

Seamless connectivity



A series of measures taken by the Indian government has enabled a seamless connectivity through inland water transport among BBIN countries. Bipul Chatterjee and Veena Vidyadharan consider the effects on the region

Providing a much-required boost to the inland water transport sector in India, the world's largest shipping firm, Maersk moved 16 containers along National Waterway 1 from Varanasi (Uttar Pradesh) to Kolkata (West Bengal) recently in February, 2019. As container cargo transport through waterways reduces logistics cost and allows easier modal shift, this is expected to be a major leap in redefining the transport narrative for not just India but also for its neighbouring countries of Bangladesh, Bhutan and Nepal.

A series of measures has been taken by the Government of India in the past few years to improve the logistics infrastructure in the country. This includes setting up of logistics parks, multimodal terminals, Sagarmala Project¹, e-mobility solutions and infrastructural development of rail, road and waterways. Despite these initiatives, India's rank dropped from 35th to 44 in the recently published World Bank's Logistics Performance Index (2018). Similar decline was observed in the case of Nepal (144) Bangladesh (100) and Bhutan (149) compared to previous data of 2016.

Though the fruitfulness of the reform measures will take time to realise, it is to be mentioned that the thrust to develop inland waterways for trade and transport got intensified lately after the declaration of National Waterways Act in 2016. The National Waterway-1 from Allahabad to Haldia in the Ganga- Bhagirathi-Hooghly river system and National Waterway-2 from Sadiya to Dhubri in the Brahmaputra river are the two important waterways that are projected to play a vital role in improving the inland water transport connectivity of India with its eastern neighbours.

Fostering sub-regional connectivity

The intermodal and multimodal terminals being developed at key locations of Kalughat (Bihar), Sahibganj (Jharkhand) and Haldia (West Bengal) as part of Jal Marg Vikas Project² (in National Waterway-1) are expected to

benefit Nepal bound cargo from third countries. In this context, India and Nepal have recognised inland waterways as a 'trade route' in Nepal-India Trade Treaty in a recent bilateral meeting³.

Bhutan has also signed a Memorandum of Understanding with Bangladesh in 2017 to access Bangladesh ports of Chittagong and Mongla⁴. Bhutan can either access inland waterway at Jogighopa (Assam, India) or at Chilmari, (Kurigram, Bangladesh). However, a tripartite agreement among Bangladesh, Bhutan and Nepal is required for

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Bhutan to access Indian and Bangladeshi waterways. Currently, Bhutan exports boulders, gypsum and oranges to Bangladesh via the land routes in India. Till now, the country has been using Kolkata port for trade with third countries. Access to Chittagong and Mongla ports via waterways would open new avenues for Bhutan as the transportation costs will lessen significantly.

Unlike Nepal, India and Bangladesh have an existing Protocol of Inland Waterways Transit and Trade (PIWTT) since 1972. Out of the six operational routes, most of the transport occurs between Kolkata and Narayanganj, which falls in Protocol Route 1 (Kolkata- Silghat).

The inter-country cargo movement between India and Bangladesh through waterways for 2017-2018 was 2,698 thousand tonnes⁵ and has not varied considerably in the last three years. It is interesting to note that this movement is one-sided (export to Bangladesh) with fly ash constituting 98 percent of the cargo and the rest being rice, jute, steel plate, stone chips and over dimensional cargo mostly to north east India.

Impetus to India-Bangladesh bilateral trade

Though the bilateral trade between India and Bangladesh has increased by more than 17 percent in the past five years, the value of imports from Bangladesh is limited to less than 15% of the value of exports from India as of year 2016-17⁶. Major products which are exported from India to Bangladesh are – cotton, vehicles, machinery, cereals, iron and steel, stones, and electrical equipment; while India's major imports from Bangladesh are – fabrics, yarn and fibres, clothing accessories, textile articles, plastics, mineral fuels and oil, leather and footwear.

A study conducted by CUTS International⁷ has pointed out that the high sedimentation load carried by Himalayan rivers of Ganga and Brahmaputra (corresponding to National Waterway-1 and National Waterway-2, respectively) demands periodical dredging in these rivers to keep the channel navigable throughout the year.

While a channel of 45 metre width and 3-metre-deep is essential for the movement of vessels of carrying capacity 2000 metric tonnes, the required depth is not present particularly during lean season. This is true even in the case of waterways in Bangladesh where Class III and Class IV waterways (less than 1.82m depth) constitute about 70% of total inland water transport. The country has massive plans to dredge its major rivers to improve navigability⁸.

In this context, CUTS has conducted an explorative study⁹ on the possibilities of short haul trade between India and Bangladesh in shorter stretch of waterways across the international border along the Protocol Route. The stretch of waterway between Dhubri, (Assam, India) and Chilmari (Kurigram, Bangladesh) (which are the last custom stations in India and Bangladesh respectively) is congenial for the movement small mechanised boats of 20-50 tonnes capacity, carrying perishables, cereals, stones and coal from India throughout the year.

Similarly, from Bangladesh cotton waste, potatoes and cement can be exported to India, primarily to meet the local demand. While this stretch would require dredging for the movement of big steel hull vessels, it has enough navigational parameters for the movement of small boats to ply for short distance across border during all months of a year thereby contributing to local livelihoods, bilateral trade and trust building.

This genre of cross border trade is currently operational between Karimganj (Assam, India) and Zakiganj (Sylhet, Bangladesh) wherein row boats are used to carry perishables after customs clearance to Bangladesh sailing hardly 300m across the river.

Interestingly, here also the movement of goods is from India to Bangladesh to meet the local demand. While all the 12 boats engaged here are from Bangladesh, loading and unloading are done manually in respective countries providing livelihood to local people. India and Bangladesh are jointly undertaking dredging operations in this

part of the Protocol route (Route No 3 & 4) for facilitating movement of bigger steel vessels, yet the local trade will continue as it caters to the local demand.

Thus huge investment is a prerequisite for capacity augmentation of the waterways as well as building terminals and other infrastructure. The current mode of trade relying on a single commodity (fly ash) is not economically viable and sustainable. Hence it is imperative to explore cargo that can be shifted from road/rail transport to waterways to make it economically viable. While it is challenging for waterways to compete with the relatively cheaper freight charges of railway, it cannot be seen as an alternate mode or substitute for other modes of transport instead has to be integrated with multimodal connectivity.

Towards seamless connectivity

With multiple initiatives taken by India and Bangladesh governments to improve the physical connectivity between the countries and in the Bay of Bengal sub region, none of these has to be seen in isolation. The coastal shipping agreement of India and Bangladesh should be considered as an ally to inland navigation and can be extended to farther east.

Along this line, it is important to mention that access to Chittagong port in Bangladesh would be game changer for North East India which is land locked from mainland India. Sabroom district in Tripura borders Bangladesh and is about 75km away from Chittagong; however, Feni river flows through the international border separating India and Bangladesh. With a new bridge coming across the river, Tripura and other north east states will have access to Chittagong port opening new avenues for trade and connectivity.

Chittagong port which carries about 92% of the total sea borne cargo in Bangladesh faces heavy traffic congestion and delays. Most of the cargo are containerised and are destined for Dhaka which is hardly 260km away and the

time taken to cover the distance may vary from eight to twenty-four hours depending on the traffic. Except for Pangaon, there is no other inland container terminal near Dhaka despite having a good river network.

Research indicates that the Dhaka-based ready-made garments industry is keen to tranship via Haldia (India) through inland waterways, as from there it can be connected to Vizag, Colombo and Singapore through feeder services¹⁰. The research also concludes that though the transport cost of sending a container from Dhaka via Haldia is increased, by around \$160 it saves a significant amount of time by about two to three days.

Considering time as a crucial factor in logistics management, day and night navigation facilities have to be assured in inland navigation. Though Bangladesh is much advanced in inland water transport and has its vessels equipped with radar and night navigation lights put along the navigable channels at strategic points, India lags far behind.

The navigable rivers of Bangladesh are wider, deeper and in most cases are having advantage of tidal benefit. Comparatively, the National Waterways of India (NW-1, 2 and 16) do not get any benefit of tide except between Sagar Island and Kolkata. Moreover, these waterways are shallower, meandering and narrower.

In order to make inland water transport system attractive to private sector and logistics firms, a lot more needs to be done in the infrastructural and policy fronts along with river training work to ease navigation. While an Integrated Multimodal Transport Policy is in place for Bangladesh, India has come up with a draft National Logistics Policy very recently.

Apart from trade via waterways, river tourism is another area which has been gaining wide attention from both domestic as well as foreign tourists in the last decade. India and Bangladesh have signed a Memorandum of Understanding on Passenger and Cruise Services along Coastal and Protocol Routes in 2017.

The tourist vessels can sail even in shallow waters, generate revenue and provide job opportunities for local communities, artisans etc. Looking into the benefits of river cruise and water tourism, necessary infrastructural facilities need to be created for this sector as well.

Thus, the challenges that are faced currently by inland water transport sector are:

- Limited number of vessels (particularly low draft vessels) and its poor maintenance
- The projected trade potential in National Waterway-2 is mostly project based cargo (hydro-electric projects coming up in Upper Assam and Arunachal Pradesh)
- Undue advantage and uncompetitive freight charges by few private operators
- Altering interests and political influence of truck lobby leading to underdevelopment and usage of waterways
- Shifting channels, multiple channels and excessive bank erosion pose threat to construction of permanent terminals in National Waterway-2
- Need for upgradation of river systems on core routes that can support large modern vessel fleets

In conclusion, the following brief recommendations would ensure seamless connectivity through inland water transport among BBIN countries:

- Continuous data collection, monitoring, study and river training works to regulate and stabilise the channels of Brahmaputra
- Regular consultations and feedback mechanisms with industries and operators for identifying success/failure of developmental interventions and take appropriate steps to promote IWT
- Identify stretches and commodities (on demand-base) with trade potential between shorter stretches across border and design vessels accordingly
- Mandatory GPS tracking for vessels to ensure safety and security
- Removal or relaxation of product bans and other non-tariff barriers
- Comprehensive disaster management plan and pollution control measures
- Build infrastructural facilities for last mile connectivity, safe navigation and e-monitoring system bringing in more transparency to the operators, users and common public ■

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Endnotes

1. The Sagarmala programme is the flagship programme of the Ministry of Shipping (India) to promote port-led

development in the country through harnessing India's 7,500km long coastline, 14,500km of potentially navigable waterways and strategic location on key international maritime trade routes. It aims to reduce logistics cost for EXIM and domestic trade with minimal infrastructure investment. More details: <http://snip.ly/cbhnoe>

2. The Jal Marg Vikas Project entails development of fairway with 3 meters depth between Varanasi and Haldia (Phase-I) covering a distance of 1380 km with technical and financial support of the World Bank. More details: <http://snip.ly/bzbxol>

3. India-Nepal Joint Statement during the State Visit of Prime Minister of India to Nepal, May 2018; More details: <http://snip.ly/omxjpu>

4. More details: <http://snip.ly/gjfdq6>

5. Traffic Statistics during FY 2010-2011 to 2017-2018; More details: <http://snip.ly/v74wm4>

6. India-Bangladesh relations; More details: <http://snip.ly/qgts7y>

7. Expanding tradable benefits of inland waterways: Case of India, 2017; More details: <http://snip.ly/777qp3>

8. Improving navigability in 100 major rivers: Ecnec approves Tk4,489cr project to procure 35 dredgers, 2018; More details: <http://snip.ly/lazp7o>

9. Boating Towards Inclusivity: Facilitating short haul cross-border trade between Dhubri (Assam, India) and Chilmari (Kurigram, Bangladesh) through waterways, 2018; More details: <http://snip.ly/3iugc4>

10. Transforming trade efficiencies of Bangladesh, 2018; More details: <http://snip.ly/0csq0y>