NW I

Declaration date: October, 1986

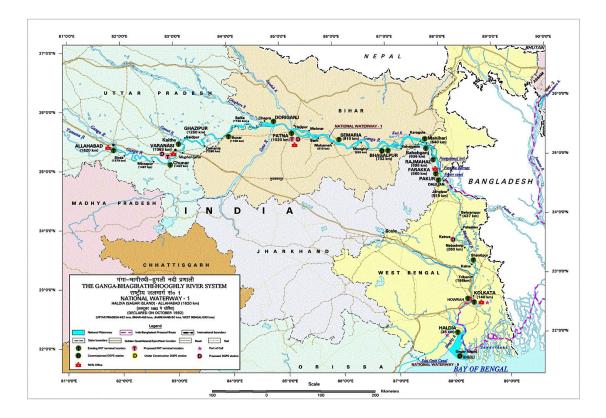
The Ganga - Bhagirathi - Hooghly river system between Haldia (Sagar) & Allahabad (1620 km) was declared as National Waterway No.1 (NW-1) in 1986. Since then IWAI is carrying out various developmental works on the waterway for improvement of its navigability and development & maintenance of other infrastructure such as terminals and navigation aids as laid down in the IWAI Act, 1985 (82 of 1985). As per Act, IWAI is interalia responsible to develop and regulate the national waterways for navigation. During 2013-14, IWAI had been maintaining a Least Available Depth (LAD) of 3.0 meters between Haldia (Sagar) & Farakka (560 km), 2.5 meters in Farakka - Barh (400 km), 2.0 meters in Barh - Ghazipur (290 km) and 1.2 to 1.5 meters in Chunar - Allahabad sector (370 km).

Nowadays the National Waterway is being used by various cargo vessels, ODC carriers, tourist vessels and IWAI vessels etc. Under the project of transportation of 3 MMTPA of imported coal from Haldia / Sand-heads to NTPC's power plant at Farakka through NW-1 by M/s Jindal ITF Ltd., about 20 barges of 2000 dwt capacity each started moving between Haldia / Sand-heads and Farakka since Oct. / Nov., 2013 and about 2.6 lakh tonnes coal reached Farakka up to May, 2014 under this project. The trial movements of 2600 tonnes fertilizer of M/s Tata Chemicals from Haldia to Fatuha (Patna) and another 2500 tonnes M/s IFFCO Phulpur from Fatuha (Patna) to Kolkata respectively was done successfully during 2013-14. Further, Inland tourist vessel RV Bengal Ganga of M/s Heritage River Cruise Pvt. Ltd. and ABN Sukhapha of M/s Assam Bengal Navigation Co. Pvt. Ltd. made their voyages successfully on NW-1 in Kolkata - Semaria - Kolkata and Kolkata - Patna - Kolkata respectively during 2013-14.

At present, several power companies have initiated action for setting up Thermal Power projects and extensive movement of Over Dimensional Cargo (ODC), imported coal for NTPC projects is planned to be done on NW-1during the next 4 - 5 years. The IWAI is planning to augment the dredging fleet during forth coming years. After deployment of the additional dredgers along with bandalling, IWAI has planned to provide an enhanced minimum depth of 2.5 meters in Farakka - Buxar stretch instead of Farakka - Barh i.e. about 235 km stretch with enhanced target of 2.5 meters depth against 2.0 meters. Further, IWAI has planned to develop 2.0 meters LAD up to Varanasi in place of Ghazipur i.e. about 133km stretch with enhanced target of 2.0 meters.

In addition, a Technical Feasibility Study for providing 3.0 m LAD in Allahabad - Buxar stretch has been recently completed through M/s DHI (India) Water & Environment

Pvt. Ltd. This study led to IWAI posing a project to Ministry of Shipping and Department of Economic Affairs for World Bank assistance of about US \$ 700 million (about Rs. 4200/- crores) for development of this National Waterway and this has been given name of Jal Marg Vikas in the year 2014 budget speech of Hon'ble Finance Minister of India Shri Arun Jaitley. Various steps in this direction are being taken. This could develop into another path breaking project for revival of IWT on this most important waterway of the country. A map, showing the important places on NW-1 and IWAl's infrastructures places is given below:



Fairway Development

Presently, eight Cutter Suction Dredgers (CSD) one Hydraulic Surface Dredger (HSD) and one Amphibian Dredger (AD) owned by IWAI have been deployed on NW-1 for achieving targeted depth during 2014-15. About 12 lakh M³ dredging in Tribeni - Chunar stretch of NW-1 was carried out in 2013-14 by these dredgers. In addition, 18 400 meters of bandalling works (a conventional method

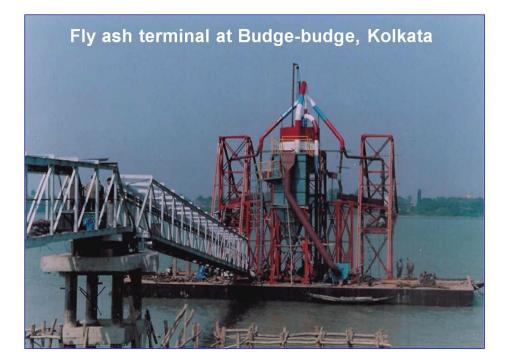
of erecting bamboos and bamboo mats) to divert the flow to the main channel were

carried out for developing / maintaining the fairway in this stretch of NW-1.

The Least Available Depth (LAD) maintained in National Waterway-1 till Mar., 2014 and that to be maintained by IWAI during 2014-2015 is given below in a tabular form:

	 I I	2013-14	2014-15		
SI. No.	Stretch (In km)	Maintained Depth (in m)	Target Depth (in m)	No. of shoals anticipated	
1	Haldia (Sagar) - Farakka (560)	2.8 - 3.0	3.0	15	
2	Farakka - Barh (400)	2.1 - 2.5	2.5	60	
3	Barh - Ghazipur (290)	1.6 - 2.0	2.0	43	
4	Ghazipur – Chunar/Allahabad (370*)	1.2 - 1.5	1.5	30	

Note: *Out of total 370 km stretch between Ghazipur and Allahabad, the River Conservancy work (bandalling/ dredging) has been considered only upto Chunar. In the stretch of Chunar- Allahabad (198 km) RC work not considered since 2010-11 as bandalling is not enough without dredging. However, dredging is not considered due to shortage of dredging units.



Terminals

Floating terminals at 20 locations and two fixed RCC Jetty / permanent terminal at GR Jetty-2 Kolkata & Gaighat Patna are being maintained for handling / berthing of cargo vessels, tourist vessels and others IWT vessels etc. In addition there are two fixed

SI.	Floating Terminals Name of terminal with	Land	Size of	No. of	Cargo Handling	Stora	ige area	Link a	pproach	Security	Water/	Remarks
0.	chainage (In km)	area (in Sq. m)	berth, water front (In	Pontoon equipment Barge & Gangway		ing Storage area		road		(in each shift)		Senidi K3
	Haldia (Ch. 35.0)	10930	mtr.) 70 m berth & 200 m WF	04 Pontoons 01 Gangway	NIL	One Godown o size 12 x 30 m and Open space 1630 m		3.5 km via HDC		01 nos. armed 03 no. unarmed	Drinking Water Sodium Vapour Lamps	Land taken from Haldia Dock Complex (HDC) on
	Botanical Garden Jetty (Ch. 134.5)	996	35 m berth & 50 m WF	01 Pontoon 01 Steel Gangway	NIL	To be stored on Pontoon		150 m		03 nos. unarmed	Sodium Vapour Lamps (Full Illumination)	lease basis. Land belongs to KoPT being used by IWAL.
	BISN Jetty & G.R. Jetty-1 (Ch. 135.0)	30409.64	70 m berth & 100 WF	03 Pontoons 01 Steel Gangway	NIL	Open Space area 6000 m ²		1 km		01 nos. armed 03 no. unarmed	Sodium Vapour Lamps (Full Illumination)	Land taken from KoPT on lease basis
	Tribeni (Ch. 196.0)	-	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL		stored on ontoon	Along the road		01 nos. armed 02 no. unarmed	NIL	Land not available pontoon placed on water front
	Shantipur (Ch. 241.0)	8000	35 m berth & 100 WF	01 Pontoon 06 Modular Pontoons Gangway	NIL	Ponto open of IWA	stored on on and space AI's land Sq. m	3 km		03 nos. unarmed	NIL	Land belongs to State Govt. of W.B. being used by IWAI.
	Swaroopganj (Ch. 280)	2337	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL	size 4. and O	Sodown of .5 x 5 m Ipen 290 m ²	500 m		01 nos. armed 03 no. unarmed	Drinking Water Sodium Vapour Lamps	Land taken from KoPT on lease basis
	Katwa (Ch. 334.50)	-	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL		stored on	1.5 km		NIL	NIL	Land not available pontoon placed on
	Hazardwari <mark>(</mark> Ch. 439.0)	-	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL		be stored on 100 r ntoon.		m NIL		Street Lights Land n provided by availat Local pontoo Administration placed	water front Land not available pontoon placed on
1	D/s Farakka (Ch. 542.0)	-	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL	To be Pontor	stored on on.	Along the road		NIL	Street Lights provided by Local Administration	water front Land not available pontoon placed on water front
)	U/s Farakka (Ch. 545.0)	4800	35 m berth	01 Pontoon 01 Bamboo Gangway	NIL		stored on on & land	100 m		01 nos. armed 03 no. unarmed	Drinking Water Sodium Vapour Lamps	Land belongs to FBP being used by IWAI.
3.	Fixed RCC Jetties	1	<u> </u>	1	L							
	No Name of terminal with chainage (In km)	Land area (in Sq. m)	Size of berth, water front (In mtr.)	No of Ponto Barge & Gangway	oon Cargo Hand equipment		Storage a		Link approach road	Security	Water/ Lighting facility	Remarks
L	G.R.Jetty-2 (Ch. 134.5)	14,557	70 m berth	-			One Transit shed of size 25 x 46 m and Open space 4000 m ²		500 m.	01 nos. armed 03 no. unarmed	Drinking Water Sodium Vapour Lamps (Full Illumination)	Land take from KoPT on long term lease basis. RCO Jetty completed and being operationa since Nov. 2013.
2	Farakka RCC Jetty (Ch. 542 km)	-	115 m berth	-	-	-			Along the road	-	Drinking Water Sodium Vapour Lamps	Owned by FBP this can be used by the common users.
3	Pakur RCC Jetty (Ch. 522 km)	-	60 m berth	-	-	-			1 km	-	-	Owned by FBP this can be used by the common users.

(FBP) but these can be used by common users. The detail of facilities available on each of these terminals is given in following table: