STATISTICS OF INLAND WATER TRANSPORT 2011-12

सत्यमेव जयते

Government of India
Ministry of Road Transport & Highways
Transport Research Wing
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 2011-12" is the 19th issue in the series.

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

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

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

(P.K. Sinha)

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C O N T E N T S

Inland Water Transport: An Overview

INTRODUCTION

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

POLICY INITIATIVES AND MILESTONES

2. Before 1950, there was no proper institutional set up for the development of IWT. A beginning was made during the First Plan when the Ganga-Brahmaputra Water Transport Board was set up as a Joint Venture of the Central Government and State Governments of Uttar Pradesh, Bihar, West Bengal and Assam. Its objective was to coordinate the efforts of the participating Governments in developing water transport on the Ganga and Brahmaputra Systems. Subsequently, the Government of India established the Inland Water Transport Directorate in the then Ministry of Shipping and Transport in 1965. In March, 1967, the Ganga-Brahmaputra Water Transport Board was merged with the IWT Directorate. Also, Central Inland Water Transport Corporation Ltd. (CIWTC) was set up at Kolkata in 1967 after taking over the assets and liabilities of the erstwhile River Steam Navigation Company Ltd.

3. In pursuance of the recommendations of the National Transport Policy Committee (NTPC), the Inland Waterways Authority of India (IWAI) was set up on October 27, 1986 by an Act of Parliament in 1985 for development, maintenance and regulation of National Waterways for shipping and navigation in the country. Three basic IWT related infrastructure for development of waterways are:

(a) Fairway or navigational channel with desired width and depth

(b) Terminals for berthing of vessels, loading/unloading of cargo and for providing interface with road and rail; and

(c) Navigational aid for safe navigation.

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

INLAND WATERWAYS AUTHORITY OF INDIA

5. The Inland Waterways Authority of India (IWAI) was set up under the Inland Waterways Authority of India Act, 1985 is entrusted with the regulation and development of Inland Waterways for the purpose of inland shipping and navigation. Its important functions are:

(i) Conducting surveys and investigations and techno-economic feasibility for developing inland water transport mode;

(ii) Development and regulation of National Waterways for shipping and navigation by providing conservancy measures, river training works, setting up infrastructural facilities etc.;

(iii) Other connected/subsidiary functions include regulation of traffic, coordination with other modes of transport for movement on the National Waterways maintenance of Pilot age etc;

(iv) To assist and advise central and State Government on matters relating to Inland Water Transport.

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

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

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

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

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

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

NAVIGABLE WATERWAYS & INFRASTRUCTURE

6. Length of waterways along with its navigable length is an indicator of inland water potential of a state. Table 1 gives Total and Navigable length of Waterways reported across States/UTs. It is observed that the maximum length of waterways is in the State of Uttar Pradesh with 6444 kms followed by West Bengal with 4741 kms. However, the ratio of the navigable length to the total length of the river/canal better reflects the potential for IWT.

As per the available data presented in Table 1, it is observed that the ratio of navigable length to the total length is about 97% in the State of West Bengal; by contrast, in case of Mizoram the ratio of navigable length to total length is a mere 18.91%. Other States with good inland water transport prospects are Goa, Maharashtra and Bihar where waterways navigable length is 78.29, 73.22 and 61.69% respectively of the total length of rivers/lands/lakes reported by these states. Eleven states have reported river length as well as navigable length for 117 rivers. These 117 rivers have total length of 22553 Km of which 51.3% is navigable length.

Table 1 : Total and Navigable Length of Waterways in different States –2011-12 (In kms)

State	Total Length of the Rivers/ Canals/ Lakes in State(Km.)	Navigable Length(Km.)	Percentage of Navigable Length to Total Length
Andhra Pradesh	2501	791	31.63
Assam#	3700	1043	28.19
Bihar##	2255	1391	61.69
Goa	258	202	78.29
Gujarat	713	184.3	25.85
Karnataka	2862	1407	49.16
Kerala###	2779	845.2	30.41
Maharashtra	631	462	73.22
Orissa####	1378	508	36.87
Nagaland**	937	375	40.02
Mizoram	735	139	18.91
Tamil Nadu	170	…	-
Uttar Pradesh**	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.

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 704.79 lakhs tonnes in 2011-12 from 751.79 lakh tonnes in 2010-11, reflecting a decrease of 6.3%. In terms of tonnage, Goa and Maharashtra accounted for 61.7% and 28.3% respectively of the total cargo volume in 2011-12 with balance 10.0% 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 5.4% in 2011-12 over 2010-11. Goa waterways accounted for around 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 44 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 25 Kms and 10 Kms respectively in 2011-12. In case of National Waterway I (Ganga- Bhagirathi-Hooghly) the average distance over which cargo moved was relatively much longer at around 439 Kms.

Table 2: Cargo Movement on Waterways

Sl. No.	Details of Waterway	Cargo Moved (lakh Tonnes)		Tonne Kms (in lakh)	
		2010-11	**2011-12**	**2010-11**	**2011-12**
1	**National Waterway No. I**	18.77(2.5)	33.10(4.7)	12302(30.6)	14546(38.2)
2	**National Waterway No. II**	21.64(2.9)	24.06(3.4)	573(1.4)	613(1.6)
3	**National Waterway No. III**	8.86(1.1)	13.44(1.9)	142(0.4)	132(0.3)
	Sub Total NWs	49.27(6.5)	70.60(10.0)	13017(32.4)	15291(40.1)
4	**Goa Waterways**	553.82(73.7)	434.69(61.7)	23853(59.2)	19009(49.9)
5	**Maharashtra Waterways**	148.70(19.8)	199.5(28.3)	3389(8.4)	3798(10.0)
	Grand Total	**751.79(100.0)**	**704.79(100.0)**	**40259(100.0)**	**38098(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 x1.2m);
- It should have a fairway of minimum 40m wide channel with 1.4m depth in case of rivers and minimum 30m wide channel with 1.8m depth in case of canals. Exception may be given in case of irrigation-cum-navigation canals based on request of the concerned State Govt in order to safeguard the interest of irrigation;
- It should be a continuous stretch of minimum 50 kms; the only exception to be made to waterway length is for urban conglomerations and intra-port traffic; and
- It should pass through and serve the interest of more than one States or connect a vast and prosperous hinterland and major port, or either pass through or connect a strategic region where development of navigations is considered necessary to provide logistic support for economic development or national security, or connect place not served by any other mode

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.

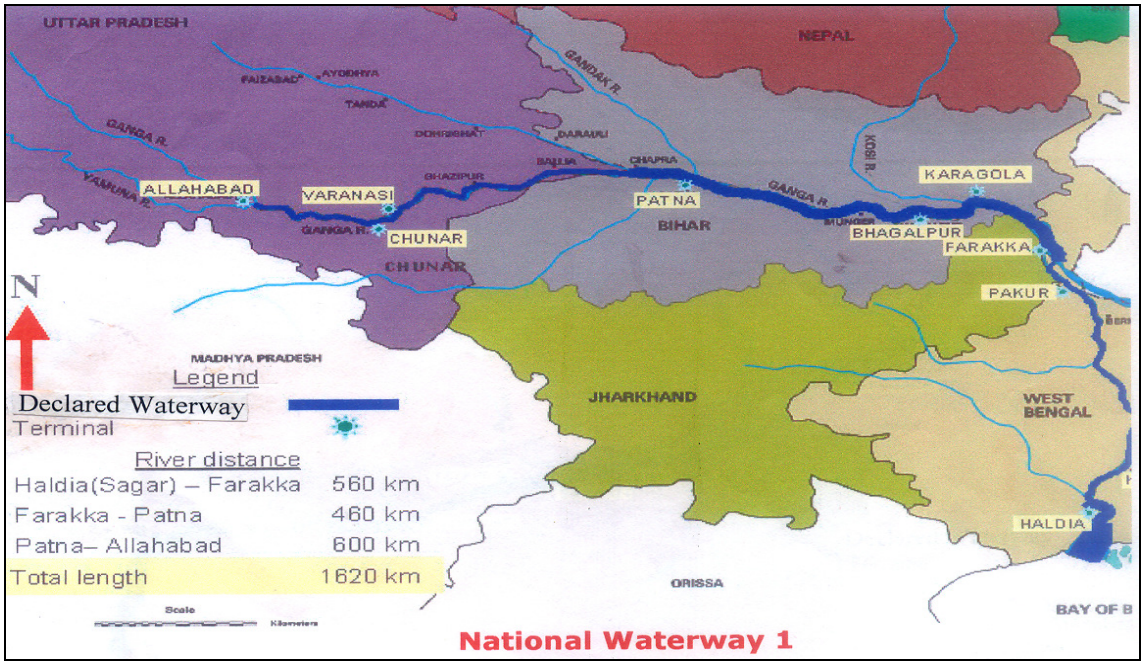
(b) Sadiya-Dhubri stretch (891 kms) of the Brahmaputra river was declared National Waterways- II in September, 1988.

(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 has gone up to 33.10 lakh tonnes in 2011-12 from 18.77 lakh tonnes in 2010-11 reflecting an annual growth of 76.3%. Although the volume of cargo movement by

CIWTC, VIVADA IWL and IWAI vessels have decreased in 2011-12 over 2010-11, the volume of cargo moved by other private operators was considerably higher on almost all the routes during 2011-12 as compared to 2010-11. Private operators moved 29.95 lakh tonnes of cargo on NW-I in 2011-12 as against 15.01 lakh tonnes moved during 2010-11.



10. The composition of cargo movement on National Waterway I over the years is shown in Table 3 below. Building material accounts for 46.2% of total cargo movement along the NW-I.

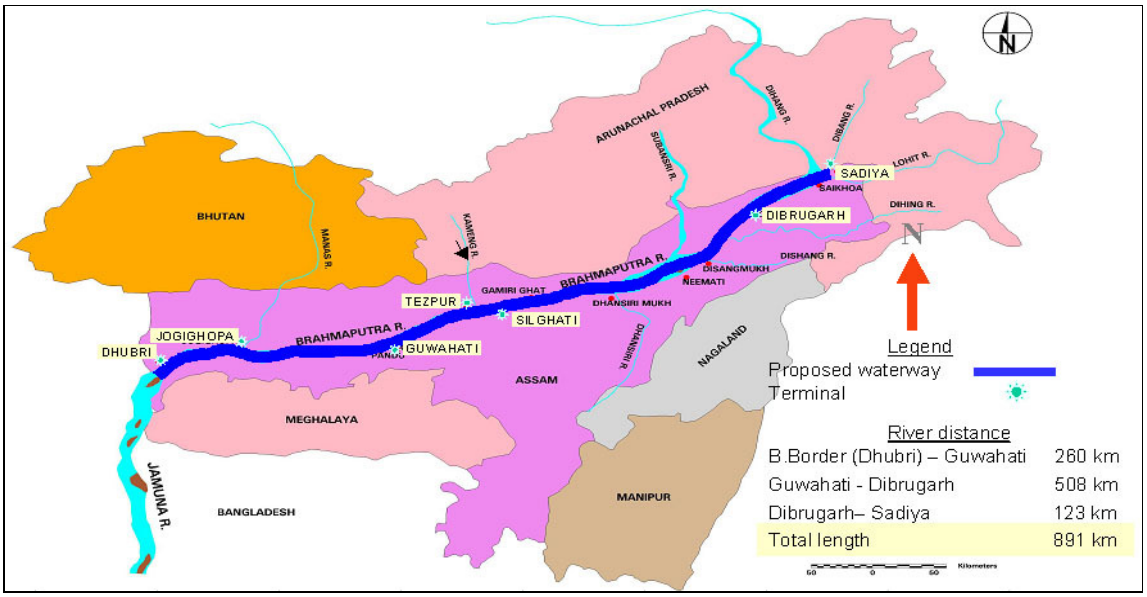
Table 3 : Composition of Cargo Moved on National Waterway- I (In Tonnes)

Name of the Commodity	2007-08	2008-09	2009-10	2010-11	2011-12
Building Material	899519(59.6)	835585(61.7)	1388365(75.6)	1492395(79.5)	1529401(46.2)
Fertilizers	2400(0.2)	-	-	7500(0.4)	-
Food items	4894(0.3)	42352 (3.1)	1434 (0.1)	9110(0.5)	15000(0.5)
Miscellaneous	193917(12.8)	42814(3.2)	145000(7.9)	41984(2.2)	22509(0.7)
Mix		-	-	-	1459428(44.1)
Ore/Minerals	68284(4.5)	96358(7.1)	25283(1.4)	2648(0.1)	550(neg.)
POL/POL products	341404(22.6)	337189(24.9)	277030(15.0)	324111(17.3)	281954(8.5)
Coal	-	-	-	-	1205(neg.)
Total NW I	**1510418(100.0)**	**1354298(100.0)**	**1837112(100.0)**	**1877748(100.0)**	**3310047(100.0)**

Note: Figure within brackets indicates percentage to the total.
Neg. - negligible

National Waterways No. II (The Brahmaputra)

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



12. The total cargo traffic on NW II has gone up to 24.06 lakh tonnes during 2011-12 from 21.64 lakh tonnes during 2010-11 reflecting an increase 11.18%. Commodity wise composition of cargo movement indicates that there is no single item with significant share on this waterway. The entire share of cargo moved on this waterway is of a mixed nature.

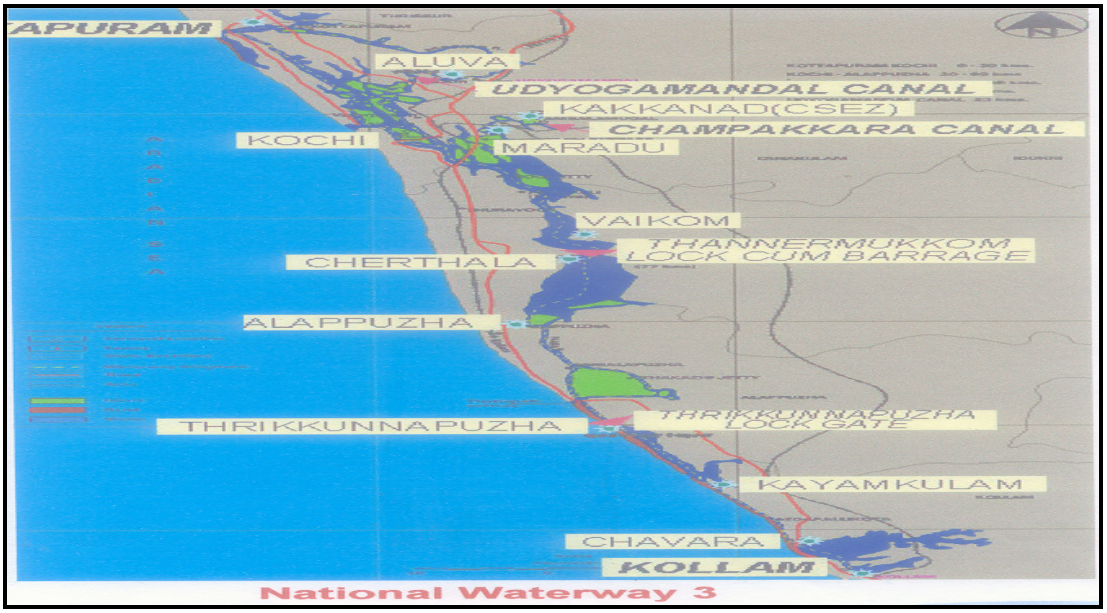
Table 4 : Composition of Cargo Moved on National Waterway - II (In Tonnes)

Commodity	2007-08	2008-09	2009-10	2010-11	2011-12
Building Material	2500(0.2)	5100(2.2)	745 (0.4)	-	-
Food items	-	-	336 (0.2)	600(neg.)	-
Miscellaneous	1298410(99.3)	225040(97.3)	182260(99.4)	2163145(100)	2406448(100.0)
Mix	-	-	-	-	-
Ore/Minerals	-	-	-	-	-
POL/POL Products	6679(0.5)	1169(0.5)	-	-	-
Total NW II	1307589(100.0)	231309(100.0)	183341(100.0)	2163745(100.0)	2406448(100.0)

Note: Figure within bracket indicates percentage to the total.
Neg. - negligible

The National Waterway No. III (West Coast Canal)

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



14. The total volume of cargo moved on National Waterway III has been fluctuating over the past few years. It has, however, gone up from 8.9 lakh tonnes in 2010-11 to 13.44 lakh tonnes in 2011-12 recording an increase of 51.0%. The cargo composition of freight traffic shows that Fertilisers, POL/POL products and food items were the major commodities moved through NW-III accounting for 23.0%, 10.4% and 9.8% respectively of the total cargo movement in 2011-12.

Table 5 : Composition of Cargo Moved on National Waterway - III (In Tonnes)

Commodity	2007-08	2008-09	2009-10	2010-11	2011-12
Chemicals	53319(7.9)	-	-	96804(11.0)	61005 (4.5)
Fertilisers	168083(25.0)	327824(42.8)	248917(37.3)	328468(37.1)	308807(23.0)
Food items	-	-	199400(29.9)	144740(16.3)	131720(9.8)
Mix	288678(42.9)	308218(40.2)	34868(5.2)	94067(10.6)	687946(51.2)
Ore/Minerals	136505(20.3)	44953(5.9)	52452(7.9)	59546(6.7)	15063(1.1)
POL/POL products	26542(3.9)	85219(11.1)	131560(19.7)	162069(18.3)	139229(10.4)
Total NW III	673127(100.0)	766214(100.0)	667197(100.0)	885694(100.0)	1343770(100.0)

Note : Figure within brackets indicate percentage to the total

15. The total cargo moved through all the three National Waterways (NW) increased by 43.3% to 70.60 lakh tonnes during 2011-12 compared with 49.27 lakh tonnes during 2010--11. In 2011-12, 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 46.9%, 34.1%, and 19.0% 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 95.1%, 4.0% 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 of 439 kms compared with an average distance of about 25 kms for NW II and average distance of 10 kms for NW III in the year 2011-12. Table 6 gives cargo movement of National Waterways in Tonnage and Tonne Kilometers.

Table 6 : Cargo Movement on National Waterways

Sl. No.	**Details of Waterway**	**Cargo Moved (lakh Tonnes)**		**Tonne Kms (in lakh)**	
		2010-11	**2011-12**	**2010-11**	**2011-12**
1	**National Waterway No. I**	18.77(38.1)	33.10(46.9)	12302(94.5)	14546(95.1)
2	**National Waterway No. II**	21.64(43.9)	24.06(34.1)	573(4.4)	613(4.0)
3	**National Waterway No. III**	8.86(18.0)	13.44(19.0)	142(1.1)	132(0.9)
	Total NWs	**49.27(100.0)**	**70.60(100.0)**	**13017(100.0)**	**15291(100.0)**

Source : Inland Waterways Authority of India for National Waterways

. Cargo handled in Kolkata-Bangladesh-Kolkata route is included in the traffic on National Waterway No.I. The route is a link between NW-I & NW-II through Bangladesh

Note : Figure within brackets indicate percentage to the total

16. The movement of Building material has shown significant increase and Fertilizer has shown decrease on the National Waterways in 2011-2012. The details of the commodities moved on the National Waterways may be seen from Table 7.

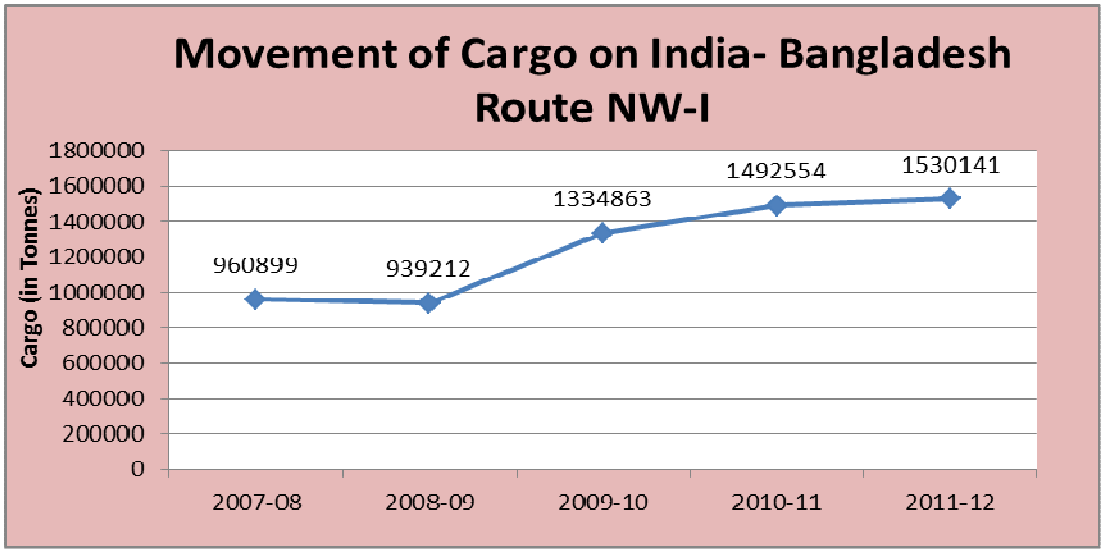
Table 7: Composition of Cargo Moved on national waterways (In tonnes)					
Commodity	2007-08	2008-09	2009-10	2010-11	2011-12
Building Material	902019(25.8)	840685(35.8)	1389110 (51.6)	1492395(30.3)	1529401(21.7)
Chemicals	53319(1.5)	-	-	96804(2.0)	61005(0.9)
Fertilisers	170483(4.9)	327824(13.9)	248917 (9.3)	335968(6.8)	308807(4.4)
Food items	4895(0.1)	42352(1.8)	201170 (7.5)	154450(3.1)	146720(2.1)
Miscellaneous	1492327(42.7)	267854(11.4)	327260(12.2)	2205129(44.7)	2428957(34.4)
Mix	288678(8.3)	308218(13.1)	34868 (1.3)	94067(1.9)	2147374(30.4)
Ore/Minerals	204789(5.9)	141311(6.0)	77735 (2.9)	62194(1.3)	15613(0.2)
POL/POL Products	374625(10.7)	423577(18.0)	408590 (15.2)	486180(9.9)	421183(6.0)
Coal	-	-	-	-	1205(0.0)
Total	3491135(100.0)	2351821(100.0)	2687650(100.0)	4927187(100.0)	7060265(100.0)
Note : Figure within brackets indicate percentage to the total					

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

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

Cargo carried on Indo -Bangladesh Waterway Route

17. Movement of cargo along India Bangladesh route of National Waterways I have shown growth of 2.5% in year 2011-12 over that in 2010-11. The cargo moved over this route has increased to 1530141 tonnes in 2011-12 against 1492554 tonnes in 2010-11. The graph inserted below depicts trend in cargo movement on India-Bangladesh route National Waterway-I during the years 2007-08 to 2011-12.



18. The table 8 shows the cargo and the main commodities carried on India-Bangladesh route on National Waterway-I during the years 2007-08 to 2011-12.

Table 8: Movement of Cargo (in Tonnes) on India- Bangladesh route of NW I*(Tonnes)

Route	2007-08	2008-09	2009-10	2010-11	2011-12	Commodities
India to Bangladesh	956324	939212	1334863	1492554	1530141	Flyash, Salt in bulk, Rice, Wheat POL, Coal, Slag Gypsum, HSD, Edible Oil, Iron Ingots
Bangladesh to India	4575	-	-	-	-	Cement, Bone crushed
Total	**960899**	**939212**	**1334863**	**1492554**	**1530141**	
***Data pertains to cargo carried on Indian registered vessels only.**						

TWO NEW NATIONAL WATERWAYS

19. Two new water ways have been declared by the Government as National Waterways.

(i) The Kakinada – Puducherry stretch of Canals and the Kaluvelly Tank; Bhadrachalam – Rajahmundry stretch of River Godavari and Wazirabad – Vijayawada stretch of River Krishna (NW-4, 1095 km); and

(ii) The Talcher –Dhamra stretch of river Brahmani, Geonkhali-Charbatia stretch of East Coast Canal, Charbatia-Dhamra stretch of Matai river and Mangalgadi- Paradip stretch of Mahanadi delta rivers (NW5,623 km Gazette notifications for both these waterways were published on 25.11.2008. Detailed Project Reports (DPR) for these new NWs is being prepared.

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

20. The stretches of the waterway (1095 kms) which has been declared as National Waterways (NW) are as follows:

(i) Godavari river from Bhadrachalam to Rajahmundry – 171km.

(ii) Krishna River from Wazirabad to Vijayawada- 157 km.

(iii) Kakinada canal from Rajahmundry-50 km.

(iv) Eluru canal from Rajahmundry to Vijayawada-139 km.

(v) Commamur canal from Vijayawada to Peddaganjam lock-113 km.

(vi) North Buckingam canal from Peddaganmjam lock to Chennai-34 km.

(vii) South Buckingham canal from Chennai to Mercanum-103; and

(viii) Kaluvelli tank from Mercanum to Puducherry-22km.

21. The waterway is located in the States of Andhra Pradesh (888Km), Tamil Nadu (205 km) and Union Territory of Puducherry (2 Km). Out of 1095 km, 50 km stretch within Chennai city (from Ennore to Muthukadu) is not envisaged for development due to encroachment of canal. This waterway runs through rural and Urban centres like Chennai, Vijayawada, Rajahmundry, Kakinada, Eluru, Bhadrachalam &Wazirabad and hence provide a vital link between rural areas and Urban centres Besides bulk cargo namely coal, cement fertilizers etc. it would help movement of agriculture products from rural area to Urban centres and industrial goods from Urban centres to rural areas. Further it also connects sea ports of Kakinada, Krishnapatnam, Ennore and Chennai and will facilitate import/export of cargo from/to hinterland. The waterway is proposed to be developed with 32 m wide and 1.8m deep navigational channel for Godavari river, Krishna river and North and South Buckingham canal while for Kakinada, Eluru and comamur canals with 14 m wide and 1.6m deep navigational channel The Estimated Cost of development of National Waterways at 2008-09 prices is (Rs. 1372 crore).

22. The Government of Andhra Pradesh has suggested for making availability of water in rivers and Irrigation canals for 330 days in a year for navigation. After the construction of dams at Polavaram in Godavari and Pulichinthala in Krishna by the year 2014-15, the development of waterway in Andhra Pradesh has been planned in two Stages as given below:-

23. Under stage I, 583 km of water way will be completed by the year 2013-14. Stage II works will be taken up after completion of construction of dams at Polavaram across Godavari river and at Pulichintala across Krishna river. Under Stage-II, 462km of waterway will be completed by the year 2016-17.

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

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

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

(i) East Coast Canal (Geonkhali-Charbatia)	217km.
(ii) Matai River (Charbatia- Dhamra)	40 km.
(iii) River Brahmani (Talcher-Dhamra)	265 km.
(iv) Mahanadi delta river (Mangalgadi-Paradip)	101 km.
Total.	**623 km.**

26. The waterway is located in the States of West Bengal (91) km) and Orissa (523km). For Brahmani- Kharsua-Dhamra River, Matai river and Mahanadi delta portion (406 km), the waterway is proposed to be developed with 45 m wide and 2m deep navigational channel while for East Coast Canal portion (217 km), with 32 m wide and 1.5 deep navigational channels. Developmental works envisaged are as follows:

(i) Widening of narrow canal
(ii) Dredging, Excavation
(iii) Bank protection
(iv) Construction of barrages in Brahmani river at 5 placed
(v) Repair of locks
(vi) Modification of bridges & roads
(vii) Navigational aids
(viii) Setting up of IWT terminals (all terminals are in Orissa)

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

CENTRAL INLAND WATER TRANSPORT CORPORATION (CIWTC LTD)

27. Central Inland Water Transport Corporation Ltd. (CIWTC) was established as a Government of India undertaking in the year 1967. (CIWTC took over the assets and liabilities of the River Steam Navigation Company Ltd. which was looking after Inland Water Transport services on river Barak). It is primarily responsible for transportation of cargo through inland waterways spread across Kolkata-Bangladesh-Assam and Allahabad-Haldia-Budge. It is operating on different routes on National Waterways- I and II including the protocol routes through Bangladesh and other parts of the country in Eastern and Northern India.

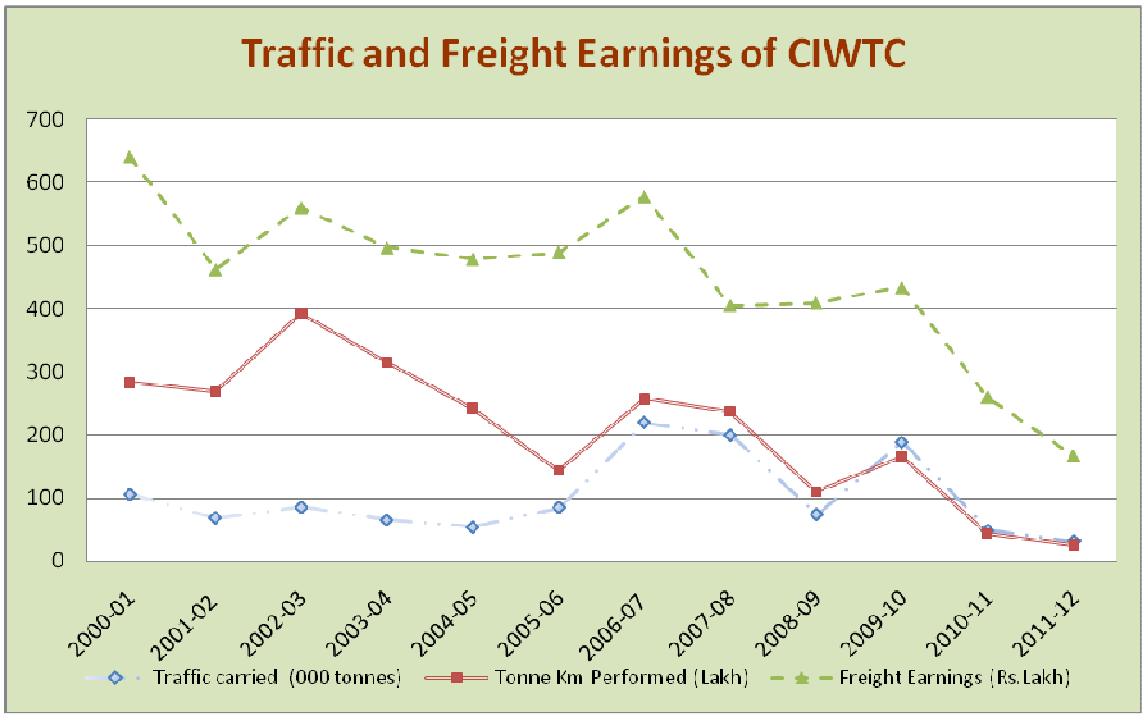
28. CIWTC Ltd. has three main divisions, viz. River services Division (RSD), Rajabagan Dockyard (RBD) and Deep Sea Ship Repair (DSSR).

i) River Services Division (RSD) 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).

ii) The Rajabagn Dockyard (RBD), whose main factory establishment is located at Kolkata, is engaged in ship building, ship repair and general engineering activities.

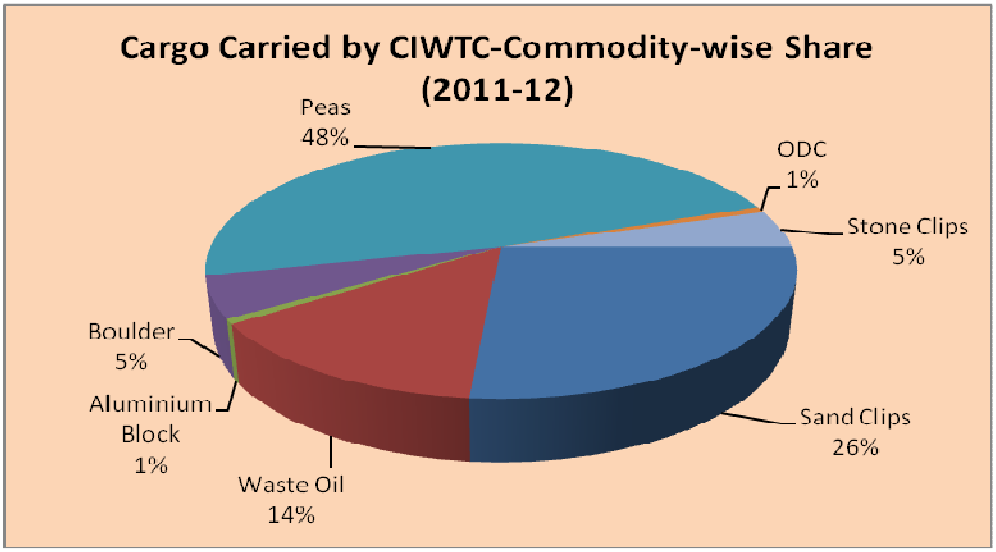
iii) The Deep Sea Ship Repair Division (DSSR) located at Kolkata undertakes repair of ocean going vessels for outside agencies.

29. The cargo carried by CIWTC decreased by 36.1% in the year 2011-12 to 31243 tonnes against 48882 tonnes in 2010-11. The total freight earnings have also gone down by 35.4% from Rs. 260.39 lakh in 2010-11 to Rs.168.34 lakh in 2011-12. The non-commodity earnings of CIWTC showed a downward growth of (-) 32.4% as it slipped to Rs. 124.86 lakh in 2011-12 from 184.82 lakhs in 2010-11. Following graphs gives a picture of long term trend in traffic and earning of CITWC.



30. The maximum cargo carried during 2011-12 was on the Saugar/Haldia Diamond Harbour-Kolkata route with freight volume of 15235 tonnes, freight earnings of Rs. 17.25 lakh and performance of 12.03 lakh tonne kms. The cargo carried and freight earned on this route, however, registered a decline of 27.5% and 46.9% respectively in 2011-12 over the previous year.

31. Haldia-Internal route had second largest share of 26.4% in cargo carried (8250 tonnes) by CIWTC on different routes in 2011-12. Commodity wise share in cargo carried by CITWC in 2011-12 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.

Table 9: Number of Inland Water Vessels and Cargo Carried – State wise

State/UT	Number of Vessels				Volume of Cargo Carried (thousand tonnes)			
	2008-09	2009-10	2010-11	2011-12	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	111	111	111	111	…	…	…	…
Assam	240		…	209	865.15	…	…	37.72
Bihar	21	21	21	138	…	…	…	2.40
Goa	191	193	188	172	11901.32	13897.38	14563.49	14469.90
Karnataka	49	39	39	473	159.00	986.75	1033.80	3887.00
Kerala	9230	9756	13495	5513	5129.01	5092.08	5285.56	5756.12
Maharashtra	662	691	781	603	9963.00	12510.00	14870.00	19950.00
Orissa	155	260	281	279	…	…	…	…
West Bengal	2321	2484	2561	2635	3644.00	17705.00	9987.00	9996.00
TOTAL (reporting states)	**12980**	**13555**	**17477**	**10133**	**31661.48**	**50191.21**	**40739.85**	**54099.14**

… Not Available

PERFOMANCE OF COMPANIES ENGAGED IN IWT

33. The data received from 26 IWT companies shows that amongst the private companies the maximum number of cargo vessels were held by the Sesa Goa Ltd., Goa followed by Sanghi Brothers (Indore) Pvt.Ltd. AND Vivada Inland Waterways Ltd. Kolkata. The Maximum cargo of 6933.72 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 2011-12 is given below in Table 10.

Table 10 : Top ten Private Companies Cargo moved and Vessels Operated 2011-12

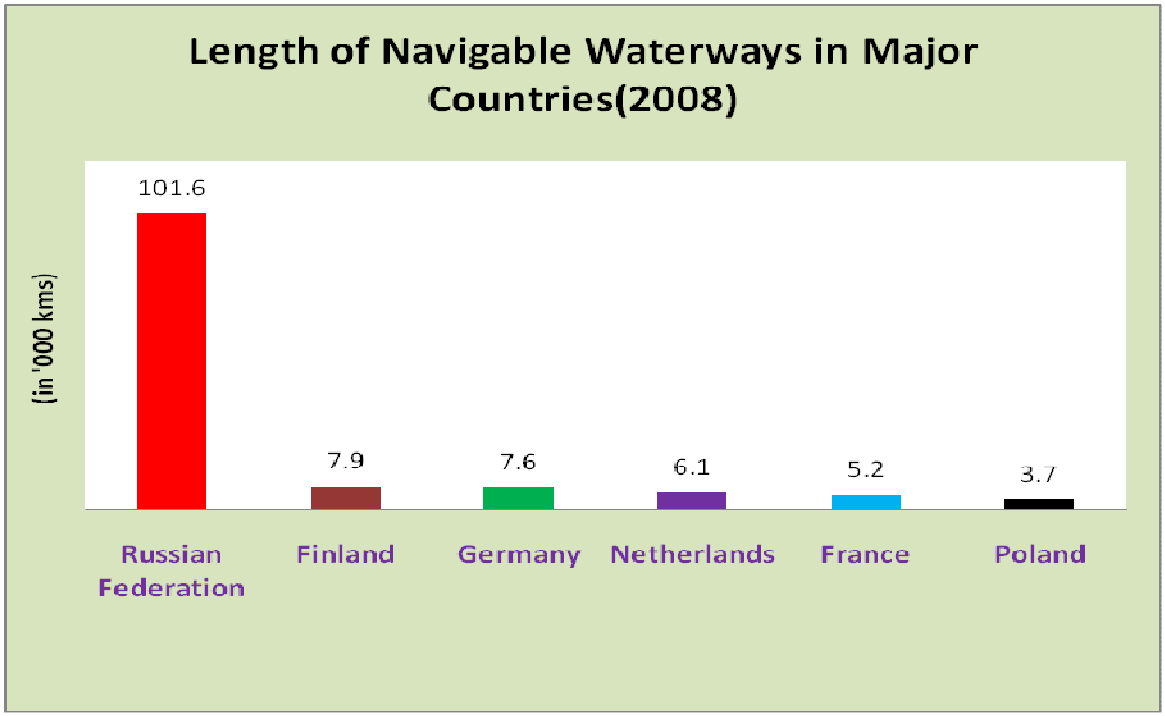
Name of the Company	No. of Vessels	Cargo moved ('000 tonnes)
1. Sesa Goa Ltd. Goa.	23	6933.72
2. S.V.Salgaocar, Goa	3	962.40
3.D.V.Salgaocar, Goa	3	948.00
4. VIVADA Inland Waterways Ltd,kolkata	14	794.59
5. Sesa Resources Ltd Goa	3	793.30
6. V.M. Salgaocar Sales International	2	693.60
7.Costa River Transport Pvt. Ltd.,Goa	3	353.90
8. Sociedade De Fomento Ind Ltd,Goa	2	194.92
9. Rashmi Ore Carriers Pvt Ltd	1	151.96
10. Mayar Shipping Pvt Ltd	1	104.34

INLAND WATERWAYS TRANSPORT ACCIDENTS

35. The total number of accidents on inland waterways during the year 2011 were 687 out of which 232 were reported in Chhattisgarh followed by Uttar Pradesh with 119 accidents. The numbers of deaths due to boat mishaps were highest in Chhattisgarh at 232 followed by Uttar Pradesh at 143 during the year. A striking feature observed (Table No. 7.1) is that the number of persons killed are more in all the States 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	2011-12	
			Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
1	**ANDHRA PRADESH**			
	(i)	Godavari	1530	171
	(ii)	Krishna	386	35
	(iii)	Others **	585	585
		Total	**2501**	**791**
2.	**ASSAM**			
	(i)	Brahmaputra	2800	891
	(ii)	Barak	900	152
	(iii)	Subansiri	…	111
	(iv)	Dhansiri	…	26
	(v)	Lohit	…	132
	(vi)	Gangadhar	…	112
	(vii)	Sonkosh	…	48
	(viii)	Manas	…	48
	(ix)	Aai	…	64
	(x)	Beki	…	56
	(xi)	Nakhonda	…	41
	(xii)	Pahumara	…	40
	(xiii)	Pagladia	…	40
	(xiv)	Borolia	…	24
	(xv)	Puthimari	…	64
	(xvi)	Dikrang	…	41
	(xvii)	Rangandi	…	45
	(xviii)	Kapil	…	102
	(xix)	Dehing	…	160
	(xx)	Katakhal	…	160
	(xxi)	Sonai	…	48
	(xxii)	Amguri	…	16
	(xxiii)	Mahura	…	32
	(xxiv)	Badri	…	25
	(xxv)	Chiri	…	42
	(xxvi)	Jiri	…	64
		Total	**3700**	**2584**
3.	**BIHAR**			
	(I)	Damodar	...	...
	(ii)	Ganga	510	510
	(iii)	Gandak	323	300
	(iv)	Koshi	236	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
		Total	**3789**	**1391**

Table No. 1.1 (Contd...)

Navigable Waterways in India

(In Kms.)

Sl. No.		State/Rivers/Canals/Lakes	2011-12	
			Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
4		**GOA**		
	(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
		Total	**258**	**202**
5		**GUJARAT**		
	(i)	Narmada	161	130
	(ii)	Tapti	140	15
	(iii)	Ambica	136	20
	(iv)	Auranga	75	4
	(v)	Purna	141	13
	(vi)	Rukmavati	60	2.3
		Total	**713**	**184.3**
6		**KARNATAKA**		
	(i)	Sharavathi	80	27
	(ii)	Tungabhadra	375	375
	(iii)	Malaprabha	230	230
	(iv)	Ghataprabha	160	160
	(v)	Krishna	325	325
	(vi)	Cauvery	270	34
	(vii)	Kabini	117	22
	(viii)	Gurupur	80	20
	(ix)	Gangolli	48	20
	(x)	Bheema	860	125
	(xi)	Udyavara	37	14
	(xii)	Netravathi	96	26
	(xiii)	Kali	184	29
		Total	**2862**	**1407**
7		**KERALA**		
	(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

Table No. 1.1 (Contd...) **Navigable Waterways in India**

(In Kms.)

Sl. No.		State/Rivers/Canals/Lakes	2011-12	
			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	…
		Total	**3092**	**845.2**
8	**MAHARASHTRA**			
	(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 Kharpada)	11	6.5
	(xvi)	Kundalika River	16	16
	(xvii)	Mandad River(Rajpuri to Mandad)	14	10
	(xviii)	Mhasla River(Turmad to Mhasla)	9	5
	(xix)	Vashisti River(Dabhol to Govalkot)	45	38
	(xx)	Jagbudi River(Karambavne to Khed)	20	20
	(xxi)	Shastri River/Jaigad Creek(Jaigad to	45	40
	(xxii)	Rajapur River(Musakazi to Rajapur)	30	30
	(xxiii)	Vagothan River/Vijaydurg	38	22
	(xxiv)	Gad Riv er(Kalaval Creek)	13	7
	(xxv)	Terekhol River/Creek(Terekhol to Banda)	28	28
	(xxvi)	Karli River(Malva)	23	13
	(xxvii)	Others	129	105
		Total	**631**	**462**

Table No. 1.1 (Contd...)

Navigable Waterways in India

(In Kms.)

Sl. No.		State/Rivers/Canals/Lakes	2011-12	
			Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
9	**ORISSA**			
	(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 **	…	462
		Total $	**1378**	**1650**
10	**TAMIL NADU**			
	(i)	North Buckingam Canal	58	…
	(ii)	Central Buckingam Canal	7	…
	(iii)	South Buckingam Canal	105	…
		Total	**170**	…
11	**UTTAR PRADESH*** **			…
	(i)	Gomti	960	…
	(ii)	Rapti	778	…
	(iii)	Ghaghra	1116	…
	(iv)	Ganga	2345	425 #
	(v)	Sai	760	…
	(vi)	Tons	485	…
		Total	**6444**	
12	**WEST BENGAL**			
	(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	2011-12	
			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
		Total	**4741**	**4593**
13	**NAGALAND*** **			
	(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
		Total	**937**	**375**
14	**MIZORAM**			
	(i)	R. Tlawng (Dhaleswari)	238	81
	(ii)	R. Kolodyne (Chhimtuipui)	196	22
	(iii)	Khawthlang Tuipui	134	17
	(iv)	R. Tuichawrg	167	19
		Total	**735**	**139**

** Including Canals.

*** Relates to 2007-08

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

… : Not avaialable

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 navigable length of canals is provided.

Source: IWT Dierctorate of states & IWAI.

Table No. 1.2

Infrastructure Facilities Available on National Waterways (As on 31-3-2012)

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
National Waterway No.1							
1. Haldia - Farakka (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) and	-	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
2. Farakka - Patna	2.0	(i) Rajmahal(Manglaghat)	600	One(Floating)	-	-	Being used for embarking/disembarking of tourists.
(460 km)		(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.
3. Patna-Varanasi (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.
4. Varanasi-Allahabad	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.
(237 km)		(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.

5) For providing Differential Global Positioning System (DGPS) connectivity on the entire waterway, DGPS stations were planned to be set up at Swaroopganj (WB), Bhagalpur (Bihar), Patna (Bihar), and Varanasi (UP). Out of these, the one at Bhagalpur has been commissioned. DGPS stations at Swaroopganj and Patna would be commissioned in 2011-12. The construction of DGPS station at Varanasi is to be taken up

Table No. 1.2 (Contd...)

Infrastructure Facilities Available on National Waterways (As on 31-3-2012)

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
National Waterways No. 2							
1. Bangladesh Border-Pandu (255 km)	2.5	(a) Dhubri	600	One(floating)	Crane prontoon	-	Storage facillity is being developed.
		(b) Jogighopa	600	One(floating)	Crane prontoon	Open storage facility available	DGPS station is commissioned
		(c) Pandu	600	One(low level RCC jetty)	one container crane of 75 T capacity, two tyre mounted crane of 20T capacity	2 transit sheds of 75x21m each	Construction of one high level jetty is under progress.
2. Pandu-Neamati (374 km)	2.5	(d) Tezpur	600	One(floating)	Crane prontoon	-	
		(e) Silghat	600	One(floating)	-	Open storage facility available	DGPS station is being setup.
		(f) Neamati	600	One (floating)	Crane prontoon	-	
3. Neamati-Dibrugarh	2.0	(g) Bogibil	600	One (floating)	-	-	
(139 km)		(h) Matmara (Opp. Bogibil)	600	One (floating)	-	-	
		(i) Sengjan/Panbari	600	One (floating)	Crane prontoon	-	
4. Dibrugarh-Sadiya (Oriumghat)	1.5	(j) Oakland/ Dibrugarh	600	One(floating)	-	-	DGPS station is commissioned.
(123 km)		(k) Oriumghat	600	One (floating)	-	-	

Note:

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 Oriumght/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. Ouy of these locations, DGPS station at Jogighopa has been commissioned.

Table No. 1.2 (Contd...)

Infrastructure Facilities Available on National Waterways (As on 31-3-2012)

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
National Waterways No. 3							
1. Kochi-Kottapuram (34 km)	1.2	(a) Kottapuram	350.0	One fixed	One 18 T crane & 3 T Fork lift	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 & 3 T Fork lift	400 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 & 3 T Fork lift	400 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(d) Kakkanad (CSEZ)			-	-	Only Land for terminal acquired
4. Kochi-Alapuzha (63 km)	2.0	(e) Vaikkom	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(f) Chertala	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(g) Alapuzha					The terminal is under construction
5. Alapuzha-Kollam (71 km)	1.5	(h)Trikunnapuzha	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 Sqm storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
		(I)Kayamkulam	350.0	One fixed	One 18 T crane & 3 T Fork lift	400 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 & 3 T Fork lift	300 Sqm covered storage (20m x 20m) and open storage (approx. 1500-2000 Sqm)	
6. CPT Area	2.2	(l) willingdon island	12 TEU	one berth for container vessels	5 T Crane through agency	5000 sqm open storgae	These terminals have been constructed for container movement to ICTT, Operation commenced w.e.f. 23.02.2011.
		(m) Bolgatty island	12 TEU	one berth for container vessels	40 T Crane through agency	8000 sqm open storgae	

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 31-3-2012)

Sl. No.	Navigational Channel	Depth (Meters)	Availability and Capacity of Terminals					
			Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
1	**ANDHRA PRADESH**	NIL	NIL	NIL	NIL	NIL	NIL	NIL
2	**BIHAR**	2 metres	(I) (a) Sahebganj-Manihari	134'x31'	2 Nos.	Nil	Nil	-
				80'x15'x7"	1 Nos.	Nil	Nil	-
				55x13'3"x4'8'	1 Nos.	Nil	Nil	-
			(II) Kahalgaon-Tintanga	60'x16'x6'	2 Nos.	Nil	Nil	-
			(III) Sultanganj - Agwani	70'x18'x6'	2 Nos.	Nil	Nil	-
			(IV) (a) Munghyr-Raighat	56'x14'x6'	1 Nos.	Shore crane-2 Pontoon crane-2 Container crane-1		-
				58'x16'x5'8	1 Nos.			
				47'x13'x5'8	1 Nos.			
				60'x16'x5'5'	1 Nos.		Godown	
			(V) Buxar-Ujirghat	-	-	-	-	At IWAI terminal
3	**GOA**							
	Panaji Port (River Mandoi)	3 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**							
	Balugaon Sector							
	Balugaon-K.Prasad	Varies between 2 to 10 metres	Lake Chilka	30 ft and above	2	-	NA	Passenger waiting hall & Jetty are available at Balugaon. The Repair of ole jetties has also been completed. The 2nd Jetty at Balugaon is newly constructed during 2011-12 undee RIDFscheme. The Jetty and waiting Hall at Krishna Prasad has already been completed under RIDF scheme during 2011-12
	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 at present which is constructed under RIDF scheme during 2011-12.
	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-	Berthing & landing facilities are available at Satapada. No waiting hall is availing for the passengers at present.

Table No. 1.3 (Contd...)

Infrastructure Facilities Available on State Waterways (As on 31.3.2012)

Sl. No.	Navigational Channel	Depth (Meters)	Availability and Capacity of Terminals					
			Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
	Astarang Sector							
	Nuagarh-Sribantpur	2 to 10 Metres	River Devi	26 ft	3	-	-do-	Jetty & Wating hall is available for the services of passenger.
	Chandabali Sector							
	Chandbali-Rajnagar	Varies between 7 to 10 metres	River Baitarani/ Brahmani	52 ft	13	-	-do-	Jetty & waiting hall are available at Chandbali. The Waiting hall and Jetty at Rajnagar completed during 2011-12 under RIDF scheme. Jetty at Nalitapatia, Chardia and Chandabali completed UNDER RIDF scheme during 2011-12.
	Chandbali-Talucha	Varies between 7 to 20 metres	Baitarani/Kharastrota/ Brahmani	50 ft	10	-	-do-	Waiting Hall at Chardia completed in all respect. The repair work of Waiting Hall at Chandabali is expected to be completed during 2012-13 under state plan scheme.
	Chandbali-Aradi	Varies between 7 to 18 meters	Brahmani	35'	3		-do-	Both Jetty and waiting hall is available at Aradi. Both the structures require repair & renovation.
6	**TAMILNADU**	41.46	Thekkady	Vessel 1 (kannagi) length - 8.5 m Breadth - 3m Depth - 1.4 m Vessel 2 (jalratna) length - 11.5 m Breadth - 2.4m Depth - 1.6 m	- - - -			-
7	**NAGALAND****							
	1. Tiru River	1.5 to 8	Lpmgmatra - Pursutsu Phokungri	-	-	-	-	Under survey.
8	**MIZORAM #**							
	1. R. Tlawng	1.4	(a) Sairang	10 Tonnes Power Vessel	1	-	RCC Building	-
	2. R. Tlawng	1.2	(b) Bairabi	10 Tonnes Power Vessel	1	-	RCC Building	-

Data not received. ** pertains to 2007-08 # pertains to 2008-09
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)	
			2010-11	2011-12	2010-11	2011-12
1	2	3	4	5	6	7
1	National Waterway No. I (Allahabad-Haldia stretch of Ganga – Bhagirathi – Hooghly river system)	1620	18.77	33.10	12302	14546
2	National Waterway No. II (Sadiya-Dhubri stretch of Brahmaputra River system)	891	21.64	24.06	573	613
3	National Waterway No. III (Kollam-Kottapuram stretch of West Coast Canal along with Champakara Canal and Udyogmandal Canal)	205	8.86	13.44	142	132
	Sub Total NWs	2716	49.27	70.60	13017	15291
4	Goa Waterways	202	553.82	434.69	23853	19009
5	Maharashtra Waterways	453	148.70	199.50	3389	3798
	Grand Total	**3371**	**751.79**	**704.79**	**40259**	**38098**

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)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
A.	**CIWTC(^)**					
1	Haldia-Budge-Budge	74	3300	8650	4400	POL, Waste Oil
2	Kolkata-Bangladesh *	790	545	...	...	Flyash,Slag,
3	(I)Saugar-Diamond Harbour/Haldia /Kolkatta/ Kolkatta Internal	144/80	140766	21000	15235	Pulses,Logs,Salt,Iron Ore,Steel, Fly Ash,Aluminium block, Fertilizer, Container, ODC
4	Kolkata-Karimganj-Badarpur	1218	2043	2050	...	Fly ash, Food Grains
5	Jogighopa-Badarpur	1089	550	...	...	Cut Bamboo
6	Haldia-Gorma Island	30	41841	17182	1650	Boulder
7	Patna-Kolkata	530	...	...	1500	Stone-Chips
8	Haldir-Internal	2	...	...	8250	Sand, Clips
9	Haldir-Jamuria	1096	...	...	208	ODC
	Sub Total (A)		**189045**	**48882**	**31243**	
B.	**VIVADA IWL**					
1	Haldia-Kolkata	100	...	34104	...	HSD/FO/LDO
2	Haldia-Budge-Budge	78	209236	100972	109630	FO, LDO, HSD
3	Haldia-Kantapukur	104	10955	...	...	FO
4	Haldia-NSD	...	...	105916	66245	LO,HSD, Lube Oil
5	Haldia-Surinam	48	...	...	2088	FO
6	Budge-Budge-NSD	...	...	6727	4513	MSD, HF
7	Budge-Budge-Surinam	48	49608	2443	249	FO, HSD
8	Budge-Budge-KPD	...	...	767	245	FO, HSD
9	Budge-Budge-Haldia	78	3931	...	...	LDO
10	Haldia-Namkhana	...	...	2515	4343	HF, HSD
11	Budge-Budge-Pujali	5	...	843	...	LDO
12	Haldia-Birth	4	...	19747	...	HSD
13	Haldia-Haldia Oil Jetty	4	...	49159	70600	FO
14	Surninam-KPD	4	...	80	70	FO
15	Surninam-NSD	1	...	288	79	HSD, HF
16	Haldia-HOB	2	...	...	23622	
17	KPD-KPD	1	...	...	270	
	Sub Total (B)		**273730**	**323561**	**281954**	

* : The route is a link between NW-I & NW-II through Banagladesh.
Cargo handled in this route is taken in NW-I.
^ : Data for the year 2009-10, 2010-11 and 2011-12 is taken from monthly returns.

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
C.	**OTHER PRIVATE OPERATORS**					
1	**TIRUPATI VESSEL(P)LTD.**					
1	Kolkatta-Mongla (Bangla desh)		7034	5582	-	Flyash
2	Kolkatta-Khulna (Bangla desh)	507	45288	54478	90062	Flyash
3	Kolkatta-Narayanganj (B'Desh)	894	361146	325106	233722	Flyash
2	**RELIANCE EXPORT CORPORATION**					
1	Kolkata-Narayanganj(B'Desh)	894	9233	21939	16244	Flyash
2	Haldia-Narayanganj(B'Desh)	836	10534	8244	1106	Flyash
3	Kolkatta-Khulna (Bangla desh)		...	616	-	Flyash
4	T.T.Shed-Narayanganj	896	-	-	710	Flyash
3	**Maitrayee Shipping & Logistics**					
1	Kolkatta-Khulna (B'Desh)	507	8711	9062	14006	Flyash
2	Kolkatta-Narayanganj (B'Desh)	894	41629	83260	63886	Flyash
3	Haldia-Khulna(B'Desh)	446	6440	...	...	Flyash
4	Haldia-Narayanjung (B'Desh)	758	15945	...	...	Flyash
5	Haldia-Karimganj	1253	...	590	...	Spnoge Iron
6	IWAI BISN Jetty-Narayanganj	895	...	...	8588	Flyash
7	Kolkatta (SR Jetty)-Naryanganj	910	...	...	760	Flyash
8	IWAI BISN Jetty-Khulna	532	...	...	3637	Flyash
4	**P K Shipping**					
1	Kolkata-Khulna (B. Desh)	507	1308	808	770	Flyash
2	Kolkata-Narayanganj(B. Desh)	894	138017	145597	149444	Flyash, Slg, MS wired rod
3	Kolkatta-Karimgung	1318	980	...	...	Flyash
4	T.T.Shed-Ashuganj	1048	...	...	867	Steel Shed
5	NSD Kolkatta-Narayanganj	895	...	...	1223	Flyash
6	Kolkatta-Mongla (Bangla desh)	494	...	...	996	Flyash
7	NSD Kolkatta-Ashuganj	1046	...	...	5591	ODC Kargo
5	**SOHOM COMMERCIAL**					
1	Kolkata- Khulna(B' Desh)	424	881	...	...	Flyash
2	Kolkata-Narayanganj (B' Desh)	894	47106	26853	1155	Flyash
3	Kolkatta(Sri Ram Jetty)-Narayanganj	910			10923	Flyash
4	T.T.Shed-Narayanganj	896			3624	Flyash
6	**RENAISSANCE IMPEX Pvt Ltd**					
1	Kolkata-Narayanganj (B'Desh)	894	41541	44392	15841	Slag,Flyash,MS wire Rod
2	Haldia-Khulna(B. Desh)	446	4518	...	...	Flyash
3	Haldia-Narayanganj	780	12999	5983	...	Flyash, Slag
4	IWAI BISN Jetty-Narayanganj	895	...	...	28875	Flyash
5	IWAI BISN Jetty-Mongla	519	...	...	864	Flyash
6	IWAI BISN Jetty-Karimganj Assam	1367	...	...	405	Flyash
7	Sri Ram Jetty-Narayanganj	897	...	...	31230	Flyash
8	Sri Ram Jetty-Khulna	528	...	...	1778	Flyash
9	Karimganj Assam-IWAI BISN Jetty	1367	...	...	172	Coal
10	Kolkatta(T.T.Shed)-Narayanganj	896	...	...	25651	Flyash
11	Kolkatta-Khulna	507	...	...	1320	Flyash

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
7	**Rivering Shipping & Logistics**					
1	Kolkata-Narayanganj	894	782	...	20693	Flyash
2	Kolkatta-Pandu	1518	926	...	...	Flyash
3	Kolkatta (BISN Jetty)-Narayanganj	895	...	...	1270	Flyash
4	Kolkatta(BB)-Khulna	507	...	...	3837	Flyash
5	IWAI Haldia Jetty-Khulna	44	...	...	2513	Flyash
6	IWAI Haldia Jetty-Narayanganj	836	...	...	2699	Flyash
8	**GLOBAL SHIPPING**					
1	Kolkata-Khulna	507	1959	7401	3216	Flyash
2	Kolkata-Narayanganj(B' Desh)	894	18198	9247	2757	Flyash
3	Haldia-Mongla(B' Desh)	413	2323	680	...	Flyash
4	Kolkata-Mongla(B' Desh)	494	9814	11937	1546	Flyash
5	Haldia-Narayanganj(B' Desh)	780	1268	...	...	Flyash
6	IWAI BISN Jetty-Khulna	532	...	...	9880	
7	IWAI BISN Jetty-Narayanganj	895	...	...	1848	
9	**COASTAL CONNEXIONS**					
1	Kolkata-Narayanganj(B' Desh)	894	64342	46321	25812	Flyash
2	Haldia-Narayanganj	780	5966	7918	...	Flyash
3	Haldia-Khulna	446	7972	3810	...	Flyash
4	Kolkata-Khulna	507	...	17861	5325	Flyash
5	IWAI BISN Jetty-Narayanganj	895	...	...	8738	Flyash
6	IWAI BISN Jetty-Khulna	532	...	...	4299	Flyash
7	IWAI Haldia Jetty-Khulna	449	...	...	5023	Flyash
8	IWAI Haldia Jetty-Narayanganj	836	...	...	7928	Flyash
10	**KANISHKA SHIPPING LINES**					
1	Kolkata-Narayanganj(B' Desh)	758	19817	18818	...	Flyash
2	Haldia-Narayanganj(B' Desh)	780	767	...	...	Flyash
3	Kolkata-Khulna(B' Desh)	424	3944	...	...	Flyash
4	IWAI Haldia Jetty-Narayanganj	836	...	...	36923	Flyash
5	Sri Ram Jetty-Narayanganj	897	...	...	11380	Flyash
6	IWAI BISN Jetty-Narayanganj	895	...	...	4099	Flyash
7	T.T.Shed-Narayanganj	896	...	...	200	Tyres
11	**Eastern Navigation Pvt Ltd., Kolkatta**					
1	Kolkatta-Zamania	1065	1216	311	1415	ODC Cargo
2	Kolkatta-Barh	751	286	...	...	Boiler Drum, Stator(ODC)
3	Kolkata- Ballia	923	1116	5660	2306	ODC (NW1)
4	Kolkatta-Fatua	854	690	1551	...	Flyash, Boiler Drum, Stator(ODC)
5	Haldia-Ashuganj	933	...	...	300	ODC (NW1)
6	Kolkatta-Bhaktiyarpur	928	...	...	1776	ODC Cargo
7	Haldia-Balia	1028	...	...	1258	ODC (NW1)
8	Haldia-Zamania	1170	...	...	1177	ODC (NW1)
9	Haldia-Karimganj, Assam	1284	...	...	842	ODC (NW1)
12	**A.K.Navigation**					
1	Kolkata- Narayanganj	894	4025	4553	3190	Flyash
2	Kolkatta-Khulana	507	1703	...	4081	Flyash
3	Haldia-Narayanganj	836	...	3228	701	Flyash
13	**Desha International**					
1	Haldia- Narayanganj		176611	194619	...	Flyash
2	Kolkata-Narayanganj	894	208097	229550	151056	Flyash, Coal Durt, Slag, Coal
3	Haldia-Khulna		10750	13867	...	Flyash
4	Kolkatta-Khulana	507	7055	18484	13212	Flyash
5	Kolkatta-Mongla		780	...	...	Flyash
6	Haldia-Mongla		685	...	...	Flyash
7	IWAI Haldia Jetty-Narayanganj	836	...	...	123831	Flyash

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
8	IWAI Haldia Jetty-Khulna	449	...	...	11981	Flyash
9	Sri Ram Jetty- Khulna	528	...	...	1025	Flyash
10	IWAI BISN Jetty-Karimganj	1367	...	...	1655	Flyash
11	IWAI BISN Jetty-Narayanganj	895	...	...	7071	Flyash
12	IWAI BISN Jetty-Khulna	532	...	...	600	Flyash
13	Sri Ram Jetty-Narayanganj	897	...	...	10646	Flyash
14	T.T.Shed-Narayanganj	896	...	...	5854	Iron Ore Fines, Flyash
15	Karimganj Assam-IWAI BISN Jetty	1367	...	...	135	Coal
16	Karimganj Assam-T.T.Shed	1368			598	Coal
14	**Reliance Enterprise**					
1	Kolkata-Narayanganj	894	43049	34372	20883	Flyash
2	Haldia-Narayanganj	836	10005	4425	895	Flyash
3	Haldia-Khulna		1848	...	...	Flyash
4	Kolkatta-Khulna	507	3885	16678	4808	Flyash
5	Kolkatta-Mongla		580	...	...	Flyash
6	IWAI BISN Jetty-Narayanganj	895	...	...	2342	Flyash
7	T.T.Shed-Narayanganj	896	...	...	1115	flyash
15	**Saha Oversees Corporation**					
1	Kolkata-Narayanganj	894	...	84662	36617	Flyash
2	Kolkatta(T.T.Shed)-Narayanganj	896	...	...	13617	Flyash
3	Kolkattan(Sri Ram Jetty)-Narayanganj	910	...	...	33764	Flyash
4	IWAI BISN Jetty-Narayanganj	895	...	...	3903	Flyash
5	Kolkatta-Khulna	507	...	...	960	flyash
16	**C. Day & Brothers**					
1	Kolkata-Narayanganj	894	...	8520	32683	Flyash
2	Kolkatta-Khulna	507	...	1582	486	Flyash
3	Kolkatta(BISN Jetty)-Narayanganj	895	...	...	840	Flyash
4	Sri Ram Jetty-Narayanganj	897	...	...	4444	Flyash
5	IWAI Haldia Jetty-Narayanganj	836	...	...	34016	Flyash
6	Haldia-Khulna	449	...	...	5412	Flyash
7	T.T.Shed-Narayanganj	896	...	...	2738	flyash, Ironfines
17	**M/s Fortune Cargo (India Pvt Ltd)**					
1	Kolkata-Narayanganj	894	...	9553	33085	Flyash
2	Haldia-Narayanganj	805	...	2020	...	Flyash
3	IWAI BISN Jetty-Narayanganj	895	...	...	4117	Flyash
4	Kolkatta-Khulna	507	...	...	1402	Flyash
5	IWAI Haldia Jetty-Khulna	449	...	...	1883	Flyash
18	**Sea Water Transport Co. Pvt Ltd**					
1	Haldia-Narayanganj	805	...	1200	...	Flyash
2	Haldia-Mongla	405	...	1332	...	Flyash
3	Haldia-Khulna	418	...	2295	...	Flyash
4	Kolkatta BISN Jetty-Kulna	532	...	3813	1136	Flyash
5	IWAI Haldia Jetty-Khulna	449	...	...	4470	Flyash
19	**ABC India Ltd**					
1	Kolkata-Tejpur	1701	...	679	...	ODC (BO Route)
2	Kolkata-Ashuganj (B'desh)	998	...	1888	...	
20	**Krishna Shipping & Logistics**					
	Kolkata-Narayanganj	894	...	...	17863	Flyash
	T.T. Shed-Ashuganj	1048	...	...	622	Iron ingots
	IWAI BISN Jetty-Narayanganj	895	...	...	1110	Flyash
	Haldia-Narayanganj	836	...	...	13702	Fly Ash

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
21	**Neli**					
1	Kolkatta-Narayanganj	894	...	...	15428	Flyash
2	IWAI BISN Jetty-Narayanganj	895	...	...	1909	Flyash
22	**Ajbela Navigation**					
1	Kolkatta-Narayanganj	894	...	...	12307	Flyash
2	Kolkatta-Khulna	507	...	...	3472	Flyash
3	Kolkatta (S R Jetty)-Narayanganj	897	...	...	1186	Flyash
4	Kolkatta BISN Jetty-Narayanganj	895	...	...	701	Flyash
5	IWAI Haldia Jetty-Khulna	449	...	...	842	Flyash
6	IWAI Haldia Jetty-Narayanganj	836	...	...	7948	
23	**Marshal Corporation Ltd.**					
1	BISN Jetty-Karimganj	1367			569	Flyash
2	Karimganj Assam-IWAI Bisn Jetty	1367			300	Coal
24	**Spring Professional Services Pvt. Ltd**					
1	T.T.Shed, Kolkatta-Ashuganj	1048			306	Galvanised Steel Plain Sheet
25	**Triupati Vessels**					
1	Kolkatta-Ashuganj	998			722	ODC Cargo
26	**Reach Asia**					
1	Haldia-Balia	1028			629	ODC Cargo
27	**KOPT**					
1	Kolkatta-Sandheads	232			4975	
2	Kolkatta-Sagar	146			627174	
3	Kolkatta-Diamond Harbour	78			408749	
4	DH-KPD	78			69873	
5	Haldia-Sagar	39			330064	Log, Pluses, Magnese Ore, Petro Coke, Coal, Fert., Rock Phosphate, Iron Ore, Sugar
6	Haldia-BB	78			10175	
7	Budge Budge-Internal	5			72	
8	Kolkatta-Budge Budge	21			51	
9	KPD-Budge Budge	21			45	
	Sub Total (C)	**-**	**1363769**	**1501345**	**2994556**	

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
D	**IWAI Vessels**					
1	Rajmahal-Kolkata		...	300	...	achina Clay, SilicaSand
2	Haldia-Patna		...	...	...	Edible-Oil
3	Haldia-Karimganj		...	660	...	Bitumin, Edible-Oi
4	Kolkatta-Karimgunj		...	...	...	SoneSand
5	Sahibgunj-Patna		...	...	...	Iron-dust
6	Kolkatta-Pandu		...	300	...	TT Shed
7	Pandu-Kolkatta		...	313	...	Jute Bales
8	Sahibgunj-Patna		...	...	...	Stone chips
9	Sahibgunj-Patna		...	...	...	Stone chips
10	Kolkata-Ballia		...	...	...	ODC
11	Haldia-Patna		300	...	...	Edible Oil, ODC
12	Kolkatta-Karimganj		300	...	...	flyash
13	Haldia_Pandu		1134	300	...	Edibleoil
14	Patna-Kolkatta		283	...	...	Silicasand
15	Samdaghat-Patna		8551	2087	300	Stonechips
16	Samdaghat-Doriganj		...	...	1120	Stonechips
17	Chunar-Balia		...	...	574	Cement
18	Samdaghat-Munger		...	...	300	Stonechips
	Sub Total (D)	**-**	**10568**	**3960**	**2294**	
	Total (NW-I) (A+B+C+D)		**1837112**	**1877748**	**3310047**	

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

(In tonnes)

Sl. No.	River/Stretch	Approximate Distance (Kms)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
A.						
	CIWTC(^)					
1	Kolkata-Banladesh #	790	545	…	…	Fly Ash, slag
	Sub Total		**545**	**…**	**…**	
B.	**Other PVt.Operators**					
1	Silighat-Baghabari	590	…	…	…	HSD
2	Kolkata-Jogighopa	1392	166	…	…	Boiler with accessories,, Seprator(ODC)
3	Kolkata-Pandu	1535	237	…	…	Shed/Valve/Rubber(ODC)
4	Kolkata-Tejpur	1693	689	679	…	Main Shed (ODC), Main Volve Turbine Runner(ODC)
	Sub Total		**1092**	**679**	**…**	
C	**IWTD Assam***		….	1981723	1982360	Goods
D	**Unorganised Sector**		181168	180429	424088	Goods
E	**IWAI Vessel**					
1	Haldia-Guwahati	1470	…	300	…	Edible Oils
2	Kolkatta-Guwahati	1535	…	300	…	Foodgrains
3	Jagighopa-Badapur	1120	200	…	…	Bamboo
4	Pandu-Kolkata	1535	…	314	…	Jute Bales
5	Kolkata-Pandu	1535	336	**..**	**..**	Edibleoil
	Sub Total(C+D+E)		**181704**	**2163066**	**2406448**	
	Total (NW-II)(A+B+C+D+E)		**183341**	**2163745**	**2406448**	

^ : Data for the year 2009-10, 2010-11 and 2011-12 is taken from monthly returns.

: Also shown in movement on NW I.

*: 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)	2009-10	2010-11	2011-12	Cargo generally moved
1	2	3	4	5	6	7
A.	**CHAMPAKARA CANAL**					
1	**KSINC**					
	Cochin Port-FACT-CD	21.5	31195	65436	107122	Raw Sulphur, Rock Phosphate & Phosphoric Acid etc..
	BPCL Irumbanam-Ship Bunkring	16	…	…	1011	Furnace Oil
2	**LOTS Shipping & Trading**					
	Cochin Port-FACT-CD	21.5	121086	163431	41144	Raw Sulphur, Rock Phosphate & Phosphoric Acid & Stone aggregates
	Q10 Berth-CPT-Fact, CD	21	…	…	122077	Phopharic Acid
	ICTT-Cochin Shipyard	5			6	Container no. 1
	Irumbanam-Fact, PD (dist.in Ch. Canal)	11	…	…	4478	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	**Kerala Backwater Navigation**					
	Cochin Port FACT CD	21.5	37676	109536	20041	Rock Phosphate, Sulphur
	Sub Total	**-**	**189957**	**338403**	**295883**	
B.	**UDYOGMANDAL CANAL**					
1	**LOTS Shipping & Trading***					
	Cochin Port FACT-UD	20	163860	214430	35243	Zibframe, Sulphur, Furnance oil, Zinc
	BPCL/IOC FACT PD	14	14684	…	9843	Stone aggregate, Furnance oil
	Alwa MULAVUKADUD	10	6751	…	…	Aggregate
	BPCL FACT UD	20	…	306	8575	Phosphoric Acid, Furnace Oil
	Alwa-Pizhala, UD	10	…	35023	…	Aggregate
	BPCL Irumbanam- FACT UD	17	…	2128	…	Furnace Oil
	Bolgaty-W.Island	3.7	…	31694		Various Commodity
	Q10 CPT-Fact, UD	20	…	…	56554	Phospharic Acid, Sulphur
	Q5 Berth CPT-Binani Zing Ltd.	22	…	…	9707	Zinc.
	Q! Berth CPT-Binani Zinc Ltd.	25	…	…	3827	Zinc.
	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	…	…	1344	Furnace Oil
	South Coal Berth-Q10 Berth CPT	6	…	…	634	Furnace Oil
	South Coal Berth-Quter Roads	3	…	…	8343	Furnace Oil
	SCB-ICTT	4	…	…	1780	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	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	**KSINC***					
	Cochin Port-FACT UD	21	10169	22876	7653	Rock Phosphate , Sulphur, Phospharic Acid
	Q10 Berth, CPT-Fact UD	20	…	…	289	Phospharic Acid,
3	**Kerla Back watre Navigation**					
	Fact Willingdon Island Fact UD	20	22558	17034	…	Sulphur. Phospharic Acid
4	**Logos Agencies**					
	Alua Terminal-Sea	23.5	…	645	1969	Liquid Effluent
	Sub Total		**218022**	**324136**	**863354**	
C.	**THE WEST COASTAL CANAL**					
1	**KSINC Ltd*.**					
	Fine Arts Jetty- Vypeen	4	176600	144740	131720	Potable water
	ErnaKulum terminal-Cochin port	5	34376	…	31963	POL(Bunkering to Ship)
	Ernakulum Vypeen Island	4	22800	….	…	Potable water
	Cochin port Ships	5	6768	51065	….	POL
2	**Travancore Cements Ltd.**					
	Vaikom- Chitramangalam	20	18650	22150	20850	Lime shell with clay & othe impurities
	Kayamkulam-Chavra	17	…	5200	…	Sand
3	**Lots Shipping & Trading Company**					
	Fact engg works Cochin shipyard	6	24	…	…	Tank
	Sub Total		**259218**	**223155**	**184533**	
	Total (NW-III)		**667197**	**885694**	**1343770**	
	GRAND TOTAL (NW-I+NW-II+NW-III)		**2687650**	**4927187**	**7060265**	

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

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	2009-10		2010-11		2011-12	
		Tonnes Carried	Freight Earned (Rs. Lakh)	Tonnes Carried	Freight Earned (Rs. Lakh)	Tonnes Carried	Freight Earned (Rs. Lakh)
1	2	3	4	5	6	7	8
1	Fly Ash	2043	17.00	1500.00	13.92	-	-
2	Pol	1100	2.35	550.00	1.24	-	-
3	Cut Bamboo	550	3.02	-	-	-	-
4	Sand Clips	-	-	-	-	8250.00	1.81
5	Slag	545	2.86	-	-	-	-
6	Waste Oil	2200	5.24	8100.00	18.49	4400.00	10.03
7	Aluminium Block	-	-	200.00	1.00	200.00	1.00
8	Boulder	41841	9.89	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
12	Pet Cake/Personal Effect	-	-	7500.00	9.00	-	-
13	ODC	-	-	-	-	243.00	7.61
14	Stone Clips	-	-	-	-	1500.00	7.55
15	Misc.	140766	158.28	550.00	5.22	-	-
	SUB TOTAL	**189045**	**198.64***	**48882**	**75.57***	**31243**	**43.48***
	*** this relates to commodity-wise earnings**						
The Non Commodity Earnings are as under :							
	Activity						
	Vessel hire, Godown	**-**	**235.99**	**-**	**184.82**	**-**	**124.86**
	Rent, Storage ,Towage etc.	**-**	**-**	**-**	**-**	**-**	**-**
	SUB TOTAL	**-**	**235.99**	**-**	**184.82**	**-**	**124.86**
	GRAND TOTAL	**189045**	**434.63**	**48882**	**260.39**	**31243**	**168.34**

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 - 2009-10 to 2011-12**

Sl. No.	Route	Distance (in Kms)	Commodity	Tonnes Carried			Freight Earned(Rs.in Lakh)			Tonne/Kms(in Lakh) Performed		
				2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Kolkata - Bangladesh	446 - 780	Fly Ash	-	-	-	-	-	-	-	-	-
			Salt	-	-	-	-	-	-	-	-	-
			Slag	545	-	-	2.86	-	-	4.25	-	-
			Accessories	-	-	-	-	-	-	-	-	-
			TOTAL	**545**	**-**	**-**	**2.86**	**-**	**-**	**4.25**	**-**	**-**
2	Bangladesh - Kolkata	446 - 780	Jute	-	-	-	-	-	-	-	-	-
			Machinery	-	-	-	-	-	-	-	-	-
			Towage Charges	-	-	-	-	-	-	-	-	-
			TOTAL	-	-	-	-	-	-	-	-	-
	Kolkata-Bangladesh-Kolkata		**TOTAL**	**545**	**-**	**-**	**2.86**	**-**	**-**	**4.25**	**-**	**-**
3	Haldia-Budge-Budge		Waste Oil	-	8100	4400	5.24	18.49	10.03	-	4.51	3.27
			Pol	-	550	-	2.35	1.24	-	1.64 0.82	1.91	-
	Haldia-Budge-2		**TOTAL**	**-**	**8650**	**4400**	**7.59**	**19.73**	**10.03**	**2.46**	**6.42**	**3.27**
4	Karimganj	1218-1248	Edible Oil/Foodgrains	-	550	-	-	5.22	-	-	6.64	-
			Fly Ash	2043	1500	-	17	13.92	-	25.33	18.72	-
			TOTAL	**2043**	**2050**	**-**	**17**	**19.14**	**-**	**25.33**	**25.36**	**-**
5	Karimganj - Kolkata	1218-1248	Cement clinkers	-	-	-	-	-	-	-	-	-
			Personal Effect	-	-	-	-	-	-	-	-	-
			TOTAL	**-**	**2050**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Kolkata-Karimganj-Kolkata		**TOTAL**	**2043**	**2050**	**-**	**17**	**19.14**	**-**	**25.33**	**25.36**	**-**
6	Haldia-GhormaIsland	415 1060	Boulders	41841	17182	1650	9.89	4.22	0.33	7.03	2.58	0.25
			TOTAL	**41841**	**17182**	**1650**	**9.89**	**4.22**	**0.33**	**7.03**	**2.58**	**0.25**
7	Haldia-Internal	02	Sand Clips	-	-	8250	-	-	1.81	-	-	0.15
			TOTAL	**-**	**-**	**8250**	**-**	**-**	**1.81**	**-**	**-**	**0.15**
8	Patna-Kolkata	530	Stone Clips	-	-	1500	-	-	7.55	-	-	7.95
			TOTAL	**-**	**-**	**1500**	**-**	**-**	**7.55**	**-**	**-**	**7.95**
9	Haldia-Jamuria (UP)	1096	ODC	-	-	208	-	-	6.51	-	-	2.28
			TOTAL	**-**	**-**	**208**	**-**	**-**	**6.51**	**-**	**-**	**2.28**

Table No. 3.3 (Contd..) **Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2009-10 to 2011-12**

Sl. No.	Route	Distance (in Kms)	Commodity	Tonnes Carried			Freight Earned(Rs.in Lakh)			Tonne/Kms(in Lakh) Performed		
				2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
1	2	3	4	5	6	7	8	9	10	11	12	13
10	Lighterage	44-144	Peas	-	7300	15000	-	10.48	15.15	-	5.84	12.00
	Operation at Saugar		Logs	-	1500	-	-	3.00	-	-	1.2	-
	/Haldia Diamond		Containers	-	4500	-	-	9.00	-	-	2.7	-
	Harbour-Kolkata		Fertilizer	140766	7500	-	158.28	9.00	-	119.7	0.38	-
	Kolkata-Internal		ODC	-	-	35			1.10			0.02
			A.Block	-	200	200	-	1.00	1.00	-	0.01	0.01
			TOTAL	**140766**	**21000**	**15235**	**158.28**	**32.48**	**17.25**	**119.7**	**10.13**	**12.03**
11	Jogihhopa-Baobapur		Cut Bamboo	550	-	-	3.02	-	-	5.99	-	-
	Internal											
			TOTAL	**550**	**-**	**-**	**3.02**	**-**	**-**	**5.99**	**-**	**-**
12	Misc.											
	Tug Hire and											
	Godown Rent			-	-		235.99	184.82	124.86	-	-	-
			Grand Total	**189045**	**48882**	**31243**	**434.63**	**260.39**	**168.34**	**164.76**	**44.49**	**25.93**

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)**

Sl.No.	Item	2010	2011*	2012
1	2	3	4	5
A.	**INCOME**	2135.70	1920.34	2059.42
(i)	Earnings (Operational)	251.81	150.51	130.54
(ii)	Earnings (Others)	1883.89	1769.83	1928.88
B	**EXPENDITURE**	2652.36	1896.01	1518.16
(i)	Materials & Stores Consumed	75.94	52.51	87.64
(ii)	Decrease/Increase in Work in Progr	475.85	-	-37.85
	Employees Remuneration & Benefits	931.32	1068.96	872.82
(iv)	Repairs & Maintenance	92.18	80.97	96.51
(v)	Power & Fuel	72.53	56.88	45.61
(vi)	Other Expenses	573.57	321.29	305.43
(vii)	Interest	-	-	-
(viii)	Depreciation	356.46	356.36	332.83
(ix)	Provisions	184.16	33.49	83.47
(x)	Transfer to other Heads of Accounts	-109.65	-84.45	-101.36
C	**Profit/Loss (A-B)**	-516.66	24.33	541.26

Source : CIWTC

* Revised Figures

Table No. 3.5 Source-wise Earning of CIWTC

(Rs. in lakhs)

Sl.No.	Name of Service	Year		
		2009-10*	2010-11*	2011-12
1	2	3	4	5
	A.Earnings (Operational)			
	Transportation & Allied			
	Activities:			
	Freight	188.52	73.15	42.48
	Dredging	-	-	-
	Ferries & Charter	63.3	77.36	88.06
	Sales pending finalisation	-	-	-
	TOTAL (A)	**251.82**	**150.51**	**130.54**
	B.Earnings (Others)			
	Investment/one time grant	-	-	-
	Interest on Short Term Deposit	724.41	700.4	1019.05
	Interest on:			
	Mobilisation Amount	-	-	-
	Sunderban Conservancy Amount	-	-	-
	Port Maintenance	-	-	-
	Sale of Scrap	-	-	-
	Rent	161.44	87.08	31.41
	Surplus on sale of assets	-	-	-
	Retired from Operation	-	29.48	-
	Miscellaneous Receipts	24.43	16.86	5.60
	Govt. Grant (Salary & Wages)	973.58	936.00	872.82
	Profit on exchange	-	-	
	TOTAL B	**1883.86**	**1769.82**	**1928.88**
	TOTAL (A+B)	**2135.68**	**1920.33**	**2059.42**

* Revised Figures

Table No. 3.6 Financial Position of CIWTC

(Rs. in Lakh)

SL. No.	Item	2009-10*	2010-11*	2011-12
1	2	3	4	5
A.	**LIABILITIES**			
	(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
	(d) Borrowings			
	i) From Govt. of India	-	-	-
	ii) From Others	-	-	-
	(e) Trade dues and other current liabilities (inclu-ding provisions) and interest accrued thereon	19611.49	20319.85	20319.44
	TOTAL (A)	**43569.90**	**44278.26**	**17313.90**
B.	**ASSETS**			
	(f) Gross Asset	11119.83	11119.30	11119.86
	(g) Less Depreciation	7149.19	7505.04	7837.87
	(h)Less Provision	-	-	-
	(i) Net Fixed Assets (f-g-h)	3970.64	3614.26	3281.49
	(j) Capital work in progress	-	-	37.85
	(k) Investment	-	-	-
	(l) Current Assets, Loans and Advances	12831.63	13413.43	13994.56
	(m) Miscellaneous expences and losses not written off	10.10	-	- -
	(n) Accumulated Profit & Loss	26757.53	27250.57	
	TOTAL (B)	**43569.90**	**44278.26**	**17313.90**
C.	Working Capital (l-e)	-6779.86	-6906.42	6324.88
	(o) Additional provision for Gratuity	524.22	604.43	571.69
	(p) Total Working Capital	-6255.64	-6301.99	5753.19
	Capital employed (i+p)	2285.00	2687.73	2471.70
	Net worth (a-(m+n))	**(-)13719.15**	**(-)14202.09**	-
	(for F.Y. 2010-11)			
	Net worth (a-(c+m)) (for F.Y. 2011-12)	-	-	**(-)13915.47**

Source: CIWTC

* Revised Figures

Note: From F.Y. 2011-12 modified Balance Sheet and Profit and Loss Account, are to furnished as per amendment of Companies Act.

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	**Andhra Pradesh**												
	2010	…	…	43	…	43	…	…	…	17	51	68	111
	2011	…	…	43	…	43	…	…	…	17	51	68	111
	2012	…	…	43	…	43	…	…	…	17	51	68	111
2	**Assam**												
	2010	…	…	…	…	…	…	…	…	…	…	…	…
	2011	…	…	…	…	…	…	…	…	…	…	…	…
	2012	…	120	10	6	136	15	…	…	13	45	73	209
3	**Bihar**												
	2010	…	13	2	...	15	4	...	...	2	...	6	21
	2011	…	13	2	...	15	4	...	...	2	...	6	21
	2012	1	19*	74*	6	100	5	...	...	9	24	38	138
4	**Goa**												
	2010	193	...	...	...	193	...	...	...	...	...	...	193
	2011	188	...	...	...	188	...	...	...	...	...	...	188
	2012	172	...	...	...	172	...	...	...	...	...	...	172
5	**Karnataka**												
	2010	…	…	21	…	21	…	…	…	18	…	18	39
	2011	…	…	39	…	39	…	…	…	…	…		39
	2012	…	109	66	…	175	…	…	…	298	…	298	473
6	**Kerala**												
	2010	99	589	30	14	732	1	…	25	7766	1232	9024	9756
	2011	107	605	30	14	756	…	…	25	9084	3630	12739	13495
	2012$	71	140	44	10	265	…	…	…	5248	…	5248	5513
7	**Maharashtra**												
	2010	…	258	…	433	691	…	…	…	…	…	…	691
	2011	…	299	…	482	781	…	…	…	…	…	…	781
	2012	…	233	…	370	603	…	…	…	…	…	…	603
8	**Orissa**												
	2010	…	260	…	…	260	...	...	...	...	...	...	260
	2011	…	281	…	…	281	…	...	...	...	...	...	281
	2012	…	279	…	…	279	…	...	...	...	...	...	279
9	**West Bengal**												
	2010	85	260	5	63(A)	413	611	…	…	1460	…	2071	2484
	2011	85	255	5	67(A)	410	635	…	…	1516	…	2151	2561
	2012	85	263	5	73(A)	426	659	...	...	1550	...	2209	2635
10	**Tamil Nadu**												
	2012	…	…	…	…	…	…	…	…	2	…	2	2

(A) Includes 34, 38 and 42 other vessels for 2010, 2011, 2012 respectively. ... Not available/Nil

$: From 2011-12 onwards, unlicenced vessels and country boats have been excluded

* Vessels are with various agencies in Bihar, and probably they are not certified registered as Bihar does not have IV rule as yet

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' tonnes)	Total No. of passengers carried (000)
1	2	3	4	5	6
1	**Andhra Pradesh**				
	2010	…	…	…	…
	2011	…	…	…	…
	2012	…	…	…	…
2	**Assam**				
	2010	…	…	…	…
	2011	…	…	…	…
	2012	66	66	37.72#	11345.53
3	**Bihar**				
	2010	2	13	…	…
	2011	2	13	…	…
	2012	1	83	2.40	578.00*
4	**Goa(a)**				
	2010	193		13897.38	…
	2011	188	-	14563.49	…
	2012	172	-	14469.90	…
5	**Karnataka**				
	2010	39	39	986.75	1227.86
	2011	39	39	1033.80	1504.49
	2012	66	15	3887.00	1648.70
6	**Kerala**				
	2010	66	615	5092.08	24508.40
	2011	68	623	5285.56	24691.01
	2012	77	644	5756.12	8410.69
7	**Maharashtra**				
	2010	…	…	12510.00	16832.00
	2011	…	…	14870.00	14323.00
	2012	…	…	19950.00	17147.80
8	**Orissa**				
	2010	…	14	…	122.00
	2011	…	14	…	132.00
	2012	…	9	…	126.00
9	**West Bengal**				
	2010	54	260	17705.00(b)	62624.00
	2011	54	255	9987.00(b)	43724.00
	2012	61	263	9996.00(b)	43832.00

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	**S.V.Salgaocar, Goa**					
	2010	4	...	1581	...	...
	2011	4	...	1581	...	...
	2012	3	...	962	...	...
2	**D.V.Salgaocar, Goa**					
	2010	4	...	1500	...	...
	2011	4	...	1500	...	...
	2012	3	...	307	...	...
3	**V.M.Salgaocar Sales International**					
	2010	2	...	693	...	...
	2011	2	...	693	...	...
	2012	2	...	693	...	...
4	**Sesa Resource Ltd Goa**					
	2010	3	...	5300	...	...
	2011	3	...	3237	...	...
	2012	3	...	3237	...	...
5	**Sesa Goa Ltd. Goa**					
	2010	17	...	32506	...	...
	2011	21(a)	...	24910	...	...
	2012	24(a)	...	29598	...	...
6	**Sociedade De Fomento Ind. Ltd. Goa**					
	2010	2	...	2434	...	...
	2011	2	...	2434	...	...
	2012	2	...	2434	...	...
7	**CIWTC, Kolkata.**					
	2010	10(b)	...	4982	...	22
	2011	5	...	2178	...	17
	2012	4	...	1961	...	12
8	**Indo-Swiss Trading Co. Kolkata.**					
	2010		2 ©	118	270	...
	2011		2 ©	118	270	...
	2012		2 ©	118	270	...
9	**Vivada Inland Waterways Ltd. Kolkata.**					
	2010	9	7	...	...	...
	2011	10	4	...	...	...
	2012	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.**					
	2010	3	20	...	...	...
	2011	3	20	...	...	...
	2012	3	20	...	...	...
11	**Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata.**					
	2010		44	...	...	...
	2011		45	...	...	...
	2012		37	...	...	...
12	**West Bengal Tourism Development Corporation limited, Kolkata.**					
	2010		4	...	...	...
	2011		4	...	...	...
	2012		3	...	...	...
13	**Eastern Navigation (P) Ltd., Kolkata.**					
	2010	9	3	...	...	...
	2011	9	3	...	...	...
	2012	8	3	...	...	...
14	**Pradeep Boating Company, Kolkata.**					
	2010	2	....	...	...	...
	2011	2	....	...	...	...
	2012	2	....	...	...	...
15	**Hindustan Petroleum Corp. Ltd., Budge Budge, West Bengal.**					
	2010	1	...	...	...	...
	2011	1	...	...	...	...
	2012	1	...	...	...	...
16	**Costa River Transport Pvt Ltd., Goa.**					
	2010	3	...	5122	...	...
	2011	3		5122	...	...
	2012	3	...	5122	...	...
17	**Ghatal Station Navigation (P) Ltd., Kolkata.**					
	2010	...	...	...	...	...
	2011	...	3	...	...	...
	2012	...	3	...	...	...
18	**Diamond Harbour Municipality, Kolkata.**					
	2010	...		...	...	...
	2011	...	9	...	...	...
	2012	...	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.**					
	2010	...	5	...	...	...
	2011	...	5	...	...	...
	2012	...	5	...	...	...
20	**Jain Navigation**					
	2010	2	...	...	...	...
	2011	2	...	...	...	...
	2012	2	...	...	...	...
21	**Sai Waterways Pv t. Ltd**					
	2010	2	...	3829	...	...
	2011	2		3829	...	...
	2012	2	...	3829	...	...
22	**Rashmi Ore Carriers Pv t. Ltd.**					
	2010	1	...	1314	...	...
	2011	1		1314	...	...
	2012	1	...	1314	...	...
23	**Kothari Overseas Private Limited**					
	2010	1	...	1893	...	...
	2011	1	...	1893	...	...
	2012	1	...	1893	...	...
24	**Mayur Shipping Private Limied**					
	2010	1		1179	...	...
	2011	1	-	1284	...	...
	2012	1	-	1284	...	...
25	**Vasco Ore Carriers**				...	...
	2010	1		85500	...	...
	2011	2		180000	...	...
	2012	1		53160	...	...
26	**Sanghi Brothers (Indore) Pvt Ltd.**				...	...
	2010	5	...	6476	9	...
	2011	5	...	6476	...	...
	2012	15	...	6476	...	...

... Not available.

(a) Includes one Passenger Launch

(b) Includes 5 pusher Tug and 3 Oil Tanker for the year 2010 and 3 pusher Tug & 2 oil tanker for the year 2011.

© Passengers vessels can carry cargo also.

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	**S. V. Salgaocar, Goa**								
	2010	Cargo	4	35	1059.67	1581600	55.36	…	…
	2011	Cargo	4	35	1075.48	1581600	55.36	…	…
	2012	Cargo	3	35	673.60	962400	33.68	…	…
2	**D. V. Salgaocar, Goa**								
	2010	Cargo	4	35	1005.00	1500000	52.50	…	…
	2011	Cargo	4	35	1020.51	1500000	52.50	…	…
	2012	Cargo	3	35	663.60	948000	33.18	…	…
3	**V.M.Salgaocar Sales International**								
	2010	Cargo	2	35	464.71	693600	24.27	…	…
	2011	Cargo	2	35	471.64	693600	24.27	…	…
	2012	Cargo	2	35	485.52	693600	24.27	…	…
4	**Sesa Resources Ltd Goa**								
	2010	Cargo	3	273	-	832042	227.15	…	…
	2011	Cargo	3	269	323.38	859307	231.15	…	…
	2012	Cargo	3	269	386.91	793304	213.40	…	…
5	**Sesa Goa Ltd. Goa.**								
	2010	Cargo	16	100	420.50	6125861	612.58	…	…
	2011	Cargo	20	100	1002.32	5103296	510.32	…	…
	2012	Cargo	23	100	1206.20	6933724	693.37	…	…
6	**Sociedade De Fomento Ind. Ltd., Goa**								
	2010	Cargo	2	110	(a)	547998	60.28	…	…
	2011	Cargo	2	110	(a)	463527	50.99	…	…
	2012	Cargo	2	110	(a)	194923	21.44	…	…
7	**C.I.W.T.C., Kolkata.**								
	2010	Cargo/Tug/Spcs/Dbs	53	5617	434.63	189045	1061.86	…	…
	2011	Cargo/Tug/Spcs/Dbs	11	2031	260.39	42882	87.09	…	…
	2012	Cargo/Tug/Spcs/Dbs	3	1368	168.34	31243	42.74	…	…
8	**Indo-Swiss Trading Co.Pvt. Ltd., Kolkata**								
	2010	Pass.	2	1	95.94	…	…	2298000	…
	2011	Pass.	2	1	102.67	…	…	…	…
	2012	Pass.	2	1	108.34	…	…	…	…
9	**VIVADA Inland Waterways Ltd., Kolkata**								
	2010	Cargo/Tug/Pass/LCT	16	…	2757.70	570130	…	30620	…
	2011	Cargo/Tug/Pass/LCT	14	…	3154.90	541460(c)	…	34120	…
	2012	Cargo/Tug/Pass/LCT	14	…	3755.95	794590(c)	…	27630	…

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	**W. Bengal Surface Transport Corporation Ltd., Kolkata**								
	2010	Pass./LCT	23	...	525.33	13709(b)	...	6810000	...
	2011	Pass./LCT	23	...	578.22	15403(b)	...	6975000	...
	2012	Pass./LCT	23	...	591.32	23855(b)	...	7123000	...
11	**Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata**								
	2010	Pass.	44	...	958.40	...	...	20300000	...
	2011	Pass.	45	...	985.01	...	...	21300000	...
	2012	Pass.	37	...	1009.49	...	...	22000000	...
12	**West Bengal Tourism Development Corpn. Ltd., Kolkata**								
	2010	Pass.	4	...	115.68	...	...	12040	...
	2011	Pass.	4	...	119.74	...	...	11890	...
	2012	Pass.	3	...	149.63	...	...	12320	...
13	**Eastern Navigation (P) Ltd., W. Bengal, Kolkata**								
	2010	Cargo/Tug/Pass.	12	...	123.92	...	...	...	...
	2011	Cargo/Tug/Pass.	8	...	184.00	...	...	1500	...
	2012	Cargo/Tug/Pass.	7	...	160.42	...	...	7000	...
14	**Pradeep Boating Company, W. Bengal, Kolkata**								
	2010	Tugs	2	...	18.00	9000	...	...	...
	2011	Tugs	2	...	...	...	...	...	...
	2012	Tugs	2	...	1000.00	5000	...	...	...
15	**Hindustan Petroleum Corpn. Ltd. Budge-Budge, W. Bengal**								
	2010	Tug	1	...	33.75	17280	...	...	...
	2011	Tug	1	...	37.11	19320	...	...	...
	2012	Tug	1	...	41.37	18470	...	...	...
16	**Costa River Transport Pvt. Ltd. Goa**								
	2010	Cargo	3	...	451.03	657970	...	...	...
	2011	Cargo	3	...	373.84	530650	...	...	...
	2012	Cargo	3	...	263.30	353900	...	...	...
17	**Ghatal steam Navigation (P) Ltd. Kolkata**								
	2010	Pass.	3	...	3016.00	...	...	1439000	...
	2011	Pass.	3	...	3221.20	...	...	2422000	...
	2012	Pass.	3	...	32.58	...	...	2325000	...
18	**Diamond Harbour Municipality, Kolkata**								
	2010	Pass.	7	...	12.9	...	...	545500	...
	2011	Pass.	9	...	96.69	...	...	354500	...
	2012	Pass.	10	...	98.32	...	...	357400	...
19	**Chandan Nagar Municipality, Kolkata**								
	2010	Pass.	5	...	10.18	...	...	1021000	...
	2011	Pass.	5	...	11.80	...	...	2240000	...
	2012	Pass.	5	...	4.60	...	...	500000	...

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
19	**Chandan Nagar Municipality, Kolkata**								
	2010	Pass.	5	…	10.18	…	…	1021000	…
	2011	Pass.	5	…	11.80	…	…	2240000	…
	2012	Pass.	5	…	4.60	…	…	500000	…
20	**Jain Navigation**								
	2010	Tugs/Pass	2	…	67.00	…	…	….	….
	2011	Tugs/Pass	2	…	15.00	…	…	….	….
	2012	Tugs/Pass	2	…	14.00	…	…	….	….
21	**Sai Waterways Pvt. Ltd.**								-
	2010	Cargo	2	60-75	1.17	244120	16.48	…	…
	2011	Cargo	2	60-75	1.29	35900	2.42	…	…
	2012	Cargo	2	60-75	1.16	32240	2.17	…	…
22	**Rashmi Ore Carriers Pvt. Ltd.**								
	2010	Cargo	1	45	174.18	214050	9.63	…	…
	2011	Cargo	1	45	205.29	210000	9.45	…	…
	2012	Cargo	1	45	104.25	151957	6.83	…	…
23	**Kothari Overseas Private Limited**								…
	2010	Cargo	1	…	96.00	151300	…	…	…
	2011	Cargo	1	…	155.00	167123	…	…	…
	2012	Cargo	1	…	54.36	65007	…	…	…
24	**Mayur Shipping Pvt. Limited**								
	2010	Cargo	1	45	153.53	190919	8.59	…	…
	2011	Cargo	1	45	63.85	68400	3.07	…	…
	2012	Cargo	1	45	84.52	104338	4.69	…	…
25	**Vasco Ore Carriers**								
	2010	…	…	…	…	…	…	…	…
	2011	…	…	…	…	…	…	…	…
	2012	…	…	…	…	…	…	…	…
26	**Sanghi Brothers (Indore) Pvt Ltd**								
	2010	Cargo	5	24	69.90	31500	0.75	…	…
	2011	Cargo	5	25	72.70	34770	0.87	…	…
	2012	Cargo	5	25	74.40	30134	0.75	…	…

(a) : transportation for self (b) : data relates to no of vehicles carried

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

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 8th FIVE YEAR PLAN TO 11th FIVE YEAR PLAN**

(Rs in Cr.)

Sl. No.	Budget head/ Waterways	8th Five Year Plan (1992-97)			9th Five Year Plan (1997-02)			10th Five Year Plan (2002-07)			11th Five Year Plan (2007-12)		
		B.E	R.E	Exp.	B.E	R.E	Exp.	B.E	R.E	Exp.	B.E	R.E	Exp.
I	**Grants to IWAI**												
1	National Waterway 1	41.60	17.70	10.58	74.80	51.94	59.89	154.97	155.11	135.62	241.69	235.81	228.95
2	National Waterway 3	62.00	10.50	7.93	35.38	24.63	33.85	54.49	46.58	36.10	75.48	107.23	104.82
3	Others	6.00	7.44	5.68	13.85	7.61	7.65	37.60	23.88	12.99	26.00	7.59	9.57
	Sub Total - I (Grants to IWAI)	**109.60**	**35.64**	**24.19**	**124.03**	**84.18**	**101.39**	**247.06**	**225.57**	**184.71**	**343.17**	**350.63**	**343.34**
II	**North Eastern Area**												
4	National Waterway 2	17.40	8.21	4.22	48.19	27.02	25.69	216.28	180.60	132.15	319.29	243.17	202.07
5	Central Plan scheme for NER	0.00	0.00	0.00	0.00	0.00	0.00	17.00	0.00	0.00	16.03	15.03	6.62
6	Proposed NW-6 (Barak)	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	1.51	0.00	0.00
7	Development of Indo- Bangladesh protocol	0.00	0.00	0.00	0.00	0.00	0.00	1.30	1.10	0.66	0.00	0.00	0.00
	Sub total - II (NER)	**17.40**	**8.21**	**4.22**	**48.19**	**27.02**	**25.69**	**237.58**	**181.70**	**132.81**	**336.83**	**258.20**	**208.69**
III	**Subsidy**	3.00	3.80	3.63	19.11	31.10	13.34	8.50	5.00	5.40	8.00	7.00	4.13
IV	**Tech Studies & R&D**	2.20	1.45	1.08	4.05	2.65	2.03	26.00	19.00	9.09	5.00	5.00	4.32
V	**Central Plan Scheme/ CSS**	7.15	4.70	1.57	10.00	10.00	8.56	40.00	65.00	52.83	0.00	0.00	0.00
	Grand Total	**139.35**	**53.80**	**34.69**	**205.38**	**154.95**	**151.01**	**559.14**	**496.27**	**384.84**	**693.00**	**620.83**	**560.48**

Source: Inland Waterways Authority of India

SECTION – 7

INLAND WATERWAYS TRANSPORT ACCIDENTS

Table No. 7.1

No. of Accidents, Persons Injured And Killed by Drowning (Boat Capsize) in States with IWT operations During 2011.

Sl. No.	State/UT	No. of Accidents	Drowning (Boat Capsize)					
			No. of Persons Injured			No. of Persons Killed		
			Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9
	STATES							
1	Andhra Pradesh	12	2	0	2	13	0	13
2	Arunachal Pradesh	0	0	0	0	0	0	0
3	Assam	10	0	0	0	6	4	10
4	Bihar	85	13	0	13	93	5	98
5	Chhattisgarh	232	0	1	1	154	78	232
6	Goa	1	0	0	0	1	0	1
7	Gujarat	17	0	0	0	18	1	19
8	Haryana	0	0	0	0	0	0	0
9	Himachal Pradesh	0	0	0	0	0	0	0
10	Jammu & Kashmir	0	0	0	0	0	0	0
11	Jharkhand	10	0	0	0	7	3	10
12	Karnataka	31	1	0	1	13	3	16
13	Kerala	8	1	0	1	9	0	9
14	Madhya Pradesh	48	0	0	0	35	21	56
15	Maharashtra	16	0	1	1	23	6	29
16	Manipur	1	0	0	0	1	0	1
17	Meghalaya	2	0	0	0	1	1	2
18	Mizoram	4	0	0	0	6	2	8
19	Nagaland	0	0	0	0	0	0	0
20	Orissa	33	0	0	0	24	11	35
21	Punjab	3	0	0	0	3	0	3
22	Rajasthan	2	0	0	0	3	0	3
23	Sikkim	0	0	0	0	0	0	0
24	Tamil Nadu	12	0	0	0	77	39	116
25	Tripura	0	0	0	0	0	0	0
26	Uttar Pradesh	119	4	3	7	109	34	143
27	Uttarakhand	0	0	0	0	0	0	0
28	West Bengal	26	14	7	21	19	9	28
	Total(States)	672	35	12	47	615	217	832
	UNION TERRITORIES							
29	A&N Island	4	0	0	0	4	2	6
30	Chandigarh	0	0	0	0	0	0	0
31	D&N haveli	0	0	0	0	0	0	0
32	Daman & Diu	9	0	0	0	9	0	9
33	Delhi	0	0	0	0	0	0	0
34	Lakshadweep	2	0	0	0	2	0	2
35	Pondicherry	0	0	0	0	0	0	0
	Total (UTs)	15	0	0	0	15	2	17
	Total States/UTs	687	35	12	47	630	219	849

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

Source : Accidental Deaths & Suicides in India - 2011
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 Montenegr	…	342	…	1076	_	1418
21	Slovakia	39	39	134	134	173	173
22	United Kingdom	155	159	910	891	1065	1050
23	United States of Ameri	…	…	…	…	42000	_
24	Ukraine	1156	1153	1035	1013	2191	2166

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

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

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
1	**Albania**								
	Canals								
	Rivers & Lakes	_							_
2	**Austria**								
	Canals								
	Rivers & Lakes	351							
3	**Belgium**								
	Canals	875	_	156	213	_	221	86	199
	Rivers & Lakes	641	_	182	34	_	210	162	53
4	**Bulgaria**								
	Canals								
	Rivers & Lakes	470							
5	**Croatia**								
	Canals								
	Rivers & Lakes	804	-	17	215	286	149	…	138
6	**Czec Republi**c								
	Canals	39							
	Rivers & Lakes	625							
7	**Estonia**								
	Canals								
	Rivers & Lakes	335							
8	**Finland**								
	Canals	125	9	…	…	16	…	100	…
	Rivers & Lakes	7858	4148	…	…	2909	…	801	…
9	**France**								
	Canals	3577	39	2670	57	217	27	17	550
	Rivers & Lakes	1623	…	351	108	-	4	219	942
10	**Germany**								
	Canals	2379	112	239	…	35	1403	391	109
	Rivers & Lakes	5186	386	734	90	227	830	1870	1049
11	**Hungary**								
	Canals	166	-	-	-	-	-	-	-
	Rivers & Lakes	1392	-	78	451	336	147	-	380

Table No. 8.2 (Contd…) **Length of Navigable Waterways By Permissible Carrying Capacity of Vessels - 2008**

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
12	**Kazakhstan***								
	Canals								
	Rivers & Lakes								
13	**Kyrgyzstan***								
	Canals								
	Rivers & Lakes								
14	**Lithuania**								
	Canals	1				1			
	Rivers & Lakes	440	-	151	-	289	-	-	-
15	**Moldova**								
	Canals								
	Rivers & Lakes								
16	**Netherlands**								
	Canals	4706	-	-	-	-	-	-	-
	Rivers & Lakes	1396	-	-	-	-	-	-	-
17	**Poland**								
	Canals	344	…	176	106	47	…	…	15
	Rivers & Lakes	3316	909	893	965	350	38	55	106
18	**Romania**								
	Canals	132	…	…	-	-	-	-	-
	Rivers & Lakes	1647	…	…	-	-	-	-	-
19	**Serbia**								
	Canals	342	21	321	-	-	-	-	-
	Rivers & Lakes	1076	38	-	45	405	-	588	-
20	**Slovakia**								
	Canals	39	-	-	-	-	-	-	39
	Rivers & Lakes	134	-	-	-	-	-	-	134
21	**Ukraine**								
	Canals	1153	-	-	-	-	-	-	-
	Rivers & Lakes	1013	-	-	-	-	-	-	-
22	**United Kingdom**								
	Canals	159	-	-	-	-	-	-	-
	Rivers & Lakes	891	-	-	-	-	-	-	-
23	**Russian Fedration**								
	Canals	1244							
	Rivers & Lakes	100368							

Source : Annual Bulletin of Transport Statistics for Europe & 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.& P. Vessels : Dumb & Pushed Vessels

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

Table No. 8.4 Goods Transport by Type of Transport on National Territory - 2008

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 Maldova	-	-	-	-	…	-	-	-
17	Romania	22646	3963	3563	123	4622	2043	1940	82
18	Russian Federation	138388	10771	648	13	44559	16309	1113	34
19	Serbia and Montenegro	4367	1324	3986	6417	414	1026	3738	10327
20	Slovakia	84	2080	257	5950	6	46	26	1023
21	Ukraine	7272	-	-	-	557	-	-	-
22	United Kingdom	3659	-	-	-	164	-	-	-
23	United States of America**	615872	…	…	…	…	…	…	…

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

* : Kilometers within the territory of the reporting country.

** : Data relates to 2005

APPENDICES

Appendix – I

DEFINITIONS OF TERMS USED

(For Section-8)

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

Navigable Inland Waterways	A stretch of water, not part of the sea, over which craft of a carrying capacity not less than 50 tonnes can navigate when normally loaded. This term covers both navigable rivers and lakes (natural water-courses, whether or not they have been improved for navigation purposes) and canals (waterways constructed primarily for the purpose of navigation). The length of rivers and canals is measured in mid channel and length of lakes, as well as lagoons, is counted as the length between the most distant points between which the transport is performed. An inland waterway forming a common frontier between two countries is reported by both.
Inland Water Transport (IWT) Craft	Craft having a minimum carrying capacity of 20 tonnes designed for the carriage of goods by inland waterways.
Dumb Barge	IWT craft designed for being towed and not having its own means of mechanical propulsion. The fact that a dumb barge is fitted with an auxiliary engine does not change its nature.
Dumb Tanker	Dumb barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster, etc. are to be excluded, and to be counted among dumb barges.
Self-Propelled Barge	IWT craft having its own means of mechanical propulsion, dumb barges, pushed barges and pushed-towed barges with only an auxiliary engine should be regarded as dumb, pushed or pushed-towed barges as the case may be. The fact that a self propelled barge can be used for towing does not change its nature.
Self Propelled Tanker	Self propelled barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster etc. are to be excluded and to be counted among self-propelled barges.
Self Propelled Craft for River-Sea Navigation	Craft having a Dead Weight capacity of at least 20 tonnes, designed for the transport of goods by river and by Sea and equipped with their own means of propulsion developing at least 37 KW.
Tug	Powdered craft developing not less than 37 KW and designed for the towing of dumb barges, pushed towed barges, rafts, but not for the carriage of goods.

Pusher Craft	Powdered craft developing not less than 37 KW and designed or fitted for the pushing of pushed or pushed-towed barges but not for the carriage of goods.
Pusher Tug	Powdered craft developing not less than 37 KW and designed or fitted for the towing of dumb barges, pushed-towed barges or rafts, and for the pushing pushed and pushed-towed barges but not for the carriage of goods.
Pushed Barge	IWT craft designed for being pushed and not having its own means of mechanical propulsion. The fact that a pushed barge is fitted with an auxiliary engine does not change its nature.
Pushed Barge	Pushed barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster etc. are to be excluded and to be counted among pushed barges.
Carrying Capacity (also referred to as Dead Weight Capacity)	Maximum permissible weight of goods, expressed in tones, which a craft may carry according to ship's document.
Power (KW)	Mechanical force developed by the motive power installation in craft. This power should be measured in effective kilowatts (power transmitted to the propeller).

Appendix – II

ABBREVIATION

...	Not Available
-	Nil
IWT	Inland Water Transport
Kms.	Kilometers
M.T.	Metric Tonnes
CIWTC	Central Inland Water Transport Corporation
IWAI	Inland Waterways Authority of India
KSINC	Kerala Shipping & Inland Navigation Corporation
H.P.	Horse Power
POL	Petroleum Oil Lubricant
ODC	Over Dimensional Cargo
LAG	Liquified Amonnia Gas
FO	Furnace Oil
LDO	Light Diesel Oil
GC/G Cargo	General Cargo
Neg/N	Negligible
FBP	Farakka Barage Project
IOC	Indian Oil Corporation
HSD	High Speed Diesel
LCT	Loaded Carriage Tug
FACT	Fertilisers and Chemicals Travancore Ltd.