STATISTICS OF INLAND WATER TRANSPORT 2022-23





भारत सरकार पत्तन, पोत परिवहन और जलमार्ग मंत्रालय परिवहन अनुसंधान प्रभाग नई दिल्ली

अंतर्देशीय जल परिवहन के आँकड़े 2022-23



Government of India
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Transport Research Wing
IDA Building, Jamnagar House
New Delhi

टी.के.रामचन्द्रन T.K.Ramachandran



सचिव
SECRETARY
भारत सरकार
AUTHORITOR INDIA
पत्तन, पोत परिवहन और
जलमार्ग मंत्रालय
MINISTRY OF PORTS,
SHIPPING AND WATERWAYS

PREFACE

Statistics of Inland Water Transport is an annual publication of the Ministry of Ports, Shipping and Waterways. This publication comprehensively reflects the current status of Inland Water Transport (IWT) in the country. On the basis of information received from various arms of the Ministry the 30th edition of the publication has been prepared. This edition covers the latest available data for the year 2022-23. This edition of the publication is divided into six 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 sector companies, Plan outlays/expenditure for IWT sector and Accidents related to Inland Waterways.

I am sure that this publication will serve as the backbone for monitoring the developments and progress made by India in the sector of IWT and provide a valuable snapshot for policy makers and the public at large. The report will also help in identifying thrust areas where interventions need to be focused.

Transport Research Wing (TRW) in the Ministry of Ports, Shipping and Waterways has prepared this edition of the publication. I would like to complement the efforts made by the officials in TRW to bring out this edition in time.

I would take this opportunity to thank the State Governments, Private Companies and Inland Waterways Authority of India for their contribution in providing the information. Suggestions from the users of the information are welcome to enable further improvements in the quality and coverage of this publication in future.

(T.K. Ramachandran)

Randalan

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Transport Bhawan, 1, Parliament Street, New Delhi-110001, INDIA Tel.: +91 11 23714938, Fax: +91 11 23716556, E-mail: secyship@nic.in

Officers involved in this Publication

Shri Sunil Kumar Singh Adviser (Statistics)

Ms. Mohita Aswal
Deputy Director

Shri Abhishek Choudhary Economic Officer

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

POLICY INITIATIVES AND MILESTONES

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

- (b) Terminals for berthing of vessels, loading/unloading of cargo and for providing interface with road and rail; and
- (c) Navigational aid for safe navigation.
- 4. The Ministry of Ports, Shipping & Waterways 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 up to 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) for the development of Inland Water Transport. An Inland Vessel Building Subsidy Scheme was also in place since April, 2002 up to 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, 1985 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.

Major Policy Reforms for promotion of Inland Water Transport by Government -

Enactment of National Waterways Act, 2016: National Waterways Bill, 2015 for declaration of 111 (5 existing and 106 additional) waterways was introduced and passed by the Lok Sabha on 21st December 2015 and by the Rajya Sabha on 9th March 2016. The National Waterways Act, 2016 came into force w.e.f. 12th April, 2016. 111 (106 new + 5 Existing) National Waterways (NWs) declared increasing the total length of NWs from 4,382 km to 20,262 km.

Inland Vessels Act, 2021 was passed by both houses of the Parliament and the assent of the Hon'ble President was received on 11 August 2021. The Act has been published in the gazette on 12th August 2021, which aims to replace over 100 years old Inland Vessels Act, 1917 (1 of 1917) and usher a new era in the inland water transport sector to make the Legislative framework user friendly and promote ease of doing business.

The Inland Vessels Act, 2021 (24 of 2021) notified on 12th August, 2021 has come into force w.e.f. 16th February, 2022 (Section 1 and Section 106) and w.e.f. 7th June, 2022 (Section 2 to Section 105 and Section 107 to Section 114).

Nine Rules under the Inland Vessels Act, 2021 (24 of 2021) have been Gazetted till June 2022.

INLAND WATERWAYS AUTHORITY OF INDIA (IWAI)

- 5. The Inland Waterways Authority of India (IWAI), set up on 27th October 1986 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:
- a) Carry out surveys and investigations for the development, maintenance and better utilization of the National Waterways (NWs) and the appurtenant land for shipping and navigation by:
 - Providing infrastructural facilities, conservancy & river training works,
 - Controlling activities of dumping / removal of bed material,
 - Removing / altering any obstruction / impediment,
 - Regulating traffic and structure across / under NWs,
 - Disseminating navigational meteorological information,
 - Coordinating with other modes of transport, providing pilotage and
 - Entering into joint ventures concerning inland shipping by equity participation.
- b) The Authority may also:
 - Advises Central Government on IWT matters,
 - Study the transport requirement in relation to other modes,
 - Conduct Hydrographic Surveys & publish river charts,
 - Assist State Governments for development of IWT,
 - Develop & provide consultancy services,
 - Conduct research for craft design, mechanization of country crafts, techniques of towage,
 landing & terminal facilities, port installations & survey techniques,
 - Classification of Inland Waterways,
 - Technical training of IWT personnel within & outside country.
- c) The Authority will exercise the above functions with the prior approval of the Central Government.

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

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

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

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

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

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

NAVIGABLE WATERWAYS & INFRASTRUCTURE

6. Length of waterways along with its navigable length is an indicator of inland water potential of a State. Details of State-wise navigable waterways in India during 2022-23 are given in Table 1.1 (Section 1). The details of infrastructure facilities available on state waterways as on 31.03.2023 are given in Table 1.3 (Section 1). Table 1 below gives Total and Navigable length of Waterways reported across States. It is observed that the maximum length of waterways is in the State of Assam with 7988.37 km followed by West Bengal with 4741 km and Karnataka with 2902.00 km. 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 100% each for the States of Bihar and Jharkhand; by contrast, in case of Assam the ratio of navigable length to total length is 25.34%. Other States with good inland water transport

prospects are West Bengal, Maharashtra and Goa where waterways navigable length is 96.88%, 93.94% and 90.84% respectively of the total length of rivers/canals/lakes reported by these states. Total length of rivers in the States as reported below is 28085.95 Km of which 55.17% is navigable length.

Table 1	Table 1: Total and Navigable Length of Waterways in different States –2022-23 (In Kms)									
S. No.	State	Total Length of the Rivers/ Canals/ Lakes in State (Km.)	Navigable Length (Km.)	Percentage of Navigable Length to Total Length						
1	Andhra Pradesh	3761.73	1159.73	30.83						
2	Assam	7988.37	2024.00	25.34						
3	Bihar*	1011.00	1011.00	100.00						
4	Goa	273.00	248.00	90.84						
5	Jharkhand	95.00	95.00	100.00						
6	Karnataka	2902.00	1215.00	41.87						
7	Kerala	2881.55	1951.85	67.74						
8	Maharashtra	931.91	875.42	93.94						
9	Mizoram	451.69	216.35	47.90						
10	Nagaland	276.00	276.00	100.00						
11	Odisha*	2425.00	1555.00	64.12						
12	Tamil Nadu	181.60	133.60	73.57						
13	Uttar Pradesh	166	140	84.34						
14	West Bengal	4741.1	4593.1	96.88						
	Total	28085.95	15494.05	55.17						

Source: State Governments

Note:

CARGO MOVEMENT ON MAJOR WATERWAYS

Table 2 provides a snap view of cargo moved on the four national waterways, waterways of Goa, Maharashtra, Gujarat, Sunderbans & Icchamati waterways which carry most of the cargo traffic on India's Inland Waterways. Cargo moved on four national waterways along with their details is given in Table 2.1 & Table 2.2 (section 2). The total cargo movement on India's waterways comprising the national waterways (NWs)(NW-1,2,3,4) and NWs in the State of Goa, Maharashtra, Gujarat, Sunderban and Icchamati & others was 1261.51 Lakh tonnes in 2022-23 as against 1087.93 lakhs tonnes in 2021-22, reflecting an increase of 15.96 In terms of tonnage, Goa, Maharashtra, Gujarat, Sunderbans & Icchamati accounted for 2.3%, 50.1%, 21.9%, 4.3% and 1.19% respectively of the total cargo volume in 2022-23.

In terms of tonne km (movement of one tonne of cargo over a distance of one km) there was a increase by 9.36% in 2022-23 over 2021-22 and cargo carried on Indian Waterways is 33.28 Tonne Kms. Goa, Maharashtra, Gujarat, Sundarbans, Icchamati waterways though accounted 79.79

^{*} Data not reported for the year 2022-23. Previous Year data has been Repeated.

% of the total cargo movement on inland waterways across India, in terms of tonne Kilometer their share was 53.99 % only. In case of Maharashtra and Gujarat, high volume of cargo movement was carried over relatively short average distances of about 12.95 Kms and 11.44 Kms respectively leading to their intensive use. However, in the four National Waterways, although the volume of cargo traffic was relatively small (20.2%), the average distance is 75.92 Kms. In case of National Waterway I (Ganga- Bhagirathi-Hooghly) the average distance over which cargo moved was relatively much longer at 142.02 Kms. In case of National Waterway II, National Waterway III and National Waterway IV the distance traversed by cargo was on an average of 16.93 Kms, 6.60 Kms and 3.51Kms respectively in 2022-23.

Tab	Table 2: Cargo Movement on Waterways										
S.	Details of	Cargo M	oved (Lakh	Tonnes)	Tonn	e Kms (In 1	Lakh)				
No.	Waterway	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23				
1	National	92.06	109.28	131.70	23309.40	20082.07	18703.99				
1	Waterway No. I	(11.0)	(10.0)	(10.4)	(52.33)	(52.3)	(44.55)				
2	National	3.07	4.28	6.30	44.9	74.38	106.67				
2	Waterway No. II	(0.4)	(0.4)	(0.5)	(0.1)	(0.2)	(0.25)				
3	National	7.38	16.95	32.28	214.8	179.19	213.19				
3	Waterway No. III	(0.9)	(1.6)	(2.6)	(0.5)	(0.5)	(0.51)				
4	National	68.32	112.34	84.18	189.90	316.47	295.22				
4	Waterway No. IV	(8.2)	(10.3)	(6.7)	(0.4)	(0.8)	(0.70)				
	Cub Total NW/s	170.83	242.85	254.46	23759.00	20652.11	19319.08				
	Sub Total NWs	(20.4)	(22.3)	(20.2)	(53.3)	(53.8)	(46.01)				
5	Cas Waterways	84.61	45.78	29.29	4124.40	2155.39	1587.47				
3	Goa Waterways	(10.1)	(4.2)	(2.3)	(9.3)	(5.6)	(3.78)				
6	Maharashtra	282.10	436.06	631.49	5697.00	1592.35	8177.97				
O	Waterways	(33.7)	(40.1)	(50.1)	(12.8)	(4.1)	(19.48)				
7	Gujarat	257.12	293.67	276.57	4413.00	3117.61	3163.83				
/	Waterways	(30.8)	(27.0)	(21.9)	(9.9)	(8.1)	(7.53)				
8	Sunderban	38.61	61.03	54.73	6558.70	10160.54	9202.31				
0	Waterways	(4.6)	(5.6)	(4.3)	(14.7)	(26.5)	(21.92)				
9	Icchamati &	2.84	8.54	14.97		716.17	538.30				
	others	(0.3)	(0.8)	(1.19)		(1.6)	(1.28)				
	Grand Total	836.11	1087.93	1261.51	44552.10	38394.17	41988.96				

Source: (i) Inland Waterways Authority of India.

Note:

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

^{2.} Figure within brackets indicates percentage to the total.

NATIONAL WATERWAYS (NW)

Box 2: Criteria for declaration of National Waterway

- It should possess capability of navigation by mechanically propelled vessels of minimum 300 tonnes (DWT) capacity (45m x 8m x1.2m);
- It should have a fairway of minimum 40m wide channel with 1.4m depth in case of rivers and minimum 30m wide channel with 1.8m depth in case of canals. Exception may be given in case of irrigation-cum-navigation canals based on request of the concerned State Govt in order to safeguard the interest of irrigation;
- It should be a continuous stretch of minimum 50 kms; the only exception to be made to waterway length is for urban conglomerations and intra-port traffic; and
- It should pass through and serve the interest of more than one States or connect a vast and prosperous hinterland and major port, or either pass through or connect a strategic region where development of navigations is considered necessary to provide logistic support for economic development or national security, or connect place not served by any other mode of transport.
- 8. To promote Inland Water Transport (IWT) in the country, Government declared 111 (including 5 existing and 106 new) National Waterways (NWs) spread over 24 states under the National Waterways Act, 2016, which came into effect from 12 April, 2016 to promote Inland Water Transport (IWT) in the country. A list of all the NWs with their approx. length is given in **Annex-1**. List of pre-2016 existing 5 NWs is detailed below-
 - (a) Allahabad-Haldia stretch (1620 kms) of Ganga-Bhagirathi-Hooghly river system was declared National Waterway- 1 in 1982 and effective in October, 1986.
 - (b) Sadiya-Dhubri stretch (891 kms) of the Brahmaputra River was declared National Waterways- 2 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- 3 in February, 1993.(Total 205 kms)
 - (d) Kakinada- Pondicherry canals along with Godavari and Krishna rivers (1078 km) –as NW-4 in 2008 and
 - (e) East Coast Canal integrated with Brahmani river and Mahanadi delta rivers (588 km) as NW-5 in 2008.
- 9. 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. Details of infrastructure facilities available on these three National Waterways is given in Table 1.2 (Section 1).

- 10. A major boost to IWT Sector has been provided by the Government through enactment of the National Waterways Act, 2016 (No. 17 of 2016) dated 26th March 2016 which came into force w.e.f. 12th April 2016. This Act repealed previous Acts of existing five National Waterways No. 1,2,3,4 & 5 and further included new 106 Inland Waterways thus totalling 111 nos. waterways declared as National Waterways which cover a total length of 20,186.65 kms spread across 24 States in the country. National Waterways of India are well in line to become the lifeline of the country. Inland Water Transport (IWT) has a potential to supplement the overburdened Railways and congested Roadways. In addition to cargo movement, National Waterways may provide a convenient function in related activities such as carriage of vehicles (in Roll-on-Roll-off mode of cross-ferry) and Tourism including stay and entertainment.
- 11. The Infrastructure facilities provided by IWAI in the existing National Waterway No.1 (Ganga, Bhagirathi-Hooghly river system), NW-2 (river Brahmaputra) & NW-3 (West Coast Canal, Champakara Canal & Udyogmandal Canal in Kerala) are detailed at **Annex-II**.

DEVELOPMENT OF 106 NEW NATIONAL WATERWAYS

12. Government declared 111 (including 5 existing and 106 new) National Waterways (NWs) spread over 24 states under the National Waterways Act, 2016, which came into effect from 12 April, 2016 to promote Inland Water Transport (IWT) in the country. A list of all the NWs with their approx. length is given in **Annex-1**. Efforts initiated towards undertaking the developmental activities for providing safe fairway channel and creating infrastructures, in phased manner on the identified new National Waterways from 2016-17.

13. Status of 106 new National Waterways

I. The Feasibility Reports (FRs) and the Detailed Project Reports(DPRs) of new 106 NWs have been completed. After detailed analysis of the outcomes and recommendations of the FRs/DPRs, input from stakeholders, 106 NWs have been categorized into three categories. The detailed parameters which have been analyzed and considered for above categorization has been elaborated in the Annex below:

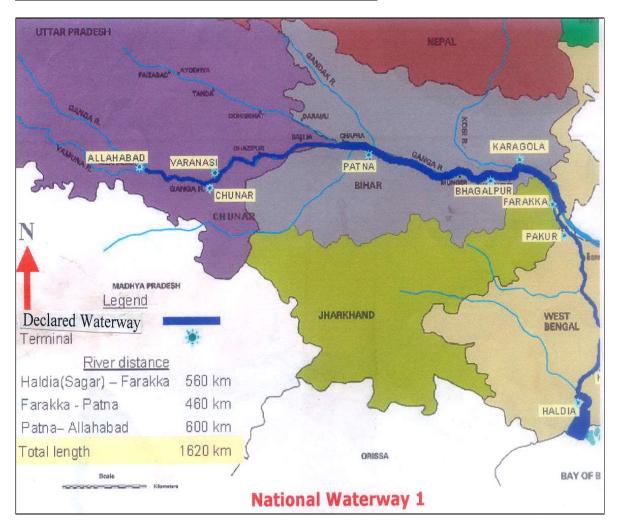
1	Category 'A': Feasible NWs with Cargo	18 NWs	NW-9, 10, 16, 27, 68, 111, 25, 28, 37, 40, 44, 73, 85, 86, 97, 100, 57 & 94 (refer Annex-I)
2	Category 'B': Feasible NWs with only Tourism potential/ Ferry/ Cruise		NW- 6, 7, 8, 14, 15, 18, 20, 23, 24, 29, 30, 36, 42, 47, 50, 52, 83, 87, 88, 90, 91, 95, 104, 108 & 110 (refer AnnexI)

3	Category '(C': NWs	may	be	63	Remaining NWs except enlisted in 1 & 2
	feasible a development	nt subsequent of Cat-A &			NWs	above
	1					

II. In addition to earlier existing 5 NWs as detailed in Para 8 above, new national waterways which are considered the most viable and where development activities have been initiated in Phase I are:

- 1. River Barak (NW-16),
- 2. Sunderbans (Protocol Route) Waterways (NW -97),
- 3. Cumberjua River (NW-27),
- 4. Mandovi River (NW-68),
- 5. Zuari River (NW-111),
- 6. Alappuzha Kottayam Athirampuzha Canal (NW -9),
- 7. Alappuzha Changanassery Canal (NW-8),
- 8. Rupnarayan River (West Bengal) (NW -86),
- 9. River Ghaghra (NW-40).
- 10. Kali River (NW-52),
- 11. Ichamati River (NW-44),
- 12. Kopili River (NW-57),
- 13. Dhansiri River (NW-31)

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



- 14. The Ganga Bhagirathi Hooghly river system between Haldia (Sagar) and Allahabad (1620 km) was declared as National Waterway-1 (NW-1) in 1986. Since then IWAI is carrying out various developmental works on the waterway for improvement of its navigability and also development and maintenance of other infrastructure such as navigation aids and terminal facilities as laid down in the IWAI Act, 1985 (82 of 1985).
- 15. The volume of freight movement on National Waterways-I was 131.70 lakh tonnes in 2022-23 against 109.28 lakh tonnes in 2021-22 reflecting an increase of 20.52 %.

16. The composition of cargo movement on National Waterway-1 over the years is shown in Table 3 below. Mix constituted 38.53% of traffic on NW-1 followed by Building material (constituting Fly ash, stone chips etc.) (30.81%) and miscellaneous (28.41%). These three items together accounted for about 97.75 % of the total cargo moved on NW I during 2022-23.

Table 3: Composit	Table 3: Composition of Cargo Moved on National Waterway- I (In Tonnes)									
Name of the Commodity	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23				
Building Material	3568909	4478790	4650148	4816082	4204484.6	4057611.38				
	(65.1)	(61.0)	(51.0)	(52.3)	(38.5)	(30.81)				
Fertilizers	0	0	0	0	0	0				
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)				
Food items	38340	260	5134	105743.47	162372.71	19716.09				
1 ood noms	(0.7)	(Neg.)	(0.1)	(1.1)	(1.5)	(0.2)				
Miscellaneous	2816	5323	2162514	1341447	2998008.92	3741221.23				
Wilseenaneous	(0.1)	(0.1)	(23.7)	(14.6)	(27.4)	(28.4)				
Mix	1694196	2854087	2269124	2935470	3524447.77	5073877.74				
IVIIX	(30.9)	(38.8)	(24.9)	(31.9)	(32.3)	(38.5)				
Ore/Minerals	0	0	0	0	0	0				
O10/1VIIIIOIUIS	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)				
POL/POL products	0	0	0	0	0	251000				
rozaroz products	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.9)				
Coal	160262	924	9409	0	15542.61	10565.65				
Cour	(2.9)	(Neg.)	(0.1)	(0.0)	(0.1)	(0.1)				
Iron steel	14839	9946	16068	7222.202	22931.39	15860.91				
11011 01001	(0.3)	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)				
Total NW I	5479362	7349330	9112397	9205965	10927788	13169853				

Source: Inland Waterways Authority of India for National Waterways.

Note: Figure within brackets indicates percentage to the total

Neg. – negligible

Mix – Food Items, Iron Steel & Building Material(Flyash, Cement, Stones) etc.

Miscellaneous – Machinery, Houeholds, Steam Turbine, ODC Cargo, Harbour Crane and Turbine & Generator etc.

Indo -Bangladesh Waterway Route

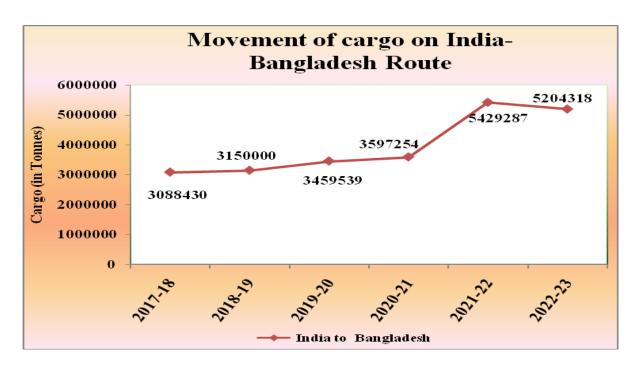
Box: 3- Indo-Bangladesh Protocol for Inland Water Transport

A Protocol on Inland Water Transit & Trade (PIWT&T) between India and Bangladesh has been in existence since 1972 facilitating movement of inland cargo vessels of one country on designated routes of other country for transit & trade of goods through inland waterways. For making the Protocol more effective, many landmark decisions were taken in the last two (19th & 20th) Standing Committee Meeting on PIWT&T and Secretary Shipping Level Talks held in October'2018 in New Delhi and in December'2019 in Dhaka. These decisions are given effect with the signing of 2nd addendum under PIWT&T on 20th May, 2020 at Dhaka, Bangladesh. Inland vessels of one country can transit through the specified routes of the other country. The existing protocol routes are 1 & 2 – Kolkata-Silghat and vice versa, 3 & 4 – Kolkata-Badarpur and vice versa, 5 & 6 – Dhulian-Rajshahi-Aricha and vice versa, 7 & 8 – Silghat-Badarpur and vice versa, 9 & 10 – Daudkandi-Sonamura and vice versa. Further, number of Ports of Call has been increased from 6 to 11 and also 2 extended ports of call has been added as shown below:

Bang	gladesh	India		
Ports of Call	Extended Ports of Call	Ports of Call	Extended Ports of Call	
Narayanganj	Ghorasal	Kolkata	Tribeni (Bandel)	
Khulna		Haldia		
Mongla		Karimganj	Badarpur	
Sirajganj		Pandu		
Ashuganj		Silghat		
Pangaon	Muktarpur	Dhubri		
Rajshahi		Dhulian		
Sultanganj		Maia		
Chilmari		Kolaghat		
Daudkhandi		Sonamura		
Bahadurabad		Jogigopha		

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.

- 17. Movement of cargo along India Bangladesh route has shown decline of 4.14% in year 2022-23 over that in 2021-22. The cargo moved over this route has decreased to 52.04 lakh tonnes in 2022-23 against 54.29 Lakh tonnes in 2021-22.
- **18.** The graph below depicts trend in cargo movement on India-Bangladesh route (National Waterway-I) during the years 2017-18 to 2022-23.



19. The table 4 shows the cargo and the main commodities carried on India-Bangladesh route on National Waterway-I during the years 2017-18 to 2022-23.

Table 4: M	Table 4: Movement of Cargo (In Tonnes) on India- Bangladesh route (Tonnes)											
Route	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Commodities					
India to Bangladesh	30,88,430	31,50,000	34,59,539	35,97,254	54,29,287		Stone Aggregates, Coal, Food Products, Steel Cargo, Others and Fly Ash					
Total	30,88,430	31,50,000	34,59,539	35,97,254	54,29,287	5204318						
Source: Inla	nd Waterwa	ys Authorit	y of India	•	•	•						

Jal Marg Vikas Project:

20. A Project on river Ganga (NW-1) called Jal Marg Vikas Project (JMVP) has been commissioned at an estimated cost of Rs.5,369.18 crores with the technical assistance and financial support of the World Bank (USD 375 million). The estimated cost of JMVP was revised to Rs. 4,633.81 crores by the Ministry of Ports, Shipping & Waterways in a review meeting held on 10.06.2020. The Project is scheduled to be completed by December, 2023. The objective of JMVP is to improve navigability of National Waterway-1 (NW-1) on Haldia-Varanasi stretch of Ganga-Bhagirathi-Hooghly River System by fairway development to provide an assured depth of 2.2 to 3.0 meters and a bottom channel width of 45 meters for at least 330 days in a year to make it navigable for vessels of up to 1500 - 2000 Dead Weight Tonnage (DWT) and to provide civil, structural, logistics and communications interventions required for this Project.

- **21**. Jal Marg Vikas Project (NW-1): Status of implementation as on 30.05.2023 is detailed here under-
- I. Jal Marg Vikas Project (JMVP) on National Waterway 1 (NW-1) from Haldia to Varanasi was approved by the CCEA on 3rd January 2018 at a cost of Rs 5369.18 crores. The loan agreement with the World Bank was signed on 2nd February 2018.
- II. The estimated cost of JMVP of Rs 5369.18 crore (US\$ 800.00 million) was to be utilized as per the following funding pattern:
 - (i) IBRD Loan Rs. 2,512.00 crores (US\$ 375.00 million);
 - (ii) Government of India Counterpart Funds (budgetary allocation and proceeds from issue of infrastructure bonds: Rs. 2,556.00 crores (US\$ 380.00 million); and
 - (iii) Private sector participation under PPP mode: Rs 301.00 crores (UD\$ 45.00 million).
- III. Consequent to the review held on 10.06.2020 through teleconferencing by Ministry of Shipping under the chair of Secretary (Shipping) with the IWAI, the estimated cost of JMVP was revised to Rs. 4,633.81 crores from the original estimated cost of Rs. 5,369.18 crores approved by the CCEA on 03.01.2018, thereby effecting a saving of Rs. 735.51 crores (USD 109.78 million) in the project cost. The savings comprise of Rs. 387.10 crores (USD 57.78 million) from the IBRD loan component and Rs. 348.41 crores from the counterpart fund component. The revised cost estimate also includes several activities aligned to the Arth Ganga Concept estimated to cost Rs. 746.00 crores. Consequently, on the request of IWAI/ Ministry of Shipping, Department of Economic Affairs (DEA) has requested the World Bank on 17.06.2020 for cancellation of USD 57.78 million from the overall IBRD loan for the JMVP. As a result, the IBRD loan component will get reduced to USD 317.22 million.
- IV. The project implementation, including the work on activities aligned to the Arth Ganga Concept, is planned to be completed by December 2023, and is progressing as per the original schedule.
- V. The project has achieved an overall financial progress of 52.59% of the revised cost and physical progress of 53.10%. Present status of civil works is as under-
- VI. Physical progress of Multimodal terminal at Varanasi is 100%; and financial progress is Rs. 182.33 cr.
- VII. Physical progress of Multimodal terminal at Sahibganj is 100%; and financial progress is 275.66 Cr.
- VIII. Physical progress of Multimodal terminal at Haldia is 99.61 %; and financial progress is 509.05 Cr.
- IX. Physical progress of new navigation lock at Farakka is 97.52 %, and financial progress is 366.27 Cr. The civil work of lock gate is substantially completed.

- X. Dredging Management Plan (DMP) in consultation with Expert Committee including NTCPWC, IIT-Madras has been prepared and approved by IWAI Board for implementation.
- XI. Provision of least assured depth (LAD) of 3m and bottom channel width of 35/45 m on the Farakka-Kahalgaon stretch (146 Kms), Sultanganj-Mahendrapur stretch (74 kms) and Mahendrapur-Barh stretch (71 kms) through Performance Based Assured Dredging contracts. The contracts were awarded to M/s Adani Ports & SEZ Ltd. on 9.04.2018, 12.04.2019 and 12.04.2019 at costs of ₹177.00 crores, 159.30 crores and 182.9 crores respectively. Financial Progress: (1) Farakka Kahalgaon stretch: ₹ 172.30 cr.; (2) Sultanganj Mahendrapur stretch: ₹ 95.70 cr.; and (3) Mahendrapur-Barh stretch: 91.16 cr.
- XII. Now based on consultation with stake holders, dredging plan has been reviewed by the expert committee on 18.10.2022. Accordingly, as per DMP 2022 the following procurement activities being undertaken.
- XIII. Barh to Majahua stretch is divided into two parts:
 - a. Digha -Majahua stretch (95 Km) Tender floated on 28.02.2023 and pre-bid scheduled on 10.03.2023. bid opened on 23.05.2023, one bid received, technical evaluation in progress.
 - b. Barh Digha stretch (74 Km) tender floated on 27.04.2023, bid submission due on 13.06.2023
- XIV. Majhaua Ghazipur (115 Km): Tender published on 28.04.2023, Pre-bid meeting was held on 10.05.2023, Pre bid replies is under approval, bid submission due on 20.06.2023.

XV. Trebeni – Farakka stretch –

Stretch has been divided into 2 parts after 3 failed attempts, the status of the stretches are as follows

- (i) Farakka Katwa (199 km) NIT has been floated on 5th January 2023 and pre-bid held on 16th January 2023. Bid opened on 05.04.2023 and 04 bids have been received. Technical evaluation under progress.
- (ii) Katwa- Tribeni (152 km) NIT has been floated on 5th January and pre-bid held on 19th January 2023. Bid opened on 03.04.2023 and 04 bids have been received. Technical evaluation under progress.
- XVI. Tender for river bend correction at upstream approach channel, new navigation lock at Farkka has been floated on 25.06.2022 and pre-bid was held on 04.07.2022. Technical bids were opened on 04.08.2022. The tender has been cancelled as all the 3 bids were nonresponsive/invalid. Now, the work is being re-tendered, bid document is prepared and under approval.
- XVII. Tender for the Haldia Access channel was floated on 17.06.2022. Pre-bid was held on 29.06.2022. Technical bids opened on 18.08.2022. Single bid received technical evaluation has been completed. The board of directors have recommended the cancellation of tender.

Fresh tender has been floated on 12th January 2023 and pre-bid has conducted on 23rd January 2023. Bids opened on 06.04.2023 and 02 bids have been received. Technical evaluation under progress.

Tender for Fire protection works at MMT Haldia has been floated on 14.02.2023. Prebid held on 24.02.2023 and bids opened on 14.03.2023 and notification of award issued on 18.05.2023

XVIII. Presently, no dredging is planned on the Kahalgaon-Sultanganj stretch (60 km) due to the presence of Dolphin Sanctuary.

XIX. Freight movement on NW-1 has increased from 4.89 MT in 2016-17 to 10.93 MT in 202-21 there by marking an increase of 123% since 2016-17 and CAGR of 22.19%.

XX. Construction of IMT -Terminal at Kalughat, NIT was released on 17.12.2020; the pre-bid has been conducted on 06.01.2021. Tender was opened on 30.03.2021 only two bids received. The evaluation is completed. Bid Evaluation Report forwarded to World Bank and NOC from World Bank received on 30.08.2021. Notification of Award issued on 10.09.2021. The contractor has submitted the contract performance guarantee and the contract has been signed on 26.11.2021. Agency has mobilized at site. Physical progress stands at 56.15% and financial at 34.32 %

- a. Piling of approach trestle completed.
- b. Ground floor slab casting of TAB & WAB building completed and brick work is in progress
- c. Construction of boundary wall is in progress
- d. Pilling work of Jetty is in progress
- e. Casting of super structure elements are in progress
- f. Foundation work for electrical sub-station building in progress
- g. Work for the underground water tank is in progress
- h. Construction work for Over Head Water Tank (OHT), Security room and Weigh Bridge control room in progress
- i. Bank protection work is in progress

XXI. Tender for TSSC cum PMC for supervision services at IMT Kalughat was floated on 28.10.2021. Technical Bids were opened on 17.12.2021. Financial bid opened on 30.03.2022 and LOA to consultant (M/s Arkitechno Consultants India Pvt Limited) has been issued on 11.05.2022. The consultant has mobilized on-site on 1st June 2022 and the work is under progress.

XXII. Tender for Solid- Liquid Waste Collector has been released on 03.12.2021; pre-bid held on 13.12.2021. Technical bids opened on 03.01.2022 where 3 bids were received. Financial bid has been opened on 16.02.2022 and Notification of Award issued on 12.03.2022 to M/s TPS Infra Pvt Ltd.The equipment has been successfully delivered to the site and the work has been completed.

XXIII. Letter of Award issued for comprehensive consultancy services for preparation of DPR for IWT sector development under JMVP-II on 08.12.2021. The study is in progress.

XXIV. Contract for consultancy services for preparation of DPR for modernization/renovation of existing navigation lock at Farakka was signed on 11.01.2022. The study is under progress and draft inception report was submitted on 11.03.2022 which has been accepted by IWAI.

- j. The inception report and conditional assessment reports have been submitted by the consultant
- k. DPR submitted on 17.01.2023 and submitted to IIT Kharagpur for vetting on 06.03.2023. Final Tender document shared by consultant, awaiting approval from WB to proceed with NIT

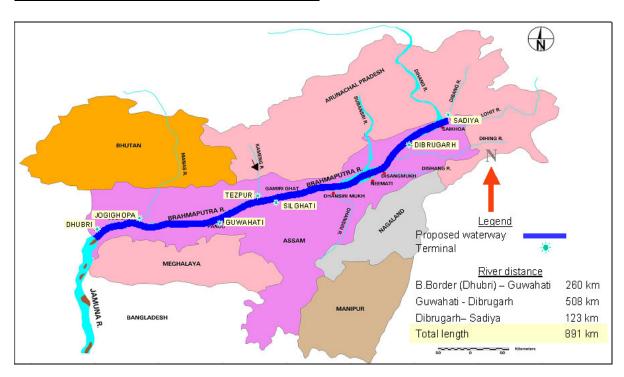
1. Extension of time submitted by the consultant till 25th June 2023, approved by competent authority on 23.3.2023.

XXV. Agreement signed between IWAI & CICMT, IIT-Kharagpur for providing consultancy services to design quick mechanical opening mechanism for pontoon kulfi system on 01.12.2021. CICMT, IIT Kharagpur presented the draft inception report for the design of quick mechanical opening for pontoon kulfi system on 24.01.2022. Draft DPR has been submitted on 10.05.2022. The final DPR has been accepted by IWAI in June 2022.IRS has appraised the design submitted by CICMT IIT KGP on 03.01.2023.

XXVI. Agreement signed between IWAI & IIT- Roorkee for providing technical assistance for channel stabilization works for development of navigation channel with eco-friendly techniques at 17 locations on NW-1 on 08.12.2021.DPR submitted and approved, Cost estimate concurred by finance wing, tender document under financial concurrence prior to approval by competent authority.

XXVII. The Consultancy for Project Management Consultancy (PMC) was awarded to M/s PWC at a cost of Rs. 10,60,50,000/- + GST on 27.01.2022. The agreement was signed on 31.01.2022. The team has been deployed at IWAI office and the kickoff meeting was held on 16.02.2022 and consultant has mobilized on site on 01.02.2022.

National Waterways No. II (The Brahmaputra)



22. National Waterway- 2: River Brahmaputra from Dhubri (Bangladesh Border) to Sadiya (891 km) was declared as National Waterway -2 (NW-2) in 1988. The waterway is being developed with

fairway of required depth and width, day and night navigation aids and terminals. The facilities created on NW-2 and planned in the near future with status as on 31.05.2023 are as under:

- I. Development of NW 2 at a revised SFC cost of Rs 474 crore during 2020-21 to 2024-25 is approved. The waterway is being maintained with fairwayof1.5m to 2.5 Least Available Depth (LAD) and 45 m width, with day and night navigation aids and terminals.

 A navigable fairway of 45-meter width and 2.50 meter Least Available Depth (LAD) from Dhubri to Neamati (629km) and 2.00 meter LAD from Neamati to Dibrugarh (139 km) and 1.50 meter from Dibrugarh to Sadiya (123km) is being maintained and waterway is operational for movement of cargo. The development of NW-2 enables waterway connectivity of North East Region with Kolkata/Haldia ports via Indo-Bangladesh Protocol Route.
- II. There are 18 activities approved by SFC and DIB for NW-2. Out of these 18 activities, 06 are of permanent nature viz, (i) Construction of Jogighopa terminal, (ii) Alternative Road to Pandu Port, and (iii) Ship repair facility at Pandu& (iv) Construction of Cargo cum Passenger terminal at Bogibeel, Dibrugarh (new component) (v) Boundary wall at IWAI parcel of land at Pandu, Neamati and Nagaghuli (vi) Improvement of existing approach road including study & land acquisition for Dhubri Terminal. The remaining 12 activities are of recurring nature viz., (i) Fairway development (ii) O&M of navigational aids (iii) O&M of fixed & floating terminals (iv) O&M of vessels (v) Consultancy training(vi)Maintenance of e-portal etc. These activities are carried out on annual basis.
- III. Status on permanent nature activities:
 - (a) Terminal at Jogighopa
- M/s National Highways Infrastructure Development Corporation Ltd (NHIDCL) has been entrusted with the construction work on deposit work basis.
- NHIDCL has awarded the work on 06.10.2021 to M/s DVP Infra Project Pvt Ltd. Agreement signed on 28.12.2021
- Work has been Commenced.
- Work likely to be completed by Dec 2023. Physical progress is 25%
 - (b) Construction of Cargo cum Passenger terminal at Bogibeel, Dibrugarh
- ➤ Site verification for land is completed in consultation with DC, Dibrugarh.
- ➤ An agreement with IPRCL at 7.00 % PMC charge has been signed on 18.01.2023
- > IPRCL submitted Feasibility Study Report (FSR) which has been accepted by IWAI.
- ➤ IPRCL Authorized to prepare DPR and tender in parallel on 24.02.2023. Accordingly, IPRCL invited tender for civil works on 08.03.2023, opened on 08.04.2023 & sought IWAI's concurrence vide letter dated 15.04.2023 being 31.87% higher than estimated cost put to tender.

- ➤ A letter has been sent to Ministry on 21.04.2023 for approval of proposal of IPRCL to award the project to L-1 bidder at 31.87% higher than cost put to tender.
- ➤ In response to Ministry's letter no. IWT-11011/118/2023-IWT dated 11.05.2023 forwarding the Minutes of Meeting held on 09.05.2023 under Chairmanship of Secretary (IWT), Ministry wherein IWAI was directed to give their recommendation on the IPRCL's justification for cost escalation and take the IWAI Board's approval, and Agenda was placed in IWAI's Board meeting held on 31.05.2023 for approval of the IPRCL's proposal to award the cited work to L-1 bidder at a cost of Rs.33,55,97,000.00(28.09% higher than the estimated cost put to tender). Board resolution is awaited.

IV. Fairway development:

- ➤ MoPS&W vide letter dated 18.11.2022 conveyed the approval for the work of development & Maintenance of fairway width of 32 m and depth of 2m/2.5 m for 3 years in various National Waterways in NER on deposit basis to DCI with 5% supervision charges and DCI will execute the work on behalf of IWAI.
- Agreement is signed with DCI & IWAI.
- ➤ Tender for NW-2(River Brahmaputra) and NW-31 (River Dhansiri) has been floated with last date for submission of bid as 31.03.2023.
- > Technical evaluation is completed by DCI & submitted to appointed observer of IWAI for their observations.
- ➤ Decision pending for the decision of MoPS&W on M/s Reach Dredging.

Expenditure of SFC -Rs.184.22 Cr out of approved revised SFC Rs, 474.00 Cr. (for NW-2). Cumulative physical progress is 38.86% (for the above I to IV).

- V. A proposal of DIB for the Ship Repair facility at Pandu, Guwahati and Development of Approach Road from Pandu Port to NH-27 at a total cost of Rs. 388.00 Crores has been approved.
- a. Alternative road to Pandu Port to NH-27(Estimated Cost-Rs.180 Cr.)
- Work entrusted to PWD (Roads), Govt of Assam on deposit work basis.
- ➤ MoU has been signed with PWD(Roads), Govt. of Assam on 31.08.2022.
- > Final Alignment Report along with complete DPR as submitted by PWD(Roads), Govt of Assam stands approved by IWAI.
- > DIB for project at a total cost of Rs. 180.00 Cr. has been approved on 03.01.2023
- ➤ Work has been awarded on 17.02.2023 to Sri Kisore Bora for the total cost of Rs.153,04,66,738.00 by the PWRD, Govt. Assam.

- Work Commenced.
- ➤ A D.O. letter from Chairman, IWAI to Chief Secretary, Government of Assam has been sent on 13.04.2023 to compress the completion period to 2 years.
- ➤ Pile test started on 14.05.2023(Physical progress-17%)
- Schedule completion by Feb, 2026(as per LoA).

b. Ship repair facility at Pandu (Estimated Cost- Rs. 208 Cr.)

- ➤ Construction of ship repair facility entrusted to Hooghly Cochin Shipyard Ltd (HCSL), a subsidiary of CSL, on deposit work basis.
- Agreement has been signed between IWAI & HCSL (A subsidiary of CSL) on 26.08.2021.
- Addendum I to the Agreement has been signed on 16.02.2022.
- ➤ Govt. of Assam, vide letter No. DWT(T)12/07/P-II/127 dated 26.10.2022, agreed for handing over additional strip of land about 8 m wide parallel to the bank on the waterfront measuring 0.229 Acre land under the possession of IWT, Assam, to IWAI for slipway project.
- ➤ HCSL engaged NTCPWC as PMC for site investigation, finalization of Proposal, preparation of DPR, detailed design, Bid Process management etc.
- ➤ DIB for project at a total cost of Rs. 208.00 Cr. has been approved on 03.01.2023
- > DPR prepared, approved by IWAI.
- ➤ Work has been awarded on 31.03.2023 to M/s L & T Geostructure Pvt. Ltd., Chennai at a total cost of Rs. 145,49,50,258.00.
- As awarded cost is Rs. 7.30 cr. higher than the provision sanctioned in DIB, a letter to Ministry for approval of additional amount of Rs. 7.30 cr. has been sent on 11.04.2023.
- ➤ 3.599 acre of land under possession of IWAI has been handed over to HCSL on 18.04.2023.
- > HCSL has been handed over the site to M/s L & T Geo Structure on 04.05.2023.
- > Topography completed, under review with NTPCWC.
- Raw materials testing commenced and trail mix started from 23.05.2023.
- ➤ Piling equipment Mobilized on 19.05.2023.
- Likely completion by March, 2025.

Expenditure of DIB-Rs. 37.48 Cr. out of approved DIB Rs.388.00 Cr. (For project on NW-2) Cumulative physical progress is 9.66% [for the above projects V (a) & V (b)].

23. The total cargo traffic on NW II was 6.30 lakh tonnes during 2022-23 as against 4.28 lakh tonnes during 2021-22 Commodity-wise composition of cargo movement over the years on this waterway is given below:

Table 5: Composition of Cargo Moved on National Waterway - II (In Tonnes)									
Commodity	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23			
Building Material	-	-	-	-	-	-			
Food items	-	-	-	-	-	-			
Miscellaneous	3162151 (100)	2871817 (100)	392767 (100)	307095 (100)	428134 (100)	629853 (100)			
Mix	-	-	-	-	-	-			
Ore/Minerals	-	_	-	-	-	-			
POL/POL Products	-	-	-	-	-	-			
Total NW II	3162151	2871817	392767	307095	428134	629853			

Source: Inland Waterways Authority of India for National Waterways.

Note: Figure within bracket indicates percentage to the total

Neg. – negligible

Miscellaneous – Machinery, Steam Turbine, ODC Cargo, Harbour Crane and Turbine & Generator etc.

National Waterway No. III (West Coast Canal)

24. West Coast Canal from Kottapuram to Kollam (168KM) together with Champakara canal (14Km) and Udyogmandal canal (23 KM) was declared as NW-3 in 1993. The National Waterways Act 2016 further extended stretch of West Coast Canal from Kottapuram to Kozhikode for a length of 165 km, thereby extending the total length of NW-3 to 370 km. IWAI is conducting channel developmental works that includes dredging for providing fairway of 2.20m LAD, channel width of 38 / 32m, 24 hours navigational facilities and terminal facilities equipped with mechanical cargo handling equipment. IWAI has constructed nine permanent terminals at Kottapuram, Aluva, Maradu, Vaikkom, Thanneermukkom (Cherthala), Alapuzha, Kayamkulam, Thrikkunnapuzha and Kollam. Further, terminal land is available at Kakannad and Chavara. In addition, two terminals with Ro-Ro facilities have been constructed at Bolghattyand Willingdon Island in Cochin Port limit sand 2 nos. of Ro-Ro vessels built by IWAI were deployed for Ro-Ro service between these two terminals.NW-3isprovided with 24 hours navigational aids in the 205 km route. Total tonnage of 32.28 lakh tonnes of cargo transported on NW-3 during the FY2022-23. IWAI has sanctioned INR38 crore for reconstruction of lock gate at Trikkunnapzha across NW-3 for utilization of full capacity of NW-3 under execution through State Govt.of Kerala.

25. The volume of cargo on NW III increased to 32.28 lakh tonnes in 2022-23 from 16.95 lakh tonnes in 2021-22 recording an increase 90.44%. Commodity wise composition of cargo movement over the years on this waterway is given below:

Commodity	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
C1 : 1	323501	387002	540997	661389	364702	585882
Chemicals	(75.6)	(92.1)	(99.07)	(89.57)	(21.52)	(18.15)
Fertilisers	57998	29403	0	0	0	132447
	(13.6)	(7.0)	(0.0)	(0.0)	(0.0)	(4.1)
Food items	-	-	-	-	-	-
Mix	42860 (10.0)	247 (0.1)	5054 (0.93)	77042 (10.43)	1218042 (71.86)	2442393 (75.67)
Ore/Minerals	-	-	-	-	-	-
POL/POL products	3630 (0.8)	3630 (0.9)	0 (0.0)	0 (0.0)	112289 (6.62)	67174.1 (2.08)
Total NW III	427989	420282	546051	738431	1695033	3227896

Source: Inland Waterways Authority of India for National Waterways.

Note: Figure within brackets indicate percentage to the total

Mix -Liquid effluent, Building materials etc.

The cargo composition of freight traffic shows that Chemicals (18.15%), Mix (75.67%), Ferilisers (4.1%) and POL/POL products (2.08%) were the major commodities moved through NW-III during 2022-23.

26. The total cargo moved through all the three National Waterways (NW) increased by 30.47% from 130.51 lakh tonnes during 2021-22 to 170.28 lakh tonnes during 2022-23. In 2022-23, 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 77.3%, 3.7%, and 19.0% respectively. In terms of tonne kilometers, the share of NW I, NW II and NW III is 98.3%, 0.6% and 1.1% of the total tonne kilometers moved. The highest share of NW I in tonne kilometers reflect long average distance travelled by cargo of 142.02 kms compared with an average distance of 16.93 kms for NW II and average distance of 6.60 kms for NW III in the year 2022-23. Table 7 gives cargo movement of National Waterways (NW- I, II & III) in Tonnage and Tonne Kilometers.

Sl. No	Details of	Cargo N	Ioved (Lakh	Tonnes)	Tonne Kms (In Lakh)			
	Waterway	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	
1	National Waterway No. I	92.06 (89.8)	109.28 (83.7)	131.70 (77.3)	23309.40 (98.9)	20082.07 (98.7)	18703.99 (98.3)	
2	National Waterway No. II	3.07 (3.0)	4.28 (3.3)	6.30 (3.7)	44.90 (0.2)	74.38 (0.4)	106.67 (0.6)	
3	National Waterway No. III	7.38 (7.2)	16.95 (13.0)	32.28 (19.0)	214.80 (0.9)	179.19 (0.9)	213.19 (1.1)	
	Total NWs	102.51	130.51	170.28	23569.10	20335.64	19023.86	

Source: Inland Waterways Authority of India for National Waterways.

Note: 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.

Figure within brackets indicate percentage to the total

27. The details of the commodity wise composition of the cargo moved on the National Waterways I, II and III taken together are given in Table 8.

Table 8: Compositi	on of Cargo	Moved on nat	ional waterwa	ys No. I,II & II	I (In Tonnes)	
Commodity	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Building Material	3568909	4478790	4650148	4816082.1	4204485	4057611.4
	(39.4)	(42.1)	(46.3)	(47.0)	(32.2)	(23.83)
Chemicals	323501	387002	540997	657540	364702	585882
Chemicais	(3.6)	(3.6)	(5.4)	(6.4)	(2.8)	(3.44)
Fertilisers	57998	29403	0	0	0	132447
retuilsers	(0.6)	(0.3)	(0.0)	(0.0)	(0.0)	(0.78)
Food items	38340	260	5134	105743.47	162373	19716.1
	(0.4)	(Neg.)	(0.1)	(1.0)	(1.2)	(0.12)
Miscellaneous	3164967	2877140	2555281	1648542	3426142	4371074.1
	(34.9)	(27.1)	(25.42)	(16.1)	(26.3)	(25.67)
Mix	1737056	2854333.9	2274178	3016369	4742490	7516270.6
	(19.2)	(26.8)	(22.6)	(29.4)	(36.3)	(44.14)
Ore/Minerals	0	0	0	0	0	0
	(0)	(0)	(0.0)	(0.0)	(0.0)	(0.0)
POL/POL Products	3630	3660	0	0	112289	318174.10
TOL/TOL Troducts	(Neg.)	(Neg.)	(0.0)	(0.0)	(0.9)	(1.87)
Coal	160262	924	9409	0	15543	10565.7
	(1.8)	(Neg.)	(0.1)	(0.0)	(0.1)	(2.06)
Iron & Steel	14839	9946	16068	7222.20	22931	15860.91
11011 & 50001	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)	(0.09)
Total	9069502	10641459	10051215	10251499	13050955	17027602

Source: Inland Waterways Authority of India

Note: Figure within brackets indicate percentage to the total

Mix - Food Items, Iron Steel & Building Material (Flyash, Cement, Stones) etc.

Miscellaneous - Machinery, Households, Steam Turbine, ODC Cargo, Harbour Crane and Turbine & Generator etc.

NATIONAL WATERWAYS 4

- 28. NW-4 was declared in 2008 for the length of 1,078 km comprising of the Kakinada–Puducherry stretch of canal sand the Kaluvelly Tank, Bhadrachalam–Rajahmundry stretch of river Godavari and Wazirabad–Vijayawada stretch of river Krishna in Andhra Pradesh & Tamil Nadu.With the notification of the National Waterways Act 2016, the total length of NW-4 got extended to 2,916 km by extending river Godavari upto Nasik and river Krishna upto Galagali.
- ➤ Projects completed so far include fairway development works in the Vijayawada-Muktyala stretch of river Krishna, fabrication /installation of four floating pontoons and land acquisition for the Ro-Ro terminals at Harshchandrapuram and Muktyala.
- Land acquisition for the Ro-Ro terminal at Ibrahimpatnm is underway with the State Govt. of Andhra Pradesh.

NATIONAL WATERWAY 5

29. Govt. of India declared National Waterway-5 (NW-5) in Mahanadi/ Brahmani delta, Matai River & East Coast Canal (ECC) in November 2008 for total length of 588 Km. The Brahmani /Mahanadi river basins extending in Madhya Pradesh, Jharkhand & Odisha have rich deposits ofminerals, coal, iron ore and large production of various industrial & agricultural products. Thelikely commodities to be transported through NW-5 could be divided into three groups namely, Minerals (Coal, Iron Ore), Agricultural products (Paddy, Rice, Straw, Animal fodder, fish, Jute) and Finished goods/ Manufactured products (from Kalinga nagar industries, textile sand forest).

IWAI awarded the preparation of Detailed Project Report on NW-5 (East Coast Canal &Brahmani / Kharsua River System) to WAPCOS Ltd and DPR submitted in March, 2010. The length wise distribution of NW-5 in 3 different stretches, as per the DPR is given below:

(i) StretchI : TalchertoMangalgadi : 237Km
(ii) StretchII : DhamratoParadip : 95Km
(iii) StretchIII : DhamratoGeonkhali : 256Km

Total : 588Km

Based on the feasibility studies conducted and DPR updated on 2016 and also keeping in view thepotential of cargo movements as emanated through various studies, it was decided to initially develop 332 Km of economically & commercially viable stretches of NW-5 between

Paradip /Dhamra and Talcher in following 2 phases and balance length of the waterway from Dhamra toGeonkhaliisnotconsideredfeasiblefordevelopment:

(i) Phase-I:BetweenParadip/DhamraandPankapal : 212Km.

(ii) Phase-II:PankapaltoTalcher : 120Km.

Phase-Idevelopmentcovering212KmbetweenParadip/DhamraandPankapalisproposed.

Action plan for development of NW-5:

- i. Monthly Longitudinal Thalweg Survey for assessing depth and horizontal / vertical clearance for cross structures / bridges (212 km).
- ii. Consultancy work has been completed for preparation of Detailed Project Report (DPR) followed by Front End Engineering Design (FEED) for hydraulic interventions except the final vetting of design and drawing, modification of cross structures for navigational clearances. Environmental clearance (EIA & EMP) including CRZ and Wildlife Clearance MoEF&CC informed on 05th Jan, 2021 that no EC is required. Only CRZ & Wild life clearances are to be obtained from Govt. of Odisha.
 - Navigational clearance below existing power lines from Dhamra / Paradip to Pankapal on deposit basis through Govt. of Odisha is nearing completion.
 - Under New initiative movement of Gypsum started from IFFCO Riverine Jetty on NW-64 (Mahanadi) to Paradip Port (NW-5). Nearly 4,02,613 MT of Gypsum have been shipped through IWT mode during the FY 2022-23. This will clear the huge accumulation of (approx. 52 million MT) gypsum at the IFFCO plant. MoU signed between IWAI and UltraTech cement for transport of the gypsum to its plants around Hooghly-Ganga River systems in West Bengal and Bihar.
 - An EoI published for development of the waterway transport on rivers Brahmani (NW-5) and Mahanadi (NW-64) under PPP (Design, Built, Finance, Operate & Transfer DBFOT model) for connecting Ports of Paradip and Dhamra to Kalingnagar Talcher mining and industrial areas.
 - Only single bid is received in EoI process with a condition for investment on DBFOT model.
 - A Transaction Advisor (M/s KPMG) has been appointed for finalising the concessionaire for development of the select stretches of NW-5 & NW-64 in Odisha. The Consultant is preparing the bid document for RFQ and RFP.

NATIONAL INLAND NAVIGATION INSTITUTE (NINI)

30. The National Inland Navigation Institute (NINI) was set up by Inland Waterways Authority of India (IWAI) at Patna, Bihar in February 2004 with a view to Develop Human Resource for the Inland Water Transport Sector. The Institute is managed by Inland Waterways Authority of India (IWAI) under the Ministry of Ports, Shipping and Waterways, Govt. of India. Total 461 Trainees have been trained for the F.Y. 2022-23 & the major achievements during the year 2022-23 were as below:-

The Institute (NINI) imparts training to IWT personnel in the following disciplines:

- Induction Training of Inland Vessel G.P. Rating.
- Preparatory Course for all grades of Deck & Engine.
- Inland Manoeuvring Simulator Course.
- Basic Safety Course for Inland Vessel
- Hydro-graphic Survey
- Navigational Aids & Pilot Training
- Operation, repair & Maintenance of Inland Vessel
- Basic Dredger Course
- Advance Dredger Course
- Refresher Course for Inland Master
- Induction Course for IWAI Supervisors
- Marine Engineering of IWAI Supervisors
- Riverine Navigation Course
- Induction Training of Newly recruited floating Staff of IWAI Personnel
- Jalayatri Sahayak Course for IWT Assam Personnel

(i) The following training activities were carried out:

- Induction Training G.P. Rating Course (35th, 36th & 37th Batch)
- The GP Rating (Inland Vessel) trainees were imparted practical training on Training Ship (HSD) Sone.
- Master Trainer for Safe Swimming Programme was successfully conducted for Bihar State Disaster Management Authority, Govt of Bihar.
- Workshop on Boat & Navigational Safety with special reference to Hydro-Meteorological Disaster by NIDM.

- Basic Safety Course for Inland Vessel (PSSSR, PST, EFA, PST & SSC)
- Jalayatri Sahayak Course for IWT Sector
- Hydrographic & Vessel Crew Training.

(ii) Preparatory Course for Inland Vessel Certificate of Competency.

- Serang
- Master Class II
- Master Class I
- Second Class Engine Driver
- First Class Engine Driver
- I V Engineer
- Inland Vessel Manoeuvring Simulator Course

(iii) Conducting Inland Vessel Examination on behalf of Govt. of Bihar.

Examination Conducted for candidates desiring to obtain Certificate of Competency for different grades mentioned below as per Inland Vessel Rules, Govt. of Bihar.

- Serang
- Master Class II
- Master Class I
- Second Class Engine Driver
- First Class Engine Driver
- I V Engineer

(iv) Affiliations and Associations:

- The ISO 9001:2015 certificate by ABS Quality Evaluations renewed subsequent to their inspection of the Institute. The process for developing and adopting the ISO approved quality management system for knowledge and Training Management (21001-2018) is also on going.
- NINI conducts the CoC (Certificate of Competency) exams in NINI Campus on behalf of Transport Department Govt. of Bihar.
- MoU signed between Inland Waterways Authority of India (IWAI) with Indian Maritime University (IMU) for establishing a frame work for academic and research, co-operation in the area so mutual interest.
- Subscription to the digital plat form of e-Granthalaya software for updating library books.

(V) Human Resource:

The Institute has developed a pool of qualified and experienced administration and academic members for management of the Institute. The Administration & Management of National Inland Navigation Institute has been awarded to M/s Sea Sprint Services Pvt. Ltd for smooth operation, administration and systematic development of academic activities at NINI including placement of trainees and development of NINI as Centre of Excellence.

IWT ACTIVITIES – STATE GOVERNMENT

31. The number of vessels deployed and Number of Passenger carried on Inland Waterways across the reporting States is given in Table 9.

Table 9: Number of Inland Water Vessels and Passenger Carried – State wise								
	Number of Vessels				No. of Passengers Carried (In Thousand No.)			
State/UT								
	2019-20	2020-21	2021-22	2022-23	2019-20	2020-21	2021-22	2022-23
Assam	203	256	81	81	6585.91	1979.20	4385.95	3155.38
Bihar*	138	68	16	16	578	N.A.	0.00	0.00
Goa	244	265	233	253	-	-	-	-
Karnataka	37	37	-	412	1617.00	916.25	928.02	1283.79
Kerala	5590	5018	5248	5892	20535.31	8874.78	19224.53	20262.39
Maharashtra	1663	1421	1440	1503	15922.30	9106.53	13667.60	18724.02
Odisha*	73	73	66	66	131.22	131.22	118.41	118.41
West Bengal	2381	2399	2369	551	116880	126980	136369	29762.61
Tamil Nadu	2	-	-	2	-	-	-	-
Gujarat	454	437	421	286	-	-	-	-
Jharkhand*	-	2	-	-	-	-	-	-
Uttar								23.86
Pradesh								23.60
TOTAL								
(reporting	10785	9976	9874	9062	162249.74	147987.98	174693.51	73330.46
states)								

Source: State Governments

The total number of vessels in the States during 2022-23 was 9062 compared to 9874 vessels in the year 2021-22. Kerala has reported the highest numbers of vessels 5892 followed by Maharashtra (1503) and Karnataka (412). However, the Number of Passengers carried in the year 2022-23 was 73330.46 thousand numbers. West Bengal has reported the highest No. of Passengers carried through waterways which was 29762.61 thousand numbers followed by Kerala 20262.39 thousand numbers.

^{*:}Information has not received. Previous Year data has been Repeated.

PERFOMANCE OF COMPANIES ENGAGED IN IWT

32. The data received from IWT companies shows that amongst the reporting private companies the maximum number of vessels was held by Eastern Navigation (38) followed by, Vedanta Ltd. (32), West Bengal Surface Transport Corporation Ltd. (28), Hooghly Nadi Jalapath Paribahan Samabaya Samity, Kolkata (27), and Jindal ITF Ltd. (25). Detailed performance of companies engaged in inland water transport activities is given in Table 4.1 & 4.2 (section 4).

The Maximum cargo of 3382.67 thousand tonnes was carried by PNP Maritime Services Pvt. Ltd followed by JSW Jaigarh Port Ltd. (2255.58), Vedanta Ltd. (1743.26 thousand tonnes), and Jindal ITF Ltd. (575 thousand tonnes).

33. Cargo moved by top 10 reporting private companies along with their number of powered vessels employed in 2022-23 is given below:

Name of the Company	Cargo moved ('000 tonnes)	No. of Powered Vessels		
1. PNP Maritime Services Pvt. Ltd.	3382.67	20		
2. JSW Jaigarh Port Ltd	2255.58	4		
3. Vedanta Ltd	1743.26	32		
4. Jindal ITF Ltd.	575	25		
5. JSW Salav Steel Ltd.	418.39	1		
6. TP RoyChowdhury & Co. Pvt. Ltd.	352.11	5		
7 VIVADA Inland Waterways Ltd., Kolkata	251	12		
8. Cochin Bunkers Pvt. Ltd.	219.41	4		
9. Infrastructure Logistics Pvt. Ltd.	218.6	4		
10. Azzura Marine Liners Pvt. Ltd.	154.15	4		

Source: Private Companies/ Operators engaged in inland water transport activities

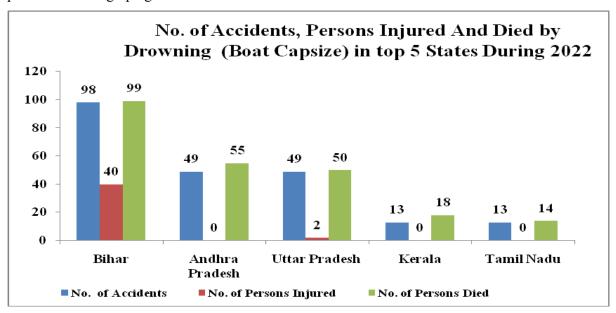
FINANCIAL OUTLAY & EXPENDITURE FOR IWAI

35. The Budget Estimate (BE) and RE during 2019-20 was Rs. 614.56 crore and Rs. 406.60 crore respectively and expenditure during the same year was Rs. 732.93 crore (including expenditure from Bond fund raised during 2017-18). The Budget Estimate (BE) and RE during 2020-21 was Rs.540.00 crore and Rs. 413.50 crore respectively and expenditure during the same year was Rs. 367.30 crore. The Budget Estimate (B.E.) during 2021-22 was Rs. 486.10 crore and Revised Estimate (R.E) during 2021-22 was Rs. 416.80 crore. The expenditure during the same year was Rs. 425.45 crore. For the year 2022-23 the Budget Estimate (B.E.) was Rs. 490.81 crore and Revised Estimate was Rs. 495.31 crore. The expenditure during the same year is Rs. 514.70 crore (provision/unaudited). BE 2023-24 is Rs. 861.96 crore.

Detailed financial outlay & expenditure for IWAI is given in Table 5.1 (section 5).

INLAND WATERWAYS TRANSPORT ACCIDENTS

34. The total number of accidents on inland waterways during the year 2022 was 256 out of which 98 were reported in Bihar followed by Andhra Pradesh and Uttar Pradesh with 49 accidents each. The number of deaths during the year due to boat mishaps was highest in Bihar at 99 followed by Andhra Pradesh and Uttar Pradesh with 55 and 50 respectively. A striking feature observed in all the States (Table 6.1, Section 6) 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. Number of Accidents, persons injured and persons died by drowning (boat capsize) for the top five state during 2022 is presented in the graph given below.



Source: Accidental Deaths & Suicides in India- 2022, NCRB, M/o Home Affairs, Govt. of India

SECTION - 1

NAVIGABLE WATERWAYS AND INFRASTRUCTURE

			2022-2	3
SI. No.		State/Rivers/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
	•	•	•	
1	ANDHRA PR			
	(i)	Godavari (Bhadrachalam to Rajahmundry)	1530	171
	(ii)	Krishna(Wazirabad to Vijayawada)	1400	157
		Others **	831.73	831.73
		Total	3761.73	1159.73
2.	ASSAM			
	(i)	Brahmaputra	2800	891
	(ii)	Barak	900	121
	(iii)	Subansiri	442	111
	(iv)	Dhansiri/Chathe	135	110
	(v)	Dehing	120	114
	(vi)	Aai	85	71
	(vii)	Beki	85	73
	(viii)	Doyang	352	61
	(ix)	Puthimari	58.234	72 62
	(x) (xi)	Gangadhar Kopili	62 50	62 46
	(xii)	Dikhw	92	63
	(xiii)	Jinjiram	43	43
	(xiv)	Lohit	2677	100
	(XV)	Tlwang (Dhaleswari)	87.136	86
	()	Total	7988.37	2024
3	BIHAR*			
٥.	(i)	Ganga	480	480
	(ii)	Gandak	210	210
	(iii)	Koshi	236	236
	(iv)	Ghaghra	85	85
		Total	1011	1011
4	GOA			
	(i)	Mandovi River	78	66
	(ii)	Zuari River	68	68
	(iii)	Mapusa River	27	27
	(iv)	Chapora River	34	32
	(v)	Tiracol River Sal River	29 20	23 15
	(vi)	Others	20 17	17
		Total	273	248
5	GUJARAT **	** Total		
		. 0 (11)		

			2022-2	3
SI. No.		State/Rivers/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
		·!		
6	KARNATAK	A		
	(i)	Sharavathi	80	27
	(ii)	Tungabhadra	375	375
	(iii)	Malaprabha	270	230
	(iv)	Ghataprabha	160	160
	(v)	Krishna	325	125
	(vi)	Cauvery	270	34
	(vii)	Kabini	117	30
	(viii)	Gurupura	80	20
	(ix)	Gangolli	48	20
	(x)	Bheema	860	125
	(xi)	Udyavara	37	14
	(xii)	Nethravathi	96	26
	(xiii)	Kali	184	29
		Total	2902	1215
7	KERALA			
	(:)	Total of Divers	1007.250	1100 010
	(i)	Total of Rivers Others **	1927.359 954.19	1189.212 762.641
		Total	2881.55	1951.85
		lotai	2001.33	1951.05
8	MAHARASH	ITRA		
	(i)	Banganga River	7.51	2.9
	(ii)	Dudh River	11.33	5.89
	(iii)	Vaitarna River	50	39.3
	(iv)	Ulhas River	38.6	27.4
	(v)	Kal River		14.7
	(vi)	Jagbudi River	25.31	23.7
	(vii)	Shastri River	51.99	48.6
	(viii)	Amba River	49.65	44.2
	(ix)	Patalganga River	24.59	15.8
	(x)	Bhageshwari River	13.66	9.4
	(xi)	Kundalika River		32.9
	(xii)	Savitri River	57.17	52.6
	(xiii)	Vashishti River		48.5
	(xiv)	Machkandi River	21.16	8.26
	(xv)	Vaghotan River	43.7	33.3
	(xvi)	Achra River	10.01	2.91
	(xvii)	Gad River	21.23	21
		Others	506	444.06
		Total	931.91	875.42
9	UTTAR PRA	DESH		
3	(i)	Ganga	166	140
	(-)	Total	166	140

State/Rivers/Canals/Lakes Total Length of the Rivers/Canals/Lakes in the State Navigable Length					(In Kms.)
No.				2022-2	3
10 MIZORAM (i) Chhimtuipui/ Kolodyne River 138.46 118 (ii) Tlawng River 185.15 81.35 (iii) Khawthlangtuipui River 128.08 17 Total 451.69 216.35 (iii) Khawthlangtuipui River 128.08 17 (iii) Khawthlangtuipui River 451.69 216.35 (iii) Brahmani 541 277 (iii) Baitarani 344 32 (iv) Subarnarekha 50 50 (v) Subarnarekha 50 50 (vi) Dhamara 20 20 20 (vii) Salandi 17 17 17 (viii) Panchputra 21 21 21 (ix) Panchputra 21 21 21 (ix) Panel 45 45 (xi) Hatel 30 30 30 (xi) Bansagadai 32 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 6 (xv) Gobari 16 16 (xvii) Ramchandi 16 16 (xvii) Ramchandi 14 14 (xiv) Batigharia 15 (xiv) Cabari 16 (xiv) Cabari 16 (xiv) Cabari 17 (xiv) Cabari 18 (xiv) Cabari 19 (xiv) Cabari 10 (xiv) Cabari 11 (xiv) Cabari 12 (xiv) Cabari 14 (xiv) Cabari 15 (xiv) Cabari 16 (xiv) Cabari 17 (xiv) Cabari 18 (xiv) Cabari 19 (xiv) Cabari			State/Rivers/Canals/Lakes	Rivers/Canals/Lakes in the	Navigable Length
(i) Chhimtuipui/ Kolodyne River 138.46 118 (ii) Tlawng River 128.08 177 Total 451.69 216.35 11 ODISHA *# (i) Mahanadi 493 199 (ii) Brahmani 541 277 (iii) Baltarani 344 32 (iv) Subarnarekha 50 50 50 (iv) Dhamara 20 20 (ii) Salandi 177 (iii) Panchputra 211 221 (ix) Pancel 45 45 (ix) Pancel 4	1		2	3	4
(i) Chhimtuipui/ Kolodyne River 138.46 118 (ii) Tlawng River 128.08 177 Total 451.69 216.35 179 Total 451.69 216.35 177 Total 185.15 185 185 185 185 185 185 185 185 185 1			•		
(ii) Tlawng River 185.15 81.35 (iii) Khawthlangtuipui River 7 Total 128.08 17 Total 128.08 17 Total 451.69 216.35 17 Total 451.69 216.35 17 Total 451.69 216.35 19 216	10	MIZORAM			
(iii) Khawthlangtuipui River Total 451.69 216.35 11 ODISHA *# (i) Mahanadi 493 199 (ii) Brahmani 541 277 (iii) Baitarani 344 32 (iv) Subarnarekha 50 50 50 (iv) Budha Balanga 35 35 (iv) Dhamara 20 20 (ivii) Salandi 177 17 (ivii) Panchputra 21 21 (ix) Pamei 45 45 (ix) Hatel 30 30 30 (ixi) Bansagadai 32 32 (ixii) Tirkota 18 18 (ixiv) Jamboo 6 6 6 (ixiv) Jamboo 6 6 (ixiv) Gobari 16 (ixivi) Ramchandi 16 (ixivi) Baitgharia 14 (ixixi) Birupa 110 (ixix) Birupa 110 (ixixi) Devi 20 20 (ixiii) Prachi 15 (ixixi) Devi 20 20 (ixiii) Prachi 15 (ixixi) Dava 9 9 (ixivi) Raqua 9 9 (ixivi) Raqua 11 (ixixi) Raqua 7 7 (ixixii) Dava 9 9 (ixivi) Raqua 7 7 (ixixii) Raqua 7 7 (ixixiii) Raqua 11 1 11 (ixixiii) Raqua 11 1 11 (ixixiiii) Raqua 11 1 11 (ixixiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		(i)		138.46	118
Total 451.69 216.35 11 ODISHA *# (i) Mahanadi 493 199 (iii) Brahmani 541 2777 (iii) Baitarani 344 32 (iv) Subarnarekha 50 50 (v) Budha Balanga 35 35 (vi) Dhamara 20 20 (vii) Chamara 20 20 (viii) Panchputra 21 21 (ix) Parnei 45 45 (x) Hatel 30 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvi) Ramchandi 16 16 (xvii) Rharansi 14 14 (xviii) Batigharia 14 (xviii) Batigharia 14 (xix) Birupa 1100 1110 (xx) Genguti 45 45 (xxi) Burupa 1100 1110 (xx) Genguti 45 45 (xxii) Devi 20 20 (xxiii) Devi 20 20 (xxiii) Prachi 15 15 (xxiv) Kadha 30 30 (xxv) Kushabhadra 25 25 (xxvii) Daya 9 9 (xxviii) Raļua 7 7 (xxviii) Makara 11 11 (xxviii) Makara 11 11 (xxviii) Raļua 7 7 (xxviii) Makara 11 11 (xxviii) Raļua 7 7 (xxviii) Makara 11 11 (xxviii) Makara 11 11 (xxviii) Raļua 7 7 (xxviii) Makara 11 11 (xxviii) Raļua 7 7 (xxviii) Makara 11 11 (xxviii) North Buckingam Canal					
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(i) Mahanadi 493 199 (ii) Brahmani 541 277 (iii) Baitarani 344 32 (iv) Subarnarekha 50 50 50 (v) Budha Balanga 35 35 35 (vi) Dhamara 20 20 20 (vii) Salandi 177 17 (viii) Panchputra 21 21 21 (ix) Parnel 45 45 45 (x) Hatel 30 30 30 (xi) Bansagadai 32 32 32 (xii) Hansua 37 37 37 (xiii) Tirkota 18 18 18 (xiv) Jamboo 6 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvii) Ramchandi 16 16 (xvii) Batigharia 14 14 (xix) Birupa 1110 110 (xx) Genguti 45 45 (xxi) Luna 37 (xxii) Prachi 15 15 (xxii) Prachi 15 15 (xxii) Prachi 15 15 (xxii) Prachi 15 15 (xxiii) Prachi 15 15 (xxiii) Prachi 15 15 (xxiv) Kadha 30 30 (xvv) Kushabhadra 25 25 (xxvii) Rajua 7 7 (xxviii) Rajua 9 9 (xxviii) Rajua 7 7 (xxviii) Rajua 9 9 (xxviii) Rajua 9 9 (xxviii) Rajua 7 7 (xxviii) Rajua 7 7 (xxviii) Makara 11 11 11 Others ** Total 2425 1555	11	ODISHA *#			
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(iii) Baitarani 344 32 (iv) Subarnarekha 50 50 50 (v) Budha Balanga 35 35 35 (vi) Dhamara 20 20 20 (vii) Salandi 17 17 17 (viii) Panchputra 21 21 21 (ix) Pamei 45 45 45 (x) Hatel 30 30 30 (xi) Bansagadai 32 32 32 (xii) Hansua 37 37 37 (xiii) Tirkota 18 18 18 (xiv) Jamboo 6 6 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvii) Ramchandi 16 16 (xvii) Baitgharia 14 14 (xix) Birupa 110 110 (xx) Genguti 45 45 (xxi) Luna 37 37 (xxiii) Devi 20 20 (xxiii) Prachi 15 15 (xxii) Prachi 25 25 (xxvi) Daya 9 9 9 (xxvii) Rajua 7 7 7 (xxviii) Rajua 7 7 7 7 7 (xxviii) Rajua 7 7 7 7 7 7 (xxviii) Rajua 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7					
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(vi) Dhamara 20 20 (vii) Salandi 17 17 (viii) Panchputra 21 21 (ix) Parrei 45 45 (x) Hatel 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvi) Kharansi 14 14 (xvii) Kharansi 14 14 (xii) Birupa 110 110 (xii) Batigharia 14 14 (xii) Birupa 110 110 (xxi) Luna 37 37 (xxii) Devi 20 20		(iv)	Subarnarekha	50	50
(viii) Salandi 17 17 (viii) Panchputra 21 21 (ix) Parnei 45 45 (x) Hatel 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvi) Ramchandi 16 16 (xvii) Kharansi 14 14 (xviii) Batigharia 14 14 (xix) Birupa 110 110 (xx) Genguti 45 45 (xxi) Luna 37 37 (xxii) Devi 20 20 (xxiii) Prachi 15 15		(v)	Budha Balanga	35	35
(viii) Panchputra 21 21 (ix) Parnei 45 45 (x) Hatel 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvii) Kharansi 14 14 (xvii) Batigharia 14 14 (xix) Birupa 110 110 (xx) Genguti 45 45 (xxi) Luna 37 37 (xxii) Devi 20 20 (xxiii) Prachi 15 15 (xxii) Prachi 15 15 (xxiv) Kadha 30 30 (xxv) Kababhadra 25 25 (xxvi) Daya 9 9 (xxvii) Makara		(vi)	Dhamara	20	20
(ix) Parnei 45 45 (x) Hatel 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvii) Kharansi 14 14 (xviii) Batigharia 14 14 (xix) Birupa 110 110 (xx) Genguti 45 45 (xxi) Burupa 110 110 (xxi) Devi 20 20 (xxii) Devi 20 20 (xxiii) Devi 20 20 (xxiii) Prachi 15 15 (xxiv) Kadha 30 30 (xxvi) Kadha 30 30 (xxvi) Daya 9 9 (xxvii) Makara		(vii)	Salandi	17	17
(x) Hatel 30 30 (xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvi) Kharansi 14 14 (xviii) Batigharia 14 14 (xi) Birupa 110 110 (xx) Genguti 45 45 (xxi) Luna 37 37 (xxii) Devi 20 20 (xxiii) Prachi 15 15 (xxii) Prachi 15 15 (xxiv) Kadha 30 30 (xxv) Kushabhadra 25 25 (xxvi) Daya 9 9 (xxvii) Rajua 7 7 (xxviii) Makara 11 11 11 Others ** <		(viii)	Panchputra	21	21
(xi) Bansagadai 32 32 (xii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvi) Ramchandi 16 16 (xvi) Ramchandi 16 16 (xvii) Ramchandi 16 16 (xvii) Ramchandi 16 16 (xvii) Batigharia 14 14 14 (xix) Birupa 110 110 110 (xxi) Birupa 110 110 110 110 (xxi) Birupa 110 110 110 12 15 45 45 (xxi) Luna 37 37 37 37 37 37 37 37 37 32 30 30 30 30 30 30 30 30 30 30 30 30 30		(ix)	Parnei	45	45
(xiii) Hansua 37 37 (xiii) Tirkota 18 18 (xiv) Jamboo 6 6 (xv) Gobari 16 16 (xvi) Ramchandi 16 16 (xvii) Kharansi 14 14 (xviii) Batigharia 14 14 (xix) Genguti 45 45 (xxi) Luna 37 37 (xxii) Devi 20 20 (xxiii) Prachi 15 15 (xxiv) Kadha 30 30 (xxv) Kushabhadra 25 25 (xxvi) Daya 9 9 (xxvii) Rajua 7 7 (xxviii) Makara 11 11 Others ** 367 367 Total 2425 1555 12 TAMIL NADU (ii) North Buckingam Canal 58 40.7@@		(x)		30	30
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(xvi) Ramchandi 16 16 (xvii) Kharansi 14 14 (xviii) Batigharia 14 14 (xix) Birupa 110 110 (xx) Genguti 45 45 (xxi) Luna 37 37 (xxii) Devi 20 20 (xxiii) Prachi 15 15 (xxiv) Kadha 30 30 (xxv) Kushabhadra 25 25 (xxvi) Daya 9 9 (xxvii) Rajua 7 7 (xxviii) Makara 11 11 Others ** 367 367 Total 2425 1555 12 TAMIL NADU (ii) North Buckingam Canal 58 40.7@@		, ,			
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Others ** 367 367 Total 2425 1555 12 TAMIL NADU (ii) North Buckingam Canal 58 40.7@@			•		
Total 2425 1555 12 TAMIL NADU (ii) North Buckingam Canal 58 40.7@@		(2017111)			
(ii) North Buckingam Canal 58 40.7@@					
(ii) North Buckingam Canal 58 40.7@@	12	TAMIL NADI	и		
				58	40.7@@
(iii) Central Buckingam Canal 7.2 -		` '			
(iv) South Buckingam Canal 102.4 78.9@@		` '			78.9@@
(v) Mullai Periyar Lake 14 14		` '	•		
Total 181.6 133.6		. ,	•		

		I	2022-2	3
SI. No.		State/Rivers/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
	•		•	
13	WEST BENG	GAL		
	(i)	Sankosh	77	77
	(ii)	Gangadhar	96	96
	(iii)	Raidak	144	144
	(iv)	Torsa	99.2	99.2
	(v)	Kaljani	87	87
	(vi)	Jaldakha	163	163
	(vii)	Teesta	140	140
	(viii)	Mahananda	206	58
	(ix)	Kulik	56	56
	(x)	Chiramati	80	80
	(xi)	Tangon	53	53
	(xii)	Punarbhaba	55	55
	(xiii)	Atrai	51	51
	(xiv)	Ajoy	174	174
	(xv)	Jalangi	232	232
	(xvi)	Churni	71	71
	(xvii)	Dwarka	129	129
	(xviii)	Brahmani	77	77
	(xix)	Kopai	39	39
	(xx)	Barkeswar	102	102
	(xxi)	Disergarh- Disergarh Barrage	64	64
	(xxii)	Durgapur Barrage- Suri Kalna	116	116
	(xxiii)	Beyond Shampur	193	193
	(xxiv)	Mundaswari-Mankar	64	64
	(xxv)	Dwarekeswas Ondagram - Bandar	103	103
	(xxvi)	Silbati	135	135
	(xxvii)	Rupnarayan	77	77
	(xxviii)	Kansabati	347	347
	(xxix)	Kalighai	77	77
	(xxx)	Subarnarekha	72	72
	(xxxi)	Hooghly	580	580
	(xxxii)	Rasulpur	29	29
	(xxxiii)	Muriganga	32	32
	(xxxiv)	Saptamukhi	80.4	80.4
	(xxxv)	Gumar	26	26
	(xxxvi)	Bidyadhari	51	51
	(xxxvii)	Gosaba	32	32
	(xxxviii)	Raimongal	32	32
	(xxxix)	Ichamati	232	232
		Others@	267.5	267.5
		Total	4741.1	4593.1

Navigable Waterways in India

(In Kms.)

			2022-2	3
SI. No.		State/Rivers/Canals/Lakes	Total Length of the Rivers/Canals/Lakes in the State	Navigable Length
1		2	3	4
14	NAGALAND : (i) (ii) (iii) (iv)	# Tizu and Zunki Dhansiri/Chathe Dikhu Doyang Total	42 110 63 61 276	42 110 63 61 276
15	JHARKHAND (i)	o* Ganga Total	95 95	95 95

Source: State Governments

 $^{^{\}star}\,$ Information for the year 2022-23 has not received. Previous Year data has been Repeated

^{**} Including Canals,Lakes & other waterways.

^{***}Data is reported nil for the year 2022-23

^{@&}gt;>>> Includes 268 Kms. each of Total Length and Navigable Length pertaining to canals.

^{&#}x27;@@- Navigation could be possible only after renovation

^{#:} Total length not provide only navigable length provided hence navigable length taken as total length

Table No. 1.2	Table No. 1.2 Infrastructure Facilities Available on National Waterways (As on 31-3-2023)								
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 like Road / Rail connectivity, land details, usage etc.				
1	2	3	4	5	6				
National Waterway No.1	<u> </u>								
1. Haldia - Farakka : (560 Km) ,Depth - 2.6 to 3.0									
(i) Haldia	1500	Three(Floating)	Nil	One Godown of size 12 x 30m and Open space 1630 m2	Land taken from Haldia Dock Complex (HDC) on lease basis.				
ii) Budge Budge - Kolkata	Nil	Nil	Nil	Nil	Nil				
(iii) a) BISN/G.R. Jetty-1,Kolkata	1500	One (Floating)	Nil	Open Space area 6000 m2					
(iii) b) G.R. Jetty-2,Kolkata	3000	Fixed RCC Jetty 71.25 m x 20m berth	Nil	Transit shed of 1186.75 sqm area for storage and open storage area of 4103.20 sqm	A permanent RCC jetty has been constructed and operational since November 2013 for handling of General cargo. This jetty is also used for loading of fly ash to Bangladesh and embark/disembark of tourists and loaistics support.				
(iv) Botanical Garden, Kolkata	1500	One(Floating)	One number of crane pontoon for cargo handling	To be stored on Pontoon	Land belongs to KoPT being used by IWAI and it also used for berthing of cruise vessels. Also two numbers of crane pontoon avaliable for cargo handling.				
(v) BTPS Jetty (Tribeni)	1500	Two(Floating)	One number of crane pontoon for cargo handling	Nil	Land belongs to WBPDCL and the same has been taken on lease from WBPDCL. At present a RCC Yoke stage is constructed at BTPS. Further, the jetty is used for loading of flyash, broken rice and other cargo.				
(vii) Shantipur	600	One(Floating)	Nil	To be stored on Pontoon and open space of IWAI's land 2000 Sq. m	Land belongs to State Govt. of W.B. being used by IWAI for embark/disembark of passenger/Tourist, loading/unloading of other logistics support.				
(viii) Metihari/Swaroopganj	600	One(Floating) Pontoon	Nil	One Godown of size 4.5 x 5 m and Open space 290 m2	Land taken from KoPT on lease basis				
(ix) Kalna/Katwa	600	One(Floating)	Nil	To be stored on Pontoon.	Land not available pontoon placed on water front				
(x) Hazardwari	600	One (floating)	Nil	To be stored on Pontoon.	Land not available pontoon placed on water front				
(xi) Pakur (Putimari)	1500	One(fixed)	Nil	Nil	Owned by Farakka Barrage project(FBP)				
(xii) Farakka a. D/s Farakka of existing lock gate	1500	One(fixed)	Nil	Nil	Being used for embark/disembark of passenger/Tourist, loading/unloading of other logistics support.				
b. U/s Farakka (IWAI's Floating jetties)	600	One(Floating)	Nil	Nil	Being used for embark/disembark of passenger/Tourist, loading/unloading of other logistics support.				
c. Owned by Jindal ITF	2500 (two vessels at a time)	Jetty with conveyor	Nil	Nil	Being used for unloading NTPC coal at Farakka Super Thermal Power Station				
2. Farakka - Barh : (400 km), Depth- 2.1 to 2.5	,								
(xiii)Rajmahal (Manglaghat)	600	One(Floating)	Nil	To be stored on Pontoon.	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xiv) MMT Sahibganj	1500	fixed RCC Jetty of 270m X 25m	Mobile harbour crane (1 Nos 50T capacity@ 17-18m outreach. Barge loader with loading capacity of 1200TPH 3.Conveyor system with fixed hopper 1200 TPH 4.08 front end loaders.	Storage shed 130m X 32m, 'Land area 182.70 acres	Being used for loading of stone chips and embark/disembark and logistics support, b) A permanent RCC jetty has been constructed and operational since September 2019 for handling of Cargo.				

Table No. 1.2	Table No. 1.2 Infrastructure Facilities Available on National Waterways (As on 31-3-2023)								
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				
(xv) Bateshwarsthan	600	One (Floating)	Nil	To be stored on Pontoon.	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xvi) Bhagalpur	600	One(floating)	Nil	To be stored on Pontoon and open space of IWAI's land 1000 Sq. m, RIS Station	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xvii) Munger	600	One (Floating)	Nil	To be stored on Pontoon and RIS Station area	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
3. Barh-Ghazipur : (290 km), Depth - 1.6 to 2.0									
(xviii) Semaria	600	One(floating)	Nil	To be stored on Pontoon.	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xix) Patna	1500	Two Fixed RCC Jetty (Low level Jetty 46.6m * 15m, High level Jetty 70m * 20m berth respectively)	Shore Crane-2 with capacity of 01 - 20 MT subject to radius. Contanar Crane-1 with capacity of 70 MT	45m x 25m Transit shed and open storage area ~ 1000 Sq. m,	Permanent (Low & High) level Jetty. Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xx) Buxar	600	One (Floating)	Nil	To be stored on Pontoon.	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
4. Ghazipur-Allahabad : (370 km) ,Depth -1.1 to 1.5		•	•		,				
* In Chunar- Allahabad stretch (198 km) Only Hy. Survey is being conducted									
(xxi) Ghazipur/ Rajghat	600	One(floating)	Nil	To be stored on Pontoon.	Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xxdi) (a) MMT Varanasi	1500	One fixed RCC Jetty of 200m X 35m	Mobile harbour crane (2 Nos 50 MT capacity@ 17-18m outreach.	To be stored on Pontoon and open space of IWAI's land 2000 Sq. m,	A permanent RCC jetty has been constructed and operational since November 2018 for handling of Cargo. Being used for berthing of vessel, embark/disembark, loading/unloading and looistics support.				
(b) All Season Passenger Jetty at Varanasi	600		Nil		Being used for berthing of vessel, embark/disembark of tourist/Passenger				
(xxiii) Ravidas Ghat	600	One(floating)	Nil		Being used for berthing of vessel, embark/disembark, loading/unloading and logistics support.				
(xxiv) Prayagraj	600	One (floating)	Nil	To be stored on Pontoon and open space of IWAI's land 5000 Sq. m	Generator could be provided for lighting whenever required				

Note:

1) Floating jetty (berth) with gangway facility can be shifted and provided at any location along the national waterway on need basis.

2) 24 hours navigation aids being provided in Haldia-Ballia sector (1140 km) only. Day channel marking being provided in entire of NW-1.

3) RIS stations between Farakka-Patna & Patna-Varanasi has been commissioned at Manihari, Bhagalpur, Munger, Hattdah, Barh, Patna, Maujampur, Govindpur Khas, Ghazipur, Varanasi.

4) River Notices & LAD Report are issued on fortnightly basis during lean season and monthly basis during flood season.

Table No. 1.2 Infrastructure Facilities Available on National Waterways (As on 31-3-2023)									
Place	Size of Vessels that can be	No. of Berths	Cargo Handling Equip. and	Type and Extent of Storage	Remarks				
1	2	3	4	5	6				
National Waterways No. 2									
1. Bangladesh Border-Pandu: (255 km), Depth - 2.5									
a) Dhubri	2000	One(Rcc Ro Ro Jetty)	Crane prontoon, one tyre mounted crane of 20 T	(i) 2 transit sheds of 25 x 15 m each(ii) open storage facility also available	(i) Storage facility is developed (ii) Customs & Immigration Facility is available				
b) Jogighopa	2000			Open storage facility available	Project work for Multi Modal Terminal is under progress				
c) Pandu	2000	One(low level RCC jetty) + One High level RCC jetty	One Container crane of 75 T capacity, one tyre mounted crane of 20 T capacity, two crane pontoon and two floating pontoon	(i)2 transit sheds of 75 x 21 m each (ii) open storage facility also available	Si siding is completed and operational. Approach road is available. However the DPR for new alternate approach road connect pandu port to NH-31 is being prepared by Consultant. Side of the NH-31 is being prepared by Consultant. Will customs & Immigration Facility is available. Wo Storage facility developed.				
. Pandu-Neamati : (374 km), Depth - 2.5									
d) Silghat	2000	One(floating)	Pontoon	Open storage facility available	The berthing pontoon is shifted u/s (about 1 km) as the original terminal land has been				
e) Biswanath	2000	One(floating)	Pontoon	Open storage facility available	DGPS station is commissioned.				
f) Neamati	2000	One (floating)	Pontoon	-					
3. Neamati-Dibrugarh : (123 km), Depth- 1.5									
g) Bogibeel	2000	One (floating)	Pontoon	-					
. Dibrugarh-Sadiya (Oriumghat) : (139 km),Depth - 1.5									
h) Oakland/ Dibrugarh	1000	One(floating)	Pontoon	-	DGPS station is commissioned. The berthing pontoon is shifted temperorily due to erosion Oriumqhat				
(i) Oriumghat	1000	One (floating)	Pontoon	-	1.77 hectare land acquired for development of terminal.				

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, Biswanath and Dibrugarh.

Table No. 1.2 Infrastructure Facilities Available on National Waterways (As on 31-3-2023)									
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. 3									
1. Kochi-Kottapuram : (30 km), Depth-2.0									
(a) Kottappuram	350.0	One 30m (RCC Jetty)		Covered storage 300 Sqm and open storage 800 Sqm.	The Terminal godown is leased to Kerala State Warehousing Corporation w.e.f June 2018				
2. Udyogmandal Canal : (23 km),Depth -2.0									
(b) Aluva	350.0	One 30m (RCC Jetty)		Covered storage 300 Sqm and open storage 1500 Sqm.	Approach road is available. The Terminal godown is leased to KSWC for 7 years.				
3. Champakkara Canal: (14 km), Depth 2.0									
(c) Ernakulam GC (Maradu)	350.0	One 30 m (RCC Jetty)		Covered godown 300 Sqm and 2000 Sqm Office area.	Approach road is available. Acquisition of land for widening of approach road for 8m width in progress.				
(d) Kakkanad (CSEZ)	350.0	10 m temporary jetty		Nil (only land available)	Approach road is available.				
4. Kochi - Chavara: (107 km), Depth 2.0									
(e) Vaikkom	350.0	One 30 m (RCC Jetty)	One 18 Tonne crane and one 3 Tonne Fork lift	Covered godown 300 Sqm and 1200 Sqm Open Storage.	Approach road is available.				
(f) Cherthala (Thanneermukkom)	350.0	One 30 m (RCC Jetty)	One 18 Tonne crane and one 3 Tonne		Approach road is available.				
(g) Alappuzha	350.0	One 30 m (RCC Jetty)	Nil	Covered godown 300 Sqm and 2500 Sqm Open Storage.	Approach road is available.				
(h) Thrikkunnapuzha	350.0	One 30 m (RCC Jetty)	One 18 Tonne crane and one 3 Tonne	Covered godown 300 Sqm and 600 Sqm Open Storage.	Approach road is available.				
(i) Kayamkulam	350.0	One 30 m (RCC Jetty)	Nii	Covered godown 300 Sqm and 1600 Sqm Open Storage.	Approach road is available.				
(i) Chavara	350.0	Nil			Approach road is available.				
5. Chavara - Kollam (31 Km), Depth 2.0									
(k) Kollam	350.0	One 30 m (RCC Jetty)	One 3 Tonne Fork lift	Covered godown 300 Sqm and 3500 Sqm Office area.	Approach road is available. The Terminal godown is leased to KSWC for 7 years.				
6. CPT Area: Depth 2.0									
(I) Willingdon Island	16 TEU	One berth for container vessels	Nil	Nil	These terminals have been constructed for container movement to ICTT, Vallarpadam, Operation commenced w.e.f. 23.02.2021.				
(m) Bolghatty Island	16 TEU	One berth for container vessels	Nil						

Source: Inland Waterways Authority of India (IWAI)

Channel marks for 24 hrs. navigation are provided on NW 3, NW 8 & NW 9. 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.

Infrastructure Facilities Available on State Waterways (As on 31-3-2023)

	1		I	A	vailability	and Capa	city of Termin	als
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	Cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
1	ANDHRA PRADESH Kakinada to Puducherry				N	Vil		
2	BIHAR*							
	Patna(Gaighat) (Ch. 955 Km.)	2.0m	Patna(Gaighat)/ 2.93 Acre	46.0 m berth 100 m WF	1 no. Low Level, 1 no. High Level Terminal	2 with capacity of 01-20 tonnes	45m x 14m Transit shed and open space of IWAl's land 1000 Sq. m	-
	Bhagalpur (Ch. 715Km)	2.5m	Bhagalpur / 3.86 Acre Land	35 m berth	1	Nil	To be stored on Pontoon and	-
	Munger (Ch. 793km)	2.5m	Munger / 3.40 Acre Land	35 m berth	1	Nil	open space of IWAI's 1000 Sq. m.	-
	Semaria (Ch. 850Km)	2.5m	Semaria	35 m berth	1	Nil	To be stored Pontoon. Private land could be made available if	-
	Buxar (Ch. 1124Km)	2.0m	Buxar	35 m berth	1	Nil	required	-
3	GOA							
	Panaji Port (River Mandovi)	3.30 metres	Panaji	75 Kms Length	1	Nil	Nil	Ports jetty being used by vessels calling in the Ports

Infrastructure Facilities Available on State Waterways (As on 31.3.2023)

				Α	vailabilit	y and Capa	ity of Termin	als	
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	Cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks	
1	2	3	4	5	6	7	8	9	
4	Odisha*								
	Chilka Lake	1 to 2 Mtr.	Balugaon Krushnaprasadagda Kalija	5x15 Mtr 5x15 Mtr 5x15 Mtr	2 1 1				
	Devi River	3 to 8 Mtr.	Satapada Astaranga Gandakula	5x15 Mtr 5x15 Mtr 5x15 Mtr	20 1 1	Only passanger	naaaanaar		
	Baitarani River	3 to 8 Mtr.	Chandabali Nalitapatia	5x15 Mtr 5x15 Mtr	1 1	launches operating	N.A.		
	Dhamara	3 to 10 Mtr.	Chradia Dhamara Kaninali Talchua	5x15 Mtr 5x15 Mtr 5x15 Mtr 5x15 Mtr	1 1 1				
	TAMILNADU Periyar Lake in Kerala (Under lease in Tamil Nadu)	41.46 meters	Thekkady	Vessel 1 (kannagi) Length-8.5m Breadth-3m Depth-1.4m Vessel 2(Jalarathna) Length-11.5m Breadth-2.4m Depth-1.6m	-	-	-	-	

Infrastructure Facilities Available on State Waterways (As on 31.3.2023)

				Α	vailability	y and Capa	city of Termir	nals
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	No. of berths	Cargo handling equip. and their capacity	Type and extent of storage facility available	Remarks
1	2	3	4	5	6	7	8	9
	MIZORAM Nil Nagaland	Nil	Nil	Nil	Nil	Nil	Nil	Nil Hydrographic survey and Techno Economic feasibility of 20% done in respect Tizu & Zunkl rivers and in the case of Dhansiri Chathe and Dikhu rivers only project proposal
	-	-	-	-	-	-	-	concept note done but in the case of river Doyang, potentiality is observed and yet to
8	Kerala							be taken up
	State Waterways	1.5 M 3.0 M	Irrigation Division,Kollam Irrigation Division,Alappuzha	Nil	Nil	Nil	Nil	Nil
	Vembanattukayal	3 to 6 M 2 to 4	Vaikom Terminal Kottayam Terminal	Barrage (250/metric ton)	2	-	3800 Sq 40000/sq/feet	Managed by Inland Waterway Authority of India Managed by Kottayam Port & Container Terminal Service Pvt. Ltd.
	-	-	Irrigation Division, Ernakulam	Nil	Nil	Nil	Nil	Nil
	-	-	Additional Irrigation Division, Thrissur	Nil	Nil	Nil	Nil	Nil
	-	-	Irrigation Division,Malappuram	Nil	Nil	Nil	Nil	Nil Ari
	-	-	Irrigation Division, Kozhikkode Inland Navigation Division, Kollam	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil
	-	2.2	Inland Navigation Division, Kollani Inland Navigation Division, Kannur	Nil	Nil	Nil	Nil	Waterways under construction
	-	-	State Water Transport Department, Alappuzha	Nil	Nil	Nil	Nil	Nil

Infrastructure Facilities Available on State Waterways (As on 31.3.2023)

			Availability and Capacity of Terminals					
SI. No.	Navigational Channel	Depth (Meters)	Place	Size of vessels that can be accomodated (DWT)/dimension	I NO OT	Cargo handling equip. and their capacity	storage	Remarks
1	2	3	4	5	6	7	8	9

9 Uttar Pradesh

Swami Vivekanand (200 2 2 2 No. of Lighbuour Crane with an attachment of Spreader and grabe 2 140 Km. 6 MMT Ramnagar Terminal Seats) M.V.Sam 1 Crane (65 attachment of Spreader and grabe 2 No. of Lighbuour Crane with an attachment of Spreader and grabe 3 Crane (65 attachment of Spreader and

10 West Bengal

In the State Waterways there are no such terminals or berths till date. The entire cargo discharging are carried out inside the the port of Kolkata and Haldia.

Source : State Govts.

^{*} Information for the year 2022-23 has not received. Previous Year data has been Repeated

SECTION - 2

CARGO MOVED ON VARIOUS WATERWAYS

Cargo Movement on National Waterways

			Cargo Moved (lakh Tonnes)			Tonne Kms (In Lakh)				
S. No.	Details of Waterways	Distance (Kms)								
			2019-20	2020-21	2021-22	2022-23	2019-20	2020-21	2021-22	2022-23
1	2	3	5	6	7	7	9	10	11	11
1	National Waterway No. I	1620.00	91.12	92.06	109.28	131.70	46240.00	23309.40	20082.07	18703.99
	(Allahabad-Haldia stretch of									
	Ganga – Bhagirathi – Hooghly									
	river system)									
2	National Waterway No. II	891.00	3.93	3.07	4.28	6.30	100.00	44.90	74.38	106.67
	(Sadiya-Dhubri stretch of									
	Brahmaputra River system)									
3	National Waterway No. III	205.00	5.46	7.38	16.95	32.28	100.00	214.80	179.19	213.19
	(Kollam-Kottapuram stretch									
	of West Coast Canal along									
	with Champakara Canal									
	and Udyogmandal Canal)									
4	National Waterway No. IV	2890.00	0.82	68.32	112.34	84.18	0.00	189.90	316.47	295.22
	(Kakinada-Pudducherry stretch)*									
	Sub Total NWs	5606.00	101.33	170.83	242.85	254.46	46440.00	23759.00	20652.11	19319.08
5	Goa Waterways	202.00	29.33	84.61	45.78	29.29	1467.00	4124.40	2155.39	1587.47
6	Maharashtra Waterways	453.00	243.93	282.10	436.06	631.49	13172.00	5697.00	1592.35	8177.97
7	Gujarat Waterways		310.15	257.12	293.67	276.57	4652	4413	3117.61	3163.83
8	Sunderban Waterways	172	34.61	38.61	61.03	54.73	5988	6558.7	10160.54	9202.31
9	lcchamati +others			2.84	8.54	14.97			716.17	538.30
	Grand Total	6433.00	719.35	836.11	1087.93	1261.51	71719.00	44552.10	38394.17	41988.96

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
Α	VIVADA IWL			
1	Haldia-Kolkata	105	1,74,000.00	FO & HSD
2	Haldia-Kolkata	105	77,000.00	LUBE/HSD
	Sub Total (A)		2,51,000.00	
В	ICSL(Inland & Coastel Shipping Limited)			
1	MMT Varanasi - Gaighat (Patna)	353.00	39.82	Cattle food
2	IWT Terminal Gaighat-Kolkata	815.00	128.67	Broken Rice
3	Kolkata-IWT Terminal Gaighat	815.00	101.17	Food Grains, Edible Oil in containers
	Sub Total (B)		269.66	
С	OTHER PRIVATE OPERATORS			
1	M/s PSP Project Pvt. Ltd.			
1	MMT Varanasi to Lalita Ghat, Varanasi	7.50	397.00	Sand stone
2	TIRUPATI VESSEL (P) LTD.			
1	Budge- Budge(Kol)- Khulna	497	8,550.00	Flyash
2	Budge- Budge Narayanganj	884	2,12,532.00	Flyash
3	IWAI Haldia Jetty-Khulna	439	8,834.00	Flyash
4	IWAI Haldia Jetty-Narayanganj	826	1,32,891.00	Flyash
3	M/s J.M. Baxi Heavy Pvt. Ltd., Kolkata		, , , , , , , , , , , , , , , , , , , ,	·
1	Kolkata to Buxar	984	379.00	Generator Stator
4	M/s Total Movements Pvt. Ltd., Kolkata			
1	Kolkata to Simaria	713	703.50	1 no. 1st diesel HDT reactor and 1 no. 2nd diesel HDT reactor
5	M/s Deurgo Projects (India) Pvt. Ltd. Mumbai			
1	Diamond Harbour to Semaria, Barauni (Bihar)	713	384.30	1no. Reactor
6	M/s Prism Logistics Pvt. Ltd., Kolkata			
1	Kolkata to Buxar	984	379.00	Generator Stator
7	Rivering Shipping & Logistics			
1	IWAI Haldia Jetty-Khulna	439	1,417.00	Flyash
2	IWAI Haldia Jetty-Pangaon	842	1,796.00	Flyash
3	Budge- Budge (Kol)- Khulna	497	35,015.00	Flyash
4	Budge Budge-Naryanganj	884	1,37,089.00	Flyash
5	TT Shed-Narayanganj	910	84,516.28	Flyash
6 7	IWAI Haldia Jetty-Narayanganj IWAI BISN Jetty-Khulna	826 522	3,62,654.00 702.00	Flyash Flyash
, 8	IWAI BISN Jetty-Knuina IWAI BISN Jetty-Narayanganj	522 909	702.00 1,768.00	Fiyash
9	GR Jetty II- Khulna	522	4,222.00	Flyash / Stone Aggregates
10	HDC Fly Ash Jetty Haldia-Narayangani	826	26,255.00	,
11	GR Jetty II- Narayanganj	909	1,11,553.60	Flyash / Crushed Stone / Thermal Coal / Indian Coal
12	GR Jetty II - Mongla	509	2,965.75	Rice, De Öiled Rice Bran Extraction, Fly Ash, Stone Chips, HR Stee Plates

Table No. 2	.2	,	,	
SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
13	IWAI BTPS Jetty-2 - Narayanganj	964	1,61,790.00	Flyash
14	IWAI BTPS-Mongla	564	1,125.00	Stone boulders
15	HDC, Haldia - Mongla	426	3,755.65	Coal / Naptha
16	K P Dock- Mongla	510	54,667.28	Sponge Iron / Rice / Stone Chips / Maize / Wheat / Project Cargo / Iron Material / Lattice Steel Tower Accessories / Hot rolled steel angles & accessories / Galvanised Transmission Tower Parts / Hard Coke & High Ash Coke / Iron & Steel item / Prime Mild Steel Hot Rolled Plates
17	K P Dock- Khulna	523	2,921.90	Rice / Stone Chips
18	K P Dock- Narayanganj	910	2,11,953.85	Rice / Coal / Project Cargo / Quartzite Powder & Silico Manganese / Sponge Iron & Wire Rod / RED SEED / Wheat / Maize / Red Lentils in Bags / Wheat Bran
19	N. S. Dock, Kolkata - Mongla	510	60.00	Crane Body & Hydraulic Crane (ODC), 5TPH Pre-Crushing Grinding & Coating Plant
20	N. S. Dock, Kolkata -Khulna	523	3,984.20	Stone Aggregates
8	KANISHKA SHIPPING LINES			
1	Budge Budge-Narayanganj	884	31,174.00	Flyash
2	IWAI Haldia Jetty - Pangaon	842	41,874.00	Flyash
3	T.T.Shed-Narayanganj	910	16,973.00	Flyash
4	IWAI BISN Jetty-Narayanganj	895/909	1,865.00	Flyash
5	IWAI Haldia Jetty-Khulna	439	11,530.00	Flyash
6	IWAI Haldia Jetty - Narayanganj	826	1,92,944.00	Flyash
7	IWAI BTPS-Khulna	577	5,374.00	Flyash
8	HDC Fly Ash Jetty-Narayanganj	826	15,665.00	Flyash
9	T. T.Shed-Khulna	523	1,159.00	Flyash
10	KPD-Mongla	510	921.30	Machinery, Steel Cargo, Steam Turbine Associated / Wheat / Rice
11	Budge Budge-Khulna	497	5,588.00	Flyash
12	GR Jetty 2- Narayanganj	909	39,426.00	Flyash / Stone Aggregates
13	GR Jetty II- Khulna	522	2,125.00	Flyash / Rice
14	KPD- Narayanganj	910	20,087.86	Wire Rod Coil / Wheat / Rice
15	KPD-Khulna	523	4,269.95	Rice / Wheat
16	IWAI BTPS-Narayanganj	964	31,491.00	Flyash
17	Budge Budge-Pangaon	900	8,796.00	Flyash
18	GR Jetty 2- Pangaon	925	874.00	Flyash
19	HDC Fly Ash Jetty-Pangaon	842	5,660.00	Flyash
20	IWAI BISN Jetty-Pangaon	925	1,191.00	Flyash
21	IWAI BTPSPangaon	980	18,863.00	Flyash
22	KPD, Kolkata - Pangaon	923	2,978.02	Rice / Wheat / Wheat & Sponge Iron in container
23	T.T. Shed - Pangaon	926	2,226.00	Flyash

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
9	C. Day & Brothers			
1	Budge Budge-Narayanganj	884	1,912.00	Flyash
2	IWAI BISN Jetty-Narayanganj	909	1,341.00	Flyash
3	IWAI Haldia Jetty-Narayanganj	826	76,603.00	Flyash
4	GR Jetty II- Narayanganj	909	2,095.00	Rice / Flyash
7	KPD, Kolkata - Narayanganj	910	1,689.40	Fly Ash / Wheat / Maize
9	KPD, Kolkata - Mongla	510	795.94	Rice/Project Cargo+
10	Neli			
1	IWAI Haldia Jetty-Narayanganj	826	10,509.00	Flyash
2	IWAI BISN Jetty-Narayanganj	909	21,916.00	Flyash
3	T.T. Shed - Narayangani	910	20,568.00	Flyash
12	GR Jetty II- Narayangani	909	3,915.00	Flyash
14	IWAI BISN Jetty-Pangaon	925	5,674.00	Flyash
15	IWAI Haldia Jetty-Pangaon	842	4,166.00	Flyash
16	T.T. Shed - Pangaon	926	1,115.00	Flyash
11	Ajbela Navigation	340	1,110100	yuu
1	T.T.Shed-Narayanganj	910	15,538.98	Flyash
2	T.T.Shed-Khulna	523	954.00	Flyash
3	HDC Fly Ash Jetty-Narayangani	826	11,842.00	Flyash
4	Budge Budge-Narayanganj	884	57,011.00	Flyash
5	Budge Budge-Khulna	497	21,517.00	Flyash
6	Budge Budge-Pangaon	900	1,370.00	Flyash
7	IWAI Haldia Jetty-Mongla	426	1,346.00	Flyash
8	IWAI Haldia Jetty-Mongia	439	1,686.00	•
9		836/826	1,686.00	Flyash
9 10	IWAI Haldia Jetty-Narayanganj	909	3,009.00	Flyash
10	IWAI BISN Jetty - Narayanganj	909	•	Flyash Flyash
11	GR Jetty II - Narayangunj	909	18,294.00	
12	GR Jetty II - Mongla	509	5,626.34	Rice / Flyash / Stone Chips/Rapseed Extraction (DORB)/Maize/Soyabean Extraction
13	GR Jetty II - Khulna	522	710.00	(DORB)/Maize/Soyabean Extraction Flyash
14	HDC Fly Ash Jetty-Khulna	439	715.00	Flyash
15	GR Jetty II - Pangaon	925	1.048.00	Flyash
16	IWAI BISN Jetty - Khulna	522	2,164.00	Flyash
17	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	91,367.00	Fly ash
17	, , , , , , , , , , , , , , , , , , , ,		•	Fly Ash / Sponge Iron / Wheat / Coal / DORB Extraction / Raw
18	KPD, Kolkata - Narayanganj	910	86,873.41	Cotton/Maize
19	KPD, Kolkata - Mongla	510	77,861.91	Project Cargo / Rice / Maize / Project Cargo / Rapseed Extraction (DORB) / Stone Chips / Wheat / DORB Extraction / High Carbon Wire
	,	3.3	,	Rod / Coal / Raw Cotton / Sponge Iron / Lattice Steel Tower
				Accessories/Project Cargo & +Container

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
20	KPD, Kolkata - Pangaon	923	1,967.86	Wheat/Insulators, Cooling Towers, Parts and Accessories of Two Wheeler,Ferro Silico Manganese & Auto Mobile Parts/ Boiled Atap Rice
21	Haldia Dock Complex - Mongla	426	3,696.97	PrimeMild Steel Non Alloy Wire Rod in coil
22	Haldia Dock Complex - Narayanganj	826	1,579.54	Wire Rod
23	HDC Fly Ash Jetty-Pangaon	842	1,195.00	Flyash
24	Putimary Jetty - Mongla	894	2,000.00	Crushed Stone
12	J.D.Shipping			
1	Budge Budge-Narayanganj	884	21,480.00	Flyash
2	Sri Ram Jetty(Kol) - Narayanganj			·
3	Sri Ram Jetty(Kol) - Khulna			
4	Sri Ram Jetty(Kol) - Mongla			
5	IWAI Haldia Jetty - Narayanganj	826	1,07,491.00	Flyash
6	KP Dock - Narayanganj	910	6,792.51	Machinery / Rice
7	KP Dock - Khulna	523	3,971.75	Steel plate / Rice
8	T.T. Shed - Narayanganj	910	8,219.00	Flyash
9	HDC Fly Ash Jetty-Narayanganj	826	23,009.00	Flyash
10	G.R. Jetty II - Narayanganj	909	5,533.00	Flyash
11	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	625.00	Fly ash
13	Safehand Logistics			
1	IWAI BISN Jetty - Khulna	522	1,102.00	Fly Ash
14	Shun Shing India Private Ltd.			
1	Budge Budge - Narayanganj	884	11,800.00	Flyash
2	Budge Budge - khulna	497	55,464.00	Flyash
15	K K Shipping			
1	T.T. Shed - Narayanganj	910	66,687.00	Flyash
2	IWAI Haldia Jetty - Narayanganj	826	38,478.00	Flyash
3	IWAI BISN Jetty - Narayanganj	909	46,922.00	Flyash
4	IWAI BISN Jetty- Khulna	522	6,488.00	Flyash
5	T.T.Shed-Khulna	523	7,099.00	Flyash
6	IWAI Haldia Jetty - Khulna	439	7,654.00	Flyash
7	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	2,069.00	Flyash
8	IWAI Haldia Jetty - Pangaon	842	2,121.00	Flyash
9	T.T.Shed-Pangaon	926	3,628.00	Flyash
16	Tetron Marchandise			
1	Budge Budge - Khulna	497	8,454.00	Flyash
2	IWAI BTPS Jetty-2, Tribeni - Khulna	577	74,145.00	Fly ash
17	M/s. Spring Professional Services Pvt. Ltd.	500	05.00	0. 0.
1	Sahibganj to Haldia	583	85.00	Stone Chips
18	Rain Maker	222	4 40 054 00	El .
1	IWAI Haldia Jetty- Narayanganj	826	1,43,254.00	Flyash

Table No. 2.2

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
•		004		
2	Budge Budge- Narayanganj	884	28,088.00	Flyash
3	G.R.Jetty 2- Narayanganj	909	39,473.60	Flyash
4	IWAI BISN Jetty- Narayanganj	909	11,635.00	Flyash
5	Budge Budge- Khulna	497	1,622.00	Flyash
6	T.T. Shed - Khulna	523	890.00	Flyash
7	HDC Fly Ash Jetty- Narayanganj	826	13,486.00	Flyash
8	T.T. Shed - Narayangani	910	8,850.00	Flyash
9	GR Jetty2- Khulna	522	3,901.00	Fly ash
10	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	2,566.00	Flyash
11	KPD Kolkata- Narayanganj	910	24,825.92	Rice / Sponge Iron / Wheat
12	Budge Budge - Pangaon	900	4,876.00	Fly Ash
13	HDC Fly Ash Jetty, Haldia - Pangaon	861	1,497.00	Fly Ash
14	IWAI BISN Jetty - Pangaon	925	3,365.00	Fly Ash
15	IWAI BTPS Jetty-2 - Pangaon	977	3,805.00	Fly Ash
16	IWAI Haldia Jetty, Haldia - Pangaon	861	27,632.00	Fly Ash
17	KPD Kolkata- Khulna	523	3,089.36	Wheat / Rice
18	KPD, Kolkata - Pangaon	923	923.28	Rice
19	Mongla-KPD Kolkata	510	910.91	Loaded with Crane, Dismantled and SOC Containers)
20	NSD, Kolkata - Narayanganj	910	1,481.72	Rice
21	T.T. Shed - Pangaon	923	1,147.00	Fly Ash
19	M/s. Vinayak Shipping*		·	
1	Budge Budge- Narayanganj	884	32,305.00	Fly Ash
2	Budge Budge - Khulna	497	12,922.00	Fly Ash
3	T.T. Shed - Narayanganj	910	1,230.00	Fly Ash
4	T.T. Shed - Khulna	523	776.00	Fly Ash
5	IWAI Haldia jetty-Narayanganj	826	58,722.00	Fly Ash
6	IWAI Haldia Jetty - Khulna	439	16,818.00	Fly Ash
7	G.R. Jetty-2 - Narayanganj	909	7.011.24	Fly Ash / Wheat & Rice
8	GR Jetty2- Khulna	522	929.00	Fly Ash
9	IWAI BTPS Jetty-2, Tribeni - Khulna	577	30,978.00	Fly Ash
10	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	63,660.00	Fly Ash
11	HDC Fly Ash Jetty- Narayanganj	826	762.00	Flyash
20	Assetment Marine & Traders Pvt. Ltd.	020	702.00	i iyasii
1	IWAI Haldia jetty- Narayanganj	826	8,164.00	Fly Ash
2		909	3,539.00	Fly Ash
3	IWAI BISN Jetty - Narayanganj T.T. Shed - Narayanganj	909 910	9,526.00	Fly Ash
3 4		826	•	,
4 5	HDC, Haldia - Narayangani	826 910	3,901.41	Prime Mild Steel Non Alloy Wire Rod in coil
5 21	KPD Kolkata-Narayanganj M/s. Fortune Transport	910	499.99	Sponge Iron
		004	24 400 00	Th. A.L.
1	Budge Budge- Narayanganj	884	31,128.00	Fly Ash
2	G.R. Jetty-2- Narayanganj	909	2,482.00	Fly Ash
3	IWAI Haldia Jetty - Narayanganj	826	15,405.00	Fly Ash

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
22	M/s. IA3 Enterprise			
1	Budge Budge-Narayangani	884	48.837.00	Fly Ash
2	G.R. Jetty-2-Narayanganj	909	4,968.34	Fly Ash/Wheat/Quartzite Powder
3	HDC Fly Ash Jetty, Haldia-Narayangani	826	1,024.00	Fly Ash
4	IWAI Haldia Jetty-Narayanganj	826	80.029.00	Fly Ash
5	T.T. Shed-Narayanganj	910	994.00	Fly Ash
6	KPD Kolkata-Narayanganj	910	15,740.53	. 7
7	Budge Budge- Khulna	497	2,136.00	
8	G.R. Jetty-2-Khulna	522	978.00	Fly Ash
9	G.R. Jetty-2-Mongla	509	4,637.00	Fly Ash/Maize
10	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	5,259.00	Fly ash
11	T.T. Shed-Khulna	523	1,350.00	Stone Chips
23	M/s. Intel International Logistics	020	.,000.00	
1	BTPS Jetty, Tribeni-Khulna	577	671.00	Fly Ash
2	G.R. Jetty-2-Khulna	522	4,466.00	Fly Ash
3	Budge Budge - Khulna	497	580.00	Fly Ash
4	KPD Kolkata-Khulna	523	3,719.59	Maize / Rice / Wheat / Indian Coal
5	KPD Kolkata-Mongla	510	2,492.30	Rice / Wheat / Indian Coal / Maize / Stone Chips / Aggregates
6	KPD Kolkata-Narayanganj	910	1,21,085.98	Maize / Wheat / Rice / Sponge Iron / Raw Cotton / Steam Coal / Stone
7	G.R. Jetty-2-Mongla	509	1,244.00	Wheat / Rice / Fly Ash
8	Budge Budge-Narayangani	884	63,911.00	Fly Ash
9	Budge Budge-Mongla	484	718.00	Fly Ash
10	BTPS Jetty, Tribeni-Narayanganj	964	42,099.00	Fly Ash
11	IWAI BISN Jetty- Narayanganj	909	1,846.00	Fly Ash
12	IWAI Haldia Jetty-Narayanganj	826	1,27,710.00	Fly Ash
13	HDC Fly Ash Jetty, Haldia-Narayanganj	826	11,874.00	Fly Ash
14	T.T. Shed-Narayanganj	910	12,946.50	Fly Ash
15	T.T. Shed - Khulna	523	968.00	Fly Ash
16	G.R. Jetty-2 - Narayanganj	910	1,12,451.00	Stone Chips / Fly Ash / Rice / Prime Mild Steel Alloy Hot Rolled
24	M/s. Ishan Enterprise	010	1,12,101.00	Storio Onipo / 1 ly / tori / 1 tito o / 1 titino titina stooi / tito y riot (torio
1	Budge Budge-Narayangani	884	15,883.00	Fly Ash
2	G.R. Jetty-2-Narayanganj	909	748.00	Fly Ash
3	IWAI BISN Jetty-Narayanganj	909	639.00	Fly Ash
4	IWAI Haldia Jetty-Narayanganj	826	10,419.00	Fly Ash
5	Budge Budge-Khulna	497	2,938.00	Fly Ash
6	IWAI Haldia Jetty-Khulna	439	675.00	Fly Ash
25	M/s. Tidal Marine Services	700	07 0.00	i ly roll
1	Budge Budge - Khulna	497	694.00	Fly Ash
2	Budge Budge-Narayanganj	884	7,250.00	Fly Ash
3	IWAI Haldia Jetty-Narayanganj	826	6,810.00	Steam Coal
4	BTPS Jetty, Tribeni-Narayanganj	964	1,821.00	Fly Ash

Table No. 2.2

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3 1	4	5
	-			
26	Inflow Waterways			
1	Budge Budge - Khulna	497	21,833.00	Fly Ash
2	Budge Budge - Narayanganj	884	1,42,103.00	Fly Ash
3	G.R. Jetty-2 - Khulna	522	725.00	Fly Ash
4	G.R. Jetty-2 - Narayanganj	909	23,525.00	Fly Ash
5	HDC Fly Ash Jetty, Haldia - Narayanganj	826	63,650.00	Fly Ash
6	IWAI Haldia Jetty - Narayanganj	826	41,142.00	Fly Ash
7	T.T. Shed - Narayanganj	910	7,060.62	Fly Ash
8	KPD Kolkata-Khulna	523	1,978.35	Non Basmati Parboiled Rice
9	KPD Kolkata-Mongla	510	7,021.12	Rice/Project Cargo/Galvanized transmission Line Tower Parts/Lattice
10	KPD Kolkata-Narayanganj	910	1,001.12	Wheat/Rice
11	Mongla, Bangladesh - N. S. Dock, Kolkata	510	135.92	Crane & Machinery Parts (ODC)
12	Budge Budge - Mongla	484	1,434.00	Fly Ash
13	Budge Budge - Pangaon	900	2,318.00	Fly Ash
14	G.R. Jetty-2 - Pangaon	925	1,190.00	Fly Ash
15	HDC Fly Ash Jetty, Haldia - Pangaon	861	861.00	Fly Ash
16	Mongla-KPD Kolkata	510	537.73	Railways Rails of Iron or Steel to UIC 60KG Heat Treated Rails Steel
17	Mongla-N. S. Dock, Kolkata	510	394.35	Crane & Machinery Parts
27	M/s. Everett (India) Pvt. Ltd.			
1	KPD Kolkata-Narayanganj	910	5,287.00	Rice / Wheat / Cotton Belles
2	HDC Haldia-Mongla	426	1,964.18	Iron Non Alloy Steel / Prime Hot Rolled Steel Coil
3	HDC Haldia-Narayanganj	826	3,681.09	Hot Roll Steel Coil / Prime Hot Rolled Non Alloy Steel Plate
4	IWAI BTPS Jetty-2, Tribeni - Narayanganj	964	2,690.00	Fly Ash
5	KPD, Kolkata - Pangaon	923	1,415.65	Refined White Sugar in Containers
6	Mongla - KPD Kolkata	510	756.89	Parts of Cranes & Other Equipments
28	M/s. Jak Maritime & Logistics			
1	KPD Kolkata-Mongla	510	1,572.57	Rice / Crushed Stone
29	M/s. Roadwings International Pvt. Ltd.			
1	G.R. Jetty-2 - Narayanganj	909	626.00	Fly ash
30	ABC India Limited (Bharat Heavy Electricals Ltd.)			·
1	Kolaghat - Mongla	490	458.00	Auto Transformer Tank & Generator Transformer Tank
2	Kolkata - Numaligarh Refinery Jetty, Assam	1883	521.00	DHT Reactor
31	Bollore Logistics India Limited			
1	Kolkata - Mongla	510	347.89	Glass Fiber Reinforced Plastic Products – GRP Chimney with Losse
32	M/s. One Shipping Agency			,
1	Kolkata - Mongla		111.50	Re exportable Machineries -(Hydraulic Piling Rig-Bae Machinery,
'	Nomata - Mongia	510	111.50	Cement Silo & Fly ash silo)
33	Delta Logistics			
1	Budge Budge - Narayanganj	884	10,711.00	Fly Ash

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
2	G.R. Jetty-2 - Narayanganj	909	1,360.00	Fly Ash
3	IWAI BTPS Jetty-2, Tribeni -Narayanganj	964	1,495.00	Fly Ash
4	IWAI Haldia Jetty - Narayanganj	826	5,613.00	Fly Ash
34	Hindol Shipping	020	0,010.00	r ty non
1	Budge Budge - Narayangani	884	1,230.00	Fly Ash
35	Meghnaditya Waterways Pvt. Ltd.	331	1,200.00	Try Non
1	Budge Budge - Narayangani	884	918.00	Fly Ash
2	HDC Haldia-Ashugani	954	958.08	TMT Bar
3	IWAI BTPS Jetty-2, Tribeni -Narayanganj	964	5.689.00	Fly Ash
4	IWAI Haldia Jetty - Narayanganj	826	1,190.00	Fly Ash
36	One Shipping Agency	020	1,150.00	11) 7.011
1	Budge Budge - Khulna	497	758.00	Fly Ash
2	Budge Budge - Narayanganj	884	2,938.00	Fly Ash
3	G.R. Jetty-2 - Narayanganj	909	4.401.20	Fly Ash
4	IWAI Haldia Jetty - Narayangani	826	2,241.00	Fly Ash
5	Mongla - KPD Kolkata	510	370.70	Parts of Cranes & Other Equipments
37	Pacific Navigation			·
1	BTPS Jetty, Tribeni-Khulna	577	26,166.00	Fly Ash
2	IWAI BTPS Jetty-2, Tribeni -Narayanganj	964	1,759.00	Fly Ash
38	Sealine Shipping & Logistics		.,	. 7
1	Budge Budge - Khulna	497	3,933.00	Fly Ash
2	Budge Budge - Narayanganj	884	781.00	Fly Ash
3	G.R. Jetty-2 - Khulna	522	1,710.00	Fly Ash
4	G.R. Jetty-2-Mongla	509	1,082.00	Fly Ash
5	G.R. Jetty-2 - Narayanganj	909	783.00	Fly Ash
39	M/s. Bharat Heavy Electricals Limited (BHEL).			•
1	Kolkata - Mongla	510	212.56	LP Bladed Rotor-1; LP Bladed Rotor-2; Generator Rotor
40	M/s. Deugro Projects (India) Pvt. Ltd.			•
1	Kolkta - Kahalgaon	550		Generator Stator
2	Kolkata - Mirzapur, UP	1258		Ammonia Converter Pressure Shell
3	Diamond Harbour - Kahalgaon	626	396.80	Generator Stator
4	Diamond Harbour - Semaria	789	384.30	Reactor

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
41	M/s. J. M. Baxi Heavy Pvt. Ltd., Kolkata			
1	Budge Budge - Buxar	1009	379.00	Generator Stator
42	M/s. Total Movements Private Limited, Kolkata	1000	0.00	Contractor Ctator
1	Kolkata - Semaria	713	703.50	Diesel HDT Reactor & 2nd, Diesel HDT Reactor
43	M/s. Prism Logistics Pvt. Ltd.	710	700.00	
1	Kolkata - Buxar	984	379.00	Generator Stator
44	Eastern Navigation Pvt. Ltd.			
1	Haldia Oil Jetty-1 - Kolaghat	77	460.00	Generator (Excl. Rotor)
45	M/s. Nivriya India Pvt. Ltd.			
1	Puthimai Jetty - BTPS, Tribeni	331.5	1,125.00	Stone boulders
	Sub Total (C)	-	50,46,279.85	
D	КОРТ			Iron Ore,Iron & Steel,Log, Pulses, sulphur,Lime stone, Machinery,
1	Sagar- KPD	146	14,20,000.00	Manganese Ore, Petroleum Coke, Rice & Wheat, Other Coke/Coal, Coking Coal, Pet Coke, Fertilizer, Sugar,Rock Phosphate, Propane, Butane,Timber, Met Coke, Other/Misc.
3	Diamond Harbour - KPD	78	27,30,000.00	Pulses, Iron & Steel, Iron Ore, Lime Stone, Manganese Ore, Thermal Coal, Other Coke/Coal, Coking Coal, Met Coke, Propane, Butane, Fertiliser, Rock Phosphate, Timber, Other/Misc
3	KPD- Sagar	146	35,000.00	Iron & Steel, Rice, Wheat
	Sub Total (D)		41,85,000.00	
Е	Unorganized Ro-Ro movements in West Bengal	0.5	36,87,303.49	Passengers and household goods
	Sub Total (E)		36,87,303.49	
	Total (NW-I) (A+B+C+D+ E)		1,31,69,853.00	

Details of Cargo Moved on National Waterways (National Waterway No.86)- RUPNARAYAN

Table No. 2.2

1 Kol B Mo 1 Ma 2 Ma 3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas		Distance (Kms)	2022-23	Cargo generally moved
1 Kol B Mo 1 Ma 2 Ma 3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	2	3	4	5
1 Kol B Mo 1 Ma 2 Ma 3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	/s. Kataria Carriers			
B Mo 1 Ma 2 Ma 3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	olaghat (NW-86) - NTPC, Farakka (NW-1)	499		315 MVA Transformer
2 Ma 3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ovement of goods by Un-organized sector			
3 Ma 4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ayachar - Kolaghat	27	20,160.000	Bricks
4 Ma 5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ayachar - Bakshi	39	10,800.000	Bricks
5 Ma 6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ayachar -Gopiganj	45	12,600.000	Bricks
6 Ma 7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ayachar -Namkhana/Bakkhali	77	21,672.000	Bricks
7 Bal Sul A Mo 1 Bas 2 Bas 3 Bas	ayachar -Patharprotima	106	14,400.000	Bricks
A Mo 1 Bas 2 Bas 3 Bas	ayachar - Kachuberia	63	2,880.000	Bricks
A Mo 1 Bas 2 Bas 3 Bas	akshi - Kolaghat	12	5,316.000	Sand
1 Bas 2 Bas 3 Bas	ıb Total		87,828.00	
1 Bas 2 Bas 3 Bas	ovement of goods by Un-organized sector			
2 Bas 3 Bas	asirhat (NW-44) - Dayapur/Satjelia (NW-97)	80	1,31,236.380	Bricks / Stone chips / Sand (Red) / Cement
3 Bas	asirhat (NW-44) - Pathankhali/Basanti/Gosaba (NW-97)	80	2,29,265.930	Bricks / Stone chips / Sand (Red) / Cement
4 Bas	asirhat (NW-44) - Namkhana/Bakkhali (NW-97)	185	31,860.000	Bricks
	asirhat (NW-44) - Itinda Ghat (NW-44)	2.5	67,648.320	Sand (local River)
5 Dha	naltitha (NW-44) - Itinda Ghat (NW-44) Cross Bank Movement	0.3	2,535.370	Motor cycles
	Total		4,62,546.000	·
	Details of Cargo Moved on National Waterways (National Waterw	ay No.2)- BRAHMAPUTRA	
A Org	rganised Cargo	32	165259.91	
B IW	/TD Assam			
ווו פ	TID ASSUIT			
C Un	norganised Sector	20	464592.93	
	otal (NW-2)(A+B+C)		629853	

Table No. 2.2 Details of Cargo Moved on National Waterways (National Waterway No.3) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
		-		
A.	CHAMPAKARA CANAL			
1	KSINC			
2	Q10 Berth-CPT-Fact, CD	21	64119	Sulpher,Rock Phosphate,Phosphoric Acid
2	LOTS Shipping & Trading			
1	Q10 Berth-CPT-Fact, CD	21	177196	Phopharic Acid, Sulphur, Rock Phosphate
3	Kerala Backwater Navigation			
1	FACT,PD- FACT, CD	21	64448	LAG
2	FACT , Ammonia jetty- FACT, PD(via mattancherry channel)	22	2112	LAG
4	FACT Ltd.*			
1	W. Island ammonia jetty to FACT(CD)	22	3810	LAG
2	FACT,PD- FACT, CD	21	60036	LAG
5	Tisha Navigation Inc.			
1	Kakanadu Terminal -Sea	21	2011	LIQUID EFFLUENT
6	COCHIN BUNKERS			
1	IRUMBANAM TO COCHIN PORT	20		
2	BPCL jetty Irumbanam to COT	18	456	FUEL OIL
3	BPCL jetty Irumbanam to Q5	19.2	39	FUEL OIL
4	BPCL jetty Irumbanam to Q6	19	79	FUEL OIL
5	BPCL jetty Irumbanam to Q4	22.5	230	FUEL OIL
6	BPCL jetty Irumbanam to CSL	16	670	FUEL OIL
7	BPCL jetty Irumbanam to NTB	18	142	FUEL OIL
8	BPCL jetty Irumbanam to NCB	22.4	1,664	FUEL OIL
9	BPCL jetty Irumbanam to OPL	21	144	FUEL OIL
10	BPCL jetty Irumbanam to Q7	19	191	FUEL OIL
11	Irumbanam- Q 10 BERTH			
12	BPCL Irumbanam - BTP	21.5	214	VLSFO, Fuel Oil
13	Fact UD to Fact CD	21	7,093	Sulphuric acid
14	Q10 berth CPT to FACT CD	21	69,203	Phosphoric Acid
15	Q10 berth CPT to FACT UD(in Ch. Canal)	21	7,097	Sulphuric Acid
16	Cochin Port to FACT CD	21	1,03,339	Sulphuric acid
17	Kakkanad to OPL	21	1,014	Phosphoric Acid
18	BPCL jetty Irumbanam to Q1	23	669	FUEL OIL
19	BPCL jetty Irumbanam to Q10	18	162	FUEL OIL
20	BPCL jetty Irumbanam to IOC	17.2	70	FUEL OIL
21	BPCL jetty Irumbanam to Fine Arts Jetty	17.2	1,239	FUEL OIL
22	BPCL jetty Irumbanam to South Naval Jetty	16	224	FUEL OIL
23	Q10 to Q1 Berth	5	100	Sulphuric Acid

Details of Cargo Moved on National Waterways (National Waterway No.3) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

Table No. 2.2

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
7	BHARAT CHEMICALS			
1	FINE ARTS JETTY TO OUTER SEA(OPL)	4	20,341	VLSFO, LSFO
2	FINE ARTS JETTY TO BERTH	4	14,571	VLSFO, LSFO
8	SHINY SHIPPING			
1	BTP to Ambajetty	4.2	497	LSHFHSD
2	BTP to CSL	5.6	2,214	LSHFHSD
3	BTP to Q8	2.8	685	FO
4	BTP to Q10	3.2	4	LSHFHSD
5	BTP to OPL	2	2,686	VLSFO,LSHFHSD,FO
6	BTP to Q6	3.7	311	LSHFHSD
7	BTP to BTP	0.015	615	LSHFHSD
8	BTP - ICTT	2		
9	NCB TO BTP	1	428	LSHFHSD, VLSFO
10	NCB TO Q6	2.9	100	LSHFHSD, VLSFO
11	NCB to Q8	3.75	300	LSHFHSD
12	NCB to Q10 berth	4	100	LSHFHSD
13	NCB to OPL/Outer Sea	2	1,522	VLSFO,LSHFHSD,FO
14	NCB to South Naval Jetty	6	2,225	LSHFHSD
15	NCB to CSL	6	4,123	VLSFO, LSHFHSD
16	NCB to Ambajetty	5	423	LSHFHSD
17	Q4 to COT	4.3	248	VLSFO
18	Q4 Berth to OPL	2.5	946	LSHFHSD, VLSFO
19	Q4 Berth to BTP	1	346	VLSFO
20	Q4 Berth to ICTT Vallarpadam	2.3	1,761	VLSFO
21	Q1 berth to South Naval Jetty	6.5	454	LSHFHSD
22	Q1 Berth to ICTT Vallarpadam	3	1,264	VLSFO
23	Q1 to Q6	3.8	246	LSHFHSD
24	Q1 Berth to Q8	4.5	5	LSHFHSD
25	Q1 to Q5	3.6	89	VLSFO
26	Q1 Berth to BTP	1.5	845	VLSFO
27	Q1 Berth to OPL	3	1,985	VLSFO
28	Q1 Berth to COT	5	846	VLSFO,
29	Q1 to Q10 Berth	5	287	VLSFO, LSHFHSD
	Sub Total (A)		6,28,238	·

Table No. 2.2 Details of Cargo Moved on National Waterways (National Waterway No.3) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
B. 1 1 2	UDYOGMANDAL CANAL LOTS Shipping & Trading* Q10 CPT-Fact, UD KSINC*	20	19,222	Phospharic Acid, Sulphur
4	RO-RO SERVICE BETWEEN BOLGATTY TO WILLINGTON ISLAND	3.7	10,55,710	VARIOUS COMMODITIES IN CONTAINERS, CARS BIKES, TWO WHEELERS, LCV etc.
2 3	NTB , COT Berth Cochin port Bolgatty ICTT - W.Island	10	514	Sludge Oil
3 1 4	Kerala Back Water Navigation FACT Ammonia jetty, W. Island -FACT,PD FACt ammoniajetty W.island - FACT UD Cochin Bunkers	14.5 20	64,448 2,112	LAG LAG
1 5	Fact UD to Cochin Port FACT Ltd.*	15	7,093	Sulphuric Acid
1	FACt ammoniajetty W.island - FACT UD	20	3,840	LAG
2	FACT Ammonia jetty, W. Island -FACT,PD Sub Total (B)	14.5	60,036 1212975	LAG
C. 1	THE WEST COASTAL CANAL KMML Ltd.			
1	TCC - KMML	133		
3	KMML Chavara East Bank- KMML Chavara KMML Chavara East Bank- KMML Chavara Subtotal(West Coast Canal)	0.03 0.03	4,25,340 1,49,792 5,75,132	Sand General Cargo

Details of Cargo Moved on National Waterways (National Waterway No.3) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

SI. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
D	Passenger Cargo (NW-3)			
1	KMML Chavara East Bank -KMML Chavara	0.03	4197.92	Passenger
2	Ernakulam - Varappuzha	13.5	5008.64	Passenger
3	Ernakulam-Fortkochi	3.5	97105.48	Passenger
4	Ernakulam-Vypin	3.5	29855.82	Passenger
5	Ernakulam-Mulavukad	3.5	6949.62	Passenger
6	Alappuzha - Nedumudi	14	9301.3	Passenger
7	Alappuzha- Kainakari	3.3	9358.16	Passenger
,	Alappuzha - Kainakan Alappuzha - Kainakri Road	3.3	7262.66	Passenger
9	Alappuzha - Venattukadu	2	9123.42	Passenger
10	Alappuzha - Veriattukadu Alappuzha- Pathiramanal	13	62248.88	Passenger
11	Muhamma - Kumarakam	6.8	10667.78	Passenger
12	Muhamma -Maniyaparambu	4.5	4738.48	Passenger
13	Pulinkunnu-Alappuzha	3	19546.6	Passenger
13 14	Nedumudi-Alappuzha	3.5	36276.64	Passenger
15	Kollam-Plavara	1.5	5032.4	Passenger
16	Kollam-Pezhamthuruth	6	6742.22	Passenger
17	Kollam-Kureepuzha	3	2072.42	Passenger Passenger
18	Vaikom-Thavanakkadavu	2.5	99506.94	Passenger
19	Panavalli-South Paravoor	2.5 4	23658.1	Passenger
20	Panavalli-Poothotta	2	46288.66	Passenger Passenger
20 21		2	31384.56	· · · · · · · · · · · · · · · · · · ·
21	Panavalli-Perumpalam market Sub-total(passenger)	2	526326.7	Passenger
	Sub-total(passeriger)		526326.7	
E	Un-Organised Cargo (NW-3)			
1	Pullangadithodu-Nalluchira	12.1	5120	Rubble
2	Pullangadithodu-Nalluchira	12.1	2650	M-sand
3	Pullangadithodu-Nalluchira	12.1	900	Aggragate
4	Pullangadithodu-Nalluchira	12.1	60	Cement
5	Pallathuruth-Zero Jetty	12.1	370	Rubble
6	Pallathuruth-Zero Jetty	12.1	80	Aggragate
7	Pallathuruthy Jetty - Meerappattipadam	1.1	355	Rubble
8	Pallathuruthy Jetty - Meerappattipadam	1.09	50	Gravel

Details of Cargo Moved on National Waterways (National Waterway No.3) - WEST COAST CANAL, CHAMPAKARA CANAL & UDYOG MANDAL CANAL

Table No. 2.2

SI. No.	River/Stretch	River/Stretch Approximate 2022-23 Distance (Kms)		Cargo generally moved
1	2	3	4	5
	-			
9	Pallathuruthy Jetty - Meerappattipadam	1.09	100	
10	Pallathuruthy Jetty -Kannattipadam	2.3	1145	
11	Pallathuruthy Jetty -Kannattipadam	2.3	1000	Paddy
12	Pallathuruthy Jetty -Kannattipadam	2.2	30	M-sand
13	Karumadi - Mannappara	3.5	35	Rubble
	Sub-total(un-organised)		11895	
F	Fish Cargo (NW-3)			
1	OPL-Munambam	1.5	2254	Fish
2	OPL-Munambam	1.5	4154	Fish
3	Kochi Sea Mouth-Thoppumpady Harbour	4.8	6813	Fish
4	Munambam Sea Mouth- Munambam Harbour	1.5	14687	Fish
5	Kochi Sea Mouth - Vypeen Harbour	1	6665	Fish
6	Kayamkulam Sea Mouth - Azheekkal Harbour	0.05	5036	Fish
7	Sea (Distance upto Sea Mouth) - Thoppumpady Harbour	4.8	26955	Fish
8	Sea (Distance upto Sea Mouth) - Munambam Harbour	1.5	147207.2	Fish
9	Sea (Distance upto Sea Mouth) - Vypeen Harbour	1	37423	Fish
10	Sea (Distance upto Sea Mouth) - Azheekkal Harbour	0.05	22135	Fish
	Sub-total(fish)		273329.2	
	Total (NW-3) (A+B+C+D+E+F)		32,27,896	

Details of Cargo Moved on National Waterways (National Waterway No. 8)

I. No.	River/Stretch	Approximate Distance (Kms)	2022-23	Cargo generally moved
1	2	3	4	5
Α	UN-ORGANISED CARGO			
•	Narakathara - Kozhichalchira	1.2	60	Cement
	Narakathara - Kozhichalchira	1.2	1790	Hollow Bricks
	Sub-total	·· -	1850	
В	Passenger cargo			
_	Alappuzha Boat Jetty - Kavalam	13.3	23961.42	Passenger
	Alappuzha Boat Jetty - Changanassery	29	7877.58	Passenger
	Sub Total		31839	g
	Total(NW-8)		33689	
A	Details of Cargo Moved on National Water UN-ORGANISED CARGO	rways (National Waterway No. 9)		
1	Mangalassery - H Block	9.5	260	Sand
2	Mangalassery - H Block	9.5	190	Rubble
	Sub-total		450	
_	Passenger cargo			
В				
B 1		25	5236.36	Passenger
B 1 2	Alappuzha Boat Jetty - Kottayam Kottayam -Alappuzha Boat Jetty	25 25	5236.36 11406.64	Passenger Passenger
1	Alappuzha Boat Jetty - Kottayam			<u> </u>
1	Alappuzha Boat Jetty - Kottayam Kottayam -Alappuzha Boat Jetty		11406.64	<u> </u>

Total(NW-9)
Source : Inland Waterways Authority of India

SECTION - 3

IWT ACTIVITIES – STATE-WISE

Table No. 3.1 Number of IWT Vessels With Valid	Certificate of SurveyBy Type (As on 31st March 2023)
--	--

	Table No. 3.1													
01.11-	04-4-				Self Propelled						Non-Self Pr	opelled	I=	
SI. No.	State	Year	Cargo	Passenger	Cargo cum Passenger	Tugs & Pushers	Total (Col.3 to Col.6)	Dumb Barges	Dumb Tankers	Dumb Flat	Boats	Others @@	Total (Col.8 to Col.12)	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		0004			450		105	4-			70		0.4	050
1	Assam	2021	0	0	159	6	165	15	-	-	76	-	91	256
		2022 2023	0 0	66 66	2 2	4 4	72 72	9 9	0 0	0 0	0	0 0	9 9	81 81
		2023	U	66	2	4	12	9	U	U	U	U	9	01
2	Bihar*	2021	23	N.A	N.A	21	44	N.A	N.A	23	1	N.A	24	68
		2022	2	0	2	12	16	0	0	0	0	0	0	16
		2023	2	0	2	12	16	0	0	0	0	0	0	16
3	Goa	2021	83	146	12	23	264	-	-	-		1	1	265
		2022	90	130	7	6	233	0	0	0	0	0	0	233
		2023	57	172	18	6	253	-	-	-	-	-	0	253
4	Karnataka	2021	-	32	5	-	37	-	-	-	-	-	0	37
		2022	-	-	-	-	0	-	-	-	-	-	-	-
		2023	-	81	31	-	112	300	-	-	-	-	300	412
5	Kerala	2021	39	59	2	0	100	40			4546	332	4918	5018
5	Reraia								0	0				
		2022	41	4	6	0	51	32	0	0	4802	363	5197	5248
		2023	112	23	6	0	141	28	0	0	5130	593	5751	5892
6	Maharashtra	2021	170	1090	14	70	1344	68	2	5	0	2	77	1421
-		2022	172	1095	17	73	1357	70	3	6	Ō	4	83	1440
		2023	175	1095	21	108	1399	62	4	33	0	5	104	1503
		2020	170	1000	2.1	100	1000	02	7	00	Ü	Ü	104	1000
7	Odisha*	2021	-		73	-	73	-	-	-	-	-	0	73
		2022			66	-	66	-	-	-	-	-	0	66
		2023			66	-	66	-	-	-	-	-	0	66
8	West Bengal	2021	97	371	7	45	520	7	3	5	1823	41	1879	2399
		2022	97	325	7	45	474	15	5	5	1830	40	1895	2369
		2023	125	316	23	58	522	20	5	4	Nil	Nil	29	551
9	Tamel Name	2021					_							
9	Tamil Nadu		-	-	-	-		-	-	-	-	-	-	-
		2022	-	-	-	-	-	-	-	-		-	-	-
		2023	-	-	-	-	-	-	-	-	2	-	2	2
11	Gujarat	2021	174	35	1	148	358	56	0	12	0	11	79	437
- ''	Gujarat													
		2022	171	36	7	139	353	39	0	2	3	24	68	421
		2023	114	23	0	80	217	41	8	0	8	12	69	286
40	Jharkhand*	0004					0	2						
12	Jilai Kilailu	2021					U						2	2
		2022						NA						
		2023						NA						
	Uttar Pradesh			•	•	•					•			
13	ottar PradeSII	2023	0	0	0	0	NA	0	0	0	0	NA	NA	NA
		2021	586	1733	273	313	2905	188	5	45	6446	387	7071	9976
		2022	573	1656	114	279	2622	165	8	13	6635	431	7252	9874
	Grand Total	2022	585	1776	169	268	2798	460	17	37	5140	610	6264	9062
		2023	303	1770	103	200	2190	400	17	31	3140	610	0204	3002

Source : State Governments

^{@@} Others includes country boats

* Information for the year 2022-23 has not received. Previous Year data has been Repeated

Number of Passengers Carried By Inland Water Vessels (Year Ending 31st March 2023)

	(coar interest in						
SI. No.	State	Year	Powered Vessels Employed for passengers (Nos.)	Total No. of passengers carried (000)			
1	2	3	4	5			
1	Assam	2019	98	8514.22			
		2020	98	6585.91			
		2021	76	1979.20			
		2022	66	4385.95			
		2023	70	3155.38			
2	Bihar*	2019	83	578.00			
		2020	83	578.00			
		2021	N.A	N.A			
		2022	0	0.00			
		2023	0	0.00			
3	Karnataka	2019	66	2158.00			
		2020	37	1617.00			
		2021	37	916.25			
		2022	46	928.02			
		2023	-	1283.79			
4	Kerala	2019	66	19739.08			
		2020	74	20535.31			
		2021	63	8874.78			
		2022	104	19224.53			
		2023	103	20262.39			
5	Maharashtra	2019	-	19291.70			
		2020	-	15922.30			
		2021	-	9106.53			
		2022	-	13667.60			
		2023		18724.02			
6	Odisha*	2019	11	128.62			
		2020	11	131.22			
		2021	11	131.22			
		2022	18	118.41			
		2023	18	118.41			
7	West Bengal	2019	321	106492.00			
		2020	335	116880.00			
		2021	378	126980.00			
		2022	332	136369.00			
-	* بر عادات مطا	2023	53	29762.61			
8	Jharkhand*	2021	**	**			
		2022		.A.			
		2023	N.	A.			
-							
9	Uttar Pradesh	2023	3	23.86			

Source : State Governments

[:] Not Available* Information for the year 2022-23 has not received. Previous Year data has been Repeated

 $^{^{\}star\star}~\text{No passanger vessel/tourist vessel operated through NW1 due to restrication of covid-19 Pandemic situation}$

SECTION - 4

IWT ACTIVITIES – PRIVATE COMPANIES/UNDERTAKINGS

	Self Propelled						
		Type	of vessel		g capacity	Non-Self Propelled	
SI. No.	. ,	Cargo (No.)	Passenger (No.)	Cargo(in thousandTonnes)	Passenger(in No.)	(Dumb Barges) (No.)	
1	2	3	4	5	6	7	
1	S.V.Salgaocar						
	2021	1	-	1.32	-	N.A.	
	2022	1	-	1.32	-	N.A.	
	2023	1	-	1.32	-	N.A.	
2	V.M.Salgaocar Sales International						
	2021	2	-	2.81	-	N.A.	
	2022	2	-	2.81	-	N.A.	
	2023	2	-	2.81	-	N.A.	
3	Sesa Resource Ltd.						
	2021	2	-	2.14	NA	N.A.	
	2022	2	-	2.14	NA	N.A.	
	2023	2	-	2.14	NA	N.A.	
4	Vedanta Ltd.						
-7	2021	30	1	41	88	NA	
	2022	31	1	43	88	NA NA	
	2023	31	1	43	88	NA NA	
5	Jindal ITF Ltd.						
	2021	28	-	589.29	-	-	
	2022 2023	28 25	-	- -	- -	-	
6	Kottayam Port and Container Termin						
	2021	1	-	0.2	-	Nil	
	2022	1	-	0.2	-	Nil	
	2023	1	-	0.2	-	Nil	
7	Maharshi Shipping Co.						
	2021	6	-	274.86	-	-	
	2022	6	-	-	-	-	
	2023	6	-	-	-	-	
8	Indo-Swiss Trading Co. Pvt. Ltd.						
	2021	-	2	0.12	270	-	
	2022	-	2	0.12	270	-	
	2023	-	4	-	-	-	
9	VIVADA Inland Waterways Ltd.						
	2021	8	6	825.220	15985	-	
	2022	10	6	-	-	-	
	2023	8	4	-	-	-	
10	West Bengal Surface Transport Corp	oration Ltd					
	2021	8	78	-	55579028	-	
	2022	8	78	-	-	-	
	2023	3	25	-	_	-	

	Private Companies/Undertakings By Type (As on 31st March 202						
		Type	of vessel		g capacity	Non-Self Propelled	
SI. No.	Company/ Undertaking and Year	Cargo (No.)	Passenger (No.)	Cargo(in thousandTonnes)	Passenger(in No.)	(Dumb Barges) (No.)	
1	2	3	4	5	6	7	
11	Hooghly Nadi Jalapath Paribahan Sa 2021	mabaya Samity	40		40790229		
	2021	-	40 40	-	40780228	-	
	2023	-	27	-	-	-	
	2020						
12	West Bengal Tourism Development C	Corporation limite	d, Kolkata*				
	2021	-	8	-	25750	-	
	2022	-	8	-	-	-	
	2023						
	= . N						
13	Eastern Navigation (P) Ltd.	40		204.40	2270		
	2021	10	2	831.46	6878		
	2022 2023	36 36	2 2	-	-		
	2023	30	2	-	-	-	
14	Ghatal Steam Navigation (P) Ltd., Ko	olkata*					
	2021	-	4	-	335710	-	
	2022	-	4	-	-	-	
	2023						
15	Diamond Harbour Municipality, Kolka	ata*					
	2021	-	3	-	179369	-	
	2022	-	3	-	-	-	
	2023						
16	Bengal Heritage River*						
	2021	-	8	-	18059	-	
	2022	-	8	-	-	-	
	2023						
17	Chandan Nagar Municipality, Kolkata	ı*	_				
	2021	-	3	-	35702	-	
	2022 2023	-	3	-	-	-	
	2023						
18	Sohom Shipping Pvt.Ltd.						
	2021	Nil	Nil	Nil	Nil	Nil	
	2022	6	-	-	-	-	
	2023	11	-	-	-	-	
19	Assam Bengal Navigation Co. Pvt. Lt	d.					
	2021	-	4	-	122	-	
	2022	-	4 4		122	NA NA	
	2023	-	4	-	122	NA	
20	M/s Pennon Shipping Pvt. Ltd.						
-	2021	6	-	10.947	Nil	Nil	
	2022	1	-	1.80	Nil	Nil	
	2023	1	-	1.80	Nil	Nil	

				Propelled	n 31st March 202	Non-Self
el Na	Company/ Undertaking and Varia	Type	of vessel		g capacity	Propelled
SI. No.	Company/ Undertaking and Year	Cargo (No.)	Passenger (No.)	Cargo(in thousandTonnes)	Passenger(in No.)	(Dumb Barges) (No.)
1	2	3	4	5	6	7
21	Ganges Water Transport Co. Pvt.					
	2021	2	-	7.30	-	-
	2022	2	-	5.30	-	NA
	2023	2	-	5.31	-	-
22	Krishna Shipping & Logistics					
	2021	5	-	2.08	-	5
	2022	4	-	1.99	-	5
	2023	5	-	2.08	-	7
23	JSW Salav Steel Ltd.					
20	2021	NA	NA	NA	NA	NA
	2022	NA	NA NA	NA NA	NA NA	NA
	2023	1	-	0.01	-	-
	2023	,	-	0.01	_	_
24	Finolex Industries Ltd.					
	2021	1	-	0.01		
	2022	2	-	0.03	18	NA
	2023	2	-	0.03	18	NA
25	Minescape Minerals Pvt. Ltd.					
	2021	-	-	-	-	-
	2022	4	-	8.65	-	-
	2023	4	-	8.65	-	-
26	Jsw Jaigarh Port Ltd.					
	2021	4	-	21.06	Nil	Nil
	2022	4	-	21.06	Nil	Nil
	2023	4	-	21.06	Nil	Nil
27	The Fertilizers and Chemicals Travai	ncore Limited				
21	2021	1	-	0.417	-	-
	2022	1	<u>-</u>	0.417	_	-
	2023	1	-	0.417	-	NA
28	Infractive Louistics Det 144					
20	Infrastructure Logistics Pvt. Ltd. 2021	3		106.68		
	2021	5 6	-	329.73	-	-
	2022	4	-	329.73 218.60	- NA	-
	2023	4	-	210.00	INA	-
29	Kerala Shipping & Inland Navigation	Co. Ltd.				
	2021	6	-	1.76	-	-
	2022	11	3	3.62	584	-
	2023	11	5	3.87	784	-

[Table No. 4.1 Priv	ate Compani	ate Companies/Undertakings By Type (As on 31st March 202 Self Propelled							
		Ŧ			16 .	Non-Self				
SI. No.	Company/ Undertaking and Year	Cargo (No.)	of vessel Passenger (No.)	Cargo(in	g capacity Passenger(in No.)	Propelled (Dumb Barges)				
1	2	3	4	thousandTonnes) 5	6	(No.) 7				
•			-			•				
30	M/sTimblo Pvt. Ltd.									
	2021	1	1	0.149+(60 KL HFHSD)	8	Nil				
	2022	2	-	0250+(60 KL HFHSD)	14	Nil				
	2023	1	1	0.025+(60 KL HFHSD)	14	Nil				
31	Backwater Navigation Co.									
	2021	1	-	0.19	-	-				
	2022	1	-	0.19	-	NA				
	2023	1	-	0.19	-	NA				
32	Adventure Resorts & Cruises Pvt. Ltd	i.								
	2021	-	2	1.21	64	-				
	2022	Passenger	2	NA	64	NA				
	2023	Passenger	2	1.21	64	NA				
33	K.K. Shipping									
	2021	1	-	0.47	-	Nil				
	2022	1	-	0.27	-	Nil				
	2023	1	-	0.40	Nil	Nil				
34	Haldia Nirman Projects Pvt. Ltd.									
	2021	Nil	Nil	Nil	Nil	Nil				
	2022	Nil	Nil	Nil	Nil	Nil				
	2023	Nil	Nil	Nil	Nil	Nil				
35	Inland Coastal Shipping Ltd.									
	2021	2	-	600	-	NA				
	2022	2	-	0.60	-	NA				
	2023	2	-	0.60	-	NA				
36	Heritage River Journeys Pvt. Ltd.									
	2021	-	2	-	112	-				
	2022	-	2	-	112	-				
	2023	-	3	-	148	-				
37	Spring Professional Services Pvt. Ltd	i.								
	2021	-	-	-	-	-				
	2022	-	1	-	70	-				
	2023	-	1	-	70	-				
38	JSW Dharamtar Port Pvt. Ltd.									
	2021	-	-	-	-	-				
	2022	Nil	Nil	Nil	Nil	Nil				
	2023	Nil	Nil	Nil	Nil	Nil				

IWT Vessels With Valid Certificates of Survey-Owned By Responding Private Companies/Undertakings By Type (As on 31st March 2023)

_	Table No. 4.1							
	Self Propelled Type of vessel Carrying capacity							
SI. No.	Company/ Undertaking and Year	Туре	of vessel	Carryin	g capacity	Propelled		
O 110.	Company, ondertaking and real	Cargo (No.)	Passenger (No.)	Cargo(in thousandTonnes)	Passenger(in No.)	(Dumb Barges) (No.)		
1	2	3	4	5	6	7		
39	PNP Maritime Services Pvt. Ltd.	2			NIA	NA		
	2021	3	-	4	NA	NA		
	2022 2023	12 20	-	14 25	NA NA	NA NA		
	2023	20		25	INA	NA.		
40	M/S Neli							
	2021	-	-	-	-	-		
	2022	-	-	-	-	-		
	2023	1	-	0.5	Nil	-		
41	TP RoyChowdhury & Co. Pvt. Ltd.							
41	2022	5	_	9.15	_	Nil		
	2023	5	_	9.15	Nil	Nil		
	2020	Ü		0.10	1411	140		
42	M/s Shiny Shipping & Logistics Pvt L	td						
	2022	2	-	1.37	-	-		
	2023	2	-	1.37	-	-		
43	M/s Nadi Bangla Shipping Corporation	n*						
70	2022	Nil	Nil	Nil	Nil	Nil		
	2023							
44	Tisha Navigation	A 171	A.171	A171	A.171	N. C.		
	2023	Nil	Nil	Nil	Nil	Nil		
45	Cochin Bunkers Pvt. Ltd.							
	2022	3	-	0.98	-	-		
	2023	4	-	1.90	-	NA		
46	Suman Forwarding Agency Pvt. Ltd.							
	2023	1	-	0.40	Nil	NA		
47	Azzura Marine Liners Pvt. Ltd.							
71	2023	4	_	_	_	_		
	2020							
48	M/s Osprey Waterways (India)							
	2023	-	1	-	156	-		
49	Abul Hassan & Brothers Pvt. Ltd							
40	2023	2	_	_	_	_		
	2023	<u>~</u>	-	-	-	-		
50	Eminence Shipping Agencies Pvt. Ltd	d.						
50								

Source: Pvt. IWT Companies/Major Operators

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

NA- Not Applicable

 $^{^{\}star}$ No information received for the year 2022-23

Cargo/Passenger Carried And Freight Collected - By Responding Private Companies/ Public Undertakings (Year Ending 31st March 2023)

			No. of			Cargo	Carried	Passenger	Carried
SI.No.	Company/Undertaking and Year	Type of Vessels	Powered Vessels Employed	Distance Travelled (Kms)	Freight 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								
	2021	Cargo	1	5328	153.30	156884	835.88	NA	-
	2022	Cargo	1	2854	107.72	122559.72	349.73	NA	-
	2023	Cargo	1	2637	108.65	107919.97	284.62	NA	-
2	V.M.Salgaocar Sales Internationa	ı							
-	2021	 Cargo	2	6890	206.49	219483	1512.24	NA	_
	2022	Cargo	2	2645	98.44	116072	307.00	NA	_
	2023	Cargo	2	2581	108.82	110077	284.08	NA	-
3	Sesa Resources Ltd.		•				107110 07		
	2021	Cargo	2	7754	NA	16392838.55	127110.07	NA	-
	2022	Cargo	2 2	9672	(c)	278573.72	2694.37	NA	-
	2023	Cargo	2	5227	Nil	134125.33	701.07	NA	-
4	Vedanta Ltd.								
	2021	Cargo/Passenger	17	77997	NA	3150383.38	245720.45	NA	=
	2022	Cargo/Passenger	21	61135	(c)	2303667.28	140834.70	NA	-
	2023	Cargo/Passenger	20	61347	Nil	1743256.162	106943.54	NA	=
5	Jindal ITF Ltd.								
3	2021	Cargo	28	_	525.18	589290	_	_	_
	2022	Cargo	28	_	561.81	627850	_	_	_
	2023	Cargo	25	-	628.36	575000	-	-	-
6	Kottayam Port & Container Term			400	N.C.	NIII			
	2021 2022	All	1 1	100	Nil	Nil Nil	-	-	-
		All	1	100	Nil		-	NA	-
	2023	All	'		Nil	Nil	-	Nil	-
7	Maharshi Shipping Co.								
	2021	Cargo	6	-	171.73	274860	-	-	-
	2022	Cargo	6	-	175.52	281610	-	-	-
	2023	Cargo	6	-	217.85	76699	-	-	-
8	Indo-Swiss Trading Co.Pvt. Ltd.								
-	2021	Pass.	2	14670	-	-	_	-	_
	2022	Pass.	2	15472	Nil	_	_	_	_
	2023	Pass.	4	-	256.53	-	-	375662	-
9	VIVADA Inland Waterways Ltd. 2021	Corgo/Tug/Pooc/LCT	16	_	982.39	82522	_	15985	
	2021 2022	Cargo/Tug/Pass/LCT	16 16	-	982.39 995.42	82522 91035	-	15985 17215	-
	2022	Cargo/Tug/Pass/LCT Cargo/Pass	12	-	1326.67	251000	-	33056	-
10	W. Bengal Surface Transport Con								
	2021	Pass./LCT	86	-	838.78	37712(b)	-	55579028	-
	2022	Pass./LCT	86	-	861.21	38213(b)	-	58178258	-
	2023	Pass./LCT	28	-	415.61	18106(b)	-	10624800	-

Table No. 4.2

(Year Ending 31st March 2023)

			l			Cargo	Carried	Passenger	Carried
SI.No.	Company/Undertaking and Year	Type of Vessels	No. of Powered Vessels Employed	Distance Travelled (Kms)	Freight Collected (Rs.in Lakh)	Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
			•	•			•	•	
11	Hooghly Nadi Jalapath Paribahar	n Samabaya Samity							
	2021	Pass.	40	-	518.18	-	-	40780228	-
	2022	Pass.	40	-	525.12	-	-	41621238	-
	2023	Pass.	27	-	282.56	-	-	19137592	-
12	West Bengal Tourism Developme	ent Corpn. Ltd., Kolka	ta*						
	2021	Pass.	8	-	95.18	-	-	25750	-
	2022	Pass.	8	-	98.65	-	-	27635	-
	2023								
13	Eastern Navigation (P) Ltd.								
	2021	Cargo/Tug/Pass.	12		505.26	831.46			-
	2022	Cargo/Tug/Pass.	38	-	514.31	854.42	-	7115	-
	2023	Cargo/Tug/Pass.	38	-	612.52	3795	-	8240.00	-
14	Ghatal steam Navigation (P) Ltd.	Kolkata*							
	2021	Pass.	4	_	253.16	_	_	335710	_
	2022	Pass.	4	_	258.61	-	-	342621	_
	2023	1 433.							
15	Diamond Harbour Municipality, K	'olkata*							
15	2021	Pass.	3	_	126.12	_	_	179369	
	2022	Pass.	3	_	131.42	_	_	191467	_
	2023	F 033.	ŭ					.0	
16	Bengal Heritage River*								
10	2021	Tuge	8	_	15.16	_	_	18059	
	2022	Tugs Tugs	8	_	19.42	_		22165	
	2023	rugs	Ü		10.42			22100	
17	Chandan Nagar Municipality, Kol	kata*							
17	2021	Pass.	3	_	4.29	_	_	35702	_
	2022	Pass.	3	_	4.95	_	_	38145	
	2023	1 433.	ŭ					00110	
18	Soham Shipping Pvt.Ltd.								
10	2021	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2022	Cargo	6	-	112.5	214850	-	-	-
	2023	Cargo	11	-	-	96007	-	-	-
19	Accom Rongol Novicetion Co. P.	at Ltd							
19	Assam Bengal Navigation Co. Pv 2021	/t. Lta. -	10	2717	_		_	661	1.80
	2021		8	2577	-	-	-	280	0.72
	2022	Pass. Pass.	10	2011	-	-	-	544	0.12
	2020	Pass.	10		-	-		J 44	

Table No. 4.2

(Year Ending 31st March 2023) Cargo Carried Passenger Carried No. of Distance Freight

SI.No.	Company/Undertaking and Year	Type of Vessels	Powered Vessels Employed	Travelled (Kms)	Freight Collected (Rs.in Lakh)	Cargo (in Tonnes)	TKms (in millions)	Passenger (in No.)	PKms
1	2	3	4	5	6	7	8	9	10
				-	-			-	
20	M/s Pennon Shipping Pvt. Ltd.								
	2021	Cargo	6	27095	-	349340	9465	-	-
	2022	Cargo	1	2072	-	33469	69	Nil	-
	2023	Cargo	1	21384	-	25353	542	Nil	-
21	Ganges Water Transport Co. Pvt.	Ltd.							
	2021	Cargo	2	33132	287.47	89461	2964.02	-	-
	2022	Cargo	2		412.40	103284		NA	-
	2023	Cargo	2	9432.5	395.60	124788	1177.06	-	-
22	Krishna Shipping & Logistics								
	2021	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-	-
	2023	-	-	-	-	-	-	-	-
23	JSW Salav Steel Ltd.								
	2021	Cargo	8	2304	Nil	274248	631.87	NA	NA
	2022	Cargo	4	1071	Nil	238000	254.90	NA	NA
	2023	Cargo	7	9504	Nil	418395	3976.43	NA	NA
24	Finolex Industries Ltd.								
24	2021	_	Nil	NA	NA	NA	NA	NA	NA
	2022	NA	NA	NA	NA	NA	NA	NA	NA
	2023	NA	NA	NA	NA	NA	NA	NA	NA
25	Minasaana Minasaasla Dut 1 td								
25	Minescape Mineraaals Pvt. Ltd. 2021								
	2021	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	8.80	-	-
	2023	-	4	4400	217.8	2000	0.00	-	-
26	Jsw Jaigarh Port Ltd.								
	2021	Cargo	4	89304	-	2668326	238292.19	-	-
	2022	Cargo	4	76372	-	2297051	175430.38	-	-
	2023	Cargo	4	134663	-	2255580	303742.32	-	-
27	The Fertilizers and Chemicals Tra	avancore Limited							
	2021		1	20467	+	58307.28	1193.38	-	-
	2022	Cargo	1	22876	+	70464	1611.93	-	-
	2023	Cargo	1	22838	NA(+)	64866	1481.41	NA	NA
28	Infrastructure Logistics Pvt.								
	2021	Cargo	5	1704	(d)	215680	367.52	_	_
	2022	Ü	6	4862	(d)	329725	1603.12	-	_
	2023	Cargo	4	3477	(d)	218600	760.07	NA	NA

Table No. 4.2 (Year Ending 31st March 2023) Cargo Carried Passenger Carried No. of Freight Distance Powered Type of Vessels SI.No. Company/Undertaking and Year Travelled Collected Cargo TKms Passenger Vessels **PKms** (Rs.in Lakh) (Kms) (in Tonnes) (in millions) (in No.) **Employed** 1 2 8 10 29 Kerala Shipping & Inland Navigation Co. Ltd. 28314 7279.76 2021 Cargo 6 497.75 257108 2022 Cargo/Passenger 17948 371.94 158185.6 2839.12 1001445 17973.93 11 2023 Cargo/Passenger 13672 282.85 121118 1655.93 1001445 9 Timblo Pvt. Ltd. 2021 Cargo/Passenger 3 67 2.30 147 KL 10.08 222 2022 1.29 110 33.60 Passenger 1 2023 Cargo/Passenger 593 12.46 120 89.61 Backwater Navigation Co. 31 257.00 66048 1613.16 Cargo 24424 2021 66048 1613.16 2022 Cargo 24424 287.00 2023 Cargo 25489 306.00 68864 1755.27 NA NA 32 Adventure Resorts & Cruises Pvt. Ltd. 0 O 2021 Passenger 2 473 0 0 2022 Passenger 2 NA NA NA NA NA 2023 Passenger 237 315 K.K. Shipping 33 13.50 e 2462 2021 Cargo 1560 3.84 2022 Cargo 1560 13.50 e 704 1.10 14.50e 2023 Cargo 3120 3809 11.88 NA NA Haldia Nirman Projects Pvt. Ltd. 2021 NA NA NA NA NA NA NA NA 2022 Nil Nil Nii Nil Nil Nii Nil Nil 2023 Nil Nil Nil Nil Nil Nil Nil Nil Inland Coastal Shipping Ltd. 35 2021 Cargo 2 3260 1.98 420 1.37 2022 5705 2.51 650 3.71 Cargo 2 2023 Cargo 2 8965 7 12245 871 7.81 Nil Nil Heritage River Journeys Pvt. Ltd. 2021 2022 2023 Passenger 3 982 Spring Professional Services Pvt. Ltd. 37 2021 2022 200 0.51 180 0.04 Passenger 1 2023 Passenger 120 0.51 60 0.01 JSW Dharamtar Port Pvt. Ltd. 38 2021 50 596454 Nil 12902 7695 2022 60 707564 17207 12175 2023 60 1065284 24296 25882

(Year Ending 31st March 2023) Table No. 4.2 Cargo Carried Passenger Carried No. of Freight Distance Powered Type of Vessels Collected SI.No. Company/Undertaking and Year Travelled TKms Passenger Cargo Vessels **PKms** (Kms) (Rs.in Lakh) (in Tonnes) (in millions) (in No.) Employed 1 2 3 4 5 6 9 10 PNP Maritime Services Pvt. Ltd. 2021 3272050 2022 3288000 NA 2023 3382673 NA M/S Neli 40 2021 2022 2023 Cargo 6240 14.50e 9005 56.19 NA NA TP RoyChowdhury & Co. Pvt. Ltd. 5439 88 2022 Cargo 5 18237 298288 Nil 2023 Cargo 561672 352112 197771.45 5 M/s Shiny Shipping & Logistics Pvt Ltd 42 2022 2023 M/s Nadi Bangla Shipping Corporation* 43 2022 Nil Nil Nil Nil Nil Nil Nil Nil 2023 **Tisha Navigation** 2023 Nil Nil Nil Nil Nil Nil Nil Nil Cochin Bunkers Pvt. Ltd. 45 2022 3 Cargo 2023 Cargo 4 34840 498.33 219405 7644.07 46 Suman Forwarding Agency Pvt. Ltd. 2023 NA NA NA NA NA NA NA Azzura Marine Liners Pvt. Ltd. 2023 154150 405 Passenger 4 M/s Osprey Waterways (India) 48 2023 Passenger 83 8000 49 Abul Hassan & Brothers Pvt. Ltd 2023 25992 Cargo Eminence Shipping Agencies Pvt. Ltd. 50 2023 NA NA NA NA NA NA NA NA

Source: Pvt. IWT Companies/Major Operators

 $Note: This \ table \ covers \ only \ those \ IWT \ Co./Operators \ from \ whom \ the \ data/reply \ is \ received \ by \ TRW.$

⁽c):Rs. Nil Company Owned barges hired to third party

⁽d): Cargo sold on FOB Basis

⁽e) as per USD rate (14.50 USD per MT)

^{+ :} Barge is used for transportation between production divison

^{*} No information received for the year 2022-23

SECTION - 5

PLAN-WISE OUTLAY & EXPENDITURE FOR IWT SECTOR

YEAR WISE FINANCIAL PERFORMANCE FROM F.Y. 2019-20 TO F.Y. 2023-24

(Rs. In Crore)

		Fi	nancial Y	ear	Fi	nancial Ye	ear	Fi	nancial Ye	ear	Fi	nancial Y	ear	Fi	nancial Ye	ar
G1			(2019-20))		(2020-21)			(2021-22)			(2022-23)		(2023-24)	
S1. No.	Budget head/ Waterways	B.E	R.E	Exp.	B.E	R.E	Ехр.	B.E	R.E @	Ехр.	B.E <a>@	R.E	Exp. (Provisin al/unau dited)	в.е @	R.E	Exp.
I	Grants to IWAI/INVESTMENT (Execpt JMVP & NEA - 21-22/22-23) @															
1	National Waterway-1	96.66	90.66	155.10	109.00	62.00	60.19	75.00	85.50	87.83	90.00	87.03	87.22			
2	National Waterway-3	51.43	15.21	26.07	31.00	21.00	21.52	10.00	10.20	10.83	6.00	4.53	4.51			
3	National Waterway-4						3.62	3.50	3.10	3.08	0.50	0.18	0.18			
4	National Waterway-5					37.00	2.13	3.00	2.60	2.58	1.00	0.76	0.76			
5	Others Projects/Activities etc.**	156.47	18.23	31.50	60.00	37.00	9.82	10.00	12.00	12.89	7.00	6.50	6.33			
6	Other NWs						3.40	0.50	0.60	0.59	1.50	1.00	0.86			
	Sub Total - I	304.56	124.10	212.67*	200.00	120.00	100.68	102.00	114.00	117.80	106.00	100.00	99.86	118.46		
II	Jal Marg Vikas Project (JMVP)	230.00	230.00	461.83*	300.00	261.50	227.83	295.00	218.00	229.61	285.01	295.51	315.88			
	Sub Total - I+II (Grants to IWAI including JMVP)/Investments (execpt NEA - 21-22/22-23)	534.56	354.10	674.50*	500.00	381.50	328.51	397.00	332.00	347.41	391.01	395.51	415.74	546.50		
III	North Eastern Areas															
1	National Waterway-2	80.00	52.50	58.43*	40.00	32.00	38.79	89.10	84.80	78.04	99.80	99.80	98.96	197.00		
2	Proposed NW-16 (Barak) ***															
3	Development of Indo- Bangladesh protocol for Channel marking, Dredging & Night Navigation etc. ***															
4	Central Plan scheme for NER (Operated by IWT Section MoPS&W) (Being controlled by IWT Wing of Ministry)															
	Sub total - III (NER) @	80.00	52.50	58.43*	40.00	32.00	38.79	89.10	84.80	78.04	99.80	99.80	98.96	197.00		
	Grand Total	614.56	406.60	732.93*	540.00	413.50	367.30	486.10	416.80	425.45	490.81	495.31	514.70	861.96		

Source : Inland Waterways Authority of India (IWAI)

Note: Expenditure shown on Accrual basis

^{*} Expenditure during 2016-17 to 2019-20 also includes expenditure from Bond Fund raised from Extra Budgetary Resources (EBRs) during 2016-17 and 2017-18 for Rs. 340 crore and Rs.660 crore respectively.

^{**} The expenditure on Jal Marg Vikas Project (JMVP) included in Grants to IWAI (I-5) upto 2016-17 since seperate Budget Head was created in F. Y. 2017-18

^{***} Budget and expenditure on account of SI. No.III. 2 for NW-16 (Barak) and SI. No.III. 3 are incuded in SI. No.III.1 under North Eastern Areas.

[@] Budget provided to IWAI under Capital Section/Head - Capital Outlay -Investment during 2021-22 (RE) and onwards.

SECTION - 6

INLAND WATERWAYS TRANSPORT ACCIDENTS

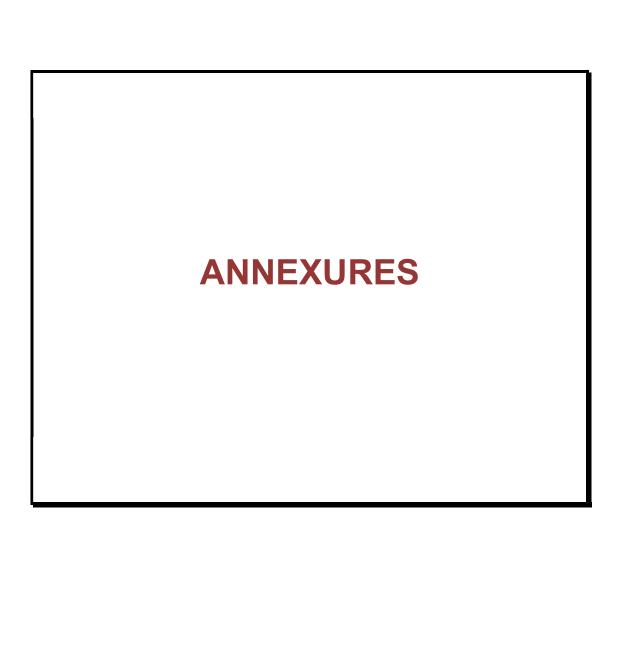
No. of Accidents, Persons Injured And Died by Drowning (Boat Capsize) in States During 2022.

			Drowning (Boat Capsize)								
SI.	State/UT	No. of		No. of I	Persons Injured				of Persons Died		
No.		Cases	Male	Female	Transgenders	Total	Male	Female	Transgenders	Total	
1	2	3	4	5	6	7	8	9	10	11	
	STATES										
1	Andhra Pradesh	49	0	0	0	0	43	12	0	55	
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	
3	Assam	8	0	0	0	0	3	5	0	8	
4	Bihar	98	33	7	0	40	68	31	0	99	
5	Chhattisgarh	3	0	0	0	0	1	2	0	3	
6	Goa	0	0	0	0	0	0	0	0	0	
7	Gujarat	5	0	0	0	0	7	4	0	11	
8	Haryana	0	0	0	0	0	0	0	0	0	
9	Himachal Pradesh	0	0	0	0	0	0	0	0	0	
10	Jharkhand	10	0	0	0	0	12	3	0	15	
11	Karnataka	1	0	0	0	0	1	0	0	1	
12	Kerala	13	0	0	0	0	16	2	0	18	
13	Madhya Pradesh	1	0	0	0	0	3	0	0	3	
14	Maharashtra	2	0	0	0	0	1	2	0	3	
15	Manipur	0	0	0	0	0	0	0	0	0	
16	Meghalaya	0	0	0	0	0	0	0	0	0	
17	Mizoram	1	Ö	0	0	Ö	0	1	0	1	
18	Nagaland	0	0	0	0	Ö	0	0	0	0	
19	Odisha	Ö	0	0	0	0	0	0	0	0	
20	Punjab	0	0	0	0	0	0	0	0	0	
21	Rajasthan	Ö	0	0	0	Ö	Ö	Ö	0	0	
22	Sikkim	0	0	0	0	Ö	0	Ö	0	0	
23	Tamil Nadu	13	0	0	0	Ö	13	1	0	14	
24	Telangana	0	0	0	0	0	0	0	0	0	
25	Tripura	Ö	0	0	Õ	Ö	0	0	0	Õ	
26	Uttar Pradesh	49	0	0	2	2	42	8	0	50	
27	Uttarakhand	0	0	0	0	0	0	0	0	0	
28	West Bengal	0	0	0	Ö	0	0	0	0	0	
20	Total(States)	253	33	7	2	42	210	71	0	281	
	UNION TERRITORII		- 00	· · · · · · · · · · · · · · · · · · ·		72	210	, ,		201	
	Andaman &										
29	Nicobar Island	3	0	0	0	0	3	0	0	3	
30	Chandigarh	0	0	0	0	0	0	0	0	0	
	Dadra and Nagar										
31	Haveli and Daman	0	0	0	0	0	0	0	0	0	
32	and Diu Delhi	0	0	0	0	0	0	0	0	0	
33	Jammu and	0	0	0	0	0	0	0	0	0	
	Kashmir										
34	Ladakh	0	0	0	0	0	0	0	0	0	
35	Lakshadweep	0	0	0	0	0	0	0	0	0	
36	Puducherry	0	0	0	0	0	0	0	0	0	
	Total (UTs)	3	0	0	0	0	3	0	0	3	
	Total States/UTs	256	33	7	2	42	213	71	0	284	

Source : Accidental Deaths & Suicides in India - 2022

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

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



Annex- 1

List of 111 National Waterways

(Government of India has declared 111 waterways as National Waterways through National Waterways Act, 2016 enacted on 12.04.2016).

National Waterways Act, 2016 enacted on 12.04.2016).								
Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES				
1	National Waterway 1	1620	Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad)	Uttar Pradesh, Bihar, Jharkhand & West Bengal				
2	National Waterway 2	891	Brahmaputra River (Dhubri - Sadiya)	Assam				
3	National Waterway 3	205	West Coast Canal (Kottapuram - Kollam), Champakara and Udyogmandal Canals	Kerala				
		170	West Coast Canal (Kottapuram - Kozhikode)					
		50	Kakinada Canal (Kakinada to Rajahmundry)					
		171	Godavari river (Bhadrachalam to Rajahmundry)					
		139	Eluru Canal (Rajahmundry to Vijayawada)					
		157	Krishna river (Wazirabad to Vijayawada)					
		113	Commamur Canal (Vijayawada to Peddaganjam)	Andhra Pradesh, Telangana, Chhattisgarh,				
4	National Waterway 4	316	North Buckingham Canal (Peddaganjam to Central Station of Chennai)	Karnataka, Tamil Nadu, Pondichery and Maharashtra				
		110	South Buckingham canal (Central Station of Chennai to Marakanam)	anu manarashua				
		22	Marakanam to Puducherry through Kaluvelly tank					
		1202	River Godavari (Bhadrachalam - Nashik)					
		636	River Krishna (Wazirabad - Galagali)					
5	National Waterway 5	256	East Coast Canal and Matai river	Odisha and West Bengal				

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
		265	Brahmani-Kharsua-Dhamra rivers	
		67	Mahanadi delta rivers (Consisting of Hansua river, Nunanala, Gobrinala, Kharnasi river and Mahanadi river)	
6	National Waterway 6	68	Aai River	Assam
7	National Waterway 7	90	Ajoy (Ajay) River	West Bengal
8	National Waterway 8	29	Alappuzha- Changanassery Canal	Kerala
9	National Waterway 9	40	Alappuzha- Kottayam – Athirampuzha Canal	Kerala Alternate route: 11.5km
10	National Waterway 10	45	Amba River	Maharashtra
11	National Waterway 11	99	Arunawati - Aran River System	Maharashtra
12	National Waterway 12	5.5	Asi River	Uttar Pradesh
13	National Waterway 13	11	Avm Canal	Kerala & Tamil Nadu
14	National Waterway 14	48	Baitarni River	Odisha
15	National Waterway 15	135	Bakreswar - Mayurakshi River System	West Bengal
16	National Waterway 16	121	Barak River	Assam
17	National Waterway 17	189	Beas River	Himachal Pradesh & Punjab
18	National Waterway 18	69	Beki River	Assam
19	National Waterway 19	67	Betwa River	Uttar Pradesh
20	National Waterway 20	95	Bhavani River	Tamil Nadu
21	National Waterway 21	139	Bheema River	Karnataka & Telangana
22	National Waterway 22	156	Birupa-BadiGenguti- Brahmani River System	Odisha
23	National Waterway 23	56	BudhaBalanga	Odisha
24	National Waterway 24	61	Chambal River	Uttar Pradesh
25	National Waterway 25	33	Chapora River	Goa
26	National Waterway 26	51	Chenab River	Jammu & Kashmir
27	National Waterway 27	17	Cumberjua River	Goa
28	National Waterway 28	45	Dabhol Creek -Vashishti River System	Maharashtra
29	National Waterway 29	132	Damodar River	West Bengal
30	National Waterway 30	109	Dehing River	Assam

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
31	National Waterway 31	114	Dhansiri / Chathe	Assam
32	National Waterway 32	63	Dikhu River	Assam
33	National Waterway 33	61	Doyans River	Assam
34	National Waterway 34	137	Dvc Canal	West Bengal
35	National Waterway 35	108	Dwarekeswar River	West Bengal
36	National Waterway 36	119	Dwarka River	West Bengal
37	National Waterway 37	296	Gandak River	Bihar & Uttar Pradesh
38	National Waterway 38	62	Gangadhar River	Assam & West Bengal
39	National Waterway 39	49	Ganol River	Meghalaya
40	National Waterway 40	354	Ghaghra River	Bihar & Uttar Pradesh
41	National Waterway 41	112	Ghataprabha River	Karnataka
42	National Waterway 42	514	Gomti River	Uttar Pradesh
43	National Waterway 43	10	Gurupur River	Karnataka
44	National Waterway 44	63	Ichamati River	West Bengal
45	National Waterway 45	650	Indira Gandhi Canal	Punjab , Haryana &Rajashtan
46	National Waterway 46	35	Indus River	Jammu & Kashmir
47	National Waterway 47	131	Jalangi River	West Bengal
48	National Waterway 48	590	Jawai-Luni-Rann Of Kutch River System	Gujarat & Rajasthan
49	National Waterway 49	110	Jhelum River	Jammu & Kashmir
50	National Waterway 50	43	Jinjiram River	Assam & Meghalaya
51	National Waterway 51	23	Kabini River	Karnataka
52	National Waterway 52	53	Kali River	Karnataka
53	National Waterway 53	145	Kalyan-Thane-Mumbai Waterway, Vasai Creek And Ulhas River System	Maharashtra
54	National Waterway 54	86	Karamnasa River	Bihar & Uttar Pradesh
55	National Waterway 55	311	Kaveri - Kollidam River System	Tamil Nadu
56	National Waterway 56	22	Kherkai River	Jharkhand
57	National Waterway 57	50	Kopili River	Assam
58	National Waterway 58	236	Kosi River	Bihar
59	National Waterway 59	19	Kottayam-Vaikom Canal	Kerala
60	National Waterway 60	80	Kumari River	West Bengal

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
61	National Waterway 61	28	Kynshi River	Meghalaya
62	National Waterway 62	86	Lohit River	Assam & Arunachal Pradesh
63	National Waterway 63	336	Luni River	Rajasthan
64	National Waterway 64	426	Mahanadi River	Odisha
65	National Waterway 65	80	Mahananda River	West Bengal
66	National Waterway 66	247	Mahi River	Gujarat
67	National Waterway 67	94	Malaprabha River	Karnataka
68	National Waterway 68	41	Mandovi River	Goa
69	National Waterway 69	5	Manimutharu River	Tamil Nadu
70	National Waterway 70	245	Manjara River	Maharashtra & Telangana
71	National Waterway 71	27	Mapusa / Moide River	Goa
72	National Waterway 72	59	Nag River	Maharashtra
73	National Waterway 73	226	Narmada River	Maharashtra &Gujarat
74	National Waterway 74	79	Netravathi River	Karnataka
75	National Waterway 75	142	Palar River	Tamil Nadu
76	National Waterway 76	23	Panchagangavali (Panchagangoli) River	Karnataka
77	National Waterway 77	20	Pazhyar River	Tamil Nadu
78	National Waterway 78	262	Penganaga - Wardha River System	Maharashtra & Telangana
79	National Waterway 79	28	Pennar River	Andhra Pradesh
80	National Waterway 80	126	Ponniyar River	Tamil Nadu
81	National Waterway 81	35	Punpun River	Bihar
82	National Waterway 82	58	Puthimari River	Assam
83	National Waterway 83	31	Rajpuri Creek	Maharashtra
84	National Waterway 84	44	Ravi River	Jammu & Kashmir, Himachal Pradesh & Punjab
85	National Waterway 85	31	Revadanda Creek - Kundalika River System	Maharashtra
86	National Waterway 86	72	Rupnarayan River	West Bengal
87	National Waterway 87	210	Sabarmati River	Gujarat
88	National Waterway 88	14	Sal River	Goa
89	National Waterway 89	45	Savitri River (Bankot Creek)	Maharashtra
90	National Waterway 90	29	Sharavati River	Karnataka
91	National Waterway 91	52	Shastri River - Jaigad Creek System	Maharashtra

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
92	National Waterway 92	26	Silabati River	West Bengal
93	National Waterway 93	63	Simsang River	Meghalaya
94	National Waterway 94	141	Sone River	Bihar
95	National Waterway 95	106	Subansiri River	Assam
96	National Waterway 96	311	Subarnrekha River	Jharkhand, West Bengal & Odisha
		172	Sunderbans Waterway	West Bengal
		56	Bidya River	West Bengal
		15	ChhotaKalagachi (ChhotoKalergachi) River	West Bengal
		7	Gomar River	West Bengal
		16	Haribhanga River	West Bengal
		37	Hogla (Hogal)-Pathankhali River	West Bengal
97	National Waterway 97	9	Kalindi (Kalandi) River	West Bengal
		22	Katakhali River	West Bengal
		99	Matla River	West Bengal
		28	Muri Ganga (Baratala) River	West Bengal
		53	Raimangal River	West Bengal
		14	Sahibkhali (Sahebkhali) River	West Bengal
		37	Saptamukhi River	West Bengal
		64	Thakurran River	West Bengal
98	National Waterway 98	377	Sutlej River	Himachal Pradesh & Punjab
99	National Waterway 99	62	Tamaraparani River	Tamil Nadu
100	National Waterway 100	436	Tapi River	Maharashtra & Gujarat
101	National Waterway 101	42	Tizu - Zungki Rivers	Nagaland
102	National Waterway 102	87	Tlwang (Dhaleswari River)	Assam & Mizoram
103	National Waterway 103	73	Tons River	Uttar Pradesh
104	National Waterway 104	232	Tungabhadra River	Karnataka, Telangana & Andhra Pradesh
105	National Waterway 105	15	Udayavara River	Karnataka
106	National Waterway 106	20	Umngot (Dawki) River	Meghalaya
107	National Waterway 107	46	Vaigai River	Tamil Nadu
108	National Waterway 108	53	Varuna River	Uttar Pradesh
109	National Waterway 109	166	Wainganga - Pranahita River System	Maharashtra &Telangana

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
110	National Waterway 110	1080	Yamuna River	Delhi, Haryana & Uttar Pradesh
111	National Waterway 111	50	Zuari River	Goa
		20162.5		

INFRASTRUCTURE FACILITIES ON NATIONAL WATERWAYS 1, 2 & 3

1. <u>National Waterway – 1</u>:River Ganga-Bhagirathi-Hooghly river system from Haldia to Allahabad, 1620 km:

1. Varanasi MMT

- a. Type of Jetty: Fixed RCC Jetty, 200m*35m
- b. Usage: All types of Cargo & Passenger vessels
- c. Managed by: IWAI, Process for O&M of the terminal by a private operator is in progress
- d. Commodities: Cement, Heavy Industries, Agriculture and horticulture products, Containers, ODC etc. e. LAD Range: Varanasi to Saidpur stretch (64 km), 0.8m to 2.2m
- f. Facilities: i. Open Storage is available, Covered storage space is proposed in 2nd Phase. ii. Weighbridge proposed in 2nd phase. iii. Dedicated Truck Parking space proposed in 2nd phase.
- g. Equipment: Two Mobile Harbour Cranes of rated capacity 50 MT each, suitable for handling both bulk and container cargo
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road (dimension: 700m*7.5m)
- j. Distance from the nearest National/ State highway: NH-02 (< 2 km), NH-07 (0.7 km)
- k. Customs notification status: Not notified

2. Assi Ghat, Varanasi

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: Varanasi to Saidpur stretch (64 km), 0.8m to 2.2m
- e. Labour & Manpower: Security available
- f. Customs notification status: Not notified

3. Rajghat, Varanasi

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: Varanasi to Saidpur stretch (64 km), 0.8m to 2.2m
- e. Labour & Manpower: Security available
- f. Customs notification status: Not notified

4. Gaighat, Patna

- a. Type of Jetty: Fixed RCC Jetties, 2 nos, High Level Jetty (70m*20m), Low Level Jetty (46.6 m*15m)
- b. Usage: All types of Cargo & Passenger vessels including Ro-Ro service
- c. Managed by: IWAI, Process for O&M of the terminal by a private operator is in progress

- d. LAD Range: i. Patna to Mehnar D/S stretch (31 km), 1.4m to 2.5m ii. Patna to Doriganj U/S stretch (45 km), 1.2m to 2.5m
- e. Commodities: Fly Ash, Cement, Stone Aggregates, Containers, Agriculture & Horticulture Products, ODC etc.
- f. Storage facility: Transit shed (45m*25m)
- g. Equipment: One rubber tyre mobile crane of capacity 70 MT and Two 20 MT rubber tyre mobile crane, suitable for handling both bulk and container cargo
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road (dimension: 334 m*7m)
- j. Distance from the nearest National/ State highway: NH-19 (< 1 km), NH-31 & 82 (<51 km)
- k. Customs notification status: Not notified

5. Munger

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: i. Munger to Sultanganj D/S stretch (47 km), 2m to 3m ii. Munger to Mahendrapur U/S stretch (27 km), 1.6m to 3m
- e. Labour & Manpower: Security available
- f. Customs notification status: Not notified

6. Bhagalpur

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD range: i. Bhagalpur to Kahalgaon D/S stretch (25 km), 2.1m to 3m ii. Bhagalpur to Sultanganj U/S stretch (31 km), 1.8m to 3m
- e. Labour & Manpower: Security available
- f. Customs notification status: Not notified

7. Bateshwarsthan, Bihar

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: Karagola to Kahalgaon stretch (30 km), 2.1m to 3m
- e. Labour & Manpower: Security available
- f. Nearest Town: Bhagalpur, Sahibgani, Banka, Godda
- g. Customs notification status: Not notified

8. Samdaghat, Sahibganj

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels including Ro-Ro service
- c. Managed by: IWAI
- . LAD Range: Rajmahal to Manihari stretch (50 km), 2.5m to 3m
- e. Labour & Manpower: Security available

f. Customs notification status: Not notified

9. Sahibganj

a. Type of Jetty: Floating pontoon

b. Usage: Passenger vessels & Logistics support

c. Managed by: IWAI

d. LAD Range: Rajmahal to Manihari stretch (50 km), 2.5m to 3m

e. Labour & Manpower: Security available f. Customs notification status: Not notified

10. Sahibganj MMT

a. Type of Jetty: Fixed RCC Jetty, 270m*25m

b. Usage: All types of Cargo & Passenger vessels

- c. Managed by: IWAI, Process for O&M of the terminal by a private operator is in progress
- d. LAD Range: Rajmahal to Manihari stretch (50 km), 2.5m to 3m
- e. Commodities: Stone aggregates, Coal, Fly Ash, Silica, Sand etc.
- f. Facilities: i. Storage shed (132 m X 30 m), Open storage space: 50,000 sqm ii. Weighbridge available (2 nos.): 60 tonne capacity each iii. Dedicated Truck Parking space available (10,000 sq. m.)
- g. Equipment: i. One Mobile Harbour crane with 50 MT rated capacity, suitable for handling both bulk and container cargo ii. Front end loaders, 8 Nos. iii. Conveyor system with fixed hopper (capacity 1,200 TPH) iv. Barge Loader (capacity 1,200 TPH)
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road (dimension: 1,095m*20m)
- j. Distance from the nearest National/ State highway: NH-33 (< 2 km)
- k. Customs notification status: Not notified

11.Rajmahal, Jharkhand

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels including Ro-Ro Services
- c. Managed by: IWAI
- d. LAD Range: i. Rajmahal to Manihari U/S stretch (50 km), 2.5m to 3m ii. Rajmahal to D/S

Farakka Lock Gate stretch (39 km), 2.8m to 3m

- e. Labour & Manpower: Security available
- f. Nearest Town: Sahibganj, Farakka, Malda, Pakur
- g. Customs notification status: Not notified

12. U/S Terminal Ghat, Farakka

- a. Type of Jetty: Floating pontoon
- b. Usage: Bulk cargo and Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: Rajmahal to D/S Farakka Lock Gate stretch (39 km), 2.8m to 3m
- e. Commodities: Stone Aggregates, Silica, Sand, Coal
- f. Facilities: Pilot shelter
- g. Equipment: Submersible pump for vessels

h. Labour & Manpower: Security available i. Customs notification status: Notified

13. D/S Terminal Ghat, Farakka

- a. Type of Jetty: Fixed RCC Jetty
- b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: i. Rajmahal to D/S Farakka Lock Gate D/S stretch (39 km), 2.8m to 3m ii. Farakka JITF Jetty to D/S Farakka Lock Gate U/S stretch (3 km), 1.5m to 3m
- e. Commodities: Stone Aggregates, Silica, Sand, Coal
- f. Equipment: Submersible pump for vessels g. Labour & Manpower: Security available h. Customs notification status: Notified

- **14. Hazarduari Ghat, Berhampore** a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: i. Berhampore to Chowrigacha D/S stretch (21 km), 3m ii. Berhampore to

Mohammadpur U/S stretch (28 km), 2.7m to 3m

- e. Labour & Manpower: Security available
- f. Customs notification status: Not notified

15. Matiari, West Bengal

- a. Type of Jetty: Floating pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: Patuli to Katwa stretch (23 km), 2.7m to 3m
- e. Labour & Manpower: Security available
- f. Nearest Town: Katwa
- g. Customs notification status: Not notified

16. Kalna, West Bengal

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: i. Kalna to Balagarh D/S stretch (23 km), 3m ii. Kalna to Samudragarh U/S

stretch (18 km), 3m

e. Labour & Manpower: Security available f. Customs notification status: Not notified

17.Shantipur

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI
- d. LAD Range: Kalna to Balagarh D/S stretch (23 km), 3m
- e. Labour & Manpower: Security available

f. Customs notification status: Not notified

18. BTPS, Tribeni

- a. Type of Jetty: RCC Jetty
- b. Usage: Bulk Cargo & Passenger vessels
- c. Managed by: IWAI d. LAD range: i. Tribeni to Balagarh U/S stretch (28 km), 3m ii. Tribeni to

Sagar D/S stretch (193 km), 3m

- e. Equipment: Two nos. Diesel Compressor
- f. Labour & Manpower: Security available
- g. Customs notification status: Notified

19. Botanical Garden, Kolkata

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics support
- c. Managed by: IWAI d. LAD Range: 3m
- e. Labour & Manpower: Security available f. Customs notification status: Not notified

20.BISN/GR Jetty 1, Kolkata

- a. Type of Jetty: Floating Pontoon
- b. Usage: Bulk Cargo vessels incl. Ro-Ro service
- c. Managed by: M/s SAPL
- d. LAD Range: 3m
- e. Commodities: Fly Ash, Coal
- f. Equipment: One Diesel Compressor
- g. Labour & Manpower: 24*7 Security available
- h. Customs notification status: Notified

21. GR Jetty 2, Kolkata

- a. Type of Jetty: Fixed RCC Jetty, 70m*20m
- b. Usage: All types of Cargo vessels
- c. Managed by: M/s SAPL
- d. LAD Range: 3m
- e. Commodities: Fly Ash, Coal, Cement, Steel materials, Stone aggregates, Food grains, Containers, etc. f. Facilities: i. Covered storage space, 1,186 sqm ii. Dedicated Truck Parking space available
- g. Equipment: i. 1 no. Crane 45-120-ton capacity, ii. 2 nos. Electric Compressor, iii. Submersible Pump
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road
- i. Distance from the nearest National/ State highway: NH-117 (< 5 km)
- k. Customs notification status: Notified

22. Haldia Old Fly Ash Jetty (Jetty-1)

a. Type of Jetty: Floating Pontoonb. Usage: Bulk Cargo vessels

c. Managed by: IWAId. LAD Range: 3me. Commodities: Fly Ash

f. Storage facility: A Transit Shed Facility (100m X 30m)

g. Labour & Manpower: Security available h. Customs notification status: Notified

23. Haldia Old Terminal (Jetty-2)

a. Type of Jetty: Floating Pontoon

b. Usage: Bulk Cargo vessels

c. Managed by: IWAId. LAD Range: 3me. Commodities: Fly Ash

f. Labour & Manpower: Security available g. Customs notification status: Notified

24.Haldia Old Terminal (Jetty-3)

a. Type of Jetty: Floating Pontoon

b. Usage: Bulk Cargo vessels c. Managed by: IWAI

d. LAD Range: 3m e. Commodities: Fly Ash

f. Labour & Manpower: Security available g. Customs notification status: Notified

2. INFRASTRUCTURE FACILITIES ON NATIONAL WATERWAY -2 National Waterway - 2: River Brahmaputra from Dhubri to Sadiya, 891 km:

1. Dhubri

- a. Type of Jetty: Fixed RCC jetty, 186m*15.6m
- b. Usage: Bulk Cargo and Passenger vessels including Ro-Ro service
- c. Managed by: IWAI, Process for O&M of the terminal by a private operator is in progress
- d. LAD Range: i. Bangladesh Border to Dhubri U/S stretch (32 km), 2.3m to 2.5m ii. Dhubri to Tulsibari U/S stretch (30 km), 2.3m to 2.5m
- e. Commodities: Coal, Cement, Stone Aggregates, Food grains, Tea, Jute etc.
- f. Facilities: i. 2 nos. Transit Sheds (25 m x15 m each), ii. Open storage area: 553.90 sq. m. iii. Weighbridge available, one 60 MT capacity iv. Dedicated truck parking space available
- g. Equipment: i. One Shore crane 20 MT rated capacity ii. Crane not suitable to handle container cargo h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road
- j. Distance from the nearest National/ State highway: NH-17 (< 2 km)
- k. Customs notification status: Notified

2. Jogighopa

- a. Type of Jetty: Floating Pontoon
- b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: i. Chandradinga to Jogighopa U/S stretch (24 km), 2.3m to 2.5m ii. Jogighopa to Bagbor U/S stretch (37 km), 2.4m to 2.5m
- e. Commodities: Stone Aggregates, Coal, Cement, Food Grains, Bamboo
- f. Storage facility: Ample open storage space
- g. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour and equipment can be arranged by the operator.
- h. Access road/rail connectivity: Paved road
- i. Distance from the nearest National/ State highway: NH-17 (< 2 km)
- j. Customs notification status: Notified

3. Pandu

- a. Type of Jetty: Fixed RCC Jetties, 2 nos, High Level Jetty (50m*20m), Low Level Jetty (50m*20m)
- b. Usage: All types of Bulk Cargo and Passenger vessels including Ro-Ro service
- c. Managed by: IWAI, Process for O&M of the terminal by a private operator is in progress
- d. LAD Range: i. Vijaynagar to Pandu U/S stretch (22 km), 2.5m ii. Pandu to Ganesh Pahar U/S stretch (38 km), 2m to 2.5m
- e. Commodities: Coal, Cement, Stone Aggregates, Food grains, Tea, POL, Jute, Fertilizer, Salt etc.
- f. Facilities: i. 2 nos. Transit Sheds (75 m x 21 m each), ii. Open storage area: 8,273 sq. m. iii. Weighbridge available, 1 no., 100 MT capacity iv. Dedicated truck parking space available
- g. Equipment: i. Hydraulic shore crane (01 nos.) 75 ton rated capacity ii. Hydraulic shore crane (01 nos.) 20 ton rated capacity iii. Both cranes are only suitable for handling bulk cargo
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: i. Paved road ii. Broad Gauge (BG) siding
- j. Distance from the nearest National/ State highway: NH-27 (old NH-31) (< 3 km)
- k. Customs notification status: Notified

4.Silghat

- a. Type of Jetty: Floating Pontoon
- b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: Tezpur to Biswanath stretch (47 km), 2.3m to 2.5m
- e. Commodities: Tea, Food Grains, Cement, POL, Chemicals, Timber
- f. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour and equipment can be arranged by the operator.
- g. Access road/rail connectivity: Paved road
- h. Distance from the nearest National/ State highway: NH-715 (16 km)
- i. Customs notification status: Notified

5.Biswanathghat

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics Support
- c. Managed by: IWAI
- d. LAD Range: i. Tezpur to Biswanath U/S stretch (47 km), 2.3m to 2.5m ii. Biswanath to

Bargang River (U/S) stretch (22 km), 2.1m to 2.5m

e. Labour & Manpower: Security available f. Customs notification status: Not notified

6.Neamati

- a. Type of Jetty: Floating Pontoon
- b. Usage: Bulk Cargo & Passenger vessels
- c. Managed by: IWAI
- d. LAD Range: i. Pahumara to Neamati U/S stretch (22 km), 2.3m to 2.5m ii. Neamati to

Teliadanga U/S stretch (31 km), 2.2m to 2.5m e. Commodities: Tea, Cement, Food Grains

- f. Labour & Manpower: Security available
- g. Nearest town: Jorhat
- h. Customs notification status: Not notified

7. Bogibeel

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics Support
- c. Managed by: IWAI
- d. LAD Range: Kathalguri to Dibrugarh stretch (32 km), 2m
- e. Labour & Manpower: Security available
- f. Nearest town: Dibrugarh
- g. Customs notification status: Not notified

8. Oriamghat

- a. Type of Jetty: Floating Pontoon
- b. Usage: Passenger vessels & Logistics Support
- c. Managed by: IWAI
- d. LAD Range: Bahir Jonai to Oriamghat stretch (13 km), 1.2m to 1.5m
- e. Labour & Manpower: Security available
- f. Nearest town: Sadia, Tinsukia
- g. Customs notification status: Not notified

3. <u>INFRASTRUCTURE FACILITIES ON NATIONAL WATERWAY NO.3</u>

1. Aluva

- a. Type of Jetty: Fixed RCC jetty, 30m*7m b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m

- e. Commodities: Fertilizers, Chemicals, Minerals, Zinc
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 4000 sqm
- g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: Old NH-17 (600m)
- k. Nearest town: Kochi, Ernakulam, Kakkanad
- 1. Customs notification status: Not Notified

2.CSEZ (Kakkanad)

- a. Type of Jetty: Temporary berthing jetty
- b. Managed by: IWAI c. LAD Range: 1m to 2m
- d. Commodities: Fertilizers, POL
- e. Storage facility: Nil
- f. Equipment: Nil g. Labour & Manpower: Security available. For manual handling of cargo, labour can be arranged by the operator.

3. Maradu

- a. Type of Jetty: Fixed RCC jetty, 30m*7mb. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m
- e. Commodities: Fertilizers, POL
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 2000 sqm
- g. Equipment: i. 2 nos. mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Paved road
- j. Distance from the nearest National/ State highway: NH-66 (400m)
- k. Nearest town: Kochi, Ernakulam
- 1. Customs notification status: Not Notified

4.Vaikkom

- a. Type of Jetty: Fixed RCC jetty, 30m*7m
- b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m
- e. Commodities: Coir
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 800 sqm
- g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT

- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: SH-15 (1.8 km)
- k. Nearest town: Cherthala
- 1. Customs notification status: Not Notified

5. Thanner mukkom

- a. Type of Jetty: Fixed RCC jetty, 30m*7mb. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m e. Commodities: Coir
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 2000 sqm
- g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: SH-40 (200m)
- k. Nearest town: Cherthala
- 1. Customs notification status: Not Notified

6.Alappuzha

- a. Type of Jetty: Fixed RCC jetty, 30m*7m b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m
- e. Commodities: Coir, Rubber f. Storage facility: i. Covered storage 300 sqm, ii. Open Storage 2000 sqm g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: NH-66 (3 km)
- k. Customs notification status: Notified

7. Thrikunnappuzha

- a. Type of Jetty: Fixed RCC jetty, 30m*7mb. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m e. Commodities: Coir
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 800 sqm

- g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: NH-66 (5.80 km)
- k. Nearest town: Haripad
- 1. Customs notification status: Not Notified

8. Kayamkulam

- a. Type of Jetty: Fixed RCC jetty, 30m*7mb. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m e. Commodities: Minerals
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 2000 sqm
- g. Equipment: i. One mobile hydraulic crane of capacity 18 MT, suitable to handle container cargo ii. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: NH-66 (6.5km)
- k. Customs notification status: Not Notified

9. Kollam

- a. Type of Jetty: Fixed RCC jetty, 30m*7m b. Usage: Bulk Cargo and Passenger vessels
- c. Managed by: IWAI d. LAD Range: 1m to 2m
- e. Commodities: Minerals
- f. Storage facility: i. Covered storage 300 sqm ii. Open Storage 2000 sqm
- g. Equipment: i. One forklift of capacity 3 MT
- h. Labour & Manpower: 24*7 Security available. For manual handling of cargo, labour can be arranged by the operator.
- i. Access road/rail connectivity: Bituminous road
- j. Distance from the nearest National/ State highway: NH-66 (2 km)
- k. Customs notification status: Not Notified

10.Chavara

a. Type of Jetty: Land onlyb. Managed by: IWAIc. LAD Range: 1m to 2m

11. Bolgatty Island

a. Type of Jetty: Ro-Ro/Lo-Lo Landing Point (50m*17m)

b. Usage: Ro-Ro Servicec. Managed by: IWAId. LAD Range: 1m to 2m

e. Facilities: Dedicated truck parking space

f. Access road/rail connectivity: Bituminous road

g. Distance from the nearest National/ State highway: Container Road, Ernakulam (200 m)

h. Customs notification status: Not Notified

12. Willingdon Island

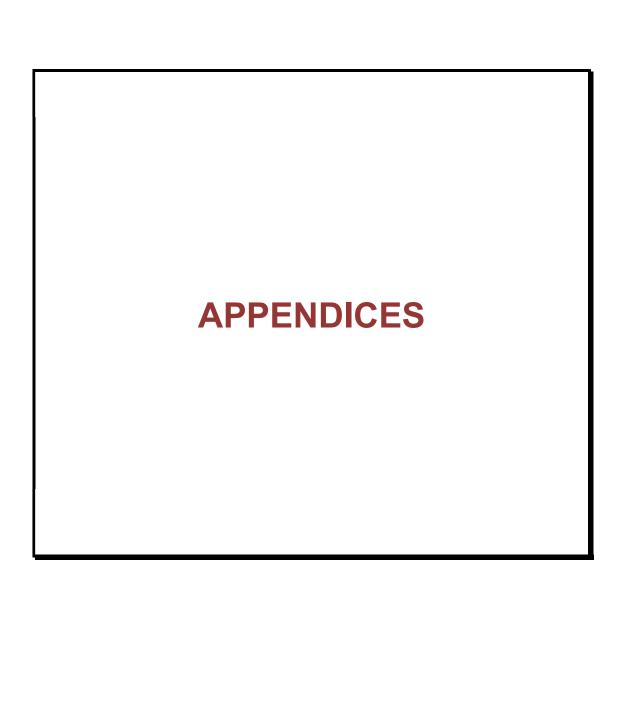
a. Type of Jetty: Ro-Ro/Lo-Lo Landing Point (50m*12m)

b. Usage: Ro-Ro Servicec. Managed by: IWAId. LAD Range: 1m to 2m

e. Access road/rail connectivity: Bituminous road

f. Distance from the nearest National/ State highway: Old NH-47 (4 km)

g. Customs notification status: Not Notified



ABBREVIATION

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 PowerH.F. Harbor Freight

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.