

An aerial photograph of a wide river. In the foreground, a large white tugboat is pushing a long barge loaded with colorful cargo containers. The river flows towards the background where a distant shoreline with some buildings is visible under a clear sky. A large, light blue semi-transparent text box is overlaid on the left side of the image.

Efforts being made by

Inland Waterways Authority of India

In the logistics sector and inter modal connectivity

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Inland Water Transport in India



111

National Waterways

24

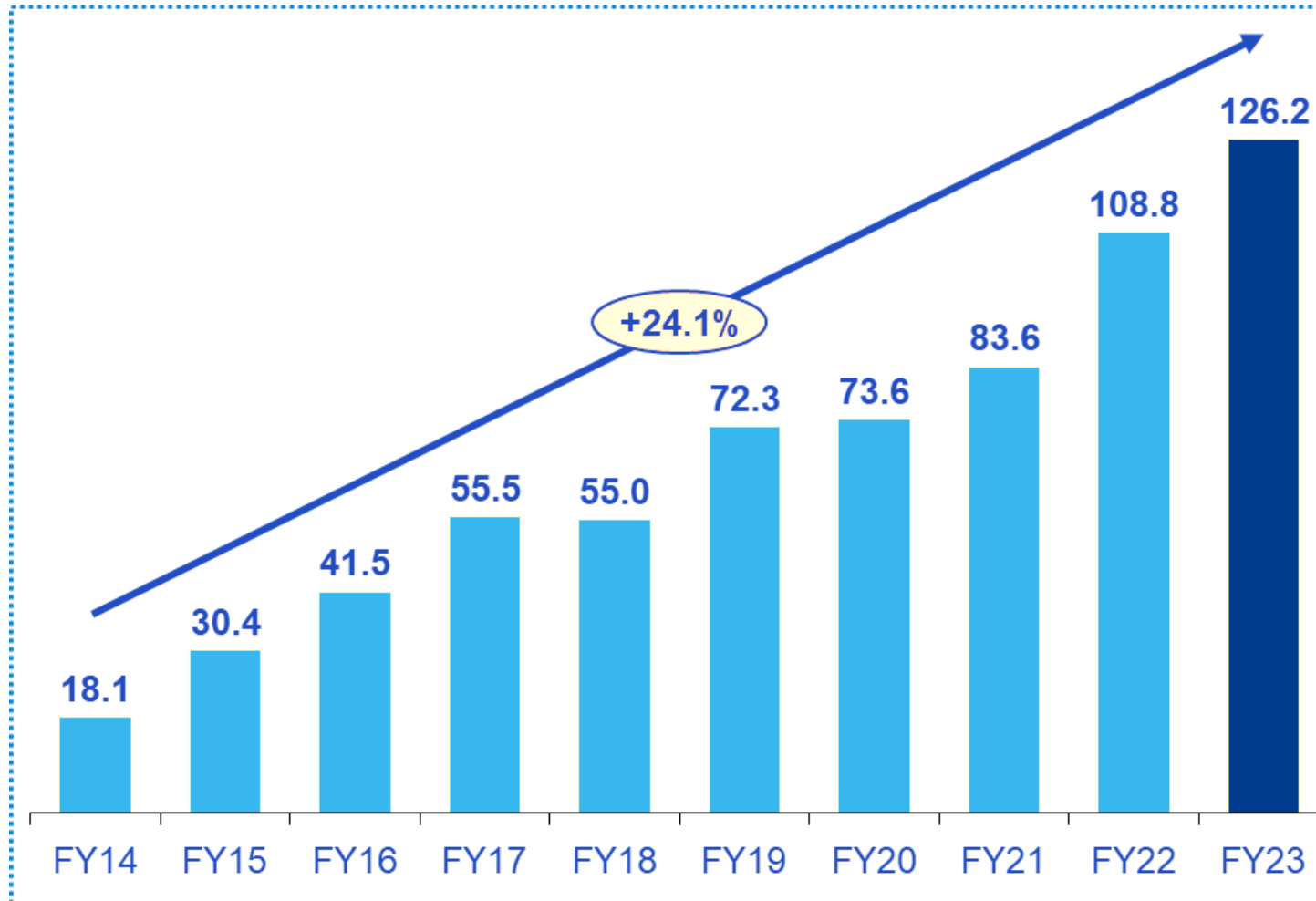
Operational National Waterways

~126

MMT Cargo Volume during FY' 23

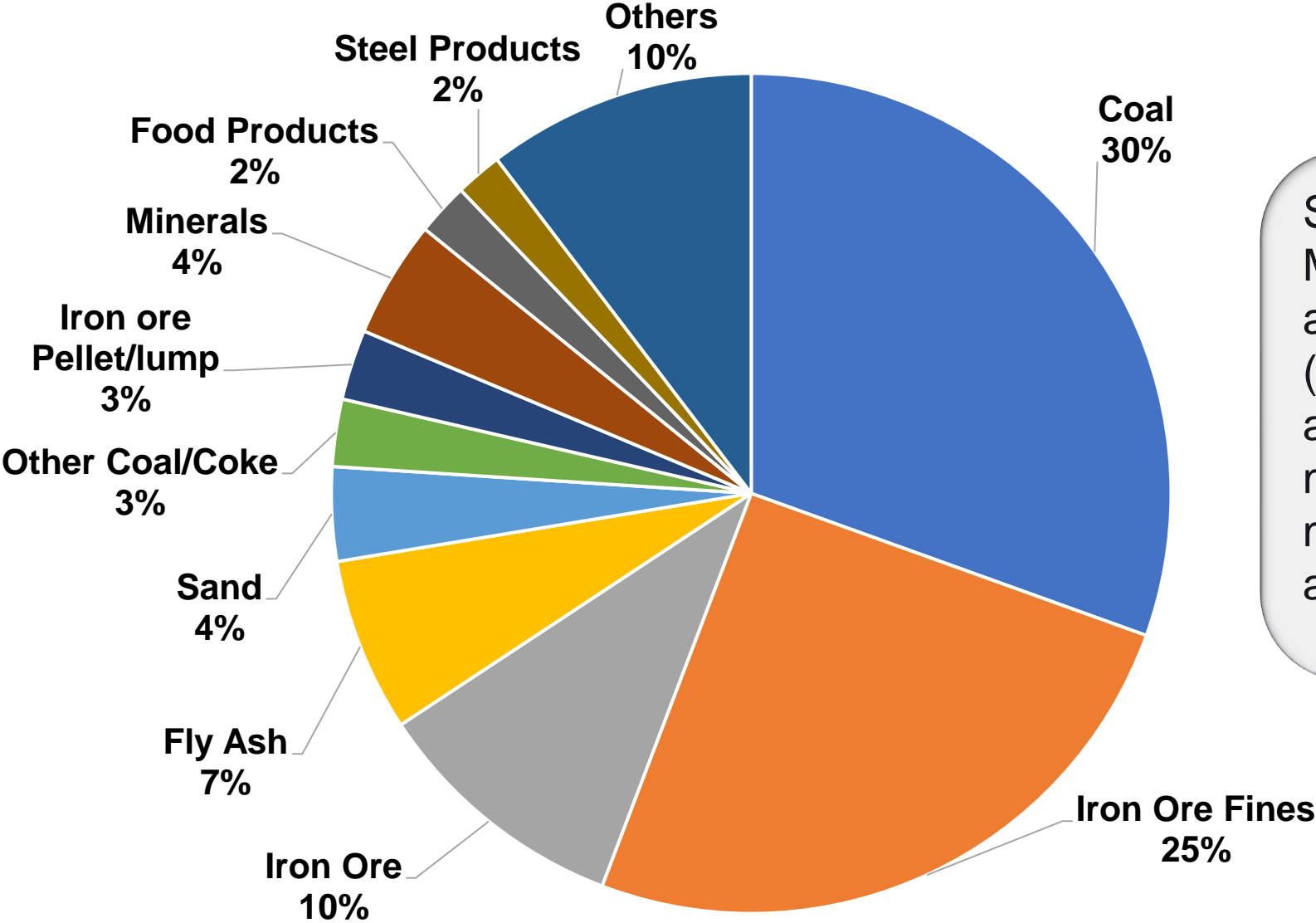
- ▶ The Inland Waterways Authority of India (IWAI) came into existence on 27th October 1986.
- ▶ As per section 14 of IWAI Act, 1985, IWAI is mandated with the development and regulation of waterways which are declared as national waterways
- ▶ National Waterways has total length of ~20,000 Km and Navigable length of ~14,500 Km.
- ▶ 27 NWs feasible for Cargo movement & additional 24 for passenger movement

Traffic on National Waterways



Total traffic on National Waterways increased from **18.1 million tonne** in **FY14** to **126.2 million tonne** in **FY23** - **CAGR of 24.1%**

National Waterways: Commodity Profile – FY 2023-24 (Till Jan – 2024)



Steel companies located in Maharashtra and Gujarat are using waterways (prominently NW-10: Amba and NW-100: Tapi) for movement of their raw material (coal, iron ore) and finished steel products

**Interventions made
by IWAI in the
logistics sector**



1. Fairway Development

- ▶ Fairway development is essential for unlocking full potential of inland waterways transport.
- ▶ LAD is being maintained in all operational NWs and IBP routes through dredging activities

IWAI is increasing its fleet of dredgers by procuring new dredging units

Operation Models

- ▶ Departmental dredger with departmental manpower
- ▶ Departmental dredger with contract crew
- ▶ Contract dredging with private dredgers
- ▶ Performance Based Dredging(Assured depth contracts)



2. Infrastructure Development & Maintenance

- ▶ IWAI has developed several multimodal terminals, Intermodal Terminals, Floating jetties, navigational lock across the NWs.
- ▶ Terminals at Varanasi (Uttar Pradesh), Sahibganj (Jharkhand), Haldia (West Bengal), Kalughat (Bihar), Dhubri (Assam), Sonamura (Tripura) have been constructed.
- ▶ In addition to above, 60+ community jetties are being developed for transportation of local cargo and passengers.
- ▶ Connectivity with roads has been ensured for intermodal Transportation
- ▶ Partnership with private entities for efficient operation and maintenance of terminal.
- ▶ Implementing navigational aids and ensuring safe and well-marked routes
- ▶ Increasing fleet of cargo vessels
- ▶ Adoption of Eco-friendly Mode of Transport

Infrastructure Development (NW-1) under JMVP



Development of 60 Community Jetties



Quick Pontoon Opening System



Fairway Development



Infrastructure Development (NW-1) under JMVP (Cont)



**Multimodal
Terminal
Varanasi**



**Multimodal
Terminal
Sahibganj**



**Multimodal
Terminal
Haldia**

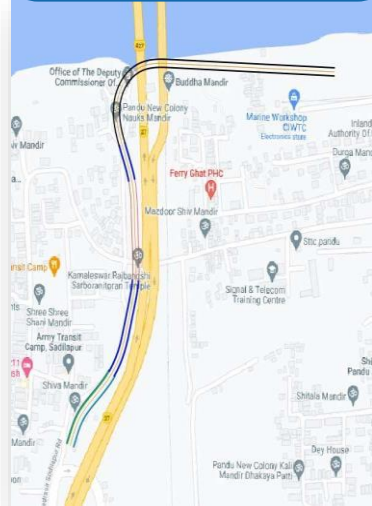


**Intermodal
Terminal
Kalughat**



**New
Navigational
Lock Gate,
Farakka**

Alternative Road to Pandu



Ship Repair Facility at Pandu



Cargo Terminal at Bogibeel



Karimganj on River Barak



Badarpur on River Barak



Development of IWT infrastructure in North Eastern Region

Floating jetties
at Bogibeel and
Guijan



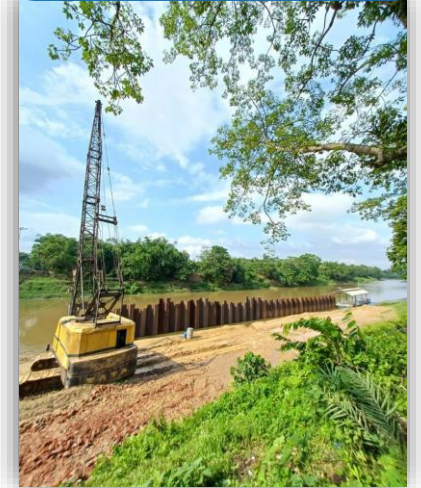
Skill
development
center at
Guwahati



MMT
Jogighopa



Floating
Terminal at
Sonamura



3. Regulatory Support

- ▶ The Inland Vessels Bill, 2021 was passed by Parliament on 02nd August 2021.
- ▶ It replaced the Century old Inland Vessels Act, 1917.
- ▶ The new act will introduce a uniform regulatory framework for inland vessel navigation across the country.
- ▶ Prescribes standards for classification and categorization of mechanically propelled vessels
- ▶ Stipulates higher standards to ensure safety of navigation, protection of life and cargo, prevention of environmental pollution
- ▶ Ensures ease of compliance for service provider and service users



4. Information Dissemination

CAR-D (CARGO DATA)



- Provides information for cargo traffic on National Waterways of India which includes:
 - ✓ Commodity wise Traffic
 - ✓ NW, Terminal wise Cargo Traffic
 - ✓ Major Shippers Traffic
- Accessible to all

E-Navigation application for NWs

Route clearly marking the areas offering LAD

Track different vessels in real time

Event based SMS and Email Alerts

Vessel Stop alert through remote Server Communication

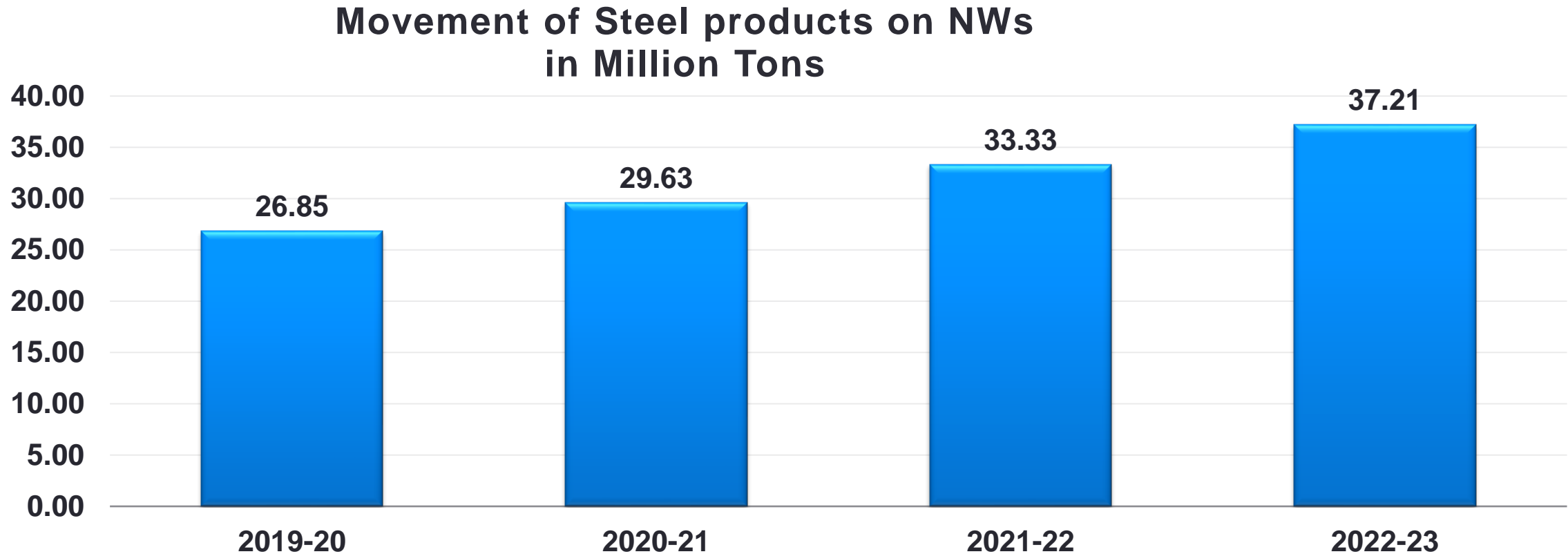
Support Web Based/ Android apps

Back up data storage facility

Potential for Steel industry on IWAI



Movement of Steel Products on NWs



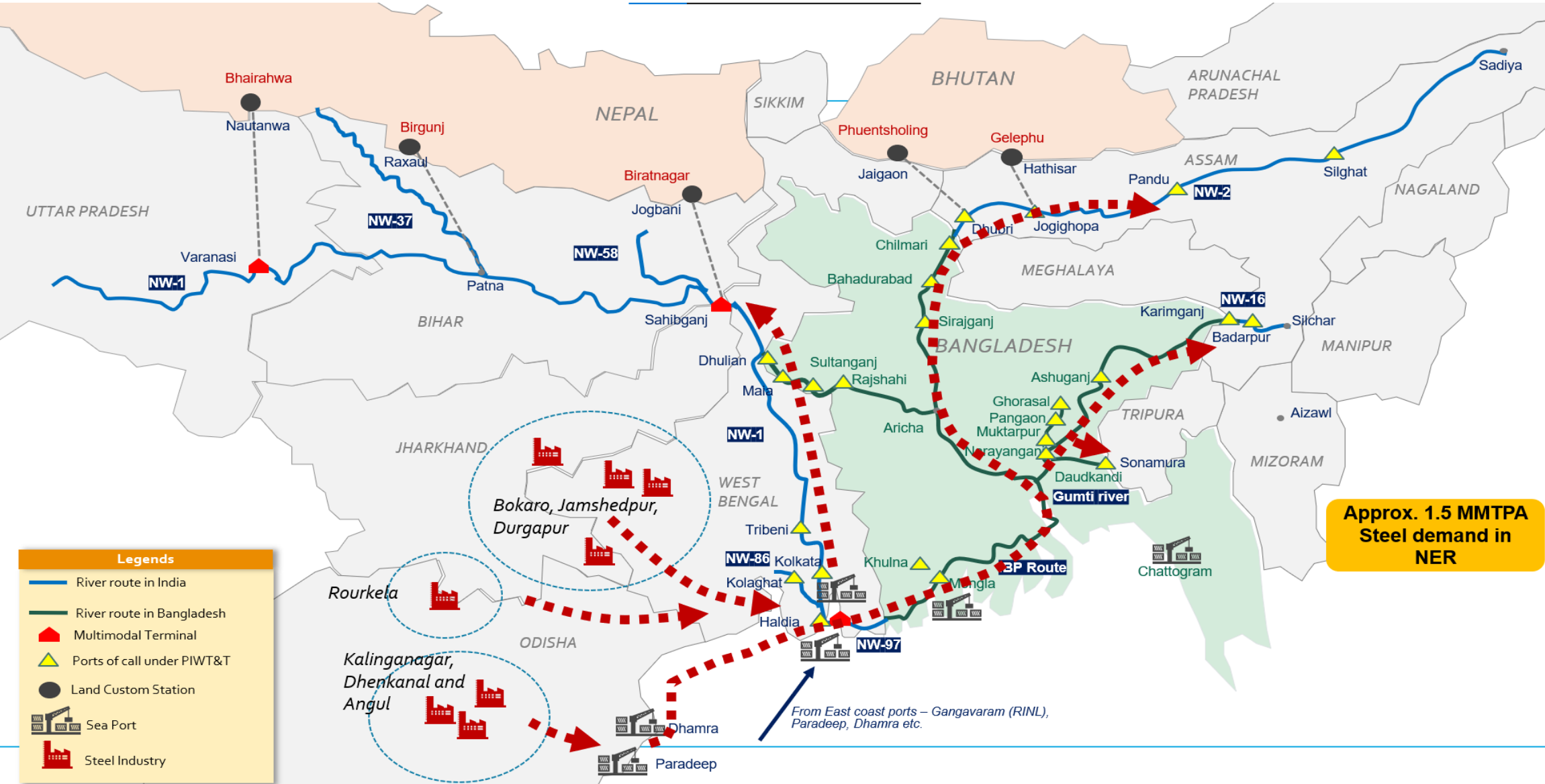
- ▶ Steel and Steel products is one of the main commodities transported on NWs.
- ▶ Steady growth of ~11.5 % can be seen in the movement of steel products on National Waterways

Potential OD Pairs for Steel Industry Logistics on NWs

Potential of Steel Transportation using IWT mode – INDIA		
S.No.	Destination Region-NW.	Potential (Million Tonne/Per Annum
1	North East Region (NW-1, IBP, NW-2/NW-97)	1.50
2	NW-5	2.0 (BY 2027)
2	Bangladesh(NW-1,IBP)	0.40
3	Nepal(NW-1)	0.02
	Total	1.92



Potential OD Pairs for Steel Industry Logistics on NWs



Comparative modal Advantages of Inland Waterways for Steel movement

Challenges in Existing Mode	Advantages of IWT Mode
Small carrying capacity of trucks not suitable for needs of industry	Alternative and cost effective mode of transport with scale advantage
Insufficient parcel size to conduct Coastal shipping	Inshore corridor guidelines allow inland vessels to ply in coastal corridor (5 Nm from base line) carrying smaller shipment sizes (~2000 MT)
Rail and road have limited flexibility for carrying ODC cargo such as wide plates, long products	Inland vessels are advantageously placed to move ODC cargo compared to road and rail
Insufficient rake availability	Has potential to significantly increase the total transportation capacity
Ware housing challenges	<ul style="list-style-type: none">▶ IWAI terminals with open space /covered space for warehousing can serve as Distribution Hubs.▶ Storage at IWAI Terminals in Open Storage/Hard stand/Transit shed free for first 30 days.

Way Forward

Infrastructure development

Invest to upgrade ports, terminals, and waterway infrastructure.

Policy support

Implement incentives & subsidies to encourage inland waterway use.

Public-private partnerships

Collaborate with private sector to invest and manage waterway infrastructure.

Logistics integration

Improve connectivity with roads, railways, and industrial zones

Technological innovation

Implement advanced cargo handling and tracking technologies.

Environmental considerations

Adhere to environmental standards for sustainability

Skill development

Train maritime and logistics sector workers.

Market awareness

Educate stakeholders on waterway benefits for steel transport.

Thank You

