



# STAKEHOLDERS CONFERENCES REPORT

(2019-20)



भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण  
**Inland Waterways Authority of India**  
Ministry of Shipping, Government of India





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## ***Message from Chairperson***



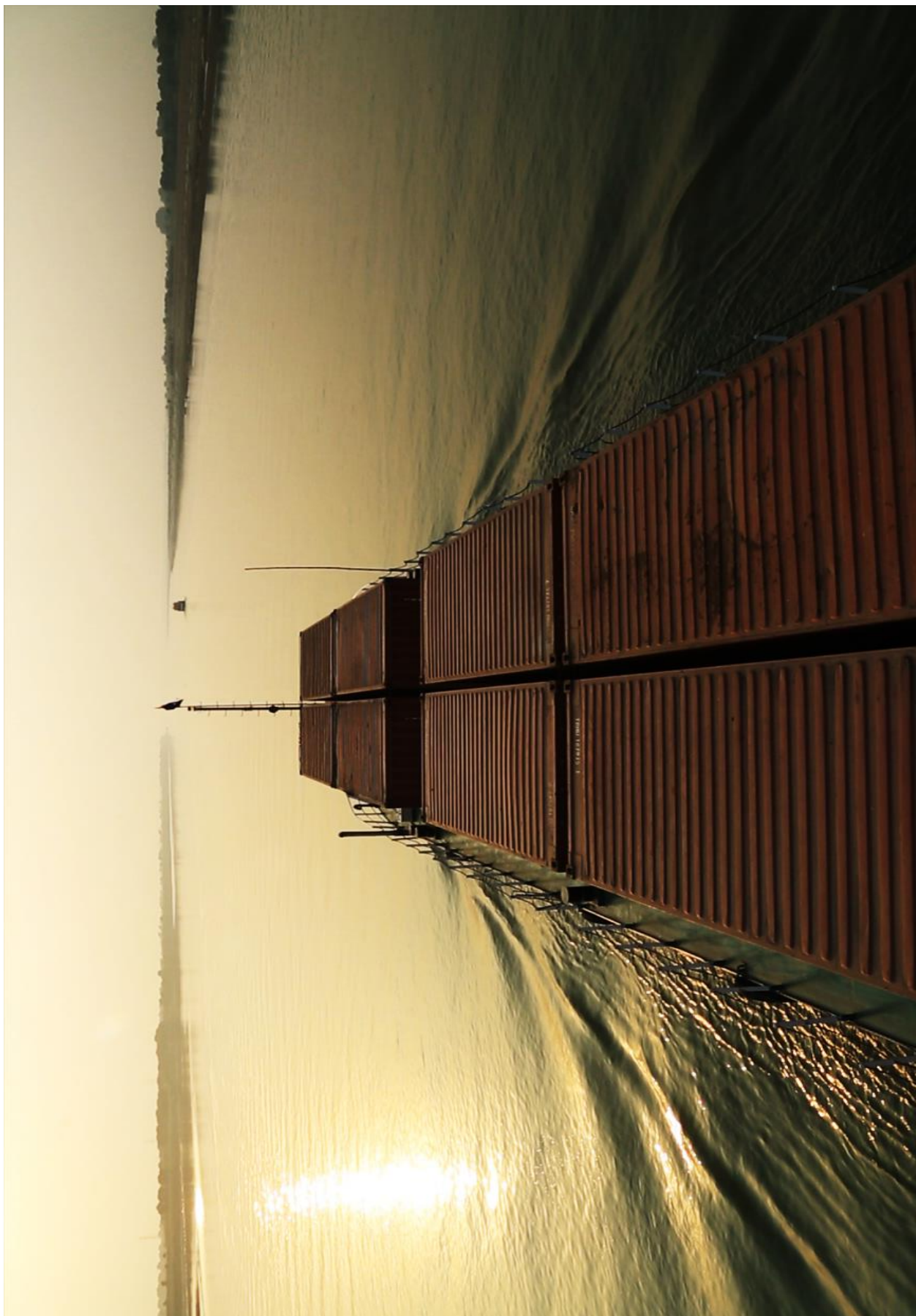
Efficient transport infrastructure is the key to boosting economic growth and promoting sustainable development. Inland Water Transport (IWT) system ensures both, by provisioning access, mobility, connectivity and employment generation at the grass root level with lesser carbon footprint and cost. During start of 20th century, IWT was an integral part of mode of transportation and widely used for trade and passenger movement. The rapid development of other modes of transport i.e. rail, road and air, coupled with inadequate development and promotion of IWT sector over years, resulted in a decline in the share of water transport in India. However, considering that IWT has multiple inherent benefits over other modes of transport, the need for systematic development of IWT sector was realized which is apparent from the fact that various committees were formed and advocated the development of IWT sector. National Transport Policy committee in its report in 1980 recommended setting up of an authority to develop and regulate Inland Waterways in India. This recommendation led to formation of Inland Waterways Authority of India (IWAI) in 1986.

Renewed emphasis has been given to the IWT sector in the last few years and several projects for the development of infrastructure to promote the IWT sector have been undertaken. To increase the cargo traffic on National Waterways, a number of efforts have been initiated by IWAI in the areas of development of fairway for round the year navigability, river information systems, jetties / terminals for cargo handling, integration with coastal shipping and enhancement of regional connectivity with neighboring countries along with targeted marketing and promotions. With these efforts, the cargo movement on National Waterways has reached 73.64 MMT (million metric tonne) in FY 2019-20 and is planned to reach 120 MMTPA by 2030.

IWAI endeavors to create a sustainable environment conducive to the development of National Waterways in India with an encouraging support of its regional partners, industry and civil society, through advisory and consultative processes for gaining insights and defining roadmap to develop an efficient network of inland transportation.

Dr. Amita Prasad, IAS  
Chairperson  
Inland Waterways Authority of India







## 1. Introduction

Inland Water Transport (IWT) is one of the most cost effective and environment friendly mode of transportation. As per a World Bank study, IWT mode has the least operational cost of USD 0.015/ ton-km, compared to USD 0.033/ ton-km for Road and USD 0.02/ ton-km for Rail. Globally, inland waterways have been recognized and developed as a mode of transportation to leverage these benefits. India has about 14,500 km of navigable waterways which comprise of rivers, canals, backwaters, creeks, etc. To develop and regulate these waterways, Inland waterways authority of India (IWAI), an authority under Ministry of Shipping was formed in 1986. Currently there are 111 declared National Waterways (NWs) in India, out of which 22 NWs have been identified for development purpose through various studies conducted by IWAI. For the development of these NWs, IWAI has been undertaking various activities including detailed technical and commercial studies, identifying projects for development and providing navigational infrastructure in the form of adequate fairways, locks, river information system, terminals and allied infrastructure for facilitating transportation of cargo and passenger using the IWT mode. The impact of these interventions along with various market outreach activities conducted by IWAI to promote the IWT sector is gradually resulting in recognition of IWT mode as an alternate mode of transportation by the industry.

In order to promote IWT on National Waterways for movement of passengers and cargo, IWAI participates in various conferences / seminars and workshops organized by various trade associations and industry partners and presents various developments in the IWT sector to promote its use. During the year FY 2019-20, stakeholder conferences were organized by IWAI in partnership with Industry Associations, State Governments and other important organizations. The broad objectives of these conferences were:

- a) To promote Inland Waterways as an enabler for establishing domestic and regional connectivity for movement of passengers and cargo
- b) To promote IWT as an additional mode of transport for trade and tourism
- c) To identify issues & challenges faced by stakeholders for development and usage of Inland Waterways
- d) To identify strategies for creating opportunities in the IWT sector through private investments, policy incentivization and linkages with new business models.
- e) To engage and exchange perspectives in the sector and share the latest developments, policy updates, market insights and business prospects.



The stakeholder conferences were organized at the following locations:

#	Date	Location	Partnership
1.	30-Nov-19	Goa	CII
2.	05-Dec-19	Dhaka	High Commission of India
3.	17-Dec-19	Kolkata	CII
4.	24-Jan-20	Kochi	ASSOCHAM
5.	07-Feb-20	Mumbai	ASSOCHAM
6.	11-Feb-20	Patna	FICCI

The conferences at these 6 locations deliberated upon the key trends and developments in infrastructure and challenges faced and also highlighted the emerging opportunities in cargo transportation, infrastructure development, innovative financial models and river tourism. This report contains location wise highlights about agenda, speakers, participants, key achievements, issues raised, and solutions provided. The pieces of information, highlighted in the document, has been captured from feedback received from visiting IWAI officials and partner Industry Associations.







## ***2. Stakeholders conference at Goa on 30.11.2019***

Inland waterways have played an important role in the transportation of mined minerals and thereby the economy of the mining industry of Goa. Since the beginning of the commercial production of the minerals (mainly iron ore) in 1947, the river network of Mandovi, Zuari and Cumberjua canal in Goa have provided natural waterway and supported the promotion of iron ore industry with efficient means of transport. 6 rivers in the State of Goa have been declared as National Waterways out of which two are operational i.e. NW-68 (River Mandovi) and NW-111 (River Zuari). Goa has a robust barge industry which acts as the lifeline of iron ore exports of Goa. It has virtually developed on its own without too much of government interference or support. The barge industry was developed by private operators for the last 60 years as the cost of transporting ores to ports by inland waterways works out to be a more efficient mode of transportation when compared to wagons / trucks.

However, the mining of iron ore has been stalled in Goa ever since the Supreme Court cancelled 88 mining leases in the state on February 7, 2018. This decision has directly impacted 60,000 households and 3 lakh livelihoods. The ban has stopped 15 million tonnes of iron ore exports and has disrupted an entire eco-system of allied industries, including logistics suppliers, truck companies and barge owners as well as equipment suppliers.

With its 131-km-long coastline, Goa is also an important tourism destination in every tourist's itinerary. Tourism is so prominent in the State that the number of tourists almost equals the state population. The number of local and foreign visitors visiting Goa has been continuously increasing over the years. Goa has widely spread network of inland water ways with the two main rivers Mandovi and Zuari and other small rivers such as Terekhol, Chapora, Mapusa, Sal etc. having sufficient draft for navigation. These flowing waterbodies has greater potential for water park tourism & river-based transport systems. With the intent to increase river transport usages by the govt., the growing importance of river jetties and small boats are greatly sought after that can aid to leisure tourism services, spread evenly across all parts of Goa, not just beaches.

IWAI partnered with Confederation of Indian Industry (CII) to organize the 5th CII Conference on Logistics: 'Roadmap for Port Led Development, Inland Waterways & Multi-Modal Logistics' at Goa on 30<sup>th</sup> November 2019. The sessions of the conference were based on the following themes:

- a) Development of IWT sector: Emerging opportunities for modal shift of cargo and encouraging private Investments.
- b) Significance of Sagarmala Programme and initiatives undertaken under port led development.
- c) Development of multi-modal logistics for seamless movement of cargo in Goa.
- d) Role of IWT to boost river cruise tourism



The conference was inaugurated by Hon'ble Minister of Ports, Waste Management, Science and Technology, and Rural Development of Goa, Shri Michael Lobo along with Hon'ble Minister for Transport and Legislative affairs of Goa, Shri Mauvin Godinho. The conference was well attended by the senior officials of the State Government, DG Shipping, IWAI, Customs, Ministry of Railways, several trade associations and cargo owners / operators.

### 2.1. List of speakers

1.	<b>Shri Michael Lobo</b> Hon'ble Minister of Ports, Waste Management, Science and Technology, and Rural Development, Govt. of Goa	14.	<b>Shri Gagan Malik</b> Airport Director, Goa International Airport, Airports Authority of India
2.	<b>Shri Mauvin Godinho</b> Hon'ble Minister for Transport and Legislative affairs, Govt. of Goa	15.	<b>Capt James Braganza</b> Captain of Ports, Govt. of Goa
3.	<b>Dr Amita Prasad, IAS</b> Chairperson, IWAI	16.	<b>Capt Premlal Sirsaikar</b> Deputy Captain of Ports, Govt. of Goa
4.	<b>Shri Dilip Kumar Gupta</b> Managing Director & Director Projects, Sagarmala Development Company Ltd	17.	<b>Shri Joseph George</b> General Manager, Strategic Planning & Business Development, Konkan Railway Corporation Ltd.
5.	<b>Shri Shashi Bhushan Shukla, IRS</b> Member (Traffic & Logistics), IWAI	18.	<b>Shri S V Naik</b> Managing Director, Goa Industrial Development Corporation (GIDC)
6.	<b>Shri Pandurang Kondiram Raut, IRS</b> Deputy Director General of Shipping	19.	<b>Shri Raj Singh</b> Managing Director, Heritage River Journeys Pvt. Ltd.
7.	<b>Smt Nila Mohanan, IAS</b> Secretary, Industries, Trade & Commerce, Govt. of Goa	20.	<b>Shri Suchendra Agni</b> Head, River Fleet Management, Vedanta Limited
8.	<b>Shri Parag K Singh</b> Joint Commissioner, Central Goods & Services Tax (Goa CGST)	21.	<b>Shri William D'Costa</b> President, Goa Barge Owners Association
9.	<b>Capt Ashish Arya</b> Hydrography Chief, IWAI	22.	<b>Shri Manish Sharma</b> Partner, Capital Projects & Infrastructure, PwC India
10.	<b>Shri Lalit Saraswat</b> Chairman, CII Goa State Council & Director, Sancoale Shipping Ltd.	23.	<b>Capt Hemant Gupta</b> Senior Consultant Director, Drewry Maritime Services Private Limited
11.	<b>Shri Atul Jadhav</b> Mentor, CII Goa Logistics Panel & Managing Director, New Era Shipping Private Limited	24.	<b>Shri Gaurav Naik Khaunte</b> Director, Alcon- Anil Counto Enterprises
12.	<b>Shri Shrinivas Dempo</b> Past Chairman, CII WR & CMD, Dempo Shipbuilding & Engg Pvt. Ltd.	25.	<b>Shri Mannubhai Thakkar</b> Managing Director, Hiralal Shipping
13.	<b>Shri Anthony Gaskell</b> Convener, CII Goa Logistics Panel & Director, Sentrans Shipping Private Limited	26.	<b>Shri Sandeep Sood</b> Director, Express Machines
		27.	<b>Shri Kishore Parab</b> Head Materials, Deccan Fine Chemicals (India) Pvt. Ltd.

## 2.2. Key highlights

- **Inaugural Speeches by Hon'ble Ministers, Government of Goa:** The inaugural speeches were made by Hon'ble Minister of Ports, Waste Management, Science and Technology, and Rural Development of Goa, Shri Michael Lobo along with Hon'ble Minister for Transport and Legislative affairs of Goa, Shri Mauvin Godinho. Shri Lobo highlighted the main issues faced by the Goa mining industry currently due to the halt of mining activities and assured that mining and associated economic activity will restart as sincere efforts have been taken by the state government in this regard. Mr. Lobo also declared that the Government of Goa will take up comprehensive studies to explore the potential of its rivers in tourism activities on the hinterland and the transport through the Inland Waterways. Shri Godinho asserted that the State Government is open for support to private players and stressed on their participation in the logistics sector.
- **Presentation by Chairperson, IWAI on Goa Waterways:** Chairperson IWAI apprised the stakeholders about current traffic movements on Goa Waterways primarily on River Mandovi and Zuari. She further elaborated about proposed interventions undertaken by IWAI with an estimated project cost of Rs. 22.65 crores for construction of 4 concrete floating pontoons at Dempo, CoP, Old Goa and Chapora and installation of RIS and navigational aids on Mandovi, Zuari and Cumberjua Rivers as per IALA standards. She also stated about emerging opportunities for private players in the areas of fairway development & maintenance, ship building and repair facilities, terminal operations and river cruise tourism. She further emphasized on the integration of coastal and inland waterways to enhance the use of inland barges available in Goa.

**Promotion of River Cruise Tourism and development of new IWT terminals:** During the conference, stakeholders expressed that inland waterways in Goa provides opportunity for exhibiting the rich cultural heritage of the state, long & scenic river routes, natural spots and breath-taking views which can create immense potential for river cruise tourism in the state. Stakeholders also expressed the need to construct more jetties on the Zuari river at talukas of Tiswadi, Ponda, Mormugao, Salcete, Sanguem, Quepem, and Cortalim. In this regard, private sector was urged to explore 3-5-day cruises on Mandovi, Cumberjua canal and Zuari river to attract tourists and also create employment among the locals. State Government announced that the first concrete floating jetty of the country and an immigration facility at a cruise terminal at Vasco is stated to be inaugurated in early 2020 which would give a boost to river cruise tourism in the State\*. The Stakeholders requested the State Government and the Customs department for speedy facilitation of developing passenger terminals and amenities. In addition, the Captain of Ports (COP), Goa sought assistance from Government of India for developing 40 new jetties on National Waterways of Goa. COP had also sought assistance from IWAI for dredging on Sal River (NW-



27). *\*It was subsequently inaugurated by Hon'ble Minister of State (Independent Charge) for Ministry of Shipping, Shri Mansukh Mandaviya on 21.02.2020.*

- **Issues of barge operators due to closure of mining in Goa:** The industry stakeholders expressed their concern about reduction of traffic since Supreme Court's order on closure of iron ore mines in Goa in February 2018 which has resulted in loss of business for barge operators. The State Government informed that to aid the barge operators, file for exemption of barge tax is being moved and is under consideration with the Finance Department. The state government also informed that formation of Goa Maritime Board would be taken up, and assured support for reviving the barge industry. Barge Operators also expressed the requirement of soft loans in order to put up the idle lying barges for alternative uses. They also sought financial assistance to make their vessels seaworthy by upgrading their vessels to ply within 5 nautical miles of inshore traffic corridor under Statement of Compliance (SOC) by DG Shipping order no. 8 of 2018. This would help them to get back in business by catering to coastal shipping / transshipment cargo.
- **Discussion on the need for comprehensive logistics policy for Goa:** It was discussed that the State of Goa requires a comprehensive "Logistics Policy" for efficient logistic solutions which would go hand to hand with the development of industry and trade in Goa. The State Government stressed on the participation of private players in the logistics sector and asserted that there is a need of out-of-the-box concrete proposals. In this regard, Industry requested the State Government to release the blocked land in Verna and allocate the same for developing SEZ for the benefit of logistics and other sectors.
- **Strengthening of skill development programs:** On skill development front, the State Government was urged to start a specialized institute in logistics and allied activities for the benefit of the local youth. This would provide them with the required trainings, which would increase efficiency in warehouse operations like grading, sorting, labelling, customs packaging etc.

### **2.3. Key action points**

#### **▪ For aid to barge / vessel operators in Goa:**

- The vessel operators have sought relaxation in the SOC issued by DG Shipping as the vessel specifications and the requirement of manpower mentioned in the SOC were found to be stringent which increases the upgradation cost of vessels as well as its operational expenses. A review into these specific requirements are being undertaken by the office of DG Shipping.
- Directorate of Shipping has also engaged Indian National Centre for Ocean Information Services (INCOIS) to collect data on various oceanic parameters, wave heights, etc. of the Bay of Bengal sea area in order to review the fair weather - non fair weather seasons on the east coast of India, which will enable operation of Inland Vessels on the east coast for longer periods during the year. It is recommended that similar study may be undertaken for the Arabian Sea area so that vessel operators of the west coast states gets benefitted.
- Further, financial assistance to the vessel operators for upgradation of the vessels SOC compliance may be considered in existing Shipbuilding Financial Assistance Policy (2016-2026) by suitable modification.
- Government of Goa may also take up this matter to address the needs of the industry.

#### **▪ For development of river cruise tourism in Goa:**

- The Ministry of Tourism has recognized Cruise Tourism, as a “Niche” tourism product in order to promote India as 365 days’ destination and attract tourists with specific interest. The steps taken to promote Cruise Tourism include developing appropriate infrastructure at ports for handling cruise vessels and facilitating ease of movement of passengers. Further Ministry of Shipping has brought out a Vision Document with a view to develop India as a Cruise shipping destination.
- Considering the potential of river cruise tourism, Government of Goa should consider including river cruise tourism in the overall tourism policy for financial and infrastructure support.



## 2.4. Photo Gallery



Shri Michael Lobo, Hon'ble Minister of Ports, Waste Management, Science and Technology, and Rural Development of Goa giving the inaugural speech



Shri Mauvin Goudinho, Hon'ble Minister for Transport and Legislative affairs of Goa giving the inaugural speech



Dr. Amita Prasad, Chairperson, IWAI making a presentation on Goa Waterways



Shri Shashi Bhushan Shukla, Member (Traffic & Logistics) moderating a session on Emerging opportunities for Modal shift of cargo



Speakers at the inaugural session



Delegates at the conference



Speakers at the session: Sagarmala – A Port led Development Initiative



Speakers at the session: Multi-Modal Logistics in Goa



IWAI meeting with Shri Michael Lobo and other officials from Government of Goa



IWAI meeting with Goa Barge Owners Association





### ***3. Stakeholders conference at Dhaka on 05.12.2019***

Among the NWs under development, National Waterway-1 (Ganga-Bhagirathi-Hooghly system) and National Waterway-2 (River Brahmaputra) hold immense significance as besides being the lifeline of the regions in India they pass through, these NWs also provide alternate option for connectivity with Bangladesh. Although in terms of regional connectivity with Bangladesh, road and rail mode remain to be the choice of transport for most of the shippers, the inherent potential in regional connectivity through waterways has been brought to the forefront through development of necessary waterway infrastructure and development and strengthening of enabling policy framework with Government of Bangladesh. This deeper and longer network integration of greener water borne transport will not only help divert traffic from other congested and carbon intensive modes but can also potentially induce or generate significant economic activities and significantly boost international trade in the region.

The 'Protocol on Inland water transit and trade' (PIWT&T) between India and Bangladesh elaborates on the mutually agreed terms for the use of waterways for commerce. With the signing of PIWT&T between India and Bangladesh in 1972, transportation through waterways was revived and steadily traffic started building up. The Indo Bangladesh Protocol (IBP) routes declared under the PIWT&T connect Indian NW-1, NW-2 and NW-16 (Barak river) with Bangladesh's rivers Jamuna, Padma, Gumti, Meghna and Kushiara and provide an alternate and integrated connectivity through declared routes.

To promote IBP route as an enabler of regional connectivity, a stakeholder's conference was organized in Dhaka in partnership with High Commission of India in Dhaka on 5<sup>th</sup> December 2019 subsequent to the Shipping Secretary Level Talks (SSLT), Inter Government Committee (IGC) Meeting on the use of Chattogram and Mongla Ports for movement of goods to and from India and 20<sup>th</sup> meeting of the Standing Committee (SCM) of PIWT&T between India and Bangladesh. The event was inaugurated by Shri Gopal Krishna, Secretary, Ministry of Shipping, Government of India and his counterpart Sh. Md. Abdus Samad, Secretary, Ministry of Shipping, Government of Bangladesh. Other dignitaries included Shri Bhola Nath Dey, Additional Secretary, Ministry of Shipping, Bangladesh; Shri Rajat Sachar, Senior Economic Advisor, Ministry of Shipping, India; and other senior government officials from both sides.

The event was duly attended by over 50 delegates from Bangladesh who were apprised of the regional connectivity enabled by the IBP route. Chairperson IWAI gave a detailed presentation about the emergence of opportunities for Bangladeshi stakeholders with the operationalization of IBP route. She also elaborated on the joint fairway development works undertaken by both governments to ensure round the year navigability. Further, she informed the stakeholders about commencement of river-based cruise services between India and Bangladesh as the waterways pass through various places of cultural, ancient and wildlife importance and can increase tourism in the region and generate employment.

### 3.1 Key highlights

Secretary (Shipping) led a delegation to Dhaka on December 04-05, 2019 for the SSLT and to attend 20th SCM under PIWT&T and 1st meeting of IGC on the use of Chattogram and Mongla Ports for movement of goods to and from India. The following agreements were arrived during discussions.

- On the movement of Indian transit cargo for North East Region (NER) through Chattogram and Mongla ports in Bangladesh, both countries agreed to commence trial runs from January-February 2020.
- There are six Ports of Call (POC) under PIWTT in India and Bangladesh at present and it was decided to increase Ports of Call both sides to include other important locations to enhance trade between the two countries. \*
- Under the Coastal Shipping Agreement, three more ports on the Indian eastern coast, viz. Dhamra, Ennore and Tuticorin and two ports of Bangladesh namely Cox Bazar and Muktarpur have been agreed to be included as POC.
- Constitute a Joint Technical Committee (JTC) for undertaking hydrographic survey for studying the technical feasibility of navigation on inclusion of Ichamati River (National Waterway 44) as a new route under PIWTT.
- Bangladesh Inland Water Transport Authority (BIWTA) agreed to provide necessary navigational aids and pilot services on Indo-Bangladesh Protocol routes on their side for smooth connectivity and navigation of vessels to NER.
- On the quantum of administrative fees to be charged by Bangladesh for movement of India's transit cargo for NER through Chattogram and Mongla Ports, Bangladesh agreed to review its proposal as the proposed high charges would be unfruitful for the industry to adopt the shorter route.
- During the first IGC meeting, it was proposed to include an additional new route - Chitagong / Mongla to Dalu via Nakugaon and was agreed to amend the agreement accordingly during the next SSLT in 2020. Dalu / Nakugaon is an LCS situated west of Dawki at the Meghalaya – Bangladesh border.
- It was agreed to allow shallow draft smaller size vessels to promote cross-border trade between the two countries.

*\* With the signing of the second addendum to the PIWT&T on 20<sup>th</sup> May 2020, the declared protocol routes are:*

- (i) Kolkata – Silghat – Kolkata extended up to Kolaghat in India (IBP route 1 & 2)
- (ii) Kolkata – Badarpur – Kolkata (IBP route 3 & 4)
- (iii) Aricha – Dhulian – Aricha (IBP route 5 & 6)
- (iv) Badarpur – Silghat – Badarpur (IBP route 7 & 8)
- (v) Sonamura – Daudkandi – Sonamura (IBP route 9 & 10)



*Moreover, five new 'Ports of Call' and two 'Extended Ports of Call' have been added on each side thereby taking the total no. of Ports of Call on each side to 13 (including extended ports of call). These Ports of call are Kolkata, Haldia, Dhubri, Pandu, Silghat, Karimganj, Dhulian, Maia, Kolaghat, Jogighopa and Sonamura in India, and Narayanganj, Khulna, Mongla, Sirajganj, Ashuganj, Pangaon, Rajshahi, Sultanganj, Chilmari, Daudkandi and Bahadurabad in Bangladesh. The extended Ports of call are Tribeni (Bandel) and Badarpur in India, and Ghorasal and Muktarpur in Bangladesh.*

*As a path-breaking development signed in the 2nd Addendum under PIWT&T, both sides also have agreed to introduce trade between Chilmari (Bangladesh) and Dhubri (India) through the use of shallow draft mechanized vessels, provided these are registered under Inland Shipping Ordinance 1976 of Bangladesh or Inland Vessels Act, 1917 of India as per provisions of Article 1.3 of the Protocol and conform to safety requirements. This initiative will allow export of stone chips and other Bhutanese and North East cargo to Bangladesh and easy access for the traders to the hinterland of Bangladesh, enhancing the local economy in Bangladesh and the lower Assam region of India.*

### **3.2 Key action points**

- IWAI is in process of commencing thalweg survey and issuance of river notices in the Indian portion of IBP route no. 5 & 6, which recently got included in 2<sup>nd</sup> amendment to the PIWT&T.
- Respective Customs Commissionerates have been informed to issue necessary notifications / public notices about the 7 newly added ports of call in the Indian side.
- As Kolaghat on NW-86 is included as an extended port of call, IWAI is planning to schedule 1<sup>st</sup> movement on IBP route no. 1&2 from Kolaghat to Mongla in Bangladesh.
- IWAI has also requested BIWTA to undertake survey of newly added stretches in Bangladesh and share the LAD and other navigational details.
- As Jogighopa on NW-2 is included as a port of call, inclusion of Jogighopa on NW-2 as an additional entry / exit point for duty free transit of EXIM cargo of Bhutan in the Indo Bhutan Agreement on Trade and Transit is being taken up with Ministry of Commerce & Industry. This would further boost the prospects of regional connectivity enabled by Inland Waterways.
- IWAI has also taken up upgradation of existing terminals at Maia, Sonamura, Karimganj and Badarpur which have also been declared as ports of call.

### 3.3 Photo Gallery



SSLT between India and Bangladesh



The first meeting of IGC on use of Chattogram and Mongla ports for movement of goods to and from India



Delegates from India and Bangladesh at 20<sup>th</sup> SCM of PIWT&T

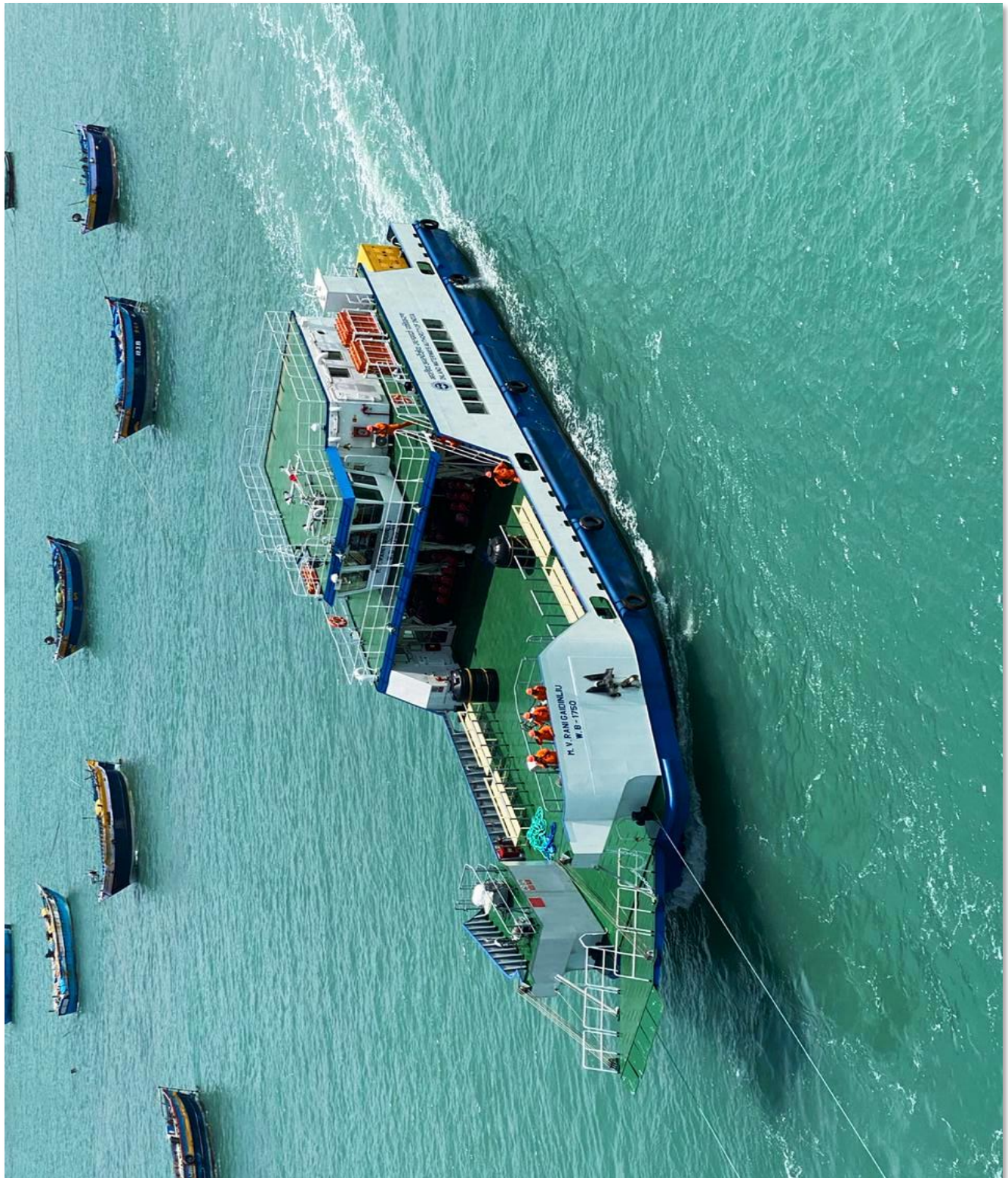


Dr. Amita Prasad, Chairperson IWAI making a presentation on emerging opportunities due to operationalization of IBP route at the stakeholder conference









#### ***4. Stakeholders conference at Kolkata on 17.12.2019***

Kolkata region is positioned as a focal point for hinterland connectivity through National Waterways. Despite being 200 kms away from the sea, The Kolkata Port; the only riverine major port in India; acts as the gateway to Eastern India and is the guiding factor to trade and commerce of vast hinterland comprising the entire Eastern India and North East States. It is also very important port for trade with Bangladesh and the two land-locked Himalayan Kingdoms of Nepal and Bhutan. IWAI's terminals GR Jetty – I, BISN and GR Jetty – II on NW-1 along with other jetties at Haldia (HDC), Budge Budge, TT Shed, KPD and NS Dock on NW-1 serve richly endowed natural reserve areas as well as a large number of industrial units comprising thermal power plants, iron & steel plant, sugar mills, cement industry, small scale industries etc. This region contains the head offices of most of the companies (producer and users) and is well connected through multi-modal transportation and has a high density of population. The stakeholders in this region are the prime beneficiary of the regional connectivity enabled by inland waterways i.e. NW-1, IBP Route and NW-2.

To leverage on the high concentration of stakeholders in the region, IWAI organized a stakeholder's conference for "Facilitating regional connectivity through Inland Waterways" at Kolkata, West Bengal on 17<sup>th</sup> December 2019 in partnership with Confederation of Indian Industry (CII). The interactions primarily focused on several initiatives of the Government driving India's maritime sector and enhancing connectivity with its neighboring partners and is making way for easy, hassle-free movement of cargo between India, Bangladesh, Bhutan and Nepal, and to the north-eastern States of India. More than 100 participants attended the meeting and gained insights about IWT. Discussions were deliberated around the utilization of inland waterways and current infrastructure and its development plans to improve the logistics efficiency and thereby the competitiveness of the regional countries.

The conference was duly attended by senior officials from IWAI, KoPT, Govt of Nepal and Bangladesh and industry. The inaugural session started with the speeches delivered by Chairman CII West Bengal, followed by representative of Ministry of Shipping, Govt. of Bangladesh; Joint secretary, Water Resources, Govt of Nepal & finally by Chairperson, IWAI to set the context of the conference of enhancing regional connectivity through Inland Waterways Systems. Post the inaugural session, 3 sessions were organized to capture stakeholder's viewpoint on various topics as mentioned below.

- a) Integration of inland waterways and coastal shipping to enhance regional connectivity.
- b) Multimodal infrastructure and logistics facilities on NW-1
- c) Importance of fairway development to maintain the navigability of rivers.
- d) Development of river cruise tourism.

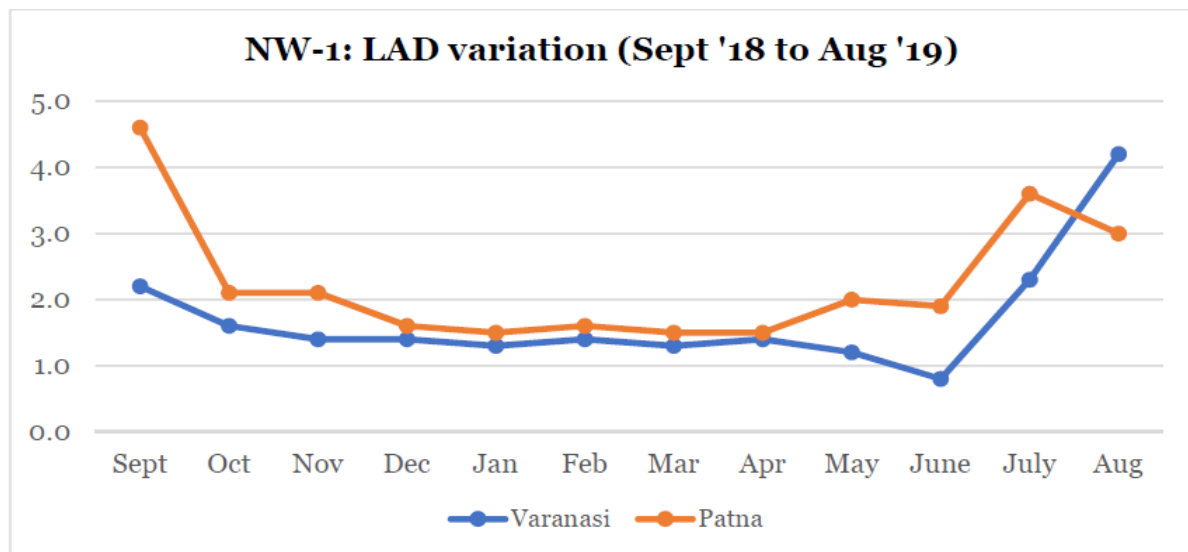
## 4.1 List of Speakers

1.	<b>Dr Amita Prasad, IAS</b> Chairperson, IWAI	15.	<b>Shri Manish Sharma</b> Partner, Capital Projects & Infrastructure, PwC India
2.	<b>Shri Shishir Koirala</b> Joint Secretary Water Resources, Govt of Nepal.	16.	<b>Shri Mohammad Athar</b> Partner, Economic Development & Infrastructure, PwC India
3.	<b>Shri Rezaul Karim</b> Officer, DG Shipping, Govt. of Bangladesh	17.	<b>Shri Jaideep Raha</b> Co-Chairman, CII Logistics & SCM Task Force & Managing Director, Jetex Oceanair
4.	<b>Shri Vinit Kumar</b> Chairman, Kolkata Port Trust	18.	<b>Shri S A Rahman</b> Group General Manager, CONCOR
5.	<b>Shri S Balaji Arun Kumar</b> Dy Chairman, Kolkata Port Trust	19.	<b>Shri Rajnish Khandelwal</b> Vice President, JM Baxi
6.	<b>Shri Shashi Bhushan Shukla, IRS</b> Member (Traffic & Logistics), IWAI	20.	<b>Shri Sudip Dey</b> Vice President, Customs Clearing House Agencies Association & Managing Director, Haridas Chunder Clearing House
7.	<b>Shri Ashish Gupta</b> Chairman, CII Logistics & SCM Task Force and Managing Director, TMILL	21.	<b>Shri Anirban Basu</b> Executive Director – Logistics, Bharat Dalmia Cement
8.	<b>Capt. Ashish Arya</b> Hydrography Chief, IWAI	22.	<b>Shri Pradeep Purohit</b> Chairman - Infra Core Committee, CII - NE Regional Council & Sr. Vice Chairman- Supply Chain
9.	<b>Shri S V K Reddy</b> Chief Engineer (Technical), IWAI	23.	<b>Shri Raj Singh</b> Managing Director, Heritage River Journeys Pvt. Ltd.
10.	<b>Shri S Hajara</b> Ex-Chairman, Shipping Corporation of India	24.	<b>Shri Sachin R Jadhav IAS</b> Director - Tourism, Govt of Odisha
11.	<b>Shri Pramod Srivastava</b> Chairman, PDP Group	25.	<b>Smt Sushila Ramamoorthy</b> Executive Director, Vivada Cruises
12.	<b>Shri Debashis Dutta</b> President, Ripley Group	26.	<b>Shri Debjit Dutta</b> Director and CEO, Impression Tourism
13.	<b>Shri Amlan Basu</b> Director, AVS Riverline Logistics		
14.	<b>Shri Rishi Jalan</b> Managing Director, River Water Link		



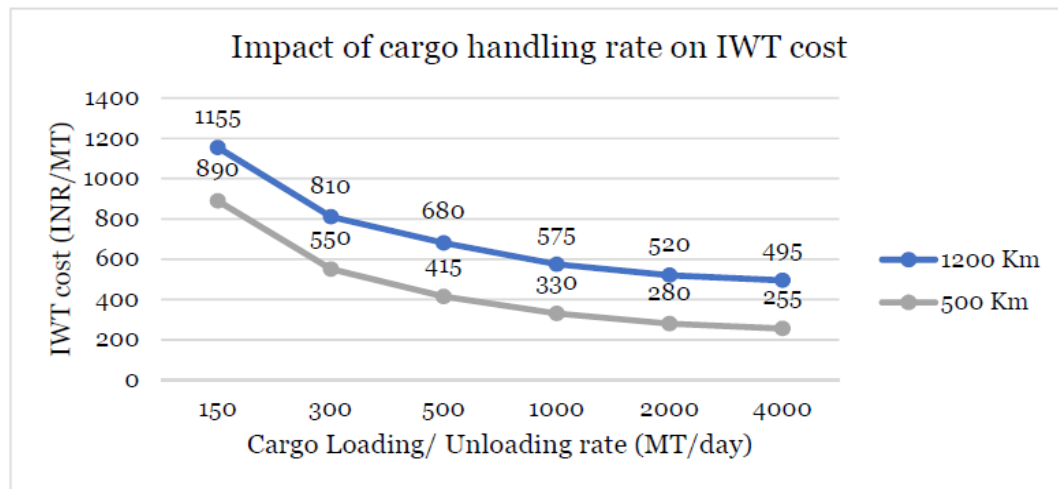
## 4.2 Key highlights

- **Presentation by Chairperson, IWAI on Regional Connectivity:** Chairperson IWAI gave a detailed presentation on regional connectivity enabled by inland waterways during the inaugural session of the conference. She mentioned that the waterway connectivity between India and Bangladesh along with their coastal routes offer tremendous potential to develop integrated waterway routes for cargo movements between India, Bangladesh, Nepal, Bhutan, Myanmar and also other South East Asian Countries. She also stated that IWT will help divert traffic from other congested and carbon intensive modes and generate significant economic activities and significantly boost international trade in the region. In addition, she apprised the stakeholders about signing of agreement and SOP on use of Chittagong and Mongla Ports in Bangladesh for transit cargo of India which would benefit movement of transit cargo to / from North East Region (NER). India's North East region will be benefitted by faster access to Sea Ports, while industries in Bangladesh will be benefitted with increase in demand for logistics services for transportation of goods through all modes of transport within Bangladesh.
- **IWT Connectivity with Nepal:** The representative from Govt of Nepal and other stakeholders stated that Nepal is a land locked country & an unhindered access of Nepal to the sea can be achieved by developing rivers like Kosi, Karnali and Gandak which merges with NW-1. Indo Nepal Treaty currently entails use of roadways and railways for cargo transportation between the two countries. At present, Nepalese trade to/ from third countries primarily uses Kolkata Port (KDS and HDC) and hinterland transportation takes place using road and rail mode. Inclusion of IWT mode in the Treaty will allow Nepal bound cargo (to/ from 3rd country via Kolkata port) to take the waterway route from Haldia/ Kolkata. It was emphasized that the development of NW-1 will not only improve the connectivity of Nepal with seaports but will also significantly reduce the transportation time and cost. From Kolkata and Haldia ports, goods can move up to Sahibganj MMT, Kalughat IMT (under development) and Varanasi MMT for onward movement by road. The inclusion of waterways in the Treaty will reduce the logistics cost of Nepal and will further the trade interest of both the countries equally.
- **Inconsistent LAD on NW-1:** The industry stakeholders expressed their concern about seasonal variation of water depth level, due to low water discharge, siltation and shifting of channels, resulting into lack of interest in diverting cargo to IWT mode. Availability of consistent and adequate water draft is the topmost requirement for regularization of commercially viable cargo operations on waterways. CII presented a chart on LAD variation on NW-1 and stressed that the LAD between Patna to Varanasi is generally below 2m and sometimes falls below 1m which makes NW-1 not navigable for a large period of the year (Oct to May). Unless the confidence of industry is restored by improving LAD for round the year, no investment can be expected from the industry in IWT mode beyond Sahibganj.



Source: Confederation of Indian Industry presentation

- Insufficient air draft availability on NW-1 during flood season:** Industry representatives also stated that vertical clearance with bridges during high flood level on stretches Rajamahall – Bhagalpur and Saidpur – Varanasi of NW-1 is approx. 3.3 meters and 6.5 meters respectively. These clearance levels are insufficient for vessel navigation as the vessels of capacity 1200-1500 DWT require min. 8.5 to 10 meters of air clearance for safe navigation. The constraint of less than required vertical clearance levels on waterways should be addressed and resolved in coordination with the relevant State Governments so that end-to-end and seamless vessel navigation on waterways is ensured.
- Lack of efficient cargo handling equipment at jetties/ terminals and limited operational hours:** Stakeholders raised a concern that the cargo handling equipment available on jetties have limited cargo handling capacity and have been found to be non-functional at times. Although the new terminals such as Varanasi are equipped with modern Liebherr mobile harbour cranes (LHM 180) which have a maximum lifting capacity of approx. 60 tonne, the terminals at Patna and Guwahati do not have efficient equipment and manpower. Due to these challenges, cargo owners have to arrange own equipment and operators, which demotivates users from shifting to the IWT mode. Moreover, currently cargo handling operations are carried out at terminals for maximum 12 hours. Poor cargo handling rates increase the number of charter days of vessel and crew in voyage, thereby resulting in increased per tonne cost. The below graph explains the impact of faster cargo loading/ unloading rate on the overall IWT cost for a fully loaded 1200 - 1500 DWT vessel. The cost of operation (INR/MT) reduces drastically with increase in cargo handling (loading & unloading) rates (MT/day) at IWT jetties/ terminals.



Source: Confederation of Indian Industry presentation

- **Reduction of high first/ last mile transport cost (On NW-1, IBP route and NW-2):** The end-to-end logistics cost through different modes of transport is a key criterion for industry to decide on its preferred mode. Although on a standalone basis IWT mode is economical, however due to cost associated with cargo handling at origin/ destination and first/ last mile transportation, the end-to-end logistics cost increases and negatively impacts the cost competitiveness of IWT mode. It has been assessed by CII that for viability of a 2,000 MT cargo movement over 1,000 Km using IWT mode, total first and last mile distance should be within 60 Km.
- **Issues related to river cruise tourism:** Stakeholders from the tourism industry raised multiple issues which needs to be addressed for promotion of river cruise tourism. To promote investments from private players and to ensure uptake by suppliers and simultaneously create demand, there is a need for improvement of infrastructure for passenger embarking/ disembarking facilities and other amenities at locations of tourist importance. In case of cross-border (India-Bangladesh) cruise services, co-ordination between various agencies viz. immigration, state govt and waterway authorities should improve to standardize processes to avoid inconvenience to passengers and improve infrastructure for immigration services at Hemnagar (Indo-Bangla Border on Sunderban Waterways). It was emphasized that berthing space for cruise vessels must be adequately created to encourage the investment in the sector
- **Poor access to information on Indo Bangladesh Protocol (IBP) route:** Stakeholders also expressed that information such as LAD availability, charges, documentation requirement on IBP route is not accessible and cargo owners/ vessel operators have to remain dependent on agents for this. On multiple occasion, agents have been found to share misleading information and charge exorbitant amount for their services such as documentation, customs clearance, and arrangement of pilotage on IBP route etc.
- **Developing LNG Network:** M/s. JM Baxi expressed that Inland Waterways has an opportunity to become an integral part of LNG supply chains. It is suggested to setup LNG bunkering at MMTs & also use LNG enabled vessels.



### 4.3 Key action points

- **To overcome issues of inconsistent LAD**, IWAI has prepared detailed dredging management plan under JMVP. Contracts have already been awarded for assured depth dredging upto 3m upto Barh and the contract has also commenced. The concerns of the Industry regarding critical stretches upstream of Sahibganj was appreciated. The dredging of stretches upstream of Barh needs to commence on priority. It has also been felt necessary that all dredging contract's timelines should be synchronized for the maximum benefit of investment being made under JMVP. Now, as terminals at Sahibganj and Varanasi have been inaugurated by Hon'ble Prime Minister, JMVP team should focus its attention on targeted LAD.
- **To enhance use of jetties / terminals** and to eradicate irregularities in current operations, IWAI is in process of handing over its terminals to the private sector for operations and management. IWAI has already handed over its Garden Reach jetty I, II and BISN jetty at Kolkata to a private operator on O&M in October 2018 which has resulted in significant increase of cargo handling at these jetties. In addition, IWAI's various terminals on all NWs are proposed to be handed over to private operators for O&M. The process of handing over of the Multimodal Terminals (MMTs) at Varanasi, Haldia and Sahibganj on NW-1 to private operators is in progress. Similar process is in progress for IWAI's jetties at Gaighat (Patna) on National Waterway-1 and Dhubri, Pandu (Guwahati) on National Waterway-2. Subsequently, IWAI's terminals on NW-3 (West Coast Canal) and NW-16 (River Barak) are also planned to be handed over for O&M.
- **To reduce high first / last mile transportation cost**, IWAI has planned to develop warehouses, storage and logistics centers near the newly developed terminals under JMVP. The connectivity of terminals with National Waterways is being improved. Also, efforts are being made to convince DPIIT and State Governments to encourage and incentivize establishments of industry along the NWs.
- **With regards to information on IBP route**, the matter has been taken up with BIWTA for information such as LAD, documentation requirement for transit, charges etc. on their website regularly. The link shall be hosted on IWAI's website as well.
- **In order to promote the use of eco-friendly fuel LNG** in inland waterways and coastal vessels, guidelines for LNG fueled vessels have been framed in 2017. These guidelines were framed by a group coordinated by IRS with members from DG Shipping, IWAI, ICCSA, Petronet LNG, PESO, Cochin Shipyard, Shoft Shipyard, Chowgule Shipyard and AC Roy & Co. In addition, guidelines for LNG bunkering was also developed by Ministry of Shipping. LNG storage and bunkering facilities are planned to be set up to support the operation of LNG fueled vessels.

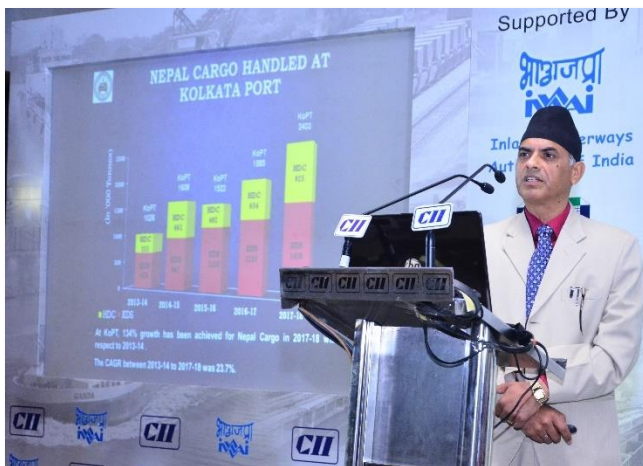
## 4.4 Photo Gallery



Dr Amita Prasad, Chairperson IWAI in a discussion with Shri Shishir Koirala, Joint Secretary, Water Resources, Govt of Nepal and Shri Rezaul Karim, Officer, DG Shipping, Govt of Bangladesh



Dr. Amita Prasad, Chairperson, IWAI making a presentation on regional connectivity enabled by inland waterways during the inaugural session



Shri Shishir Koirala, Joint Secretary, Water Resources, Govt of Nepal addressing during the inaugural session



Shri Vineet Kumar, Chairman, KoPT addressing during the inaugural session



Shri Shashi Bhushan Shukla, Member (T&L), IWAI giving a keynote address on Enhancing Regional Connectivity through IWT



Shri S V K Reddy, Chief Engineer (Technical), IWAI addressing a session on Multimodal Approach - First Mile & Last Mile Connectivity





Speakers at the inaugural session



Speakers at the session on Enhancing Regional Connectivity through Inland Waterways



Speakers at the session on Cruise tourism: unlocking India as a destination and a source market



Session on Multimodal Approach - First Mile & Last Mile Connectivity

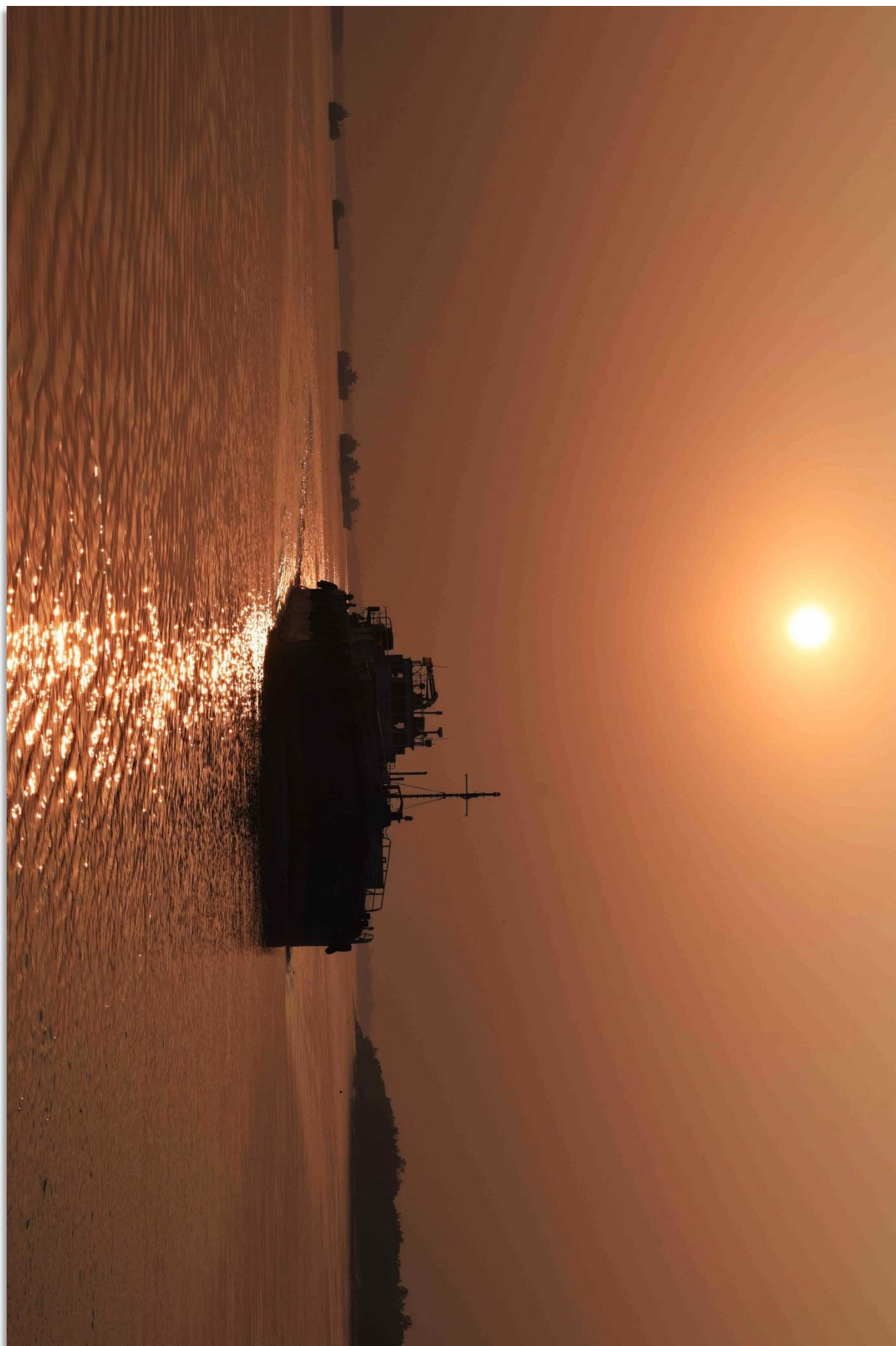


A Stakeholder interacting with the panelists



A Bhutanese exporter interacting with the panelists











## ***5. Stakeholders conference at Kochi on 24.01.2020***

Inland Waterways in Kerala holds significant importance for both domestic and international trade and acts as catalyst to boost multimodal connectivity. Kerala's hinterland and the waterways run parallel to the Arabian Sea and link major trading centers. There are 4 National Waterways in Kerala namely; NW-3, 8, 9 and 59 with a combined length of 460 kms. Out of these, 205 kms of NW-3 between Kottapuram and Kollam including Udyogmandal and champakkara Canals, 28kms of NW-9 between Alappuzha and Kottayam are currently operational. There are 9 existing IWT terminals and 2 Ro-Ro Terminals on National Waterway - 3. Congestion in the ports and load on railways and road network could be reduced significantly if bulk cargo such as fertilizers, cement, iron ore, bulk agricultural commodities and project cargo is transshipped onto barges for onward transportation into the hinterland. Kerala's export-based industries too, can grow considerably if it taps the potential of the State's inland water transport system. Seamless connectivity of National Waterways of Kerala with Cochin Port shall enhance the use of IWT and also reduce the cost and congestion.

Besides trade prospects, Kerala backwaters offer incomparable beauty and unique experience and has thus contributed to its inclusion in the list of 50 must see places in the world. Kerala back waters offer tremendous tourism and passenger cruise services potential.

IWAI, in partnership with The Associated Chambers of Commerce of India (ASSOCHAM), organized the "Stakeholders Interaction for Development of Inland Waterways Systems in Kerala" on January 24th, 2020 at Kochi, Kerala. The Inaugural session was duly attended by Shri N. Sivasailam IAS, Special Secretary Logistics, Ministry of Commerce; Dr Amita Prasad, IAS, Chairperson, IWAI; Dr Vishwas Mehta IAS, Chairman, Kerala Shipping & Inland Navigation Corporation & Addl. CS, Water Resources, Coastal Shipping & Inland Navigation, Govt. of Kerala; Dr. M. Beena IAS, Chairperson, Cochin Port Trust; Shri Madhu S Nair, CMD Cochin Shipyard Ltd; Capt. Sandeep Mehta, Chairman ASSOCHAM's National Council on Ports and Shipping and President Adani Ports and SEZ; and other eminent stakeholders from the Kerala shipping industry. More than 80 delegates participated in the conference. Post the inaugural session, 3 sessions were organized to capture stakeholder's viewpoint on various topics as mentioned below.

- a) Integration of inland waterways and coastal shipping
- b) Challenges of modal competition with Roadways & Railways
- c) Issues related to Fairway Development
- d) Vessels and terminal infrastructure



## 5.1 List of speakers

<b>1. Shri N Sivasailam IAS</b> Special Secretary Logistics, Ministry of Commerce	<b>12. Shri Kishor Rungta</b> CMD, Fertilizers & Chemicals Travancore Ltd. (FACT)
<b>2. Shri Sanjay Bandopadhyay IAS</b> Addl. Secretary to the Govt of India, Ministry of Shipping	<b>13. Dr P N Rao</b> Principal Chief Commissioner, Custom House Kochi
<b>3. Dr Amita Prasad, IAS</b> Chairperson IWAI	<b>14. Shri Abraham Verghese</b> Managing Director, Kottayam Port
<b>4. Dr Vishwas Mehta IAS,</b> Chairman, Kerala Shipping & Inland Navigation Corporation; Addl. CS, Water Resources, Coastal Shipping & Inland Navigation, Govt. of Kerala	<b>15. Dr Samson Mathew,</b> Director, National Transportation Planning and Research Centre (NATPAC)
<b>5. Dr M Beena IAS</b> Chairperson, Cochin Port Trust	<b>16. Shri Prakash Iyer</b> Member, Kerala Maritime Board; Former President, Cochin Steamer Agents Association; Former Trustee, Cochin Port Trust
<b>6. Shri Madhu S Nair</b> CMD, Cochin Shipyard Ltd	<b>17. Shri Arun M V</b> Mechanical Engineer, Directorate of State Water Transport Department
<b>7. Shri Shashi Bhushan Shukla, IRS</b> Member (Traffic & Logistics), IWAI	<b>18. Shri Sanjay Basu</b> Co-Founder & Chairman, Far Horizon Tours Pvt Ltd.
<b>8. Capt Ashish Arya</b> Chief Hydrography, IWAI	<b>19. Shri Sandith Thandasherry</b> CEO, NavAlt Solar and Electric Boats
<b>9. Capt Sandeep Mehta,</b> Chairman, ASSOCHAM's National Council on Ports and Shipping; President, Adani Ports and SEZ Ltd.	<b>20. Shri P J Shaji</b> General Manager – Water Transport, Kochi Metro Rail Ltd.
<b>10. Shri D K Gupta</b> Managing Director, Sagarmala Development Corporation Ltd.	<b>21. Dr Sudheer C B</b> Associate Prof, Dept. of Ship Technology, CUSAT
<b>11. Shri Praveen Thomas Joseph</b> CEO, ICTT, Vallarpadam	<b>22. Shri Mohanlal Pillai,</b> Naval Architect & Managing Director, Mech Marine Engineers

## 5.2 Key highlights

- **Presentation by Chairperson, IWAI on Kerala Waterways:** Chairperson IWAI made a detailed presentation on Development of Inland Waterways Systems in Kerala. She stated that the connectivity of Inland Waterways with coastal shipping in Kerala has opened up numerous possibilities of trade for stakeholders in southern region of India, with Kochi being the focal point for integrated waterways development. Kochi has been facilitating cargo movements between India and Middle east and South East Asian Countries. The trio of CPT, ICTT and Kottayam Port supported by other IWT terminals on NW-3, offers a robust waterways connectivity between hinterland and coastal shipping for efficient and fast cargo evacuation. She mentioned that industries like engineering, metals, agro, paper mills, POL etc which are located in close proximity to NWs can explore possibility of using waterways for movement of their cargo. She also apprised the stakeholders about 24-hrs navigational aids being provided by IWAI for round the clock navigation on NW-3, NW-8 and NW-9. She also sought assistance from the State Government for the finalization of DPRs of NW-8, NW-9 and NW-59, identification of disposal sites for dredged material and utilization of existing IWT terminals. Chairperson emphasized that the State Government should come forward to operate Ro-Ro and ferry services on NW-3 and IWAI would definitely assist in State Government's endeavor to promote IWT.
- **Integration of Inland Waterways and Coastal Shipping in Kerala:** Stakeholders stated in unison that there is a need to integrate Inland Waterways with Coastal Shipping in order to achieve faster evacuation of EXIM cargo. The relaxation granted by DG Shipping vide circular no. no. 8 of 2018 of Inland Vessels in the 5 nautical miles inshore traffic corridor provides seamless integration of IWT and coastal traffic. ICTT, Vallarpadam with a draft of 14 m, can facilitate transshipment of cargo to smaller inland barges for direct transportation to inland terminals. The Ro-Ro service between Bolghatty and Willingdon Islands to support cargo evacuation through ICTT terminal is set to recommence during FY 20-21 with the help of KSINC. However, support to port operators at these smaller ports needs to be assessed and issues related to "No customs code" at Kottayam, Kollam, Beypore and Azhikkal needs to be resolved with the help of Central Board of Indirect Taxes and Customs. In addition, ICTT also requested hand holding support from Government of India until a sustainable volume of trade is achieved.
- **Issues related to fairway development on NW-3:** The industry stakeholders submitted that there have been incidents of grounding / touching reported on NW-3 and other NWs of Kerala because of inadequate LAD at some places. In addition, cases of encroachment of canals and eviction have also been reported along with low air draft due to many bridges built by local government bodies over the years. Slush from canal dredged out, cannot be transported as it is laden with water, which needs to be drained out. For this purpose, dumping yards are required, which is often objected by local residents. The State

Government made a presentation on the fairway development works related to riverbed maintenance and bank protection taken up in West Coast Canal and stated that it is exploring to use wetland/ government land for the purpose of dumping slushes. The State Government also expressed concerns about issues being faced while undertaking development works like removal of encroachment in a densely populated state and obstructions like Sivagiri and Chilakkur tunnels, bridges, locks and electrical lines. Cruise tour operators requested for removal of fishing nets from the fairway and adoption of standardized fairway development works to enable them to provide integrated cruise tours (sea, river and canals) which would draw more tourists towards choosing cruises. In addition, it was discussed that the fairway development plan of NW-3, NW-8 and NW-9 needs to be holistically reviewed along with the State Government with respect to its development viz a viz the cargo anticipated. In addition, there is a need for institutionalizing fairway development mechanism and identification of suitable land for disposal of dredged material prior to awarding dredging contracts.

- **Issues raised by barge operators and vessel owners** – Stakeholders expressed the need for reduction of costs which would solve issues like unavailability of return cargo and motivate users to shift their operations to inland waterways. High cost of parking of vessels and empty containers also needs to be addressed to remain competitive against other modes of transport. Double handling and empty return of vessels cannot compete with rail / road cargo movement.
- **Development of Water Metro service:** The State Govt gave in-depth information about their upcoming Water Metro Project. Kochi Metro Rail Ltd. is all set to implement the integrated water transport project at a cost of Rs.747 crore with financial assistance from the German Bank, KfW. The project envisages the development of 16 identified routes, connecting 10 islands along a network of routes that span 76 km. The project intends to bring in a fleet of 78 fast, fuel-efficient, air-conditioned ferries plying to 38 jetties, 18 of which will be developed as main boat hubs, while the remaining 20 will be minor jetties for transit services. More than 100,000 islanders are expected to benefit from the Water Metro with modern watercrafts. It was also discussed that for Integration of all modes of transport, demand from urban areas need to be identified and connectivity to other modes of transport should be provided accordingly at designated places.
- **Issues related to availability of financing in shipbuilding:** The industry has been requesting to aid the entrepreneurs in providing long term loans for shipbuilding activities. Currently debt financing for ship building is not exercised by banks in India which is having an adverse impact on maritime & logistics sector's growth. Secretary Logistics stated that role of equity financing and creation of Maritime Development Fund may be explored to address this issue. The Kerala Government had been providing subsidy for inland transportation and that has been recently discontinued. The same may be pursued with State Government of Kerala to ensure continued benefits to the Kerala inland ship owners. Other



relevant State Governments may be pursued for bringing in such schemes in the respective states. Another concern which was raised was the absence of any subsidies or incentives due to which, investors/ vessel operators are not coming forward to invest in inland vessels.

### **5.3 Key action points**

- **Promotion of cargo on Kerala Waterways:** IWAI is in process of updating the DPR of NW-3 in consultation with the State Government in order to develop the necessary infrastructure related to fairway development and promote usage of terminals from PSUs and private players for movement of EXIM and transshipment cargo. In addition, IWAI is also in process of engaging transaction advisor for outsourcing of operations and maintenance of terminals at NW-3 which would also comprise marketing and promotion of cargo in the region.
- **Commencement of RO-RO Operations:** IWAI is engaging with KSINC for operation of 2 RO-RO vessels between Bolghatty and Willingdon Islands. The 2 new vessels are set to get delivered in August 2020. The commencement of RO-RO operations would not only help evacuate transshipment cargo at the ICTT terminal but also decongest Kochi City roads.
- **Disposal of dredging material:** In order to capture value of the dredged material, the need of the hour is to revisit the existing dredging operations and necessary arrangements need to be made with the State Governments so that there is possibility of using dredged material for beneficial use in an environmentally sustainable manner. IWAI is in the process of finalization of guidelines for undertaking dredging operation on NWs taking into consideration the above-mentioned aspect.
- **In order to address the vessel financing issues,** there is a need for innovative financing tools to support inland vessel procurement:
  - **Setting up a maritime development fund to enhance the credit availability:** Internationally, foreign currency bonds fund ship acquisition, whereas in India, the same is done through banks. As a result, foreign vessels avail a loan for 15 years, while the Indian vessel owners get a shorter loan duration of 6-8 years. Moreover, because of higher risk perception of sector by banks, players have to provide a collateral over and above the vessel. This discourages small ship owners to purchase a vessel. To provide longer tenure funds at a lower cost of borrowing, a specialized maritime development fund should be explored which would provide credit in favorable terms depending on the requirement of sector. The fund could be set up by government with the participation from multilateral/bilateral agencies and large financial institutions which lowers the cost of borrowing funds and allows disbursement at lower interest rate.
  - **Extension of benefits under Tonnage Tax Scheme to Inland Vessel:** The Tonnage Tax Scheme are currently available to vessels which are registered under Merchant Shipping Act, 1958 while the inland vessels are registered under Inland Vessels Act, 1917. Therefore, the benefits of the tax

scheme are not available for Inland Vessel operator companies. As the IWT sector is at a nascent stage, the private sector would be keen to invest in inland vessels if similar incentives are provided. The extension of benefits under the tonnage tax scheme to vessels registered under the Inland Vessels Act, 1917 (as amended) is likely to catalyze investment in inland vessels and therefore the availability of inland vessels in the IWT sector.

- **Separate ship building and financial assistance policy for Inland Vessel:** In order to promote building of a greater number of barges for operation in the National Waterways, it may be more helpful to have a separate shipbuilding financial assistance policy till 2030. Such a policy can be exclusively for new build barges / IV vessels proposed to be deployed in the National Waterways for movement of cargoes and passengers.
- **Removal of anomaly in GST rates for multimodal transportation:** GST rate on multimodal transportation is 12%, while that on single mode of transport like road or rail is 5%. As coastal movement is mostly a multimodal movement, effectively, GST rate for coastal movement becomes 12%. Multimodal GST rate becomes a cost in case of products where final product GST is low such as in Fertilizer where GST rate is 5%. The additional GST of 7% incurred by fertilizer players on multimodal transportation becomes an extra cost for the players, discouraging use of multimodal transportation. To ensure multi modal transportation is not at a disadvantage, representation needs to be sent to GST council to reduce the GST on multimodal transportation to 5% so as to align with the applicable rates for single mode of transportation.
- **Addressal of GST credit mismatch:** As per GST Law 2017, GST is not applicable on services by way of transportation of goods on inland waterways. As a result, NIL GST is charged by the vessel operator on the IWT freight (output). However, the vessel operator pays GST (@12% /18%) on the input services and components such as vessel hire charges, contractual crew charges. Due to this reason, the input tax credit gets accumulated, which the vessel operator is not able to claim as a refund, resulting in increase in cost of operations. This anomaly is also seen in case of multimodal transportation, wherein GST is applicable on the non IWT services, while no GST is payable on services by way of transportation of goods on inland waterways. Accordingly, it is proposed that either the GST rates on input service availed by the IWT operators may be reduced or certain percentage of accumulated GST credit may be refunded.

## 5.4 Photo Gallery



Dr Amita Prasad, Chairperson IWAI addressing the inaugural session on Development of Inland Waterway systems in Kerala



Shri Sanjay Bandopadhyay, Addl. Secretary to the Govt of India, Ministry of Shipping addressing the inaugural session.



Shri N Sivasailam, Special Secretary Logistics, Ministry of Commerce addressing the inaugural session.



Smt M Beena, CMD, Cochin Port Trust addressing the inaugural session.



Dr Vishwas Mehta, Chairman, Kerala Shipping & Inland Navigation Corporation and Addl. CS, Water Resources, Coastal Shipping & Inland Navigation, Govt. of Kerala addressing the inaugural session



Shri Shashi Bhushan Shukla, Member (T&L) IWAI moderating a session on Kerala IWT for Urban Transport, Tourism and Cruise





Speakers addressing stakeholders during the session  
Integration of IWT with Ports - Facilitate Cargo  
Evacuation



Speakers addressing stakeholders during the session  
Kerala IWT for Urban Transport, Tourism and Cruise



Speakers addressing stakeholders during the session  
Vessel Construction, Technology and Financing



Delegates at the conference



Stakeholders interacting with the panelists

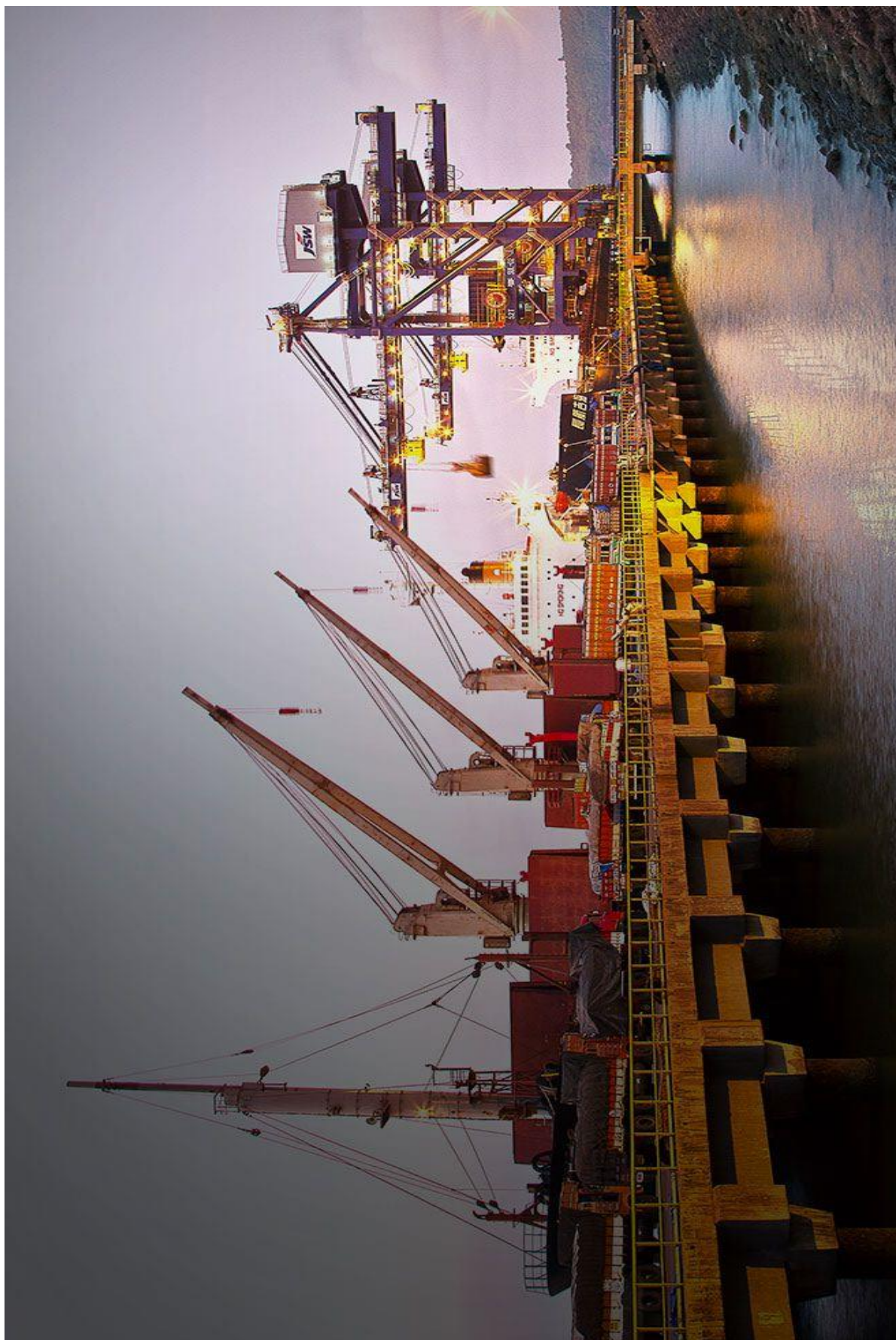


Stakeholders interacting with the panelists











## ***6. Stakeholders conference at Mumbai on 07.02.2020***

Waterways of Goa, Gujarat and Maharashtra carry approx. 80% of inland cargo traffic on India's Inland Waterways. Major commodities, which were transported on these waterways, were mined minerals, coal, steel products, cement, clinker and other bulk cargo. Mumbai being a focal point in this region, holds a strategic importance for IWT promotion, shipbuilding and investment in the sector.

To reach out to the stakeholders, IWAI in partnership with ASSOCHAM organized the stakeholder conference for “Augmenting trade potential through Inland Waterways and Coastal Shipping” at Mumbai on 7<sup>th</sup> February 2020 duly attended by senior officials of IWAI viz, Chairperson, Vice Chairman, Member (Traffic & Logistics) and Hydrographic Chief. The conference was organized at apex level with inaugural session duly attended by Shri Sanjay Bandyopadhyay IAS, Addl Secy to Govt of India; Ministry of Shipping; Shri Sanjay Kumar, AS & FA, Ministry of Shipping; Dr Amita Prasad IAS, Chairperson, IWAI; Shri Sanjay Bhatia IAS, Chairman, Mumbai Port Trust; Shri Amitabh Kumar, Director General Shipping, Govt of India; Smt H K Joshi, CMD Shipping Corporation of India; Md. Manjurul Kabir, Chief Engineer, DG Shipping Bangladesh and other senior members of the Shipping Industry.

The inaugural session started with the welcome remarks by Chairman ASSOCHAM National Council on Ports & Shipping, followed by addresses from other dignitaries mentioned above and finally a keynote address by Chairperson IWAI to set the context of the conference. Post the inaugural session, 2 sessions were organized to capture stakeholder's viewpoint on various topics as mentioned below.

- a) Augmenting trade potential through inland waterways and coastal shipping
- b) Salient features of IV Bill 2020
- c) Fairway development plan to maintain the navigability of NW-1.
- d) Commercialization of IWT & Multimodal Operations

## 6.1 List of speakers

1.	<b>Shri Sanjay Bandopadhyay IAS</b> Addl. Secretary to the Govt of India, Ministry of Shipping	15.	<b>Shri Anil Kishore Singh</b> CEO, Adani Inland Waterways
2.	<b>Shri Sanjay Kumar</b> AS & FA, Ministry of Shipping	16.	<b>Shri N Girish</b> Chief Surveyor, Sr. VP Research & Innovation, Indian Registrar of Shipping
3.	<b>Dr Amita Prasad, IAS</b> Chairperson IWAI	17.	<b>Shri Rohit Puri</b> General Manager, Maharashtra Maritime Board
4.	<b>Shri Sanjay Bhatia IAS</b> Chairman, Mumbai Port Trust	18.	<b>Dr P K Raut IRS</b> Deputy Director General Shipping, Govt of India
5.	<b>Shri Amitabh Kumar</b> Director General Shipping, Govt of India	19.	<b>Shri D K Rai</b> Director, Sagarmala, Ministry of Shipping
6.	<b>Smt H K Joshi</b> CMD, Shipping Corporation of India	20.	<b>Shri Anil Devli</b> CEO, INSA
7.	<b>Shri Pravir Pandey IA&amp;AS</b> Vice Chairman, IWAI and Chairman, ASSOCHAM's National Council on Inland Waterways	21.	<b>Shri Vijay Kalantri</b> CMD, Balaji Infra Projects
8.	<b>Shri Shashi Bhushan Shukla, IRS</b> Member (Traffic & Logistics), IWAI	22.	<b>Shri Akhil Saxena</b> LPAL, MHA
9.	<b>Capt Ashish Arya</b> Chief Hydrography, IWAI	23.	<b>Shri Aniruddha Lele</b> Head India Operations, CMA CGM Agencies (India) Pvt. Ltd.
10.	<b>Md Manjurul Kabir</b> Chief Engineer, DG Shipping, Ministry of Shipping, Bangladesh	24.	<b>Shri K P Unnikrishnan</b> Director, Sima Marine India Pvt. Ltd.
11.	<b>Capt Sandeep Mehta,</b> Chairman, ASSOCHAM's National Council on Ports and Shipping & President, Adani Ports and SEZ Ltd.	25.	<b>Shri K S Sathianathan</b> Former Managing Director, Distribution Logistics Infrastructure
12.	<b>Shri Vincent Ugo</b> Managing Director, CMA-CGM	26.	<b>Shri Sanjib Roy Chaudhury</b> Regional Head, Samsung SDS
13.	<b>Shri Arun Maheshwari</b> Jt. MD and CEO, JSW Infrastructure	27.	<b>Capt Devendra Kumar Manral</b> CEO, Indigo Seaways
14.	<b>Shri Arnab Bandyopadhyay</b> Lead Transport Specialist, World Bank	28.	<b>Shri Sanjeev Kumar</b> General Manager, Business Development, Adani Dredging

## 6.2 Key highlights

- **Presentation by Chairperson, IWAI on NW traffic:** Chairperson IWAI made a detailed presentation on the cargo movement on National Waterways in the three states of Goa, Gujarat and Maharashtra. She apprised the stakeholders that these waterways provide ample opportunity for transportation of bulk cargo. She expressed that traffic is expected to grow further in line with the industrial growth in the region specifically in Gujarat. Commodities like HR coils, mined minerals, cement, heavy machinery and imported coal are major contributors towards the growth of IWT in the region. In addition, she also apprised the stakeholders about IWAI's initiatives for the development of IWT in East India region. By giving a brief on various trade agreements with neighboring countries, she mentioned that integrated waterways connectivity between India and Bangladesh has opened up new opportunities to explore waterways-based trade routes with Nepal, Bhutan and Myanmar. The waterways-based transportation routes provide an alternate route to the congested road routes passing through Land Customs Stations (LCS) where cargo faces challenges such as long waiting time, multiple cargo handling, damages etc. More number of choices to trade will reduce logistics cost and result in growth in traffic movement using IWT mode.
- **Cargo on NWs in Maharashtra:** The total traffic on Maharashtra Waterways in FY 2018-19 was 22.3 MMT. NW10-Amba River constituted the majority of the share followed by NW-85. JSW has contributed significantly towards integrated movement of cargo through inland waterways and coastal shipping in the recent past. Approx. 12 MMT of JSW's bulk cargo was moved on NW-10 during FY 2018-19 and is expected to increase to 30 MMT over the next few years. To cater these volumes, JSW has ordered 18 mini-bulk carriers from Indian and Korean Shipyards. JSW expressed that cost of putting the ships in waters is very high and only dedicated, voluminous cargo can justify the kind of investments. JSW has also invested in Paradip port for transportation of coastal cargo comprising steel, iron ore and coal.
- **Discussion on modal shift of cargo to IWT:** To further promote movement of bulk cargo on NWs, the industry stakeholders suggested that the Central Government may provide initial thrust by raising the mandate to at least 15 - 20 % volume of bulk cargo to be moved essentially through waterways. The ideal commodities could be hazardous goods, coal, fertilizers, cement, fly ash, ores, steel, POL, oversize cargo and food grains from PSUs. Apart from bulk cargo, stakeholders raised concerns over lack of sufficient bagged or container cargo for inland waterway / coastal movement as there is lack of good agglomeration services for small produce and low volume goods. Goods from farmers, MSME manufacturers and traders need to be aggregated and transported through multi modal transport including IWT. To address this, it was discussed that supply chains of agri produce and manufactured goods needs to be identified in collaboration with State Governments and subsequently role of IWT in these supply chains needs to be articulated and marketed accordingly.



- **Discussion on lack of container manufacturing in India:** The Industry stakeholders pointed out that companies in India import containers from China and South Korea because the cost is about 20-25 per cent lower as compared to manufacturing in India. Most of the companies which have a bulk dry container requirement import from these markets. Hence, Indian manufacturers find it difficult to compete. The industry purchases containers from Indian container manufacturer only when there is requirement for low volume, and custom-made containers. It is suggested to undertake a study on the market development analysis of containers in India and factors affecting the change in demand and supply. Subsequently it can be further taken up with Ministry of Commerce & Industry for discussions on possible solutions for reduction of costs.
- **Passenger transportation using cruises:** MbPT is focusing on developing and encouraging passenger movement by water transport system with a challenge to make it cheaper and faster than cabs / trains. Ro-Pax services has started between Mumbai and Mandva/ Alibaug to boost tourism. MbPT has also introduced hovercrafts for faster access to destination points. 22 hovercrafts with 12 pax capacity are currently plying between DCT (Bhauchadhakka) and Navi Mumbai/ Nerul/ Vashi/ Aeroli/ New Airport at a nominal price of Rs. 350. Commutation time for the same has been reduced to just 25-30 minutes. MbPT suggested that such hovercrafts can be replicated in other cities located on coastal area or along riverbanks.
- **Strengthening of Ease of Doing Business:** Adani Logistics has expressed that currently long-haul transportation of goods via IWT has the potential to reduce the logistics costs as compared to roadways and railways. They stated that the recent pilot movements of long-haul transportation (movement on NW-1, IBP route and NW-2) faced numerous checks & barriers on route which delays the arrival of cargo at destination. It was suggested that these barriers need to be holistically reviewed and simplified for promotion of ease of doing business. Adani also raised concern over the serviceability at IWT terminals and requested for a review on realization and removal of pain points at the terminals.
- **Strengthening of River Information Systems:** Stakeholders also expressed that critical information such as LAD status and river notices are published on IWAI website with a significant delay. Industry requires assured and live status of LAD and other navigational information so that voyages can be planned and executed in a safe manner. Moreover, availability of necessary information for industry to evaluate IWT mode is not easily available through IWAI's website. Basic information such as distance between two points on national waterways, infrastructure such as jetties, cargo handling equipment, storage facilities etc. required for a cargo owner/ vessel operator to design IWT based solution are not available at a single place and are not easily accessible through IWAI's website. Industry has to call or visit offices of IWAI to get this information. IWAI stated that 24 River Information Stations (RIS) from Haldia to Varanasi have been put in place. It provides information including the water current (unit

meter/second) and electronic navigation chart. However, large number of vessels, plying on the National Waterway 1, do not have corresponding Automated Information System (AIS) which is needed to communicate with River Information Systems. Stakeholders requested the Government for subsidizing installation of AIS systems on vessels. They also stated that awareness through training programs for seafarers and operators can be taken up at National Inland Navigation Institute (NINI) in Patna, to share data on River information system (RIS) and how to respond to any challenge they face at particular stretches.

### 6.3 Key action points

- **River Information Systems:** In order to promote Ease of Doing Business in IWT sector, IWAI is currently developing a digital portal 'River Navigation System (RNS)' to disseminate key systematic and aggregated River and Navigational information related to National Waterways to various stakeholders. RNS shall provide detailed information on various National Waterways in India such as fairway (LAD, etc.), infrastructure facilities (jetties, pontoons, cargo handling equipment, storage facilities), cross river structures (bridge locations locks, barrages), connectivity at jetties, emergency services, vessel sailing plan details etc. for facilitating transportation of cargo and other vessels through National Waterways. Central database portal for the vessel & crew registration shall also be developed on the lines of VAHAN and SARTHI for motor vehicles.
- **To promote modal shift of cargo:** IWAI is developing concept papers of key target commodities like fertilizers, LPG, coal, cement etc. to understand their supply chains through their demand centers situated nearby National Waterways. Basis on the viability identified, these concept papers would help IWAI in engaging one on one with stakeholders of these commodities and encourage them to shift their cargo on inland waterways.
- **Development of connectivity to ports /terminals handling coastal and IWT cargo:** It is proposed to develop small ports / areas (Coastal Cargo Ports (CCPs)), with small draft of around 3-5 m, specifically for coastal shipping where barges with around 2,000-3,000 MT of cargo can ply. These CCPs are proposed to be developed on the outskirts of major coastal cities on both western and eastern coasts of India. Some existing small jetties lying idle can also be converted / utilized for this purpose. These CCPs can be developed and operated in a cost-effective manner and will target small barges plying on the coastal route. These CCPs are envisaged to be developed in locations with good connectivity and adequate infrastructure, in the vicinity of national / state highways and / or rail heads. To take this initiative forward, it is suggested to create two SPVs, one for western coast and another for eastern coast of India.

## 6.4 Photo Gallery



Senior officials from Government and Industry inaugurated the conference



Shri Sanjay Bandopadhyay, Addl. Secretary, Ministry of Shipping addressing during the inaugural session



Dr. Amita Prasad, Chairperson IWAI addressing during the inaugural session



Shri Sanjay Kumar, AS&FA, Ministry of Shipping addressing during the inaugural session



Shri Sanjay Bhatia, Chairman, Mumbai Port Trust addressing during the inaugural session



Shri Amitabh Kumar, Director General, DG Shipping addressing during the inaugural session





Shri Pravir Pandey, Vice – Chairperson, IWAI interacting with the stakeholders on fairway development works on NW-1



Shri Shashi Bhushan Shukla, Member (T&L) moderating the session on Augmenting trade potential through coastal shipping and transshipment



Speakers during the session on Augmenting trade potential through coastal shipping and transshipment



Delegates present at the conference

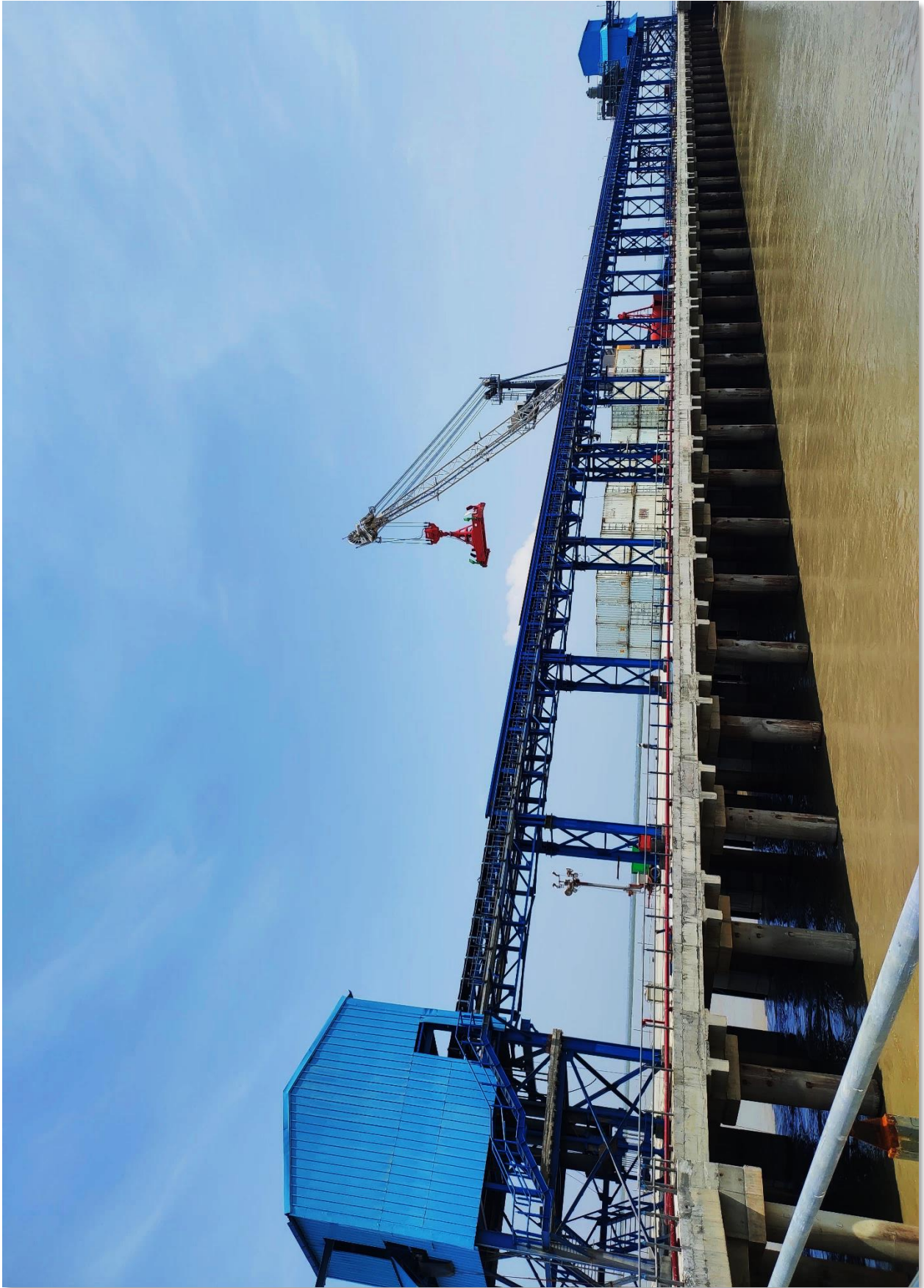


Stakeholders interacting with the panelists



Stakeholders interacting with the panelists





## ***7. Stakeholders conference at Patna on 11.02.2020***

The Ganga-Bhagirathi-Hooghly river system from Haldia to Allahabad, a distance of about 1,620 km, declared as National Waterway-1 (NW-1) in 1986 is of national significance passing through four states of Uttar Pradesh, Bihar, Jharkhand, and West Bengal. The waterway is potentially serving the major cities of Haldia, Howrah, Kolkata, Tribeni, Katwa, Behrampur, Farakka, Rajmahal, Sahibganj, Bhagalpur, Patna, Ballia, Buxer, Ghazipur, Varanasi and Allahabad, their industrial hinterlands, and several industries located along the Ganga basin. The river basin of the Ganges is fertile and is extensively used for agriculture, resulting in significant transport demand. The river system also serves richly endowed natural reserve areas as well as a large number of industrial units comprising thermal power plants, iron & steel plant, sugar mills, cement industry, small scale industries etc.

With an initiative to on board all existing IWT stakeholders and prospective businesses to understand and leverage the benefits of inland waterways transportation on NW-1 and promote integration with coastal shipping, IWAI in partnership with Federation of Indian Chambers of Commerce and Industry (FICCI) organized the “Stakeholders Interaction for Development and Promotion of Cargo Movement on National Waterway -1” at Patna on 11th February. The push initiated by the government through various initiatives, like the Jal Marg Vikas Project (JMVP), construction of multi modal terminals at Varanasi, Haldia and Sahibganj, development of Ro-Ro terminals amongst other, have generated private sector’s interest in the recent past. The platform was an opportunity for the stakeholders to collectively deliberate and evaluate these initiatives and define roadmap for development of the economical, efficient and environment friendly mode of transport.

The inaugural session started with the speeches delivered by Chairman FICCI Sub-Committee on Inland Waterways, followed by speeches from senior official from Ministry of Shipping, State Government of Bihar and finally by Chairperson IWAI to set the context of the conference. Post the inaugural session, 2 sessions were organized to capture stakeholder’s viewpoint on various topics. The major topics discussed comprised of following:

- a) National Waterway - 1: Augmenting trade on an alternative mode of transport
- b) Global best practices adopted for movement of cargo on inland waterways
- c) Fairway development plan to maintain the navigability of NW-1
- d) Dredging and operational improvements
- e) Navigational aids for safe movement of cargo
- f) Emergency response and disaster management plans for NW-1
- g) Socio-economic impact of waterways projects



## h) IWAI's Gaighat Jetty (Patna) – proposed PPP framework

**7.1 List of Speakers**

1.	<b>Dr Amita Prasad, IAS</b> Chairperson IWAI	12.	<b>Shri Devayan Dey</b> Director, Capital Projects & Infrastructure, PwC
2.	<b>Shri Sanjay Kumar Agarwal, IAS</b> Secretary, Transport Department, Government of Bihar	13.	<b>Prof O P Sha</b> Professor Ocean Engg and Naval Architecture, IIT Kharagpur
3.	<b>Dr Raj Shekhar, IAS</b> Managing Director, UP State Road Transport Corporation	14.	<b>Smt Sindhu NT</b> Senior Consultant, KITCO
4.	<b>Shri K Ravikumar, IAS</b> Secretary (Transport), Government of Jharkhand	15.	<b>Shri Nripesh Kumar</b> Partner, EY
5.	<b>Dr Nilotpal Goswami</b> Principal Accountant General, Bihar	16.	<b>Shri A K P Sinha</b> Convenor (Chairman)- Infrastructure Sub- Committee, Bihar Chamber of Commerce and Industries
6.	<b>Shri Pravir Pandey, IA&amp;AS</b> Vice Chairman, IWAI	17.	<b>Shri Praveen Jain</b> Head Supply Chain Management, Adani Wilmar Limited
7.	<b>Shri Shashi Bhushan Shukla, IRS</b> Member (Traffic & Logistics), IWAI	18.	<b>Shri Rakesh Singh</b> Secretary, Indian Coastal Conference Shipping Association
8.	<b>Capt Ashish Arya</b> Chief Hydrography, IWAI	19.	<b>Shri Roshan Purohit</b> Regional Sales Manager, SAARC Region (Civil Engineering & Construction, Marine Division), Trimble Navigation India
9.	<b>Shri Arnab Bandyopadhyay</b> Lead Transport Specialist, World Bank	20.	<b>Shri Vikas Malaviya</b> Director, Nordic Cruiseline Pvt Ltd
10.	<b>Shri Anil Kishore Singh</b> CEO, Adani Inland Waterways	21.	<b>Shri Vishnu Sinsinwar</b> Director, Heritage River Journeys Pvt Ltd
11.	<b>Shri Sanjeev Kumar</b> Head – Business Development & Engineering (Dredging Vertical), Adani Ports & SEZ Ltd.		

## 7.2 Key highlights

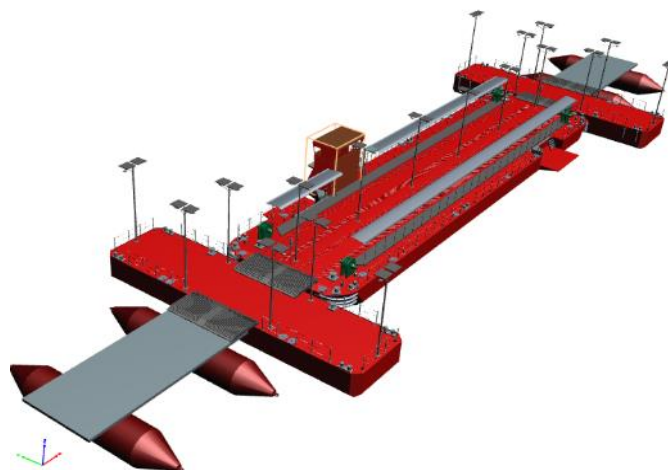
- **Presentation by IWAI on NW-1:** While addressing the stakeholders about IWAI's initiatives for the development of NW -1, Chairperson stated that IWAI is targeting 2.5 % of the total cargo movement through inland waterways in the next 5 years from the current 2 %. She highlighted that alongside roadways and railways, inland waterways should be looked as an additional medium of transportation for movement of cargo and passengers. She also mentioned that JMVP is being implemented at an estimated cost of Rs. 5369 cr. for capacity augmentation of navigation on National Waterway -1 (NW-1) on the Haldia – Varanasi stretch with the technical and financial assistance of the World Bank. She apprised that the project is scheduled to be completed by March 2023. Projects worth Rs. 1800 crores (approx.) have commenced on ground in a time period of three years after statutory clearances. On completion, JMVP will provide a supplementary, cost-effective, safe and environment-friendly mode of transport, giving the cargo operator modal choice of transport and enable socio-economic growth in Uttar Pradesh, Bihar, Jharkhand and West Bengal. She concluded by citing the various opportunities offered by NW-1 such as maintenance of waterways, dredging, terminal operations, shipbuilding and ship repair, tourism amongst others.

In addition, Vice Chairperson gave a detailed presentation on IWAI's approach to dredging management of NW-1. He started by mentioning that the economic rate of return from the Indian inland waterways transportation is 21.44% whereas the worldwide threshold is 12% which is considered a healthy rate of return in IWT. He further spoke about various challenges related to fairway development like river siltation, sediment load, meandering and shoal formation. To overcome these issues, he apprised that IWAI has adopted assured depth-based dredging at certain stretches of River Ganga and have appointed M/s Inros Lackner SE, as Technical Support Services cum Project Management Consultant to facilitate efficient management cum supervision of contracts awarded for assured LAD on National Waterways.

- **Address by IIT KGP on mechanized pontoon bridges:** Movement of vessels are obstructed on various stretches of River Ganga between Varanasi and Barh due to presence of pontoon bridges used by locals. To allow passage for vessels, a section of these pontoon bridges is being gas cut and welded back after stopping the traffic over the bridges. This activity faces much resistance by the locals adding to the time taken for completion which delays movement of vessels to reach their destination. To address this issue,



IIT KGP gave a presentation on developing mechanized opening and closing of a section of pontoon bridge which would significantly reduce turnaround time for allowing passage to the vessels. This innovative technology with IIT KGP may be pursued and further be taken up with State Governments of Uttar Pradesh and Bihar for implementation.



- **Discussion on Disaster Management Plans for NW-1:** Representative of KITCO gave a brief presentation on disaster management plans for NW-1. The presentation laid emphasis on causes of emergencies and operational profile of vessels. KITCO further stated about their observations on hotspots on NW-1 with regards to siltation, critical bends, obstructions, ferry crossings, wastewater disposals from vessels, agriculture intakes, aquatic biodiversity, temples, industrial establishments, common public utilities etc. KITCO also gave a brief on institutional framework in place for disaster management including acts, nodal ministries & departments, early warning agencies, incident reporting framework and key interventions required from IWAI.
- **Feedback from State Government of Bihar:** State Government of Bihar emphasized on the potential of inland waterways sector in the state of Bihar and how the state is trying to unlock its capacity. It was further mentioned that the state is currently facing various concerns related to cargo transportation due to lack of proper roads and railway infrastructure. The Inland waterways could help in tackling these issues through development of essential infrastructure and financial support from central and state government. Furthermore, the state government stated the opportunities present in Ro-Ro services for transporting cargo and passengers in the state of Bihar. The State Government lauded IWAI and the World Bank for putting together a sound model of techno - commercial solution for economic value addition of all stakeholders. It was further mentioned that through sectoral co-linking and an integrated endogenous approach can lead to robust additional growth of 1.33 per cent of the State GDP in the medium term if inland waterways are used as an infrastructure input.
- **Feedback from Adani Ports:** Adani Ports and SEZ said that the India's maritime sector is on a high growth path, mainly due to the efforts done by the government to revive the inland waterways to promote the cargo movement and how it is welcomed by the industry. The riverine ports and jetties have been developed well which has helped in promoting long distance cargo transportation on the national waterways. It was further added that the industry is keenly observing the development of small jetties



along the river coast for promoting short distance cargo transportation which would further encourage more industry players to participate in this segment.

- **Address by World Bank on developing robust inland waterways transportation in India:** Representative of World Bank made a presentation on key success factors for development of Inland Waterways in India and emphasized on several socio-economic dimensions which needs comprehensive planning viz; network level planning, climate adaptation, aquatic biodiversity, cultural values, market development, riverside land use management, short sea shipping integration, multimodal connectivity, vessel design, sustainable cost recovery mechanisms and adopting performance based O&M frameworks. It was further emphasized on other critical success factors like skilled manpower, continuous R&D / innovation, robust river information systems and disaster management systems.

### **7.3 Key action points**

- **Cargo mapping study:** There are many stretches on NW-1 on which cargo transportation is taking place with smaller boats and the same is not being captured. It is imperative that such smaller movements are also brought under the purview of the governing authority to the extent possible. This would not only give a boost to the overall traffic volumes being recorded but also help in overall integration of the entire ecosystem. Hence it is proposed to carry out a cargo mapping study to map the unorganized and uncaptured cargo movement on various NWs.

In addition, Outreach activities can be undertaken attract potential PSUs and private entities who handle key commodities such as coal, fertilizer, fly-ash, steel, cement etc. The cargo owners located along the NWs may be identified and focused B2B discussion be held among IWAI, cargo owners, barge operators and logistics players to identify logistics and supply chain requirements and to develop IWT based logistic solutions.

A proposal to make it mandatory for cargo owners to move a certain percentage of their cargo traffic of select commodities through inland waterways may be considered by offering innovative incentives / transport subsidy to industry for transportation of cargo on waterways in the initial period. Alternatively, a percentage of transportation cost on IWT may be considered as part of Corporate Social Responsibility (CSR).

- **Vessel crew / other trained manpower for IWT sector:** There is likely to be huge requirement of trained vessel crew in direct proportion to the projected cargo volume and fairway development activity. The requirements such as piloting, terminal operations, RIS operators and fairway development needs to be fulfilled. IWAI is in process of upgrading its trainee intake at its National Inland Navigation Institute at Patna. However, it is recommended to enhance the capacity building and further investments are needed for development of indigenous institutes to supply the required skilled manpower.

## 7.4 Photo Gallery



Dr. Amita Prasad, Chairperson IWAI addressing during the inaugural session



Speakers from Government and Industry during the inaugural session



Shri Pravir Pandey, Vice Chairperson IWAI making presentation on IWAI's approach to Dredging



Shri Sanjay Kumar Agarwal, Secretary, Transport Department, Govt of Bihar addressing during the inaugural session



Panelists during the session National Waterway - 1: Augmenting trade on an alternative mode of transport



Prof O P Sha, IIT KGP giving presentation on mechanized pontoon





Capt. Ashish Arya, Hydrography Chief, IWAI, giving presentation on River Information Systems



Delegates present at the conference



Delegates present at the conference



Stakeholders interacting with the panelists



Stakeholders interacting with the panelists



Stakeholders interacting with the panelists





## ***8. Summary of key initiatives undertaken by IWAI for development of IWT***

To enhance the utilization of NWs for transportation of cargo and passengers, IWAI is pursuing multiple initiatives in consultation with different stakeholders. These initiatives are briefly summarized as follows.

- **Fairway development works:** Fairway development works to ensure Least Available Depth (LAD) of 3.0 meter in Haldia-Barh, 2.5 meter in Barh-Ghazipur and 2.2 meter in Ghazipur-Varanasi stretches on NW-1 are in progress under the Jal Marg Vikas Project (JMVP) which has been undertaken by IWAI with technical and financial assistance from World Bank. Similarly, to improve the connectivity between NW-1 and NW-2/ NW-16 via the Indo Bangladesh protocol route, the critical and shallow stretches between Sirajganj and Daikhowa on protocol route No1 & 2 and Ashuganj and Zakiganj on protocol route no 3 & 4 in Bangladesh are being jointly developed by India and Bangladesh for round the year navigability (with targeted LAD of 2.5 mtrs). Similarly, fairway development works are being carried out on NW-97 in Sunderbans to allow smooth navigation of vessels on the Indo-Bangladesh Protocol Route.
- **Operations & Management of IWAI's terminals by Private Operators:** IWAI is in the process of handing over its terminals on all NWs to private operators on PPP basis. The newly constructed Multimodal Terminals (MMTs) at Varanasi (capacity 1.26 million tonne), Sahibganj (capacity 3.03 million tonne) and Haldia (capacity 3.18 million tonne) on NW-1 under JMVP are in the process of being tendered out private operators on PPP basis for operation and maintenance. Similar exercise is in progress for IWAI's terminals at Gaighat (Patna) on National Waterway-1 and Dhubri, Pandu (Guwahati) on National Waterway-2. Subsequently, IWAI's terminals on NW-3 and NW-16 are also planned to be handed over for O&M to private players. Appointment of O&M operators will bring in necessary operations and marketing experience and contribute to increasing traffic on the IWT mode.
- **Policy for development of Private jetty/ terminal:** With the growth of IWT traffic on NWs, private entities have exhibited interest to build and operate private terminals on NWs. Allowing private entities to build, operate and manage the terminals will enable rapid development of terminal network on NWs. In view of the advantages associated with private sector participation in development of terminals on NWs, IWAI has proposed to permit the private sector to develop their own jetties and operate them on commercial basis. Recently IWAI has permitted RO-RO operations by private operators on NW-1 using their land on banks as landing points on temporary basis. This initiative is expected to bring in much needed participation of private sector in augmenting the development of infrastructure and modal shift of cargo in favor of IWT.
- **Development of portals FOCAL and LAD:** A dedicated portal named FOCAL (Forum of Cargo Owners and Logistics Operators) was developed by IWAI to connect cargo owners interested in moving their cargo using the IWT mode and vessel operators who are operating vessels on National Waterways

(NWs). The portal allows registered users to share their transportation requirement and positioning of vessels on different NWs. Also, IWAI has internally developed a portal 'LAD' to facilitate the day-to-day operations of inland vessels plying on NWs and to avoid any hindrance in service and operation. The portal enhances credibility and efficiency of information sharing to achieve seamless operations on NWs, besides pre-empting problems that may occur during movement of vessels.

- **Digital portal for dissemination of information to IWT users:** IWAI is currently developing a digital portal to disseminate key systematic and aggregated River and Navigational information related to NWs to various stakeholders. The portal shall provide detailed information on various NWs in India such as fairway (LAD, etc.), infrastructure facilities (jetties, pontoons, cargo handling equipment, storage facilities), cross river structures (bridge locations locks, barrages), connectivity at jetties, emergency services, vessel sailing plan details etc. for facilitating transportation of cargo and other vessels through NWs. This will help different stakeholders to better understand the key features of the NWs that are essential for decision making on the use of IWT mode.
- **Facilitation of Cargo transportation by the local community:** IWT has been traditionally used by the local community for transportation of their produce and passengers. Facilitation of movement of goods on waterways and local level as part of the Arth Ganga vision will further enhance use of IWT. Locations with potential to develop small scale jetties to enable movement of daily commuters and low scale goods movement using local ferry services is being identified by IWAI and the State Governments. This will enable a safe and economical mode of transportation for local communities staying near rivers.
- **Enhanced regional trade using IWT mode:**
  - **Addition of new Ports of Call and routes in India and Bangladesh under PIWT&T:** With 7 new ports of call agreed to be added on each side along with addition/ extension of waterway routes under PIWT&T between India and Bangladesh, the accessibility of IWT mode for trade between India and Bangladesh is expected to increase and result in growth of traffic on NWs. As per an assessment, approx. 2.5 million tonne of traffic is expected to get diverted to IWT mode with the extension of Rajshahi – Dhuliyan route up to Aricha in Bangladesh.
  - **Inclusion of IWT mode in the Indo Nepal trade treaty:** Inland waterways mode has been agreed for inclusion in the trade treaty between India and Nepal. This will allow Nepal bound cargo (coming from 3rd country via Kolkata port and India's exports) to take waterway up to Sahibganj MMT (Jharkhand), proposed Kalughat terminal near Patna (Bihar) and Varanasi MMT (UP) and further movement to Nepal via road. The IWT route will provide an alternate option to the traffic, which currently faces significant challenges such as congestion and delays on the rail and road mode currently.



- **Trade between Bhutan and Bangladesh:** Stone exporters from Bhutan have identified Inland waterways as an alternate mode of transportation considering the benefits associated with waterways mode such as lower transportation cost, larger shipment size compared to road, avoiding congestion on land routes etc. The first movement under supervision of IWAI was successfully executed in July 2019. This movement evinced confidence in the Bhutanese exporters to increasingly shift to waterways mode and increase the trade of stone aggregates and other commodities between Bhutan and Bangladesh. As a result of the success of the first movement, transportation of stone aggregates has become regular between Dhubri and Chilmari (Bangladesh) and more than 10 shipments of approx. 100-300 tonne size have been completed in FY-20. This trade using the IWT mode is expected to continue and reach a significant scale in the coming years.
- **Delineation and relaxation of Customs procedures for transportation of transit goods via Bangladesh through the IBP route:** To further facilitate use of the IWT mode for movements of goods to/ from North East states of India via the IBP route (under PIWT&T), IWAI held consultations with the Central Board of Indirect Taxes and Customs (CBIC), Ministry of Finance (GoI) to delineate the Customs procedure and consider possible relaxations. In view of this, CBIC has issued Transportation of Goods (Through Foreign Territory), Regulations, 2020 on 21st February 2020. These regulations delineate the procedures to be followed by the trade for transit goods passing through the IBP route and have also dispensed with the requirement of Cross Border Certificate for the purpose of the subject regulations.
- **Facilitation of Ro-Ro/ Ro-PAX traffic:** IWAI has procured Ro-Ro and Ro-PAX vessels for operations NW-1, 2 and 3. Discussions are in progress with multiple State Governments to operate these vessels and to regularize the operations of informal sector.
- **Container movement between Cochin port and Kottayam port via IWT:** After the success of the pilot movement in 2019, containerized movement between Cochin port and Kottayam port via NW-3 and NW-9 is expected to become regular in the coming years, thereby shifting traffic from road to IWT mode and helping in reducing road congestion.
- **Development of new National Waterways:** IWAI has identified 20-25 new National Waterways (NWs) through technoeconomic feasibility studies for undertaking technical interventions to make the waterways navigable for transportation purpose. Once ready, these new waterways will provide an alternate mode of transportation in respective geographies.

The above initiatives shall promote ease of accessing and using the IWT system, besides enhancing the efficiency and safety of operations and shall result in traffic increase on the National Waterways in the coming years.

**Annexure – I: List of delegates in Goa Conference**

#	Name	Designation	Organisation
1	Mr Vivas Parkhit	HMN	ACM
2	Mr Satyajit Bhattacharjee	Secretary	Air Cargo Association
3	Mr Gaurav Naik Khaunte	Director	Alcon- Anil Counto Enterprises
4	Mr Amey Panvelkar	Head- Real Estate	Alcon Constructions Goa Pvt Limited
5	Mr Naresh Mandrekar	Head- Logistics	Alcon Constructions Goa Pvt Limited
6	Mr Luis Vasconcelos Dias	Director	Alcon Constructions Goa Pvt Limited
7	Mr Aakash Khaunte	Director	Alcon Constructions Goa Pvt Limited
8	Mr Vinod Pai	Head- Piling Division	Alcon Constructions Goa Pvt Limited
9	Mr Ghanashyam Shenvi Kerkar	Head- Business Development	Alcon Constructions Goa Pvt Limited
10	Ms Parvish Kamat	Director	Anka Services
11	Col Milind Prabhu	Director	Anka Services
12	Cmdr Shiv Tewari	Founder	Arista Risk and Corporate Solutions
13	Mr Michael H. Fernandes	Director	Ashiroft Trading Pvt Ltd
14	Mr Atrey Sawant	Unit Head	Aterya Engineering Works Ltd.
15	Mr Mas Meejuru	Director	Brin Trading International LLC
16	Capt Premlal Sirsaikar	Captain of Ports	Captain of Ports, Govt of Goa
17	Capt James Braganza	Captain of Ports	Captain of Ports, Govt of Goa
18	Mr Prafull Sharma	Consultant	CBRE South Asia Private Limited
19	Mr Vishal Patil	Director	CBRE South Asia Pvt. Ltd.
20	Mr Harshil Girish Vithlani	GM	Chakiat Agencies
21	Mr Shrikant Itagi	General Manager	Chowgule & Co Pvt Ltd.
23	Dr Rajendra Dhumma	Director	Classis Travel and Tour
24	Mr Ramakant Anush	Manager	CMM Logistics Pvt Ltd
25	Mr H. Paras	Sr. Engr	Colorcon Asia Pvt Ltd
26	Mr Kishore Parab	Head Materials	Deccan Fine Chemicals (India) Pvt Ltd
27	Mr Yatish Dempo	Director	Dempo Shipbuilding & Engg Pvt. Ltd.
28	Dr. Raut P. K	Deputy Director General	DG Shipping Mumbai
29	Mr Santosh Vasudev Parab	Branch Manager	DHL Logistics Pvt. Ltd.
30	Mr Prashant Kamat	Functional Manager	Directorate of Industry, Trade & Commerce, Govt of Goa
31	Mr Brijesh Karekar	General Manager	Gauri Handicraft
32	Mr Srikanth Bhandarkar	Chief Commercial Officer, GGIAL	GMR Goa International Airport Ltd.
33	Mr Satyendra Kumar	Manager Aero, GGIAL	GMR Goa International Airport Ltd.
34	Mr Prashanth CS	Head Aero, GGIAL	GMR Goa International Airport Ltd.
35	Mr Lakhwender Singh	BDM	GMR Hyderabad
36	Mr Noel Carvalho	Secretary	Goa Barge Owners Association
37	Mr A K Banerjee	Director	Goa Chamber of Commerce & Industry
38	Prof Raj Amonkar	Associate Professor	Goa Institute of Management
39	Mr Sukanta Das	CLO	Hindalco Industries Ltd
40	Mr Lavin Mahtani	Head Shipping	Hindalco Industries Ltd
41	Mr Samir Padhi	Senior Manager	Hindalco Industries Ltd
42	Mr Dharendra Manu Thaker	Partner	Hiralal & Co.
43	Mr Suhail Rafat	J. H. S	Inland Waterway Authority of India
44	Mr Mathew George	Director	Inland Waterways Authority of India
45	Mr P. S. Rao	Director	Inland Waterways Authority of India
46	Mr Pawan Verma	Chief Engineer	Inland Waterways Authority of India
47	Capt Ashish Arya	Hydrography Chief	Inland Waterways Authority of India
48	Mr Rishi Singla	Director	Jhanu Logistics Limited
49	Mr Amin Ladak	CEO	Kaenat
50	Mr Bipinchandra Kantak	Partner	Kala Mining Pvt Ltd
51	Mr Mihir Sinai Cacodcar	Associate	Kala Mining Pvt Ltd
52	Mr Joseph E George	GM (Business Development)	Konkan Railway Corporation Ltd.

53	Mr Abhinav Apte	GM	Lila Digital and Environmental Solutions
54	Mr Rajesh Nair	CEO	Logstar ERP India Pvt Ltd
55	Mr Pradhresh Bhonsale	Director	Logstar ERP India Pvt Ltd
56	Mr Sanjay Trivady	Senior Director	Logstar ERP India Pvt Ltd
57	Mr Vincent Elfring	Director- Transport & Logistic	Logstar ERP India Pvt Ltd
58	Mr Preiansh Kumaar	Projects and Implementation Manager	Logstar ERP India Pvt Ltd
59	Mr Ramesh Polur	Sales Manager	Logstar ERP India Pvt Ltd
60	Mr Viterbo Serafim Lourenco	Director	Lourenco Marine Pvt. Ltd
61	Mr John Francis Savio Rodrigues	Chief Operating Officer	Machado And Sons Agents and Stevedores Private Limited
62	Mr Gunjan Joshi	Technical Assistant to the COO	Machado And Sons Agents and Stevedores Private Limited
63	Mr Ratikesh Shahpure	Senior Manager	Machado And Sons Agents and Stevedores Private Limited
64	Mr Vatandeep Singh	Project Manager	Mangal Analytics and Research Consulting Pvt Ltd
65	Mr Nimit Biswas	Market Research Analyst	Mangal Analytics
66	Mr Swaroop Natekar	Managing Director	Meson Valves India Private Limited
67	Mr Vivekanand Redekar	Managing Director	Meson Valves India Private Limited
68	Mr Brijesh Manerikar	Managing Director	Meson Valves India Private Limited
69	Mr Atul Jadhav	Managing Director	New Era Shipping Private Limited
70	Dr Vimlesh Prabhudesai	Associate Professor	NICMAR
71	Mr Vishwajit Kurdekar	Asst,Manager	Nippon Express India Pvt Ltd
72	Mr Ulhas Manohar Naik	Manager	Nippon Express India Pvt Ltd
73	Mr Amit Narayan Bandekar	Director	NRB Group
74	Mr Adrian D'Cunha	Consultant	NRB Group
75	LT Col Pradeep Selpal	HD Operations	Numadic
76	Mr Partha D Talekar	CEO	Parikh Power Pvt. Ltd.
77	Mr Deepak Shirodkar	Head - Materials	Pentair Water India Pvt. Ltd.
78	Mr Muthu Kumar	Manager - Logistics	Pentair Water India Pvt. Ltd.
79	Mr Hemant Arondekar	Managing Director	Pinakin Construction Pvt Ltd
80	Mr Sanjiv Garg	Managing Director	Pipavav Railway Corporation Limited
81	Mr Ashok Kumar	Sr. Vice President	Pipavav Railway Corporation Limited
82	Mr Sandeep Sood	Attorney	Popular Construction Company
83	Mr Sanjay Kudaj	Director	Rahi Shipping P. L
84	Mr R. Deka	Director	RDKA- Sailing Solution
85	Mr James Victor John Ratnam	General Manager	RITES Ltd
86	Mr. Lalit. Saraswat	Director	Sancoale Shipping Ltd.
87	Mr Anthony Gaskell	Director	Sentrans Shipping
88	Mr D. P. Pai	Director	Shubhaji Shipping Ltd
89	Mr Servito Noronha	Director	South West Port
90	Mr Raj Kumar	Associate	SRI
91	Mr Chirag Jalan	CEO	Sri Roadlines
92	Mr MANOJ JALAN	Proprietor	Sri Roadlines
93	Mr Surendra Shirda	Director	SUVM Shipping
94	Mr Swarup Bedbak	Founder	The Swarup Inframingtech
95	Mr Mahesh Prabhu	Proprietor	Transport Agencies
96	Er. Anuj Kumar SHARMA	Director	Trilok Navigation Pvt Ltd
97	Mr Shailendra Triveni	Proprietor	Universal Marine Works
98	Mr Ajay R Borkar	GM Exports	V. M Salgaocar & Bro Pvt. Ltd.
99	Mr Nagesh Gaonkar	Technical Manager	V. M. Salgaocar and Brother Pvt. Ltd.
100	Captain Sanjay Tyagi	Director	v2maritime LLP
101	Mr Upendar Rao Kollu	Managing Director	Voyants Solutions Private Limited
102	Mr Mahendra K Mehta	Prop	Waves Tourism
103	Mr Bimal Singha Keisam	COO	Waves Tourism
104	Mr V M Gaitonde		



***Annexure – II: List of delegates in stakeholder conference at Dhaka***

#	Name
1.	Amlan Basu
2.	Y.K. Singhee, Eastern Navigation (P) Ltd.
3.	Syed Monowar Hussain
4.	Syed Bashir Ahmed
5.	Md-Abu Sayed
6.	Jalauddin Seikh
7.	Saumya Sankar Ray (TCI)
8.	Narendra Kumar Vyas (TCI)
9.	Jahangir Bin Abu
10.	Saikat Roy Chowdhury, CII
11.	Saandip Wadhwa, JM Baxi
12.	Ahamedul Karim Chowdhury, Chittagong Port Authority
13.	A.K. Singh
14.	R/Adm Riazuddin Ahmed
15.	Yousuf Shahrian
16.	J. Rizvi
17.	M.Raich U-Khan
18.	Mahaveer Singh
19.	Sukhendu Panja
20.	Md. Yaqub Shujan Bhuyon
21.	Rajiv Agarwal, Tirupati vessel pvt ltd.
22.	Capt. K. M. Jashimuddin Sarker, Dept. of Shipping
23.	Md. Sohel Parvej, Step one Group
24.	Ahasan, Step one group
25.	Farzana Rahman, VC
26.	Amar Rahman, Director High speed Group
27.	Md. Sohag
28.	K. R. Zaman
29.	Dr. Bari
30.	MD. Farid
31.	Fayyaz Kitandkar
32.	Bijan Kumar Saha
33.	Abdullah Al Mamun
34.	SK Mafuz Hamid
35.	Raj Singh
36.	T. Jamir
37.	Cpt. SK Shahikul
38.	Abdul Halim
39.	Mr. Manu Seraj
40.	Omar Haider
41.	Kabir Ahmed
42.	Dr. Tarun Kantisikdg

43.	Farid Uddin Mahduid Tariq
44.	MD. Ananyet Ullah
45.	Jasim Uddin Mahmud
46.	Conveyor Logistics Ltd.
47.	Avant Logistic Ltd
48.	Selim Mahbub. Director, BKMEA
49.	Nooruddin Rana, The Riverine
50.	Sharmila Khanan, BIWTA
51.	Arifur Rahman Chowdhury

### ***Annexure – III: List of delegates in stakeholder conference at Kolkata***

#	Name	Designation	Company
1	Pulastya Ray	Junior Partner	A. C. ROY & CO.
2	Rahul Nandy	DGM (CARGO)	AAI CARGO LOGISTICS
3	Chiranjit Goswamy	DGM Business Development	Adani Ports and SEZ Ltd
4	Mr Amitabh Goswami	Deputy Manager	ADANI WILMAR
5	Sneha Keshari	State Head	Agarwal Movers Group
6	A Chatterjee	Zonal Manager East	All Cargo Logistics
7	Arun Sharma		All Cargo Logistics
8	Barjesh Srivastava	GM	All Cargo Logistics
9	Prithviraj Nath	Senior Fellow	Asian Confluence
10	Nikhilesh Gupta	DGM - Business Development	Associated Container Terminals Ltd, New Delhi.
11	Aparajita Banerjee	Director	Astrit Research
12	Shiladitya Chakraborty	Account Manager - CCU	AVS Cargo Management Services Pvt Ltd
13	Debashis Mitra		Behag Overseas
14	Dilip Mazumder		C.Dey & Brothers
15	Subhas Ch Ghosh		CCHAA
16	Indraneel Dutta		CEMCOA
17	Suman Sen		Ceratizit Group
18	Gaurav Sengupta	GM	CMA CGM agencies (India) Pvt LTD
19	S A Rehman		Concor
20			Desha International
21	Pallab Laha	Regional Manager – Marketing & Sales	DHL
22	Kunal Basu	Sr. Manager Leasing - Kolkata	ESR Advisers India Pvt. Ltd.
23	Bejoy Majumder	Managing Director	Fairdeal Customs House Agent PVT. Ltd.
24	Capt. D Kumar	Branch Manager	Far Shipping
25	Anup Chowdhury	GM	Flyjac Logistics PVT Ltd
26	Murali Nair	Asst GM	Flyjac Logistics PVT Ltd
27	Nikhil Doshi	General Manager	Gateway Media
28	Chiranjib Biswas	Manager-Eastern India	Global Aviation Services PVT Ltd
29	Himen Pradhan		H P Shipping Lines
30	Ali Haider	Proprietor	Haider Logistics Co.
31	Suchandan Chatterjee	General Manager CBT	Haldia Petrochemicals Ltd
32	Joydip Mukherjee		Haque Traders
33	Raj singh	CMD	Heritage river Cruise
34	M K Dasgupta	HOD-Professor	India Maritime University
35	Sanjib Ray		Indian Iron & Steel Suppliers
36	Susanta Das		Indian Iron & Steel Suppliers
37	Kamal K Mantri	Proprietor	International Trading Agency

38	BIKASH DHAR		J D shipping
39	Harshit Bihani		Jayesh Logistics Pvt. Ltd.
40	Sanjay kundaliya	Director	Jayesh Logistics Pvt.ltd.
41	Tapan Sengupta		JM Baxi
42	Suvojit Rai Choudhury	Branch Manager	JMB
43	R. K. Ganguly	President - Corporate	JMB Group
44			K K Shipping
45	S C Sarkar		Krishna Shipping & Logistics
46	T CHOUDHURI		LPG R&D CENTRE
47	Sumit Sarkar		Macolin
48	Murugan Natarajan		Maersk Line (I) Pvt Ltd
49	Dilip Dey Sarkar		Maitraye shipping & Logistics
50	Ranjan Roychowdhury		Maritime Logistics
51	Rajan Karia	Managing Director	Monark
52	Aloy Bose	Sr Manager - Capacity Management	MSC India Pvt Ltd
53	J N Dey	Vice President (Operation)	Nikki Logistics
54	Capt Prabhakar Prakash	Director	Ocean Whale shipping Services P Ltd
55	Subrata Chowdhury	Deputy General Manager Branch Manager - Kolkatta	ONE (Ocean Network Express) Line (India) Pvt. Ltd.
56	P.C. Maity	CEO	Parbati International Co
57	Probir Kr chakraborty		PIL
58	Sandip Chakraborty	MD	Pioneer Shipping Lines
59	Rahul Raj Rathi		PortExO - Port Express Operations
60	Mohammed Alam Khan	Terminal Manager Sales & ICD Operations	Pristine Hindustan Infraprojects PVT. Ltd.
61	Dhruv Agarwal	Director	Prospace Industrial Parks Private Limited
62	Amit K Aggarwal		Rajesh Auto Merchandise P Ltd
63	Ankur Roy	Director	Res Trans Logis
64	Udit Sen	Executive Assistant to Director	Ripley & Co. Stevedoring & Handling Pvt Ltd
65	Shrey Tayal		Riverine Infrastructure & Logistics
66	Nitya Kumar Saha	Proprietor	Riverinn Shipping & Logistics
67	R P Roychowdhury		Safehand Logistics
68	Amit Koley	Hon. Secretary, Acaai Eastern Region	Saila Shipping & Clearing Agency (P) Ltd.
69	Avinash Kumar	Sales Manager	Samudera Shipping Line (I) Pvt Ltd
70	B.N.Chatterjee	Senior General Manager	Seahorse Group
71	S. B. Mazumder		Seahorse Group
72	Soham Sarkar		Soham Commercial
73	Shiran Kretser Silva	Area Manager - Kolkata	SriLankan Airlines Limited
74	Pradeep Purohit	VP	Star Cement
75	B P Sarkar	Publisher	Steel Tech
76	Tushar Biswas	COO	Summit Alliance Port East Gateway(I) Pvt Ltd
77	Sagar Khastagir		Summit Alliance Port East Gateway(I) Pvt Ltd
78	SEEMAH DAGA		The Air Cargo Agents Association of India
79	Souvik Kundu	Manager	Transcost Trading P Ltd
80	Purnima Saha		Uma Road Carrier Pvt Ltd
81	Capt. A.K. Das		United Liner Shipping Services LLP
82	Tuhin K Biswas	Chairman and Managing Director	Upatsol Pvt. Ltd.
83	Vivek Choudhary	Director	Vivek Freight & Logistics Pvt. Ltd.
84	Bodhisatta Roy		VR Logistics
85	SK Awasthi	Advisor	Western Carriers
86	Arup Bandhu Guha	Vice President	Yang Ming Line (India) PVT Ltd.



***Annexure – IV: List of delegates in stakeholder conference at Kochi***

#	Name	Desination	Organisation
1	Mr. Justin David John	Director	ADDAX Logistics
2	Mr. Sanjay Basu	Chaiman	Adventure Cruise
3	Mr. ANIL KUMAR	SR. EXECUTIVE	Avaana
4	Mr. DENNY SEBAN	DY. MANAGER	Avaana
5	Mr. NISHAD	DY.MGR-MKTG	Avaana
6	Mr. KRISHNAKUMAR K	SR.MGR-MKTG	Avaana
7	Mr. CHITHAMBARAKRISHNAN	SR.MGR-MKTG	Avaana
8	Mr. A M James	Consultant	BACKWATER NAVIGATION Co.
9	Mr.DEEP ARORA	Territory Manger (Indl.), Kochi	BPCL
10	Mr.RAVINDRANATH K	Senior Manager-Coordination (Indl.), Kochi	BPCL
11	Mr.RAHUL V.G.	Area Manager (Indl.), Kochi	BPCL
12	Mr.JANARDHAN S	Assistant Manager (Indl.), Kochi	BPCL
13	Mr. K. C. Rajan		Brothers Candle Works
14	Mr. Mathew M. J	Branch Manager – Cochin	CMA CGM Agencies (India) Pvt Ltd
15	Mr. Paul J Kocheril	GM	Cochin International Airport Ltd.
16	Shri D V Swamy IAS	Development Commissioner	Cochin SEZ
17	Shri Saju K Surendran IES	Deputy Development Commissioner	Cochin SEZ
18	Shri Anish Muraleedharan IRS	Deputy Commissioner of Customs, CSEZ	Cochin SEZ
19	Mr. SIVARAM N	Deputy General Manager (BD	Cochin shipyard Ltd
20	Mr. Manoj Padamadan	Chairman	Creek Cruise
21	Mr. Ashly Antony	Partner	Custos Shipping and Logistics
22	Mr. Jose kurian	Partner	Custos Shipping and Logistics
23	Mr. Aritra Ganguly	Project Manager- Tracking Solutions	Elektroniklab
24	Mr. T.P. Ajith Kumar	General Manager	FACT-Cochin Division
25	Mr. Antony John	Dy.General Manager	FACT-W.Island
26	Mr. N J Thomas	MD	Great Sea Shipping Pvt.Ltd.
27	Mr. Sonu George	CEO	Great Sea Shipping Pvt.Ltd.
28	Mr. Ajith Kumar Gopinath	Cochin Head	Green Ways Group
29	Mr. Girish K R	Manager	Hooghly Cochin Shipyard Limited
30	Mr. Sudheer Nambiar		India Sea Trade
31	Mr. Joseph Paikada		Indo-Malabar Foods (P) Ltd.,
32	Mr. Sjaith k	Senior Surveyor	IR Class
33	Mr. Unnikrishnan	Surveyor	IR Class
34	Mr. Jisha Kumar	Asst. Engineer	Irrigation Dept.
35	Mr.Biju Joseph Parakal	Senior Executive – Liner	ISS Shipping
36	Mr. Arun Sathyanathan	Senior Executive – Operations	ISS Shipping
37	Mr. V. Sajith Kumar	Asst Vice President	JM Baxi & Co
38	Mr Gopi Krishnan G Babu	VP – Sales	JN Freight forwarders Pvt Ltd.
39	Mr. Prakashan. K. V.		K V Candle Works
40	Mr. Biju.R	CFS Manager	Kerala State Warehousing Corporation CFS
41	Ms. Sindhu N T	Sr. Consultant	KITCO
42	Mr Jose Davis	GM (Finance),	KITCO
43	Mr Benny Paul	Joint General Manager	KITCO
44	Mr. Sureshababu G,	Head of the Unit	KMML
45	Mr. Sahil M	Manager-Projects	KMML
46	Mr Roopesh Babu	GM operations	Kottayam Port
47	Mr Baiju. S	Director	Kottayam Port
48	Mr. K.K. Ramesh		Krishna Industries
49	Mr. G.Prasanth Nair	Consultant (Water Transport)	KWIL
50	Ms. Rita Babu	Partner	LACHMANDAS & SONS
51	Mr. KJ Antony		Libra Shipping

52	Mr. John Mathew	Director	Lots Shipping Pvt Ltd.
53	Mr. Harish Sivaram	VP	Monnet Ispat
54	Dr. BG Sreedevi	Chief Scientist	NATPAC
55	Ms. Sabitha NM	Scientist	NATPAC
56	Mr. P.J. Jose		Pallipaden Enterprises
57	Mr. GEORGE FERDINAND XAVIER	Executive Director	Pax Shipping
58	Mr. S MAHADEVAN	CEO	Pax Shipping
59	Mr. NIDHIN GOKUL	(Sr. Executive)	Pax Shipping
60	Miss. DARSANA SUDARSAN	(Shipping & Logistics Coordinator)	Pax Shipping
61	Capt.Sandeep Gupta	DGM (Port Operations)	Petronet Lng
62	Capt. Nilendra Kumar	CM (Port Operations)	Petronet Lng
63	Er Joy NR	Chief industry	Planning Board
64	Mr. Sojan Joseph		Popular Industries-Edayar
65	Mr. France C Mundadan		Popular Packaging
66	Mr. Paul Varghese		Regi Tom Antony & Associates
67	Mr. Regi Tom Antony	Proprietor	Regi Tom Antony & Associates
68	Mr. K.P. BENNY ROHAL	MD	RON MARITIME LTD
69	Mr. Zakhir Hussain	Manager(operation)	RON MARITIME LTD
70	Capt.Harikumar Nair	Director	ROYALGLOBELIA MARITIME SOLUTIONS PVT.LTD
71	Mr.Santhosh Kannambra		ROYALGLOBELIA MARITIME SOLUTIONS PVT.LTD
72	Mr. Krishna Kumar	MGMT Consultant	Rya & Associates
73	Mr. Joseph K. A		Safe Power Industries
74	Mr. Jeevan	CEO	Samudra shipyard
75	Mr. Thomas V		Techs India Company
76	Cpt. Sreejith K Hari	Managing Partner	Tisha Navigation Inc.,
77	Mr. J.M. PAREKH	Director	Triton Maritime
78	Mr. Varghese Koshy	Manager	Triton Maritime
79	Mr. Shyam K	Director	Unotech Marine Engineering and Services Pvt Ltd
80	Mr. Nibu Viswanath	Project Head	Unotech Marine Engineering and Services Pvt Ltd
81	Mr. Jacob C John	MD	Unotech Marine Engineering and Services Pvt Ltd
82	Mr. WENCE MORRIS JOSEPH	Professor on Shipping, Logistics and SCM	
83	Mr. Joseph Paikada		
84	Mr. Bency Mathew	Freelance maritime consultant	

### ***Annexure – V: List of delegates in stakeholder conference at Mumbai***

#	Name	Designation	Organisation
1	Mr. Rajiv Chohan	President-BD	Aegis LOGISTICS LIMITED
2	Mr Aditya N Sinha	BDM	ALAR Group
3	Mr Ashwin Sinha	BDM	ALAR Group
4	Mr. Sanjay Bajpai		Amal Logistics Pvt Ltd.
5	Mr. Sudhansh Gupta		Ambuja Cement
6	Mr. M P Joseph	Secretary General	AMFII
7	Mr. P.N. Krishnan	Business Advisor	Empire Industries Ltd
8	Capt Xerxes Aga		Ericson & Richards
9	Mr. Rajendra Singh		EXIM India
10	Capt. Piyush Asthana	Managing Director	Fairfreight Lines Pvt
11	Capt. Zareer Colabavala	COO	Globe forwarding Agencies pvt Ltd.

12	Mr. Attar Singh	Head- BD	Great Lake Shipping
13	Mr. Saurabh Antani	Country Head	HR wallinford India Pvt Ltd.
14	Mr. Aditya Suklikar	President	ICCSA
15	Capt. Akbar Khalape	Managing Committee Member	ICCSA
16	Mr. Rakesh Singh	Hon. Secretary	ICCSA
17	Mr. Tomgee Kallingal	GM	IFFCO
18	Capt. Xerxes H. Daji	Vice President (BD)	IMS Ship
19	Mr. Sandeep Raul	Head - Operations	IMS Ship
20	Mr. Chandrakant Dalvi	Line Manager	INCHCAPE
21	Mr. Sunil G Kaleshwari	GM- Institutional Business	Indian Oil
22	Shri. K. Bhardwaj		Indian Register of Shipping
23	Mr. GAURAV SETHI	Director	INTERCONT FREIGHT LINERS PVT. LTD.
24	Mr. Nishith Shalwala	Business Development Manager	INTERCONT FREIGHT LINERS PVT. LTD.
25	Mr. Suvam Mitra	Assistant Manager	IOCL
26	Mr. Junichi Sakamoto	General Manager	ITOCHU India Pvt. Ltd.
27	Mr Vikram Lakhotia	OPS Head - Jeena Coastal	Jeena
28	Mr Ashish Gupta	BD Head - Jeena Coastal	Jeena
29	Mr. Apoorva Bookseller	Director	KC Maritime (India) Ltd
30	Mr. Sonoo Menghani	Executive Director	KC Maritime (India) Ltd
31	Mr. Sachin Parekh	Director	Keel Logistics Pvt. LTD.
32	Mr. Tejas Bhivandkar	Head	Keystone Investments
33	Mr. Devesh Kalra	Partner	KNK Ship Management
34	Mr. Vijaysinh Vaghela	Head Sales – Maritime Cranes	LIEBHERR INDIA PRIVATE LIMITED
35	Shri Raj Lotlikar	MD	Lkar Shipping Pvt Ltd
36	Mr. Akshay Chavan	Manager	M/s Mahindra Marine
37	Mr. Sanket Naik	Manager	M/s Mahindra Marine
38	Mr. Vinay Mohan		M/s Mahindra Marine
39	Mr. Mohanlal Pillai	Naval architech and MD	Mech Marine
40	Mr. Ashutosh Kumar	General Manager	Mol Group
41	Mr. Vasant Pathak	General Manager	Nabros Transport pvt ltd.
42	Mr. Mahesh Zagade	Manager - Business Development	National Marine and Infrastructure India Pvt Ltd
43	Mr. Sardool Singh	Director	NMIS
44	Mr. Nandan Tavnandi		Norinco Pvt ltd
45	Mr. Shubham Kumar		Norinco Pvt ltd
46	Mr. Ajay Jalali	Vice President - Sales & Business Development	Norinco Pvt ltd
47	Shri S.Adwaith	Asitance Manager Sales	PEINER SMAG INDIA
48	Mr. Ashok Jain	Director	Samsara Shipping Pvt. Ltd.
49	Mr. Lankadhar Golapalli	VP-Commercial	Samsara Shipping Pvt. Ltd.
50	Mr.Vishal Srivastava	BU Head	Samsung SDS
51	Mr. Prakash Malvankar	Senior Vice President	Saurashtra Freight Pvt
52	Mr. Rahul Jain	Chief Financial Officer	Saurashtra Freight Pvt Ltd
53	Mr. Shivang Kagzi	Vice President	Saurashtra Freight Pvt Ltd
54	Mr. C R Nambiar	CEO	Seahorse Shipping
55	Mr. A.P. SINGH		Seal Logistics Ltd
56	Ms. Malika K	Director	SeaTech Integrated Technology Pvt Ltd
57	Capt. Piyush Pal Singh	Director	SHAAN MARINE SERVICES PVT LTD
58	Mr. A J Das	Consultant	Shoft Shipyard Pvt ltd.
59	Mr. Raj Chakravorty	Business Development Manager	SMS Marine
60	Mr. Gul Punjabi	Senior Manager	Union Bank of India
61	Capt. Sanjay Prashar	MD	VR Maritime
62	Capt. Mukund Rangamani	Ship Agency Manager	Wilhelmsen Ships Service
63	Mr. Santosh Shelar		Wilhelmsen Ships Service
64	Mr. Naval J. Oonwalla	CEO	Zebec Marine Consultants and Services Pvt. Ltd
65	Captain DK Singh	Marine Consultant	



66 Dr. Sham Choughule Consultant Maritime Trade & Visiting Faculty

### ***Annexure – VI: List of delegates in stakeholder conference at Patna***

#	Name	Designation	Organisation
1	Mr Rakesh Kumar	Sr AO	A G Office
2	Prof S N Ashraf	Sr Reader, Dept of English	A N College
3	Mr Manish Kumar	Director	Aarna Foods Pvt. Ltd
4	Mr Sanjeev Kumar	General Manager	Adani Ports and Special Economic Zone Ltd
5	Mr Praveen Jain	Associate Vice President	Adani Wilmar Ltd
6	Mr Paramjit Kumar	Advisor	APL Logistics VASCOR Automotive Pvt Ltd
7	Mr Prashant Saha	Director	Astric Group of Companies
8	Mr Prabhat Kumar Sinha	CEO	Astric Group of Companies
9	Mr Ketan Mishra		Atmosphere Marketing Solutions LLP
10	Mr Amit Vatsa	Proprietor	B S Enterprise
11	Mr Naman Bhardwaj	Marketing & Sales Executive	Balprada Built Pvt Ltd
12	Mr Vikash Gupta	Member	Bihar Fly Ash Association
13	Mr Sandeep Mehrotra	Area Business Development Manager	Blue Dart Express Limited
14	Mr Sukhwinder Singh	Regional Business Head-North	Blue Dart Express Limited
15	Mr S B Giri	Area Sales Officer	BMW Ventures Ltd.
16	Mr Arun Budakoti	Industry head- Transportation	CISCO Systems (India)Private Limited
17	Mr A K Nayak	Chief Engineer	CWC
18	Mr Shashi Rakesh	Superintendent Engineer	CWC
19	Mr S K Suman	Director	CWC
20	Capt Bom Bhardwaj	Director	Elite Offshore Pvt Ltd
21	Mr Shashi Shankar	Director	Ernst & Young LLP
22	Mr Vishnu Sinsinwar	Director	Exoitic Heartage Group
23	Mr Chandra Prakash	Asst General Manager	FCI
24	Mr Sudip Dayal	Member	Fly Ash Association - Bhagalpur
25	Mr Dinesh Kumar Sharma	Head -EDC	Gati Kintetsu Express Private Limited
26	Mr Sher Singh	Member (P)	GFCC
27	Mr S Kumar	D D	GFCL
28	Capt A B Solanki	Chief Nautical Officer	Gujarat Maritime Board
29	Mr Vishal Sharma	Proprietor	Haldia Multi Engineering
30	Mr Anjan Kundu	AVP	HCCBPL
31	Capt Rakesh Singh	Hon Secretary	ICC Shipping Association
32	Mr Vikash Singh		I-Fabia
33	Mr Amit Kumar	Ph.D. Scholar	IIT Delhi
34	Mr O P Sha	Professor Ocean Engg and Naval Architecture	IIT Kharagpur
35	Mr H N Das	Manager	Imperial Plastic Works
36	Mr Musfiqur Rahman	Joint Director	Inland Water Transport
37	Mr Santanu Ghosh	General Manager	ITD Cementation India Limited
38	Mr I S Sidhu	Head Northern Region	Kitco Ltd
39	Mr NT Sindhu		Kitco Ltd
40	Mr Krrish		Krrish White Bricks
41	Mr Arun Pandit	Head of Sales	Loadshare Networks
42	Capt T S Ramanujam	Chief Executive Officer	Logistics Sector Skill Council
43	Mr S S Khadria	Director	Maurya Motors Pvt Ltd
44	Mr Rajendra Agrawal		Motor Spares
45	Mr Prem Kumar	Director	MSB Polymers
46	Ms Priya Kumari		MSB Polymers
47	Mr Murlidhar Venkata Satya		MVS Consultancy

48	Mr Ashish Parashar	Director	Next Gen
49	Mr Jayant Malaviya	Manager - Marketing	Nordic Cruiseline Pvt Ltd
50	Mr Vikash Malaviya	Director	Nordic Cruiseline Pvt Ltd
51	Mr Prabhat Srivastava	Director	P D Prasad & Sons Pvt Ltd
52	Mr Shrawan Kumar	JF	PD PWD
53	M Raju	JF	PD PWD
54	Mr Pramod Kumar Srivastava	Convener AMTOI and CEO & Director	PDP International Pvt Ltd
55	Ms Usha Jha	Director	Petals Craft
56	Ms Kiran Ranjan		Petals Craft
57	Mr Padam		Pinax Steel Industries Pvt Ltd
58	Mr Ved Prakash		Pinax Steel Industries Pvt Ltd
59	Mr Mukesh Kumar	Director	R G Software & Systems
60	Mr Golden Sinha	Director	Ripley & Co Stevedoring & Handling Pvt Ltd
61	Mr Shambhu Singh	Sales Executive	Saakaar Constructions Pvt Ltd
62	Mr Rajnish Kumar Singh	Sr Manager - PEB Div	Saraf Real Infra (P) Ltd
63	Mr Raj Kumar Bhardwaj	Assistant Manager - Sales	Servicemastr Clearn
64	Mr Harsh Kumar	Chief Strategy Officer	ShipsyData Driven Logistics
65	Mr Upendra Kumar Sinha	Director	Sidhanta Consultancy Services Pvt Ltd
66	Capt Sanjay Tyagi	Director	Spring Profesional Services Pvt Ltd
67	Ms Sumana Hazra	Director	Sri Maharishi shipping Pvt ltd
68	Mr Ravi Prakash Keshri		The Silicon Services
69	Mr Arnab Bandyopadhyay	Senior Transport Engineer - South Asia Region, Sustainable Development Unit	The World Bank
70	Ms Mamta Sharma	Asstt Transport Commissioner	Transport Department UP
71	Mr Vicky Kumar Ray	Area Sales Manager	Truepower Earthings Pvt Ltd
72	Mr Vishal Jhaharia	Managing Director	Tuberoose Logistics Pvt Ltd
73	Mr A P Kushwaha	AE	UP PWD
74	Mr Ashish Shukla	A E	UP PWD
75	Mr Vikash Singh	J E	UP PWD
76	Mr Naresh Nandan	Director	Venture Park
77	Ms Nitika Surie		World Bank



**Inland Waterways Authority of India, (Ministry of Shipping)**

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