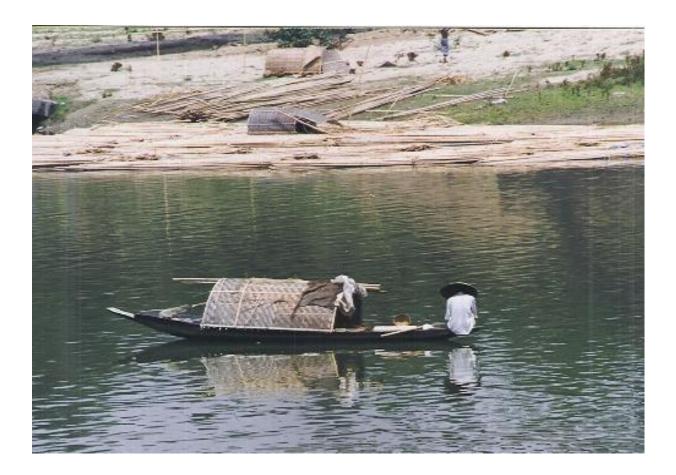
STATISTICS OF INLAND WATER TRANSPORT 2014-15





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

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Government of India Ministry of Road Transport & Highways Transport Research Wing New Delhi राजीव कुमार RAJIVE KUMAR Tel.: 23714938 Fax: 23716656



सचिव पोत परिवहन मंत्रालय भारत सरकार SECRETARY MINISTRY OF SHIPPING GOVERNMENT OF INDIA

PREFACE

Transport Research Wing (TRW) in the Ministry of Road Transport and Highways is the nodal agency for providing information/data on various facets of Shipping and Inland Water Transport. The present issue "Statistics of Inland Water Transport 2014-15" is the 22nd issue in the series.

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

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

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

Qe

(Rajive Kumar)

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Officers & Staff involved in this Publication

Smt. Kirti Saxena Senior Adviser

Shri M.M. Hasija Adviser (Statistics)

Smt. Anupam Bhatnagar Director (Port & Shipping)

Shri Mukesh Deputy Director (Shipping)

Shri S.Tyagi Senior Statistical Officer

Smt. Rashmi Gupta Junior Investigator

Shri Rahul Sharma Junior Statistical Officer

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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 Brahmputra and the Ganges in the North East and Eastern parts of the country, Kerala, Goa and in the deltas of the rivers of Krishna and Godavari where IWT offers natural advantages. IWT has an important role to play in many parts of the country since it offers an economic, energy efficient, employment intensive and almost pollutant free mode of transport service. In spite of the merits of IWT, its operation is constrained by several factors like shallow water, narrow width during dry weather, siltation and bank erosion, inadequate vertical and horizontal clearances in a large number of overhead structures making navigation throughout the year a daunting task.

POLICY INITIATIVES AND MILESTONES

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

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

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

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- (b) Terminals for berthing of vessels, loading/unloading of cargo and for providing interface with road and rail; and
- (c) Navigational aid for safe navigation.

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

INLAND WATERWAYS AUTHORITY OF INDIA

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

- (i) Conducting surveys and investigations and techno-economic feasibility for developing inland water transport mode;
- (ii) Development and regulation of National Waterways for shipping and navigation by providing conservancy measures, river training works, setting up infrastructural facilities etc.;
- (iii) Other connected/subsidiary functions include regulation of traffic, coordination with other modes of transport for movement on the National Waterways maintenance of Pilot age etc;
- (iv) To assist and advise central and State Government on matters relating to Inland Water Transport.

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

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

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

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

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

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

NAVIGABLE WATERWAYS & INFRASTRUCTURE

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

As per the available data presented in Table 1, it is observed that the ratio of navigable length to the total length is about 96.88% in the State of West Bengal; by contrast, in case of Gujrat the ratio of navigable length to total length is a mere 15.62%. Other States with good inland water transport prospects are Goa, Maharashtra and Bihar where waterways navigable length is 90.84, 73.14 and 62.40% respectively of the total length of rivers/lands/lakes reported by these states. Fourteen states have reported river length as well as navigable length for 131 rivers. These 131 rivers have total length of 27962 Km of which 45.57% is navigable length.

| Table 1 : Total and Navigable Length of Waterways in different States –2014-15 (In kms) * | | | | | | | |
|---|---|---|--|--|--|--|--|
| Total Length of the Rivers/ | Navigable | Percentage of Navigable | | | | | |
| Canals/ Lakes in State (Km.) | Length (Km.) | Length to Total Length | | | | | |
| 3579 | 804 | 22.46 | | | | | |
| 5290 | 1682 | 31.80 | | | | | |
| 2229 | 1391 | 62.40 | | | | | |
| 273 | 248 | 90.84 | | | | | |
| 653 | 102 | 15.62 | | | | | |
| 2862 | 1215 | 42.45 | | | | | |
| 2779 | 845.2 | 30.41 | | | | | |
| 631 | 461.5 | 73.14 | | | | | |
| 1378 | 508 | 36.87 | | | | | |
| 937 | 375 | 40.02 | | | | | |
| 238 | 81 | 34.03 | | | | | |
| 27 | 12 | 44.44 | | | | | |
| 2345 | 425 @ | 18.12 | | | | | |
| 4741 | 4593 | 96.88 | | | | | |
| | Total Length of the Rivers/ Canals/ Lakes in State (Km.) 3579 5290 2229 273 653 2862 2779 631 1378 937 238 27 2345 | Total Length of the Rivers/ Canals/ Lakes in State (Km.)Navigable Length (Km.)35798045290168222291391273248653102286212152779845.2631461.513785089373752388127122345425 @47414593 | | | | | |

... Not Available ****** Pertains to 2007-08,

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

^{*} The information for each State has been compiled for only those rivers for which both Total length & Navigable length have been reported by the State.

CARGO MOVEMENT ON MAJOR WATERWAYS

7. Table 2 provides a snap view of cargo moved on the three national waterways, waterways of Goa and Maharashtra which carry most of the cargo traffic on India's Inland Waterways. The total cargo movement on India's waterways comprising the three national waterways and waterways in the State of Goa and Maharashtra was 365.37 lakhs tonnes in 2014-15 as against 322.63 lakhs tonnes in 2013-14, reflecting an increase of 13.3 %. In terms of tonnage, Goa and Maharashtra accounted for 2.2 % and 74.9 % respectively of the total cargo volume in 2014-15 with balance 22.9 % being accounted by the 3 National Waterways. In terms of tonne km (movement of one tonne of cargo over a distance of one km) there was an increase of 17 % in 2014-15 over 2013-14. Maharashtra waterways accounted around 75% of the total cargo movement on inland waterways across India. In case of Goa and Maharashtra, high volume of cargo movement was carried over relatively short average distances

of about 42.82 Kms and 17.88 Kms respectively leading to their intensive use. However, in the three National Waterways the volume of cargo traffic was relatively much small. In case of National Waterway II (The Brahmaputra) and National Waterway III (Champakara canal, Udyogmandal canal and West Coast canal) the distance traversed by cargo was on an average around 20.38 Kms and 10.90 Kms respectively in 2014-15. In case of National Waterway I (Ganga- Bhagirathi-Hooghly) the average distance over which cargo moved was relatively much longer at around 444.73 Kms.

| Sl. No. | Details of Weterman | Cargo Moved (| lakh tonnes) | Tonne Kms (in lakh) | | |
|---------|------------------------------|---------------|---------------|----------------------|------------------|--|
| | Details of Waterway | 2013-14 | 2014-15 | 2013-14 | 2014-15 | |
| | National Waterway No. I | 33.49(10.4) | 50.50(13.8) | 18512(76.5) | 22459(79.4) | |
| 2 | National Waterway No. II | 24.75(7.7) | 24.92(6.8) | 594(2.5) | 508(1.8) | |
| 3 | National Waterway No. III | 10.66(3.3) | 8.44(2.3) | 116(0.5) | 92(0.3) | |
| | Sub Total NWs | 68.90(21.4) | 83.86(22.9) | 19222(79.5) | 23059 (81.5) | |
| 4 | Goa Waterways | 5.99(1.8) | 7.94(2.2) | 270(1.1) | 340 (1.2) | |
| 5 | Maharashtra Waterways | 247.74(76.8) | 273.57(74.9) | 4691(19.4) | 4892(17.3) | |
| | Grand Total | 322.63(100.0) | 365.37(100.0) | 24183(100.0) | 28291 (100.0) | |

Source: (i) Inland Waterways Authority of India for National Waterways

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

(iii) Maharashtra Maritime Board for Maharashtra Waterways.

Note

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

2. Figure within brackets indicates percentage to the total.

Box 2: Criteria for declaration of National Waterway

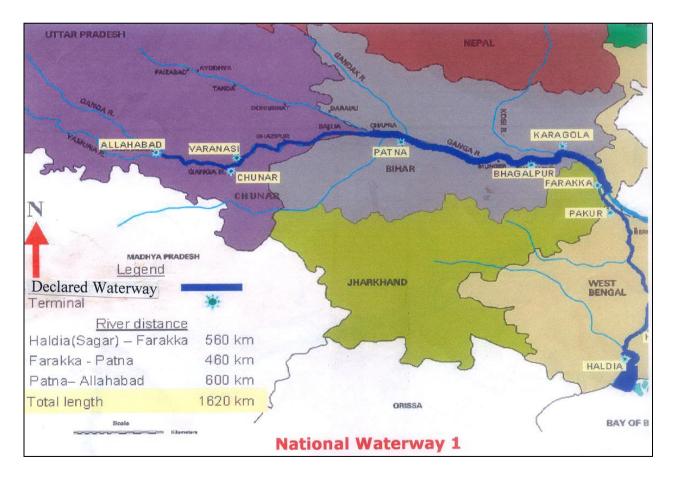
- It should possess capability of navigation by mechanically propelled vessels of minimum 300 tonnes (DWT) capacity (45m x 8m x1.2m);
- It should have a fairway of minimum 40m wide channel with 1.4m depth in case of rivers and minimum 30m wide channel with 1.8m depth in case of canals. Exception may be given in case of irrigation-cum-navigation canals based on request of the concerned State Govt in order to safeguard the interest of irrigation;
- It should be a continuous stretch of minimum 50 kms; the only exception to be made to waterway length is for urban conglomerations and intra-port traffic; and
- It should pass through and serve the interest of more than one States or connect a vast and prosperous hinterland and major port, or either pass through or connect a strategic region where development of navigations is considered necessary to provide logistic support for economic development or national security, or connect place not served by any other mode of transport.
- 8. To promote Inland Water Transport (IWT) in the country, five waterways have been declared as National Waterways so far are:
 - (a) Allahabad-Haldia stretch (1620 kms) of Ganga-Bhagirathi-Hooghly river system was declared National Waterway- 1 in October, 1986.
 - (b) Sadiya-Dhubri stretch (891 kms) of the Brahmaputra river was declared National Waterways-II in September, 1988.
 - (c) Kottapuram-Kollam stretch (168 kms) of the West Coast Canal along with Champakara canal (14 kms) and Udyogmandal canal (23 kms) was declared National Waterways-III in February, 1993.(Total 205 kms)
 - (d) Kakinada- Pondicherry canals along with Godavari and Krishna rivers (1078 km) –as NW-4.
 - (e) East Coast Canal integrated with Brahmani river and Mahanadi delta rivers (588 km) as NW-5.

Out of these five NWs, first three waterways have already been developed substantially with fairway of required depth & width, navigational aids & terminal facilities for loading/unloading of cargo & ingress/ egress of the passengers and cargo & passenger vessels are moving on these NWs. A World Bank aided project for capacity augmentation of NW-1 has been sanctioned and it is under implementation.

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

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

The volume of freight movement on National Waterways-I was 50.50 lakh tonnes in 2014-15 as against 33.49 lakh tonnes in 2013-14 reflecting an increase of 50.79 %. The volume of cargo movement by VIVADA IWL vessels increased to 2.5 lakh tonnes in 2014-15 from 2.1 lakh tonnes in 2013-14, the volume of cargo moved by other private operators increased considerably during 2014-15 as compared to 2013-14. Other private operators moved 25.13 lakh tonnes of cargo on NW-I in 2014-15 as against 20.94 lakh tonnes cargo on NW-I in 2013-14. However, no operation were reported to be carried out by CIWTC during 2014-15.

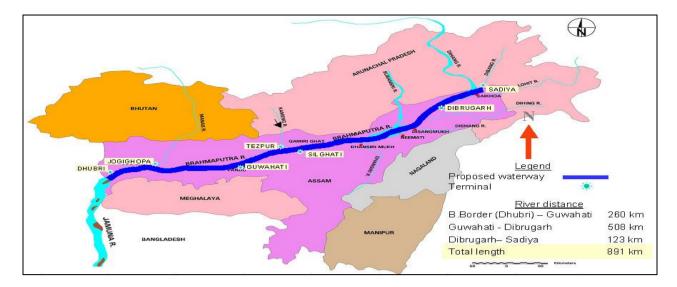


10. The composition of cargo movement on National Waterway I over the years is shown in Table 3 below. Building material accounted for 40.5% of total cargo movement along the NW-I during 2014-15, followed by Coal (34.4%) and food items (10.4%). These three items together accounted for about 85% of the total cargo moved on NWI during 2014-15.

| Table 3 : Composition of Cargo Moved on National Waterway- I (In Tonnes) | | | | | | | | | |
|---|-----------------------------------|---------------|---------------|---------------|----------------|--|--|--|--|
| Name of the Commodity | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | | | | |
| Building Material | 1492395(79.5) | 1529401(46.2) | 1727685(63.6) | 1997301(59.6) | 2044784 (40.5) | | | | |
| Fertilizers | 7500 (0.4) | - | 52000 (1.9) | 36800 (1.1) | 132299 (2.6) | | | | |
| Food items | 9110 (0.5) | 15000 (0.5) | 345179 (12.7) | 394935(11.8) | 527048(10.4) | | | | |
| Miscellaneous | 41984 (2.2) | 22509 (0.7) | 13842 (0.5) | 11476 (0.3) | 17690 (0.4) | | | | |
| Mix | - | 1459428(44.1) | 21800 (0.8) | 8250 (0.2) | 65312 (1.3) | | | | |
| Ore/Minerals | 2648 (0.1) | 550 (neg.) | 229000 (8.4) | 112000 (3.3) | 242000 (4.8) | | | | |
| POL/POL products | 324111 (17.3) | 281954 (8.5) | 247341 (9.1) | 212063 (6.3) | 250418 (5.0) | | | | |
| Coal | - | 1205 (neg.) | 79590 (2.9) | 561456 (16.8) | 1736492(34.4) | | | | |
| Iron steel | - | - | - | 14857(0.4) | 34166(0.7) | | | | |
| Total NW I | 1877748 | 3310047 | 2716437 | 3349138 | 5050209 | | | | |
| | (100.0) (100.0) (100) (100) (100) | | | | | | | | |
| Note: Figure within brackets indicates percentage to the total. Neg negligible | | | | | | | | | |

National Waterways No. II (The Brahmaputra)

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

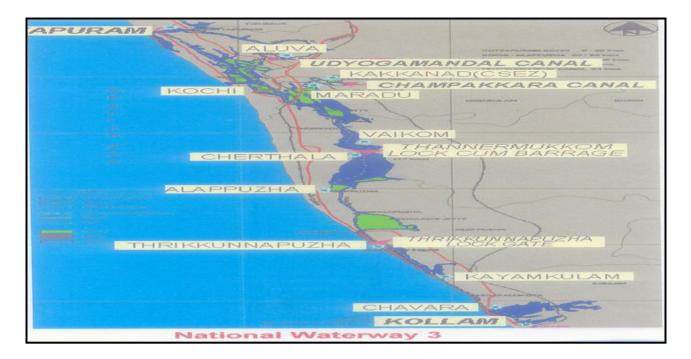


12. The total cargo traffic on NW II was 24.91 lakh tonnes during 2014-15 as against 24.75 lakh tonnes during 2013-14 reflected an increase of 0.16 lakh tonnes. Commodity-wise composition of cargo movement over the years indicates that the cargo moved on this waterway is of miscellaneous nature.

| Table 4 : Composit | Table 4 : Composition of Cargo Moved on National Waterway - II (In Tonnes) | | | | | | | |
|---|--|---------|---------|---------|---------|--|--|--|
| Commodity | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | | | |
| Building Material | - | - | - | - | - | | | |
| Food items | 600 (neg.) | - | | | | | | |
| | 2163145 | 2406448 | 2426805 | 2475349 | 2491720 | | | |
| Miscellaneous | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | | |
| Mix | - | - | - | - | - | | | |
| Ore/Minerals | - | - | - | - | - | | | |
| POL/POL Products | - | - | - | - | - | | | |
| | 2163745 | 2406448 | 2426805 | 2475349 | 2491720 | | | |
| Total NW II (100.0) (100.0) (100.0) (100.0) (100.0) | | | | | | | | |
| Note: Figure within bracket indicates percentage to the total. | | | | | | | | |
| Neg. – negligible | | | | | | | | |

The National Waterway No. III (West Coast Canal)

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



14. The total volume of cargo moved on National Waterway III has been fluctuating over the past few years. It has, however, gone down from 10.66 lakh tonnes in 2013-14 to 8.44 lakh tonnes in 2014-15 recording a decrease of 20.8%. The cargo composition of freight traffic shows that Mix items (60.7%) Fertilisers (27.5%) and chemicals (11.5%) were the major commodities moved through NW-III during 2014-15.

| Table 5 : Com | Table 5 : Composition of Cargo Moved on National Waterway - III (In Tonnes) | | | | | | | | |
|------------------|---|-------------------|-----------------|---------------|---------------|--|--|--|--|
| Commodity | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | | | | |
| Chemicals | 96804 (11.0) | 61005 (4.5) | 89074 (7.2) | 124782 (11.7) | 96773 (11.5) | | | | |
| Fertilisers | 328468 (37.1) | 308807 (23.0) | 306034 (24.8) | 262974 (24.7) | 231951 (27.5) | | | | |
| Food items | 144740 (16.3) | 131720 (9.8) | 141000 (11.4) | 18000 (1.7) | - | | | | |
| Mix | 94067 (10.6) | 687946 (51.2) | 538670 (43.6) | 606760 (56.9) | 512490 (60.7) | | | | |
| Ore/Minerals | 59546 (6.7) | 15063 (1.1) | 72163 (5.8) | 28542 (2.7) | 262 (neg) | | | | |
| POL/POL products | 162069 (18.3) | 139229 (10.4) | 89462 (7.2) | 24948 (2.3) | 2221 (0.3) | | | | |
| Total NW III | 885694 | 1343770 | 1236403 | 1066006 | 843697 | | | | |
| | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | | | | |
| Note : Figure w | vithin brackets in | ndicate percentag | ge to the total | | | | | | |

15. The total cargo moved through all the three National Waterways (NW) increased by 21.7% to 83.86 lakh tonnes during 2014-15 from 68.90 lakh tonnes during 2013-14. In 2014-15, share of cargo moved in volume terms across the three national waterways i.e NW I, (The Ganga- Bhagirathi-Hooghly) NW II (The Brahmaputra) and NW III (Champakara canal, Udyogmandal canal and west Cost canal) has been 60.2%, 29.7%, and 10.1% respectively of the total cargo moved in national waterways. In terms of tonne kilometers, the share of NW I, NW II and NW III is 97.4%, 2.2% and

0.4% of the total tonne kilometers moved. The highest share of NW I in tonne kilometers reflects long average distance traversed by cargo of 445 kms compared with an average distance of 20 kms for NW II and average distance of 11 kms for NW III in the year 2014-15. Table 6 gives cargo movement of National Waterways in Tonnage and Tonne Kilometers.

| | Table 6 : Cargo Movement on National Waterways | | | | | | | |
|-----|--|----------------|------------------------|----------------|--------------|-------------|--------------|--|
| SI. | Details of | (| Cargo Moved | | Tonne Kms | | | |
| No. | Waterway | (| lakh Tonnes) | | (in lakh) | | | |
| | | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | |
| | National | 27.16(42.6) | 33.49(48.6) | 50.50 | 15119 | 18512 | 22459 | |
| 1 | Waterway | | | (60.2) | (95.5) | (96.3) | (97.4) | |
| | No. I | | | | | | | |
| | National | 24.27(38.0) | 24.75(35.9) | 24.92 | 580(3.7) | 594(3.1) | 508 | |
| 2 | Waterway | | | (29.7) | | | (2.2) | |
| | No. II | | | | | | | |
| | National | 12.36(19.4) | 10.66(15.5) | 8.44 | 139(0.9) | 116(0.6) | 92(0.4) | |
| 3 | Waterway | | | (10.1) | | | | |
| | No. III | | | | | | | |
| | Total NWs | 63.79 | 68.90 | 83.86 | 15838 | 19222 | 23059 | |
| | 1 Otal IN VVS | (100.0) | (100.) | (100.0) | (100.0) | (100.0) | (100.0) | |
| | Source: Inl | and Waterwa | ys Authority | of India f | for Nationa | l Waterwa | ys. Cargo | |
| | han | dled in Kolka | ta-Bangladesł | n-Kolkata r | oute is incl | uded in the | e traffic on | |
| | Nati | ional Waterwa | y No.I. The ro | oute is a linl | k between N | W-I & NW | -II through | |
| | Ban | gladesh | | | | | - | |
| | Note : Figu | re within brac | kets indicate p | percentage t | to the total | | | |

16. The details of the commodity composition of the cargo moved on the National Waterways I, II and III taken together are presented in Table 7. It may be seen there from that the movement of Coal has shown significant increase and Mix items & Chemicals Products have shown decrease in volume terms on the National Waterways in 2014-2015.

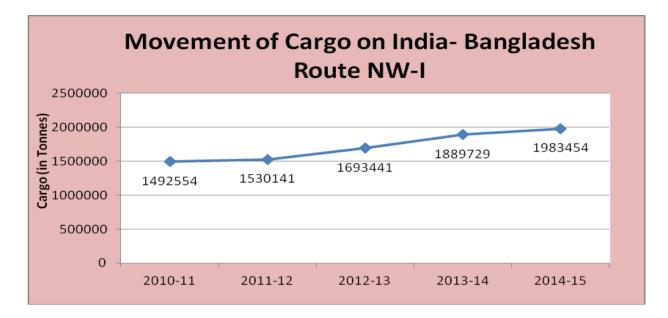
| Table 7: Composi | tion of Cargo | Moved on nation | al waterways (| In tonnes) | |
|--------------------------|----------------|------------------|----------------|----------------|----------------|
| Commodity | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| Building Material | 1492395 | 1529401 (21.7) | 1727685 | 1997301 (29) | 2044784 (24.4) |
| | (30.3) | | (27.1) | | |
| Chemicals | 96804 (2.0) | 61005 (0.9) | 89074 (1.4) | 124782 (1.8) | 96773 (1.2) |
| Fertilisers | 335968 | 308807 (4.4) | 358034 (5.6) | 299774 (4.4) | 364250 (4.3) |
| | (6.8) | | | | |
| Food items | 154450 | 146720 (2.1) | 486179 (7.6) | 412935 (6.0) | 527048 (6.3) |
| | (3.1) | | | | |
| Miscellaneous | 2205129 | 2428957 (34.4) | 2440647 | 2486825 (36.1) | 2509410 (29.9) |
| | (44.7) | | (38.3) | | |
| Mix | 94067 (1.9) | 2147374 (30.4) | 560470 (8.8) | 615010 (8.9) | 577802 (6.9) |
| Ore/Minerals | 62194 (1.3) | 15613 (0.2) | 301163 (4.7) | 140542 (2.0) | 242262(2.9) |
| POL/POL | 486180 | 421183 (6.0) | 336803 (5.3) | 237011(3.4) | 252639(3.0) |
| Products | (9.9) | | | | |
| Coal | - | 1205 (0.0) | 79590 (1.2) | 561456(8.1) | 1736492(20.7) |
| Iron & Steel | - | - | - | 14857(0.2) | 34166(0.4) |
| | 4927187 | 7060265 | 6379645 | 6890493 | 8385626 |
| Total | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) |
| Note : Figure with | in brackets in | dicate percentag | e to the total | | |

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

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

Cargo carried on Indo -Bangladesh Waterway Route

17. Movement of cargo along India Bangladesh route of National Waterways I have shown growth of 4.9% in year 2014-15 over that in 2013-14. The cargo moved over this route has increased to 1983454 tonnes in 2014-15 against 1889729 tonnes in 2013-14. The graph inserted below depicts trend in cargo movement on India-Bangladesh route National Waterway-I during the years 2010-11 to 2014-15.



18. The table 8 shows the cargo and the main commodities carried on India-Bangladesh route on National Waterway-I during the years 2010-11 to 2014-15.

| Table 8: Movement of Cargo (in Tonnes) on India- Bangladesh route of NW I*(Tonnes) | | | | | | | | | |
|---|---------|---------|---------|---------|---------|--|--|--|--|
| Route | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | Commodities | | | |
| India to Bangladesh | 1492554 | 1530141 | 1693441 | 1889729 | 1983454 | Flyash, Salt in bulk, Rice, Wheat POL, Coal, Slag Gypsum, HSD, Edible Oil, Iron Ingots, Cement, Bone crushed, Cement Clinker, Dolomite Powder | | | |
| Total | 1492554 | 1530141 | 1693441 | 1889729 | 1983454 | | | | |
| *Data pertains to cargo carried on Indian registered vessels only. | | | | | | | | | |

NATIONAL WATERWAYS 4 & 5

19. Two remaining water ways which had been declared by the Government as National Waterways are:

- The Kakinada Puducherry stretch of Canals and the Kaluvelly Tank; Bhadrachalam Rajahmundry stretch of River Godavari and Wazirabad – Vijayawada stretch of River Krishna (NW-4, 1078 km); and
- (ii) The Talcher –Dhamra stretch of river Brahmani, Geonkhali-Charbatia stretch of East Coast Canal, Charbatia-Dhamra stretch of Matai river and Mangalgadi- Paradip stretch of Mahanadi delta rivers (NW5, 588 km) Gazette notifications for both these waterways were published on 25.11.2008.

20. Development of NW-4&5 was delayed due to the initial attempt for developing the waterways through Public Private Partnership (PPP) mode after declaration of these waterways which subsequently was not found to be feasible. Therefore, effort is being made to develop these two waters under Gross Budgetary Support & External funding.

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

21. The stretches of the waterway (1078 kms) which has been declared as National Waterways (NW) are as follows:

| (i) Godavari river from Bhadrachalam to Rajahmundry | - | 171km. |
|--|-------|---------|
| (ii) Krishna River from Wazirabad to Vijayawada | - | 157 km. |
| (iii) Kakinada canal from Rajahmundry | - | 50 km. |
| (iv) Eluru canal from Rajahmundry to Vijayawada | - | 139 km. |
| (v) Commamur canal from Vijayawada to Pedaganjam lock | - | 113 km. |
| (vi) North Buckingham canal from Pedaganjam lock to Cher | nnai- | 316 km. |
| (vii) South Buckingham canal from Chennai to Mercanum | - | 110 km |
| (viii) Kaluvelli tank from Mercanum to Puducherry | - | 22km. |

22. The waterway is located in the States of Andhra Pradesh (810Km), Andhra Pradesh & Telangana Boarder (78 Km), Tamil Nadu (188 km) and Union Territory of Puducherry (2 Km). Out of 1078 km, 39 km stretch within Chennai city (from Ennore to Shollinganalur) has been excluded for development due to encroachment of canal. This waterway runs through rural and Urban centres like Chennai, Vijayawada, Rajahmundry, Kakinada, Eluru, Bhadrachalam &Wazirabad and hence provide a vital link between rural areas and Urban centres. Besides, bulk cargo namely coal, cement & fertilizers, it would help movement of agriculture products from rural area to Urban centres and industrial goods from Urban centres to rural areas. Further it also connects sea ports of Kakinada, Krishnapatnam, Ennore, Chennai and upcoming new ports at Dugarajapatnam and other minor ports in east coast for facilitating the import/export of cargo from/to hinterland. The waterway in consultation with the State Govts is proposed to be developed as class-III waterways against class II as originally envisages for facilitating the movement of economic size of cargo vessels in the entire stretch of the waterway. Different studies are being taken up for finalizing the project proposal and execution of the development activities in phases.

23. In addition to the movement of cargo, the waterway system shall be developed for facilitating passenger & tourist movement through cruise vessels. Besides, the development shall provide a host of social benefits e.g. employment generation, reduction in pollution, providing port- hinterland connectivity, reduction in road maintenance and road accidents, increase in economic activities etc.

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

| 24. | Tl | ne stretch-wise break-up of NW-5 is as given below:- | | | |
|-----|------|--|------|---|---------------|
| | i) | Rivers Brahmani- Kharsua- Dhamra (Talcher- Dhamra | .) | - | 265 km |
| | ii) | Matai river (Charbatia- Dhamra) | | - | 39 km |
| | iii) | Mahanadi delta rivers (Mangalgadi- Paradeep) | | - | 67 km |
| | iv) | East Coast Canal (Geonkhali- Charbatia) | | - | <u>217 km</u> |
| | | Тс | otal | = | 588 km |

25. A MoU has been signed by Inland Waterways Authority of India a statutory organization under Ministry of Shipping with Govt. of Odisha, Paradip Port Trust (PPT) and Dhamra Port Company Limited (DPCL) on 30.06.2014 for developing the commercially viable stretch of 332 km under two phases.

- 1st Phase : for 206 km. from Pankapal to Dhamra & Paradip.
- 2nd Phase : for 126 km. from Talcher to Pankapal.

The main components of the project are:-

- Fairway i.e development of navigation channel for facilitating the movement of Cargo Vessels of above 1500 tonnes capacity with required depth & width through dredging, river training, bank protection, construction of barrages with navigational locks and other control structures i.e. check dams etc.
- Navigational aids
- Terminal facilities at 4 locations Talcher, Pankopal, Paradip & Dhamra for facilitating the loading & unloading of cargo.
- Cargo Vessels of suitable capacity & types

26. In order to provide the desired fairway with the construction of a series of barrages along with suitable navigation locks and check dams various studies are being undertaken for formulating the project proposal and mode of execution. Action has also been initiated for providing a multi modal terminal facilities at Talcher, Pankopal, Dhamra & Paradip. The state-of-art navigational aid shall also be provided for safe movement of the vessels.

Simultaneously, the basic development activities such as dredging, widening & temporary terminal facilities are being executed for operation of cargo vessels initially on trial and subsequently on regular basis.

27. A fresh study is also in progress for finding the feasibility of the individual components of the inland navigation system through PPP mode.

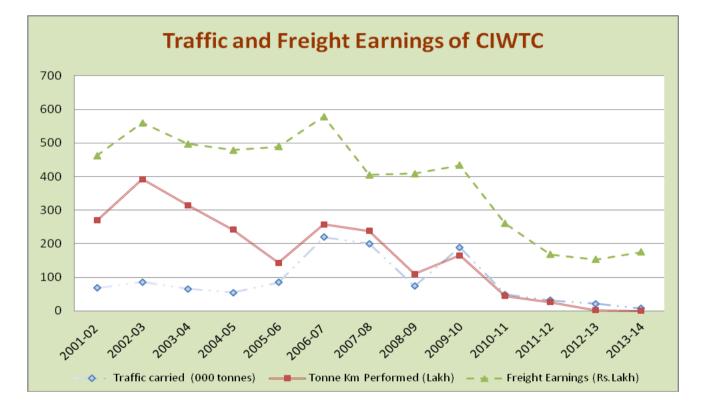
CENTRAL INLAND WATER TRANSPORT CORPORATION (CIWTC LTD)

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

Waterways-I and II including the protocol routes through Bangladesh and other parts of the country in Eastern and Northern India.

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

30. Following graphs gives a picture of long term trend in traffic and earning of CITWC up to 2013-14.



IWT ACTIVITIES – STATE GOVERNMENT

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

| Table 9: Nun | Table 9: Number of Inland Water Vessels and Cargo Carried – State wise | | | | | | | | | |
|-------------------|--|------------|---------|---------|------------------------------------|----------|----------|----------|--|--|
| | Number | of Vessels | | | Volume of Cargo Carried (thousand | | | | | |
| State/UT | | | | | tonnes) | | | | | |
| | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | | |
| Andhra Pradesh | 111 | | | | | | | | | |
| Assam | 209 | 22 | 182 | 182 | 37.72 | 71.79 | 338.53 | 178.73 | | |
| Bihar | 138 | 138 | 138 | 138 | 2.40 | 2.40 | 2.40 | 2.40 | | |
| Goa | 172 | 313 | 159 | 225 | 14469.90 | 3275.82 | 284.17 | 190.01 | | |
| Karnataka | 473 | 66 | 66 | 66 | 3887.00 | 78.40 | 58.72 | 50.50 | | |
| Kerala | 5513 | 13821 | 13689 | 13819 | 5756.12 | 5555.21 | 2831.87 | 2912.06 | | |
| Maharashtra | 603 | 577 | 588 | 743 | 19950 | 24196 | 24774 | 27357 | | |
| Orissa | 279 | 342 | | 409 | | | | | | |
| West Bengal | 2635 | 2623 | 2042 | 2032 | 9996 | 10347 | 11452 | 14728 | | |
| TOTAL | | | | | | | | | | |
| (reporting | 10133 | 17902 | 16864 | 17614 | 54099.14 | 43526.62 | 39741.69 | 45418.70 | | |
| states) | | | | | | | | | | |

... Not Available

PERFOMANCE OF COMPANIES ENGAGED IN IWT

32. The data received from 26 IWT companies shows that amongst the private companies the maximum number of powered vessels were held by Sesa Sterlite Ltd, Goa followed by West Bengal Surface Transport Corporation and Jindal ITF Ltd. The Maximum cargo of 1033.78 thousand tonnes was carried by Sesa Sterlite Ltd, Goa.

33. Cargo moved by top 10 private companies in decreasing order of cargo moved along with the number of powered vessels employed in 2014-15 is given below in Table 10.

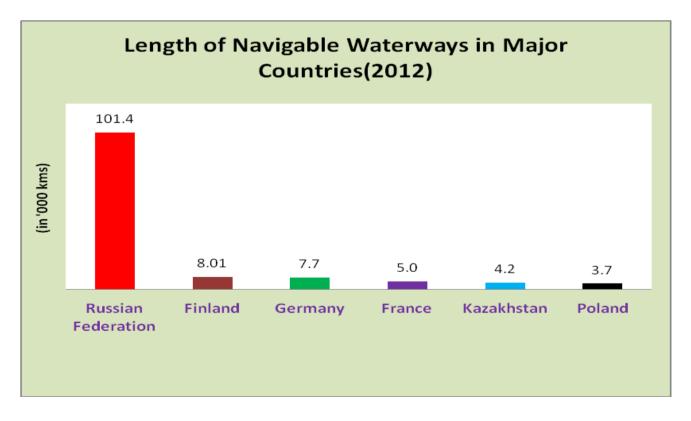
| Table 10 : Top ten Private Companies - Cargo moved and Vessels Operated 2014-15 | | | | | | |
|---|----------------|---------------------------|--|--|--|--|
| Name of the Company | No. of Vessels | Cargo moved ('000 tonnes) | | | | |
| 1. Sesa Sterlite Ltd. Goa. | 34 | 1033.78 | | | | |
| 2. VIVADA Inland Waterways Ltd, Kolkata | 14 | 512.79 | | | | |
| 3. Sesa Resources Ltd Goa | 3 | 137.02 | | | | |
| 4. Eastern Navigation Pvt. Ltd, Kolkata | 11 | 68.42 | | | | |
| 5. Jindal ITF Ltd. | 18 | 58.28 | | | | |
| 6. Soham Shipping Private Ltd. | 4 | 35.27 | | | | |
| 7.West Bengal Surface Transport Corporation | 26 | 27.42 | | | | |
| 8. Jain Navigation | 2 | 7.26 | | | | |
| 9. K.S. Singhi | 1 | 3.31 | | | | |
| 10. Pradeep Boating Co., Kolkata | 1 | 0.78 | | | | |

INLAND WATERWAYS TRANSPORT ACCIDENTS

34. The total number of accidents on inland waterways during the year 2014 was 180 out of which 32 were reported in Uttar Pradesh followed by Madhya Pradesh with 26 accidents. The number of deaths during the year due to boat mishaps were highest in Uttar Pradesh at 46 followed by Madhya Pradesh at 29. A striking feature observed in all the States (Table No. 7.1) is that the number of persons died due to boat mishaps is more than the number of persons injured on waterways unlike in the road accidents.

INLAND WATERWAYS IN SELECT COUNTRIES

35. The maximum length of Navigable Inland Waterways belongs to Russian Federation with 101,381 Kms followed by Finland with 8,014 Kms, Germany with 7,676 Kms., France with 4,996 Kms., Kazakhstan with 4,151 Kms and Poland with 3,659 Kms. in the year 2012. However, the maximum quantity of Goods carried was in Germany at 223 million tonnes, followed by Russian Federation at 138 million tonnes and France at 66 million tonnes.



Source: Annual Bulletin of Transport Statistics for Europe & North America, 2015(UN Publication).

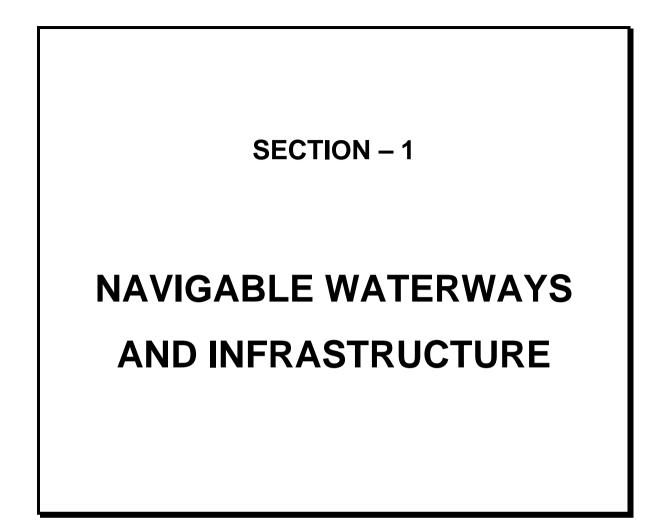


Table No. 1.1

Navigable Waterways in India

(In Kms.)

| Si. No. State/Rivers/Canats/Lakes Total Length of the Rivers/Canats/Lakes in the State Novigable Length 1 2 3 4 1 Codevariants/Lakes 1530 171 (i) Godavariants/Lakes 1530 171 (ii) Godavariants/Lakes 1530 171 (ii) Krishna 1400 157 (iii) Charlants/Lakes 649 476 Total 3579 804 2. ASSAM 2800 891 (ii) Brahmaputra 2800 891 (iii) Boriak 900 121 (iii) Subarshi 468 111 (iv) Manash 375 104 (vi) Maesh 355 55 (viii) Beki 85 55 (viii) Beki 85 55 (viii) Beki 150 104 (viii) Subarshi 120 80 | | | | 2014-1 | (in Kms.) |
|--|----|---------|---------------------|----------------------------|------------------|
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| (i) Godavai 1530 171 (ii) Krishna 1400 157 (iii) Others ** 649 476 Total 3579 804 2. ASSAM 900 121 (i) Brahmaputra 2800 891 (ii) Borak 900 121 (iii) Subansiri 135 25 (iv) Dhansiri 135 25 (vi) Manash 375 104 (vi) Aie 64 (vii) Beki 85 55 (viii) Jiabhoroli 90 60 (ix) Puthimari 64 (xi) Beki 50 50 (xii) Jiabhoroli 90 60 (xii) Jiabhoroli 90 60 (xii) Sonai 44 (xii) Kataha/Uhaleswari 150 120 (xiii) Ganga 510 510 (xiviii) Jiri </th <th>1</th> <th></th> <th>2</th> <th>3</th> <th>4</th> | 1 | | 2 | 3 | 4 |
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| (ii) Krishna 1400 157 Total 3579 804 2. ASSAM 2800 891 (i) Brahmaputra 2800 891 (ii) Borak 900 121 (iii) Subansiri 468 111 (iv) Dhansiri 135 25 (v) Manash 375 104 (vi) Aie 64 (vii) Beki 85 55 (viii) Jiabhoroli 90 60 (ix) Puthimari 64 (viii) Jiabhoroli 90 60 (ix) Disang 25 25 (xi) Dikhow 92 40 (xiii) Dikhow 92 40 (xiii) Dikhow 92 40 (xiii) Sonai 48 (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Ganga | 1 | | | | |
| (iii) Others ** 649 476 Total 3579 804 2. ASSAM 2 (i) Brahmaputra 2800 891 (ii) Borak 900 121 (iii) Subansiri 468 111 (iv) Dhansiri 135 25 (v) Manash 375 104 (vi) Aie 64 (vii) Jiabhoroli 90 60 (viii) Jiabhoroli 90 60 (ix) Puthimari 64 (x) Disang 25 25 (xii) Jiabhoroli 90 60 (xiii) Katakhal/Dhaleswari 150 120 (xiii) Sonaj 32 (xiii) Sonaj 32 (xiii) Jianti 32 (xiii) Sonaj 32 (xiii | | | | | |
| Total 3579 804 2. ASSAM | | | | | |
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| (iv) Dhansiri 135 25 (v) Manash 375 104 (vi) Aie 64 (vii) Beki 85 55 (viii) Jiabhoroli 90 60 (ix) Puthimari 64 (x) Disang 25 25 (xi) Kopili 50 50 (xiii) Dikhow 92 40 (xiii) Dikhow 92 40 (xiiii) Katakhal/Dhaleswari 150 120 (xiii) Katakhal/Dhaleswari 32 (xiv) Sonai 32 (xiv) Sonai 48 (xvi) Buridihing 120 80 (xviii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 510 510 (i) Ganga 510 510 (ii) Koshi <td< td=""><td></td><td></td><td>Borak</td><td></td><td></td></td<> | | | Borak | | |
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| (vi) Aie 64 (vii) Beki 85 55 (viii) Jiabhoroli 90 60 (x) Puthimari 64 (x) Disang 25 25 (xi) Kopili 50 50 (xii) Dikhow 92 40 (xiii) Katakhal/Dhaleswari 150 120 (xiii) Katakhal/Dhaleswari 32 (xvi) Sonai 32 (xvi) Sonai 48 (xv) Mahura 32 (xvii) Chiri 42 (xviii) Jiri 64 (xviii) Chiri 64 (xviii) Chiri 64 (xviii) Jiri 64 (xviii) Ganga 510 510 (ii) Ganga 510 510 (iii) Ganga 100 100 (v) | | | | | |
| (vii) Beki 85 55 (viii) Jiabhoroli 90 60 (ix) Puthimari 64 (x) Disang 25 25 (xi) Kopili 50 50 (xii) Dikhow 92 40 (xiii) Dikhow 92 40 (xiii) Sonai 48 (xv) Mahura 32 (xiv) Sonai 48 (xv) Mahura 32 (xvii) Buridhing 120 80 (xviii) Jiri 42 (xviii) Jiri 64 Total 5290 1996 (i) Gandak (ii) Gandak 300 300 (iii) Gandak 233 160 (iv) Sone 226 31 (vi) Burharanda 140 (vii) Burharanda 100 </td <td></td> <td></td> <td></td> <td>375</td> <td>-</td> | | | | 375 | - |
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| (ix) Puthimari 64 (x) Disang 25 25 (xi) Kopili 50 50 (xii) Dikhow 92 40 (xiii) Katakhal/Dhaleswari 150 120 (xiii) Sonai 48 (xv) Sonai 32 (xvi) Buridihing 120 80 (xvii) Buridihing 120 80 (xvii) Buridihing 120 80 (xviii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 Silenar Image: Silenar Silenar (i) Ganga 510 510 (iii) Gandak 300 300 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Burhi Gandak 400 (vii) Burhi Gandak 400 < | | | | | |
| (x) Disang 25 25 (xi) Kopili 50 50 (xii) Dikhow 92 40 (xiii) Katakhal/Dhaleswari 150 120 (xiv) Sonai 48 (xv) Mahura 32 (xvi) Buridihing 120 80 (xvii) Chrii 42 (xviii) Chrii 42 (xviii) Jiri 64 Total 5290 1996 Simadak (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Gandak 100 100 (iv) Ghaghra 100 100 (vi) Mahananda 140 (vii) Burhi Gandak 400 (vii) Burhi Gandak 400 (vii) Burhi Gandak 400 (xii) Phalgu Harihar | | | | | |
| (xi) Kopili 50 50 (xii) Dikhow 92 40 (xiii) Katakhal/Dhaleswari 150 120 (xiii) Sonai 48 (xv) Mahura 32 (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 *********************************** | | | | | |
| (xii) Dikhow 92 40 (xiii) Katakhal/Dhaleswari 150 120 (xiv) Sonai 48 (xv) Mahura 32 (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 SilHAR (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Gandak 300 300 (iii) Gandak 300 300 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Burhi Gandak 400 (vii) Burhi Gandak 400 (viii) Burhi Gandak 400 (viii) Punpun 200 (xi) Kari Koshi 150 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<> | | | | | |
| (xiii) Katakhal/Dhaleswari 150 120 (xiv) Sonai 48 (xv) Mahura 32 (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 64 (i) Ganga 510 510 (ii) Gandak 300 300 300 (iii) Gandak 100 100 100 (iv) Ghaghra 100 100 (iv) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (xii) Phalgu Harihar 300 (xii) Kari Koshi 150 (xiii) Chadan < | | | | | |
| (xiv) Sonai 48 (xv) Mahura 32 (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Gandak 300 300 (iii) Gandak 100 100 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Burhi Gandak 400 (viii) Burhi Gandak 400 (viii) Burhi Gandak 400 (viii) Punpun 200 (x) Kait Koshi 150 (x) Kait Koshi 150 | | | | | |
| (xvi) Buridihing 120 80 (xvii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 3. BIHAR 64 (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Gandak 100 100 (iv) Ghaghra 100 100 (vi) Burhi Gandak 400 (vii) Burhi Gandak 400 (viii) Punpun 200 (xii) Phalgu Harihar 300 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | Sonai | | |
| (xvii) Chiri 42 (xviii) Jiri 64 Total 5290 1996 3. BIHAR 61 (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Gandak 300 300 (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vii) Burhi Gandak 400 (viii) Punpun 200 (xii) Phalgu Harihar 300 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | (xv) | Mahura | | |
| (xviii) Jiri 64 Total 5290 1996 3. BIHAR | | | | 120 | |
| Total 5290 1996 3. BIHAR (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vii) Mahananda 140 (viii) Burhi Gandak 400 (viii) Punpun 200 (xix) Phalgu Harihar 300 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| 3. BIHAR 510 510 (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | (xviii) | | | |
| (i) Ganga 510 510 (ii) Gandak 300 300 (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Punpun 200 (xix) Phalgu Harihar 300 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | Total | 5290 | 1996 |
| (ii) Gandak 300 300 (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | 3. | | | | |
| (iii) Koshi 233 160 (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | (i) | | | |
| (iv) Ghaghra 100 100 (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| (v) Sone 226 31 (vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (viii) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| vi) Mahananda 140 (vii) Burhi Gandak 400 (viii) Punpun 200 (ix) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| viii) Burhi Gandak 400 (viii) Punpun 200 (ix) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| İviii) Punpun 200 (ix) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| (ix) Phalgu Harihar 300 (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | (viii) | | | |
| (x) Kiul 100 (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | | | |
| (xi) Kari Koshi 150 (xii) Chandan 100 (xiii) Karamnasha 144 (xiv) Others 860 290 | | | Kiul | | |
| (xiii) Karamnasha 144 (xiv) Others 860 290 | | (xi) | | | |
| (xiv) Others 860 290 | | | | | |
| | | | | | |
| i otal 3763 1391 | | (XIV) | | | |
| | | | Iotal | 3/63 | 1391 |

1

Table No. 1.1 (Contd...)

Navigable Waterways in India

| | | | 2014-1 | 5 |
|------------|---------------|---------------------------|--|-------------------|
| SI. No. | | State/Rivers/Canals/Lakes | Total Length of the Rivers/Canals/Lakes in the State | Navigable Length |
| 1 | | 2 | 3 | 4 |
| | | | | |
| 4 | (i) | GOA Mandovi | 78 | 66 |
| | (i) (ii) | Zuari | 68 | 68 |
| | (ii) (iii) | Mapusa | 27 | 27 |
| | (iv) | Chapora | 34 | 32 |
| | (v) | Tiracol | 29 | 23 |
| | (v) (vi) | Sal | 20 | 15 |
| | (vii) | Others | 17 | 17 |
| | (•11) | Total | 273 | 248 |
| | | | | |
| 5 | GUJA | RAT * Narmada | 161 | 50 |
| | (i) | | 140 | 50 15 |
| | (ii) (iii) | Tapti Ambica | 140 136 | 15 20 |
| | (iii) (iv) | | 75 | 20 4 |
| | (iv) (v) | Auranga Purna | 75 141 | 4 13 |
| | (•) | Total | 653 | 102 |
| | | , otal | | 102 |
| 6 | KARN | АТАКА | | |
| | (i) | Sharavathi | 80 | 27 |
| | (ii) | Tungabhadra | 375 | 375 |
| | (iii) | Malaprabha | 230 | 230 |
| | (iv) | Ghataprabha | 160 | 160 |
| | (v) | Krishna | 325 | 125 |
| | (vi) | Cauvery | 270 | 34 |
| | (vii) | Kabini | 117 | 30 |
| | (viii) | Gurupur | 80 | 20 |
| | (ix) | Gangolli | 48 | 20 |
| | (x) | Bheema | 860 | 125 |
| | (xi) | Udyavara | 37 | 14 |
| | (xii) | Netravathi | 96 | 26 |
| | (xiii) | Kali Total | 184 2862 | 29 1215 |
| | | | | |
| 7 | KERA (i) | L A Manjeswar | 16 | 3.2 |
| | (ii) | Uppala | 50 | |
| | (ii) (iii) | Shiriya | 67 | 4.8 |
| | (iv) | Mogral | 34 | |
| | (v) | Chandragiri | 105 | 12.8 |
| | (vi) | Chittari | 25 | |
| | (vii) | Nileswar | 46 | 11.2 |
| | (viii) | Karingode | 64 | 24 |
| | (ix) | Kavvayi | 31 | 9.6 |
| | (x) | Peruvamba | 51 | 16 |
| | (xi) | Ramapuram | 19 | 6.4 |
| | (xii) | Kuppam | 82 | 24 |
| | (xiii) | Valapattanam | 110 | 44.8 |
| | (xiv) | Anjara Kandy | 48 | 27.2 |
| | (xv) | Telcicherry | 28 | 21.6 |
| | (xvi) | Mahe | 54 | 24 |
| | (xvii) | Kuthiadi | 74 | 9.6 |
| | (xviii) | Korapuzha | 40 | 24.8 |

Table No. 1.1 (Contd...)

Navigable Waterways in India

(In Kms.)

| | | | 2014-15 | | | |
|---|--|--|---|--|--|--|
| SI. Io. | | State/Rivers/Canals/Lakes | Total Length of the Rivers/Canals/Lakes in the State | Navigable Length | | |
| 1 | | 2 | 3 | 4 | | |
| | | | <u> </u> | | | |
| | xix) | Kallai | 22 | 9.6 | | |
| (> | xx) | Chaliyar | 169 | 68.4 | | |
| () | xxi) | Kadalundy | 130 | 43.2 | | |
| () | xxii) | Tirur | 48 | 9.6 | | |
| () | xxiii) | Bharathappujha | 209 | 40 | | |
| | | Keecheri | 51 | | | |
| • | xxv)́ | Puzhakkal | 29 | | | |
| • | xxví) | Karivannur | 48 | 24 | | |
| | xxvii) | Chalakkudy | 130 | 16 | | |
| | | Periyar | 244 | 72 | | |
| • | | Muvattei puzha | 121 | 25.6 | | |
| , | | Meenachil | 78 | 41.6 | | |
| • | xxxí) | Manimala | 90 | 54.4 | | |
| • | | Pamba | 176 | 73.6 | | |
| • | | Achan coil | 128 | 32 | | |
| • | | Pallickal | 42 | 2 | | |
| ò | , | Kallada | 121 | 40 | | |
| | | Ithikkara | 56 | 16 | | |
| | | Ayroor | 17 | 1 | | |
| | | Vamanapuram | 88 | 11.2 | | |
| | | Mamom | 27 | 1 | | |
| () | xL) | Karamana | 68 | | | |
| | | Neyyar | 56 | | | |
| | | Total | 3092 | 845.2 | | |
| 8 N | IAHAR | ASHTRA **** | | | | |
| (i | i) | Dende Diver | | | | |
| | | Dande River | 2 | 1 | | |
| | | Dande River Pangere River | 2 2 | 1 1 | | |
| (i | ii) | Pangere River | 2 | | | |
| (i (i | ii) iii) | Pangere River Girye River | | 1 1 | | |
| (i (i (i | ii) iii) iv) | Pangere River Girye River Kajali River | 2 3 | 1 1 5 | | |
| (ii (ii (i (v | ii) iii) iv) v) | Pangere River Girye River | 2 3 35 | 1 1 5 2 | | |
| (ii (ii (i (v (v | ii) iii) iv) v) vi) | Pangere River Girye River Kajali River Kalbadevi River | 2 3 35 10 | 1 1 5 2 1 5 | | |
| (ii (ii (i (v (v (v | ii) iii) iv) v) vi) vii) | Pangere River Girye River Kajali River Kalbadevi River Are River | 2 3 35 10 6 | 1 5 2 1 5 3 | | |
| (ii (ii (v (v (v (v | ii) iii) iv) v) vi) vii) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River | 2 3 35 10 6 10 | 1 1 5 2 1 5 | | |
| (ii (ii (v (v (v (i: (x) (i) | ii) iii) v) vi) vii) viii) ix) x) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River | 2 3 35 10 6 10 10 45 6 | 1 5 2 1 5 3 40 4 | | |
| (ii (ii (v (v (v (i: (x) (i) | ii) iii) v) vi) vii) viii) ix) x) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) | 2 3 35 10 6 10 10 45 | 1 5 2 1 5 3 40 | | |
| (ii (ii (v (v (v (i: (x) (x) (x) | ii) iv) v) vi) vii) viii) ix) x) x) xi) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River | 2 3 35 10 6 10 10 45 6 | 1 5 2 1 5 3 40 4 | | |
| (ii (ii (\ (\ (\ (\ (\) (\) (\) (\) (\) (\) (\) | ii) iv) v) vi) vii) ixi) ix) x) xi) xii) xi | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) | 2 3 35 10 6 10 10 45 6 24 32.5 1.5 | 1 5 2 1 5 3 40 4 9 28 1 | | |
| (ii (ii (\ (\ (\ (\ (\) (\) (\) (\) (\) (\) (\) | ii) iv) v) vi) vii) viii) ix) x) x) xi) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River | 2 3 35 10 6 10 45 6 24 32.5 1.5 23 | 1 5 2 1 5 3 40 4 9 28 1 20 | | |
| | ii) iv) v) vi) vii) ix) xii) xii) xii) x | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) | 2 3 35 10 6 10 45 6 24 32.5 1.5 23 11 | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 | | |
| (ii (ii (i) () () () () () () () () () () () () () | ii) iv) v) vi) vii) ix) xii) xii) xii) x | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River | 2 3 35 10 6 10 45 6 24 32.5 1.5 23 11 16 | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 | | |
| (i (| ii) iii) iv) vi) vii) viii) ix) xii) xii | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ \end{array} $ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 | | |
| (ii) (ii) (ii) (ii) (ii) (ii) (ii) (ii) | ii) iii) iv) vi) vii) viii) viii) ix) xii) xii | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) | $\begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\end{array}$ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 | | |
| (ii) (ii) (ii) (ii) (ii) (ii) (ii) (ii) | ii) iii) iv) vi) vii) viii) viii) ix) xiii) xiii) xiii) xiii) xvi) xv | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\end{array} $ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 38 | | |
| (ii | ii) iv) v) vii) viii) viii) viii) ix) xii) xii | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ \end{array} $ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 38 20 | | |
| (ii | ii) iii) iv) vi) viii) viii) ix) xiii) xiii) xiii) xiii) xiii) xvi) xvi) xvi) xviii) xviii) xxvi) xxvi) xxiii) xxvi) xxvi) xxvi) xxiii) xxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) xxxvi) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Wahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ \end{array} $ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 38 20 40 | | |
| (ii | ii) iv) v) vii) viii) viii) viii) ix) xii) xii | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Wahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River(Musakazi to Rajapur) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ \end{array} $ | 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 38 20 | | |
| (ii) (ii) (ii) (ii) (ii) (ii) (ii) (ii) | ii) iii) iv) vi) vii) viii) ix) xiii) xiii) xiii) xiv) xvi) xvi) xvii) xvii) xxii) xxii) xxii) xxii) xxii) xxii) xxii) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River(Vijaydurg Creek(Vijaydurg to | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 30\\ \end{array} $ | $ \begin{array}{c} 1\\ 5\\ 2\\ 1\\ 5\\ 3\\ 40\\ 4\\ 9\\ 28\\ 1\\ 20\\ 6.5\\ 16\\ 10\\ 5\\ 38\\ 20\\ 40\\ 30\end{array} $ | | |
| (iii) | ii) iii) iv) vi) vii) viii) ix) xiii) xiii) xiii) xiii) xiii) xiii) xvi) xvi) xvi) xvi) xvi) xxii) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River(Musakazi to Rajapur) Vagothan River/Vijaydurg Creek(Vijaydurg to Kharepatan) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 30\\ 38\end{array} $ | $ \begin{array}{c} 1\\ 1\\ 5\\ 2\\ 1\\ 5\\ 3\\ 40\\ 4\\ 9\\ 28\\ 1\\ 20\\ 6.5\\ 16\\ 10\\ 5\\ 38\\ 20\\ 40\\ 30\\ 22\end{array} $ | | |
| (iii) | ii) iii) iv) vi) vii) viii) viii) xiii) xiii) xiii) xiii) xiii) xiii) xiii) xvi) xvi) xvi) xvi) xvi) xxii) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River/Vijaydurg Creek(Vijaydurg to Kharepatan) Gad River(Kalaval Creek) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 20\\ 45\\ 30\\ 38\\ 13\\ \end{array} $ | 1 1 5 2 1 5 3 40 4 9 28 1 20 6.5 16 10 5 38 20 40 30 22 7 | | |
| $ \begin{array}{c} \text{(ii)} \\ \text{(ii)} $ | ii) iii) iv) vi) vii) viii) viii) ix) xii) xiii) xiii) xiii) xiii) xiii) xiii) xvi) xvi) xvi) xvi) xxii) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River/Vijaydurg Creek(Vijaydurg to Kharepatan) Gad River(Kalaval Creek) Terekhol River/Creek(Terekhol to Banda) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 30\\ 38\\ 13\\ 28\end{array} $ | $ \begin{array}{c} 1\\ 1\\ 5\\ 2\\ 1\\ 5\\ 3\\ 40\\ 4\\ 9\\ 28\\ 1\\ 20\\ 6.5\\ 16\\ 10\\ 5\\ 38\\ 20\\ 40\\ 30\\ 22\\ 7\\ 28\end{array} $ | | |
| $ \begin{array}{c} \text{(ii)} \\ \text{(iii)} \\ \text{(iii)} \\ \text{(iv)} \\ \text{(v)} $ | ii) iii) iv) vi) vii) viii) viii) ix) xii) xii) xii) xii) xii) xii) xii) xii) xvi) xvi) xvi) xvi) xvi) xxi) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River(Musakazi to Rajapur) Vagothan River/Vijaydurg Creek(Vijaydurg to Kharepatan) Gad River(Kalaval Creek) Terekhol River/Creek(Terekhol to Banda) Karli River(Malva) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 30\\ 38\\ 13\\ 28\\ 23\\ \end{array} $ | $ \begin{array}{c} 1\\ 1\\ 5\\ 2\\ 1\\ 5\\ 3\\ 40\\ 4\\ 9\\ 28\\ 1\\ 20\\ 6.5\\ 16\\ 10\\ 5\\ 38\\ 20\\ 40\\ 30\\ 22\\ 7\\ 28\\ 13\\ \end{array} $ | | |
| (iii) | ii) iii) iv) vi) vii) viii) viii) ix) xii) xii) xii) xii) xii) xii) xii) xvi) xvi) xvi) xvi) xvi) xxi) | Pangere River Girye River Kajali River Kalbadevi River Are River Jog River Kelshi River Savitri River(Bankot to Mahad) Kal River Vaitarna River Ulhas River Mahim River(Bay) Amba River Patalganga River/Creek (Aware to Kharpada) Kundalika River Mandad River(Rajpuri to Mandad) Mhasla River(Turmad to Mhasla) Vashisti River(Dabhol to Govalkot) Jagbudi River(Karambavne to Khed) Shastri River/Jaigad Creek(Jaigad to Kurudunda) Rajapur River/Vijaydurg Creek(Vijaydurg to Kharepatan) Gad River(Kalaval Creek) Terekhol River/Creek(Terekhol to Banda) | $ \begin{array}{c} 2\\ 3\\ 35\\ 10\\ 6\\ 10\\ 10\\ 45\\ 6\\ 24\\ 32.5\\ 1.5\\ 23\\ 11\\ 16\\ 14\\ 9\\ 45\\ 20\\ 45\\ 30\\ 38\\ 13\\ 28\end{array} $ | $ \begin{array}{c} 1\\ 1\\ 5\\ 2\\ 1\\ 5\\ 3\\ 40\\ 4\\ 9\\ 28\\ 1\\ 20\\ 6.5\\ 16\\ 10\\ 5\\ 38\\ 20\\ 40\\ 30\\ 22\\ 7\\ 28\end{array} $ | | |

Table No. 1.1

Navigable Waterways in India

(In Kms.)

| | | 2014-15 | | | | |
|-----------------------------------|---------------------------------|--|------------------|--|--|--|
| I. o. | State/Rivers/Canals/Lakes | Total Length of the Rivers/Canals/Lakes in the State | Navigable Length | | | |
| 1 | 2 | 3 | 4 | | | |
| | | | | | | |
| | ISSA | | | | | |
| (i) | Mahanadi | 493 | 199 | | | |
| (ii) | Brahmani | 541 | 277 | | | |
| (iii) | Baitarani | 344 | 32 | | | |
| (iv) | Subarnarekha | | 50 | | | |
| (v) | Budha Balanga | | 35 | | | |
| (vi) | Dhamara | | 20 | | | |
| (vii) | | | 17 | | | |
| (viii) | | | 21 | | | |
| (ix) | Parnei | | 45 | | | |
| (x) | Hatel | | 30 | | | |
| (xi) | Bansagadal | | 32 | | | |
| (xii) | | | 37 | | | |
| (xiii) | | | 18 | | | |
| (xiv) | | | 6 | | | |
| (xv) | | | 16 | | | |
| (xvi) | | | 16 | | | |
| (xvii | | | 14 | | | |
| (xvii | | | 14 110 | | | |
| (xix) | | | - | | | |
| (xx) | | | 45 37 | | | |
| (xxi) | | | 20 | | | |
| (xxii | | | 15 | | | |
| (xxii | | | 30 | | | |
| (xxiv | • | | 25 | | | |
| (xxv (xxv | , | | 25 9 | | | |
| (XXV) | | | 9 7 | | | |
| (xxv | | | , 11 | | | |
| (xxi) | | | 367 | | | |
| | Total \$ | 1378 | 1555 | | | |
|) TAN | | | | | | |
| (i) | Anantha Victoria Marthandavarna | 27 | 12 | | | |
| (ii) | North Buckingam Canal | 58 | | | | |
| (iii) | Central Buckingam Canal | 7 | | | | |
| (iv) | South Buckingam Canal | 105 | | | | |
| | Total | 197 | 12 | | | |
| υττ | TAR PRADESH*** | | | | | |
| (i) | Gomti | 960 | | | | |
| (ii) | Rapti | 778 | | | | |
| (iii) | Ghaghra | 1116 | | | | |
| | Ganga | 2345 | 425 # | | | |
| (iv) | Sai | 760 | | | | |
| (iv) (v) | Tons | 485 | | | | |
| | | 6444 | | | | |
| (v) | Total | 0444 | | | | |
| (v) (vi) | Total | 0111 | | | | |
| (v) (vi) | Total ST BENGAL | | 580 | | | |
| (v) (vi) 2 WE (i) | Total ST BENGAL Hooghly | 580 | 580 58 | | | |
| (v) (vi) 2 WE | Total ST BENGAL | | 580 58 174 | | | |

Table No. 1.1 (Contd...)

Navigable Waterways in India

(In Kms.)

| | | | 2014-15 | | | | |
|------------|---------------|---------------------------|--|------------------|--|--|--|
| SI. No. | | State/Rivers/Canals/Lakes | Total Length of the Rivers/Canals/Lakes in the State | Navigable Length | | | |
| 1 | | 2 | 3 | 4 | | | |
| | (v) | Dwarka | 129 | 129 | | | |
| | (vi) | Bakreswar | 102 | 102 | | | |
| | (vii) | Damodar | 437 | 437 | | | |
| | (viii) | Dwarekeswar | 103 | 103 | | | |
| | (ix) | Silabati | 135 | 135 | | | |
| | (x) | Kumari | 347 | 347 | | | |
| | (xi) | Ichamati | 232 | 232 | | | |
| | (xii) | Others@ | 2064 | 2064 | | | |
| | | Total | 4741 | 4593 | | | |
| 13 | NAGA | LAND*** | | | | | |
| | (i) | Doyans | 185 | 105 | | | |
| | (ii) | Tizu/Zungki | 287 | 90 | | | |
| | (iii) | Dhansiri/Chathe | 170 | 75 | | | |
| | (iv) | Dikhu | 120 | 52 | | | |
| | (v) | Tapi-Yangnyu | 95 | 18 | | | |
| | (v) (vi) | Tsurang/Disai | 60 | 15 | | | |
| | (vi) (vii) | Others | 20 | 20 | | | |
| | (VII) | Total | 937 | 375 | | | |
| | | TOTAL | 937 | 375 | | | |
| 14 | MIZOI | | | | | | |
| | (i) | R. Tlawng (Dhaleswari) | 238 | 81 | | | |
| | (ii) | R. Kolodyne (Chhimtuipui) | | | | | |
| | (iii) | Khawthlang Tuipui | | | | | |
| | (iv) | R. Tuichawrg | | | | | |
| | (v) | Tul River | | | | | |
| | (vi) | Others | | | | | |
| | | | 238 | 81 | | | |

* Relates to 2012-13

*** Including Canals. *** Relates to 2007-08 **** Relates to 2013-14

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

... : Not avaialable
 # Navigable length Pertains to NW I for Allahabad-Buxar stretch in Uttar Pradesh is available.

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

Source: IWT Directorate of states & IWAI.

5

Table No. 1.2

Infrastructure Facilities Available on National Waterways (As on 31-3-2015)

| Place | Size of Vessels that can be accomodated (DWT) | No. of Berths | Cargo Handling Equip. and their Capacity | Type and Extent of Storage Facility Available | Remarks |
|--|---|----------------------------------|--|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| National Waterway No.1 1. Haldia - Farakka : (560 Km) ,Depth - 2.8 to 3.0 | 1500 | - (:) | | | 5 |
| (i) Haldia | 1500 | Two(Floating) | | One godown of size 12x30m and open storage (1630 sq.m.). | Being used for loading of fly ash, embark/disembark of tourists and logistic support. About 1.5 lakh tons fly ash loaded in 2014-15. |
| ii) Budge Budge - kolkata | 1500 | One(Floating) | Crane Pontoon | | A new floating Jetty has been developed and being used for transportation of food grains by FCI from Kolkata to Northeast region through Indo- Bangladesh protocol route. |
| (iii) a) BISN/G.R. Jetty-1,Kolkata | 1500 | One(Floating) | | Open storage- 15 sqm. | Being used for loading of fly ash, embark/disembark of tourists and logistic support. About 1.5 lakh tons fly ash loaded in 2014-15. |
| (iii) b) G.R. Jetty-2,Kolkata | 3000 | Fixed RCC Jetty 70 m berth | | Transit shed of size 25m x 46m and open storage (4000 sqm) | A permanent RCC jetty has been constructed and operational since November ,2013. |
| (iv) Botanical garden, Kolkata | 1500 | One(Floating) | | | Being used for embark/disembark tourists & logistics support. |
| (v) Shantipur | 600 | One(Floating) | | | Being used for embark/disembark tourists & logistics support. |
| (vi) Swaroopganj | 600 | One(Floating) | - | - | Being used for embark/disembark tourists & logistics support. One DGPS station is operational. |
| (vii) Katwa | 600 | One(Floating) | | | Being used for embark/disembark & logistics support. |
| (viii) Hazardwari | 600 | One (floating) | | | Being used for embark/disembark & logistics support. |
| (ix) Pakur (Putimari) | | One(fixed) | | | May be used for loading/unloading and logistics support. |
| (x) Farakka | 1500 | One(fixed) | | | May be used for loading/unloading and logistics support. |
| (a) Owned by Farakka Barrage Project | 2500 | One(fixed) | | | May be used for loading/unloading and logistics support. |
| (b) Owned by Jindal ITF | (two vessels at a time) | Jetty with conveyor | Two EoT | | Being used for unloading NTPC coal. |
| (c) IWAI's Floating jetties | 600 | Two(Floating) | | | Being used for embark/disembark of tourists & logistics support. |
| 2. Farakka - Barh : (400 km), Depth- 2.1 to 2.5 | | | | | |
| (xi)Rajmahal (Manglaghat) | 600 | One(Floating) | | - | Being used for embark/disembark of tourists and logistics support. |
| (xii) Sahibganj (Samudarghat) | 600 | One(Floating) | | - | Being used for loading of stone chips and embark/disembark facility. Construction of permanent IWT multi model terminal is planned. |

Table No. 1.2 (Contd...)

Infrastructure Facilities Available on National Waterways (As on 31-3-2015)

| Place | Size of Vessels that can be accomodated (DWT) | No. of Berths | Cargo Handling Equip. and their Capacity | Type and Extent of Storage Facility Available | Remarks |
|--|---|--|--|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| (xiii) Bateshwarsthan | 600 | One (Floating) | | - | Being used for embark/disembark of tourists and logistic support. |
| (xiv) Bhagalpur | 600 | One(floating) | | Total land area 3.86 acres. Open storage - 1000 sqm. | Being used for stationing of IWT vessels, embark/disembark of tourists and logistic support. One DGPS station is operational. |
| (xv) Munger | 600 | One (Floating) | | Total land area 3.40 acres. Open storage - 1000 sqm. | Being used for embark/disembark of tourists and logistic support. |
| 3. Barh-Ghazipur : (290 km),Depth - 1.6 to 2.0 | | | | | |
| (xvi) Semaria | 600 | One(floating) | | | Being used for embark/disembark of tourists. |
| (xvii) a) Patna | 600 | Fixed RCC (Low & High) Jetties of 50m & 70m berth respectively | 2 Shore cranes 1 Container crane | | Low and high level permanent Jetties are operational since 2008 & 2012 respectively and capable for handling of containers & general cargo. Besides bunkering facility is also available. One DGPS station is operational. |
| (xvii) b) Patna | 600 | One (Floating) | Crane Pontoon | | Being used for embark/disembark of tourists and logistic support during leanest period. |
| (xviii) Buxar | 600 | One (Floating) | | | Being used for embark/disembark of tourists and logistic support. |
| 4. Ghazipur-Allahabad : (370 km) ,Depth -1.2 to 1.5 * In Chunar- Allahabad stretch (198 km) no RC works was undertaken. | | | | | |
| (xviii) Ghazipur/ Rajghat | 300 | One(floating) | | | Being used for embark/disembark of tourists and logistic support. |
| (xix) Varanasi | 300 | One(floating) | | Total land area 5.586 hectare .Open storage- 3000 sqm. | Being used for embark/disembark and logistic support. Construction of permanent IWT multimodel terminal is planned. |
| (xx) Allahabad | 300 | One (floating) | | Total Land area- 8.759 hectare . Open storage -3000 sqm. | Being used for embark/disembark of tourists and logistic support. |

Note :

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

2) A jetty with conveyor facility has been developed by M/s Jindal ITF Ltd. At NTPC Farakka under the tripartite MoU signed between NTPC, Jindal and IWAI for transportation of 3 MMTPA imported coal and being used for unloading of the coal.

3) A floating jetty has been developed by IWAI at Budge Budge, Kolkatta and being used for transportation of food grains by FCI from Kolkata to north east region through Indo- Bangladesh Protocol route.

4) DGPS stations at Swaroopganj, Bhagalpur and Patna have been commissioned. Construction of another DGPS Station at Varanasi is underway.

5) River notices are issued on fortnightly basis during lean season and monthly basis during flood season.

6) 24 hours navigation aids being provided in Tribeni-Varanasi sector (1187 km) only. Day channel marking being provided in Tribeni- Allahabad sector (1424 km).

Table No. 1.2 (Contd...)

Infrastructure Facilities Available on National Waterways (As on 31-3-2015)

| Place | Size of Vessels that can be accomodated (DWT) | No. of Berths | Cargo Handling Equip. and their Capacity | Type and Extent of Storage Facility Available | Remarks |
|---|---|--|---|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| National Waterways No. 2 | | | | | |
| 1. Bangladesh Border-Pandu: (255 km), Depth - 2.5 | | | | | |
| (a) Dhubri | 600 | One(floating) | Crane prontoon | - | (i) Storage facility is being developed(ii) DGPS station is commissioned(iii) Construcition of an RCC Ro- Ro terminal in progress. |
| (b) Jogighopa | 600 | One(floating) | Crane pontoon | Open storage facility available | (i) DGPS station is commissioned |
| (c) Pandu | 600 | One(low level RCC jetty) + One High level RCC jetty | One Container crane of 75 T capacity, two tyre mounted crane of 20 T capacity | (i)2 transit sheds of 75 x 21 m each(ii) open storage facility also available | (i) BG siding is completed.(ii) Approach road is available |
| 2. Pandu-Neamati : (374 km), Depth - 2.5 | | | | | |
| (d) Tezpur | 600 | One(floating) | Crane prontoon | - Open storage facility available | DGPS station is commissioned. |
| (e) Silghat | 600 | One(floating) | - | | |
| (f) Neamati | 600 | One (floating) | Crane prontoon | - | |
| 3. Neamati-Dibrugarh : (123 km), Depth- 1.5 | | | | | |
| (g) Bogibeel | 600 | One (floating) | - | - | |
| (i) Sengajan/Panbari | 600 | One (floating) | Crane prontoon | - | |
| 4. Dibrugarh-Sadiya (Oriumghat) : (139 km),Depth - 2.0 | | | | | |
| (j) Oakland/ Dibrugarh | 600 | One(floating) | - | | DGPS station is commissioned. |
| (k) Oriumghat | 600 | One (floating) | - | - | 1.77 hectare land acquired for development of terminal. |

Note:

1) Floating pontoons can be provided at any location along waterway on demand.

2) Night navigation facilities are available between Bangladesh Border and Silghat (440km).

3) River notices issued on regular monthly/fortnightly basis.

4) Different Global Positioning System(DGPS) Stations to cover entire waterway are provided at Dhubri, Jogighopa, Silighat and Dibrugarh.

| Table No. 1.2 (Contd) | Infrastruct | ure Faci | lities Availab | le on National Wate | erways (As on 31-3-2015) |
|---|---|------------------|--|--|--|
| Place | Size of Vessels that can be accomodated (DWT) | No. of Berths | Cargo Handling Equip. and their Capacity | I VDO 200 EVIONI OI | Remarks |
| 1 | 2 | 3 | 4 | 5 | 6 |
| National Waterways No. 3 | | | | | |
| 1. Kochi-Kottapuram : (30 km), Depth-2.0 | | | | | |
| (a) Kottapuram | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm) | Terminal has a road connectivity. |
| 2. Udyogmandal Canal : (23 km),Depth -2.0 | | | | | |
| (b) Aluva | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm) | Terminal has a road connectivity. |
| 3. Champakara Canal : (14 km), Depth - 2.0 | | | | | |
| (c) Ernakulam GC (Maradu) | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm) | (i) Terminal has a road connectivity. |
| (d) Kakkanad (CSEZ) | | | | | (ii) Only Land for terminal acquired. |
| 4. Kochi - Chavara : (107 km) , Depth - 2.0 | | | | | |
| (e) Vaikkom | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm) | Terminal has road connectivity. |
| (f) Chertala (Thanneermukkom) | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | • • | (i) Terminal has road connectivity. |
| (g) Alapuzha | | | | | (ii) Construction of Terminal is nearing completion. |
| (h)Trikunnapuzha | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | 400 Sqm Covered storage (20m x 20m) and open storage (approx. 1500-2000 Sqm) | Terminal has road connectivity. |
| (I)Kayamkulam | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500- 2000 Sqm) | (i) Terminal has road connectivity. |
| (j) Chavara | | | | | (ii) Only land for terminal acquired. |

| Table No. 1.2 (Contd) | Infrastructure Facilities Available on National Waterways (As on 31-3-2015) | | | | | |
|--|---|---------------------------------------|--|--|---|--|
| Place | Size of Vessels that can be accomodated (DWT) | No. of Berths | Cargo Handling Equip. and their Capacity | | Remarks | |
| 1 | 2 | 3 | 4 | 5 | 6 | |
| 5. Chavara- Kollam : (31 Km), Depth -2.0 | | | | | - | |
| (k) Kollam | 350.0 | One fixed | One 18 T crane & 3 T Fork lift | Covered storage (20m x 20m) and open storage (approx. 1500 2000 Sqm) | Terminal has road connectivity. | |
| 6. CPT Area : Depth -2.2 | | | | | | |
| (I) Willingdon island | 12 TEU | One berth for container vessels | 5 T Crane through agency | 5000 sqm open storgae | These terminals have been constructed for container movement to | |
| (m) Bolgatty island | 16 TEU | One berth for container vessels | 40 T Crane through agency | 8000 sqm open storgae | ICTT, Vallarpadam. Operation commenced w.e.f. 23.02.2011. | |

Note :-

Channel marks for 24 hrs navigation provided on the entire waterway.
 River notices issued on regular fortnightly basis.
 Depth is in meters and about 330 days in a year.

Table No. 1.3

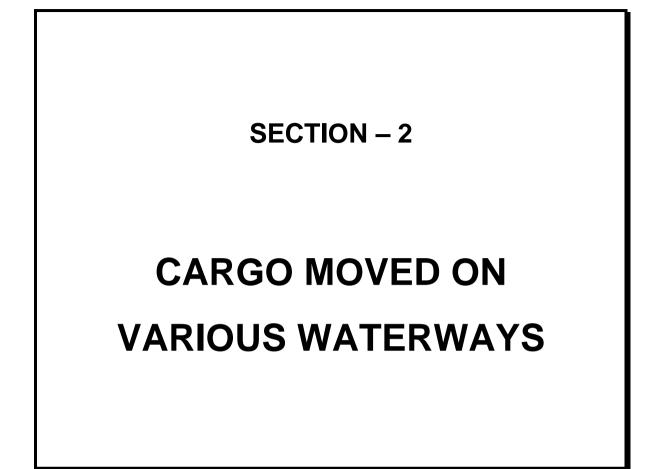
Infrastructure Facilities Available on State Waterways (As on 31-3-2015)

| SI. No. | Navigational Channel | Depth (Meters) | Availability and Capacity of Terminals | | | | | |
|------------|-----------------------------------|----------------|--|---|------------------|--|---|--|
| | | | Place | Size of vessels that can be accomodated (DWT)/dimension | No. of berths | Cargo handling equip. and their capacity | Type and extent of storage facility available | Remarks |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | ANDHRA PRADESH Godavari River | NIL | NIL | NIL | NIL | NIL | NIL | NIL |
| | Kakinada Canal | 2.98/1.98 | Z-Medaoadu to Kovvur | | | | | Through the canals noted in Col.(1) are designed for Navigation Canal long back i.e. 100 to 150 years at present no Inland Water Facility is being utilized. |
| | Samarlakota Canal | 2.17/1.95 | Dowlaiswaram- Kakinada | | | | | |
| | G.E. Banak Canal | 2.86/2.13 | Vemagiri- Tallarevu | | | | | |
| | Amalapuram Canal Krishna River | 2.225/1.890 | Bobbarlanka-Challapalli Lock | | | | | |
| | Eluru Canal | | | | | | | |
| | Ryves Canal | | | | | | | |
| | Polraj Canal | | | | | | | |
| | Campbell Canal | | | | | | | |
| | Bantumilli Canal | | | | | | | |
| | Bandar Canal | | | | | | | |
| | K.E.B. Canal | | | | | | | |
| 2 | BIHAR | 2 metres | (I) (a) Sahebganj- Manihari | 134'x31' | 2 Nos. | Nil | Nil | - |
| | | | | 80'x15'x7" | 1 Nos. | Nil | Nil | - |
| | | | | 55x13'3"x4'8' | 1 Nos. | Nil | Nil | - |
| | | | (II) Kahalgaon-Tintanga | 60'x16'x6' | 2 Nos. | Nil | Nil | - |
| | | | (III) Sultanganj - Agwani | 70'x18'x6' | 2 Nos. | Nil | Nil | |
| | | | (IV) (a) Munghyr- Raighat | 56'x14'x6' 58'x16'x5'8 | 1 Nos. 1 Nos. | Shore crane- 2 Pontoon | | - |
| | | | | 47'x13'x5'8 | 1 Nos. | crane-2 Container | | |
| | | | | 60'x16'x5'5' | 1 Nos. | crane-1 | Godown | |
| | | | (V) Buxar-Ujirghat | - | - | - | | At IWAI terminal |
| 3 | GOA | | | | | | | |
| | | 0.00 | Donoii | 75 March and | | | | Danta latti kalen maalikumaa ku sa Waxib ta Da |
| | Panaji Port (River Mandoi) | 3.30 metres | Panaji | 75 Mtrs Length | 1 | - | - | Ports jetty being used by vessels calling in the Ports |

Infrastructure Facilities Available on State Waterways (As on 31.3.2015)

| | | | | Ava | Availability and Capacity of Terminals | | | | | | |
|------------|--|----------------------------------|---------------------------------------|---|--|--|---|---|--|--|--|
| SI. No. | Navigational Channel | , | Place | Size of vessels that can be accomodated (DWT)/dimension | No. of berths | Cargo handling equip. and their capacity | Type and extent of storage facility available | Remarks | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | |
| 4 | ORISSA Balugaon Sector | | | | | | | | | | |
| | Balugaon-K.Prasad | Varies between 2 to 10 metres | Lake Chilka | 30 ft and above | 2 | - | NA | Passenger waiting hall & Jetty are available at Balugao & Krishna Prasadgarh. | | | |
| | Balugaon-Kalijai | 2 to 10 Metres | Lake Chilka | 40 ft and above | 2 | - | -do- | Block wall at kalijai is available for berthing & landing. kalijai. | | | |
| | Balugaon-Nuapada | 2 to 4 Metres | Lake Chilka | 30 ft | 2 | - | -do- | No Jetty and waiting hall is available at Nuapada. | | | |
| | Balugaon-Satapada | 2 to 4 Metres | Lake Chilka | 30 ft | 2 | - | -do- | Passenger waiting hall & Jetty are available at Satapad | | | |
| | Astarang Sector | | | | | | | | | | |
| | Nuagarh-Sribantpur | 2 to 10 Metres | River Devi | 26 ft | 3 | - | -do- | Jetty & Wating hall is available for the services of passenger. | | | |
| | Chandabali Sector | | | | | | | | | | |
| | Chandbali-Rajnagar | Varies between | River Baitarani/ Brahmani | 52 ft | 13 | - | -do- | Jetty & waiting hall are available at Chandbali, Nalitapatia, Chardia & Raj Nagar. | | | |
| | | 7 to 10 metres | | | | | | | | | |
| | Chandbali-Talucha | Varies between 7 to 20 metres | Baitarani/Kharastrota/ | 50 ft | 10 | - | -do- | - | | | |
| | Chandbali-Aradi | Varies between 7 to 18 meters | Brahmani | 35' | 3 | | -do- | Both Jetty and waiting hall is available at Aradi. | | | |
| 5 | TAMILNADU Periyar Lake in Kerala (Under lease in T.N.) | 41.46 | Thekkady | Vessel 1 (kannagi) Length-8.5m Breadth-3m Depth-1.4m Vessel 2(Jairatna) Length-11.5m Breadth-2.4m Depth-1.6m | - | | | - | | | |
| | Anantha Victoria Marthandavarma Canal (AVM) | 4 m (Average) | Kanyakumari District of Tamil Nadu | 3.5 m | - | - | - | - | | | |
| 6 | MIZORAM | | | | | | | | | | |
| | 1. R. Tlawng | 3.0 | (a) Hortoki | 15 | 1 | 20 T | Available | | | | |
| | | | (b) Bairabi | 10 | 2 | 15 T | Available | | | | |

Source : State Govts.



Cargo Movement on National Waterways,

Goa & Maharashtra Waterways

| SI.No. | Details of Waterway | Distance (Kms) | Cargo (lakh T | | | ne Kms lakh) |
|--------|------------------------------|----------------|------------------|---------|---------|-----------------|
| | | | 2013-14 | 2014-15 | 2013-14 | 2014-15 |
| 1 | 2 | 3 | 5 | 5 | 7 | 7 |
| 1 | National Waterway No. I | 1620 | 33.49 | 50.50 | 18512 | 22459 |
| | (Allahabad-Haldia stretch of | | | | | |
| | Ganga – Bhagirathi – Hooghly | | | | | |
| | river system) | | | | | |
| 2 | National Waterway No. II | 891 | 24.75 | 24.92 | 594 | 508 |
| | (Sadiya-Dhubri stretch of | | | | | |
| | Brahmaputra River system) | | | | | |
| 3 | National Waterway No. III | 205 | 10.66 | 8.44 | 116 | 92 |
| | (Kollam-Kottapuram stretch | | | | | |
| | of West Coast Canal along | | | | | |
| | with Champakara Canal | | | | | |
| | and Udyogmandal Canal) | | | | | |
| | Sub Total NWs | 2716 | 68.90 | 83.86 | 19222 | 23059 |
| 4 | Goa Waterways | 202 | 5.99 | 7.94 | 270 | 340 |
| 5 | Maharashtra Waterways | 453 | 247.74 | 273.57 | 4691 | 4892 |
| | Grand Total | 3371 | 322.63 | 365.37 | 24183 | 28291 |

Source: Inland Waterways Authority of India for National Waterways

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

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

| l. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|--------|---|----------------------------------|---------|---------|---------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Α. | CIWTC(^) | | | | | |
| | | | | | | Pulses,Logs,Salt,Iron Ore,Steel, F |
| 1 | | | | | | Ash,Aluminium block, Fertilizer, |
| • | (I)Saugar-Diamond Harbour/Haldia /Kolkatta/ | | | | | Container, ODC,Sand Clips |
| | Kolkatta Internal | 144/80 | 19650 | | | |
| 2 | Haldir-Internal | 2.00 | 1650 | | | <i>i</i> 1 |
| 3 | Kolkata- Ichamati River at Basirhat | 2.00 | | 8250 | | |
| | Sub Total (A) | | 21300 | 8250 | 0 | |
| В. | | | | | | |
| 1 | Haldia-Sagar | 35 | | | 4410 | HSD/FO/LDO |
| 2 | Haldia-Budge-Budge | 78/84 | 95072 | 66607 | 71309 | FO, LDO, HSD |
| 3 | Haldia-NSD | 106 | 52969 | 54595 | | |
| 4 | Haldia-Diamond Harbour | 29 | | | 535 | |
| 5 | Budge-Budge-NSD | 21/19 | 2656 | | 1533 | MSD. HF |
| 6 | Halida- J'Ham | 10 | | | 20637 | FO, HSD |
| 7 | Budge-Budge-KPD | 21 | 916 | | 758 | |
| 8 | Haldia-Namkhana | 46 | 3923 | 305 | 1625 | HF, HSD |
| 9 | Budge-Budge-Pujali | 5 | | 434 | | ÚDO |
| 10 | Haldia-Haldia Oil Barge | 3 | | 16948 | 66420 | HSD |
| 11 | Haldia-Haldia Oil Jetty | 3 | 66057 | 70724 | 40838 | FO |
| 12 | Surninam-KPD | 2 | 1031 | 140 | 0 | FO |
| 13 | Surninam-NSD | 1 | | | 206 | HSD, HF |
| 14 | Haldia-HOB | 3 | 24717 | | | , |
| 15 | Haldia-KPD | 105 | | | 42122 | |
| 16 | Haldia- Noorpur | 43 | | | 24 | L |
| 17 | Budge Budge - Kolkatta | 21 | | 2310 | | HF, HSD |
| | Sub Total (B) | | 247341 | 212063 | 250418 | |

Data for the year 2012-13 & 2013-14 is taken from monthly returns.

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

| il. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|--------------------------------|----------------------------------|---------|---------|---------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C. | OTHER PRIVATE OPERATORS | | | | | |
| 1 | TIRUPATI VESSEL(P)LTD. | | | | | |
| 1 | Budge- Budge(Kol)- Khulna | 497 | 99534 | 104484 | 69648 | Flyash |
| 2 | Budge- Budge Narayanganj | 884 | 285858 | 308004 | 313023 | Flyash |
| 3 | Budge- Budge- Mongla | 484 | | | 970 | Flyash |
| 2 | RELIANCE EXPORT CORPORATION | | | | | |
| 1 | T.T.Shed-Narayanganj | 910 | 7153 | | | Flyash |
| 2 | Budge- Budge Narayanganj | 884 | - | 2646 | | Flyash |
| 3 | IWAI BISN Jetty-Narayanganj | 909 | - | 1374 | 1401 | |
| 3 | Maitrayee Shipping & Logistics | | | | | |
| 1 | IWAI BISN Jetty-Narayanganj | 909 | 4955 | 7494 | 21899 | Flyash |
| 2 | IWAI BISN Jetty-Khulna | 522 | 699 | 636 | 660 | Flyash |
| 3 | T.T.Shed-Narayanganj | 910 | 25233 | 11184 | 2464 | Flyash |
| 4 | T.T.Shed-Mongla | 510 | 2180 | | | Flyash |
| 5 | Budge Budge- Naryanganj | 884 | 44984 | 33923 | 14933 | Flyash |
| 6 | Budge Budge- Khulna | 497 | 2525 | | | Flyash |
| 7 | Sri Ram Jetty - Narayanganj | 905 | - | 2790 | 665 | Flyash |
| 8 | Budge Budge - Karimganj | 1332 | - | 642 | | Flyash |
| 9 | IWAI BISN Jetty - Karimganj | 1357 | - | - | 1185 | Flyash |
| 4 | P K Shipping | | | | | |
| 1 | Orient Jute Mill- Ashuganj | 1015 | | | 1931 | Rice |
| 2 | Budge- Budge Narayanganj | 884/844 | 101227 | 20130 | 6003 | Flyash |
| 3 | Narayanganj- T.T.Shed | 910 | 500 | | | Cement Prime mild steel billets, Steel Co |
| 4 | K.P.Dock-Narayanganj | 910 | 787 | 3836 | 1979 | & Plates |
| 5 | Haldia H.D.CKarimganj | 1274 | 2225 | | | Coal |

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

| I. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|--------|---|----------------------------------|---------|---------|---------|-----------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | Kolkatta-Karimganj | 1358 | 1554 | | | ODC Kargo |
| 7 | Diamond Harbour-Ashuganj | 962 | | | 4848 | Food Grain (Rice) |
| 8 | Sri Ram Jetty-Narayanganj | 905 | - | 24073 | 6575 | Flyash |
| 9 | K.P.Dock-Khulna | 523 | - | 1622 | | Dolomite Powder, Steel Sheet |
| 10 | T.T.Shed - Narayanganj | 910 | - | | 36236 | Flyash |
| 11 | IWAI BISN Jetty - Narayangunj | 909 | - | | 1110 | Flyash |
| | | | | | | Steel Plate, Prime Hot Rolled No |
| | | | | | | Alloy Steel Coils & Plates, Prime |
| 12 | K.P.Dock-Mongla | 510 | | | 3526 | Quality Hot Roll Steel |
| 5 | SOHAM COMMERCIAL | | | | | |
| 1 | Sri Ram Jetty-Narayanganj | 905 | | | 729 | Flvash |
| 2 | Kolkatta(Sri Ram Jetty)-Narayanganj | 905 | 761 | | | Flyash |
| 3 | T.T.Shed-Narayanganj | 910 | 50139 | 81267 | 122966 | Flyash |
| 4 | T.T.Shed-Khulna | 523 | - | 745 | | Flyash |
| 5 | Khulna - FSEZ Jetty(Falta), Kolkatta, India | 472 | - | 291 | | Jute Carpet, Baking Cloth |
| 6 | KPD - Narayanganj | 910 | - | 1329 | | Steel Coil |
| 7 | IWAI BISN Jetty - Narayanganj | 909 | | | 2435 | Flyash |
| 8 | IWAI BISN Jetty - Khulna | 522 | | | 890 | Flyash |
| 6 | RENAISSANCE IMPEX Pvt Ltd | | | | | |
| 1 | IWAI BISN Jetty-Narayanganj | 909 | 16137 | 44463 | 16637 | Flyash |
| 2 | IWAI BISN Jetty-Karimganj Assam | 1357 | 1950 | | | Flyash, HDPE Bags, Coal |
| 3 | Sri Ram Jetty-Narayanganj | 905 | 21657 | 992 | | Flyash |
| 4 | Karimganj Assam-IWAI BISN Jetty | 1357 | 900 | | | Coal |
| 5 | IWAI Haldia Jetty- Narayanganj | 826 | 4767 | 2805 | 3537 | Flyash |
| 6 | Shri Ram Jetty- Mongla | 505 | 998 | | | Flyash |
| 7 | TT Shed-Narayanganj | 910 | 22759 | 12469 | 21955 | Flyash |
| 8 | Budge Budge Naryanganj | 884 | 18549 | 52074 | 8827 | Flyash |
| 9 | Budge Budge Karimganj | 1332 | 558 | | | Flyash |
| 10 | KPD - Mongla | 510 | - | 1184 | 339 | Prime Hot Roll Non Alloy Steel Co |
| 11 | TT Shed-Khulna | 523 | | | 879 | Flyash |

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

| il. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|--------------------------------------|--|--|--|--|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | Rivering Shipping & Logistics | | | | | |
| 1 | IWAI Haldia Jetty-Khulna | 439 | 1450 | | 5088 | Flyash |
| 2 | Budge- Budge (Kol)- Khulna | 497 | 6039 | 2666 | | Flyash |
| 3 | Budge Budge Naryanganj | 884 | 17223 | 26210 | 18277 | Flyash |
| 4 | TT Shed-Narayanganj | 910 | 7274 | 5812 | 16729 | Flyash |
| 5 | K P Dock- Khulna | 523 | 1997 | | | Wheat |
| 6 | Sri Ram Jetty-Khulna | 518 | 2574 | | | Flyash |
| 7 | Sri Ram Jetty-Narayanganj | 905 | 8091 | 10484 | 10609 | Flyash |
| 8 | IWAI Haldia Jetty-Narayanganj | 826 | | 10852 | 11968 | Flyash |
| 9 | K P Dock- Mongla | 510 | - | 1157 | | Maize |
| 10 | NSD - Mongla | 508 | - | 850 | | Maize |
| 1 2 3 4 5 6 7 8 | Budge Budge-Narayanganj Budge Budge-Khulna IWAI BISN Jetty-Khulna IWAI BISN Jetty-Narayanganj T.T.Shed-Khulna IWAI Haldia Jetty - Khulna T.T.Shed-Narayanganj IWAI Haldia Jetty - Narayanganj | 884 497 522 909 523 522/439 910 826 | 3266 4646 2938 810 - - - | 1466 5494 813 570 2193 1688 | 703 1654 7751 4397 4525 1404 | Flyash Flyash Flyash Flyash Flyash Flyash Flyash Flyash |
| 9 | Sri Ram Jetty-Narayanganj | 905 | | | 1782 | Flyash |
| 9 | COASTAL CONNEXIONS | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 10643 | | | Flyash |
| 2 | Budge Budge-Karimganj | 1332 | 1331 | 400 | | Flyash |
| 3 | Budge Budge-Khulna | 497 | 2277 | 3698 | 2504 | Flyash |
| 4 | IWAI BISN Jetty-Narayanganj | 909 | 3693 | 5443 | 1698 | Flyash |
| | BISN Jetty-Narayanganj | 1357 | 1030 | | | Flyash |
| 5 | DISIN Jelly-Indiayangang | 1357 | 1030 | | | 1194311 |

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

| SI. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|---|----------------------------------|---------|---------|---------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | BISN Jetty-Karimganj | 1357 | 415 | | | Coal |
| 8 | IWAI BISN Jetty-Khulna | 532 | | | 2938 | Flyash |
| 9 | IWAI Haldia Jetty-Khulna | 439 | 2268 | 3372 | 6204 | Flyash |
| 10 | IWAI Haldia Jetty-Narayanganj | 826 | 4725 | 2078 | 3397 | Flyash |
| 11 | Karimganj(Badarpur, Assam) - Narayanganj | 478 | - | 455 | | Cement Clinker |
| 10 | KANISHKA SHIPPING LINES | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 69689 | 63636 | 36730 | Flyash |
| 2 | IWAI Haldia Jetty-Narayanganj | 826 | 116523 | 99999 | 134227 | Flyash |
| 3 | Sri Ram Jetty-Khulna | 518 | 1078 | | 848 | Flyash |
| 4 | T.T.Shed-Narayanganj | 910 | 2406 | 15294 | 20551 | Flyash |
| 5 | Sri Ram Jetty-Narayanganj | 905 | 750 | 1277 | 21158 | Flyash |
| 6 | IWAI BISN Jetty-Khulna | 522 | 520 | | | Flyash |
| 7 | IWAI BISN Jetty-Narayanganj | 895/909 | | 2850 | 7486 | Flyash |
| 8 | T.T. Shed - Mongla | 510 | - | 2113 | | Flyash |
| 9 | IWAI Haldia Jetty-Khulna | 439 | - | - | 1606 | Flyash |
| 10 | IWAI Haldia Jetty-Mongla | 426 | - | - | 1570 | Flyash |
| 11 | Diamond Harbour - Ashuganj | 962 | - | - | 5314 | Foodgrain(Rice) |
| 11 | Eastern Navigation Pvt Ltd., Kolkatta | | | | | |
| 1 | Kolkatta-Zamania | 1065 | 380 | | | ODC Cargo |
| 2 | Kolkatta-Silghatghat | 1748 | 165 | | | ODC Cargo |
| 3 | Haldia-Silghatghat | 1664 | 96 | | | ODC Cargo |
| | | | | | C | ontrol & Protection Equipments |
| 4 | T.T. Shed - Pandu | 1573 | | | 150 | HVDC |
| 12 | A.K.Navigation | | | | | |
| 1 | T.T.Shed-Narayanganj | 910 | 1625 | | 5798 | Flyash |
| 2 | T.T.Shed-Khulna | 523 | 3080 | | | Wheat |

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

| 5I. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|--------------------------------|----------------------------------|---------|---------|---------|----------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 | Desha International | 004 | 400407 | 204022 | 110000 | Flyesh |
| 1 | Budge Budge-Narayanganj | 884 | 163487 | 201933 | 113396 | Flyash |
| 2 | IWAI Haldia Jetty-Khulna | 439 | 17075 | 9936 | 11216 | Flyash |
| 3 | IWAI Haldia Jetty-Mongla | 426 | 2908 | 3548 | 2826 | Flyash |
| 4 | Budge Budge-Khulna | 497 | 2626 | 4759 | 23330 | Flyash |
| 5 | IWAI BISN Jetty-Narayanganj | 909 | 5445 | 1216 | 20946 | Flyash |
| 6 | IWAI BISN Jetty-Karimganj | 1357 | 1285 | | 748 | Flyash |
| 7 | BISN Jetty-Karimganj(Badarpur) | 1357 | 550 | | | Coal |
| 8 | Sri Ram Jetty-Mongla | 505 | 1306 | | | Flyash |
| 9 | Sri Ram Jetty-Khulna | 518 | 7719 | 5568 | 11211 | Flyash |
| 10 | Sri Ram Jetty-Narayanganj | 905 | 34963 | 84687 | 58943 | Flyash |
| 11 | T.T.Shed-Mongla | 510 | 2836 | 531 | 6302 | Wheat, Soyabean Extraction, Maiz |
| 12 | T.T.Shed-Khulna | 523 | 2400 | | 2389 | Maize |
| 13 | T.T.Shed-Narayanganj | 910 | 24444 | 44291 | 65312 | Flyash,Maize |
| 14 | K.P.Dock-Mongla | 510 | 22614 | 2658 | | Wheat, Maize |
| 15 | K.P.Dock-Khulna | 523 | 30083 | | | Wheat |
| 16 | IWAI Haldia Jetty-Narayanganj | 826 | 183804 | 244897 | 235687 | Flyash |
| 17 | IWAI BISN Jetty-Khulna | 532/522 | | 606 | 8570 | Flyash |
| 18 | Budge Budge- Mongla | 484 | - | 1438 | | Flyash |
| 19 | IWAI BISN Jetty (kol)- Mongla | 509 | - | 1407 | | Flyash |
| 20 | K.P.Dock-Narayanganj | 910 | - | 1450 | 1056 | Maize, Steel coils |
| 21 | NSD - Narayanganj | 908 | - | 2942 | | Soyabean Extraction, Maize |
| 22 | NSD- Mongla | 508 | - | 1347 | | Maize |
| 23 | Gr. Jetty II - Mongla | 509 | - | - | 973 | Rice |
| 14 | Reliance Enterprise | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 2277 | 12367 | 694 | Flyash |
| 2 | Budge Budge-Khulna | 497 | 698 | | | Flyash |
| 3 | Sri Ram Jetty-Khulna | 518 | 612 | | | Flyash |
| 4 | IWAI BISN Jetty-Narayanganj | 909 | 2994 | 699 | 2731 | Flyash |
| 5 | T.T.Shed-Narayanganj | 910 | 8983 | 12425 | 51391 | Flyash |
| 7 | IWAI Haldia Jetty-Narayanganj | 826 | - | 1358 | | Flyash |
| 8 | IWAI Haldia Jetty-Khulna | 439 | - | 2131 | | Flyash |
| 9 | Sri Ram Jetty-Narayanganj | 905 | - | 4779 | 3300 | Flyash |

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

(In tonnes)

| 5I. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|---------------------------------|----------------------------------|---------|---------|---------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15 | Saha Oversees Corporation | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 5138 | | | Flyash |
| 2 | Sri Ram Jetty-Khulna | 518 | 1855 | | | Flyash |
| 3 | T.T.Shed-Narayanganj | 910 | 8721 | | | Flyash |
| 16 | C. Day & Brothers | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 23597 | 52610 | 18863 | Flyash |
| 2 | Budge Budge-Khulna | 497 | 586 | 600 | 7043 | Flyash |
| 3 | Sri Ram Jetty-Khulna | 518 | 758 | | 798 | Flyash |
| 4 | Sri Ram Jetty-Narayanganj | 905 | 1362 | 5782 | 5216 | Flyash |
| 5 | IWAI Haldia Jetty-Mongla | 426 | | | 654 | Flyash |
| 6 | IWAI Haldia Jetty-Khulna | 439 | 950 | 4919 | 3593 | Flyash |
| 7 | IWAI BISN Jetty-Narayanganj | 909 | 930 | | 14847 | Flyash |
| 8 | IWAI Haldia Jetty-Narayanganj | 826 | 4723 | 5886 | 24591 | Flyash |
| 9 | T.T.Shed-Khulna | 523 | | | 812 | Flyash |
| 10 | T.T.Shed-Narayanganj | 910 | 13652 | 4736 | 1708 | flyash, Ironfines |
| 11 | IWAI BISN Jetty - Khulna | 522 | - | 905 | 5216 | Flyash |
| 17 | Fortune Cargo (India Pvt Ltd) | | | | | |
| 1 | Budge Budge-Narayanganj | 894/884 | 16185 | 29765 | 11734 | Flyash |
| 2 | IWAI Haldia Jetty-Narayanganj | 826 | 692 | 780 | 8218 | Flyash |
| 3 | T.T.Shed-Narayanganj | 910 | 5129 | 2167 | 907 | Flyash |
| 4 | IWAI BISN Jetty-Khulna | 522 | 755 | 633 | | - |
| 5 | IWAI BISN Jetty-Narayanganj | 909 | 1112 | | 13687 | Flyash |
| 6 | T.T.Shed-Khulna | 523 | | | 602 | Flyash |
| 7 | Sri ram Jetty - Narayanganj | 905 | | | 650 | Flyash |
| 18 | Sea Water Transport Co. Pvt Ltd | | | | | |
| 1 | T.T.Shed-Khulna | 523 | 2239 | | | Wheat Steel Coils, Steel Plates, Ste |
| 2 | K.P. Dock-Mongla | 510 | | | 2947 | items |

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

| 61. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|-------------------------------|----------------------------------|---------|---------|---------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | IWAI Haldia Jetty-Mongla | 426 | | 1140 | | Flyash |
| 4 | IWAI BISN Jetty-Khulna | 522 | | 1080 | | Flyash |
| 19 | Krishna Shipping & Logistics | | | | | |
| 1 | Budge Budge- Narayanganj | 884 | 5288 | | | Flyash |
| 2 | Budge Budge- Karimganj | 1332 | 590 | | | Flyash |
| 3 | TT Shed- Narayanganj | 910 | 5667 | | | Flyash |
| 4 | Kolkatta- Pandu | 1432 | 485 | | | ODC Cargo |
| 20 | Neli | | | | | |
| 1 | Budge Budge-Narayanganj | 884 | 4128 | 19337 | 3798 | Flyash |
| 2 | IWAI Haldia Jetty-Narayanganj | 826 | 768 | | 1964 | Flyash |
| 3 | IWAI BISN Jetty-Narayanganj | 909 | 2468 | 6147 | 15678 | Flyash |
| 4 | T.T. Shed - Narayanganj | 910 | - | 834 | 27632 | Flyash |
| 5 | T.T. Shed - Khulna | 523 | | | 1819 | Flyash |
| 6 | Budge Budge-Khulna | 497 | 1640 | | | Flyash |
| 7 | Sri Ram Jetty- Mongla | 505 | 648 | | | Flyash |
| 8 | Sri Ram Jetty- Khulna | 518 | 602 | | | Flyash |
| 9 | Budge Budge- Karimganj | 1332 | 494 | | | Flyash |
| 10 | Kolkatta- Narayanganj | 894 | | | | Flyash |
| 11 | IWAI BISN Jetty-Karimganj | 1357 | 580 | | | Flyash |
| 21 | Ajbela Navigation | | | | | |
| 1 | Sri Ram Jetty-Khulna | 518 | 1850 | | | Flyash |
| 2 | Sri Ram Jetty-Narayanganj | 905 | 8841 | 15712 | 9835 | Flyash |
| 3 | K.P.Dock-Khulna | 523 | 6714 | | | Wheat |
| 4 | T.T.Shed-Narayanganj | 910 | 4226 | 5752 | 8676 | Flyash |
| 5 | T.T.Shed-Mongla | 510 | | | 1293 | Maize |
| 6 | T.T.Shed-Khulna | 523 | 1497 | | | Wheat |

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

| il. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|------------------------------------|----------------------------------|---------|---------|--------------------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | Budge Budge-Narayanganj | 884 | 19712 | 11268 | 10415 | Flyash |
| 8 | Budge Budge-Khulna | 497 | 591 | | | Flyash |
| 9 | IWAI Haldia Jetty-Mongla | 426 | 1250 | | | Flyash |
| 10 | IWAI Haldia Jetty-Khulna | 439 | 2726 | | | Flyash |
| 11 | IWAI Haldia Jetty-Narayanganj | 836/826 | | 3456 | 18566 | Flyash |
| 12 | IWAI BISN Jetty - Narayanganj | 909 | - | 703 | 730 | Flyash |
| 22 | Reach Asia | | | | | |
| 1 | Kolkatta-Jogighopa, Assam | 1392 | 372 | | | ODC Cargo |
| 23 | Neticon | | | | | |
| 1 | KP Dock- Khulna | 510 | 2600 | | | Wheat |
| 24 | Duttson | | | | | |
| 1 | T.T.Shed-Narayanganj | 910 | 3847 | | 3815 | Flyash |
| 2 | IWAI BISN Jetty-Narayanganj | 909 | 738 | 7917 | 3695 | Flyash |
| 3 | Budge Budge-Narayanganj | 884 | 2181 | 9659 | 5131 | Flyash |
| 4 | IWAI Haldia Jetty - Mongla | 426 | - | 740 | | Flyash |
| 5 | IWAI Haldia Jetty - Narayanganj | 826 | - | 10942 | 5760 | Flyash |
| 6 | IWAI Haldia Jetty - Khulna | 439 | - | 3721 | 644 | Flyash |
| 7 | IWAI BISN Jetty-Khulna | 522 | - | 2010 | 1281 | Flyash |
| 8 | IWAI BISN Jetty-Karimganj | 1357 | - | 2337 | 1680 | Flyash, Spare parts |
| 9 | Budge Budge-Karimganj | 1332 | - | 507 | | Flyash |
| 10 | Karimganj(Badarpur) - Narayanganj | 478 | - | 1200 | | Cement Clinker |
| 11 | Sriram Jetty - Narayanganj | 905 | - | - | 686 | Flyash |
| 25 | Seaways Shipping & Logistics Ltd. | | | | | |
| 1 | KP Dock - Mongla | 510 | | | 1375 ^{Si} | teel Plates, Steel coils, Steel it |
| 26 | J.D.Shipping | | | | | |
| 1 | Budge Budge-Narayangani | 884 | 2854 | 6550 | 1782 | Flyash |
| 2 | Sri Ram Jetty(Kol) - Narayanganj | 905 | - 2001 | 3828 | 1828 | Flyash |
| 3 | Sri Ram Jetty(Kol) - Khulna | 518 | - | 512 | | Flyash |
| 4 | Sri Ram Jetty(Kol) - Mongla | 505 | - | 642 | | Flyash |
| 5 | IWAI Haldia Jetty - Narayanganj | 826 | - | 996 | 1966 | Flyash |
| 6 | KP Dock - Mongla | 510 | - | 931 | 1997 | Steel plate, Steel items |
| 7 | KP Dock - Narayanganj | 910 | - | 2221 | | Machinery |
| 8 | KP Dock - Khulna | 523 | - | - | 1000 | Steel plate |
| 9 | T.T. Shed - Narayanganj | 910 | - | - | 2351 | Flyash |
| 9 10 | IWAI BISN Jetty - Narayanganj | 909 | - | - | 2738 | Flyash |

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

| SI. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|--|----------------------------------|---------|---------|---------|---------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27 | Ganga Water Transport | | | | | |
| 1 | K.P.Dock-Mongla | 510 | 2700 | | | Wheat |
| 2 | K.P.Dock-Narayanganj | 910 | 510 | 2733 | | Non Alloyed Hot Rolled Steel Co |
| 3 | Budge Budge - Khulna | 497 | | 683 | | Flyash |
| 28 | Bertling Logistic India Pvt.Ltd. | | | | | |
| 1 | Haldia-Balia | 1028 | 337 | | | ODC Cargo |
| | Kolkata - Balia | 923 | | | 675 | ODC Cargo |
| 29 | Venketesh Logistics | | | | | |
| 1 | Haldia-Bhaktiyarpur | 885 | 310 | | | ODC Cargo |
| 30 | All Cargo Logistics Ltd. | | | | | |
| 1 | Haldia-Zamania | 1170 | 1150 | | | ODC Cargo |
| 2 | Haldia - Biswanath Chareli, Assam(NW2) | 1730/1694 | - | 2223 | 620 | ODC Cargo |
| 3 | T.T. Shed - Biswanath Charlie | 1778 | | | 1000 | ODC Cargo |
| 4 | Haldia-Jogigopa | 1348 | | | 642 | ODC Cargo |
| 5 | Kolkata - Jogigopa | 1432 | | | 1060 | ODC Cargo |
| 6 | T.T. Shed - Jogigopa | 1432 | | | 350 | ODC Cargo |
| 31 | Prism Logistics Pvt.Ltd. | | | | | |
| 1 | Haldia-Allahabad | 1512 | 762 | 599 | | ODC Cargo |
| 32 | Safehand Logistics | | | | | |
| 1 | IWAI BISN Jetty - Karimganj (Badarpur | 1357 | - | 1150 | | Flyash |
| 2 | Budge Budge - Narayanganj | 884 | - | 1753 | 2988 | Flyash |
| 3 | IWAI Haldia Jetty - Narayanganj | 826 | - | 582 | 1752 | Flyash |
| 4 | IWAI Haldia Jetty -Khulna | 439 | | | 640 | Flyash |
| 33 | Shun Shing India Private Ltd. | | | | | |
| 1 | Budge Budge - Narayanganj | 884 | - | 15604 | 72316 | Flyash |
| 2 | Budge Budge - khulna | 497 | | | 19478 | Flyash |
| 3 | IWAI BISN Jetty- Narayanganj | 909 | | | 3042 | Flyash |
| 4 | IWAI BISN Jetty- Khulna | 522 | | | 2036 | Flyash |
| 5 | Sri Ram Jetty - Khulna | 518 | | | 745 | Flyash |
| 34 | Jindal ITF Ltd. | | | | | |
| 37 | Sagar - Farakkar | 540 | | | | |

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

| l. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|--------|----------------------------|----------------------------------|---------|---------|---------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35 | AFS Logistics Pvt. Ltd. | | | | | |
| 1 | AWAI Haldia Jetty - Fatuha | 910 | - | 1400 | 1200 | Fertilizers |
| 2 | Fatuha - Kolkatta | 805 | - | 1400 | 1099 | Fertilizers |
| 36 | Lee & Muirhead Pvt. Ltd. | | | | | |
| 1 | Haldia - Sirsa | 1471 | - | 343 | 343 | ODC Cargo |
| 37 | Boxco India Pvt. Ltd. | | | | | |
| 1 | Haldia - Geonkhali | 43 | - | 642 | | ODC Cargo |
| 38 | K K Shipping | | | | | |
| 1 | T.T. Shed - Narayanganj | 910 | | | 9756 | Flyash |
| | Sub Total (C) | - | 1696380 | 2093793 | 2512791 | |
| D | IWAI Vessels | | | | | |
| 2 | Rajmahal -Patna | | 300 | | | Cement |
| 6 | Samdhaghatj-Manihari | | 15216 | 8832 | | Stone chips |
| 8 | Samdaghat-Patna | | 900 | 1200 | | Stonechips |
| | Sub Total (D) | - | 16416 | 10032 | 0 | |

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

| No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|-----|---------------------------|----------------------------------|---------|---------|---------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| E | КОРТ | | | | | Iron Ore,Iron & Steel,Log, Pulses, sulphur,Lime stone, Machinery, Manganese Ore, Petroleum Coke |
| 1 | Sagar- KPD | | | | | Rice & Wheat, Other Coke/Coal,Coking Coal, Pet Coke Fertilizer, Sugar,Rock Phosphate, |
| 2 | Kolkatta-Sagar | 146 146 | 115000 | 85000 | | Timber, Other/Misc. Iron Ore, Iron & Steel ,Other/Misc |
| 4 | Diamond Harbour - KPD | 78 | | | | Pulses, Other Coke/Coal |
| 5 | Sagar-Kolkatta | | | | 100100 | Iron Ore,Pulses,Sugar,Timber,Coking Coal,Rock Phosphate,Rice & Wheat,Fertiliser,Manganese |
| | | 146 | 496000 | 764000 | | Ore,Pet Cock |
| 6 | Kolkatta-Diamond Harbour | | 2000 | | | |
| 7 | | | | | | Iron Ore, Sugar, Pet Cock, Pulse Cokjing, Fertilizer, |
| ' | Diamond Harbour-Kolkatta | 78 | 122000 | 176000 | | Limestone,Cooking oil |
| | Sub Total (E) | | 735000 | 1025000 | 2287000 | |
| | | | | | | - |
| | Total (NW-I) (A+B+C+D+ E) | | 2716437 | 3349138 | 5050209 | - |

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

| SI. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|---------|----------------------|----------------------------------|---------|---------|---------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Α | Organised Cargo | | 396 | | 3821.90 | Transformers of power grid, |
| В | IWTD Assam* | | 1965239 | 1981935 | 1981935 | Transmission equipments ,Goods Passengers,Bicycle, bikes,live stock |
| С | Unorganised Sector | | 461170 | 493414 | 505964 | 31001 |
| | Sub Total (A+B+C) | | 2426805 | 2475349 | 2491720 | |
| | Total (NW-II)(A+B+C) | | 2426805 | 2475349 | 2491720 | |

*: Provisional data has been considered for 2014-15 in absence of cargo data received from IWTD, Govt. of Assam.

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

| I. N | lo. River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|------|---|----------------------------------|---------|---------|----------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Α. | CHAMPAKARA CANAL | | | | | |
| 1 | KSINC | | | | | |
| | Cochin Port-FACT-CD | 21.5 | 3444 | 124954 | 71062.00 | Raw Sulphur, Rock Phosphate a Phosphoric Acid etc Sulpher,Rock |
| | Q10 Berth-CPT-Fact, CD | 21 | 157186 | | | Phosphate, Phosphoric Acid |
| | BPCL Irumbanam-Ship Bunkring | 16 | | | | Furnace Oil |
| 2 | LOTS Shipping & Trading | | | | | Daw Culabur, Daaly Dhaanhata |
| | | | | | | Raw Sulphur, Rock Phosphate & Phosphoric Acid & Stone |
| | Cochin Port-FACT-CD | 21.5 | | 158509 | 39135.00 | aggregates |
| | | | | | | Phopharic Acid,Sulphur,Rock |
| | Q10 Berth-CPT-Fact, CD | 21 | 184393 | | 76325.00 | Phosphate |
| | BPCL Irumbanam-Fact, PD (dist.in Ch. Canal) | 16.5 | 23835 | | | Furnace Oil |
| 3 | Kerala Backwater Navigation | | | | | |
| | Cochin Port -FACT CD | 21.5/27 | | 23786 | 30624.00 | Rock Phosphate, Sulphur, LAG |
| | FACT,PD- FACT, CD | 21 | | | 6528.00 | LAG |
| | FACT , Ammonia jetty- FACT, CD | 27 | | | 36288.00 | LAG |
| | Sub Total | | 368858 | 307249 | 299663 | |
| В. | UDYOGMANDAL CANAL | | | | | - |
| в. | OD I OGMANDAL CANAL | | | | | |
| 1 | LOTS Shipping & Trading* | | | | | Zibframe, Sulphur, Furnance of |
| | Cochin Port FACT-UD | 20 | | 50774 | 460 | Zinc |
| | BPCL Irumbanam- FACT PD | 11 | 23835 | | | Furnace Oil |
| | Q10 CPT-Fact, UD | 20 | 46543 | | 9532 | Phospharic Acid, Sulphur |
| | Q6 Berth CPT-Binani Zinc Ltd. | 22 | 72163 | | | Zinc. |
| | Q5 Berth CPT-Binani Zinc Ltd. | 22 | | 28542 | 262 | Zinc. |

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

| i. | No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
|----|-----|---|----------------------------------|---------|---------|---------|---------------------------|
| 1 | | 2 | 3 | 4 | 5 | 6 | 7 |
| | | South Coal Berth-Q10 Berth CPT | 6 | 36732 | | | Furnace Oil |
| | | South Coal Berth-Quter Roads | 3/2 | 110 | | | Furnace Oil |
| | | SCB-ICTT | 4 | 2150 | | | Furnace Oil |
| | | Willinbgdon island- Bolgaty-Bolgaty Williangdon | | | | | |
| | | Island | 3.7 | 523480 | 598190 | 508850 | commodities in container |
| 2 | 2 | KSINC* | | | | | Deals Dhaankata - Oslahun |
| | | Cochin Port-FACT UD | 21 | | 23779 | 2144 | Rock Phosphate , Sulphur, |
| | | | | | 23119 | | Phospharic Acid |
| | | Q10 Berth, CPT-Fact UD | 20 | 3542 | | 7285 | Phospharic Acid, |
| 3 | 3 | Kerala Back Water Navigation | | | | | |
| | | Fact ,PD - FACT, CD | 14.5 | | | 8640 | Sulphur. Phospharic Acid |
| | | Fact ,CD - FACT, PD | 14.5 | | 5954 | | Lag |
| 4 | ļ | Logos Agencies | | | | | |
| | | Aluva Terminal-Sea | 23.5 | 2726 | 2491 | 2221 | Liquid Effluent |
| 5 | 5 | Amrok Industrial & Investments | | | | | |
| | | Aluva Terminal-Sea | 23.5 | 74 | | | Liquid Effluent |
| 6 | 6 | Cochin Bunkers | | | | | |
| | | BPCL, Irumbanam - Fact PD | 27.5 | | 7113 | | Furnance oil |
| | | IOC(BPT berth) - Fact PD | 17 | | 15344 | | Furnance oil |
| | | Sub Total | | 711355 | 732187 | 540394 | |

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

| | item) | | | | | (In tonnes) |
|---------|--------------------------------|----------------------------------|---------|---------|---------|------------------------------|
| SI. No. | River/Stretch | Approximate Distance (Kms) | 2012-13 | 2013-14 | 2014-15 | Cargo generally moved |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C. | THE WEST COASTAL CANAL | | | | | |
| 1 | KSINC Ltd*. | | | | | |
| | Fine Arts Jetty- Vypeen | 4 | 141000 | 18000 | | Potable water |
| | ErnaKulum terminal-Cochin port | 5 | | | | POL(Bunkering to Ship) |
| 2 | Travancore Cements Ltd. | | | | | |
| | | | | | | Lime shell with clay & other |
| | Vaikom- Chitramangalam | 20 | 15190 | 8570 | 3640 | impurities |
| | Sub Total | | 156190 | 26570 | 3640 | - |
| | | | | | | Tank |
| | Total (NW-III) (A+B+C) | | 1236403 | 1066006 | 843697 | - |

Total Cargo Moved on National Waterways (NW-I+NW-II+NW-III)

| GRAND TOTAL (NW-I+NW-II) 6379645 6890493 8385626 |
|--|
|--|

29

Source : Inland Waterways Authority of India / CIWTC

... : Not available.



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

Table No. 3.1

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

| Period | Traffic carried (000 tonnes) | Tonne Km Performed (Lakh) | Total Earnings (Rs.Lakh) |
|-----------|---------------------------------|------------------------------|-----------------------------|
| 1 | 2 | 3 | 4 |
| 1981-82 | 75 | 780 | 163 |
| 1982-83 | 122 | 813 | 135 |
| 1983-84 | 201 | 928 | 210 |
| 1984-85 | 255 | 1184 | 372 |
| 1985-86 | 304 | 1621 | 501 |
| 1986-87 | 321 | 1566 | 581 |
| 1987-88 | 288 | 1434 | 452 |
| 1988-89 | 304 | 1415 | 485 |
| 1989-90 | 410 | 1163 | 566 |
| 1990-91 | 385 | 1197 | 581 |
| 1991-92 | 289 | 639 | 427 |
| 1992-93 | 312 | 1111 | 640 |
| 1993-94 | 242 | 1033 | 552 |
| 1994-95 | 331 | 968 | 781 |
| 1995-96 | 325 | 994 | 837 |
| 1996-97 | 188 | 677 | 718 |
| 1997-98 | 243 | 524 | 802 |
| 1998-99 | 141 | 311 | 815 |
| 1999-00 | 251 | 525 | 1202 |
| 2000-01 | 106 | 283 | 641 |
| 2001-02 | 68 | 269 | 462 |
| 2002-03 | 86 | 392 | 560 |
| 2003-04 | 66 | 315 | 497 |
| 2004-05 | 54 | 242 | 479 |
| 2005-06 | 85 | 143 | 489 |
| 2006-07 | 220 | 257 | 578 |
| 2007-08 | 200 | 238 | 405 |
| 2008-09 | 74 | 110 | 409 |
| 2009-10 | 189 | 165 | 434 |
| 2010-11 | 49 | 44 | 260 |
| 2011-12 | 31 | 26 | 168 |
| 2012-13 | 21 | 2 | 153 |
| 2013-14 | 8 | 0.15 | 175 |
| 2014-15 * | - | - | - |

Source : CIWTC, 2014-15

Note :Total freight earned includes towing /hire/detention charges/

additional freight/godown rent/misc. charges etc. as detailed in Table 3.3.

* CIWTC has not carried out any operations in 2014-15.

| Τ | able No. 3.2 Cargo | Carried And | d Freight E | arned by C | CIWTC-Co | mmodity- | wise |
|-----|----------------------------|--------------|---------------|------------|----------|----------|---------|
| | | 2012-13 | | 2013 | 8-14 | 2014 | -15 ** |
| SI. | Commodity | Tonnes | Freight | Tonnes | Freight | Tonnes | Freight |
| No. | | Carried | Earned | Carried | Earned | Carried | Earned |
| | | | (Rs. | | (Rs. | | (Rs. |
| | | | Lakh) | | Lakh) | | Lakh) |
| 1 | 2 | 5 | 6 | 7 | 8 | 7 | 8 |
| 1 | Fly Ash | - | - | - | - | - | - |
| 2 | Pol | - | - | - | - | - | - |
| 3 | Cut Bamboo | - | - | - | - | - | - |
| 4 | Sand Clips | 19800 | 4.32 | 8250 | 1.80 | - | - |
| 5 | Slag | - | - | - | - | - | - |
| 6 | Waste Oil | - | - | - | - | - | - |
| 7 | Aluminium Block | - | - | - | - | - | - |
| 8 | Boulder | - | - | - | - | - | - |
| 9 | Cement/W.Cement | - | - | - | - | - | - |
| 10 | Cement Clinkers | - | - | - | - | - | - |
| 11 | Peas | 1500 | 3.00 | - | - | - | - |
| 12 | Pet Cake/Personal Effect | - | - | - | - | - | - |
| 13 | ODC | - | 10.98 | - | - | - | - |
| 14 | Stone Clips | - | - | - | - | - | - |
| 15 | Misc. | - | - | - | - | - | - |
| | SUB TOTAL | 21300 | 18.30* | 8250 | 1.80 | - | - |
| | * this relates to commodit | y-wise earni | ngs | | | | |
| | * * CIWTC has not carried | d out any op | erations in 2 | 014-15. | | | |
| The | Non Commodity Earnings | are as unde | r: | | | | |
| | Activity | | | | | | |
| | Vessel hire, Godown | - | 135.42 | - | 172.83 | - | - |
| | Rent, Storage ,Towage etc. | - | - | - | - | - | - |
| | SUB TOTAL | - | 135.42 | - | 172.83 | - | - |
| | GRAND TOTAL | 21300 | 153.72 | 8250 | 174.63 | - | - |
| | | | | | | | |

Cargo Carried And Freight Earned by CIWTC-Commodity-wise

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

| SI. | Route | Distance | e Commodity | | Tonnes Car | ried | Freight | t Earned(Rs. | in Lakh) | Tonne/ | (ms(in Lakh) | Performed |
|-----|---------------------|-------------|------------------|---------|------------|------------|---------|--------------|------------|---------|--------------|------------|
| No. | | (in Kms) | | 2012-13 | 2013-14 | 2014-15 ** | 2012-13 | 2013-14 | 2014-15 ** | 2012-13 | 2013-14 | 2014-15 ** |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | Haldia-Budge-Budge | | Waste Oil Pol | - | - | - - | - - | - | - | - - | - | - |
| | Haldia-Budge-2 | | TOTAL | - | - | - | - | - | - | - | - | - |
| 2 | Haldia-Ghormalsland | 415 1060 | Boulders | - | - | - | - | - | - | - | - | - |
| | | | TOTAL | - | - | - | - | - | - | - | - | - |
| 3 | Haldia-Internal | 02 | Sand Clips | 1650 | - | - | 0.36 | - | - | 0.03 | - | - |
| | | | TOTAL | 1650 | - | - | 0.36 | - | - | 0.03 | - | - |
| 4 | Patna-Kolkata | 530 | Stone Chips | - | - | - | - | - | - | - | - | - |
| | | | TOTAL | - | - | - | - | - | - | - | - | - |
| 5 | Haldia-Jamuria (UP) | 1096 | ODC | | | | 10.98 | - | - | - | - | - |
| | | | TOTAL | | | | 10.98 | | - | - | | - |

Table No. 3.3 Commodity-wise, Route-wise Cargo Carried, Freight Earned and Tonne Kms. Performed by CIWTC - 2012-13 to 2014-15

| SI. | Route | Distance | Commodity | | Tonnes Car | ried | Freigh | t Earned(Rs. | in Lakh) | Tonne/k | (ms(in Lakh) | Performed |
|-----|---------------------|----------|-------------|---------|-------------------|------------|---------|--------------|------------|---------|--------------|-----------|
| No. | | (in Kms) | | 2012-13 | 2013-14 | 2014-15 ** | 2012-13 | 2013-14 | 2014-15 ** | 2012-13 | 2013-14 | 2014-15 * |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 6 | Lighterage | 44-144 | Peas | 1500 | - | - | 3.00 | - | - | 1.20 | - | - |
| | Operation at Saugar | | Logs | - | - | - | - | - | - | - | - | - |
| | /Haldia Diamond | | Containers | - | - | - | - | - | - | - | - | - |
| | Harbour-Kolkata | | Fertilizer | - | - | - | - | - | - | - | - | - |
| | Kolkata-Internal | | ODC | - | - | - | - | - | - | - | - | - |
| | | | Sand- Clips | 18150 | 8250 | - | 3.96 | 1.80 | - | 0.33 | 0.15 | - |
| | | | A.Block | - | - | - | - | - | - | - | - | - |
| | | | TOTAL | 19650 | 8250 | - | 6.96 | 1.80 | - | 1.53 | 0.15 | - |
| 7 | Misc. | | | | | | | | | | | |
| | Tug Hire and | | | | | | | | | | | |
| | Godown Rent | | | - | - | - | 135.42 | 172.83 | - | - | - | - |
| | | | Grand Total | 21300 | 8250 | - | 153.72 | 174.63 | _ | 1.56 | 0.15 | _ |

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

CIWTC has not carried out any operations in 2014-15.

Income And Expenditure Of C.I.W.T.C.

| SI.No. | Item | 2013 | 2014 * | 2015 # | |
|--------|--------------------------------------|----------|----------|---------|--|
| 1 | 2 | 3 | 4 | 5 | |
| Α. | INCOME | 1874.31 | 15916.18 | 1172.42 | |
| (i) | Earnings (Operational) | 153.73 | 185.95 | 93.43 | |
| (ii) | Earnings (Others) | 1720.58 | 15730.23 | 1078.99 | |
| В | EXPENDITURE | 4266.89 | 6371.38 | 410.84 | |
| (i) | Materials & Stores Consumed | 62.25 | 22.77 | 23.44 | |
| (ii) | Decrease/Increase in Work in Progres | -2.56 | - | - | |
| iii) | Employees Remuneration & Benefits | 861.66 | 856.79 | 834.03 | |
| (iv) | Repairs & Maintenance | 3.70 | 3.73 | 2.82 | |
| (v) | Power & Fuel | 32.09 | 89.34 | 32.58 | |
| (vi) | Other Expenses | 264.06 | 217.61 | 205.84 | |
| (vii) | Interest | 253.75 | 732.15 | - | |
| (viii) | Depreciation | 313.87 | 296.10 | 243.74 | |
| (ix) | Provisions | 2478.07 | 4152.89 | -931.61 | |
| С | Profit/Loss (A-B) | -2392.58 | 9544.80 | 761.58 | |

* Revised Figures # Unaudited

Note: Provision includes -:

i) For doubtful debts
ii) Gratuity Liability and
iii) Leave pay liability as per actuerial valuation

Table No. 3.5 Source-wise Earning of CIWTC

(Rs. in lakhs)

| SI.No. | Name of Service | | Year | |
|--------|--|---------|-----------|---|
| | | 2012-13 | 2013-14 * | 2014-15 # |
| 1 | 2 | 3 | 4 | 5 |
| | A.Earnings (Operational) | | | |
| | Transportation & Allied | | | |
| | Activities: | | | |
| | Freight | 16.05 | 184.73 | 92.81 |
| | Dredging | - | - | - |
| | Ferries & Charter | 137.68 | 1.22 | 0.62 |
| | Sales pending finalisation | | | |
| | TOTAL (A) | 153.73 | 185.95 | 5 92.81 - |
| | | | | |
| | B.Earnings (Others) | | | |
| | Investment/one time grant | - | - | - 286.52 - |
| | Interest on Short Term Deposit | 851.73 | 235.00 | |
| | Interest on: | | | |
| | Mobilisation Amount | - | - | - |
| | Sunderban Conservancy Amount | - | - | - |
| | Port Maintenance | - | - | - |
| | Sale of Scrap | - | - | - |
| | Rent | 2.79 | 1.85 | 5 92.81 - 0.62 93.43 - 286.52 - - 286.52 - 1.85 - 1.85 - 0.27 790.35 - - 1078.99 |
| | Surplus on sale of assets | | | |
| | Retired from Operation | - | - | - |
| | Miscellaneous Receipts | 4.40 | 3.59 | 0.27 |
| | Govt. Grant (Salary & Wages) | 861.66 | 856.79 | - 0.27 790.35 - - |
| | Govt. Grant (Income tax dues) | - | | - |
| | Profit on exchange | | 14633.00 | - |
| | 2A.Earnings (Operational)Transportation & AlliedActivities:FreightDredgingFerries & CharterSales pending finalisationTOTAL (A)B.Earnings (Others)Investment/one time grantInterest on Short Term DepositInterest on:Mobilisation AmountSunderban Conservancy AmountPort MaintenanceSale of ScrapRentSurplus on sale of assetsRetired from OperationMiscellaneous ReceiptsGovt. Grant (Salary & Wages)Govt. Grant (Income tax dues) | 1720.58 | 15730.23 | 1078.99 |
| | TOTAL (A+B) | 1874.31 | 15916.18 | |

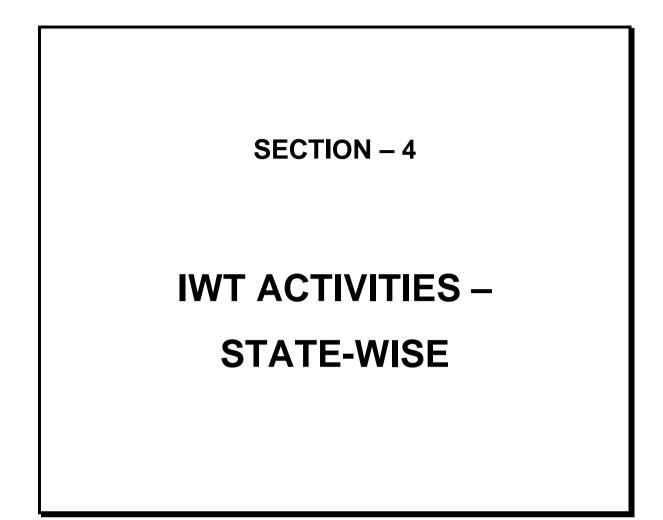
Unaudited

* Revised Figures

Financial Position of CIWTC

| SL. No. | Item | 2012-13 | 2013-14* | 2014-15# |
|---------|---|--|--|---|
| 1 | 2 | 3 | 4 | 5 |
| Α. | LIABILITIES | | | |
| | (a) Paid up capital (b) Reserves & Surplus(Capital Reserve) (c) Accumulated Loss (d) Borrowings i) From Govt. of India ii) From Others (e) Trade dues and other current liabilities (including provisions) and interest accrued thereon | 13048.48 10909.93 -30951.91 _ _ 15738.66 | 13048.48 10909.93 -21407.11 _ _ 5616.84 | 13048.48 10441.78 -20645.52 - - 9757.98 |
| | TOTAL (A) | 8745.16 | 8168.14 | 12602.72 |
| В. | ASSETS | | 0100117 | 12002112 |
| | (f) Gross Asset (g) Less Depreciation (h)Less Provision (i) Net Fixed Assets (f-g-h) (i) Capital work in progress (k) Investment (l) Current Assets, Loans and Advances (m) Miscellaneous expences and losses not written off | 11012.02 8049.29 - 2962.73 40.42 - 5742.01 - - | 11012.02 8338.97 - 2673.05 40.42 - 5454.67 - - | 6393.39 4990.45 - 1402.94 40.43 - 11159.35 - - - |
| | TOTAL (B) | 8745.16 | 8168.14 | 12602.72 |
| C. | Working Capital (I-e) (o) Additional provision for Gratuity | -9996.65 594.73 | -162.17 612.17 | 1401.37 603.34 |
| | (p) Total Working Capital | -9401.92 | 450.00 | 798.03 |
| | Capital employed (i+p) | -6439.19 | 3123.05 | 2200.97 |
| | Net worth (a-(c+m)) for F.Y.2014-2015 | (-)17903.43 | (-)8358.63 | (-)7597.04 |

Source: CIWTC # Unaudited * Revised



| SI. No. | UT/Year | | | Sen i ropeneu | State/ Self Propelled | | | | | | ed | | |
|------------|----------------|-------|-------|---------------------------------------|-----------------------|-----------------|--------|-------------|------|-------|--------|------------------|-------|
| | | Cargo | Passe | Cargo | Tugs | Total | Dumb | Dumb | Dumb | Boats | Others | Total | Grand |
| | | | nger | cum Passenger | and Pushers | (Col.3 to 6) | Barges | Tank ers | Flat | | | (Col.8 to 12) | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Andhra Pradesh | | | , , , , , , , , , , , , , , , , , , , | , , | • | , , | • | | •• | | | |
| - | 2013 | | | | | | | | | | | | |
| | 2014 | | | | | | | | | | | | |
| | 2015 | | | | | | | | | | | | |
| 2 | Assam | | | | | | | | | | | | |
| 2 | | 4 | 4 | | 4 | 6 | 7 | | 0 | | | 10 | 22 |
| | 2013 | 1 | 1 | | 4 | 6 | 7 | | 9 | | | 16 | 22 |
| | 2014 | 15 | 114 | 23 | 6 | 158 | 15 | | 9 | ••• | | 24 | 182 |
| | 2015 | 15 | 114 | 23 | 6 | 158 | 15 | | 9 | | | 24 | 182 |
| 3 | Bihar | | | | | | | | | | | | |
| | 2013 | 1 | 19* | 74* | 6 | 100 | 5 | | | 9 | 24 | 38 | 138 |
| | 2014 | 1 | 19* | 74* | 6 | 100 | 5 | | | 9 | 24 | 38 | 138 |
| | 2015 | 1 | 19* | 74* | 6 | 100 | 5 | | | 9 | 24 | 38 | 138 |
| 4 | Goa | | | | | | | | | | | | |
| | 2013 | 264 | 45 | | 2 | 311 | 2 | | | | | 2 | 313 |
| | 2013 | 81@ | 38 | | 2 | 121 | 2 | | | | 36 | 38 | 159 |
| | 2014 | | | | 8 | | 3 | | | | 19 | | |
| - | | 114 | 81 | | 0 | 203 | 3 | | | | 19 | 22 | 225 |
| 5 | Karnataka | | | _ | | | | | | | | | |
| | 2013 | | 61 | 5 | | 66 | | | | | | | 66 |
| | 2014 | | 61 | 5 | | 66 | | | | | | | 66 |
| | 2015 | | 61 | 5 | | 66 | | | | | | | 66 |
| 6 | Kerala | | | | | | | | | | | | |
| | 2013 | 153 | 200 | 69 | 10 | 432 | | | | 4665 | 8724 | 13389 | 13821 |
| | 2014 | 134 | 143 | 55 | 5 | 337 | | | | 4413 | 8939 | 13352 | 13689 |
| | 2015 | | 287 | 42 | 2 | 442 | | 3 | | 4283 | 9091 | 13377 | 13819 |
| 7 | Maharashtra | | 207 | 72 | 2 | 774 | | 0 | | 4200 | 5051 | 10011 | 10010 |
| ' | 2013 | | 201 | | 376 | 677 | | | | | | | 677 |
| | | | | | | 577 | | | | | | | 577 |
| | 2014 | | 250 | | 338 | 588 | | | | | | | 588 |
| | 2015 | 100 | 501 | | 122 | 723 | 20 | | | | | | 743 |
| 8 | Orissa | | | | | | | | | | | | |
| | 2013 | | 342 | | | 342 | | | | | | | 342 |
| | 2014 | | | | | | | | | | | | |
| | 2015 | | 409 | | | 409 | | | | | | | 409 |
| 9 | West Bengal | | | | | | | | | | | | |
| | 2013 | 94 | 227 | 6 | 69(A) | 396 | 690 | | | 1537 | | 2227 | 2623 |
| | | | | | | | | | | | | | |
| | 2014 | | 219 | 3 | 29 | 308 | 51 | 3 | 3 | 1646 | 31 | 1734 | 2042 |
| | 2015 | 53 | 236 | 3 | 21 | 313 | 11 | 3 | 3 | 1676 | 26 | 1719 | 2032 |
| 0 | Tamil Nadu | | | | | | | | | | | | |
| | 2013 | | | | | | | | | 2 | | 2 | 2 |
| | 2014 | | | | | | | | | | | | |
| | | | | | | | | | | | | ···· 2 | |
| | 2015 | | | | | | | | | 2 | | 2 | 2 |
| | MIZORAM | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 11 | 2013 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |

(A) Includes 29 other vessels for 2013.

... Not available/Nil

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

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

@ vessel count reduced due to mining ban

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

| SI. No. | State/UT/Year | Powered Vessels Employed for cargo (Nos.) | Powered Vessels Employed for passengers (Nos.) | Quantity of cargo carried (000' tonnes) | Total No. of passengers carried (000) |
|----------------------------|----------------|---|--|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 1 2 3 4 5 | Andhra Pradesh | | | | |
| | 2013 | | | | |
| | 2014 | | | | |
| | 2015 | | | | |
| 2 | Assam | | | | |
| | 2013 | 56 | 56 | 71.79@ | 7656.00 |
| | 2014 | 56 | 56 | 338.53@ | 7043.84 |
| | 2015 | 56 | 56 | 178.73@ | 16461.48 |
| 3 | Bihar | | | | |
| | 2013 | 1 | 83 | 2.40 | 578.00* |
| | 2014 | 1 | 83 | 2.40 | 578.00 |
| | 2015 | 1 | 83 | 2.40 | 578.00 |
| 4 | Goa(a) | | | | |
| | 2013 | 264 | 45 | 3275.82 | 14076.00 |
| | 2014 | 81 | 38 | 284.17 | 1450.00 |
| | 2015 | 140 | 38 | 190.01 | 1448.00 |
| 5 | Karnataka | | | | |
| | 2013 | 66 | 66 | 78.40** | 1884.56** |
| | 2014 | 66 | 66 | 58.72** | 2089.96** |
| | 2015 | 66 | 66 | 50.5 ** | 2003.71** |
| 6 | Kerala | | | | |
| | 2013 | 66 | 632 | 5555.21 | 24752.82 |
| | 2014 | 38 | 180 | 2831.87 | 15323.71 |
| | 2015 | 28 | 185 | 2912.06 | 13750.50 |
| 7 | Maharashtra | | | | |
| | 2013 | | | 24196.00 | 17608.00 |
| | 2014 | | | 24774.00 | 17802.00 |
| | 2015 | | | 27357.00 | 17834.00 |
| 8 | Orissa | | | | |
| | 2013 | | 10 | | 124.00 |
| | 2014 | | | | |
| | 2015 | | 8 | | 142.00 |
| 9 | West Bengal | | | | |
| | 2013 | 76 | 227 | 10347.00(b) | 42976.00 |
| | 2014 | 57 | 219 | 11452.00 | 43619.00 |
| | 2015 | 53 | 263 | 14728.00 | 653604.00 |
| 10 | MIZORAM | | | | |
| | 2013 | | | | |
| | 2014 | | | | |
| | 2015 | 48 | 48 | 1000.00 | 10000.00 |

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

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

578* based upon passengers travelling on unregistered vessels plying in various rivers.

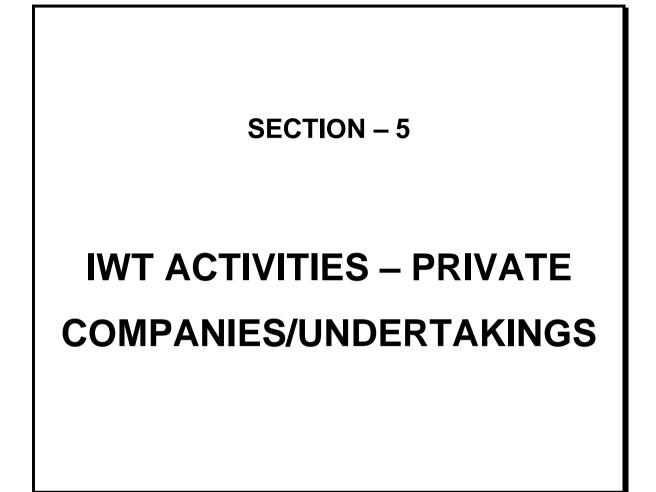
... : Not Available

: in addition to cargo, LMV 51716 nos, Bicycle 209104 nos, Motor Cycles 125198 nos, and Animals 11300 nos for 2011-12

** : The traffic of passengers & cargo is only operation of Ferry Service across the river in rural area.

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

\$ No iron ore export due to mining ban.



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

| | | | | Propelled | | Non-Self | |
|---------|-------------------------------|--------------|-----------------|------------------|-------------------|------------------------|--|
| 01 N | Company/ Undertaking | Туре | of vessel | Carryin | g capacity | Propelled | |
| SI. No. | and Year | Cargo (No.) | Passenger (No.) | Cargo(in Tonnes) | Passenger(in No.) | (Dumb Barges) (No.) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1 | S.V.Salgaocar, Goa | | | | | | |
| | 2013 | 3 | | - | | | |
| | 2014 | 3 | | | | | |
| | 2015 | | | | | | |
| 2 | D.V.Salgaocar, Goa | | | | | | |
| | 2013 | 3 | | - | | | |
| | 2014 | 3 | | | | | |
| | 2015 | 3 | | | | | |
| 3 | V.M.Salgaocar Sales Intern | ational | | | | | |
| - | 2013 | 2 | | - | | | |
| | 2014 | 2 | | | | | |
| | 2015 | 2 | | | | | |
| | | | | | | | |
| 4 | Sesa Resource Ltd Goa | _ | | | | | |
| | 2013 | 3 | | 3237 | | | |
| | 2014 | 3 | | 3237 | | | |
| | 2015 | 3 | | 3237 | | | |
| 5 | *Sesa Sterlite Ltd, Goa | | | | | | |
| | 2013 | 35(a) | | 44255 | | | |
| | 2014 | 32(a) | | 41714 | | | |
| | 2015 | 34(a) | | 44106 | | | |
| 0 | Or sight de De Franceste la d | 141.0 | | | | | |
| 6 | Sociedade De Fomento Ind | | | 0.40.4 | | | |
| | 2013 | 2 | | 2434 | | | |
| | 2014 | 2 | | 2434 | | | |
| | 2015 | 2 | | 2434 | | | |
| 7 | CIWTC, Kolkata. | | | | | | |
| | 2013 | 8 (b) | | 3909 | | 16 | |
| | 2014 | 7(b) | | 3690 | | 10 | |
| | 2015 | 1(b) | | 470 | | - | |
| 8 | Indo-Swiss Trading Co. Kol | kata. | | | | | |
| | 2013 | | 2 | 118 | 270 | | |
| | 2014 | | 2 | 118 | 270 | | |
| | 2015 | | 2 | 118 | 270 | | |
| 9 | Vivada Inland Waterways L | td. Kolkata. | | | | | |
| | 2013 | 10 | 4 | | | | |
| | 2014 | 9 | 5 | | | | |
| | 2015 | 9 | 5 | | | | |

IWT Vessels With Valid Certificates of Survey-Owned By Responding

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

| | | | Self | Propelled | | Non-Self | |
|----------|--|-------------------|-----------------|------------------|-------------------|------------------------|--|
| . | Company/ Undertaking | Туре | of vessel | | g capacity | Propelled | |
| SI. No. | and Year | Cargo (No.) | Passenger (No.) | Cargo(in Tonnes) | Passenger(in No.) | (Dumb Barges) (No.) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 10 | West Bengal Surface Trans | nort Corneration | 144 | | | | |
| 10 | | | | | | | |
| | 2013 | 3 | 20 | | | | |
| | 2014 | 2 | 24 | | | | |
| | 2015 | 2 | 24 | | | | |
| 11 | Hooghly Nadi Jalapath Pari Samity, Kolkata. | bahan Samabaya | I | | | | |
| | 2013 | | 34 | | | | |
| | 2014 | | 34 | | | | |
| | 2015 | | 34 | | | | |
| | 2010 | | 01 | | | | |
| 12 | West Bengal Tourism Deve limited, Kolkata. | lopment Corpora | tion | | | | |
| | 2013 | | 3 | | | | |
| | 2014 | | 3 | | | | |
| | 2015 | | 3 | | | | |
| 13 | Eastern Navigation (P) Ltd., | Kolkata | | | | | |
| 10 | 2013 | 8 | 3 | | | | |
| | 2013 | 10 | 1 | | | | |
| | 2014 | 10 | 1 | | | | |
| | 2015 | 10 | I | | | | |
| 14 | Pradeep Boating Company, | Kolkata. | | | | | |
| | 2013 | 2 | | | | | |
| | 2014 | 2 | | | | | |
| | 2015 | 2 | | | | | |
| 45 | Or all Direct Transmitted Ded I | (d. 0 | | | | | |
| 15 | Costa River Transport Pvt L 2013 | | | 5400 | | | |
| | | 3 | | 5122 | | | |
| | 2014 | 3 | | 5122 | | | |
| | 2015 # | 3 | | 5122 | | | |
| 16 | Ghatal Station Navigation (| P) Ltd., Kolkata. | | | | | |
| | 2013 | | 3 | | | | |
| | 2014 | | 3 | | | | |
| | 2015 | | 3 | | | | |
| 17 | Diamond Harbour Municipa | lity Kolkata | | | | | |
| 17 | 2013 | • | 10 | | | | |
| | 2013 | | 10 | | | | |
| | | | | | | | |
| | 2015 | | 10 | | | | |

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

| | | | Self F | Propelled | | Non-Self |
|---------|----------------------------|-------------|-----------------|----------------------|-------------------|------------------------|
| SI. No. | Company/ Undertaking | Туре | e of vessel | | ng capacity | Propelled |
| 31. NO. | and Year | Cargo (No.) | Passenger (No.) | Cargo (in Tonnes) | Passenger(in No.) | (Dumb Barges) (No.) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | | | | | |
| 18 | Chandan Nagar Municipalit | y, Kolkata. | | | | |
| | 2013 | | 5 | | | |
| | 2014 | | 5 | | | |
| | 2015 | | 5 | | | |
| 19 | Jain Navigation | | | | | |
| | 2013 | 2 | | | | |
| | 2014 | 2 | | | | |
| | 2015 | 2 | | | | |
| | | | | | | |
| 20 | K.S.Singhi | | | | | |
| | 2013 | 1 | | | | |
| | 2014 2015 | 1 | | | | ••• |
| | 2015 | I | | | | |
| 21 | Jindal ITF Ltd. | | | | | |
| | 2013 | 2 | | | | |
| | 2014 | 18 | | | | |
| | 2015 | 18 | | | | |
| 22 | Soham Shipping Pvt.Ltd. | | | | | |
| | 2013 | 4 | | | | |
| | 2014 | 4 | | | | |
| | 2015 | 4 | | | | |
| 23 | Rashmi Ore Carriers Pvt. L | td. | | | | |
| | 2013 | 1 | | 1314 | | |
| | 2014 | 1 | | 1314 | | |
| | 2015 | | | 1314 | | |
| | | | | | | |
| 24 | Kothari Overseas Private L | | | 1000 | | |
| | 2013 | 1 | | 1893 | | |
| | 2014 | | | 1893 | | |
| | 2015 | 1 | | 1893 | | |
| 25 | Mayur Shipping Private Lim | nied | | | | |
| | 2013 | 1 | - | 1284 | | |
| | 2014 | 1 | - | 1284 | | |
| | 2015 | - | - | 1284 | | |
| 26 | Sanghi Brothers (Indore) P | vt Ltd. | | | | |
| | 2013 | 5 | | 6476 | | |
| | 2014 | 5 | | 6476 | | |
| | 2015 | 5 | | 6476 | | |
| | | | | | | |

... Not available.

* Formerly SESA Goa Ltd.

(a) Includes one Passenger Launch & one Oil Tanker

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

Relates to the year 2014

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

| | | | (Year Endi | 1 | | | <u> </u> | _ | <u> </u> |
|--------|----------------------------------|-------------------------|--------------------------------|--------------------|------------------------------|-------------------------|-----------------------|-----------------------|----------|
| | | | No. of | Distance | Freight | Cargo | Carried | Passenger | Carried |
| SI.No. | Company/Underta king and Year | Type of Vessels | Powered Vessels Employed | Travelled (Kms) | Collected (Rs.in Lakh) | Cargo (in Tonnes) | TKms (in millions) | Passenger (in No.) | PKms |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | S. V. Salgaocar, G | oa | | | | | | | |
| | 2013 (f) | Cargo | - | - | - | - | | | |
| | 2014 (f) | Cargo | - | - | - | - | | | |
| | 2015 | Cargo | - | - | - | - | | | |
| 2 | D. V. Salgaocar, G | oa | | | | | | | |
| | 2013 (f) | Cargo | - | - | - | - | | | |
| | 2014(f) | Cargo | - | - | - | - | | | |
| | 2015 | Cargo | - | - | - | - | | | |
| 3 | V.M.Salgaocar Sal | es International | | | | | | | |
| | 2013 (f) | Cargo | - | - | - | - | | | |
| | 2014(f) | Cargo | - | - | - | - | | | |
| | 2015 | Cargo | - | - | - | - | | | |
| 4 | Sesa Resources L | td Goa | | | | | | | |
| | 2013 | Cargo | 3 | 18100 | (d) | 278224 | 5035.85 | | |
| | 2014 | Cargo | 3 | 14800 | (d) | 163204 | 2415.41 | | |
| | 2015 | Cargo | 3 | 21658 | (d) | 137025 | 2967.68 | | |
| 5 | Sesa Sterlite Ltd, C | Goa. | | | | | | | |
| | 2013 | Cargo/Pass/Oil Tankers | 35 | 134200 | (d) | 2582447 | 346564.39 | | |
| | 2014 | Cargo/Pass/Oil Tankers | 32 | 74300 | (d) | 1003364 | 74549.94 | | |
| | 2015 | Cargo/Pass/Oil Tankers | 34 | 127036 | (d) | 1033779 | 131327.15 | | |
| | | | | | | | | | |
| 6 | | ento Ind. Ltd., Goa | | | | | | | |
| | 2013 | Cargo | 2 | 4510 | (a) | 71867 | 324.12 | | |
| | 2014 | Cargo | 2 | - | (a) | - | - | | |
| | 2015* | Cargo | 2 | - | (a) | - | - | | |
| 7 | C.I.W.T.C., Kolkata | | | | | | | | |
| | 2013 | Cargo/Tug/Spcs/Dbs | 1 | 160 | 153.72 | 21300 | 3.41 | | |
| | 2014 | Cargo/Tug/Spcs/Dbs | - | - | 174.63 | 8250 | - | | |
| | 2015 | Cargo/Tug/Spcs/Dbs | 1 | | | | | | |
| 8 | | g Co.Pvt. Ltd., Kolkata | | | | | | | |
| | 2013 | Pass. | 2 | 15610 | 110.25 | | | | |
| | 2014 | Pass. | 2 | 15300 | 143.26 | | | 121038 | |
| | 2015 | Pass. | 2 | 15610 | 52.29 | | | 128749 | |
| 9 | | terways Ltd., Kolkata | | | | | | | |
| | 2013 | Cargo/Tug/Pass/LCT | 14 | | 3863.78 | 480740(c) | | | |
| | 2014 | Cargo/Tug/Pass/LCT | 14 | | 4024.38 | 495620(c) | | 10776 | |
| | 2015 | Cargo/Tug/Pass/LCT | 14 | | 4138.42 | 512790(c) | | 12776 | |

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

| Table | No. 5.2 (Contd) | Cargo/Passeng | (Ye | ar Ending | 31st Marc | :h) | sponding C | ompanies | |
|--------|----------------------------------|-----------------------------|--------------------------------|--------------------------------|------------------------------|-------------------------|-----------------------|-----------------------|---------|
| | | | No. of | | Freight | | Carried | Passenger | Carried |
| SI.No. | Company/Underta king and Year | Type of Vessels | Powered Vessels Employed | Distance Travelled (Kms) | Collected (Rs.in Lakh) | Cargo (in Tonnes) | TKms (in millions) | Passenger (in No.) | PKms |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10 | W. Bengal Surface | Transport Corporation | Ltd., Kolkata | - | - | | | - | |
| | 2013 | Pass./LCT | 23 | | 408.32 | 24346(b) | | | |
| | 2014 | Pass./LCT | 26 | | 402.56 | 27421(b) | | 105967 | |
| | 2015 | Pass./LCT | 26 | | 414.71 | 27421(b) | | 118329 | |
| 11 | Hooghly Nadi Jalar | oath Paribahan Samaba | va Samity K | olkata | | | | | |
| | 2013 | Pass. | 34 | Jinata | 1129.85 | | | | |
| | 2014 | Pass. | 34 | | 1203.72 | | | 123000 | |
| | 2015 | Pass. | 34 | | 1312.72 | | | 128429 | |
| | 2015 | 1 833. | 54 | | 1312.72 | | | 120429 | |
| 12 | West Bengal Touris | sm Development Corpn | . Ltd., Kolkat | a | | | | | |
| | 2013 | Pass. | 3 | | 158.97 | | | | |
| | 2014 | Pass. | 3 | | 148.27 | | | 10900 | |
| | 2015 | Pass. | 3 | | 152.28 | | | 11139 | |
| 13 | Eastern Navigation | (P) Ltd., W. Bengal, Ko | lkata | | | | | | |
| 15 | 2013 | Cargo/Tug/Pass. | 11 | | 175.00 | 40600 | | | |
| | | 0 0 | 11 | | 175.00 | | | | |
| | 2014 | Cargo/Tug/Pass. | | ••• | 200.00 | 56340 | | | ••• |
| | 2015 | Cargo/Tug/Pass. | 11 | | 212.00 | 68420 | | | |
| 14 | Pradeep Boating C | ompany, W. Bengal, Ko | Ikata | | | | | | |
| | 2013 | Tugs | 2 | | 7.80 | 1200 | | | |
| | 2014 | Tugs | 2 | | 7.36 | 900 | | | |
| | 2015 | Tugs | 2 | | 6.20 | 780 | | | |
| 15 | Costa River Transp | ort Byt I to Goo | | | | | | | |
| 15 | 2013 | Cargo | 3 | | 75.10 | 100950 | | | |
| | 2013 | Cargo | 3 | - | - | 100350 | | | |
| | | Cargo | 3 | - | - | - | - | - | |
| | 2015 # | Cargo | 3 | - | - | - | - | - | - |
| 16 | Ghatal steam Navig | gation (P) Ltd. Kolkata | | | | | | | |
| | 2013 | Pass. | 3 | | 40.36 | | | | |
| | 2014 | Pass. | 3 | | 41.29 | | | 115508 | |
| | 2015 | Pass. | 3 | | 41.29 | | | 122629 | |
| 17 | Diamond Harbour | Municipality, Kolkata | | | | | | | |
| .7 | 2013 | Pass. | 10 | | 110.73 | | | | |
| | 2013 | Pass. | 10 | | 123.56 | | | 10729 | |
| | 2014 | Pass. | 10 | | 142.56 | | | 13912 | |
| | a l 1 ··· | | | | | | | | |
| 18 | Chandan Nagar Mun 2013 | icipality, Kolkata Pass. | 5 | | 5.25 | | | | |
| | 2013 | Pass. | 5 | | 5.45 | ••• | | 15608 | |
| | 2014 | Pass. Pass. | э 5 | | 5.45 15.42 | | | 17641 | |
| | 2013 | rass. | 0 | | 10.42 | | | 17041 | |

| Table No. 5.2 (Contd) | Tab | e N | o. 5.2 | (Contd | .) |
|-----------------------|-----|-----|--------|--------|----|
|-----------------------|-----|-----|--------|--------|----|

Cargo/Passenger Carried And Freight Collected - By Responding Companies

| | | | No. of | | Freight | Cargo | Carried | Passenger | Carried |
|--------|----------------------------------|---------------------------|--------------------------------|--------------------------------|------------------------------|-------------------------|-----------------------|-----------------------|---------|
| SI.No. | Company/Underta king and Year | Type of Vessels | Powered Vessels Employed | Distance Travelled (Kms) | Collected (Rs.in Lakh) | Cargo (in Tonnes) | TKms (in millions) | Passenger (in No.) | PKms |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 19 | Jain Navigation | | | | | | | | |
| 13 | 2013 | | 2 | | 17.37 | E270 | | | |
| | | Tugs/Pass | 2 | | | 5370 | | | |
| | 2014 | Tugs/Pass | 2 | | 16.45 | 7260 | | | |
| | 2015 | Tugs/Pass | 2 | | 26.45 | 7260 | | | |
| 20 | K.S.Singhi | | | | | | | | |
| 20 | 2013 | Tugs | 1 | | 9.21 | 3290 | | | |
| | 2014 | Tugs | 1 | | 10.13 | 3310 | | | |
| | 2015 | Tugs | 1 | | 10.15 | 3310 | | | |
| | | | | | | | | | |
| 21 | Jindal ITF Ltd. | | | | | | | | |
| | 2013 | Cargo | 2 | | 55.33 | 27000 | | | |
| | 2014 | Cargo | 18 | | 65.23 | 40210 | ••• | | |
| | 2015 | Cargo | 18 | | 165.23 | 58280 | | | |
| 22 | Soham Shipping Pv | t.Ltd. | | | | | | | |
| | 2013 | Cargo | 4 | | 58.48 | 39850 | | | |
| | 2014 | Cargo | 4 | | 49.72 | 25270 | | | |
| | 2015 | Cargo | 4 | | 149.72 | 35270 | | | |
| 23 | Rashmi Ore Carriers | Dut I to | | | | | | | |
| 23 | 2013 | Cargo | 1 | 3240 | 104.25 | 151957 | 492.34 | | |
| | 2013 | | | | | | -32.34 | | |
| | 2015 | | | | | | | | |
| 0.4 | | terration of the state of | | | | | | | |
| 24 | Kothari Overseas Pr | | 4 | | 0.00 | 44440 | | | |
| | 2013 2014 | Cargo Cargo | 1 | | 8.20 | 11442 | | | |
| | 2014 | Cargo | 1 | | ··· ··· | | | | |
| 25 | Mayur Shipping Pvt. | Limited | | | | | | | |
| 20 | 2013 | Cargo | 1 | 2475 | 84.52 | 104338 | 258.24 | | |
| | 2010 | | | | | | | | |
| | 2015 | | | | | | | | |
| 26 | Sanghi Brothers (Inc | dore) Pvt Ltd | | | | | | | |
| | 2013 | Cargo | 5 | 3900 | 74.40 | 30134 | 117.52 | | |
| | 2014 | Cargo | | | | | | | |
| | 2015 | Cargo | | | | | | | |

(a) : transportation for self
(b) : data relates to no of vehicles on L.C.T.
(c) : 257859 no. of vehicles on LCT for year 2012-13 and 26812 no. of vehicles on LCT for the year 2013-14 and 27829 no. of vehicles on LCT for the year 2014-15

(d): Own barges plying for group company
(e): Barges not plied due to ban on mining.
(f): Ships have been baned by the Govt. Therefore cargo has been reported as 'Nil'.

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

** Formerly SESA Goa Ltd.

Relates to the year 2014

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

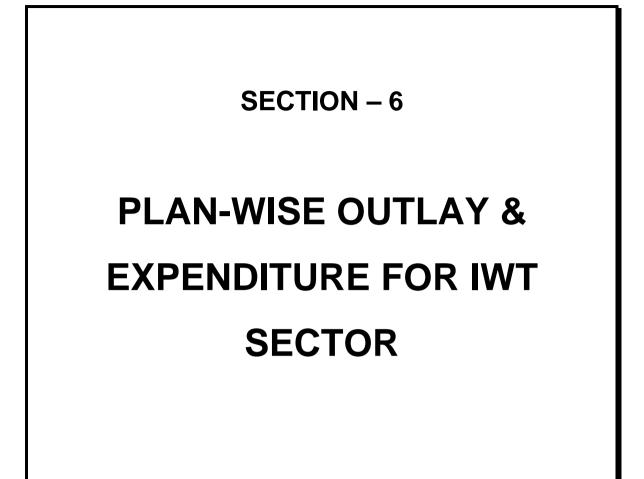


Table No. 6.1

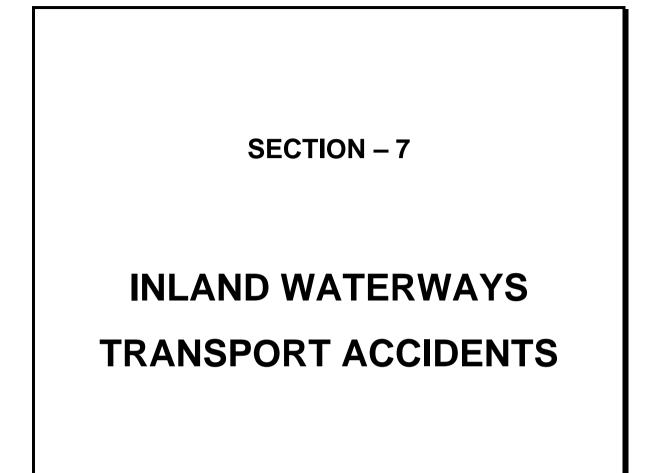
PLAN WISE FINANCIAL PERFORMANE FROM 10th FIVE YEAR PLAN TO 11th FIVE YEAR PLAN AND PART OF 12th FIVE YEAR PLAN

(Rs in Cr.)

| a | | 10th F | ive Year | Plan | 11th I | Five Year | Plan | Fi | nancial Y | ear | Fin | ancial Ye | ar |
|------------|---|--------|----------|--------|--------|-------------------|--------|--------|-----------|--------|--------|-----------|--------|
| SI. No. | Budget head/ Waterways | (| 2002-07) | | | (2007-12 <u>)</u> | | | (2013-14) |) | | (2014-15) | |
| 190. | | B.E | R.E | Exp. | B.E | R.E | Exp. | B.E | R.E | Exp. | B.E | R.E | Exp. |
| Ι | Grants to IWAI | | | | | | | | | | | | |
| 1 | National Waterway 1 | 154.97 | 155.11 | 135.62 | 241.69 | 235.81 | 228.95 | 74.43 | 65.24 | 48.63 | 77.29 | 64.2 | 64.01 |
| 2 | National Waterway 3 | 54.49 | 46.58 | 36.10 | 75.48 | 107.23 | 104.82 | 22.11 | 17.70 | 22.50 | 17.85 | 10.66 | 10.66 |
| 3 | Others | 37.60 | 23.88 | 12.99 | 26.00 | 7.59 | 9.57 | 22.26 | 7.06 | 14.20 | 85.96 | 3.36 | 3.36 |
| | Sub Total - I (Grants to IWAI) | 247.06 | 225.57 | 184.71 | 343.17 | 350.63 | 343.34 | 118.80 | 90.00 | 85.33 | 181.10 | 78.22 | 78.03 |
| II | North Eastern Area | | | | | | | | | | | | |
| 4 | National Waterway 2 | 216.28 | 180.60 | 132.15 | 319.29 | 243.17 | 202.07 | 72.00 | 48.21 | 47.44 | 78.10 | 37.61 | 36.02 |
| 5 | Central Plan scheme for NER | 17.00 | 0.00 | 0.00 | 16.03 | 15.03 | 6.62 | 3.20 | 3.20 | 1.22 | 3.20 | 1.07 | 1.07 |
| 6 | Proposed NW-6 (Barak) | 3.00 | 0.00 | 0.00 | 1.51 | 0.00 | 0.00 | 2.00 | 0.25 | 0.00 | 1.00 | 0.00 | 0.00 |
| 7 | Development of Indo- Bangladesh | 1.30 | 1.10 | 0.66 | 0.00 | 0.00 | 0.00 | 3.00 | 1.34 | 1.20 | 2.60 | 1.32 | 1.32 |
| | protocol for Channel marking, | | | | | | | | | | | | |
| | Dredging & Night Navigation etc. | | | | | | | | | | | | |
| | Sub total - II (NER) | 237.58 | 181.70 | 132.81 | 336.83 | 258.20 | 208.69 | 80.20 | 53.00 | 49.86 | 84.90 | 40.00 | 38.41 |
| III | Interest Subsidy to Bank, Loan to IWT Enterprenuer for Inland Vessel Subsidy Scheme | 8.50 | 5.00 | 5.40 | 8.00 | 7.00 | 4.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| IV | Tech Studies & R&D | 26.00 | 19.00 | 9.09 | 5.00 | 5.00 | 4.32 | 1.00 | 1.00 | 1.00 | 1.00 | 0.77 | 0.77 |
| V | Central Plan Scheme/ CSS | 40.00 | 65.00 | 52.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Grand Total | 559.14 | 496.27 | 384.84 | 693.00 | 620.83 | 560.48 | 200.00 | 144.00 | 136.19 | 267.00 | 118.99 | 117.21 |

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

In addition to above, during the year 2013-14 an amount of Rs. 9.00 Crore was allocated in B.E. & R.E. Stage to be released to Government of Bangladesh for maintenance of Protocol routes on Inland Water Transit out of which an amount of Rs. 8.077 Crore was released by Ministry of Shipping directly. Source: Inland Waterways Authority of India



No. of Accidents, Persons Injured And Died by Drowning (Boat Capsize) in States During 2014. Table No. 7.1

| | | | | | D | rowning | (Boat C | apsize) | | |
|-----|-------------------|-----------|------|----------|-----------------|---|---------|---------|-----------------|-------|
| SI. | State/UT | No. of | | No. of F | Persons Injured | • · · · · · · · · · · · · · · · · · · · | (| No. | of Persons Died | |
| No. | | Accidents | Male | Female | Transgenders | Total | Male | Female | Transgenders | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| - | STATES | - | | | - | - | | | | |
| 1 | Andhra Pradesh | 9 | 0 | 0 | 0 | 0 | 8 | 4 | 0 | 12 |
| 2 | Arunachal Pradesh | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| 3 | Assam | 15 | 0 | 0 | 0 | 0 | 9 | 6 | 0 | 15 |
| 4 | Bihar | 16 | 8 | 0 | 0 | 8 | 9 | 19 | 0 | 28 |
| 5 | Chhattisgarh | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| 6 | Goa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Gujarat | 9 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 9 |
| 8 | Haryana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | Himachal Pradesh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | Jammu & Kashmir | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 11 | Jharkhand | 3 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| 12 | Karnataka | 15 | 0 | 0 | 0 | 0 | 17 | 4 | 0 | 21 |
| 13 | Kerala | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| 14 | Madhya Pradesh | 26 | 0 | 0 | 0 | 0 | 24 | 5 | 0 | 29 |
| 15 | Maharashtra | 6 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| 16 | Manipur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | Meghalaya | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| 18 | Mizoram | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | Nagaland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | Odisha | 10 | 0 | 0 | 0 | 0 | 10 | 5 | 0 | 15 |
| 21 | Punjab | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 | Rajasthan | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| 23 | Sikkim | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | Tamil Nadu | 18 | 6 | 0 | 0 | 6 | 19 | 1 | 0 | 20 |
| 25 | Telangana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | Tripura | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | Uttar Pradesh | 32 | 7 | 3 | 0 | 10 | 33 | 13 | 0 | 46 |
| 28 | Uttarakhand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 | West Bengal | 8 | 0 | 2 | 0 | 2 | 12 | 2 | 0 | 14 |
| | Total(States) | 179 | 21 | 5 | 0 | 26 | 170 | 63 | 0 | 233 |
| | UNION TERRITORI | ES | | | | | | | | |
| 30 | A&N Island | 1 | 5 | 4 | 0 | 9 | 9 | 13 | 0 | 22 |
| 31 | Chandigarh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 32 | D&N haveli | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 33 | Daman & Diu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34 | Delhi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 | Lakshadweep | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | Pondicherry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total (UTs) | 1 | 5 | 4 | 0 | 9 | 9 | 13 | 0 | 22 |
| | Total States/UTs | 180 | 26 | 9 | 0 | 35 | 179 | 76 | 0 | 255 |

Note : The data includes boats plying in all water bodies. Source : Accidental Deaths & Suicides in India - 2014

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

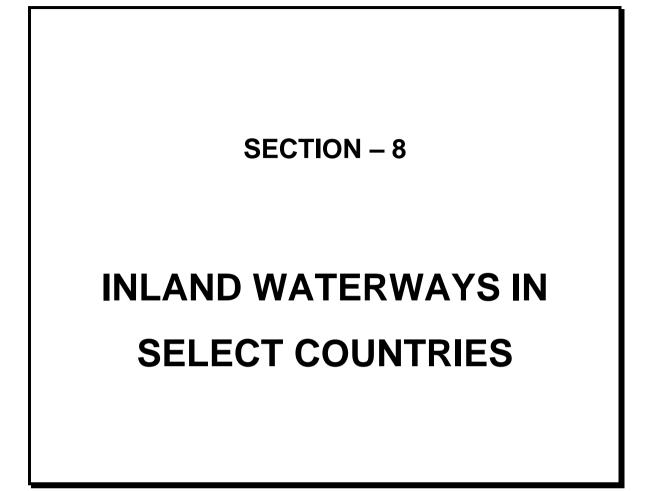


Table No. 8.1

Length of Navigable Inland Waterways in Europe and USA in 2010,2011 & 2012

| SI. | Country | | Canals | | Ri | vers and Lak | es | | Total | |
|-----|--------------------------|------|--------|------|------|--------------|------|--------|--------|-------|
| No. | | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Austria | _ | _ | _ | 351 | 351 | 351 | 351 | 351 | 351 |
| 2 | Bulgaria | _ | _ | _ | 470 | 470 | 470 | 470 | 470 | 470 |
| 3 | Canada | _ | _ | _ | _ | _ | _ | 5487 | _ | _ |
| 4 | Croatia | _ | | _ | 805 | 1018 | 1018 | 805 | 1018 | 1018 |
| 5 | Czech. Republic | 39 | 39 | 39 | 637 | 637 | 637 | 676 | 676 | 676 |
| 6 | Estonia | _ | _ | _ | 335 | 335 | 335 | 335 | 335 | 335 |
| 7 | Finland | 125 | 125 | 125 | 7881 | 7888 | 7889 | 8006 | 8013 | 8014 |
| 8 | France | 3539 | 3435 | 3332 | 1571 | 1584 | 1664 | 5110 | 5019 | 4996 |
| 9 | Germany | 2163 | 2163 | 2001 | 5565 | 5565 | 5675 | 7728 | 7728 | 7676 |
| 10 | Hungary | 173 | _ | 173 | 1691 | _ | 1691 | 1864 | _ | 1864 |
| 11 | Italy | 950 | 950 | - | 612 | 612 | _ | 1562 | 1562 | _ |
| 12 | Kazakhstan | _ | _ | _ | _ | _ | _ | 4063 | 4094 | 4151 |
| 13 | Kyrgyzstan | _ | _ | _ | _ | _ | _ | 420 | 420 | 420 |
| 14 | Lithuania | 1 | 1 | _ | 447 | 451 | _ | 448 | 452 | _ |
| 15 | Netherlands | 4707 | 4708 | _ | 1397 | 1396 | _ | 6104 | 6104 | _ |
| 16 | Poland | 344 | 344 | 344 | 3315 | 3315 | 3315 | 3659 | 3659 | 3659 |
| 17 | Republic of Moldova | _ | _ | _ | 42 | _ | 42 | 42 | _ | 42 |
| 18 | Romania | 132 | 132 | 132 | 1647 | 1647 | 1647 | 1779 | 1779 | 1779 |
| 19 | Russian Federation | _ | _ | _ | _ | _ | _ | 101371 | 101334 | 10138 |
| 20 | Serbia | 342 | _ | _ | 1077 | _ | _ | 1419 | _ | _ |
| 21 | Slovakia | 39 | 39 | 39 | 134 | 134 | 134 | 173 | 173 | 173 |
| 22 | Ukraine | 1170 | 1130 | 1111 | 1015 | 1015 | 1015 | 2185 | 2145 | 2126 |
| 23 | United Kingdom | 159 | 159 | 159 | 891 | 891 | 891 | 1050 | 1050 | 1050 |
| 24 | United States of America | _ | _ | _ | _ | _ | _ | 19300 | 19300 | _ |

Source: Annual Bulletin of Transport Statistics for Europe & North America, 2015 (UN Publication).

Table No. 8.2

Length of Navigable Waterways By Permissible carring Capacity of Vessels - 2012

| | | Total | | Carry | ving Capa | acity of Ve | essels (ir | | (in kms) |
|--------|----------------|--------|------|---------|-----------|-------------|------------|-------|----------|
| SI.No. | Country | Length | upto | 250-399 | | 650-999 | 1000- | 1500- | 3000 & |
| | | (Kms.) | 249 | | | | 1499 | 2999 | Above |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Austria | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | 351 | | | | | | | |
| 2 | Bulgaria | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | 470 | | | | | | | |
| 3 | Canada | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | | | | | | | | |
| 4 | Croatia | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | 1018 | | 226 | 215 | 289 | 150 | | 138 |
| 5 | Czech Republic | | | | | | | | |
| | Canals | 39 | | | | | | | |
| | Rivers & Lakes | 637 | _ | _ | _ | _ | _ | _ | _ |
| 6 | Estonia | | | | | | | | |
| | Canals | _ | _ | _ | _ | _ | _ | _ | _ |
| | Rivers & Lakes | 335 | _ | _ | _ | _ | _ | _ | _ |
| 7 | Finland | | | | | | | | |
| | Canals | 125 | 9 | - | - | 16 | - | 100 | - |
| | Rivers & Lakes | 7889 | 4179 | - | - | 2909 | | 801 | |
| 8 | France | | | | | | | | |
| | Canals | 3332 | 132 | 2393 | - | 126 | 118 | 46 | 517 |
| | Rivers & Lakes | 1664 | 30 | 349 | 85 | - | - | 573 | 627 |
| 9 | Germany | | | | | | | | |
| | Canals | 2001 | 79 | 158 | 96 | 107 | 651 | - | 910 |
| | Rivers & Lakes | 5676 | 933 | 246 | 156 | 126 | 1130 | 1002 | 2083 |
| 10 | Hungary | | ' | - | | - | | | |
| - | Canals | 173 | - | 52 | 121 | - | - | - | - |
| | Rivers & Lakes | 1691 | - | 73 | 408 | 330 | 499 | - | 381 |

Table No. 8.2 (Contd...)

Length of Navigable Waterways By Permissible Carrying Capacity of Vessels - 2012

| | | Total | | Carry | | | essels (ii | n tonnes) | |
|--------|------------------------|--------|------|---------|---------|---------|------------|-----------|---------|
| SI.No. | Country | Length | upto | 250-399 | 400-649 | 650-999 | 1000- | 1500- | 3000 & |
| | | (Kms.) | 249 | | | | 1499 | 2999 | Above |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | Italy Canals | | | | | | | | |
| | Rivers & Lakes | _ | - | - | - | - | - | - | _ |
| 12 | Kazakhstan* | _ | _ | _ | _ | _ | - | - | _ |
| | Canals | | | | | | | | |
| | Rivers & Lakes | _ | _ | _ | _ | - | - | _ | _ |
| 13 | Kyrgyzstan* | _ | _ | _ | _ | _ | - | - | _ |
| 15 | Canals | | | | | | | | |
| | Rivers & Lakes | - | - | - | - | - | - | - | - |
| 14 | Lithuania | - | _ | - | - | - | - | - | - |
| 14 | | | | | | | | | |
| | Canals | - | - | - | - | - | - | - | - |
| | Rivers & Lakes | — | - | - | - | - | - | - | - |
| 15 | Netherlands | | | | | | | | |
| | Canals | - | - | - | - | - | - | - | - |
| | Rivers & Lakes | - | _ | _ | - | _ | - | - | _ |
| 16 | Poland | | | | | | | | |
| | Canals | 344 | | 176 | 106 | 47 | | | 15 |
| | Rivers & Lakes | 3315 | 908 | 893 | 965 | 350 | 38 | 55 | 106 |
| 17 | Republic of Moldova | | | | | | | | |
| | Canals | - | - | - | - | - | - | - | - |
| | Rivers & Lakes | 42 | 40 | - | - | 2 | - | - | - |
| 18 | Romania | | | | | | | | |
| | Canals | 132 | _ | _ | _ | _ | _ | _ | _ |
| | Rivers & Lakes | 1647 | _ | _ | _ | _ | _ | _ | _ |
| 19 | Russian Fedration | | | | | | | | |
| | Canals | _ | _ | _ | _ | _ | _ | _ | _ |
| | Rivers & Lakes | _ | _ | _ | _ | _ | _ | _ | _ |
| 20 | Serbia | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | _ | _ | _ | _ | _ | _ | - | _ |
| 21 | Slovakia | — | _ | _ | _ | - | _ | — | _ |
| | Canals | 39 | | | | | | | |
| | Rivers & Lakes | 134 | | | | | | | 134 |
| 23 | Ukraine | 104 | | | | | | | 10-1 |
| 25 | Canals | 1111 | | | | | | | |
| | Rivers & Lakes | 1015 | | | | | | | |
| 24 | | 1015 | | | | | | | |
| 24 | United Kingdom | 150 | | | | | | | |
| | Canals | 159 | | | | | | | |
| | Rivers & Lakes | 891 | | | | | | | |
| 22 | United States | | | | | | | | |
| | Canals | | | | | | | | |
| | Rivers & Lakes | - | | | | | | | |

Source : Annual Bulletin of Transport Statistics for Europe & North America-2015.

Table No. 8.3 Inland Waterways vessels in Service at the end of 2012

| | | Self P | ropelled Ve | ssels | D.& P. | Vessels | Tugs and | Pushers |
|--------|---------------------|--------|---|-------------------|--------|-------------------------------------|----------|-------------------|
| SI. No | Country | Nos. | Carrying Capacity (Th.Tonne s) | Power (Th. KW) | Nos. | Carrying Capacity (Th.Tonnes) | Nos. | Power (Th. KW) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Belgium | | | | | | | |
| 2 | Bulgaria | 27 | 36 | 21 | 141 | 237 | 35 | 34 |
| 3 | Croatia | 12 | 9 | 7 | 122 | 88 | 41 | 14 |
| 4 | Czec.Republic | 40 | 40 | 17 | 136 | 64 | 84 | 25 |
| 5 | Estonia | 8 | 2 | 1 | 3 | 1 | 2 | 0 |
| 6 | Finland | 152 | 16 | 32 | 34 | 6 | 30 | 8 |
| 7 | France | 905 | 695 | 335 | 420 | 525 | - | - |
| 8 | Germany | 1292 | 1858 | 846 | 982 | 951 | 412 | 135 |
| 9 | Hungary | 72 | | | 285 | | 72 | |
| 10 | Kazakhstan(a) | 12 | | | 59 | | 56 | 16 |
| 11 | Kyrgyzstan(a) | 5 | | | 5 | 4 | 2 | |
| 12 | Lithuania | | | | | | | |
| 13 | Poland | 71 | 52 | 24 | 477 | 223 | 209 | 54 |
| 14 | Republic of Moldova | | | | 9 | 2 | 8 | 1 |
| 15 | Romania | 103 | 110 | | 1131 | 1470 | 227 | |
| 16 | Russian Fedration | 1574 | 2487 | 1254 | 5319 | 7430 | 4744 | 1548 |
| 17 | Serbia | | | | | | | |
| 18 | Slovakia | 20 | 23 | 12 | 146 | 226 | 39 | 38 |
| 19 | Switzerland | 15 | 29 | | 6 | 12 | 7 | |
| 20 | Ukraine | | | | | | | |
| 21 | United Kingdom | 158 | 40 | | 287 | 98 | 92 | |

D.& P. Vessels : Dumb & Pushed Vessels

Source: Annual Bulletin of Transport Statistics for Euorpe and North America, 2015

Table No. 8.4

Goods Transport by Type of Transport on National Territory - 2012

| SI. | Country | Good | s carried (' | 000 Tonnes) | 1 | | Tonne | Kms. of Go | ods carried(N | Aillion)* | |
|-----|-----------------------------|----------|--------------|-------------|---------|--------|----------|------------|---------------|-----------|--------|
| No. | | National | | ational | Transit | Total | National | | ational | Transit | Total |
| | | | Loaded | Unloaded | Ī | | | Loaded | Unloaded | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | Austria | 1240 | 1624 | 5439 | 2411 | 10714 | 101 | 213 | 1034 | 844 | 2192 |
| 2 | Belarus | - | - | - | - | - | - | - | - | - | - |
| 3 | Belgium | - | - | - | - | - | - | - | - | - | - |
| 4 | Bulgaria | 1407 | 805 | 1682 | 12483 | 16377 | 39 | 71 | 313 | 4927 | 5350 |
| 5 | Canada | - | - | - | - | - | - | - | - | - | - |
| 6 | Croatia | 50 | 256 | 340 | 5288 | 5934 | 11 | 13 | 18 | 730 | 772 |
| 7 | Czech-Republic | 410 | 264 | 164 | - | 838 | 16 | 14 | 8 | - | 38 |
| 8 | Finland | 471 | - | - | - | 471 | 124 | - | - | - | 124 |
| 9 | France | 29431 | 16241 | 12438 | 7423 | 65533 | 4863 | 1579 | 1296 | 884 | 8622 |
| 10 | Germany | 54569 | 48248 | 100041 | 20313 | 223171 | 10912 | 12688 | 22228 | 12660 | 58488 |
| 11 | Hungary | 32 | 3814 | 1265 | 3024 | 8135 | 3 | 627 | 206 | 1146 | 1982 |
| 12 | Kazakhstan | 1236 | - | 55 | - | 1291 | 29 | - | 33 | - | 62 |
| 13 | Kyrgyzstan | 12 | - | - | - | 12 | 2 | - | - | - | 2 |
| 14 | Lithuania | - | - | - | - | - | 2 | - | - | - | 2 |
| 15 | Luxemburg | - | - | - | - | - | - | - | - | - | 292 |
| 16 | Netherlands | - | - | - | - | - | - | - | - | - | 46631 |
| 17 | Poland | 1644 | 642 | 177 | 5 | 2468 | - | - | - | - | 815 |
| 18 | Republic of Moldova | - | - | - | - | 144 | 0 | 0 | 0 | - | 0 |
| 19 | Romania | 13292 | 2957 | 6466 | 5222 | 27937 | 3084 | 1888 | 4547 | 3000 | 12519 |
| 20 | Russian Federation | 111003 | 24636 | 1446 | 403 | 137488 | 40326 | 32768 | 2288 | 892 | 76274 |
| 21 | Serbia | 1501 | 266 | 195 | 36 | 1998 | 145 | 249 | 166 | 45 | 605 |
| 22 | Slovakia | 39 | 2756 | 168 | 5280 | 8243 | 2 | 63 | 13 | 908 | 986 |
| 23 | Switzerland | - | 1011 | 6200 | - | 7211 | 49 | - | - | - | 49 |
| 24 | Ukraine | 3066 | 1229 | - | - | 4295 | 312 | 1437 | - | - | 1749 |
| 25 | United States of America | - | - | - | - | - | - | - | - | - | 280972 |

Source: Annual Bulletin of Transport Statistics for Europe and North America 2015 * : Kilometers within the territory of the reporting country.

APPENDICES

DEFINITIONS OF TERMS USED

(For Section-8)

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

| <u>Navigable Inland Waterways</u> | 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. |
|---|--|
| <u>Inland Water Transport (IWT)</u> <u>Craft</u> | Craft having a minimum carrying capacity of 20 tonnes designed for the carriage of goods by inland waterways. |
| <u>Dumb Barge</u> | 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. |
| <u>Dumb Tanker</u> | Dumb barge intended for the bulk transport of liquids or gases. Tankers for the transport in bulk of powdered products such as cement, flour, plaster, etc. are to be excluded, and to be counted among dumb barges. |
| <u>Self-Propelled Barge</u> | 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. |
| <u>Self Propelled Tanker</u> | 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. |
| <u>Self Propelled Craft for River-</u> <u>Sea Navigation</u> | Craft having a Dead Weight capacity of at least 20 tonnes, designed for the transport of goods by river and by Sea and equipped with their own means of propulsion developing at least 37 KW. |
| Tug | Powdered craft developing not less than 37 KW and designed for the towing of dumb barges, pushed towed barges, rafts, but not for the carriage of goods. |

| <u>Pusher Craft</u> | 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. |
|---|---|
| <u>Pusher Tug</u> | Powdered craft developing not less than 37 KW and designed or fitted for the towing of dumb barges, pushed-towed barges or rafts, and for the pushing pushed and pushed-towed barges but not for the carriage of goods. |
| <u>Pushed Barge</u> | 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. |
| <u>Pushed Barge</u> | 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. |
| <u>Carrying Capacity (also</u> <u>referred to as Dead Weight</u> <u>Capacity)</u> | Maximum permissible weight of goods, expressed in tones, which a craft may carry according to ship's document. |
| <u>Power (KW)</u> | Mechanical force developed by the motive power installation in craft. This power should be measured in effective kilowatts (power transmitted to the propeller). |

<u> Appendix – II</u>

ABBREVIATION

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