

18

# STATISTICS OF INLAND WATER TRANSPORT 2010-11



Government of India  
Ministry of Shipping  
Transport Research Wing  
New Delhi

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Ministry of Road Transport & Highways  
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**STATISTICS OF INLAND WATER TRANSPORT  
2010-11**

## P R E F A C E

Transport Research Wing (TRW) is the nodal agency of both Ministry of Shipping and Ministry of Road Transport & Highways for providing information/data on various facets of road and water borne transport. The present issue "Statistics of Inland Water Transport 2010-11" is the 18<sup>th</sup> 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.

Information contained in the volume is obtained from a large number of sources spread across both public as well as private sector, which inevitably results in time lag in bringing out collated data. However with the concerted efforts of TRW and co-operation of various source agencies, we have succeeded in cutting the time lag to an year. I wish to record my deep appreciation of the outstanding support and cooperation provided by all who have contributed to improve and complete this issue. This publication is a joint endeavour, with each officer contributing with their knowledge and professional commitment. Suggestions from the users of information are welcome to improve quality and coverage.

New Delhi  
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# Inland Water Transport: An Overview

## INTRODUCTION

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

## POLICY INITIATIVES AND MILESTONES

2. Before 1950, there was no proper institutional set up for the development of IWT. A 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:

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

Transport.

**Box 1: Inland Water Transport (WT): A Historical Perspective**  
The commercial history of India gives a glorious account of growth of navigation on inland waterways. The location of a large number of towns on waterways, which were also centers of trade and commerce, much before railways, indicate the value of this mode in the past.

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

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

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

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

## NAVIGABLE WATERWAYS & INFRASTRUCTURE

6. Length of waterways along with its navigable length is an indicator of inland water potential of a state. Table - 1 gives total and navigable length of waterways reported across States/UTs. It is observed that the maximum length of waterways is in the State of Uttar Pradesh with 6444 kms followed by 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.

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 increased to 75.1 million tonnes in 2010-11 from 69.6 million tonnes in 2009-10 reflecting an increase of 7.9%. In terms of tonnage, Goa and Maharashtra accounted for about 73.7% and 19.8% of the cargo volume respectively with balance 6.5% being accounted by the three National Waterways in 2010-11. However, in terms of tonne km. (movement of one tonne of cargo over a distance of one km) there was an annual growth of 8.5% in 2010-11 with Goa waterways accounting for around 59.2% 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 43 kms and 23 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 (Champakakara canal, Udyogmandal canal and West Coast canal) the distance traversed by cargo was on an average around 26 kms and 16 kms respectively in 2010-11. In case of National Waterway-I (Ganga- Bhagirathi-Hooghly), the average distance over which cargo moved was relatively much longer at around 655 Kms.

Table 2: Cargo Movement on Waterways

| Sl. No. | Details of Waterway       | Cargo Moved (lakh Tonnes) |               |              | Tonne Kms (in lakh) |         |         |
|---------|---------------------------|---------------------------|---------------|--------------|---------------------|---------|---------|
|         |                           | 2009-10                   | 2010-11       | 2009-10      | 2010-11             | 2009-10 | 2010-11 |
| 1       | National Waterway No. I   | 18.37 (2.6)               | 18.77(2.5)    | 10402(28.0)  | 12302(30.6)         |         |         |
| 2       | National Waterway No. II  | 1.83(0.2)                 | 21.63(2.9)    | 74(0.2)      | 573(1.4)            |         |         |
| 3       | National Waterway No. III | 6.67(1.0)                 | 8.86(1.1)     | 97(0.3)      | 142(0.4)            |         |         |
|         | Sub Total NWS             | 26.87(3.8)                | 49.26(6.5)    | 10574(28.6)  | 13017(32.4)         |         |         |
| 4       | Goa Waterways             | 544.32(78.2)              | 553.82(73.7)  | 23405(63.1)  | 23853(59.2)         |         |         |
| 5       | Maharashtra Waterways     | 125.10(18.0)              | 148.70(19.8)  | 3107(8.4)    | 3389(8.4)           |         |         |
|         | Grand Total               | 696.29(100.0)             | 751.78(100.0) | 37085(100.0) | 40259(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.1. 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 bracket indicates percentage to the total.

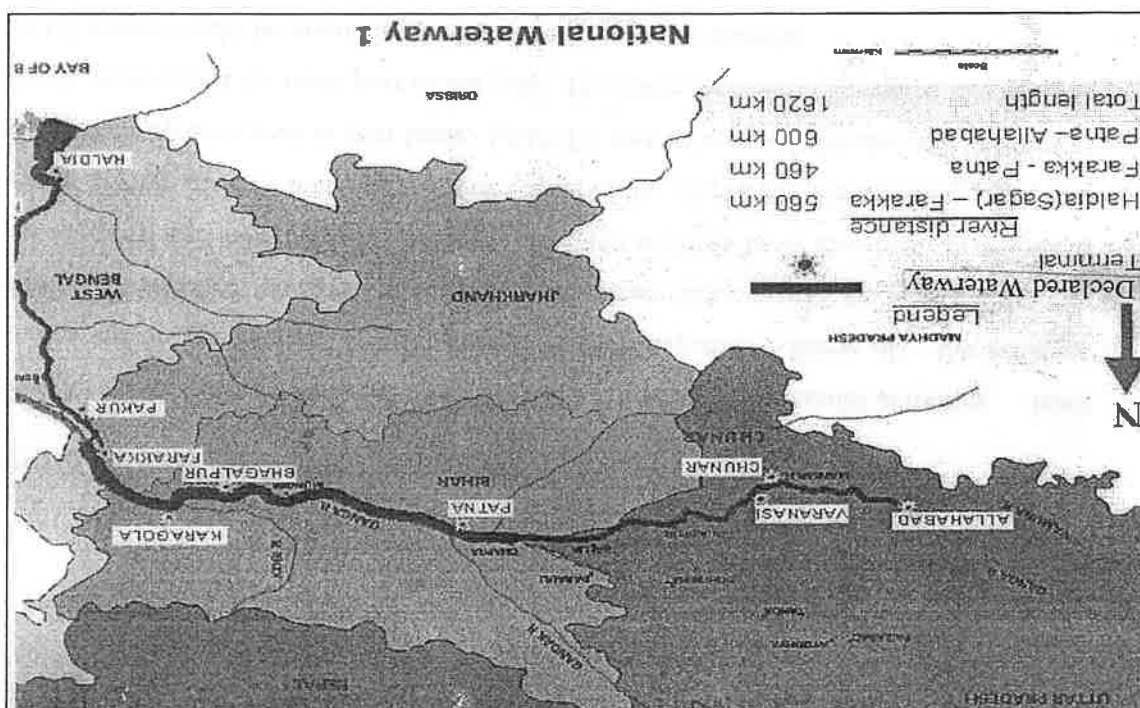


Table 3 : Composition of Cargo Moved on National Waterway-1 (In Tonnes)

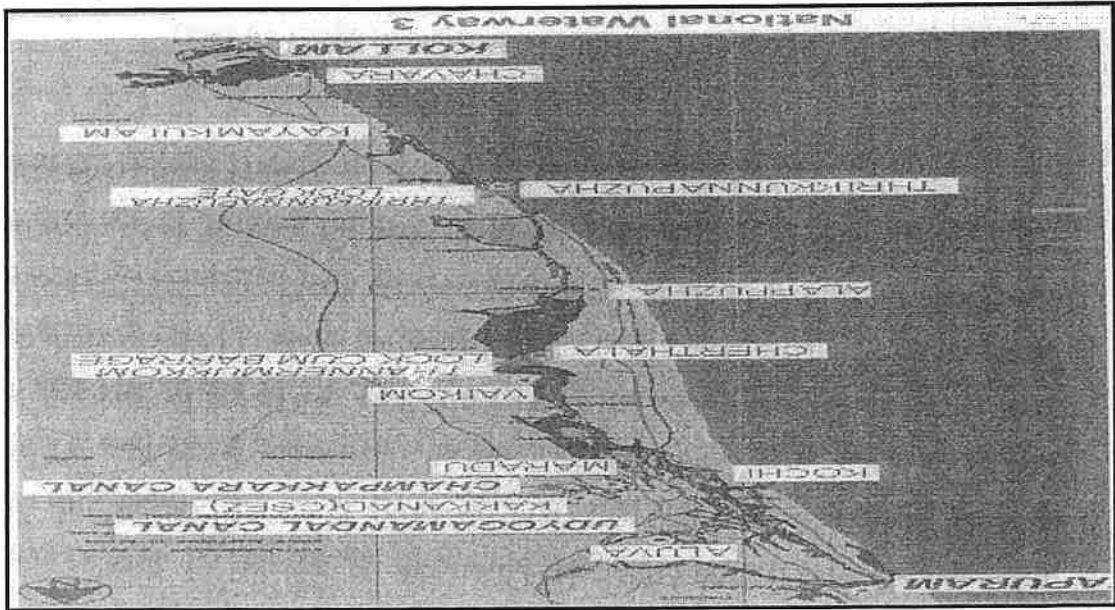
| Name of the Commodity | 2006-07        | 2007-08        | 2008-09        | 2009-10        | 2010-11        |
|-----------------------|----------------|----------------|----------------|----------------|----------------|
| Building Material     | 773740(58.7)   | 899519(59.6)   | 835585(61.7)   | 1388365(75.6)  | 1492395(79.5)  |
| Fertilizers           | -              | 2400(0.2)      | -              | -              | 7500(0.4)      |
| Food items            | 10268(0.8)     | 4894(0.3)      | 42352 (3.1)    | 1434 (0.1)     | 9110(0.5)      |
| Miscellaneous         | 1297(0.1)      | 193917(12.8)   | 42814(3.2)     | 145000(7.9)    | 41984(2.2)     |
| Mix                   | 191936(14.6)   | -              | -              | -              | -              |
| Ore/Minerals          | 48606(3.7)     | 68284(4.5)     | 96358(7.1)     | 25283(1.4)     | 2648(0.1)      |
| POL/POI Products      | 291548(22.1)   | 341404(22.6)   | 337189(24.9)   | 277030(15.0)   | 324111(17.3)   |
| Total NW 1            | 1317395(100.0) | 1510418(100.0) | 1354298(100.0) | 1837112(100.0) | 1877748(100.0) |

Note: Figure within bracket indicates percentage to the total.

The composition of cargo movement on National Waterway-1 shows that share of all type of commodities except ore/minerals and miscellaneous has gone up in the year 2010-11 compared to their share in total cargo in the preceding year. Whereas, the building material has gained in significance over the years in terms of its share in total cargo moved through NW-1 and accounts for a share of more than 79% in total cargo movement along the NW-1. POL/POI products was second largest commodity group which used the NW-1 accounts the share of 17.3% in total cargo moved during 2010-11. Table 3 give an idea of composition of different cargos moved along the NW-1 over the years.



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.

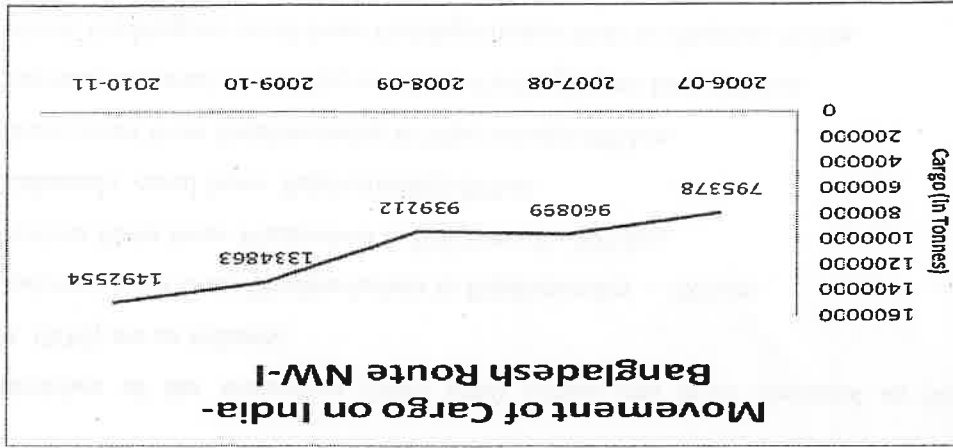


The total volume of cargo moved on National Waterway - III has been fluctuating over the past few years. It has, however, increased from 6.7 lakh tonnes in 2009-10 to 8.8 lakh tonnes in 2010-11 recording an increase of 33% over the year. The cargo composition of freight traffic shows that fertilisers, POL/POL products and Food items were the major commodities moved through NW-III accounting for 37.1%, 18.3% and 16.3% respectively of the total cargo movement in 2010-11.

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

| Commodity        | 2006-07        | 2007-08       | 2008-09       | 2009-10       | 2010-11       |
|------------------|----------------|---------------|---------------|---------------|---------------|
| Chemicals        | 18864(1.8)     | 53319(7.9)    | -             | -             | 96804(11.0)   |
| Fertilisers      | 509703(49.8)   | 168083(25.0)  | 327824(42.8)  | 248917(37.3)  | 328468(37.1)  |
| Food items       | 336570(32.9)   | -             | -             | 199400(29.9)  | 144740(16.3)  |
| Mix              | 23080(2.3)     | 288678(42.9)  | 308218(40.2)  | 34868(5.2)    | 94067(10.6)   |
| Ore/Minerals     | -              | 136505(20.3)  | 44953(5.9)    | 52452(7.9)    | 59546(6.7)    |
| POL/POL products | 134559(13.2)   | 26542(3.9)    | 85219(11.1)   | 131560(19.7)  | 162069(18.3)  |
| Total NW III     | 1022776(100.0) | 673127(100.0) | 766214(100.0) | 667197(100.0) | 885694(100.0) |

Note : Figure within bracket indicate percentage to the total



13. Movement of cargo along India Bangladesh route of National Waterways I has shown a growth of 11.8% in year 2010-11 compared to 42.1% registered in year 2009-10. The cargo moved over this route has increased to 149255.4 tonnes in 2010-11 against 133486.3 tonnes in 2009-10. The graph given below depicts trend in cargo movement on India-Bangladesh route National Waterway-I during the years 2006-07 to 2010-11.

### Cargo carried on Indo-Bangladesh Waterway Route

**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.

Note : Figure within bracket indicate percentage to the total

| Commodity         | 2006-07         | 2007-08        | 2008-09        | 2009-10        | 2010-11        |
|-------------------|-----------------|----------------|----------------|----------------|----------------|
| Building Material | 774100(22.6)    | 902019(25.8)   | 840685(35.8)   | 1389110 (51.6) | 1492395(30.29) |
| Chemicals         | 18864(0.6)      | 53319(1.5)     | -              | -              | 96804(1.96)    |
| Fertilisers       | 509703(14.9)    | 170483(4.9)    | 327824(13.9)   | 248917 (9.3)   | 335968(6.82)   |
| Food items        | 347823(10.2)    | 4895(0.1)      | 42352(1.8)     | 201170 (7.5)   | 154450(3.13)   |
| Miscellaneous     | 1297(Neg.)      | 1492327(42.7)  | 267854(11.4)   | 327260(12.2)   | 2205129(44.75) |
| Mix               | 1291-890(37.7)  | 288678(8.3)    | 308218(13.1)   | 34868 (1.3)    | 94067(1.91)    |
| Ore/Minerals      | 48606(1.4)      | 204789(5.9)    | 141311(6.0)    | 77735 (2.9)    | 62194(1.26)    |
| POI/POL           | 433914(12.7)    | 374625(10.7)   | 423577(18.0)   | 408590 (15.2)  | 486180(9.87)   |
| Products          | 3426197(100.00) | 3491135(100.0) | 2351821(100.0) | 2687650(100.0) | 4927187(100.0) |
| Total             |                 |                |                |                |                |

18. In addition to the above mentioned cargo transportation, 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.

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.

below:-

17. 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 Pulichintala in Krishna by the year 2014-15, the development of waterway in Andhra Pradesh has been planned in two Stages as given

16. 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 (coal, cement fertilizers etc). it would help movement of agriculture products from rural areas to urban centres and industrial goods from urban centres to rural areas. It also connects sea ports of Kakinada, Krishnapatnam, Ennore and Chennai and helps 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 comanur 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).

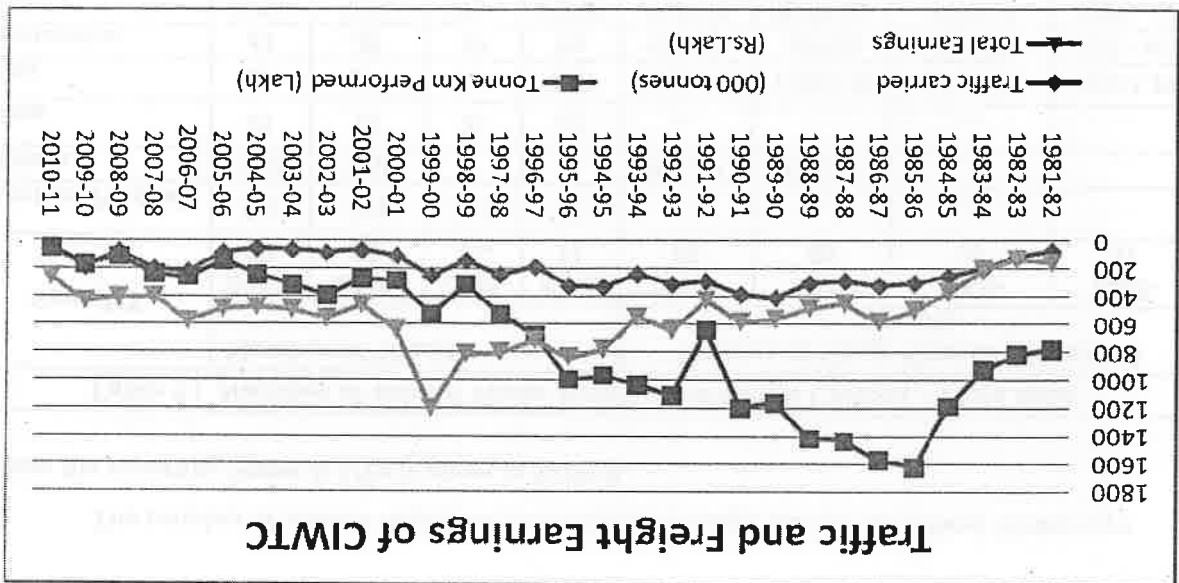
CIWTC Ltd. has three main divisions, viz. River services Division (RSD), Rajabagan Dockyard (RBD) and Deep Sea Ship Repair (DSSR).

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 Rajabagan 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.

22. The cargo carried by CIWTC has been decreased by 74.1% in the year 2010-11 to 48882 tonnes from 189045 tonnes in 2009-10. Concomitantly, the freight earnings has also gone down by 40.8% from Rs. 434.63 lakh in 2009-10 to Rs.260.39 lakh in 2010-11. The non-commodity earnings of CIWTC showed a downward growth of (-) 21.6% as it slipped to Rs. 184.82 lakh in 2010-11 from 235.99 lakhs in 2009-10. Following graphs gives a long term trend in traffic and earning of CIWTC.



23. The maximum cargo carried during 2010-11 was on the Saugar/Haldia Diamond Harbour-Kolkata route with freight volume of 21000 tonnes and freight earnings of about Rs. 32.4 lakh and 10.1 lakh tonne kms and; these three parameters registered a declining growth of (-)85%, (-)79% and (-)92% respectively in 2010-11 over 2009-10.

## PERFORMANCE OF COMPANIES ENGAGED IN IWT

25. The data received from 28 IWT companies shows that amongst the private companies the maximum number of cargo vessels were held by the Sesa Goa Ltd., Goa(20) followed by Vivada Inland Waterways Ltd. Kolkata(14). The Maximum cargo of 5103.29 thousand tonnes was carried by Sesa Goa Ltd Goa.

26. Sesa Goa Ltd., Goa had the maximum number of powered vessels (20) which carried a cargo of 5103.2 thousand tonnes and 510.32 lakh tonnes kilometres during 2010-11. Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata (45 vessels) carried 21.3 million passengers followed by West Bengal Surface Transport Corporation Ltd. with 23 powered vessels carrying 6.9 million passengers during 2010-11. The cargo/passengers carried and freight collected pertaining to 28 companies is shown in Table No. 5.2.

| Name of the Company                    | No. of Vessels | Cargo moved ('000 tonnes) |
|--|----------------|---------------------------|
| 1. Sesa Goa Ltd. Goa.                  | 20             | 5103.29                   |
| 2. S.V.Salgaocar, Goa                  | 4              | 1581.60                   |
| 3. D.V.Salgaocar, Goa                  | 4              | 1500.00                   |
| 4. Sesa Resources Ltd Goa              | 3              | 859.30                    |
| 5. V.M.Salgaocar Sales International   | 2              | 693.60                    |
| 6. VIVADA Inland Waterways Ltd,Kolkota | 3              | 530.65                    |
| 7.Costa River Transport Pvt Ltd,Goa    | 14             | 541.46                    |
| 8. Sociedade De Fomento Ind Ltd,Goa    | 2              | 463.52                    |
| 9. Rashmi Ore Carriers                 | 1              | 210.00                    |
| 10. Kothari Overseas Pvt Ltd           | 1              | 167.12                    |

## INLAND WATERWAYS TRANSPORT ACCIDENTS

27. The total number of accidents on inland waterways during the year 2009 were 791 out of which 319 were reported in Madhya Pradesh followed by Uttar Pradesh with 127 accidents. The numbers of deaths due to boat mishaps were highest for Madhya Pradesh at 323 followed by Uttar Pradesh at 161 in 2009. A striking feature observed (Table No. 7.1) is that the number of persons killed is more in all the States than the number of persons injured on waterways unlike in the road accidents.

**NAVIGABLE WATERWAYS  
AND INFRASTRUCTURE**

**SECTION - 1**

**Table No. 1.1**

**Navigable Waterways in India**

(in Kms.)

| Sl. No. | State/Rivers/Canals/Lakes | Total Length of the State |         |
|---------|---------------------------|---------------------------|---------|
|         |                           | 2010-11                   | 2010-11 |
| 1       |                           | 3                         | 4       |

**1 ANDHRA PRADESH**

- (i) Godavari
- (ii) Krishna
- (iii) Others \*\*

1530  
386  
2501

171  
35  
791

**2 ASSAM**

- (i) Brahmaputra
- (ii) Borak
- (iii) Subansiri
- (iv) Dhansiri
- (v) Lohit
- (vi) Gangadhar
- (vii) Sonkosh
- (viii) Manas
- (ix) Aai
- (x) Beki
- (xi) Nakhonda
- (xii) Pahunmara
- (xiii) Pagladia
- (xiv) Borolia
- (xv) Puthimari
- (xvi) Dikrang
- (xvii) Rangandi
- (xviii) Kapli
- (xix) Dehing
- (xx) Kakakhal
- (xxi) Sonai
- (xxii) Amguri
- (xxiii) Mahura
- (xxiv) Badri
- (xxv) Chiri
- (xxvi) Jiri

2800  
900

891  
152

**3 BIHAR**

- (i) Damodar
- (ii) Ganga
- (iii) Gandak
- (iv) Koshi
- (v) Ghaghra
- (vi) Sone
- (vii) Mahananda
- (viii) Burhi Gandak
- (ix) Punpun
- (x) Phaiyu Hatihar
- (xi) Kiul
- (xii) Kari Koshi
- (xiii) Chandan
- (xiv) Karamasha
- (xv) Others

510  
300  
233  
100  
226  
140  
400  
200  
300  
100  
150  
100  
144  
860

510  
300  
160  
100  
31  
160  
290

**Total**

3700

2584



| 1       |                           | 2                                |  | 3                |  | 4       |  |
|---------|---------------------------|----------------------------------|--|------------------|--|---------|--|
| Sl. No. | State/Rivers/Canals/Lakes | Rivers/Canals/Lakes in the State |  | Navigable Length |  | 2010-11 |  |
|         |                           | (in kms.)                        |  | (in kms.)        |  |         |  |

|                |           |                   |         |                  |       |       |     |     |
|----------------|-----------|-------------------|---------|------------------|-------|-------|-----|-----|
| 4              | GOA       | (i) Mandovi       | 76      | 56               | 45    | 20    | 20  |     |
|                |           | (ii) Zuari        | 56      | 26               | 25    | 25    |     |     |
|                |           | (iii) Mapusa      | 26      | 34               | 15    | 15    |     |     |
|                |           | (iv) Chapora      | 26      | 29               | 15    | 15    |     |     |
|                |           | (v) Tiracol       | 34      | 20               | 17    | 17    |     |     |
|                |           | (vi) Sal          | 29      | 17               | 202   | 202   |     |     |
|                |           | (vii) Others      | 20      | 17               |       |       |     |     |
|                |           | (viii) Total      | 258     | 258              |       |       |     |     |
|                |           | 5                 | GUJARAT | (i) Narmada      | 161   | 140   | 15  | 130 |
|                |           |                   |         | (ii) Tapi        | 140   | 136   | 20  | 20  |
|                |           |                   |         | (iii) Ambica     | 136   | 75    | 4   | 4   |
|                |           |                   |         | (iv) Auranga     | 75    | 141   | 13  | 13  |
|                |           |                   |         | (v) Purna        | 141   | 60    | 2.3 | 2.3 |
| (vi) Rukmavati | 60        |                   |         | 713              | 184.3 | 184.3 |     |     |
| (vii) Total    | 713       |                   |         | 713              |       |       |     |     |
| 6              | KARNATAKA |                   |         | (i) Sharavathi   | 80    | 375   | 375 | 27  |
|                |           |                   |         | (ii) Tungabhadra | 375   | 230   | 375 | 230 |
|                |           |                   |         | (iii) Malaprabha | 230   | 160   | 160 | 230 |
|                |           |                   |         | (iv) Ghataprabha | 160   | 325   | 160 | 325 |
|                |           |                   |         | (v) Krishna      | 325   | 270   | 34  | 325 |
|                |           |                   |         | (vi) Cauvery     | 270   | 117   | 34  | 270 |
|                |           | (vii) Kabini      | 117     | 80               | 22    | 117   |     |     |
|                |           | (viii) Guruspur   | 80      | 48               | 20    | 80    |     |     |
|                |           | (ix) Gangolli     | 48      | 860              | 20    | 48    |     |     |
|                |           | (x) Bheema        | 860     | 37               | 125   | 860   |     |     |
|                |           | (xi) Udyavara     | 37      | 96               | 14    | 37    |     |     |
|                |           | (xii) Netravathi  | 96      | 184              | 26    | 96    |     |     |
|                |           | (xiii) Kali       | 184     | 2862             | 29    | 184   |     |     |
| (i) Total      | 2862      | 2862              | 1407    | 2862             |       |       |     |     |
| 7              | KERALA    | (i) Manjeswar     | 16      | 50               | 3.2   | 16    |     |     |
|                |           | (ii) Uppala       | 50      | 67               | 4.8   | 50    |     |     |
|                |           | (iii) Shriya      | 67      | 34               | 12.8  | 67    |     |     |
|                |           | (iv) Mogral       | 34      | 105              | 4.8   | 34    |     |     |
|                |           | (v) Chandragiri   | 105     | 25               | 11.2  | 105   |     |     |
|                |           | (vi) Chittan      | 25      | 46               | 24    | 25    |     |     |
|                |           | (vii) Nilleswar   | 46      | 64               | 9.6   | 46    |     |     |
|                |           | (viii) Karlingode | 64      | 31               | 16    | 64    |     |     |
|                |           | (ix) Kavayi       | 31      | 51               | 6.4   | 31    |     |     |
|                |           | (x) Peruvamba     | 51      | 19               | 24    | 51    |     |     |
|                |           | (xi) Ramapuram    | 19      | 82               | 9.6   | 19    |     |     |
|                |           | (xii) Kuppam      | 82      | 24               | 11.2  | 82    |     |     |
|                |           | (i) Total         | 1407    | 1407             | 1407  | 1407  |     |     |

Table No. 1.1(Contd...)

Navigable Waterways in India

(In Kms.)

| Sl. No.      | State/Rivers/Canals/Lakes                  | 2010-11  |                  |
|--------------|--|--|------------------|
|              |  | 3  | 4                |
|              |  | Total Length of the Rivers/Canals/Lakes in the State | Navigable Length |
| (xiii)       | Valapatnam                                 | 110  | 44.8             |
| (xiv)        | Anjara Kandy                               | 48   | 27.2             |
| (xv)         | Teicicherry                                | 28   | 21.6             |
| (xvi)        | Mahe                                       | 54   | 24               |
| (xvii)       | Kuthiadi                                   | 74   | 9.6              |
| (xviii)      | Korapuzha                                  | 40   | 24.8             |
| (xix)        | Kallai                                     | 22   | 9.6              |
| (xx)         | Chalhyar                                   | 169  | 68.4             |
| (xxi)        | Kadalundy                                  | 130  | 43.2             |
| (xxii)       | Tirur                                      | 48   | 9.6              |
| (xxiii)      | Bharathappuzha                             | 209  | 40               |
| (xxiv)       | Keecheri                                   | 51   | ...              |
| (xxv)        | Puzhakkal                                  | 29   | ...              |
| (xxvi)       | Karvannur                                  | 48   | 24               |
| (xxvii)      | Chalakkudy                                 | 130  | 16               |
| (xxviii)     | Pertayar                                   | 244  | 72               |
| (xxix)       | Muvattet 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)      | Dallikal                                   | 42   | 2                |
| (xxxv)       | Kallada                                    | 121  | 40               |
| (xxxvi)      | Ithikkara                                  | 56   | 16               |
| (xxxvii)     | Ayroor                                     | 17   | 1                |
| (xxxviii)    | Vamanapuram                                | 88   | 11.2             |
| (xxxix)      | Manom                                      | 27   | 1                |
| (xl)         | Karamana                                   | 68   | ...              |
| (xli)        | Neyyar                                     | 56   | ...              |
| <b>Total</b> |  | <b>3092</b>  | <b>845.2</b>     |
| (i)          | Dande River                                | 2  | 1                |
| (ii)         | Pangere River                              | 2  | 1                |
| (iii)        | Girye River                                | 3  | 1                |
| (iv)         | Kajali River                               | 35   | 5                |
| (v)          | Kalbadevi River                            | 10   | 2                |
| (vi)         | Are River                                  | 6  | 1                |
| (vii)        | Jog River                                  | 10   | 5                |
| (viii)       | Kelshi River                               | 10   | 3                |
| (ix)         | Savitri River(Bankot to Mahad)             | 45   | 40               |
| (x)          | Kal River                                  | 6  | 4                |
| (xi)         | Vaitama River                              | 24   | 9                |
| (xii)        | Uhas 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               |

8

MAHARASHTRA

Table No. 1.1(Contd..)

| Sl. No.                   |   | 1                | 2           | 3           | 4           |
|---------------------------|---|------------------|-------------|-------------|-------------|
| State/Rivers/Canals/Lakes |   | 2010-11          |             |             |             |
| Total Length of the State |   | Navigable Length |             |             |             |
| (xvii)                    | Mandad River(Rajapur to Mandad)                       | 14               | 10          | 5           | 10          |
| (xviii)                   | Mhasila River(Turnad to Mhasila)                      | 9                | 5           | 5           | 5           |
| (xix)                     | Vashisti River(Dabhol to Govalkot)                    | 45               | 38          | 38          | 38          |
| (xx)                      | Jagbudi River(Karambavne to Khed)                     | 20               | 20          | 20          | 20          |
| (xxi)                     | Shashti River/Jaigad Creek(Jaigad to Kundunda)        | 45               | 40          | 40          | 40          |
| (xxii)                    | Rajapur River(Musakazi to Rajapur)                    | 30               | 30          | 30          | 30          |
| (xxiii)                   | Vagothan River/Vjaydurg Creek(Vjaydurg to Kharapatan) | 38               | 22          | 22          | 22          |
| (xxiv)                    | Gad River(Kalaval Creek)                              | 13               | 7           | 7           | 7           |
| (xxv)                     | Terekhol River/Creek(Terekhol to Band)                | 28               | 28          | 28          | 28          |
| (xxvi)                    | Karli River(Maiva)                                    | 23               | 13          | 13          | 13          |
| (xxvii)                   | Others  | 129              | 105         | 105         | 105         |
| <b>Total</b>              |   | <b>631</b>       | <b>462</b>  | <b>462</b>  | <b>462</b>  |
| <b>ORISSA</b>             |   |                  |             |             |             |
| (i)                       | Mahanadi  | 493              | 199         | 199         | 199         |
| (ii)                      | Brahmani  | 541              | 277         | 277         | 277         |
| (iii)                     | Baitarani   | 344              | 32          | 32          | 32          |
| (iv)                      | Subarnarekha  | ...              | 50          | 50          | 50          |
| (v)                       | Budha Balanga   | ...              | 35          | 35          | 35          |
| (vi)                      | Dhamara   | ...              | 20          | 20          | 20          |
| (vii)                     | Salandi   | ...              | 17          | 17          | 17          |
| (viii)                    | Panchputra  | ...              | 21          | 21          | 21          |
| (ix)                      | Parnei  | ...              | 45          | 45          | 45          |
| (x)                       | Hatei   | ...              | 30          | 30          | 30          |
| (xi)                      | Bansagadal  | ...              | 32          | 32          | 32          |
| (xii)                     | Hansua  | ...              | 37          | 37          | 37          |
| (xiii)                    | Tirkota   | ...              | 18          | 18          | 18          |
| (xiv)                     | Jamboo  | ...              | 6           | 6           | 6           |
| (xv)                      | Gobari  | ...              | 16          | 16          | 16          |
| (xvi)                     | Ramchandi   | ...              | 16          | 16          | 16          |
| (xvii)                    | Kharaasi  | ...              | 14          | 14          | 14          |
| (xviii)                   | Batigharia  | ...              | 14          | 14          | 14          |
| (xix)                     | Birupa  | ...              | 110         | 110         | 110         |
| (xx)                      | Genguti   | ...              | 45          | 45          | 45          |
| (xxi)                     | Luna  | ...              | 37          | 37          | 37          |
| (xxii)                    | Devi  | ...              | 20          | 20          | 20          |
| (xxiii)                   | Pradhi  | ...              | 15          | 15          | 15          |
| (xxiv)                    | Kadha   | ...              | 30          | 30          | 30          |
| (xxv)                     | Kusavadra   | ...              | 25          | 25          | 25          |
| (xxvi)                    | Daya  | ...              | 9           | 9           | 9           |
| (xxvii)                   | Rajua   | ...              | 7           | 7           | 7           |
| (xxviii)                  | Makara  | ...              | 11          | 11          | 11          |
| (xxix)                    | Others **   | ...              | 462         | 462         | 462         |
| <b>Total \$</b>           |   | <b>1378</b>      | <b>1650</b> | <b>1650</b> | <b>1650</b> |
| <b>TAMIL NADU</b>         |   |                  |             |             |             |
| (i)                       | North Buckingham Canal                                | 58               | ...         | ...         | ...         |
| (ii)                      | Central Buckingham Canal                              | 7                | ...         | ...         | ...         |
| (iii)                     | South Buckingham Canal                                | 105              | ...         | ...         | ...         |
| <b>Total</b>              |   | <b>170</b>       | <b>...</b>  | <b>...</b>  | <b>...</b>  |
| <b>UTTAR PRADESH</b>      |   |                  |             |             |             |
| (i)                       | Gomti   | 960              | ...         | ...         | ...         |
| (ii)                      | Rapti   | 778              | ...         | ...         | ...         |
| (iii)                     | Ghaghra   | 1116             | ...         | ...         | ...         |
| (iv)                      | Ganga   | 2345             | ...         | ...         | ...         |
| (v)                       | Sai   | 760              | ...         | ...         | ...         |
| (vi)                      | Tons  | 485              | ...         | ...         | ...         |
| <b>Total</b>              |   | <b>6444</b>      | <b>...</b>  | <b>...</b>  | <b>...</b>  |

**Table No. 1.1 (Concld...)**

**Navigable Waterways in India**

(in Kms.)

| Sl. No. | State/Rivers/Canals/Lakes | 2010-11                   |                  |
|---------|---------------------------|---------------------------|------------------|
|         |                           | 3                         | 4                |
|         |                           | Total Length of the State | Navigable Length |

**12 WEST BENGAL**

(i) Hooghly 580

(ii) Mahananda 206

(iii) Ajoy 174

(iv) Jalangi 232

(v) Dwarka 129

(vi) Bakreswar 102

(vii) Damodar 437

(viii) Dwarakeswar 103

(ix) Silabati 135

(x) Kumari 347

(xi) Ichamati 232

(xii) Others@ 2064

**Total 4741**

**580**

**13 NAGALAND**

(i) Doyans 185

(ii) Tizu/Zungki 287

(iii) Dhansiri/Chathe 170

(iv) Dikhu 120

(v) Tapi-Yangnyu 95

(vi) Tsurang/Disai 60

(vii) Others 20

**Total 937**

**375**

**14 MIZORAM**

(i) R. Tlawng (Dhaleswar) 185

(ii) R. Kolodyne (Chhimitupoi) 138

(iii) Khawthlang Tuipei 128

(iv) R. Tuichawng 108

**Total 559**

**293**

\*\* Including Canals.

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

... : Not available

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

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

Source: IWT Directorate of states & IWA.

Table No. 1.2

## Infrastructure Facilities Available on National Waterways (As on 31-3-2011)

| Navigational Channel           | Availability and Capacity of Terminals  |                                |  |                                |  |   |   | Remarks |
|--------------------------------|---|--------------------------------|--|--------------------------------|--|---|---|---------|
|                                | Depth (Meters) about 330 days in a year | Place                          | Size of Vessels that can be accommodated (DWT) | No. of Berths                  | Cargo Handling Equip. and their Capacity | Type and Extent of Storage Facility Available                   |   |         |
| National Waterway No.1         | 2                                       | 3                              | 4  | 5                              | 6  | 7   | 8   |         |
| 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.).        |   |         |
|                                |   | (b) G.R. Jetty (BISN), Kolkata | 600  | One(Floating)                  | -  | Open storage  | Owned by Farakka Barrage Project. Both the berth and godown are owned by Farakka Barrage Project  |         |
|                                |   | (c) Botanical garden, Kolkata  | 600  | One(Floating)                  | -  | -   | Owned by Farakka Barrage Project. Both the berth and godown are owned by Farakka Barrage Project  |         |
|                                |   | (d) Putman (pakur)             | 600  | One(fixed)                     | -  | -   |   |         |
|                                |   | (e) Farakka                    | 600  | One(fixed) and                 | -  | One covered godown  |   |         |
|                                |   | (f) Hazardwar                  | 600  | one (floating)                 | -  | -   |   |         |
|                                |   | (g) Shantipur                  | 600  | One(Floating)                  | -  | -   |   |         |
|                                |   | (h) Katwa                      | 600  | One(Floating)                  | -  | -   |   |         |
| 2. Farakka - Patna (460 km)    | 2.0                                     | (i) Rajmahal(Manglghat)        | 600  | One(Floating)                  | -  | -   | one DGPS station is being set up at Swaroopganj Fully operational condition for cargo operation   |         |
|                                |   | (j) Samudrahat(Sahibganj)      | 600  | One(Floating)                  | -  | -   | Fully operational condition for cargo operation   |         |
|                                |   | (k) Bhagalpur                  | 600  | One(floating)                  | -  | Open storage  | one DGPS station is being set up at Bhagalpur   |         |
|                                |   | (l) Samaria                    | 600  | One(floating)                  | -  | -   |   |         |
|                                |   | (m) Patna.                     | 600  | One (floating) and one (fixed) | -  | Pontoon with crane facility and godown of 45 x 15 m shore crane | 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. |         |
| 3. Patna-Varanasi (363 km)     | 1.5                                     | (p) Buxer                      | 600  | One (Floating)                 | -  | -   |   |         |
|                                |   | (q) Ghazipur/Kaithy            | 600  | One (floating)                 | -  | -   |   |         |
| 4. Varanasi-Allahabad (237 km) | 0.8                                     | (r) Varanasi                   | 600  | One(floating)                  | -  | -   |   |         |
|                                |   | (s) Allahabad                  | 600  | One (floating)                 | Pontoon with crane                       | Open storage  |   |         |

- 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 31-3-2011)

| National Waterways No.2      | Availability and Capacity of Terminals  |                 |  |                |  |   |  |   |
|------------------------------|---|-----------------|--|----------------|--|---|--|---|
|                              | 1                                       | 2               | 3  | 4              | 5  | 6   | 7  | 8 |
| Navigation Channel           | Depth (Meters) about 350 days in a year | Place           | Size of Vessels that can be accommodated (DWT) | No. of Berths  | Cargo Handling Equip. and their Capacity | Type and Extent of Storage Facility Available   | Remarks                                      |   |
| National Waterways No.2      | 2.0                                     | (a) Dhubri      | 600  | One(floating)  | -  | Open storage facility being developed   | Project for development is under preparation |   |
|                              |   | (b) Joghghopa   | 600  | One(floating)  | -  | -   | Terminal being developed for coal loading.   |   |
|                              |   | (c) Pandu       | 600  | One(floating)  | -  | Two floating and Two godowns each of Construction of one low level permanent berth for two shore cranes of size 75x20m and handling container and general cargo under progress. |  |   |
|                              |   | (d) Tezpur      | 600  | One(floating)  | -  | -   |  |   |
|                              |   | (e) Silghat     | 600  | One(floating)  | Pipeline for POL                         | -   | DGPS station is being setup at silghat       |   |
|                              |   | (f) Nearnati    | 600  | One (floating) | -  | -   |  |   |
|                              |   | (g) Boglbi      | 600  | ...do...       | -  | -   |  |   |
|                              |   | (h) Opp. Boglbi | 600  | ...do...       | -  | -   |  |   |
|                              |   | (i) Dibrugarh   | 600  | One(floating)  | -  | -   | DGPS station is being setup at Dibrugarh     |   |
|                              |   | (j) Panbari     | 600  | One(floating)  | -  | -   |  |   |
| (k) Orunghat                 | 600                                     | ...do...        | -  | -              |  |   |  |   |
| 4. Dibrugarh-Sadiya (123 km) | 1.0                                     | (i) Dibrugarh   | 600  | One(floating)  | -  | -   |  |   |
|                              |   | (j) Panbari     | 600  | One(floating)  | -  | -   |  |   |

Note:

- 1) Floating terminals with pontoon/crane can be provided at any location along waterway on demand.
- 2) Night navigation aids are available between Tiberi and Varanasi
- 3) River radices are issued on fortnightly/monthly.
- 4) For providing Differential Global Positioning System (DGPS) connectivity on the entire waterway, DGPS stations were planned to be set up at Joghghopa, Silghat and Dibrugarh. Out of these locations, DGPS station at Joghghopa has been commissioned. Construction of DGPS stations at the other two locations is in progress.

Table No.1,2 Contd.....

## Infrastructure Facilities Available on National Waterways (As on 31-3-2011)

| Navigational Channel         | Availability and Capacity of Terminals |                           |        |                    |   |   |                                    | Remarks |
|------------------------------|--|---------------------------|--------|--------------------|---|---|------------------------------------|---------|
|                              | 1                                      | 2                         | 3      | 4                  | 5   | 6   | 7                                  |         |
| 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                  | 3 Covered storage (20x20m) Open storage(2000 sqm) |                                    |         |
| 2. Udyogmandal Canal (23 km) | 2.0                                    | (b) Aluva                 | 350.0  | One fixed          | One 18 T crane & 3 T Fork lift                  | 3 Covered storage(20x20m) Open storage(2000 sqm)  |                                    |         |
| 3. Champakara Canal (14 km)  | 2.0                                    | (c) Ennakulam GC (Maradu) | 350    | One fixed          | One 18 T crane & 3 T Fork lift                  | 3 Covered storage(20x20m) Open storage(2000 sqm)  |                                    |         |
| 4. Kochi-Alapuzha (63 km)    | 2.0                                    | (d) Kakkanaad (CSEZ)      | 350    | One fixed          | One 18 T crane & 3 T Fork lift                  | 3 Covered storage(20x20m) Open storage(2000 sqm)  | Only Land for terminal acquired    |         |
|                              |  | (e) Vaikkom               |        |                    |   |   |                                    |         |
|                              |  | (f) Chertala              | 350    | One fixed          | One 18 T crane & 3 T Fork lift                  | 3 Covered storage(20x20m) Open storage(2000 sqm)  |                                    |         |
|                              |  | (g) Alapuzha              |        |                    |   |   |                                    |         |
| 5. Alapuzha-Kollam (71 km)   | 1.5                                    | (h) Trikunapuruzha        | 350    | One fixed          | One 18 T crane & 3 T Fork lift                  | 3 Covered storage(20x20m) Open storage(2000 sqm)  | The terminal is under construction |         |
|                              |  | (i) Kayamkulam            |        |                    |   |   |                                    |         |
| 6. CPT Area                  | 2.2                                    | (j) Chavara               | 12 TEU | Container Material | 40 T Crane 8000 sqm open through agency storage |   |                                    |         |
|                              |  | (k) Kollam                |        |                    |   |   |                                    |         |
|                              |  | (l) Willingdon Island     |        |                    |   |   |                                    |         |
|                              |  | (m) Bolgatty Island       |        |                    |   |   |                                    |         |

Notes: 1) Channel marks for 24 hrs navigation provided on the entire waterway.

2) River notices are issued on fortnightly basis.

These terminals have been constructed for container movement to ICTT, Operation commenced w.e.f. 23.02.2011.

Only land acquired

The terminal is under construction

Table No 1.3

## Infrastructure Facilities Available on State Waterways (As on 31-3-2011)

Availability and Capacity of Terminal

| Sl. No. | Navigational Channel | Depth (Meters)                | Place  | Size of vessels that can be accommodated (DWT/dimension)   | No. of berths   | Cargo handling equip. and their capacity                           | Type and extent of storage facility available                      | Remarks   |
|---------|----------------------|-------------------------------|--|--|---|--|--|---|
|         |                      |                               |  |  |   |  |  |   |
| 1       | ANDHRA PRADESH       | NIL                           | NIL  | NIL  | NIL   | NIL  | NIL  | NIL   |
| 2       | BIHAR                | 2 metres                      | (i) Sahibganj-Manihari<br>(ii) Kalyanpur-Tinanga<br>(iii) Sultanpur-Arwan<br>(iv) (a) Munghy-Rajhat<br>(v) Buxar-Ujighat | 134x31x2 Nos<br>80x15x7x1No<br>56x13x3x4x1 Nos<br>60x16x6x2Nos.<br>70x18x6x1 No.<br>56x3x14x2x5x1 No.<br>56x3x16x4x5x1 No.<br>47x3x12x6x5x1 No.<br>59x3x15x6x5x1 No.<br>NA | 2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>2 Nos.<br>1 No. | NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL | NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL<br>NIL | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-  |
| 3       | GOA                  | 3 metres                      | Panaji   | 75 Mtrs Length   | 1   | -  | -  | Port jety 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 Chailika  | 30 ft  | 2   | -  | NA   | Passenger waiting hall is available at Balugaon. Repair of jetties and construction are needed. Black well at Balugaon and Krishnprasad waiting hall is not available at Krishnprasad at present. |
|         | Balugaon-Kailjal     | 2 to 10 Metres                | Lake Chailika  | 40 ft  | 2   | -  | NA   | Black well at Kailjal is available for berthing & landing. Waiting hall is not available at Kailjal.  |
|         | Balugaon-Nuapada     | 2 to 4 Metres                 | Lake Chailika  | 30 ft  | 2   | -  | -  | No Jetty and waiting hall is available at Nuapada.  |
|         | Balugaon-Satapada    | 2 to 4 Metres                 | Lake Chailika  | 30 ft  | 2   | -  | -  | 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 31.3.2011)

Availability and Capacity of Terminals

| Sl. No.                        | Navigational Channel | Depth (Meters)                | Place                             | Size of vessels that can be accommodated (DWT/dimension)   | No. of berths | cargo handling equip. and their capacity | Type and extent of storage facility available | Remarks   |
|--------------------------------|----------------------|-------------------------------|-----------------------------------|--|---------------|--|---|---|
|                                |                      |                               |                                   |  |               |  |   |   |
| <b>Astrang Sector</b>          |                      |                               |                                   |  |               |  |   |   |
|                                | Nuagath-Sibanpur     | 2 to 10 Metres                | River Devi                        | 28 ft  | 3             | -  | -do-  | No jetty & waiting hall is available for the sector.  |
| <b>Chandbail Sector</b>        |                      |                               |                                   |  |               |  |   |   |
|                                | Chandbail-Rainagar   | Varies between 7 to 18 metres | River Baitarani/ Phokungri        | 52 ft  | 13            | -  | -do-  | Jetty & waiting hall are available at Chandbail. The Jetty at Rainagar washed away  |
|                                | Chandbail-Talucha    | Varies between 7 to 20 metres | Baitarani/Kharastrola/ Brahmani   | 50 ft  | 10            | -  | -do-  | Jetty at Nallipatia in the Chandbail, Talucha, route has been severely damaged during super cyclone 1999 & Floor 2001. Waiting hall at Nallipatia is not available. |
|                                | Chandbail-Arudi      | Varies between 7 to 18 metres | Brahmani                          | 35'  | 3             | -  | -do-  | Both Jetty and waiting hall is available at Arudi. Both the structures require repair & renovation.   |
| <b>6 TAMILNADU</b>             |                      |                               |                                   |  |               |  |   |   |
|                                |                      | 41.46                         | Thakkady                          | Vessel 1 (Kannagi) length - 8.5 m Breadth - 3m Depth - 1.4 m Vessel 2 (Sairama) length - 11.5 m Breadth - 2.4m Depth - 1.6 m | -             | -  | -   | -   |
| <b>7 ANDAMAN &amp; NICOBAR</b> |                      |                               |                                   |  |               |  |   |   |
| <b>8 NAGALAND**</b>            |                      |                               |                                   |  |               |  |   |   |
|                                | 1. Tnu River         | 1.5 to 8                      | Lpmgmtra - Pursusu Phokungri      | -  | -             | -  | -   | Under survey.   |
| <b>9 MIZORAM #</b>             |                      |                               |                                   |  |               |  |   |   |
|                                | 1. R. Tiawng         | 0.5 - 3.00                    | (a) Saikang (b) Assam Border      | Country Boat   | -             | -  | -   | Being hill rivers there are many rapids. Small motorised boat can navigate in monsoon and small country boat in dry season  |
|                                | 2. R. Kaidoyne       | 0.5 - 3.00                    | (a) Kawichaw (b) Ngenpudhuhah     | Country Boat   | -             | -  | -   | -do-  |
|                                | 3. R. Khawhlang      | 0.5 - 3.00                    | (a) Marpara (b) Bangladesh Border | Country Boat   | -             | -  | -   | -do-  |
|                                | 4. R. Twichawng      | 0.5 - 3.00                    | (a) Chamngle (b) Diphibagh        | Country Boat   | -             | -  | -   | -do-  |

Data not received.  
Source : State Govts.

\*\* pertains to 2007-08 # pertains to 2008-09

**CARGO MOVED ON  
VARIOUS WATERWAYS**

**SECTION - 2**

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

| Sl.No. | Details of Waterway | Distance (Kms) | Cargo Moved (lakh Tonnes) |         | 2009-10 | 2010-11 |
|--------|---------------------|----------------|---------------------------|---------|---------|---------|
|        |                     |                | 2009-10                   | 2010-11 |         |         |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|

|   |  |      |       |       |       |       |
|---|--|------|-------|-------|-------|-------|
| 1 | National Waterway No. 1<br>(Allahabad-Haldia stretch of Ganga - Bhagirathi - Hooghly river system) | 1620 | 18.37 | 18.77 | 10402 | 12302 |
|---|--|------|-------|-------|-------|-------|

|   |   |     |      |       |    |     |
|---|---|-----|------|-------|----|-----|
| 2 | National Waterway No. II<br>(Sadiya-Dhubri stretch of Brahmaputra River system) | 891 | 1.83 | 21.64 | 74 | 573 |
|---|---|-----|------|-------|----|-----|

|   |  |     |      |      |    |     |
|---|--|-----|------|------|----|-----|
| 3 | National Waterway No. III<br>(Kollam-Kottapuram stretch of West Coast Canal along with Champakara Canal and Udyogmandal Canal) | 205 | 6.67 | 8.86 | 97 | 142 |
|---|--|-----|------|------|----|-----|

|      |               |     |        |        |       |       |
|------|---------------|-----|--------|--------|-------|-------|
| 4.00 | Goa Waterways | 202 | 544.32 | 553.82 | 23405 | 23853 |
|------|---------------|-----|--------|--------|-------|-------|

|   |                       |     |        |        |      |      |
|---|-----------------------|-----|--------|--------|------|------|
| 5 | Maharashtra Waterways | 453 | 125.10 | 148.70 | 3107 | 3389 |
|---|-----------------------|-----|--------|--------|------|------|

|             |  |      |        |        |       |       |
|-------------|--|------|--------|--------|-------|-------|
| Grand Total |  | 3371 | 696.29 | 751.79 | 37085 | 40259 |
|-------------|--|------|--------|--------|-------|-------|

Source : Inland Waterways Authority of India for National Waterways  
Data for Goa Waterways include the data received from Ports department, Govt of Goa  
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.1) - THE GANGA**

| Sl. No. | River/Stretch                              | Approximate Distance (Kms) | 2008-09(†) | 2009-10(†) | 2010-11(†) | Cargo generally moved  |
|---------|--|----------------------------|------------|------------|------------|--|
| 1       |  |                            |            |            |            |  |
| 2       | Kolkata-Bangladesh                         | 790                        | 5100       | 545        | ...        | Fiyash,Slag, Pulses,Logs,Salt,Iron Ore,Steel, Fiy Ash,Aluminium block, Fertilizer, Container |
| 3       | (1)Saugar-Diamond Harbour/Haldia /Kolkata/ | 144/80                     | 66773      | 140766     | 21000      | GC, Cement, Fiy ash,EdibleOils,Cement Clinkers, Food Grains                                  |
| 4       | Kolkata-Kamanganj-Badampur                 | 1218                       | 2197       | 2043       | 2050       | Cut Bamboo   |
| 5       | Jogjhopa-Badampur                          | 1089                       | ...        | 550        | ...        | Boulder  |
| 6       | Haldia-Goma Island                         | 30                         | ...        | 41841      | 17182      |  |

A. CIMTC

| Sub Total (A) |  |        |       |        |       |  |
|---------------|--|--------|-------|--------|-------|--|
| 1             | Haldia-Budge-Budge                         | 74     | ...   | 3300   | 8650  | POL, Waste Oil   |
| 2             | Kolkata-Bangladesh                         | 790    | 5100  | 545    | ...   | Fiyash,Slag, Pulses,Logs,Salt,Iron Ore,Steel, Fiy Ash,Aluminium block, Fertilizer, Container |
| 3             | (1)Saugar-Diamond Harbour/Haldia /Kolkata/ | 144/80 | 66773 | 140766 | 21000 | GC, Cement, Fiy ash,EdibleOils,Cement Clinkers, Food Grains                                  |
| 4             | Kolkata-Kamanganj-Badampur                 | 1218   | 2197  | 2043   | 2050  | Cut Bamboo   |
| 5             | Jogjhopa-Badampur                          | 1089   | ...   | 550    | ...   | Boulder  |
| 6             | Haldia-Goma Island                         | 30     | ...   | 41841  | 17182 |  |
| Sub Total (A) |  |        |       |        |       |  |
| 74070         |  |        |       |        |       |  |
| 189045        |  |        |       |        |       |  |
| 48882         |  |        |       |        |       |  |

| Sub Total (B) |                         |     |        |        |        |                  |
|---------------|-------------------------|-----|--------|--------|--------|------------------|
| 1             | Haldia-Kolkata          | 100 | ...    | ...    | 34104  | HSD/FO/LDO       |
| 2             | Haldia-Budge-Budge      | 78  | 78823  | 209236 | 100972 | FO, LDO, HSD     |
| 3             | Haldia-Kantapukur       | 104 | 17612  | 10955  | ...    | FO               |
| 4             | Haldia-NSD              | ... | 103995 | ...    | 105916 | LO,HSD, Lubo Oil |
| 5             | Haldia-River Moon       | ... | 112277 | ...    | ...    | FO,HSD, LDO      |
| 6             | Budge-Budge-NSD         | ... | 8132   | ...    | 6727   | HSD/LDO          |
| 7             | Budge-Budge-Sunam       | 48  | ...    | 49608  | 2443   | FO, HSD          |
| 8             | Budge-Budge-KPD         | ... | 659    | ...    | 767    | FO, HSD          |
| 9             | Budge-Budge-Haldia      | 78  | 12122  | 3931   | ...    | LDO              |
| 10            | Haldia-Namkhana         | ... | 3569   | ...    | 2515   | LDO, HSD         |
| 11            | Budge-Budge-Pujail      | 5   | ...    | ...    | 843    | LDO              |
| 12            | Haldia-Birth            | 4   | ...    | ...    | 19747  | HSD              |
| 13            | Haldia-Haldia Oil Jetty | 4   | ...    | ...    | 49159  | FO               |
| 14            | Sunam-KPD               | 4   | ...    | ...    | 80     | FO               |
| 15            | Sunam-NSD               | 1   | ...    | ...    | 288    | HSD              |
| Sub Total (B) |                         |     |        |        |        |                  |
| 337189        |                         |     |        |        |        |                  |
| 273730        |                         |     |        |        |        |                  |
| 323561        |                         |     |        |        |        |                  |

† : Not available.

\* : The route is a link between NW-I & NW-II through Bangladesh.

† : Cargo handled in this route is taken in NW-I.

\* : Data for the year 2008-09, 2009-10 and 2010-11 is taken from monthly returns.

**Details of Cargo Moved on National Waterways (National Waterway No.1) - THE GANGA**

Table No 2.2 Contd...

| Sl. No. | River/Stretch | Approximate Distance (kms) | 2008-09(₹) | 2009-10(₹) | 2010-11(₹) | Cargo generally moved |
|---------|---------------|----------------------------|------------|------------|------------|-----------------------|
| 1       |               |                            |            |            |            |                       |

(in tonnes)

|    |                                |  |        |        |        |                                     |
|----|--------------------------------|--|--------|--------|--------|-------------------------------------|
| C. | OTHER PRIVATE OPERATORS        |  |        |        |        |                                     |
| 1  | TRUPATI VESSEL P.LTD.          |  | 7034   | 5582   |        | Fiyash                              |
| 2  | Kolkata-Khulna (Bangla desh)   |  | 45288  | 54478  |        | Fiyash                              |
| 3  | Kolkata-Narayanganj (B'Desh)   |  | 361146 | 325106 |        | Fiyash                              |
| 2  | RELIANCE EXPORT CORPORATION    |  | 9233   | 21939  |        | Fiyash                              |
| 1  | Kolkata-Narayanganj(B'Desh)    |  | 10534  | 8244   |        | Fiyash                              |
| 2  | Haldia-Narayanganj(B'Desh)     |  |        | 616    |        |                                     |
| 3  | Kolkata-Khulna (Bangla desh)   |  |        |        |        |                                     |
| 3  | Maitrayee Shipping & Logistics |  | 424    | 9062   |        | Fiyash                              |
| 1  | Kolkata-Khulna (B'Desh)        |  | 8711   | 41629  | 83260  | Fiyash                              |
| 2  | Kolkata-Narayanganj (B'Desh)   |  | 446    | 6440   |        | Fiyash                              |
| 3  | Haldia-Khulna(B'Desh)          |  | 758    | 15945  |        | Fiyash                              |
| 4  | Haldia-Narayanganj (B'Desh)    |  | 1253   | 590    |        | Sponge Iron                         |
| 5  | Haldia-Karimganj               |  | 424    | 1308   | 808    | Fiyash                              |
| 2  | Kolkata-Narayanganj(B. Desh)   |  | 758    | 138017 | 145597 | Fiyash, Slig, MS wired rod          |
| 3  | Kolkata-Karimgung              |  | 1318   | 980    |        | Fiyash                              |
| 5  | SOHOM COMMERCIAL               |  | 424    | 881    | 26853  | Fiyash                              |
| 1  | Kolkata- Khulna(B' Desh)       |  | 758    | 47106  |        | Fiyash                              |
| 2  | Kolkata-Narayanganj (B' Desh)  |  | 446    | 4518   |        | Fiyash                              |
| 3  | Haldia-Narayanganj             |  | 780    | 12999  | 5983   | Fiyash, Slag                        |
| 7  | R.S. SHIPPING                  |  | 758    | 782    |        | HP Separator, MS Wire Rod Machinery |
| 1  | Kolkata-Narayanganj            |  | 1518   | 926    |        |                                     |
| 2  | Kolkata-Pandu                  |  | 424    | 1959   | 7401   | Fiyash                              |
| 1  | Kolkata-Khulna                 |  | 758    | 18198  | 9247   | Fiyash                              |
| 2  | Kolkata-Narayanganj(B' Desh)   |  | 413    | 2323   | 680    | Fiyash                              |
| 3  | Haldia-Mongla(B' Desh)         |  | 413    | 9814   | 11937  | Fiyash                              |
| 4  | Kolkata-Mongla(B' Desh)        |  | 780    | 1268   |        | Fiyash                              |
| 5  | Haldia-Narayanganj(B' Desh)    |  |        |        |        |                                     |

**Details of Cargo Moved on National Waterways (National Waterway No.1)- THE GANGA**

Table No 2.2 Contd...

| Sl. No. | River/Stretch | Approximate Distance (kms) | 2008-09(%) | 2009-10(%) | 2010-11(%) | Cargo generally moved |
|---------|---------------|----------------------------|------------|------------|------------|-----------------------|
| 1       |               |                            |            |            |            |                       |
| 2       |               |                            |            |            |            |                       |
| 3       |               |                            |            |            |            |                       |
| 4       |               |                            |            |            |            |                       |
| 5       |               |                            |            |            |            |                       |
| 6       |               |                            |            |            |            |                       |
| 7       |               |                            |            |            |            |                       |

(In tonnes)

|     |                                 |        |        |         |       |                                  |
|-----|---------------------------------|--------|--------|---------|-------|----------------------------------|
| 9   | COASTAL CONNECTIONS             | 758    | 64342  | 48321   | 48321 | Flyash                           |
| 1   | Kolkata-Narayanganj(B' Desh)    | 780    | 5966   | 7918    | 7918  | Flyash                           |
| 2   | Haldia-Narayanganj              | 446    | 7972   | 3810    | 3810  | Flyash                           |
| 3   | Kolkata-Khulna                  | 491    | ...    | 17861   | 17861 | Flyash                           |
| 10  | KANISHKA SHIPPING LINES         | 758    | 19817  | 18818   | 18818 | Flyash                           |
| 1   | Kolkata-Narayanganj(B' Desh)    | 780    | 767    | ...     | ...   | Flyash                           |
| 2   | Haldia-Narayanganj(B' Desh)     | 424    | 3944   | ...     | ...   | Flyash                           |
| 3   | Kolkata-Khulna(B' Desh)         | 1065   | 1216   | 311     | 311   | Boiler Drum, Stator(ODC)         |
| 1   | Kolkata-Jamnia                  | 751    | 286    | ...     | ...   | Boiler Drum, Stator(ODC)         |
| 2   | Kolkata-Bath                    | 923    | 1116   | 5660    | 5660  | Stator(ODC)                      |
| 4   | Kolkata-Falua                   | 854    | 690    | 1551    | 1551  | Flyash, Boiler Drum, Stator(ODC) |
| 12  | A.K.Navigaton                   | 4025   | 4553   | ...     | ...   | Flyash                           |
| 1   | Kolkata-Narayanganj             | 1703   | ...    | ...     | ...   | Flyash                           |
| 2   | Kolkata-Khulna                  | 805    | 3228   | ...     | ...   | Flyash                           |
| 13  | Dasha International             | 176611 | 194619 | ...     | ...   | Flyash                           |
| 1   | Haldia-Narayanganj              | 208097 | 229550 | ...     | ...   | Flyash, Coal Durt, Slag, Coal    |
| 2   | Kolkata-Narayanganj             | 10750  | 13867  | ...     | ...   | Flyash                           |
| 3   | Haldia-Kulna                    | 7055   | 18484  | ...     | ...   | Flyash                           |
| 4   | Kolkata-Kulana                  | 780    | ...    | ...     | ...   | Flyash                           |
| 5   | Kolkata-Mongla                  | 685    | ...    | ...     | ...   | Flyash                           |
| 6   | Haldia-Mongla                   | ...    | 685    | ...     | ...   | Flyash                           |
| 14  | Reliance Enterprise             | 43049  | 34372  | ...     | ...   | Flyash                           |
| 1   | Kolkata-Narayanganj             | 10005  | 4425   | ...     | ...   | Flyash                           |
| 2   | Haldia-Narayanganj              | 1646   | ...    | ...     | ...   | Flyash                           |
| 3   | Haldia-Kulna                    | 3685   | 16678  | ...     | ...   | Flyash                           |
| 4   | Kolkata-Kulna                   | 580    | ...    | ...     | ...   | Flyash                           |
| 5   | Kolkata-Mongla                  | ...    | ...    | ...     | ...   | Flyash                           |
| 15  | Saha Overseas Corporation       | 864    | ...    | 84662   | 84662 | Flyash                           |
| 16  | C. Day & Brothers               | 865    | 8520   | ...     | ...   | Flyash                           |
| 1   | Kolkata-Narayanganj             | 865    | ...    | ...     | ...   | Flyash                           |
| 2   | Haldia-Narayanganj              | 805    | 2020   | ...     | ...   | Flyash                           |
| 18  | Sea Water Transport Co. Pvt Ltd | 805    | 1200   | ...     | ...   | Flyash                           |
| 1   | Haldia-Narayanganj              | 805    | 405    | ...     | ...   | Flyash                           |
| 2   | Haldia-Mongla                   | 418    | 1332   | ...     | ...   | Flyash                           |
| 3   | Haldia-Kulna                    | 477    | 2285   | ...     | ...   | Flyash                           |
| 4   | Kolkata-Kulna                   | 1701   | 3813   | ...     | ...   | Flyash                           |
| 19  | ABC India Ltd                   | 1701   | 679    | ...     | ...   | ODC (BO Route)                   |
| 1   | Kolkata-Tajpur                  | 998    | 1888   | ...     | ...   | ODC (BO Route)                   |
| 2   | Kolkata-Ashuganj (B'desh)       | ...    | ...    | ...     | ...   | ODC (BO Route)                   |
| 20* | Private Operators               | 810908 | 80967  | ...     | ...   | Fly Ash, Gypsum                  |
|     | Kolkata-Khulna                  | 34237  | ...    | ...     | ...   | Fly Ash, Slag                    |
|     | Kolkata-Mongla                  | ...    | ...    | ...     | ...   | Cement                           |
|     | Narayanganj-F'arid              | ...    | ...    | ...     | ...   | Flyash                           |
|     | Kolkata-Karimganj               | ...    | ...    | ...     | ...   | Flyash                           |
|     | Zabganj-karimganj               | ...    | ...    | ...     | ...   | Chinker                          |
|     | Karimganj-Kolkata               | 1441   | ...    | ...     | ...   | Edibleoil                        |
|     | Kolkata-pandu                   | 93553  | 136769 | 1501345 | ...   |                                  |
|     | Sub Total (C)                   | ...    | ...    | ...     | ...   |                                  |

\* : Names of Private operators not available

**Details of Cargo Moved on National Waterways (National Waterway No.1) - THE GANGA**

Table No 2.2 Contd...

| 1       | 2             | 3                          | 4          | 5          | 6          | 7                     |
|---------|---------------|----------------------------|------------|------------|------------|-----------------------|
| Sl. No. | River/Stretch | Approximate Distance (Kms) | 2008-09(°) | 2009-10(°) | 2010-11(°) | Cargo generally moved |

(In tonnes)

| D       |                         | IWI Vessels |            | Total (NW-1) (A+B+C+D) |               |
|---------|-------------------------|-------------|------------|------------------------|---------------|
| Sl. No. | Route                   | 2008-09(°)  | 2009-10(°) | 2010-11(°)             | Sub Total (D) |
| 1       | Rajmahal-Kolkata        | 1436        | ...        | ...                    | 3960          |
| 2       | Haldia-Patna            | 325         | ...        | ...                    | 10568         |
| 3       | Haldia-Kanmanganj       | 516         | ...        | ...                    | 1837112       |
| 4       | Kolkata-Kanmanganj      | 229         | ...        | ...                    | 1354298       |
| 5       | Sahibgunj-Patna         | 745         | ...        | ...                    | 7486          |
| 6       | Kolkata-Pandu           | ...         | ...        | ...                    | ...           |
| 7       | Pandu-Kolkata           | ...         | ...        | ...                    | ...           |
| 8       | Sahibgunj-Patna         | 285         | ...        | ...                    | ...           |
| 9       | Sahibgunj-Patna         | 2717        | ...        | ...                    | ...           |
| 10      | Kolkata-Ballia          | 337         | ...        | ...                    | ...           |
| 11      | Haldia-Patna            | 896         | ...        | ...                    | ...           |
| 12      | Kolkata-Kanmanganj      | 300         | ...        | ...                    | ...           |
| 13      | Haldia-Pandu            | 1134        | ...        | ...                    | ...           |
| 14      | Patna-Kolkata           | 283         | ...        | ...                    | ...           |
| 15      | Samdagnhat-Patna        | 8551        | ...        | ...                    | ...           |
|         | Stonechips              | 2087        | ...        | ...                    | 1877748       |
|         | Silicasand              | ...         | ...        | ...                    | ...           |
|         | Edibleoil               | 300         | ...        | ...                    | ...           |
|         | flyash                  | 300         | ...        | ...                    | ...           |
|         | Edible Oil, ODC         | 300         | ...        | ...                    | ...           |
|         | ODC                     | ...         | ...        | ...                    | ...           |
|         | Stone chips             | ...         | ...        | ...                    | ...           |
|         | Stone chips             | ...         | ...        | ...                    | ...           |
|         | Jute Bales              | 313         | ...        | ...                    | ...           |
|         | TT Shed                 | 300         | ...        | ...                    | ...           |
|         | Iron-dust               | ...         | ...        | ...                    | ...           |
|         | SoneSand                | ...         | ...        | ...                    | ...           |
|         | Bitumin, Edible-Oil     | 650         | ...        | ...                    | ...           |
|         | Edible-Oil              | ...         | ...        | ...                    | ...           |
|         | achina Clay, SilicaSand | 300         | ...        | ...                    | ...           |

Source : Inland Waterways Authority of India / CIWTC. ... : Not available.

**Details of Cargo Moved on National Waterways (National Waterway No.11) - BRAHMAPUTRA**

Table No 2.2 Contd...

| Sl. No. | River/Stretch | Approximate Distance (kms) | 2008-09(₹) | 2009-10(₹) | 2010-11(₹) | Cargo generally moved |
|---------|---------------|----------------------------|------------|------------|------------|-----------------------|
| 1       |               |                            |            |            |            |                       |

(In tonnes)

| A.                       |                     | CIWTC  |        |         |   |
|--------------------------|---------------------|--------|--------|---------|---|
| 1                        | Kolkata-Banladesh # | 790    | 5100   | 545     | ...   |
| Sub Total                |                     |        |        |         |   |
| B. Other Pvt.Operators   |                     |        |        |         |   |
| 1                        | Siligha-Baghabari   | 590    | 1169   | ...     | HSD   |
| 2                        | Kolkata-Jogighopa   | 1392   | 882    | 166     | Boiler with accessories, Separator(ODC)         |
| 3                        | Kolkata-Pandu       | 1535   | ...    | 237     | Shed/Valve/Rubber(ODC)                          |
| 4                        | Kolkata-Tripur      | 1693   | ...    | 689     | Main Shed (ODC), Main Valve Turbine Runner(ODC) |
| Sub Total                |                     |        |        |         |   |
| C                        | IWTD Assam          | 224158 | ...    | 1981723 | Goods   |
| D                        | Unorganised Sector  | ...    | 181168 | 180429  | Goods   |
| E                        | IWAI Vessel         | ...    | ...    | ...     | ...   |
| 1                        | Haldia-Guwahati     | 1470   | ...    | 300     | Edible Oils                                     |
| 2                        | Kolkata-Guwahati    | 1535   | ...    | 300     | Foodgrains                                      |
| 3                        | Jagihopa-Badapur    | 1120   | ...    | 200     | Bamboo  |
| 4                        | Pandu-Kolkata       | 1535   | ...    | 314     | Jute Bales                                      |
| 5                        | Kolkata-Pandu       | 1535   | ...    | 336     | Edibleoil                                       |
| Sub Total(C+D+E)         |                     |        |        |         |   |
| Total (NW-11)(A+B+C+D+E) |                     | 231309 | 183341 | 2163745 | ...   |

Source : Inland Waterways Authority of India / CIWTC

... : Not available

# : Also shown in movement on NW 1.

∴ Data of IWT Directorate, Govt of Assam not included



**Details of Cargo Moved on National Waterways (National Waterway No.11) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL**

Table No 2.2 Contd.

| Sl. No. | River/Stretch | Approximate Distance (Kms) | 4          | 5          | 6          | 7                     |
|---------|---------------|----------------------------|------------|------------|------------|-----------------------|
|         |               |                            | 2008-09(v) | 2009-10(v) | 2010-11(v) |                       |
|         |               |                            |            |            |            | Cargo generally moved |

| A. CHAMPAKARA CANAL |                                  |       |        |        |        |   |
|---------------------|----------------------------------|-------|--------|--------|--------|---|
| Sub Total           |                                  |       |        |        |        |   |
| 1                   | KSINC                            | 21.5  | 207015 | 31195  | 65436  | Raw Sulphur, Rock Phosphate & Phosphoric Acid etc |
| 2                   | LOTS Shipping & Trading          | 21.5  | 45092  | 121086 | 163431 | Raw Sulphur, Rock Phosphate & Phosphoric Acid     |
| 3                   | Kerala Backwater Navigation      | 21.5  | 2447   | 37676  | 109536 | Rock Phosphate, Sulphur & Stone aggregates        |
|                     | Cochin Port FACT-CD              |       |        |        |        |   |
|                     | Cochin Port FACT-CD              |       |        |        |        |   |
|                     | Cochin Port FACT-CD              |       |        |        |        |   |
|                     | Alwa MULAVUKADUD                 |       |        |        |        |   |
|                     | BPCL FACT UD                     |       |        |        |        |   |
|                     | Alwa-Pizhala, UD                 |       |        |        |        |   |
|                     | BPCL Inumbanam-FACT UD           |       |        |        |        |   |
|                     | Bolgaty-W, Island                |       |        |        |        |   |
| 2                   | KSINC*                           | 3.7   | ...    | ...    | 31694  | Various Commodity                                 |
|                     | Cochin Port-FACT UD              |       |        |        |        |   |
| 2                   | Rock Phosphate, Sulphur          | 22876 | 10169  | ...    | ...    |   |
| 3                   | Kerala Backwater Navigation      | 20    | ...    | 22558  | 17034  | Sulphur.  |
|                     | Facit Willingdon Island Facit UD |       |        |        |        |   |
| 4                   | Logos Agencies                   | 20    | ...    | ...    | 645    | Liquid Effluent                                   |
|                     | Alwa Terminal-Sea                |       |        |        |        |   |
|                     | Sub Total                        |       | 181850 | 218022 | 324136 |   |

| B. UDYOGMANDAL CANAL |                                  |    |        |        |        |                              |
|----------------------|----------------------------------|----|--------|--------|--------|------------------------------|
| Sub Total            |                                  |    |        |        |        |                              |
| 1                    | LOTS Shipping & Trading*         | 20 | 162059 | 163860 | 214430 | Zirame, Sulphur, Fumance oil |
|                      | Cochin Port FACT-UD              |    |        |        |        |                              |
|                      | Cochin-Port-Vallarapadam         |    |        |        |        |                              |
|                      | BPCL/IOC FACT PD                 |    |        |        |        |                              |
|                      | Stone aggregate, Fumance oil     |    |        |        |        |                              |
|                      | Aggregate                        |    |        |        |        |                              |
|                      | Phosphoric Acid                  |    |        |        |        |                              |
|                      | Aggregate                        |    |        |        |        |                              |
|                      | 306                              |    |        |        |        |                              |
|                      | 35023                            |    |        |        |        |                              |
|                      | Furnace Oil                      |    |        |        |        |                              |
|                      | 2128                             |    |        |        |        |                              |
|                      | 31694                            |    |        |        |        |                              |
| 2                    | KSINC*                           | 20 | ...    | 10169  | 22876  | Rock Phosphate, Sulphur      |
|                      | Cochin Port-FACT UD              |    |        |        |        |                              |
| 3                    | Kerala Backwater Navigation      | 20 | ...    | 22558  | 17034  | Sulphur.                     |
|                      | Facit Willingdon Island Facit UD |    |        |        |        |                              |
| 4                    | Logos Agencies                   | 20 | ...    | ...    | 645    | Liquid Effluent              |
|                      | Alwa Terminal-Sea                |    |        |        |        |                              |
|                      | Sub Total                        |    | 181850 | 218022 | 324136 |                              |

| C. THE WEST COASTAL CANAL |                               |    |        |        |        |  |
|---------------------------|-------------------------------|----|--------|--------|--------|--|
| Sub Total                 |                               |    |        |        |        |  |
| 1                         | KSINC Ltd.                    | 4  | 247630 | 176600 | 144740 | POL, Coal                              |
|                           | Fine Arts Jetty- Vypeen       |    |        |        |        |  |
|                           | Emakulum terminal-Cochin port |    |        |        |        |  |
|                           | Emakulum Vypeen Island        |    |        |        |        |  |
|                           | Cochin port Ships             |    |        |        |        |  |
|                           | Travancore Cements Ltd.       |    |        |        |        |  |
|                           | Valkom- Chittamangalam        |    |        |        |        |  |
|                           | Kayamkulam-Chavra             |    |        |        |        |  |
| 2                         | Travancore Cements Ltd.       | 20 | 38350  | 18650  | 22150  | Lime shell with clay& other impurities |
|                           | Kayamkulam-Chavra             |    |        |        |        |  |
|                           | Sand                          |    |        |        |        |  |
|                           | 5200                          |    |        |        |        |  |
|                           | 51065                         |    |        |        |        |  |
|                           | POL                           |    |        |        |        |  |
|                           | Potable water                 |    |        |        |        |  |
|                           | 22800                         |    |        |        |        |  |
|                           | 6768                          |    |        |        |        |  |
|                           | 43830                         |    |        |        |        |  |
|                           | 34376                         |    |        |        |        |  |
|                           | 144740                        |    |        |        |        |  |
|                           | 247630                        |    |        |        |        |  |
|                           | 259218                        |    |        |        |        |  |
|                           | 223155                        |    |        |        |        |  |
|                           | 766214                        |    |        |        |        |  |
|                           | 667197                        |    |        |        |        |  |
|                           | 885694                        |    |        |        |        |  |
|                           | 2351821                       |    |        |        |        |  |
|                           | 2687650                       |    |        |        |        |  |
|                           | 4927187                       |    |        |        |        |  |

Source : Inland Waterways Authority of India. ... : Not available.

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

**SECTION - 3**

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

**Table No. 3.1**

| 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                      |

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 3.3

## Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2008-09 to 2010-11

| Sl. No. | Route                      | Distance (in Kms) | Commodity                              | Tonnes Carried         |                    |                  |                         |                     | Freight Earned (Rs. in Lakh) |                  |                         |                     |                  | Tonne/Kms (in Lakh) Performed |  |  |  |  |
|---------|----------------------------|-------------------|--|------------------------|--------------------|------------------|-------------------------|---------------------|------------------------------|------------------|-------------------------|---------------------|------------------|-------------------------------|--|--|--|--|
|         |                            |                   |  | 2008-09                | 2009-10            | 2010-11          | 2008-09                 | 2009-10             | 2010-11                      | 2008-09          | 2009-10                 | 2010-11             |                  |                               |  |  |  |  |
| 1       | 2                          | 3                 | 4                                      | 5                      | 6                  | 7                | 8                       | 9                   | 10                           | 11               | 12                      | 13                  | 14               |                               |  |  |  |  |
| 1       | Kolkata - Bangladesh       | 446 - 780         | Fly Ash<br>Salt<br>Slag<br>Accessories | 2100<br>-<br>3000<br>- | -<br>-<br>545<br>- | -<br>-<br>-<br>- | 10.17<br>-<br>13.8<br>- | -<br>-<br>2.86<br>- | -<br>-<br>-<br>-             | -<br>-<br>-<br>- | 9.37<br>-<br>13.38<br>- | -<br>-<br>4.25<br>- | -<br>-<br>-<br>- |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | 5100                   | 545                | -                | 23.97                   | 2.86                | -                            | -                | 22.75                   | 4.25                | -                |                               |  |  |  |  |
| 2       | Bangladesh - Kolkata       | 446 - 780         | Jute<br>Machinery<br>Towage Charges    | -<br>-<br>-            | -<br>-<br>-        | -<br>-<br>-      | -<br>-<br>-             | -<br>-<br>-         | -<br>-<br>-                  | -<br>-<br>-      | -<br>-<br>-             | -<br>-<br>-         | -<br>-<br>-      |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | -                      | -                  | -                | -                       | -                   | -                            | -                | -                       | -                   | -                |                               |  |  |  |  |
|         | Kolkata-Bangladesh-Kolkata |                   | TOTAL                                  | 5100                   | 545                | -                | 23.97                   | 2.86                | -                            | -                | 22.75                   | 4.25                | -                |                               |  |  |  |  |
| 3       | Haldia-Budge-Budge         |                   | Waste Oil<br>Pol                       | -<br>-                 | -<br>-             | 8100<br>550      | -<br>-                  | 5.24<br>2.35        | 18.49<br>1.24                | -<br>-           | -<br>-                  | 1.64<br>0.82        | 4.51<br>1.91     |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | -                      | -                  | 8650             | -                       | 7.59                | 19.73                        | -                | -                       | 2.46                | 6.42             |                               |  |  |  |  |
| 4       | Karimganj                  | 1218-1248         | Edible Oil/Foodgrains<br>Fly Ash       | 550<br>1647            | -<br>2043          | 550<br>1500      | 5.1<br>13.85            | -<br>17             | 5.22<br>13.92                | 6.7<br>20.55     | -<br>25.33              | -<br>25.33          | 6.64<br>18.72    |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | 2197                   | 2043               | 2050             | 18.95                   | 17                  | 19.14                        | 27.25            | 25.33                   | 25.33               | 25.36            |                               |  |  |  |  |
| 5       | Karimganj - Kolkata        | 1218-1248         | Cement clinkers<br>Personal Effect     | -<br>-                 | -<br>-             | 2050<br>-        | -<br>-                  | -<br>-              | -<br>-                       | -<br>-           | -<br>-                  | -<br>-              | -<br>-           |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | -                      | -                  | 2050             | -                       | -                   | -                            | -                | -                       | -                   | -                |                               |  |  |  |  |
|         | Kolkata-Karimganj-Kolkata  |                   | TOTAL                                  | 2197                   | 2043               | 2050             | 18.95                   | 17                  | 19.14                        | 27.25            | 25.33                   | 25.33               | 25.36            |                               |  |  |  |  |
| 6       | Haldia-Chormalsland        | 417-1060          | Boulders                               | -                      | 41841              | 17182            | -                       | 9.89                | 4.22                         | -                | -                       | 7.03                | 2.58             |                               |  |  |  |  |
|         |                            |                   | TOTAL                                  | -                      | 41841              | 17182            | -                       | 9.89                | 4.22                         | -                | -                       | 7.03                | 2.58             |                               |  |  |  |  |

| Table No 3.3 Contd..... |                     | Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2008-09 to 2010-11 |                    |                |               |              |                              |               |               |                               |               |              |
|-------------------------|---------------------|---|--------------------|----------------|---------------|--------------|------------------------------|---------------|---------------|-------------------------------|---------------|--------------|
| Sl. No.                 | Route               | Distance (in Kms)   | Commodity          | Tonnes Carried |               |              | Freight Earned (Rs. in Lakh) |               |               | Tonne/Kms (in Lakh) Performed |               |              |
|                         |                     |   |                    | 2008-09        | 2009-10       | 2010-11      | 2008-09                      | 2009-10       | 2010-11       | 2008-09                       | 2009-10       | 2010-11      |
| 1                       | 2                   | 3   | 4                  | 5              | 6             | 7            | 8                            | 9             | 10            | 11                            | 12            | 13           |
| 7                       | Lighterage          | 44-144  | Peas               | 30100          | -             | 7300         | 36.18                        | -             | 10.48         | 28.48                         | -             | 5.84         |
|                         | Operation at Saugar |   | Logs               | -              | -             | 1500         | -                            | -             | 3.00          | -                             | -             | 1.2          |
|                         | /Halda Diamond      |   | Containers         | -              | -             | 4500         | -                            | -             | 9.00          | -                             | -             | 2.7          |
|                         | Harbour-Kolkata     |   | Fertilizer         | 35873          | 140766        | 7500         | 45.67                        | 158.28        | 9.00          | 31.57                         | 119.7         | 0.38         |
|                         |                     |   | A.Block            | -              | -             | 200          | -                            | -             | 1.00          | -                             | -             | 0.01         |
|                         |                     |   | <b>TOTAL</b>       | <b>65973</b>   | <b>140766</b> | <b>21000</b> | <b>81.85</b>                 | <b>158.28</b> | <b>32.48</b>  | <b>60.05</b>                  | <b>119.7</b>  | <b>10.13</b> |
| 8                       | Joghhopa-Baobapur   |   | Cut Bamboo         | 800            | 550           | -            | 1.22                         | 3.02          | -             | 0.02                          | 5.99          | -            |
|                         | Internal            |   | <b>TOTAL</b>       | <b>800</b>     | <b>550</b>    | <b>-</b>     | <b>1.22</b>                  | <b>3.02</b>   | <b>-</b>      | <b>0.02</b>                   | <b>5.99</b>   | <b>-</b>     |
| 9                       | Misc:               |   |                    |                |               |              |                              |               |               |                               |               |              |
|                         | Tug Hire and        |   |                    |                |               |              | 283.51                       | 235.99        | 184.82        | -                             | -             | -            |
|                         | Godown Rent         |   |                    |                |               |              |                              |               |               |                               |               |              |
|                         |                     |   | <b>Grand Total</b> | <b>74070</b>   | <b>189045</b> | <b>48882</b> | <b>409.5</b>                 | <b>434.63</b> | <b>260.39</b> | <b>110.07</b>                 | <b>164.76</b> | <b>44.49</b> |

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

**Table No. 3.4 Income And Expenditure Of C.I.W.T.C.**

**(For The Year Ending 31st Marc**

**(Rs. lakhs)**

| SI.No. | Item | 2008 | 2009 | 2010* | 2011 |
|--------|------|------|------|-------|------|
|        |      | 3    | 4    | 5     | 6    |

| A. INCOME          |                        |         |         |         |         |
|--------------------|------------------------|---------|---------|---------|---------|
| (i)                | Earnings (Operational) | 371.81  | 220.77  | 251.81  | 150.54  |
| (ii)               | Earnings (Others)      | 1472.97 | 1890.72 | 1883.89 | 1770.19 |
| <b>EXPENDITURE</b> |                        | 1872.19 | 2031.31 | 2652.36 | 1856.34 |

|        |                                    |         |         |         |        |
|--------|------------------------------------|---------|---------|---------|--------|
| (i)    | Materials & Stores Consumed        | 77.91   | 70.52   | 75.94   | 53.03  |
| (ii)   | Decrease/Increase in Work in Prog  | -       | 60.13   | 475.85  | -      |
| (iv)   | Repairs & Maintenance              | 144.16  | 92.42   | 92.18   | 80.97  |
| (v)    | Power & Fuel                       | 84.16   | 74.44   | 72.53   | 56.88  |
| (vi)   | Other Expenses                     | 390.09  | 414.43  | 573.57  | 322.08 |
| (vii)  | Interest                           | -       | -       | -       | -      |
| (viii) | Depreciation                       | 369.53  | 367.52  | 356.46  | 356.08 |
| (ix)   | Provisions                         | 136.84  | 180.24  | 184.16  | 0.20   |
| (x)    | Transfer to other Heads of Account | -108.10 | -104.31 | -109.65 | 84.45  |

|          |                          |        |       |         |       |
|----------|--------------------------|--------|-------|---------|-------|
| <b>C</b> | <b>Profit/Loss (A-B)</b> | -27.41 | 80.18 | -516.66 | 64.39 |
|----------|--------------------------|--------|-------|---------|-------|

Source : CIWTC  
\* Revised Figures

**Source-wise Earning of CIWTC**

Table No. 3.5

(Rs. in lakhs)

| Sl.No. | Name of Service | Year    |         |         |         |
|--------|-----------------|---------|---------|---------|---------|
|        |                 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
| 1      |                 |         |         |         |         |
| 2      |                 |         |         |         |         |
| 3      |                 |         |         |         |         |
| 4      |                 |         |         |         |         |
| 5      |                 |         |         |         |         |
| 6      |                 |         |         |         |         |

**A.Earnings (Operational)**

**Transportation & Allied**

**Activities:**

|                            |               |               |               |               |
|----------------------------|---------------|---------------|---------------|---------------|
| Freight                    | 250.63        | 122.54        | 188.52        | 73.18         |
| Dredging                   | -             | -             | -             | -             |
| Ferries & Charter          | 121.18        | 98.23         | 63.3          | 77.36         |
| Sales pending finalisation | -             | -             | -             | -             |
| <b>TOTAL (A)</b>           | <b>371.81</b> | <b>220.77</b> | <b>251.82</b> | <b>150.54</b> |

**B.Earnings (Others)**

|                           |                |                |                |                |
|---------------------------|----------------|----------------|----------------|----------------|
| Investment/one time grant | -              | -              | -              | -              |
| Short Term Deposit        | 526.35         | 879.43         | 724.41         | 700.77         |
| Interest on:              |                |                |                |                |
| Mobilisation Amount       | -              | -              | -              | -              |
| Sunderban                 | -              | -              | -              | -              |
| Conservancy Amount        | -              | -              | -              | -              |
| Port Maintenance          | -              | -              | -              | -              |
| Sale of Scrap             | -              | -              | -              | -              |
| Rent                      | 146.53         | 154.55         | 161.44         | 133.42         |
| Surplus on sale of assets | -              | -              | -              | -              |
| Retired from Operation    | -              | -              | -              | -              |
| Miscellaneous Receipts    | 800.09*        | 856.74*        | 998.01         | 936            |
| Profit on exchange        | -              | -              | -              | -              |
| <b>TOTAL B</b>            | <b>1472.97</b> | <b>1890.72</b> | <b>1883.86</b> | <b>1770.19</b> |

**TOTAL (A+B)**

|         |         |         |         |
|---------|---------|---------|---------|
| 1844.78 | 2111.49 | 2135.68 | 1920.73 |
|---------|---------|---------|---------|



**Table No. 3.6 Financial Position of CIWTC**

| Sl. No. | Item | Year    |          |          |         |
|---------|------|---------|----------|----------|---------|
|         |      | 2007-08 | 2008-09* | 2009-10* | 2010-11 |
| 1       |      |         |          |          |         |
| 2       |      |         |          |          |         |
| 3       |      |         |          |          |         |
| 4       |      |         |          |          |         |
| 5       |      |         |          |          |         |
| 6       |      |         |          |          |         |

| A. LIABILITIES   |  |          |          |          |          |
|------------------|--|----------|----------|----------|----------|
| (a)              | Paid up capital  | 13048.48 | 13048.48 | 13048.48 | 13048.48 |
| (b)              | Reserves & Surplus(Capital Reserve)  | 10909.93 | 10909.93 | 10909.93 | 10909.93 |
| (c)              | Borrowings   |          |          |          |          |
|                  | i) From Govt. of India   |          |          |          |          |
|                  | ii) From others  |          |          |          |          |
| (d)              | Trade dues and other current liabilities (including provisions) and interest accrued thereon | 19520.77 | 19246.85 | 19611.49 | 20073.41 |
| <b>TOTAL (A)</b> |  |          |          |          |          |

| B. ASSETS        |   |          |          |          |          |
|------------------|---|----------|----------|----------|----------|
| (e)              | Gross Asset                                       | 11119.71 | 11119.83 | 11119.83 | 11119.83 |
| (f)              | Less Depreciation                                 | 6425.35  | 6792.73  | 7149.19  | 7505.04  |
| (g)              | Less Provision                                    |          |          |          |          |
| (h)              | Net Fixed Assets (e-f-g)                          | 4694.36  | 4327.10  | 3970.64  | 3614.26  |
| (i)              | Capital work in progress                          | 535.89   | 475.85   |          |          |
| (j)              | Investment  |          |          |          |          |
| (k)              | Current Assets, Loans and Advances                | 11970.62 | 12632.93 | 12831.63 | 13446.63 |
| (l)              | Miscellaneous expenses and losses not written off | 14298.68 | 25769.38 | 26767.63 | 26970.93 |
| <b>TOTAL (B)</b> |   |          |          |          |          |

| C. WORKING CAPITAL |                                   |            |             |             |             |
|--------------------|-----------------------------------|------------|-------------|-------------|-------------|
| (m)                | Working Capital (k-d)             | -4429.48   | -6613.92    | -6779.86    | -6626.78    |
| (n)                | Additional provision for Gratuity |            |             |             |             |
| (o)                | Total Working Capital             | 4404.96    | -6613.92    | -6779.86    | -6626.78    |
|                    | Capital employed (h+o)            | 9099.32    | -2286.82    | -2809.22    | -3012.52    |
|                    | Net worth (a-l)                   | (-1250.20) | (-12720.90) | (-13719.15) | (-13922.45) |

Source: CIWTC  
\* Revised Figures

**IWT ACTIVITIES -  
STATE-WISE**

**SECTION - 4**

**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 |           |       |        |                    |       | Grand Total |
|------------------|---------------|----------------|-----------|---------------------|------------------|-------------------|-------------|----------------------|-----------|-------|--------|--------------------|-------|-------------|
|                  |               | Cargo          | Passenger | Cargo cum Passenger | Tugs and Pushers | Total (Col.3 to6) | Dumb Barges | Dumb Tankers         | Dumb Flat | Boats | Others | Total (Col.8 to12) |       |             |
| 1                | 2             | 3              | 4         | 5                   | 6                | 7                 | 8           | 9                    | 10        | 11    | 12     | 13                 | 14    |             |
| 1 Andhra Pradesh | 2009          | ...            | ...       | 43                  | ...              | 43                | ...         | ...                  | ...       | 17    | 51     | 68                 | 111   |             |
|                  | 2010          | ...            | ...       | 43                  | ...              | 43                | ...         | ...                  | ...       | 17    | 51     | 68                 | 111   |             |
|                  | 2011          | ...            | ...       | 43                  | ...              | 43                | ...         | ...                  | ...       | 17    | 51     | 68                 | 111   |             |
| 2 Assam          | 2009          | ...            | 116       | 44                  | 7                | 167               | 18          | ...                  | 31        | 24    | ...    | 73                 | 240   |             |
|                  | 2010          | ...            | ...       | ...                 | ...              | ...               | ...         | ...                  | ...       | ...   | ...    | ...                | ...   |             |
|                  | 2011          | ...            | ...       | ...                 | ...              | ...               | ...         | ...                  | ...       | ...   | ...    | ...                | ...   |             |
| 3 Bihar          | 2009          | ...            | 13        | 2                   | ...              | 15                | 4           | ...                  | ...       | 2     | ...    | 6                  | 21    |             |
|                  | 2010          | ...            | 13        | 2                   | ...              | 15                | 4           | ...                  | ...       | 2     | ...    | 6                  | 21    |             |
|                  | 2011          | ...            | 13        | 2                   | ...              | 15                | 4           | ...                  | ...       | 2     | ...    | 6                  | 21    |             |
| 4 Goa            | 2009          | 191            | ...       | ...                 | ...              | 191               | ...         | ...                  | ...       | ...   | ...    | ...                | 191   |             |
|                  | 2010          | 193            | ...       | ...                 | ...              | 193               | ...         | ...                  | ...       | ...   | ...    | ...                | 193   |             |
|                  | 2011          | 188            | ...       | ...                 | ...              | 188               | ...         | ...                  | ...       | ...   | ...    | ...                | 188   |             |
| 5 Karnataka      | 2009          | ...            | ...       | 33                  | ...              | 33                | ...         | ...                  | ...       | 16    | ...    | 16                 | 49    |             |
|                  | 2010          | ...            | ...       | 21                  | ...              | 21                | ...         | ...                  | ...       | 18    | ...    | 18                 | 39    |             |
|                  | 2011          | ...            | ...       | 39                  | ...              | 39                | ...         | ...                  | ...       | ...   | ...    | 39                 | 39    |             |
| 6 Kerala         | 2009          | 66             | 598       | 33                  | 15               | 712               | 1           | ...                  | 26        | 7466  | 1025   | 8518               | 9230  |             |
|                  | 2010          | 99             | 589       | 30                  | 14               | 732               | 1           | ...                  | 25        | 7766  | 1232   | 9024               | 9756  |             |
|                  | 2011          | 107            | 605       | 30                  | 14               | 756               | ...         | ...                  | 25        | 9084  | 3630   | 12739              | 13495 |             |
| 7 Maharashtra    | 2009          | ...            | 251       | ...                 | 411              | 662               | ...         | ...                  | ...       | ...   | ...    | ...                | 662   |             |
|                  | 2010          | ...            | 258       | ...                 | 433              | 691               | ...         | ...                  | ...       | ...   | ...    | ...                | 691   |             |
|                  | 2011          | ...            | 299       | ...                 | 482              | 781               | ...         | ...                  | ...       | ...   | ...    | ...                | 781   |             |
| 8 Orissa         | 2009          | ...            | 155       | ...                 | ...              | 155               | ...         | ...                  | ...       | ...   | ...    | ...                | 155   |             |
|                  | 2010          | ...            | 260       | ...                 | ...              | 260               | ...         | ...                  | ...       | ...   | ...    | ...                | 260   |             |
|                  | 2011          | ...            | 281       | ...                 | ...              | 281               | ...         | ...                  | ...       | ...   | ...    | ...                | 281   |             |
| 9 West Bengal    | 2009          | 23             | 256       | 7                   | 54(A)            | 340               | 579         | ...                  | ...       | 1402  | ...    | 1981               | 2321  |             |
|                  | 2010          | 23             | 260       | 5                   | 63               | 413               | 611         | ...                  | ...       | 1460  | ...    | 2071               | 2484  |             |
|                  | 2011          | 25             | 255       | 5                   | 67(A)            | 410               | 635         | ...                  | ...       | 1516  | ...    | 2151               | 2561  |             |
| 10 Tamil Nadu    | 2011          | ...            | ...       | ...                 | ...              | ...               | ...         | ...                  | ...       | 2     | ...    | 2                  | 2     |             |
|                  | 2011          | ...            | ...       | ...                 | ...              | ...               | ...         | ...                  | ...       | 2     | ...    | 2                  | 2     |             |

(A) Includes 27, 34 and 38 other vessels for 2009, 2010 and 2011 respectively. ... Not available.

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 | 2009 | ... | ... | ...      |
|   |                | 2010 | ... | ... | ...      |
|   |                | 2011 | ... | ... | ...      |
| 2 | Assam          | 2009 | 33  | 190 | 865.15   |
|   |                | 2010 | ... | ... | ...      |
|   |                | 2011 | ... | ... | ...      |
| 3 | Bihar          | 2009 | 2   | 13  | ...      |
|   |                | 2010 | 2   | 13  | ...      |
|   |                | 2011 | 2   | 13  | ...      |
| 4 | Goa(a)         | 2009 | 191 | -   | 11901.32 |
|   |                | 2010 | 193 | -   | 13897.38 |
|   |                | 2011 | 188 | -   | 14563.49 |
| 5 | Karnataka      | 2009 | 49  | 49  | 159      |
|   |                | 2010 | 39  | 39  | 987      |
|   |                | 2011 | 39  | 39  | 1034     |
| 6 | Kerala         | 2009 | 66  | 576 | 5129.01  |
|   |                | 2010 | 66  | 615 | 5092.08  |
|   |                | 2011 | 68  | 623 | 5285.56  |
| 7 | Maharashtra    | 2009 | ... | ... | 9963.00  |
|   |                | 2010 | ... | ... | 12510.00 |
|   |                | 2011 | ... | ... | 14870.00 |
| 8 | Orissa         | 2009 | ... | 10  | ...      |
|   |                | 2010 | ... | 14  | ...      |
|   |                | 2011 | ... | 14  | ...      |
| 9 | West Bengal    | 2009 | 50  | 256 | 3644(b)  |
|   |                | 2010 | 54  | 260 | 17705(b) |
|   |                | 2011 | 54  | 255 | 9987(b)  |

(a) Excludes traffic reported by Marmugao Port for Iron Ore movement which is

27.40 million tonnes in 2007-08, 33.80 million tonnes in 2008-09, 40.53 MILLION TONNES IN 2009-10 and 40.82 million tonnes in 2010-11.

(b) No. of vehicles carried LCT 43437, 39770 and 39618 for the year 2008-09, 2009-10 and 2010-11 respectively.

... Not available

**COMPANIES/UNDERTAKINGS**

**IWT ACTIVITIES – PRIVATE**

**SECTION – 5**

Table No 5.1

**IWT Vessels with Valid Certificates of Survey (As on 31st March) Companies/Undertakings By Type (As on 31st March)**

| Sl. No. | Company/<br>Undertaking and Year | Type of vessel |   | Cargo (No.) | Passenger<br>(No.) | Cargo(in<br>Tonnes) | Passenger(in<br>No.) | Carrying capacity | Non-Self<br>Propelled | 7<br>(Dumb Barges)<br>(No.) |
|---------|----------------------------------|----------------|---|-------------|--------------------|---------------------|----------------------|-------------------|-----------------------|-----------------------------|
|         |                                  | Self Propelled |   |             |                    |                     |                      |                   |                       |                             |
|         |                                  | 6              | 5 |             |                    |                     |                      |                   |                       |                             |

|   |                                       |      |       |       |       |     |     |     |     |     |
|---|---------------------------------------|------|-------|-------|-------|-----|-----|-----|-----|-----|
| 1 | S.V.Salgocar, Goa                     | 2009 | 4     | 4     | 1236  | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 4     | 4     | 1581  | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 4     | 4     | 1581  | ... | ... | ... | ... | ... |
| 2 | D.V.Salgocar, Goa                     | 2009 | 4     | 4     | 1178  | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 4     | 4     | 1500  | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 4     | 4     | 1500  | ... | ... | ... | ... | ... |
| 3 | V.M.Salgocar Sales International      | 2009 | 2     | 2     | 650   | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 2     | 2     | 693   | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 2     | 2     | 693   | ... | ... | ... | ... | ... |
| 4 | Sesa Resource Ltd Goa                 | 2009 | 3     | 3     | 5300  | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 3     | 3     | 5300  | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 3     | 3     | 3237  | ... | ... | ... | ... | ... |
| 5 | Sesa Goa Ltd. Goa                     | 2009 | 16    | 17    | 32506 | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 17    | 17    | 32506 | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 21(a) | 21(a) | 24910 | ... | ... | ... | ... | ... |
| 6 | Sociedade De Fomento Ind. Ltd. Goa    | 2009 | 2     | 2     | 2434  | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 2     | 2     | 2434  | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 2     | 2     | 2434  | ... | ... | ... | ... | ... |
| 7 | CIWTC, Kolkata.                       | 2009 | 8(b)  | 8(b)  | 2936  | ... | ... | ... | ... | 24  |
|   |                                       | 2010 | 10(b) | 10(b) | 4982  | ... | ... | ... | ... | 22  |
|   |                                       | 2011 | 5     | 5     | 2178  | ... | ... | ... | ... | 17  |
| 8 | Indo-Swiss Trading Co. Kolkata.       | 2009 | 2 @   | 2 @   | 118   | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 2 @   | 2 @   | 118   | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 2 @   | 2 @   | 118   | ... | ... | ... | ... | ... |
| 9 | Vivada Inland Waterways Ltd. Kolkata. | 2009 | 7     | 7     | ...   | ... | ... | ... | ... | ... |
|   |                                       | 2010 | 9     | 9     | ...   | ... | ... | ... | ... | ... |
|   |                                       | 2011 | 10    | 10    | ...   | ... | ... | ... | ... | ... |

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

| Sl. No. | Company/<br>Undertaking and Year | Type of vessel |           | Cargo (No.) | Passenger (No.) | Cargo (in Tonnes) | Passenger (in No.) | Carrying capacity | Propelled (Dumb Barges) (No.) |
|---------|----------------------------------|----------------|-----------|-------------|-----------------|-------------------|--------------------|-------------------|-------------------------------|
|         |                                  | Self Propelled |           |             |                 |                   |                    |                   |                               |
|         |                                  | Non-Self       | Propelled |             |                 |                   |                    |                   |                               |

|    |   |      |    |    |     |     |     |     |     |
|----|---|------|----|----|-----|-----|-----|-----|-----|
| 10 | West Bengal Surface Transport Corporation Ltd.                | 2009 | 3  | 27 | ... | ... | ... | ... | ... |
|    |   | 2010 | 3  | 20 | ... | ... | ... | ... | ... |
|    |   | 2011 | 3  | 20 | ... | ... | ... | ... | ... |
| 11 | Hooghly Nadi Jalapath Parbhan Samabaya Sanity, Kolkata.       | 2009 | 45 | 45 | ... | ... | ... | ... | ... |
|    |   | 2010 | 44 | 44 | ... | ... | ... | ... | ... |
|    |   | 2011 | 45 | 45 | ... | ... | ... | ... | ... |
| 12 | West Bengal Tourism Development Corporation limited, Kolkata. | 2009 | 3  | 3  | ... | ... | ... | ... | ... |
|    |   | 2010 | 4  | 4  | ... | ... | ... | ... | ... |
|    |   | 2011 | 4  | 4  | ... | ... | ... | ... | ... |
| 13 | Eastern Navigation (P) Ltd., Kolkata.                         | 2009 | 8  | 1  | ... | ... | ... | ... | ... |
|    |   | 2010 | 9  | 3  | ... | ... | ... | ... | ... |
|    |   | 2011 | 9  | 3  | ... | ... | ... | ... | ... |
| 14 | Pradeep Boating Company, Kolkata.                             | 2009 | 2  | 2  | ... | ... | ... | ... | ... |
|    |   | 2010 | 2  | 2  | ... | ... | ... | ... | ... |
|    |   | 2011 | 2  | 2  | ... | ... | ... | ... | ... |
| 15 | Hindustan Petroleum Corp. Ltd., Budge Budge, West Bengal.     | 2009 | 1  | 1  | ... | ... | ... | ... | ... |
|    |   | 2010 | 1  | 1  | ... | ... | ... | ... | ... |
|    |   | 2011 | 1  | 1  | ... | ... | ... | ... | ... |
| 16 | Costa River Transport Pvt Ltd., Goa.                          | 2009 | 3  | 3  | ... | ... | ... | ... | ... |
|    |   | 2010 | 3  | 3  | ... | ... | ... | ... | ... |
|    |   | 2011 | 3  | 3  | ... | ... | ... | ... | ... |

| SL No. | Company/<br>Underaking and Year | Type of vessel |  | 4<br>Passenger<br>(No.) | 5<br>Cargo(in<br>Tonnes) | 6<br>Passenger(in<br>No.) | 7<br>(Dumb Barges)<br>(No.) |
|--------|---------------------------------|----------------|--|-------------------------|--------------------------|---------------------------|-----------------------------|
|        |                                 | Self Propelled |  |                         |                          |                           |                             |

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

Table No 5.1 Contd....

|    |  |      |     |     |     |     |     |
|----|--|------|-----|-----|-----|-----|-----|
| 17 | Ghatel Station Navigation (P) Ltd., Ko | 2009 | 3   | ... | ... | ... | ... |
|    |  | 2010 | ... | ... | ... | ... | ... |
|    |  | 2011 | 3   | ... | ... | ... | ... |
| 18 | Diamond Harbour Municipality, Kolkata. | 2009 | 7   | ... | ... | ... | ... |
|    |  | 2010 | ... | ... | ... | ... | ... |
|    |  | 2011 | ... | ... | ... | ... | ... |
| 19 | Chandan Nagar Municipality, Kolkata.   | 2009 | 5   | ... | ... | ... | ... |
|    |  | 2010 | 5   | ... | ... | ... | ... |
|    |  | 2011 | 5   | ... | ... | ... | ... |
| 20 | Jain Navigation                        | 2009 | 1   | ... | ... | ... | ... |
|    |  | 2010 | 2   | ... | ... | ... | ... |
|    |  | 2011 | 2   | ... | ... | ... | ... |
| 21 | Sai Waterways Pv L Ltd                 | 2009 | 2   | ... | ... | ... | ... |
|    |  | 2010 | 2   | ... | ... | ... | ... |
|    |  | 2011 | 2   | ... | ... | ... | ... |
| 22 | Rashmi Ore Carriers Pv L Ltd.          | 2009 | 1   | ... | ... | ... | ... |
|    |  | 2010 | 1   | ... | ... | ... | ... |
|    |  | 2011 | 1   | ... | ... | ... | ... |
| 23 | M. N. Shipping                         | 2009 | 1   | ... | ... | ... | ... |
|    |  | 2010 | 1   | ... | ... | ... | ... |
|    |  | 2011 | ... | ... | ... | ... | ... |



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

| Sl. No. | Company/<br>Undertaking and Year | Type of vessel |                    | Passenger<br>(No.) | Cargo (in<br>Tonnes) | Passenger (in<br>No.) | Propelled<br>Non-Self<br>Carrying capacity | Propelled<br>(Dumb Barges)<br>(No.) |
|---------|----------------------------------|----------------|--------------------|--------------------|----------------------|-----------------------|--|-------------------------------------|
|         |                                  | Self Propelled | Non-Self Propelled |                    |                      |                       |  |                                     |
|         |                                  | 1              | 2                  | 3                  | 4                    | 5                     | 6  | 7                                   |

|    |                                   |      |     |        |        |     |     |     |
|----|-----------------------------------|------|-----|--------|--------|-----|-----|-----|
| 24 | Kothari Overseas Private Limited  | 2009 | 1   | 1893   | 1893   | ... | ... | ... |
|    |                                   | 2010 | 1   | 1893   | 1893   | ... | ... | ... |
|    |                                   | 2011 | 1   | 1893   | 1893   | ... | ... | ... |
| 25 | Mayur Shipping Private Limited    | 2009 | 1   | 1179   | 1179   | ... | ... | ... |
|    |                                   | 2010 | 1   | 1179   | 1179   | ... | ... | ... |
|    |                                   | 2011 | 1   | 1284   | 1284   | ... | ... | ... |
| 26 | Vaishnavi Shipping Co. Pvt.Ltd.   | 2009 | 1   | 1232   | 1232   | ... | ... | ... |
|    |                                   | 2010 | 1   | 1232   | 1232   | ... | ... | ... |
|    |                                   | 2011 | 1   | 1232   | 1232   | ... | ... | ... |
| 27 | Vasco Ore Carriers                | 2009 | 1   | 53160  | 53160  | ... | ... | ... |
|    |                                   | 2010 | 1   | 85500  | 85500  | ... | ... | ... |
|    |                                   | 2011 | 2   | 180000 | 180000 | ... | ... | ... |
| 28 | Sanghi Brothers (Indore) Pvt Ltd. | 2009 | ... | ...    | ...    | ... | ... | ... |
|    |                                   | 2010 | 5   | 6476   | 6476   | 9   | ... | ... |
|    |                                   | 2011 | 5   | 6476   | 6476   | ... | ... | ... |

... Not available.

(a) Includes one one Passenger Launch

(b) Includes 3 oil Tankers & 5 Twin Screw Tugs for the year 2009, 2 oil tanker, 4 Twin Screw Tugs for year 2009 and 5 Pusher Tug and 3 Oil Tanker 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.

| Sl.No. | Company/Undertakin<br>g and Year         | Type of Vessels    | No. of<br>Powered<br>Vessels<br>Employe<br>d | Distance<br>Travelled<br>(Kms) | Freight<br>Collected<br>(Rs.in<br>Lakh) | Cargo Carried            |                          | Passenger<br>PKms |
|--------|--|--------------------|--|--------------------------------|---|--------------------------|--------------------------|-------------------|
|        |  |                    |  |                                |   | Tkms<br>(in<br>millions) | Tonnes<br>(in<br>Tonnes) |                   |
| 1      | S. V. Salgaocar, Goa                     |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 4  | 35                             | 840.48                                  | 1236000                  | 43.26                    | ...               |
|        | 2010                                     | Cargo              | 4  | 35                             | 1059.67                                 | 1581600                  | 55.36                    | ...               |
|        | 2011                                     | Cargo              | 4  | 35                             | 1075.48                                 | 1581600                  | 55.36                    | ...               |
| 2      | D. V. Salgaocar, Goa                     |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 4  | 35                             | 801.31                                  | 1178400                  | 41.24                    | ...               |
|        | 2010                                     | Cargo              | 4  | 35                             | 1005.00                                 | 1500000                  | 52.50                    | ...               |
|        | 2011                                     | Cargo              | 4  | 35                             | 1020.51                                 | 1500000                  | 52.50                    | ...               |
| 3      | V.M.Salgaocar Sales International        |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 2  | 35                             | 442.27                                  | 650400                   | 22.76                    | ...               |
|        | 2010                                     | Cargo              | 2  | 35                             | 464.71                                  | 693600                   | 24.27                    | ...               |
|        | 2011                                     | Cargo              | 2  | 35                             | 471.64                                  | 693600                   | 24.27                    | ...               |
| 4      | Sesa Resources Ltd Goa                   |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 3  | 273                            | 797337                                  | 217.67                   | ...                      | ...               |
|        | 2010                                     | Cargo              | 3  | 273                            | 832042                                  | 227.15                   | ...                      | ...               |
|        | 2011                                     | Cargo              | 3  | 269                            | 859307                                  | 231.15                   | ...                      | ...               |
| 5      | Sesa Goa Ltd, Goa.                       |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 16   | 100                            | 123.40                                  | 6199713                  | 620.00                   | ...               |
|        | 2010                                     | Cargo              | 16   | 100                            | 420.50                                  | 6125861                  | 612.58                   | ...               |
|        | 2011                                     | Cargo              | 20   | 100                            | 1002.32                                 | 5103296                  | 510.32                   | ...               |
| 6      | Sociedade De Fomento Ind., Goa           |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo              | 2  | 110                            | (a)                                     | 642995                   | 70.73                    | ...               |
|        | 2010                                     | Cargo              | 2  | 110                            | (a)                                     | 547998                   | 60.28                    | ...               |
|        | 2011                                     | Cargo              | 2  | 110                            | (a)                                     | 463527                   | 50.99                    | ...               |
| 7      | G.I.W.T.C., Kolkata.                     |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo/Tug/Spcs/Dbs | 94   | 7448                           | 409.50                                  | 74070                    | 551.67                   | ...               |
|        | 2010                                     | Cargo/Tug/Spcs/Dbs | 53   | 5617                           | 434.63                                  | 189045                   | 1061.86                  | ...               |
|        | 2011                                     | Cargo/Tug/Spcs/Dbs | 11   | 2031                           | 260.39                                  | 42882                    | 87.09                    | ...               |
| 8      | Indo-Swiss Trading Co.Pvt. Ltd., Kolkata |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Pass.              | 2  | 1                              | 95.15                                   | ...                      | 2378000                  | ...               |
|        | 2010                                     | Pass.              | 2  | 1                              | 95.94                                   | ...                      | 2298000                  | ...               |
|        | 2011                                     | Pass.              | 2  | 1                              | 102.67                                  | ...                      | ...                      | ...               |
| 9      | VIVADA Inland Waterways Ltd., Kolkata    |                    |  |                                |   |                          |                          |                   |
|        | 2009                                     | Cargo/Tug/Pass/LCT | 16   | ...                            | 2534.23                                 | 362600                   | 32020                    | ...               |
|        | 2010                                     | Cargo/Tug/Pass/LCT | 16   | ...                            | 2757.70                                 | 570130                   | 30620                    | ...               |
|        | 2011                                     | Cargo/Tug/Pass/LCT | 14   | ...                            | 3154.90                                 | 541460                   | 15850                    | ...               |

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

Table No 5.2

| Sl.No. | Company/Underkin<br>g and Year                            | Type of Vessels | No. of<br>Powered<br>Vessels<br>Employe<br>d | Distance<br>Travelled<br>(Kms) | Freight<br>Collected<br>(Rs.in<br>Lakh) | Cargo Carried        |                          | Passenger Carried |         |
|--------|---|-----------------|--|--------------------------------|---|----------------------|--------------------------|-------------------|---------|
|        |   |                 |  |                                |   | Cargo (in<br>Tonnes) | TKms<br>(in<br>millions) |                   |         |
| 1      | 2   | 3               | 4  | 5                              | 6                                       | 7                    | 8                        | 9                 | 10      |
| 10     | W. Bengal Surface Transport Corporation Ltd., Kolkata     | Pass./LCT       | 30   | 676.41                         | 11770(b)                                | 6930000              | ...                      | 6930000           | ...     |
|        | 2010  | Pass./LCT       | 23   | 525.33                         | 13709(b)                                | 6810000              | ...                      | 6810000           | ...     |
|        | 2011  | Pass./LCT       | 23   | 578.22                         | 15403(b)                                | 6975000              | ...                      | 6975000           | ...     |
| 11     | Hooghly Nadi Jalapathi Parbathan Samabaya Samity, Kolkata | Pass.           | 45   | 982.42                         | ...                                     | 23900000             | ...                      | 23900000          | ...     |
|        | 2010  | Pass.           | 44   | 958.40                         | ...                                     | 20300000             | ...                      | 20300000          | ...     |
|        | 2011  | Pass.           | 45   | 985.01                         | ...                                     | 21300000             | ...                      | 21300000          | ...     |
| 12     | West Bengal Tourism Development Corpn. Ltd., Kolkata      | Pass.           | 3  | 115.16                         | ...                                     | 10530                | ...                      | 10530             | ...     |
|        | 2010  | Pass.           | 4  | 115.68                         | ...                                     | 12040                | ...                      | 12040             | ...     |
|        | 2011  | Pass.           | 4  | 119.74                         | ...                                     | 11890                | ...                      | 11890             | ...     |
| 13     | Eastern Navigation (P) Ltd., W. Bengal, Kolkata           | Cargo/Tug/Pass. | 9  | 108.30                         | ...                                     | ...                  | ...                      | ...               | ...     |
|        | 2010  | Cargo/Tug/Pass. | 12   | 123.92                         | ...                                     | ...                  | ...                      | ...               | ...     |
|        | 2011  | Cargo/Tug/Pass. | 9  | 184.00                         | ...                                     | 1500                 | ...                      | 1500              | ...     |
| 14     | Pradeep Boating Company, W. Bengal, Kolkata               | Tugs            | 2  | 103.55                         | ...                                     | ...                  | ...                      | ...               | ...     |
|        | 2010  | Tugs            | 2  | 18.00                          | ...                                     | 9000                 | ...                      | 9000              | ...     |
|        | 2011  | Tugs            | 2  | 103.55                         | ...                                     | 25425                | ...                      | 25425             | ...     |
| 15     | Hindustan Petroleum Corpn. Ltd. Budge-Budge, W. Bengal    | Tug             | 1  | 33.50                          | ...                                     | 20700                | ...                      | 20700             | ...     |
|        | 2010  | Tug             | 1  | 33.75                          | ...                                     | 17280                | ...                      | 17280             | ...     |
|        | 2011  | Tug             | 1  | 37.11                          | ...                                     | 19320                | ...                      | 19320             | ...     |
| 16     | Costa River Transport Pvt. Ltd. Goa                       | Cargo           | 3  | 1541.38                        | 2340754                                 | 304.29               | ...                      | ...               | ...     |
|        | 2010  | Cargo           | 3  | 451.03                         | 657970                                  | ...                  | ...                      | ...               | ...     |
|        | 2011  | Cargo           | 3  | 373.84                         | 530650                                  | ...                  | ...                      | ...               | ...     |
| 17     | Ghatal steam Navigation (P) Ltd. Kolkata                  | Pass.           | 3  | 2.32                           | ...                                     | 131500               | ...                      | 1439000           | 2422000 |
|        | 2010  | Pass.           | 3  | 3016.00                        | ...                                     | ...                  | ...                      | ...               | ...     |
|        | 2011  | Pass.           | 3  | 3221.20                        | ...                                     | ...                  | ...                      | ...               | ...     |
| 18     | Diamond Harbour Municipality, Kolkata                     | Pass.           | 6  | 9.45                           | ...                                     | 230010               | ...                      | 545500            | 354500  |
|        | 2010  | Pass.           | 7  | 12.9                           | ...                                     | ...                  | ...                      | ...               | ...     |
|        | 2011  | Pass.           | 9  | 96.69                          | ...                                     | ...                  | ...                      | ...               | ...     |

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

| Sl.No. | Company/Under-taking and Year       | Type of Vessels | No. of Powered Vessels | Distance Travelled (Kms) | Freight Collected (Lakh) | Cargo Carried    |                    | Passenger Carried |     |
|--------|-------------------------------------|-----------------|------------------------|--------------------------|--------------------------|------------------|--------------------|-------------------|-----|
|        |                                     |                 |                        |                          |                          | Cargo (in Tones) | TKms (in millions) |                   |     |
| 1      | 2                                   | 3               | 4                      | 5                        | 6                        | 7                | 8                  | 9                 | 10  |
| 19     | Chandan Nagar Municipality, Kolkata |                 | 5                      | ...                      | 8.51                     | ...              | ...                | 81000             | ... |
|        | 2010                                |                 | 5                      | ...                      | 10.18                    | ...              | ...                | 1021000           | ... |
|        | 2011                                | Pass.           | 5                      | ...                      | ...                      | ...              | ...                | 2240000           | ... |
| 20     | Jain Navigation                     | Tugs/Pass       | 1                      | ...                      | 19.00                    | ...              | ...                | ...               | ... |
|        | 2010                                | Tugs/Pass       | 2                      | ...                      | 67.00                    | ...              | ...                | ...               | ... |
|        | 2011                                | Tugs/Pass       | 2                      | 60-75                    | 1.17                     | 244120           | 35900              | 2.42              | ... |
| 21     | Sai Waterways Pvt. Ltd.             | Cargo           | 2                      | 60-75                    | 1.08                     | 215400           | 14.53              | ...               | ... |
|        | 2010                                | Cargo           | 2                      | 60-75                    | 1.17                     | 244120           | 16.48              | ...               | ... |
|        | 2011                                | Cargo           | 2                      | 60-75                    | 1.29                     | 35900            | 2.42               | ...               | ... |
| 22     | Rashmi Ore Carriers Pvt. Ltd.       | Cargo           | 1                      | 45                       | 158.72                   | 208000           | 9.36               | ...               | ... |
|        | 2010                                | Cargo           | 1                      | 45                       | 174.18                   | 214050           | 9.63               | ...               | ... |
|        | 2011                                | Cargo           | 1                      | 45                       | 205.29                   | 210000           | 9.45               | ...               | ... |
| 23     | M.N. SHIPPING                       | Cargo           | 1                      | 60-70                    | 155.52                   | 248.34           | 16.12              | ...               | ... |
|        | 2010                                | Cargo           | 1                      | 60-70                    | 189.13                   | 274827           | 16.49              | ...               | ... |
|        | 2011                                | Cargo           | 1                      | ...                      | ...                      | ...              | ...                | ...               | ... |
| 24     | Kothari Overseas Private Limited    | Cargo           | 1                      | ...                      | 77.00                    | 117300           | ...                | ...               | ... |
|        | 2010                                | Cargo           | 1                      | ...                      | 96.00                    | 151300           | ...                | ...               | ... |
|        | 2011                                | Cargo           | 1                      | ...                      | 155.00                   | 167123           | ...                | ...               | ... |
| 25     | Mayur Shipping Pvt. Limited         | Cargo           | 1                      | 45                       | 127.36                   | 190919           | 8.59               | ...               | ... |
|        | 2010                                | Cargo           | 1                      | 45                       | 153.53                   | 190919           | 8.59               | ...               | ... |
|        | 2011                                | Cargo           | 1                      | 45                       | 63.85                    | 68400            | 3.07               | ...               | ... |
| 26     | Vaishnavi Shipping Co. Pvt. Ltd.    | Cargo           | 1                      | 60-70                    | 146.00                   | 229846           | 14.94              | ...               | ... |
|        | 2010                                | Cargo           | 1                      | 60-70                    | 133.74                   | 196159           | 11.77              | ...               | ... |
|        | 2011                                | Cargo           | 1                      | ...                      | ...                      | ...              | ...                | ...               | ... |
| 27     | Vasco Ore Carriers                  | ...             | ...                    | ...                      | ...                      | ...              | ...                | ...               | ... |
|        | 2010                                | ...             | ...                    | ...                      | ...                      | ...              | ...                | ...               | ... |
|        | 2011                                | ...             | ...                    | ...                      | ...                      | ...              | ...                | ...               | ... |
| 28     | Sanghi Brothers (Indore) Pvt Ltd    | Cargo           | 5                      | ...                      | 69.90                    | 31500            | 0.75               | ...               | ... |
|        | 2010                                | Cargo           | 5                      | ...                      | 72.70                    | 347700           | 0.87               | ...               | ... |
|        | 2011                                | Cargo           | 5                      | ...                      | ...                      | ...              | ...                | ...               | ... |

(a) : This table covers only those IWT Operators from whom the data is received by TRW.  
 (B) : data relates to no of vehicles carried (C) : 24215 no vehicles on LCT

Table No 5.2 Contd.....

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

**SECTION - 6**

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

Table No. 6.1

## Inland Water Transport - Plan Outlay and Expenditure - Central Sector (Central and Centrally Sponsored Schemes)

(Rs. in Lakh)

| Plan | Central Schemes |             | Centrally Sponsored Schemes |             | Total  |             |
|------|-----------------|-------------|-----------------------------|-------------|--------|-------------|
|      | Outlay          | Expenditure | Outlay                      | Expenditure | Outlay | Expenditure |

| 1            | 2 | 3        | 4        | 5       | 6       | 7        |
|--------------|---|----------|----------|---------|---------|----------|
| First Plan   |   | 33.00    | -        | -       | -       | 33.00    |
| (1951-56)    |   |          |          |         |         |          |
| Second Plan  |   | 143.32   | 72.34    | -       | 143.32  | 72.34    |
| (1956-61)    |   |          |          |         |         |          |
| Third Plan   |   | 438.10   | 126.62   | 322.00  | 125.71  | 252.33   |
| (1961-66)    |   |          |          |         |         |          |
| Annual Plan  |   | 164.52   | 54.09    | 32.62   | 27.62   | 81.71    |
| 1966-67      |   |          |          |         |         |          |
| 1967-68      |   | 192.40   | 299.07   | 33.65   | 27.98   | 327.05   |
| 1968-69      |   | 98.86    | N.A.     | 31.00   | N.A.    | 130.00   |
| Fourth Plan  |   | 500.00   | 369.89   | 400.00  | 303.91  | 673.80   |
| (1969-74)    |   |          |          |         |         |          |
| Fifth Plan   |   | 1392.18  | 685.82   | 1100.00 | 508.86  | 1194.68  |
| (1974-79)    |   |          |          |         |         |          |
| Annual Plan  |   | 714.30   | 190.00   | 242.70  | 24.00   | 214.00   |
| 1979-80      |   |          |          |         |         |          |
| Sixth Plan   |   | 4117.00  | 3821.00  | 383.00  | 84.00   | 3905.00  |
| (1980-85)    |   |          |          |         |         |          |
| Seventh Plan |   | 14167.00 | 12892.00 | 1333.00 | 293.00  | 13185.00 |
| (1985-90)    |   |          |          |         |         |          |
| Annual Plan  |   | 5385.00  | 1385.00  | 315.00  | 58.00   | 1443.00  |
| 1990-91      |   |          |          |         |         |          |
| 1991-92(RE)  |   | 4748.00  | 882.00   | 252.00  | 150.00  | 1032.00  |
| Eighth Plan  |   | 23285.00 | 6241.00  | 715.00  | 153.00  | 6394.00  |
| (1992-97)    |   |          |          |         |         |          |
| Ninth Plan   |   | 38322.00 | 21670.00 | 938.00  | 856.00  | 22526.00 |
| (1997-2002)  |   |          |          |         |         |          |
| Tenth Plan   |   | 88300.00 | -        | 2000.00 | -       | 90300.00 |
| (2002-2007)  |   |          |          |         |         |          |
| 2002-03      |   | 8690.00  | 7831.00  | 300.00  | Nil     | 7831.00  |
| 2003-04      |   | 8868.00  | 8147.00  | 1000.00 | 985.00  | 9132.00  |
| 2004-05      |   | 12557.00 | 5796.00* | 2000.00 | 1598.00 | 7394.00* |
| 2005-06      |   | 13500.00 | 6551.00  | 1500.00 | 1500.00 | 8051.00  |
| 2006-07(P)   |   | 13300.00 | 8839.00  | 1700.00 | 1200.00 | 10039.00 |

(P) : Provisional

\* Amount released by the Ministry of Shipping RT&amp;H upto Dec. 2004

Source : Planning Commission, Government of India and Ministry of Shipping, RT&amp;H, Government of India.

**State Plan Outlay & Expenditure under the Head of Developm**

**Table No. 6.2**

**titled "Inland Water Transport"** (Fig. in Rs. Lakh)

| Sl. No. | Name of the State | Plan Outlay (2002-07) | 2005-06 (Expd) | 2006-07 (Expd) |
|---------|-------------------|-----------------------|----------------|----------------|
|---------|-------------------|-----------------------|----------------|----------------|

|                |                   |       |         |         |
|----------------|-------------------|-------|---------|---------|
| 1              | Andhra Pradesh    | 100   | -       | -       |
| 2              | Arunachal Pradesh | ...   | ...     | 41.89   |
| 2              | Assam             | 1600  | 262.00  | 209.57  |
| 3              | Bihar             | ...   | ...     | ...     |
| 4              | Goa               | 800   | 124.95  | 112.88  |
| 5              | Himachal Pradesh  | 15    | 10.88   | 0.86    |
| 6              | Jammu & Kashmir   | 1160  | 197.86  | -       |
| 7              | Karnataka         | 4797  | 47.57   | -       |
| 8              | Kerala            | 7000  | 487.62  | 258.46  |
| 9              | Maharashtra       | 1000  | 183.37  | 257.12  |
| 10             | Mizoram           | 47    | 5.00    | 32.45   |
| 11             | Orissa            | 120   | 31.51   | 2.39    |
| 12             | Tamil Nadu        | ...   | ...     | ...     |
| 13             | Uttar Pradesh     | 10    | ...     | ...     |
| 14             | West Bengal       | 2569  | 964.63  | 483.00  |
| 15             | Lakshadweep       | ...   | 2458.09 | ...     |
| All States/Uts |                   | 19218 | 4773.48 | 1398.62 |

Source : Planning Commission, Government of India.

**TRANSPORT ACCIDENTS**

**INLAND WATERWAYS**

**SECTION - 7**





**INLAND WATERWAYS IN  
SELECT COUNTRIES**

**SECTION - 8**

**Table No. 8.1**  
**Length of Navigable Inland Waterways in Europe and USA in 2003 & 2004**

| Sl. No. | Country                  | Canals |      | Rivers and Lakes |       | Total |
|---------|--------------------------|--------|------|------------------|-------|-------|
|         |                          | 2003   | 2004 | 2003             | 2004  |       |
| 1       | Albania                  | -      | -    | 351              | 351   | 351   |
| 2       | Austria                  | -      | -    | 641              | 641   | 1516  |
| 3       | Belgium                  | 875    | 875  | 641              | 641   | 1516  |
| 4       | Bulgaria                 | -      | -    | 470              | 470   | 470   |
| 5       | Croatia                  | -      | -    | 720              | 804   | 720   |
| 6       | Czech Republic           | 39     | 39   | 625              | 664   | 664   |
| 7       | Estonia                  | -      | -    | 320              | 320   | 320   |
| 8       | Finland                  | 125    | 125  | 7759             | 7893  | 8018  |
| 9       | France                   | 3715   | 3693 | 1669             | 1679  | 5372  |
| 10      | Germany                  | 1620   | 2379 | 5089             | 5186  | 7565  |
| 11      | Hungary                  | 121    | 166  | 1319             | 1273  | 1439  |
| 12      | Kazakhstan               | -      | -    | 4032             | 4032  | ...   |
| 13      | Kyrgyzstan               | -      | -    | 460              | ...   | 460   |
| 14      | Lithuania                | 1      | 1    | 289              | 289   | 290   |
| 15      | Poland                   | 331    | 331  | 3312             | 3307  | 3638  |
| 16      | Moldova                  | -      | -    | 42               | 42    | 42    |
| 17      | Netherlands              | ...    | 3509 | ...              | 3086  | 6595  |
| 18      | Romania                  | 132    | 132  | 1647             | 1647  | 1779  |
| 19      | Russian Federation       | ...    | 342  | ...              | 1077  | 1419  |
| 20      | Serbia and Montenegro    | ...    | 39   | ...              | 134   | 173   |
| 21      | Slovakia                 | 39     | 39   | 134              | 134   | 173   |
| 22      | United Kingdom           | 155    | 155  | 910              | 910   | 1065  |
| 23      | United States of America | ...    | ...  | ...              | 42000 | ...   |

(in kms.)

Source: Annual Bulletin of Transport Statistics for Europe & North America, 2008 (UN Publication).





Table No. 8.3 Inland Waterways vessels in Service at the end of 2004

| Sl. No. | Country                     | Self Propelled Vessels |                      |                | D. & P. Vessels |                       |      | Tugs and Pushers |  |
|---------|-----------------------------|------------------------|----------------------|----------------|-----------------|-----------------------|------|------------------|--|
|         |                             | Nos.                   | Capacity (Th. Tonne) | Power (Th. KW) | Nos.            | Capacity (Th. Tonnes) | Nos. | Power (Th. KW)   |  |
| 1       | Albania                     | ...                    | ...                  | ...            | ...             | ...                   | ...  | 9                |  |
| 2       | Austria                     | ...                    | ...                  | ...            | ...             | ...                   | ...  | 8                |  |
| 3       | Belgium                     | 1279                   | 1298.00              | ...            | 244             | 453                   | ...  | ...              |  |
| 4       | Bulgaria                    | 10                     | 12.5                 | 10.90          | 161             | 245.5                 | 35   | 33.8             |  |
| 5       | Croatia                     | 5                      | 3.00                 | 3.00           | 121             | 76.00                 | 59   | 16.00            |  |
| 6       | Czech Republic              | 75                     | 66.39                | 31.76          | 227             | 126.33                | 152  | 50.80            |  |
| 7       | Estonia                     | 1                      | ...                  | ...            | 3               | ...                   | 2    | ...              |  |
| 8       | Finland                     | 135                    | 13.00                | 26.00          | 32              | 5.00                  | 31   | 10.00            |  |
| 9       | France                      | 970                    | 511.00               | 230.00         | 533             | 597.00                | ...  | ...              |  |
| 10      | Germany                     | ...                    | ...                  | ...            | ...             | ...                   | ...  | ...              |  |
| 11      | Hungary                     | 135                    | 42.00                | 62.00          | 113             | ...                   | 37   | 27.00            |  |
| 12      | Kazakhstan(a)               | 2                      | 3.40                 | ...            | 81              | 63.10                 | 51   | 12.30            |  |
| 13      | Kyrgyzstan(a)               | 8                      | 0.60                 | ...            | 10              | ...                   | 4    | ...              |  |
| 14      | Lithuania                   | 30                     | 9.90                 | 5.50           | 27              | 18.60                 | 19   | 4.00             |  |
| 15      | Poland                      | 93                     | 45.50                | 22.60          | 494             | 237.40                | 257  | 68.00            |  |
| 16      | Republic of Moldova         | ...                    | ...                  | ...            | 15              | 3.60                  | 10   | 1.10             |  |
| 17      | Romania                     | ...                    | ...                  | ...            | 1661            | 2184.60               | 915  | 465.11           |  |
| 18      | Serbia and Montenegro       | 72                     | 68.00                | 25.00          | 468             | 510.00                | 141  | 77.00            |  |
| 19      | Slovakia                    | 27                     | 20.50                | 13.30          | 204             | 301.10                | 46   | 46.20            |  |
| 20      | Ukraine                     | ...                    | ...                  | ...            | ...             | ...                   | ...  | ...              |  |
| 21      | United Kingdom              | 151                    | 50.00                | ...            | 339             | 117.00                | 143  | ...              |  |
| 22      | United States of America(a) | 4834                   | 1954.80              | 6036.70        | 26984.00        | 40027.90              | 3393 | 5363.20          |  |

D. & P. Vessels : Dumb & Pushed Vessels  
(a) : Relates to 2003

Source: Annual Bulletin of Transport Statistics for Europe and North America, 2008

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Source: Annual Bulletin of Transport Statistics for Europe and North America 2008  
 \*: Kilometers within the territory of the reporting country.  
 @: Total Goods Carried during 2003  
 #: Total Tonne Kms of goods carried during 2003

| Sl. No.                                | Country                  | Goods carried ('000 Tonnes) |          |               |          |         |          |          |          |               |          |         |
|--|--------------------------|-----------------------------|----------|---------------|----------|---------|----------|----------|----------|---------------|----------|---------|
|  |                          | National                    |          | International |          | Transit |          | National |          | International |          | Transit |
|  |                          | Loaded                      | Unloaded | Loaded        | Unloaded | Loaded  | Unloaded | Loaded   | Unloaded | Loaded        | Unloaded |         |
| Tonne Kms. of Goods carried (Million)* |                          |                             |          |               |          |         |          |          |          |               |          |         |
|  |                          | 1                           | 2        | 3             | 4        | 5       | 6        | 7        | 8        | 9             | 10       |         |
| 1                                      | Albania                  | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 2                                      | Austria                  | 191                         | 1635     | 6072          | 1173     | 33      | 1017     | 6176     | 1548     | ...           | ...      |         |
| 3                                      | Belgium                  | 35747                       | 40712    | 66631         | 4146     | 3057    | 1528     | 3717     | 557      | ...           | ...      |         |
| 4                                      | Bulgaria                 | 904                         | 470      | 3033          | ...      | 40      | 56       | 602      | ...      | ...           | ...      |         |
| 5                                      | Croatia                  | 493                         | 114      | 925           | ...      | 49      | 9        | 121      | ...      | ...           | ...      |         |
| 6                                      | Czech-Republic           | 621                         | 253      | 299           | -        | 26      | 141      | 195      | ...      | ...           | ...      |         |
| 7                                      | Estonia                  | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 8                                      | Finland                  | 492                         | ...      | ...           | ...      | 118     | ...      | ...      | ...      | ...           | ...      |         |
| 9                                      | France                   | 27500                       | 16088    | 14394         | 9343     | 4163    | 1625     | 1526     | 1106     | ...           | ...      |         |
| 10                                     | Germany                  | 55209                       | 51367    | 105109        | 24175    | 11297   | 13413    | 23625    | 15333    | ...           | ...      |         |
| 11                                     | Hungary                  | 39                          | 2313     | 1859          | 3146     | 5       | 385      | 322      | 1192     | ...           | ...      |         |
| 12                                     | Kazakhstan               | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 13                                     | Kyrgyzstan               | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 14                                     | Lithuania                | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 15                                     | Poland                   | 5010                        | 1832     | 386           | 1519     | 243     | 465      | 121      | 237      | ...           | ...      |         |
| 16                                     | Republic of Moldova      | 120                         | -        | -             | -        | ...     | -        | -        | -        | ...           | ...      |         |
| 17                                     | Romania                  | 12183                       | 1500     | 793           | 124      | 2176    | 1318     | 714      | 82       | ...           | ...      |         |
| 18                                     | Russian Federation@      | 104000@                     | 71294#   | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 19                                     | Serbia and Montenegro    | 2412                        | 464      | 3429          | 3289     | 218     | 446      | 3369     | 5441     | ...           | ...      |         |
| 20                                     | Slovakia                 | 106                         | 2287     | 213           | 119      | 5       | 50       | 16       | 20       | ...           | ...      |         |
| 21                                     | Ukraine                  | ...                         | ...      | ...           | ...      | ...     | ...      | ...      | ...      | ...           | ...      |         |
| 22                                     | United Kingdom           | 2599                        | -        | -             | -        | 152     | -        | -        | -        | ...           | ...      |         |
| 23                                     | United States of America | 2662045                     | ...      | ...           | ...      | 415819  | ...      | ...      | ...      | ...           | ...      |         |

**Goods Transport by Type of Transport on National Territory - 2004**

**Table No. 8.4**

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**DEFINITIONS OF TERMS USED**

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

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

Self-Propelled Barge

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

Self Propelled Tanker

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

Tug

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.

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 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).

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

### ABBREVIATION