Green IWT Development in Bangladesh

Presented by:

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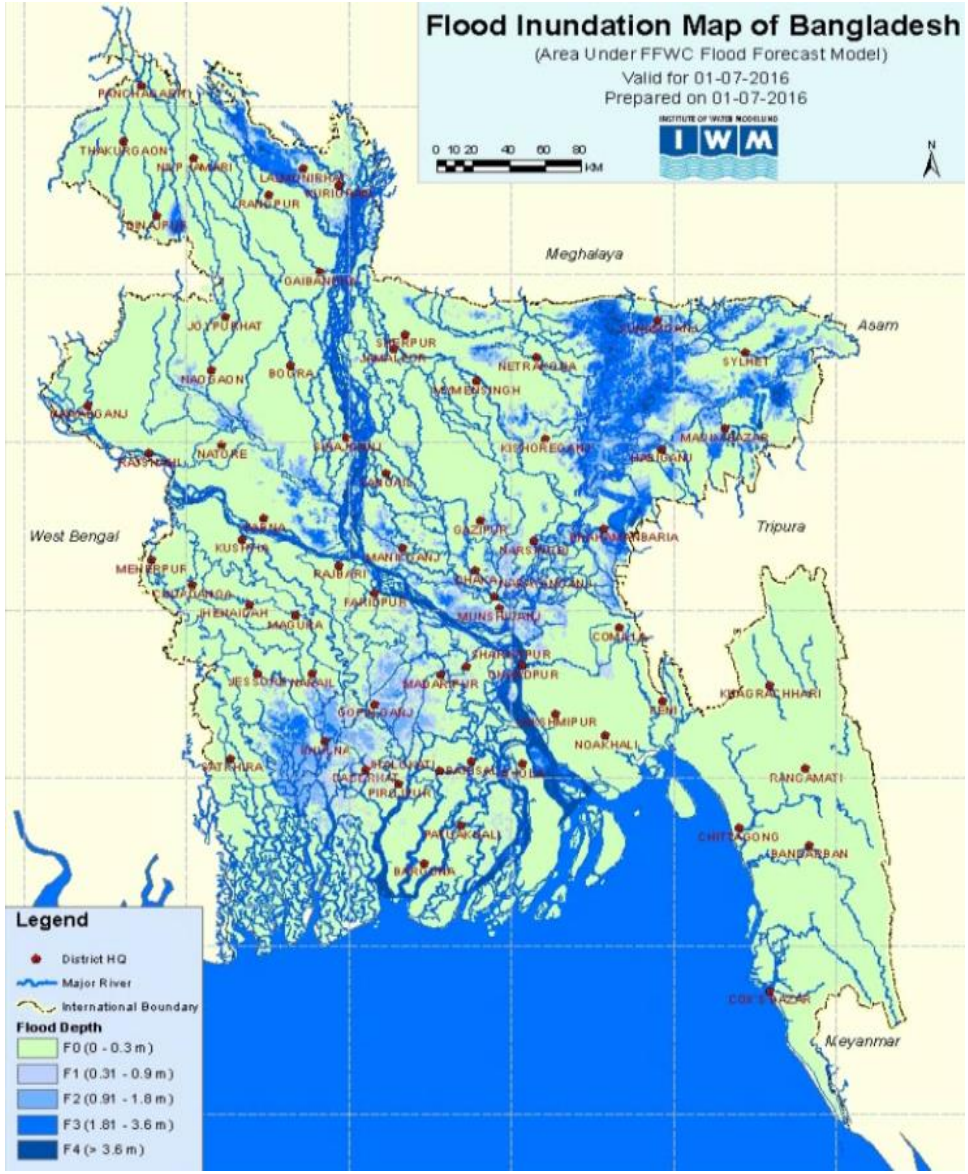
History of Inland Waterways in Bangladesh

- In Sultani & Mughal era, sailing and rowing boats of different sizes carried passengers & cargo
- Mechanized vessels came only about 200 yrs ago
- Lord William Bentinck introduced first inland steamer in 1834
- India General Navigation and Railway Company - 1844
- 1st Dredger - 1907 - Madhumati, Madaripur Beel Route, Lower Kumar and Gopalganj Loop was excavated



Status of Inland Waterways in Bangladesh

- **Largest delta**

  Bangladesh is geographically located in the largest delta of the world, downstream of the Ganges-Brahmaputra-Meghna (GBM) basin, and is bestowed with rivers, streams, and canals.

- **405 Rivers in Bangladesh**

  According to Bangladesh Water Development Board, there are 405 rivers including 57 transboundary rivers of which 54 originates from India and 3 from Myanmar.

- **Complex Waterway**

  The rivers, streams, and canals of Bangladesh are linked together and create a complex waterways system.

- **Length of Waterway**

  Bangladesh covers almost 24,000 km of waterways, which is about 7% of the country's surface.

Status of Inland Waterways - continued

Navigable Waterways

- In the Monsoon period, this complex network of waterways reaches its extensive size. However, a much smaller segment of the waterways is available for navigational purposes both in monsoon and dry seasons;

- Out of 24,000 km of rivers, streams, and canals only about 7,200 km is navigable by mechanized vessels during monsoon season which eventually reduces to about 5,500 km during dry season.

Depth of waterways

- Least available depth Range is 3.90 m to 1.50m.

Status of Inland Waterways - continued

Transportation

1. The two major seaports at Chittagong and Mongla handle almost 90% of the total imports and exports;

2. Major share of these goods is transported to hinterland by inland water transports through river ports;

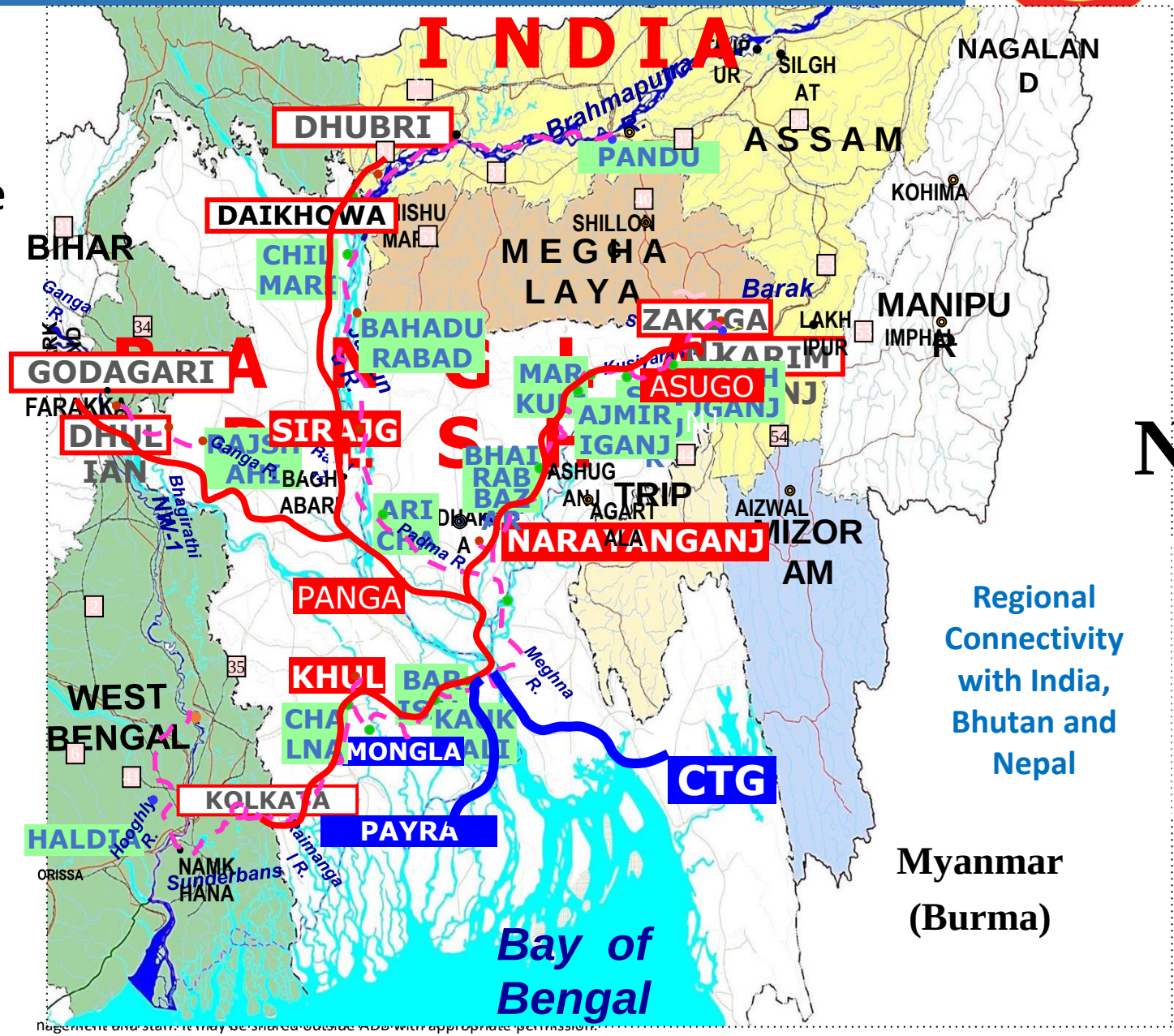
3. To support the waterways there are 47 inland ports and over 19 thousand Registered vessels for inland waterway transportation;

4. Quantum of cargo carried 58 Million tons and also 25% (87.80 million) of country's passenger traffic each year.

Status of Inland Waterways - Regional Connectivity

- In recent past, for enhanced opportunities of transboundary trade between the Bangladesh and India the Government of Bangladesh has strengthened the Protocol of Inland Water Transit and Trade (PIWTT). As a result, cargo transport through inland waterways between Bangladesh and India has just nearly doubled;

- The ministry of shipping are also looking for the opportunities to expand business communication with north-eastern province India, Bhutan and Nepal by waterways.

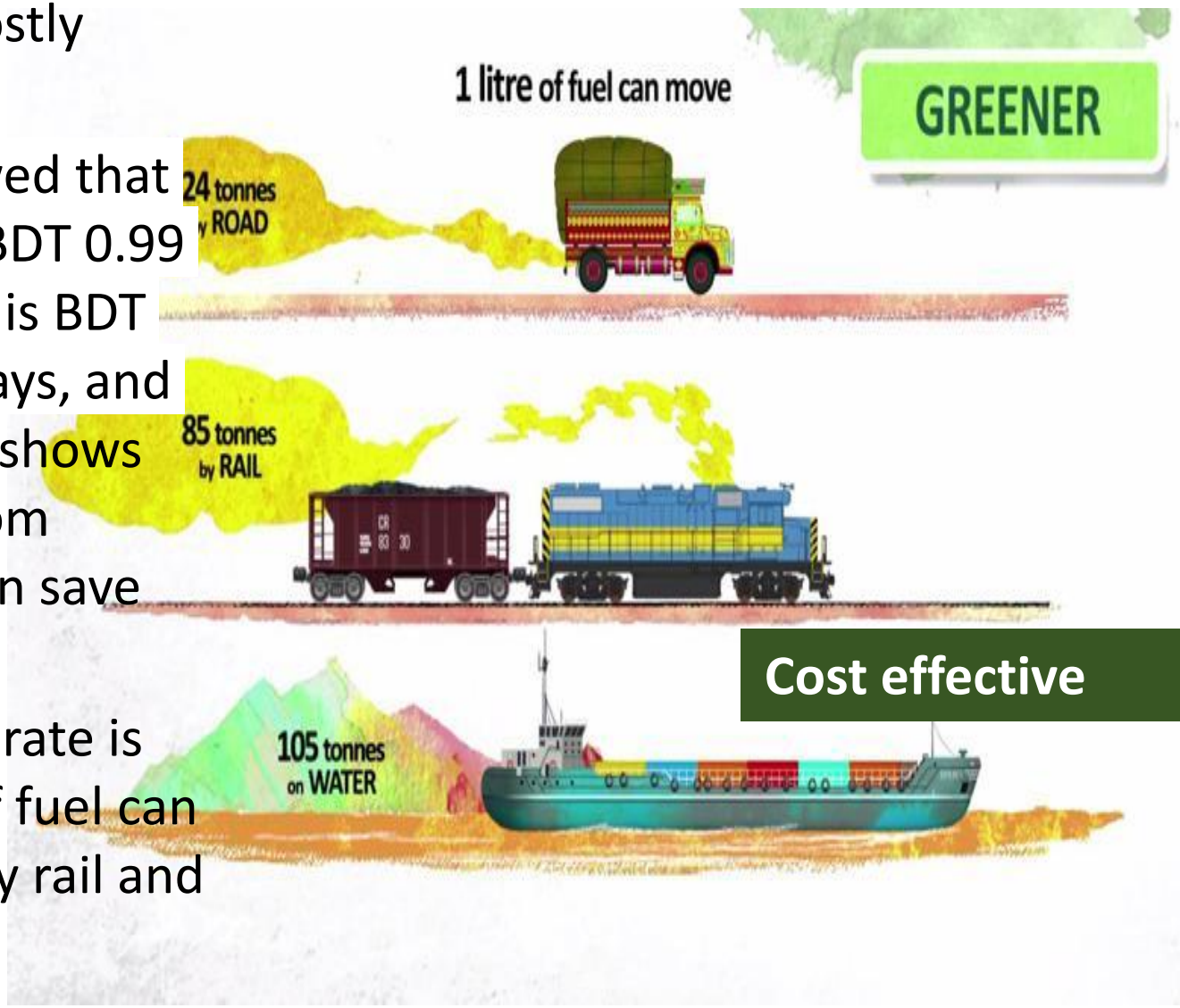


Status of Inland Waterways - Safer Mode

1. IWT has some inherent advantages over other modes of freight transportation. In general, it needs less energy, creates less noise and emits less green house gas (GHG) compared to the surface modes (roads and railways);
2. The IWT mode consumes energy slightly less than one-fifth (1/5) of road mode and half of the railway mode for transporting one ton of goods for one kilometer. In addition, IWT helps to lower the congestion levels of busy freight road corridors;
3. Recent studies show that overall external costs of IWT , covering accidents, congestion, noise effect, air pollution and other environmental impacts, are one-eighth (1/8) of road transport and above all, it is also a safer mode comparatively.

Benefits of Inland Shipping

- **Terrain Friendly-** Entire Bangladesh is mostly connected by rivers and canals.
- **Cost Effective -** A World Bank study showed that carrying a ton of goods a kilometer cost BDT 0.99 ($0.013) through the waterways, while it is BDT 2.74 ($0.03) if transported through railways, and BDT 4.50 ($0.06) by road. Another Study shows that by carrying 1.5 million containers from Chittagong to Dhaka by waterways we can save $120 million/year.
- **Environment Friendly -** Carbon Emission rate is 50% lesser in waterways (IUCN). 1 liter of fuel can move 24 tons of cargo by road, 85 tons by rail and 105 tons by waterways.



Green afforestation in river basins

Removing the illegal structures

BIWTA has established boundary pillars along the riverbanks by removing illegal structures erected by various private establishments. Thereby increasing the width of the river.

Plantation and set up Eco park

Plantation of trees has been done within the boundary by BIWTA. Moreover, BIWTA has set up four Eco-parks in the riverbanks with its own funding.

Establish a 220 km walkway

In order to protect the riverbanks, BIWTA is working to establish a 220km walkway along the 110km waterway of the Buriganga, Shitalaksha, Dhaleshari, Turag and Balu rivers around Dhaka city.

Country's Perspective plan 2020-2041 (PP2041) for IWT-Development

- Bangladesh has a long-term perspective plan for her sustainable economic growth and infrastructure development.
- One of the important elements of the plan is to build transport and communication infrastructure for sustained rapid growth.
- Bangladesh has massive riverine network with easy access to the sea.
- Therefore, the PP2041 contains the strategy of developing IWT system in order to harness this potential for both passenger and cargo traffic.

The key elements of the strategy are (PP2041)

1. Navigability improvement of river's channel;
2. Priorities to inter-regional river connectivity to facilitate trade, commerce and tourism;
3. Integrate IWT with other transport modes to maximize- the benefits;
4. Strengthening the capability of IWTA with technical staff and inspectors and regarding hydrological survey, river training and dredging operation;
5. Development and modernization of river port facilities in cargo handling, docking, storage facilities, security and rescue services and uplifting passenger's service standard;
6. Engaging private sector in all the improvement and development activities on public private partnership (PPP) basis.

Conclusion

- As Bangladesh is blessed with good IWT network, a natural trade way, therefore revival of this sector can contribute significantly to balancing the national logistics system. This balancing is very essential for sustainable development of the country.
- Modernization of IWT can create massive employment for people of rural areas. Furthermore, as a flood prone country, IWT can offer the only transport options, when some of the areas are badly affected by flood.
- As the surface mode has the capacity constrains for freight transportation, therefore, new strategies have already been taken in country's perspective plan (PP2041) to develop the IWT sector equally with other sector of transportation.
- Equally developed sectors, all together will provide seamless and synchronized freight/cargo transportation in all over the country and help achieving socio-economic and environmental prosperity as well.

Thank you