baitarani/Kharastrota/ Brahmani	50 ft	10	-	-do-	-
	Chandabali-Aradi	Varies between 7 to 18 meters	Brahmani	35'	3		-do-	Both Jetty and waiting hall is available at Aradi.
6	<b>TAMILNADU</b> 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	-	-	-	-
7	<b>NAGALAND**</b> 1. Tiru River	1.5 to 8	Lpmgmatra - Pursutsu Phokungri	-	-	-	-	Under survey.
8	<b>MIZORAM</b> 1. R. Tlawng 2. R. Tlawng	1.4 1.2	(a) Sairang (b) Bairabi	5 Tonnes Power Vessel 5 Tonnes Power Vessel	1 1	- -	RCC Building RCC Building	300 tonnes capacity 300 tonnes capacity

\*\* pertains to 2007-08  
Source : State Govts.

**SECTION – 2**

**CARGO MOVED ON  
VARIOUS WATERWAYS**

**Table No. 2.1****Cargo Movement on National Waterways,  
Goa & Maharashtra Waterways**

Sl.No.	Details of Waterway	Distance (Kms)	Cargo Moved (lakh Tonnes)		TonneKms (in lakh)	
			2011-12	2012-13	2011-12	2012-13
1	2	3	4	5	6	7
1	National Waterway No. I  (Allahabad-Haldia stretch of Ganga – Bhagirathi – Hooghly river system)	1620	33.10	27.16	14546	15119
2	National Waterway No. II  (Sadiya-Dhubri stretch of Brahmaputra River system)	891	24.06	24.27	613	580
3	National Waterway No. III  (Kollam-Kottapuram stretch of West Coast Canal along with Champakara Canal and Udyogmandal Canal)	205	13.44	12.36	132	139
	Sub Total NWs	2716	70.60	63.79	15291	15838
4	Goa Waterways	202	434.69	106.77	19009	10240
5	Maharashtra Waterways	453	199.50	241.96	3798	4551
<b>Grand Total</b>		<b>3371</b>	<b>704.79</b>	<b>412.52</b>	<b>38098</b>	<b>30629</b>

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

**Table No. 2.2****Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA****(In tonnes)**

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>A.</b>	<b>CIWTC(^)</b>					
1	Haldia-Budge-Budge	74	8650	4400	...	POL, Waste Oil
2	(I)Saugar-Diamond Harbour/Haldia /Kolkatta/					Pulses,Logs,Salt,Iron Ore,Steel, Fly
3	Kolkatta Internal	144/80	21000	15235	19650	Ash,Aluminium block, Fertilizer,
4	Kolkata-Karimganj-Badarpur	1218	2050	...	...	Container, ODC,Sand Clips
5	Haldia-Gorma Island	30	17182	1650	...	Fly ash, Food Grains
6	Patna-Kolkata	530	...	1500	...	Boulder
7	Haldia-Internal	2	...	8250	1650	Stone-Chips
	Haldia-Jamuria	1096	...	208	...	Sand, Clips
						ODC
<b>Sub Total (A)</b>			<b>48882</b>	<b>31243</b>	<b>21300</b>	
<b>B.</b>	<b>VIVADA IWL</b>					
1	Haldia-Kolkata	100	34104	...	...	HSD/FO/LDO
2	Haldia-Budge-Budge	78	100972	109630	95072	FO, LDO, HSD
3	Haldia-NSD	106	105916	66245	52969	LO,HSD, Lube Oil, FO
4	Haldia-Surinam	48	...	2088	...	FO
5	Budge-Budge-NSD	21	6727	4513	2656	MSD, HF
6	Budge-Budge-Surinam	48	2443	249	...	FO, HSD
7	Budge-Budge-KPD	21	767	245	916	FO, HSD
8	Haldia-Namkhana	46	2515	4343	3923	HF, HSD
9	Budge-Budge-Pujali	5	843	...	...	LDO
10	Haldia-Birth	4	19747	...	...	HSD
11	Haldia-Haldia Oil Jetty	4	49159	70600	66057	FO
12	Surninam-KPD	4	80	70	1031	FO
13	Surninam-NSD	1	288	79	...	HSD, HF
14	Haldia-HOB	3	...	23622	24717	
15	KPD-KPD	1	...	270	...	
<b>Sub Total (B)</b>			<b>323561</b>	<b>281954</b>	<b>247341</b>	

^ : Data for the year 2010-11, 2011-12 &  
2012-13 is taken from monthly returns.

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>C. OTHER PRIVATE OPERATORS</b>						
<b>1</b>	<b>TIRUPATI VESSEL( P)LTD.</b>					
1	Kolkatta-Mongla (Bangla desh)	...	5582	...	...	Flyash
2	Kolkatta-Khulna (Bangla desh)	507	54478	90062	...	Flyash
3	Kolkatta-Narayanganj (B'Desh)	894	325106	233722	...	Flyash
4	Budge- Budge(Kol) Khulna	497	...	...	99534	Flyash
5	Budge- Budge Narayanganj	884	...	...	285858	Flyash
6	Kolkatta-Ashuganj	998	...	722	...	ODC Kargo
<b>2</b>	<b>RELIANCE EXPORT CORPORATION</b>					
1	Kolkata-Narayanganj(B'Desh)	894	21939	16244	...	Flyash
2	Haldia-Narayanganj(B'Desh)	836	8244	1106	...	Flyash
3	Kolkatta-Khulna (Bangla desh)	-	616	...	...	Flyash
4	T.T.Shed-Narayanganj	910	...	710	7153	Flyash
<b>3</b>	<b>Maitrayee Shipping &amp; Logistics</b>					
1	Kolkatta-Khulna (B'Desh)	507	9062	14006	...	Flyash
2	Kolkatta-Narayanganj (B'Desh)	894	83260	63886	...	Flyash
3	Haldia-Karimganj	1253	590	...	...	Spnoge Iron
4	IWAI BISN Jetty-Narayanganj	909	...	8588	4955	Flyash
5	Kolkatta (SR Jetty)-Naryanganj	910	...	760	...	Flyash
6	IWAI BISN Jetty-Khulna	522	...	3637	699	Flyash
7	T.T.Shed-Narayanganj	910	...	...	25233	Flyash
8	T.T.Shed-Mongla	510	...	...	2180	Flyash
9	Budge Budge Naryanganj	884	...	...	44984	Flyash
10	Budge Budge Khulna	497	...	...	2525	Flyash
<b>4</b>	<b>P K Shipping</b>					
1	Kolkata-Khulna (B. Desh)	507	808	770	...	Flyash
2	Kolkata-Narayanganj(B. Desh)	894	145597	149444	...	Flyash, Slg, MS wired rod
3	Budge- Budge Narayanganj	884	...	...	101227	Flyash
4	Narayanganj- T.T.Shed	910	...	...	500	Cement
5	K.P.Dock-Narayanganj	910	...	...	787	Coil
6	Haldia H.D.C.-Karimganj	1274	...	...	2225	Coal

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	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
<b>5</b>	<b>SOHOM COMMERCIAL</b>					
1	Kolkata- Khulna(B' Desh)	424	...	...	...	Flyash
2	Kolkata-Narayanganj (B' Desh)	894	26853	1155	...	Flyash
3	Kolkata(Sri Ram Jetty)-Narayanganj	905	...	10923	761	Flyash
4	T.T.Shed-Narayanganj	910	...	3624	50139	Flyash
<b>6</b>	<b>RENAISSANCE IMPEX Pvt Ltd</b>					
1	Kolkata-Narayanganj ( B'Desh)	894	44392	15841	...	Slag,Flyash,MS wire Rod
2	Haldia-Narayanganj	780	5983	...	...	Flyash, Slag
3	IWAI BISN Jetty-Narayanganj	909	...	28875	16137	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	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	Flyash
11	Shri Ram Jetty- Mongla	505	...	...	998	Flyash
12	TT Shed-Narayanganj	910	...	...	22759	Flyash
13	Budge Budge Naryanganj	884	...	...	18549	Flyash
14	Budge Budge Karimganj	1332	...	...	558	Flyash
15	Kolkatta-Khulna	507	...	1320	...	Flyash

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>7</b>	<b>Rivering Shipping &amp; Logistics</b>					
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	Flyash
6	Budge Budge Narayanganj	884	...	...	17223	Flyash
7	TT Shed-Narayanganj	910	...	...	7274	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	Flyash
11	IWAI Haldia Jetty-Narayanganj	836	...	2699	...	Flyash
<b>8</b>	<b>GLOBAL SHIPPING &amp; Forwarding</b>					
1	Kolkata-Khulna	507	7401	3216	...	Flyash
2	Kolkata-Narayanganj(B' Desh)	894	9247	2757	...	Flyash
3	Haldia-Mongla(B' Desh)	413	680	...	...	Flyash
4	Kolkata-Mongla(B' Desh)	494	11937	1546	...	Flyash
5	Budge Budge-Narayanganj	884	...	...	3266	Flyash
6	Budge Budge-Khulna	497	...	...	4646	Flyash
7	IWAI BISN Jetty-Khulna	522	...	9880	2938	Flyash
8	IWAI BISN Jetty-Narayanganj	909	...	1848	810	Flyash
<b>9</b>	<b>COASTAL CONNEXIONS</b>					
1	Kolkata-Narayanganj(B' Desh)	894	46321	25812	...	Flyash
2	Haldia-Narayanganj	780	7918	...	...	Flyash
3	Haldia-Khulna	446	3810	...	...	Flyash
4	Kolkata-Khulna	507	17861	5325	...	Flyash
5	Budge Budge-Narayanganj	884	...	...	10643	Flyash
6	Budge Budge-Karimganj	1332	...	...	1331	Flyash
7	Budge Budge-Khulna	497	...	...	2277	Flyash
8	IWAI BISN Jetty-Narayanganj	909	...	8738	3693	Flyash
9	BISN Jetty-Narayanganj	1357	...	...	1030	Flyash
10	IWAI BISN Jetty-Karimganj	1357	...	...	2170	Flyash



Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	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	Flyash
14	IWAI Haldia Jetty-Narayanganj	826	...	7928	4725	Flyash
<b>10</b>	<b>KANISHKA SHIPPING LINES</b>					
1	Kolkata-Narayanganj(B' Desh)	758	18818	...	...	Flyash
2	Budge Budge-Narayanganj	884	...	...	69689	
3	IWAI Haldia Jetty-Narayanganj	826	...	36923	116523	Flyash
4	Sri Ram Jetty-Khulna	518	...	...	1078	Flyash
5	T.T.Shed-Narayanganj	910	...	...	2406	Flyash, Tyre
6	Sri Ram Jetty-Narayanganj	905	...	11380	750	Flyash
7	IWAI BISN Jetty-Khulna	522	...	...	520	Flyash
8	IWAI BISN Jetty-Narayanganj	895	...	4099	...	Flyash
9	T.T.Shed-Narayanganj	896	...	200	...	Tyres
<b>11</b>	<b>Eastern Navigation Pvt Ltd., Kolkata</b>					
1	Kolkata-Zamania	1065	311	1415	380	ODC Cargo
2	Kolkata-Silghatghat	1748	...	...	165	ODC Cargo
3	Kolkata- Ballia	923	5660	2306	...	ODC (NW1)
4	Kolkata-Fatua	854	1551	...	...	Flyash, Boiler Drum, Stator(ODC)
5	Haldia-Ashuganj	933	...	300	...	ODC (NW1)
6	Kolkata-Bhaktiarpur	928	...	1776	...	ODC Cargo
7	Haldia-Silghatghat	1664	...	...	96	ODC Cargo
8	Haldia-Balia	1028	...	1258	...	ODC (NW1)
9	Haldia-Zamania	1170	...	1177	...	ODC (NW1)
10	Haldia-Karimganj, Assam	1284	...	842	...	ODC (NW1)
<b>12</b>	<b>A.K.Navigation</b>					
1	Kolkata- Narayanganj	894	4553	3190	...	Flyash
2	T.T.Shed-Narayanganj	910	...	...	1625	Flyash
3	T.T.Shed-Khulna	523	...	...	3080	Wheat
4	Kolkata-Khulana	507	...	4081	...	Flyash
5	Haldia-Narayanganj	836	3228	701	...	Flyash

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>13</b>	<b>Desha International</b>					
1	Haldia- Narayanganj	...	194619	...	...	Flyash
2	Budge Budge-Narayanganj	884	...	...	163487	Flyash
3	Kolkata-Narayanganj	894	229550	151056	...	Flyash, Coal Durt, Slag, Coal
4	IWAI Haldia Jetty-Khulna	439	...	11981	17075	Flyash
5	IWAI Haldia Jetty-Mongla	426	...	...	2908	Flyash
6	Haldia-Khulna	...	13867	...	...	Flyash
7	Budge Budge-Khulna	497	...	...	2626	Flyash
8	IWAI BISN Jetty-Narayanganj	909	...	7071	5445	Flyash
9	IWAI BISN Jetty-Karimganj	1357	...	1655	1285	Flyash
10	BISN Jetty-Karimganj(Badarpur)	1357	...	...	550	Coal
11	Kolkatta-Khulana	507	18484	13212	...	Flyash
12	Sri Ram Jetty-Mongla	505	...	...	1306	Flyash
13	Sri Ram Jetty-Khulna	518	...	1025	7719	Flyash
14	Sri Ram Jetty-Narayanganj	905	...	10646	34963	Flyash
15	T.T.Shed-Mongla	510	...	...	2836	Wheat
16	T.T.Shed-Khulna	523	...	...	2400	Wheat
17	T.T.Shed-Narayanganj	910	...	5854	24444	Flyash,Wheat,Coal
18	K.P.Dock-Mongla	510	...	...	22614	Wheat
19	K.P.Dock-Khulna	523	...	...	30083	Wheat
20	IWAI Haldia Jetty-Narayanganj	826	...	123831	183804	Flyash
21	IWAI BISN Jetty-Khulna	532	...	600	...	Flyash
22	Karimganj Assam-IWAI BISN Jetty	1367	...	135	...	Coal
23	Karimganj Assam-T.T.Shed	1368	...	598	...	Coal
<b>14</b>	<b>Reliance Enterprise</b>					
1	Kolkata-Narayanganj	894	34372	20883	...	Flyash
2	Haldia-Narayanganj	836	4425	895	...	Flyash
3	Budge Budge-Narayanganj	884	...	...	2277	Flyash
4	Budge Budge-Khulna	497	...	...	698	Flyash
5	Sri Ram Jetty-Khulna	518	...	...	612	Flyash
6	Kolkatta-Khulna	507	16678	4808	...	Flyash
7	IWAI BISN Jetty-Narayanganj	909	...	2342	2994	Flyash
8	T.T.Shed-Narayanganj	910	...	1115	8983	flyash
<b>15</b>	<b>Saha Oversees Corporation</b>					
1	Kolkata-Narayanganj	894	84662	36617	...	Flyash
2	Budge Budge-Narayanganj	884	...	...	5138	Flyash
3	Sri Ram Jetty-Khulna	518	...	...	1855	Flyash
4	T.T.Shed-Narayanganj	910	...	13617	8721	Flyash
5	Kolkatta (Sri Ram Jetty)-Narayanganj	910	...	33764	...	Flyash
6	IWAI BISN Jetty-Narayanganj	895	...	3903	...	Flyash
7	Kolkata-Narayanganj	894	...	...	...	Flyash

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>16</b>	<b>C. Day &amp; Brothers</b>					
1	Kolkata-Narayanganj	894	8520	32683	...	Flyash
2	Budge Budge-Narayanganj	884	...	...	23597	Flyash
3	Budge Budge-Khulna	497	...	...	586	Flyash
4	Kolkatta-Khulna	507	1582	486	...	Flyash
5	Kolkatta(BISN Jetty)-Narayanganj	895	...	840	...	Flyash
6	Sri Ram Jetty-Khulna	518	...	...	758	Flyash
7	Sri Ram Jetty-Narayanganj	905	...	4444	1362	Flyash
8	IWAI Haldia Jetty-Khulna	439	...	...	950	Flyash
9	IWAI BISN Jetty-Narayanganj	909	...	...	930	Flyash
10	IWAI Haldia Jetty-Narayanganj	826	...	34016	4723	Flyash
11	Haldia-Khulna	449	...	5412	...	Flyash
12	T.T.Shed-Narayanganj	910	...	2738	13652	flyash, Ironfines
<b>17</b>	<b>Fortune Cargo (India Pvt Ltd)</b>					
1	Kolkata-Narayanganj	894	9553	33085	...	Flyash
2	Budge Budge-Narayanganj	894	...	...	16185	Flyash
3	IWAI Haldia Jetty-Narayanganj	826	...	...	692	Flyash
4	T.T.Shed-Narayanganj	910	...	...	5129	Flyash
5	Haldia-Narayanganj	805	2020	...	...	Flyash
6	IWAI BISN Jetty-Khulna	522	...	...	755	Flyash
7	IWAI BISN Jetty-Narayanganj	909	...	4117	1112	Flyash
8	Kolkatta-Khulna	507	...	1402	...	Flyash
9	IWAI Haldia Jetty-Khulna	449	...	1883	...	Flyash
<b>18</b>	<b>Sea Water Transport Co. Pvt Ltd</b>					
1	Haldia-Narayanganj	805	1200	...	...	Flyash
2	T.T.Shed-Khulna	523	...	...	2239	Wheat
3	Haldia-Mongla	405	1332	...	...	Flyash
4	Haldia-Khulna	418	2295	...	...	Flyash
5	Kolkatta BISN Jetty-Kulna	532	3813	1136	...	Flyash
6	IWAI Haldia Jetty-Khulna	449	...	4470	...	Flyash
<b>19</b>	<b>ABC India Ltd</b>					
1	Kolkata-Tejpur	1701	679	...	...	ODC (BO Route)
2	Kolkata-Ashuganj (B'desh)	998	1888	...	...	

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>20</b>	<b>Krishna Shipping &amp; Logistics</b>					
1	Budge Budge-Narayanganj	884	...	...	5288	Flyash
2	Budge Budge-Karimganj	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-Ashuganj	1048	...	622	...	Iron ingots
7	IWAI BISN Jetty-Narayanganj	895	...	1110	...	Flyash
8	Haldia-Narayanganj	836	...	13702	...	Fly Ash
<b>21</b>	<b>Neli</b>					
1	Budge Budge-Narayanganj	884	...	...	4128	Flyash
2	Budge Budge-Khulna	497	...	...	1640	Flyash
3	IWAI Haldia Jetty-Narayanganj	826	...	...	768	Flyash
4	Sri Ram Jetty-Mongla	505	...	...	648	Flyash
5	Sri Ram Jetty-Khulna	518	...	...	602	Flyash
6	Budge Budge-Karimganj	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	Flyash
<b>22</b>	<b>Ajbela Navigation</b>					
1	Kolkatta-Narayanganj	894	...	12307	...	Flyash
2	Sri Ram Jetty-Khulna	518	...	...	1850	Flyash
3	Sri Ram Jetty-Narayanganj	905	...	...	8841	Flyash
4	Kolkatta-Khulna	507	...	3472	...	Flyash
5	K.P.Dock-Khulna	523	...	...	6714	Wheat
6	T.T. Shed-Narayanganj	910	...	...	4226	Flyash
7	T.T. Shed-Khulna	523	...	...	1497	Wheat
8	Kolkatta (S R Jetty)-Narayanganj	897	...	1186	...	Flyash
9	Kolkatta BISN Jetty-Narayanganj	895	...	701	...	Flyash
10	Budge Budge-Narayanganj	884	...	...	19712	Flyash
11	Budge Budge-Khulna	497	...	...	591	Flyash
12	IWAI Haldia Jetty-Mongla	426	...	...	1250	Flyash
13	IWAI Haldia Jetty-Khulna	439	...	842	2726	Flyash
14	IWAI Haldia Jetty-Narayanganj	836	...	7948	...	Flyash
<b>23</b>	<b>Marshall Corporation Ltd.</b>					
1	BISN Jetty-Karimganj	1367	...	569	...	Flyash
2	Karimganj Assam-IWAI Bisn Jetty	1367	...	300	...	Coal

**Table No. 2.2****Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA**

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>24</b>	<b>Spring Professional Services Pvt. Ltd</b>					
1	T.T.Shed, Kolkatta-Ashuganj	1048	...	306	...	Galvanised Steel Plain Sheet
<b>25</b>	<b>Reach Asia</b>					
1	Kolkatta-Jogighopa, Assam	1392	...	...	372	ODC Cargo
2	Haldia-Balia	1028	...	629	...	ODC Cargo
<b>26</b>	<b>Netincon Marketing Pvt. Ltd.</b>					
1	K.P.Dock-Khulna	510	...	...	2600	Wheat
<b>27</b>	<b>Duttsom</b>					
1	T.T.Shed-Narayanganj	910	...	...	3847	Flyash
2	IWAI BISN Jetty-Narayanganj	909	...	...	738	Flyash
3	Budge Budge-Narayanganj	884	...	...	2181	Flyash
<b>28</b>	<b>J.D.Shipping</b>					
1	Budge Budge-Narayanganj	884	...	...	2854	Flyash
<b>29</b>	<b>Ganga Water Transport</b>					
1	K.P.Dock-Mongla	510	...	...	2700	Wheat
2	K.P.Dock-Narayanganj	910	...	...	510	Non Alloyed Hot Rolled Steel Coil
<b>30</b>	<b>Bertling Logistic India Pvt.Ltd.</b>					
1	Haldia-Balia	1028	...	...	337	ODC Cargo
<b>31</b>	<b>Venketesh Logistics</b>					
1	Haldia-Bhaktiyarpur	885	...	...	310	ODC Cargo
<b>32</b>	<b>All Cargo Logistics Ltd.</b>					
1	Haldia-Zamania	1170	...	...	1150	ODC Cargo
<b>33</b>	<b>Prism Logistics Pvt.Ltd.</b>					
1	Haldia-Allahabad	1512	...	...	762	ODC Cargo
<b>34</b>	<b>KOPT</b>					
1	Kolkatta-Sandheads	232	...	4975		Iron Ore
2	Kolkatta-Sagar	146	...	627174	115000	Iron Ore, Other/Misc.
3	Kolkatta-Diamond Harbour	78	...	408749		
4	DH-KPD	78	...	69873		

**Table No. 2.2****Details of Cargo Moved on National Waterways (National Waterway No.I) - THE GANGA****(In tonnes)**

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
5	Sagar-Kolkatta	146				Iron Ore,Pulses,Sugar,Timber,Coking Coal,Rock Phosphate,Rice & Wheat,Fertiliser,Manganese Ore,Pet Cock
6	Kolkatta-Diamond Harbour	78	...	...	496000	
7	Haldia-Sagar	39	...	330064	2000	
8	Diamond Harbour-Kolkatta	78			122000	Iron Ore, Sugar, Pet Cock, Pulses, Cokjing
9	Haldia-BB	78	...	10175	...	
10	Budge Budge-Internal	5	...	72	...	
11	Kolkatta-Budge Budge	21	...	51	...	
12	KPD-Budge Budge	21	...	45	...	
<b>Sub Total ( C )</b>		<b>-</b>	<b>1501345</b>	<b>2994556</b>	<b>2431380</b>	
<b>D</b>	<b>IWAI Vessels</b>					
1	Rajmahal-Kolkata		300	...	...	achina Clay, SilicaSand
2	Rajmahal -Patna		...	...	300	Cement
3	Haldia-Karimganj		660	...	...	Bitumin, Edible-Oi
4	Kolkatta-Pandu		300	...	...	TT Shed
5	Pandu-Kolkatta		313	...	...	Jute Bales
6	Samdhaghatj-Manihari		...	...	15216	Stone chips
7	Haldia_Pandu		300	...	...	Edibleoil
8	Samdaghat-Patna		2087	300	900	Stonechips
9	Samdaghat-Doriganj		...	1120	...	Stonechips
10	Chunar-Balia		...	574	...	Cement
11	Samdaghat-Munger		...	300	...	Stonechips
<b>Sub Total (D)</b>		<b>-</b>	<b>3960</b>	<b>2294</b>	<b>16416</b>	
<b>Total (NW-I) (A+B+C+D)</b>			<b>1877748</b>	<b>3310047</b>	<b>2716437</b>	

**Table No. 2.2****Details of Cargo Moved on National Waterways (National Waterway No.II)- BRAHMAPUTRA**

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>A</b>	<b>Others Pvt. Operators</b>					
1	Kolkatta-Tejpur	1693	679	...	...	ODC
	<b>Sub Total</b>		679			
<b>B</b>	<b>Organised Cargo</b>		...	...	396	
<b>C</b>	<b>IWTD Assam*</b>		1981723	1982360	1965239	Goods
<b>D</b>	<b>Unorganised Sector</b>		180429	424088	461170	Goods, Passengers,Bicycle, M.Cycle,Animal
<b>E</b>	<b>IWAI Vessel</b>					
1	Haldia-Guwahati	1470	300	...	...	Edible Oils
2	Kolkatta-Guwahati	1535	300	...	...	Foodgrains
3	Jagighopa-Badapur	1120	...	...	...	Bamboo
4	Pandu-Kolkata	1535	314	...	...	Jute Bales
5	Kolkata-Pandu	1535	...	...	...	Edibleoil
	<b>Sub Total (B+C+D+E)</b>		<b>2163066</b>	<b>2406448</b>	<b>2426805</b>	
	<b>Total (NW-II)(A+B+C+D+E)</b>		<b>2163745</b>	<b>2406448</b>	<b>2426805</b>	

\*: Data of IWT Assam is extrapolated.

**Table No. 2.2  
(Contd...)**

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>A.</b>	<b>CHAMPAKARA CANAL</b>					
1	<b>KSINC</b>					
	Cochin Port-FACT-CD	21.5	65436	107122	3444	Raw Sulphur, Rock Phosphate & Phosphoric Acid etc..
	Q10 Berth-CPT-Fact, CD	21	...	...	157186	Sulphur,Rock
	BPCL Irumbanam-Ship Bunkring	16	...	1011	...	Phosphate,Phosphoric Acid Furnace Oil
2	<b>LOTS Shipping &amp; Trading</b>					
	Cochin Port-FACT-CD	21.5	163431	41144	...	Raw Sulphur, Rock Phosphate & Phosphoric Acid & Stone aggregates
	Q10 Berth-CPT-Fact, CD	21	...	122077	184393	Phosphoric Acid,Sulphur,Rock
	ICTT-Cochin Shipyard	5	...	6	-	Phosphate Container no. 1
	BPCL Irumbanam-Fact, PD (dist.in Ch. Canal)	16.5	...	4478	23835	Furnace Oil
	DP World-Cochin Shipyard	5	...	1	...	20 ft Container-1 no.
	Vallarpadam-Cochin Shipyard	5	...	2	...	Container no. 1
	Q5 berth-Cochin Shipyard	3	...	1	...	20 ft Container-1 no.
3	<b>Kerala Backwater Navigation</b>					
	Cochin Port FACT CD	21.5	109536	20041	...	Rock Phosphate, Sulphur
	<b>Sub Total</b>		<b>338403</b>	<b>295883</b>	<b>368858</b>	
<b>B.</b>	<b>UDYOGMANDAL CANAL</b>					
1	<b>LOTS Shipping &amp; Trading*</b>					
	Cochin Port FACT-UD	20	214430	35243	...	Zibframe, Sulphur, Furnance oil, Zinc
	BPCL/IOC FACT PD	14	...	9843	...	Stone aggregate, Furnance oil
	Alwa MULAVUKADUD	10	...	...	...	Aggregate
	BPCL FACT UD	20	306	8575	...	Phosphoric Acid, Furnace Oil
	Alwa-Pizhala, UD	10	35023	...	...	Aggregate
	BPCL Irumbanam- FACT PD	11	...	...	23835	Furnace Oil
	BPCL Irumbanam- FACT UD	17	2128	...	...	Furnace Oil
	Bolgaty-W.Island	3.7	31694	...	...	Various Commodity
	Q10 CPT-Fact, UD	20	...	56554	46543	Phosphoric Acid, Sulphur
	Q6 Berth CPT-Binani Zinc Ltd.	22	...	...	72163	Zinc.
	Q5 Berth CPT-Binani Zinc Ltd.	22	...	9707	...	Zinc.
	Q1 Berth CPT-Binani Zinc Ltd.	25	...	3827	...	Zinc.



**Table No. 2.2**  
**(Contd...)**

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	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 isldan Bolgaty-Bolgaty Williangdon Island	3.7	...	667086	523480	commodities in container
	Cochin Port-BPCL, Matrix Bharat	1	...	939	...	Furnace Oil Bunkering
	Cochin Port-Matrix Bharat	5	...	1060	...	Furnace Oil Bunkering
	BPCL-Vllarapadam	2	...	149	...	Furnace Oil Bunkering
2	<b>KSINC*</b>					
	Cochin Port-FACT UD	21	22876	7653		Rock Phosphate , Sulphur, Phosphoric Acid
	Q10 Berth, CPT-Fact UD	20	...	289	3542	Phosphoric Acid,
3	<b>Kerla Back watre Navigation</b>					
	Fact Willingdon Island Fact UD	20	17034	...	...	Sulphur. Phosphoric Acid
4	<b>Logos Agencies</b>					
	Aluva Terminal-Sea	23.5	645	1969	2726	Liquid Effluent
5	<b>Amrok Industrial &amp; Investments</b>					
	Aluva Terminal-Sea	23.5			74	Liquid Effluent
<b>Sub Total</b>			<b>324136</b>	<b>863354</b>	<b>711355</b>	

Table No. 2.2

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2010-11	2011-12	2012-13	Cargo generally moved
1	2	3	4	5	6	7
<b>C.</b>	<b>THE WEST COASTAL CANAL</b>					
<b>1</b>	<b>KSINC Ltd*.</b>					
	Fine Arts Jetty- Vypeen	4	144740	131720	141000	Potable water
	Ernakulum terminal-Cochin port	5	...	31963		POL(Bunkering to Ship)
	Ernakulum Vypeen Island	4	....	...	...	Potable water
	Cochin port Ships	5	51065	....	....	POL
<b>2</b>	<b>Travancore Cements Ltd.</b>					
	Vaikom- Chitramangalam	20	22150	20850	15190	Lime shell with clay & othe impurities
	Kayamkulam-Chavra	17	5200	...	...	Sand
<b>3</b>	<b>Lots Shipping &amp; Trading Company</b>					
	Fact engg works Cochin shipyard	6	...	...	...	Tank
<b>Sub Total</b>			<b>223155</b>	<b>184533</b>	<b>156190</b>	
<b>Total (NW-III) (A+B+C)</b>			<b>885694</b>	<b>1343770</b>	<b>1236403</b>	
<b>Total Cargo Moved on National Waterways (NW-I+NW-II+NW-III)</b>						
<b>GRAND TOTAL (NW-I+NW-II+NW-III)</b>			<b>4927187</b>	<b>7060265</b>	<b>6379645</b>	

Source : Inland Waterways Authority of India /  
CIWTC

... : Not available.

**SECTION – 3**

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

**Table No. 3.1****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

Source : CIWTC

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

**Table No. 3.2****Cargo Carried And Freight Earned by CIWTC-Commodity-wise**

Sl. No.	Commodity	2010-11		2011-12		2012-13	
		Tonnes Carried	Freight Earned (Rs. Lakh)	Tonnes Carried	Freight Earned (Rs. Lakh)	Tonnes Carried	Freight Earned (Rs. Lakh)
1	2	5	6	7	8	7	8
1	Fly Ash	1500.00	13.92	-	-	-	-
2	Pol	550.00	1.24	-	-	-	-
3	Cut Bamboo	-	-	-	-	-	-
4	Sand Clips	-	-	8250.00	1.81	19800.00	4.32
5	Slag	-	-	-	-	-	-
6	Waste Oil	8100.00	18.49	4400.00	10.03	-	-
7	Aluminium Block	200.00	1.00	200.00	1.00	-	-
8	Boulder	17182.00	4.22	1650.00	0.33	-	-
9	Cement/W.Cement	4500.00	9.00	-	-	-	-
10	Cement Clinkers	1500.00	3.00	-	-	-	-
11	Peas	7300.00	10.48	15000.00	15.15	1500.00	3.00
12	Pet Cake/Personal Effect	7500.00	9.00	-	-	-	-
13	ODC	-	-	243.00	7.61	-	10.98
14	Stone Clips	-	-	1500.00	7.55	-	-
15	Misc.	550.00	5.22	-	-	-	-
<b>SUB TOTAL</b>		<b>48882</b>	<b>75.57*</b>	<b>31243</b>	<b>43.48*</b>	<b>21300</b>	<b>18.30*</b>

\* this relates to commodity-wise earnings

The Non Commodity Earnings are as under :

Activity							
Vessel hire, Godown		-	184.82	-	124.86	-	135.42
Rent, Storage ,Towage etc.		-	-	-	-	-	-
<b>SUB TOTAL</b>		<b>-</b>	<b>184.82</b>	<b>-</b>	<b>124.86</b>	<b>-</b>	<b>135.42</b>
<b>GRAND TOTAL</b>		<b>48882</b>	<b>260.39</b>	<b>31243</b>	<b>168.34</b>	<b>21300</b>	<b>153.72</b>

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

Table No. 3.3

Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2010-11 to 2012-13

Sl. No.	Route	Distance (in Kms)	Commodity	Tonnes Carried			Freight Earned(Rs.in Lakh)			Tonne/Kms(in Lakh) Performed		
				2010-11	2011-12	2012-13	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Haldia-Budge-Budge		Waste Oil	8100	4400	-	18.49	10.03	-	4.51	3.27	-
			Pol	550	-	-	1.24	-	-	1.91	-	-
												-
	<b>Haldia-Budge-2</b>		<b>TOTAL</b>	<b>8650</b>	<b>4400</b>	<b>-</b>	<b>19.73</b>	<b>10.03</b>	<b>-</b>	<b>6.42</b>	<b>3.27</b>	<b>-</b>
2	Kolkata-Karimganj	1218-	Edible Oil/Foodgrains	550	-	-	5.22	-	-	6.64	-	-
		1248	Fly Ash	1500	-	-	13.92	-	-	18.72	-	-
			<b>TOTAL</b>	<b>2050</b>	<b>-</b>	<b>-</b>	<b>19.14</b>	<b>-</b>	<b>-</b>	<b>25.36</b>	<b>-</b>	<b>-</b>
3	Karimganj - Kolkata	1218-	Cement clinkers	-	-	-	-	-	-	-	-	-
		1248	Personal Effect	-	-	-	-	-	-	-	-	-
			<b>TOTAL</b>	<b>2050</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Kolkata-Karimganj-Kolkata</b>		<b>TOTAL</b>	<b>2050</b>	<b>-</b>	<b>-</b>	<b>19.14</b>	<b>-</b>	<b>-</b>	<b>25.36</b>	<b>-</b>	<b>-</b>
4	Haldia-Ghormalsland	415	Boulders	17182	1650	-	4.22	0.33	-	2.58	0.25	-
		1060										
			<b>TOTAL</b>	<b>17182</b>	<b>1650</b>	<b>-</b>	<b>4.22</b>	<b>0.33</b>	<b>-</b>	<b>2.58</b>	<b>0.25</b>	<b>-</b>
5	Haldia-Internal	02	Sand Clips	-	8250	1650	-	1.81	0.36	-	0.15	0.03
			<b>TOTAL</b>	<b>-</b>	<b>8250</b>	<b>1650</b>	<b>-</b>	<b>1.81</b>	<b>0.36</b>	<b>-</b>	<b>0.15</b>	<b>0.03</b>
6	Patna-Kolkata	530	Stone Chips	-	1500	-	-	7.55	-	-	7.95	-
			<b>TOTAL</b>	<b>-</b>	<b>1500</b>	<b>-</b>	<b>-</b>	<b>7.55</b>	<b>-</b>	<b>-</b>	<b>7.95</b>	<b>-</b>
7	Haldia-Jamuria (UP)	1096	ODC	-	208	-	-	6.51	10.98	-	2.28	-
			<b>TOTAL</b>	<b>-</b>	<b>208</b>	<b>-</b>	<b>-</b>	<b>6.51</b>	<b>10.98</b>	<b>-</b>	<b>2.28</b>	<b>-</b>

**Table No. 3.3 (Contd..) Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2010-11 to 2012-13**

Sl. No.	Route	Distance (in Kms)	Commodity	Tonnes Carried			Freight Earned(Rs.in Lakh)			Tonne/Kms(in Lakh) Performed		
				2010-11	2011-12	2012-13	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
1	2	3	4	5	6	7	8	9	10	11	12	13
8	Lighterage	44-144	Peas	7300	15000	1500	10.48	15.15	3.00	5.84	12.00	1.20
	Operation at Saugar		Logs	1500	-	-	3.00	-	-	1.2	-	-
	/Haldia Diamond		Containers	4500	-	-	9.00	-	-	2.7	-	-
	Harbour-Kolkata		Fertilizer	7500	-	-	9.00	-	-	0.38	-	-
	Kolkata-Internal		ODC	-	35	-	-	1.10	-	-	0.02	-
			Sand- Clips	-	-	18150	-	-	3.96	-	-	0.33
			A.Block	200	200	-	1.00	1.00	-	0.01	0.01	-
			<b>TOTAL</b>	<b>21000</b>	<b>15235</b>	<b>19650</b>	<b>32.48</b>	<b>17.25</b>	<b>6.96</b>	<b>10.13</b>	<b>12.03</b>	<b>1.53</b>
9	Misc.											
	Tug Hire and											
	Godown Rent			-	-	-	184.82	124.86	135.42	-	-	-
			<b>Grand Total</b>	<b>48882</b>	<b>31243</b>	<b>21300</b>	<b>260.39</b>	<b>168.34</b>	<b>153.72</b>	<b>44.49</b>	<b>25.93</b>	<b>1.56</b>

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

**Table No. 3.4**

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

**(Rs. lakhs)**

<b>Sl.No.</b>	<b>Item</b>	<b>2011</b>	<b>2012*</b>	<b>2013#</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>A.</b>	<b>INCOME</b>	1920.34	2059.42	1918.77
(i)	Earnings (Operational)	150.51	130.54	153.73
(ii)	Earnings (Others)	1769.83	1928.88	1765.04
<b>B</b>	<b>EXPENDITURE</b>	1896.01	3145.08	3798.85
(i)	Materials & Stores Consumed	52.51	32.86	62.25
(ii)	Decrease/Increase in Work in Progress	-	-37.85	-2.56
	Employees Remuneration & Benefits	1068.96	872.82	860.64
(iv)	Repairs & Maintenance	80.97	49.92	3.70
(v)	Power & Fuel	56.88	45.61	32.09
(vi)	Other Expenses	321.29	305.43	257.63
(vii)	Interest	-	1626.93	2345.45
(viii)	Depreciation	356.36	332.83	313.87
(ix)	Provisions	33.49	-83.47	-74.82
(x)	Transfer to other Heads of Accounts	-84.45	-101.36	-
<b>C</b>	<b>Profit/Loss (A-B)</b>	24.33	-1085.66	-1880.08

Source : CIWTC

\* Revised Figures    # Unaudited



**Table No. 3.5****Source-wise Earning of CIWTC**

(Rs. in lakhs)

Sl.No.	Name of Service	Year		
		2010-11	2011-12	2012-13*
1	2	4	5	5
<b>A.Earnings (Operational)</b>				
<b>Transportation &amp; Allied</b>				
<b>Activities:</b>				
	Freight	73.15	42.48	16.05
	Dredging	-	-	
	Ferries & Charter	77.36	88.06	137.68
	Sales pending finalisation	-	-	
	<b>TOTAL (A)</b>	<b>150.51</b>	<b>130.54</b>	<b>153.73</b>
<b>B.Earnings (Others)</b>				
	Investment/one time grant	-	-	
	Interest on Short Term Deposit	700.4	1019.05	781.05
	Interest on:			
	Mobilisation Amount	-	-	
	Sunderban Conservancy Amount	-	-	
	Port Maintenance	-	-	
	Sale of Scrap	-	-	
	Rent	87.08	31.41	2.79
	Surplus on sale of assets			
	Retired from Operation	29.48	-	116.16
	Miscellaneous Receipts	16.86	5.60	4.40
	Govt. Grant (Salary & Wages)	936.00	872.82	860.64
	Profit on exchange	-		
	<b>TOTAL B</b>	<b>1769.82</b>	<b>1928.88</b>	<b>1765.04</b>
	<b>TOTAL (A+B)</b>	<b>1920.33</b>	<b>2059.42</b>	<b>1918.77</b>

\* Unaudited

**Table No. 3.6****Financial Position of CIWTC****(Rs. in Lakh)**

SL. No.	Item			
		2010-11	2011-12	2012-13*
1	2	3	4	5
A.	<b>LIABILITIES</b>			
	(a) Paid up capital	13048.48	13048.48	13048.48
	(b) Reserves & Surplus(Capital Reserve)	10909.93	10909.93	10909.93
	(c) Accumulated Loss	-	-26963.95	-30501.76
	(d) Borrowings			
	i) From Govt. of India	-	-	-
	ii) From Others	-	-	-
	(e) Trade dues and other current liabilities (includ-ing provisions) and interest accrued thereon	20319.85	20319.44	15216.00
	<b>TOTAL (A)</b>	<b>44278.26</b>	<b>17313.90</b>	<b>8672.65</b>
B.	<b>ASSETS</b>			
	(f) Gross Asset	11119.30	11119.36	11012.02
	(g) Less Depreciation	7505.04	7837.87	8049.29
	(h) Less Provision	-	-	-
	(i) Net Fixed Assets (f-g-h)	3614.26	3281.49	2962.73
	(j) Capital work in progress	-	37.85	40.42
	(k) Investment	-	-	-
	(l) Current Assets, Loans and Advances	13413.43	13994.56	5669.50
	(m) Miscellaneous expences and losses not written off	-	-	-
	(n) Accumulated Profit & Loss	27250.57		
	<b>TOTAL (B)</b>	<b>44278.26</b>	<b>17313.90</b>	<b>8672.65</b>
C.	Working Capital ( l-e)	-6906.42	-6324.88	-9546.50
	(o) Additional provision for Gratuity	604.43	571.69	594.73
	(p) Total Working Capital	-6301.99	-5753.19	-8951.77
	Capital employed (i+p)	2687.73	-2471.70	-5989.04
	Net worth (a-(m+n)) (for F.Y. 2010-11)	<b>(-)14202.09</b>	-	-
	Net worth (a-(c+m)) for F.Y.2012-2013	-	<b>(-)13915.47</b>	<b>(-)17453.28</b>

Source: CIWTC

\* Unaudited

**SECTION – 4**

**IWT ACTIVITIES –  
STATE-WISE**

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

Sl. No.	State/UT/Year	Self Propelled					Non...Self Propelled						
		Cargo	Passenger	Cargo cum Passenger	Tugs and Pushers	Total (Col.3 to 6)	Dumb Barges	Dumb Tankers	Dumb Flat	Boats	Others	Total (Col.8 to 12)	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	<b>Andhra Pradesh</b>												
	2011	...	...	43	...	43	...	...	...	17	51	68	111
	2012	...	...	43	...	43	...	...	...	17	51	68	111
	2013	...	...	...	...	...	...	...	...	...	...	...	...
2	<b>Assam</b>												
	2011	...	...	...	...	...	...	...	...	...	...	...	...
	2012	...	120	10	6	136	15	...	...	13	45	73	209
	2013	1	1	...	4	6	7	...	9	...	..	16	22
3	<b>Bihar</b>												
	2011	...	13	2	...	15	4	...	...	2	...	6	21
	2012	1	19*	74*	6	100	5	...	...	9	24	38	138
	2013	1	19*	74*	6	100	5	...	...	9	24	38	138
4	<b>Goa</b>												
	2011	188	...	...	...	188	...	...	...	...	...	...	188
	2012	172	...	...	...	172	...	...	...	...	...	...	172
	2013	264	45	...	2	311	2	...	...	...	...	2	313
5	<b>Karnataka</b>												
	2011	...	...	39	...	39	...	...	...	...	...	...	39
	2012	...	109	66	...	175	...	...	...	298	...	298	473
	2013	...	61	5	...	66	...	...	...	..	...	..	66
6	<b>Kerala</b>												
	2011	107	605	30	14	756	...	...	25	9084	3630	12739	13495
	2012	71	140	44	10	265	...	...	...	5248	...	5248	5513
	2013	153	200	69	10	432	...	...	...	4665	8724	13389	13821
7	<b>Maharashtra</b>												
	2011	...	299	...	482	781	...	...	...	...	...	...	781
	2012	...	233	...	370	603	...	...	...	...	...	...	603
	2013	...	201	...	376	577	...	...	...	...	...	...	577
8	<b>Orissa</b>												
	2011	...	281	...	...	281	...	...	...	...	...	...	281
	2012	...	279	...	...	279	...	...	...	...	...	...	279
	2013	...	342	...	...	342	...	...	...	...	...	...	342
9	<b>West Bengal</b>												
	2011	85	255	5	67(A)	410	635	...	...	1516	...	2151	2561
	2012	85	263	5	73(A)	426	659	...	...	1550	...	2209	2635
	2013	94	227	6	69(A)	396	690	...	...	1537	...	2227	2623
10	<b>Tamil Nadu</b>												
	2012	...	...	...	...	...	...	...	...	2	...	2	2
	2013	...	...	...	...	...	...	...	...	2	...	2	2

(A) Includes 38,42 and 29 other vessels for 2011, 2012 and 2013 respectively. ... Not available/Nil

\$ : From 2011-12 onwards, unlicensed 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

Table No. 4.2

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

Sl. No.	State/UT/Year	Powered Vessels Employed for cargo (Nos.)	Powered Vessels Employed for passengers (Nos.)	Quantity of cargo carried (000 <sup>†</sup> tonnes)	Total No. of passengers carried (000)
1	2	3	4	5	6
1	<b>Andhra Pradesh</b>				
	2011	...	...	...	...
	2012	...	...	...	...
	2013	...	...	...	...
2	<b>Assam</b>				
	2011	...	...	...	...
	2012	66	66	37.72#	11345.53
	2013	56	56	71.79@	7656.00
3	<b>Bihar</b>				
	2011	2	13	...	...
	2012	1	83	2.40	578.00*
	2013	1	83	2.40	578.00*
4	<b>Goa(a)</b>				
	2011	188	-	14563.49	...
	2012	172	-	14469.90	...
	2013	264	45	3275.82	14076.00
5	<b>Karnataka</b>				
	2011	39	39	1033.82	1504.49
	2012	66	15	58.80**	1648.70**
	2013	66	66	78.40**	1884.56**
6	<b>Kerala</b>				
	2011	68	623	5285.56	24691.01
	2012	77	644	5756.12	8410.69
	2013	66	632	5555.21	24752.82
7	<b>Maharashtra</b>				
	2011	...	...	14870.00	14323.00
	2012	...	...	19950.00	17147.80
	2013	...	...	24196.00	17608.00
8	<b>Orissa</b>				
	2011	...	14	...	132.00
	2012	...	9	...	126.00
	2013	...	10	...	124.00
9	<b>West Bengal</b>				
	2011	54	255	9987.00(b)	43724.00
	2012	61	263	9996.00(b)	43832.00
	2013	76	227	10347.00(b)	42976.00

(a) Excludes traffic reported by Marmugao Port for Iron Ore movement which is 40.82 million tonnes in 2010-11, 29.00 million tonnes in 2011-12 & 7.40 million tonnes in 2012-13.

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

\*8\* based upon passengers travelling on unregistered vessels plying in various river

... Not available

# 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.

@ Cargo includes LMV's, Bicycles, Motor Cycles and Animals.

**SECTION – 5**

**IWT ACTIVITIES – PRIVATE  
COMPANIES/UNDERTAKINGS**

**Table No. 5.1** IWT Vessels With Valid Certificates of Survey-Owned By Responding Private Companies/Undertakings By Type (As on 31st March)

Sl. No.	Company/ Undertaking and Year	Self Propelled				Non-Self Propelled (Dumb Barges) (No.)
		Type of vessel		Carrying capacity		
		Cargo (No.)	Passenger (No.)	Cargo(in Tonnes)	Passenger(in No.)	
1	2	3	4	5	6	7
1	<b>S.V.Salgaocar, Goa</b>					
	2011	4	...	1581	...	...
	2012	3	...	962	...	...
	2013 (c)	3	...	-	...	...
2	<b>D.V.Salgaocar, Goa</b>					
	2011	4	...	1500	...	...
	2012	3	...	307	...	...
	2013(c)	3	...	-	...	...
3	<b>V.M.Salgaocar Sales International</b>					
	2011	2	...	693	...	...
	2012	2	...	693	...	...
	2013( c)	2	...	-	...	...
4	<b>Sesa Resource Ltd Goa</b>					
	2011	3	...	3237	...	...
	2012	3	...	3237	...	...
	2013	3	...	3237	...	...
5	<b>Sesa Goa Ltd. Goa</b>					
	2011	21(a)	...	24910	...	...
	2012	32(a)	...	41697	...	...
	2013	35(a)	...	44255	...	...
6	<b>Sociedade De Fomento Ind. Ltd. Goa</b>					
	2011	2	...	2434	...	...
	2012	2	...	2434	...	...
	2013	2	...	2434	...	...
7	<b>CIWTC, Kolkata.</b>					
	2011	5 (b)	...	2178	...	17
	2012	4 (b)	...	1961	...	12
	2013	8 (b)	...	3909	...	16
8	<b>Indo-Swiss Trading Co. Kolkata.</b>					
	2011		2	118	270	...
	2012		2	118	270	...
	2013		2	118	270	...
9	<b>Vivada Inland Waterways Ltd. Kolkata.</b>					
	2011	10	4	...	...	...
	2012	10	4	...	...	...
	2013	10	4	...	...	...

**Table No. 5.1**  
**(Contd...)**

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

Sl. No.	Company/ Undertaking and Year	Self Propelled				Non-Self Propelled (Dumb Barges) (No.)
		Type of vessel		Carrying capacity		
		Cargo (No.)	Passenger (No.)	Cargo(in Tonnes)	Passenger(in No.)	
1	2	3	4	5	6	7
10	West Bengal Surface Transport Corporation Ltd.					
	2011	3	20	...	...	...
	2012	3	20	...	...	...
	2013	3	20	...	...	...
11	Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata.					
	2011		45	...	...	...
	2012		37	...	...	...
	2013	...	34	...	...	...
12	West Bengal Tourism Development Corporation limited, Kolkata.					
	2011		4	...	...	...
	2012		3	...	...	...
	2013	...	3	...	...	...
13	Eastern Navigation (P) Ltd., Kolkata.					
	2011	9	3	...	...	...
	2012	8	3	...	...	...
	2013	8	3	...	...	...
14	Pradeep Boating Company, Kolkata.					
	2011	2	....	...	...	...
	2012	2	....	...	...	...
	2013	2	....	...	...	...
15	Hindustan Petroleum Corp. Ltd., Budge Budge, West Bengal.					
	2011	1	...	...	...	...
	2012	1	...	...	...	...
	2013	...	...	...	...	...
16	Costa River Transport Pvt Ltd., Goa.					
	2011	3		5122	...	...
	2012	3	...	5122	...	...
	2013	3	...	5122	...	...
17	Ghatal Station Navigation (P) Ltd., Kolkata.					
	2011	...	3	...	...	...
	2012	...	3	...	...	...
	2013	...	3	...	...	...
18	Diamond Harbour Municipality, Kolkata.					
	2011	...	9	...	...	...
	2012	...	10	...	...	...
	2013	...	10	...	...	...



**Table No. 5.1**  
(Contd...)

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

Sl. No.	Company/ Undertaking and Year	Self Propelled				Non-Self Propelled (Dumb Barges) (No.)
		Type of vessel		Carrying capacity		
		Cargo (No.)	Passenger (No.)	Cargo(in Tonnes)	Passenger(in No.)	
1	2	3	4	5	6	7
19	Chandan Nagar Municipality, Kolkata.					
	2011	...	5	...	...	...
	2012	...	5	...	...	...
	2013	...	5	...	...	...
20	Jain Navigation					
	2011	2	...	...	...	...
	2012	2	...	...	...	...
	2013	2	...	...	...	...
21	K.S.Singhi					
	2011	...	...	...	...	...
	2012	...	...	...	...	...
	2013	1	...	...	...	...
22	Jindal ITF Ltd.					
	2011	...	...	...	...	...
	2012	...	...	...	...	...
	2013	2	...	...	...	...
23	Soham Shipping Pvt.Ltd.					
	2011	...	...	...	...	...
	2012	...	...	...	...	...
	2013	18	...	...	...	...
24	Sai Waterways Pvt. Ltd					
	2011	2	...	3829	...	...
	2012	2	...	3829	...	...
	2013	...	...	...	...	...
25	Rashmi Ore Carriers Pvt. Ltd.					
	2011	1	...	1314	...	...
	2012	1	...	1314	...	...
	2013	1	...	1314	...	...
26	Kothari Overseas Private Limited					
	2011	1	...	1893	...	...
	2012	1	...	1893	...	...
	2013	1	...	1893	...	...
27	Mayur Shipping Private Limied					
	2011	1	-	1284	...	...
	2012	1	-	1284	...	...
	2013	1	-	1284	...	...
28	Sanghi Brothers (Indore) Pvt Ltd.					
	2011	5	...	6476	...	...
	2012	5	...	6476	...	...
	2013	5	...	6476	...	...

... Not available.

(a) Includes one Passenger Launch & one Oil Tanker

(b) 3 Pusher Tug & 2 Oil Tanker for 2011, 2 Pusher Tug & 2 Motor Tanker for 2012 & 5 Pusher Tug & 3 Oil Tanker for 2013.

(c) The ships have been banned by the Govt. Therefore, cargo has been reported as ' Nil'.

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

Table No. 5.2

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

Sl.No.	Company/Undertaking and Year	Type of Vessels	No. of Powered Vessels Employed	Distance Travelled (Kms)	Freight Collected (Rs.in Lakh)	Cargo Carried		Passenger Carried	
						Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
1	<b>S. V. Salgaocar, Goa</b>								
	2011	Cargo	4	18025	1075.48	1581600	28508.34	...	...
	2012	Cargo	3	14035	673.60	962400	13507.28	...	...
	2013 (f)	-	-	-	-	-	-	...	...
2	<b>D. V. Salgaocar, Goa</b>								
	2011	Cargo	4	18795	1020.51	1500000	28192.50	...	...
	2012	Cargo	3	13825	663.60	948000	13106.10	...	...
	2013 (f)	-	-	-	-	-	-	...	...
3	<b>V.M.Salgaocar Sales International</b>								
	2011	Cargo	2	4545	471.64	693600	3152.41	...	...
	2012	Cargo	2	10115	485.52	693600	7015.76	...	...
	2013 (f)	-	-	-	-	-	-	...	...
4	<b>Sesa Resources Ltd Goa</b>								
	2011	Cargo	3	49800	323.38	859307	42793.49	...	...
	2012	Cargo	3	49400	(d)	793304	39189.22	...	...
	2013	Cargo	3	18100	(d)	278224	5035.85	...	...
5	<b>Sesa Goa Ltd. Goa.</b>								
	2011	Cargo	20	289400	1002.32	5103296	1476893.86	...	...
	2012	Cargo	31	365700	(d)	6933724	2535662.87	...	...
	2013	Cargo/Pass/Oil Tanker	35	134200	(d)	2582447	346564.39	...	...
6	<b>Sociedade De Fomento Ind. Ltd., Goa</b>								
	2011	Cargo	2	28600	(a)	463527	13256.87	...	...
	2012	Cargo	2	11770	(a)	194923	2294.24	...	...
	2013	Cargo	2	4510	(a)	71867	324.12	...	...
7	<b>C.I.W.T.C., Kolkata.</b>								
	2011	Cargo/Tug/Spes/DBs	11	192945	260.39	42882	8273.87	...	...
	2012	Cargo/Tug/Spes/DBs	3	12312	168.34	31243	384.66	...	...
	2013	Cargo/Tug/Spes/DBs	1	160	153.72	21300	3.41	...	...
8	<b>Indo-Swiss Trading Co.Pvt. Ltd., Kolkata</b>								
	2011	Pass.	2	18900	102.67	...	...	...	...
	2012	Pass.	2	15120	108.34	...	...	...	...
	2013	Pass.	2	15610	110.25	...	...	3200	...
9	<b>VIVADA Inland Waterways Ltd., Kolkata</b>								
	2011	Cargo/Tug/Pass/LCT	14	...	3154.90	541460(c )	...	34120	...
	2012	Cargo/Tug/Pass/LCT	14	...	3755.95	794590(c )	...	27630	...
	2013	Cargo/Tug/Pass/LCT	14	...	3863.78	480740(c )	...	28250	...

Table No. 5.2 (Contd...)

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

Sl.No.	Company/Undertaking and Year	Type of Vessels	No. of Powered Vessels Employed	Distance Travelled (Kms)	Freight Collected (Rs.in Lakh)	Cargo Carried		Passenger Carried	
						Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
10	<b>W. Bengal Surface Transport Corporation Ltd., Kolkata</b>								
	2011	Pass./LCT	23	...	578.22	15403(b)	...	6975000	...
	2012	Pass./LCT	23	...	591.32	23855(b)	...	7123000	...
	2013	Pass./LCT	23	...	408.32	24346(b)	...	15967000	...
11	<b>Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata</b>								
	2011	Pass.	45	...	985.01	...	...	21300000	...
	2012	Pass.	37	...	1009.49	...	...	22000000	...
	2013	Pass.	34	...	1129.85	...	...	23000000	...
12	<b>West Bengal Tourism Development Corpn. Ltd., Kolkata</b>								
	2011	Pass.	4	...	119.74	...	...	11890	...
	2012	Pass.	3	...	149.63	...	...	12320	...
	2013	Pass.	3	...	158.97	...	...	10900	...
13	<b>Eastern Navigation (P) Ltd., W. Bengal, Kolkata</b>								
	2011	Cargo/Tug/Pass.	8	...	184.00	...	...	1500	...
	2012	Cargo/Tug/Pass.	7	...	160.42	...	...	7000	...
	2013	Cargo/Tug/Pass.	7	...	175.00	40600	...	...	...
14	<b>Pradeep Boating Company, W. Bengal, Kolkata</b>								
	2011	Tugs	2	...	...	...	...	...	...
	2012	Tugs	2	...	1000.00	5000	...	...	...
	2013	Tugs	2	...	7.80	1200	...	...	...
15	<b>Hindustan Petroleum Corpn. Ltd. Budge-Budge, W. Bengal</b>								
	2011	Tug	1	...	37.11	19320	...	...	...
	2012	Tug	1	...	41.37	18470	...	...	...
	2013	Tug	...	...	...	...	...	...	...
16	<b>Costa River Transport Pvt. Ltd. Goa</b>								
	2011	Cargo	3	...	373.84	530650	...	...	...
	2012	Cargo	3	...	263.30	353900	...	...	...
	2013	Cargo	3	...	75.10	100950	...	...	...
17	<b>Ghatal steam Navigation (P) Ltd. Kolkata</b>								
	2011	Pass.	3	...	3221.20	...	...	2422000	...
	2012	Pass.	3	...	32.58	...	...	2325000	...
	2013	Pass.	3	...	40.36	...	...	2550000	...
18	<b>Diamond Harbour Municipality, Kolkata</b>								
	2011	Pass.	9	...	96.69	...	...	354500	...
	2012	Pass.	10	...	98.32	...	...	357400	...
	2013	Pass.	10	...	110.73	...	...	370290	...
19	<b>Chandan Nagar Municipality, Kolkata</b>								
	2011	Pass.	5	...	11.80	...	...	2240000	...
	2012	Pass.	5	...	4.60	...	...	500000	...
	2013	Pass.	5	...	5.25	...	...	760000	...

Table No. 5.2 (Contd...)

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

Sl.No.	Company/Undertaking and Year	Type of Vessels	No. of Powered Vessels Employed	Distance Travelled (Kms)	Freight Collected (Rs.in Lakh)	Cargo Carried		Passenger Carried	
						Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
20	<b>Jain Navigation</b>								
	2011	Tugs/Pass	2	...	15.00	...	...	....	....
	2012	Tugs/Pass	2	...	14.00	...	...	....	....
	2013	Tugs/Pass	2	...	17.37	5370	...	....	....
21	<b>K.S.Singhi</b>								
	2011	..	...	...	...	...	...	....	....
	2012	...	...	...	...	...	...	....	....
	2013	Tugs	1	...	9.21	3290	...	....	....
22	<b>Jindal ITF Ltd.</b>								
	2011	..	...	...	...	...	...	....	....
	2012	...	...	...	...	...	...	....	....
	2013	Cargo	2	...	55.33	27000	...	....	....
23	<b>Soham Shipping Pvt.Ltd.</b>								
	2011	..	...	...	...	...	...	....	....
	2012	...	...	...	...	...	...	....	....
	2013	Cargo	18	...	58.48	39850	...	....	....
24	<b>Sai Waterways Pvt.Ltd.</b>								
	2011	Cargo	2	16200	1.29	35900	581.58	...	...
	2012	Cargo	2	16200	1.16	32240	522.29	...	...
	2013	...	...	...	...	...	...	...	...
25	<b>Rashmi Ore Carriers Pvt. Ltd.</b>								
	2011	Cargo	1	4500	205.29	210000	945.00	...	...
	2012	Cargo	1	3240	104.25	151957	492.34	...	...
	2013	...	...	...	...	...	...	...	...
26	<b>Kothari Overseas Private Limited</b>								
	2011	Cargo	1	...	155.00	167123	...	...	...
	2012	Cargo	1	...	54.36	65007	...	...	...
	2013	Cargo	1	...	8.20	11442	...	...	...
27	<b>Mayur Shipping Pvt. Limited</b>								
	2011	Cargo	1	1710	63.85	68400	116.96	...	...
	2012	Cargo	1	2475	84.52	104338	258.24	...	...
	2013	...	...	...	...	...	...	...	...
28	<b>Sanghi Brothers (Indore) Pvt Ltd</b>								
	2011	Cargo	5	4500	72.70	34770	156.47	...	...
	2012	Cargo	5	3900	74.40	30134	117.52	...	...
	2013(e)	Cargo	...	...	...	...	...	...	...

(a) : transportation for self (b) : data relates to no. of vehicles on L.C.T.

(c) : 24215 no vehicles on LCT, 244761 no vehicles on LCT for the year 2010-11, 2011-12 & 257859 no. of vehicles on LCT for year 2

(d): Own barges plying for group company

(e): Barges not plied due to ban on mining.

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

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

**SECTION – 6**

**PLAN-WISE OUTLAY &  
EXPENDITURE FOR IWT SECTOR**

**Table No. 6.1****PLAN WISE FINANCIAL PERFORMANE FROM 9th FIVE YEAR PLAN TO 11th FIVE YEAR PLAN+A3**

(Rs in Cr.)

Sl. No.	Budget head/ Waterways	9th Five Year Plan			10th Five Year Plan			11th Five Year Plan			Financial Year		
		(1997-02)			(2002-07)			(2007-12)			(2012-13)		
		B.E	R.E	Exp.	B.E	R.E	Exp.	B.E	R.E	Exp.	B.E	R.E	Exp.
<b>I</b>	<b>Grants to IWAI</b>												
1	National Waterway 1	74.80	51.94	59.89	154.97	155.11	135.62	241.69	235.81	228.95	78.90	55.03	58.89
2	National Waterway 3	35.38	24.63	33.85	54.49	46.58	36.10	75.48	107.23	104.82	37.91	22.48	20.59
3	Others	13.85	7.61	7.65	37.60	23.88	12.99	26.00	7.59	9.57	15.21	18.60	16.63
	<b>Sub Total - I (Grants to IWAI)</b>	<b>124.03</b>	<b>84.18</b>	<b>101.39</b>	<b>247.06</b>	<b>225.57</b>	<b>184.71</b>	<b>343.17</b>	<b>350.63</b>	<b>343.34</b>	<b>132.02</b>	<b>96.11</b>	<b>96.11</b>
<b>II</b>	<b>North Eastern Area</b>												
4	National Waterway 2	48.19	27.02	25.69	216.28	180.60	132.15	319.29	243.17	202.07	70.99	44.80	43.33
5	Central Plan scheme for NER	0.00	0.00	0.00	17.00	0.00	0.00	16.03	15.03	6.62	3.70	3.70	1.87
6	Proposed NW-6 (Barak)	0.00	0.00	0.00	3.00	0.00	0.00	1.51	0.00	0.00	0.01	0.00	0.00
7	Development of Indo- Bangladesh protocol	0.00	0.00	0.00	1.30	1.10	0.66	0.00	0.00	0.00	2.00	1.50	1.72
	<b>Sub total - II (NER)</b>	<b>48.19</b>	<b>27.02</b>	<b>25.69</b>	<b>237.58</b>	<b>181.70</b>	<b>132.81</b>	<b>336.83</b>	<b>258.20</b>	<b>208.69</b>	<b>76.70</b>	<b>50.00</b>	<b>46.92</b>
<b>III</b>	<b>Subsidy</b>	19.11	31.10	13.34	8.50	5.00	5.40	8.00	7.00	4.13	2.00	1.00	0.90
<b>IV</b>	<b>Tech Studies &amp; R&amp;D</b>	4.05	2.65	2.03	26.00	19.00	9.09	5.00	5.00	4.32	1.00	1.00	1.00
<b>V</b>	<b>Central Plan Scheme/ CSS</b>	10.00	10.00	8.56	40.00	65.00	52.83	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Grand Total</b>	<b>205.38</b>	<b>154.95</b>	<b>151.01</b>	<b>559.14</b>	<b>496.27</b>	<b>384.84</b>	<b>693.00</b>	<b>620.83</b>	<b>560.48</b>	<b>211.72</b>	<b>148.11</b>	<b>144.93</b>

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

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 2012.**

Sl. No.	State/UT	No. of Accidents	Drowning (Boat Capsize)					
			No. of Persons Injured			No. of Persons Died		
			Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9
<b>STATES</b>								
1	Andhra Pradesh	15	0	0	0	15	5	20
2	Arunachal Pradesh	0	0	0	0	0	0	0
3	Assam	75	6	3	9	68	7	75
4	Bihar	12	4	1	5	11	32	43
5	Chhattisgarh	39	0	0	0	25	17	42
6	Goa	0	0	0	0	0	0	0
7	Gujarat	126	8	2	10	122	28	150
8	Haryana	0	0	0	0	0	0	0
9	Himachal Pradesh	0	0	0	0	0	0	0
10	Jammu & Kashmir	1	0	0	0	1	1	2
11	Jharkhand	4	1	0	1	4	0	4
12	Karnataka	23	0	0	0	28	0	28
13	Kerala	7	0	0	0	7	1	8
14	Madhya Pradesh	107	6	2	8	92	20	112
15	Maharashtra	19	0	0	0	17	3	20
16	Manipur	0	0	0	0	0	0	0
17	Meghalaya	1	0	0	0	1	0	1
18	Mizoram	19	0	0	0	16	4	20
19	Nagaland	0	0	0	0	0	0	0
20	Odisha	4	0	0	0	3	1	4
21	Punjab	0	0	0	0	0	0	0
22	Rajasthan	4	0	0	0	2	2	4
23	Sikkim	0	0	0	0	0	0	0
24	Tamil Nadu	30	12	0	12	18	0	18
25	Tripura	0	0	0	0	0	0	0
26	Uttar Pradesh	107	9	3	12	91	20	111
27	Uttarakhand	0	0	0	0	0	0	0
28	West Bengal	4	1	0	1	2	2	4
<b>Total( States)</b>		<b>597</b>	<b>47</b>	<b>11</b>	<b>58</b>	<b>523</b>	<b>143</b>	<b>666</b>
<b>UNION TERRITORIES</b>								
29	A&N Island	2	0	0	0	2	0	2
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	0	0	0	0	0	0	0
34	Lakshadweep	0	0	0	0	0	0	0
35	Pondicherry	0	0	0	0	0	0	0
<b>Total ( UTs)</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>
<b>Total States/UTs</b>		<b>599</b>	<b>47</b>	<b>11</b>	<b>58</b>	<b>525</b>	<b>143</b>	<b>668</b>

Note : The data includes boats plying in all water bodies.

Source : Accidental Deaths &amp; Suicides in India - 2012

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.)**

Sl. No.	Country	Canals		Rivers and Lakes		Total	
		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 &amp; North America, 2011 (UN Publication).

**Table No. 8.2****Length of Navigable Waterways By Permissible  
carrying Capacity of Vessels - 2008**

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

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

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

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

Sl. No.	Country	Self Propelled Vessels			D. & P. Vessels		Tugs and Pushers	
		Nos.	Carrying Capacity (Th.Tonnes)	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. &amp; P. Vessels : Dumb &amp; 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**

Sl. No.	Country	Goods carried ('000 Tonnes)				Tonne Kms. of Goods carried(Million)*			
		National	International		Transit	National	International		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 Moldova	-	-	-	-	...	-	-	-
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

\* : Kilometers within the territory of the reporting country.

\*\* : Data relates to 2005

# **APPENDICES**

## **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).

**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.