India-Bangladesh Trade: The Prospect of Inland Water Transportation System

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Abstract

India, the third largest trading partner of Bangladesh, the most neighbor country having a transboundary waterway which connects some of the growth centres in India and almost all of the growth centres in Bangladesh. Despite having most of the advantages of modal choice covering least cost, environment friendly, congestion free and safe as well as institutional arrangement that is the Protocol on Inland Water Trade and Transport, the trade between Bangladesh and India through Inland Water Transport (IWT) is negligible. For decades the trade through IWT was mostly limited to one commodity which is fly ash, but few shipments of containers between these two countries this year is remarkable.This paper would institute with an overview of the trade pattern between Bangladesh and India, the transportation modal share, and an overview of the potential IWT system of Bangladesh and some parts of India that have a trans-boundary link. And then it would try to analyse the challenges that hinder the trade through IWT mostly the lack of infrastructure, investment, awareness, and longer lead time, lack of service providers, imbalance trade, inflexibility, water depth and institutional weaknesses. In parallel an examination of the development programmes that have been undertaken or in plan to upgrade the IWT in both the countries could create the opportunity for the entrepreneurs of both the countries to offer alternative transport logistic solution reducing the total cost of manufacturing.

Key words: Trade, Inland Water Transport, Transport Logistics.

Introduction

India is the third largest trading partner of Bangladesh, while the second largest trading partner in case of imports. On the other hand, Bangladesh

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An earlier version of the paper was presented at the 31st National Convention of Marine Engineers, at Indian Maritime University, Kolkata Campus on 15th and 1th October 2017.

remains within top ten export destination for India as well. This indicates the huge trade deficit between these two countries. The total trade between India and Bangladesh in 2016 was about 6142.52 million USD whereas the export from India to Bangladesh is about 5452.9 million USD (BB Website, 2017) which is around 89% of the total trade between these two countries. In the classical theory of trade the concept of comparative advantage by David Ricardo discusses the benefit of trade between two countries where there are no natural and artificial trade barriers. Distance between the countries which is reduced by the transport facilities is one of the significant natural trade barriers that could influence the trade between countries to a great extent.

The transport facility between India and Bangladesh is the prime concern of this paper where the opportunities of Inland Water Transport (IWT) have been highlighted here. The trade composition between these two countries and geographical advantage depict the potentiality of using IWT compared to other modes of transport.

Despite having most of the advantages of modal choice including a greater coverage, least cost, environment friendliness, congestion free and safe as well as institutional arrangement that is the Protocol on Inland Water Trade and Transport, the trade between Bangladesh and India through IWT is negligible. For decades the trade through IWT was mostly limited to one commodity which is fly ash, but few shipments of containers between these two countries this year is remarkable.

This paper would institute with an overview of the trade pattern between Bangladesh and India, the transportation modal share, and an overview of the potential IWT system of Bangladesh and some parts of India that have a trans-boundary link. And then it would try to analyse the challenges that hinder the trade through IWT mostly the lack of infrastructure, investment, awareness, and longer lead time, lack of service providers, imbalance trade, inflexibility, water depth and institutional weaknesses. In parallel an examination of the development programmes that have been undertaken or in plan to upgrade the IWT in both the countries that could create the opportunity for the entrepreneurs of both the countries to offer alternative transport logistic solution reducing the total cost of manufacturing. The research is mostly based on the secondary sources of information and some primary information has also been collected through telephonic discussion

with some key personnel involved in the IWT regulation, operation, development as well as maintenance.

India-Bangladesh Trade

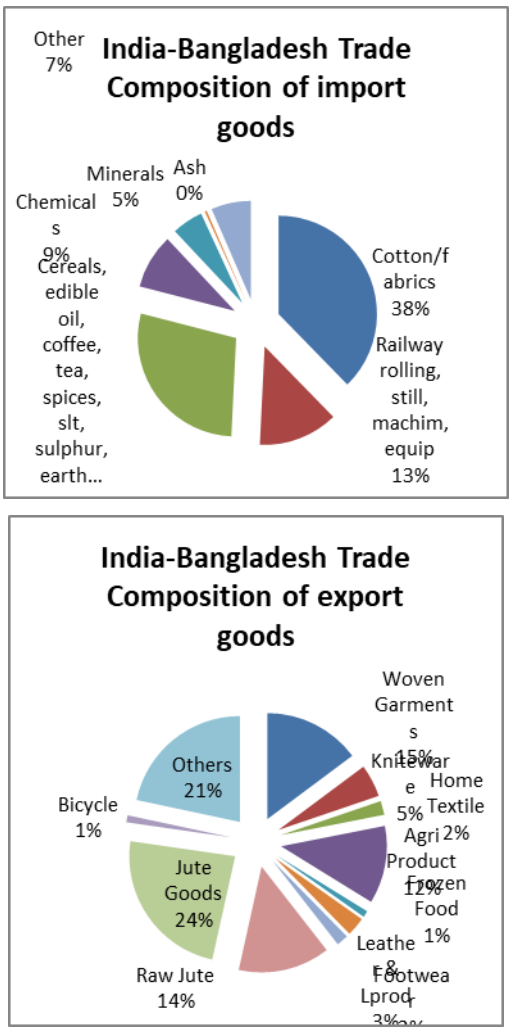
The trade between India and Bangladesh showing a continuous growth at an average rate of 11%, where both the export and import are showing similar pattern of share; that is, the export from India to Bangladesh is almost 90% of the total trade (DCCI, 2017). Bangladesh is the tenth largest export destination for India (DGCIS website, 2017), while the second largest import source for Bangladesh. The trade between these two countries amounted a total of USD 6142.52 million in 2016.

Source: Compiled by the authors data from Bangladesh Bank

Figure 1: India-Bangladesh Trade

The trade composition between these two countries shows that the import from India is predominated by raw materials and intermediate products for garments industries as well as different kinds of cereals whereas the export to India includes mostly jute goods and oven garments and knitwear. It is found that that cotton, yarn, fabrics alone covers around 38% of the total import from India, followed by different types of cereals including edible oil and other similar products which is 28% of the total import, however, ten years back the leading import was cereal which alone accounts almost 25% and including edible oil and other similar products it was almost 35% of the total import (AITD). This could be a good example to indicate the

comparative advantage that the trade between these two countries for such products is reducing gradually.



Source: Compiled b the Authors data from DCCI

Figure 2: India- Bangladesh Trade Composition

The trade between these two countries is largely done by overland routes, obviously because of huge land border between them. Maritime trade is in the second position of transporting goods (AITD). There are 23 land ports operated in different locations of which Benapole, Sonamoshjid and Vomra are the largest in terms of volume handled; around 60% of the total trade through land ports is done by these three stations (BLPA Annual Report,

2016). These three land ports are geographically located in the West Bangle of India.

The maritime trade followed by road, is also dominated by different types of cereals. The Indian container market report 2016 shows that among five major commodities export from India by volume that is cereal, iron and steel product, textile and garments, sugar and sugar confectionary and plastic product for four commodities except sugar and sugar confectionary Bangladesh respectively imports 10%, 5%, 12%, and 4% of the total export securing the top position for cereals, second top for textile and fifth top for both iron and steel and plastic products. An interesting assumption of this report is that they have considered only the commodities that are containerized or containerisable. It is pertinent to mention that there is no direct liner services from the Indian maritime ports to the Bangladesh maritime ports they usually use the hub ports for further feeder link which is time consuming obviously.

The limited trade through railway is transshipped in two places namely Nowapara, a river port, on inland barges and Ullapar near Bogra into road vehicle (AITD). The trade through inland water transport is there but limited to only one commodity which is around 2 million metric ton per annum (BIWTA, 2017). Moreover, a number of containers in several shipments has transported this year from the port of Kolkata to Pangaon Inland Container Terminal, but the service is still irregular (Pangaon ICT Officials).

In case of Bangladesh the major growth centre is Dhaka and surrounding region, followed by Chittagong and Khulna area. Bangladesh: Port and Logistics Improvement study 2011, conducted by ADB shows that almost 70% of cargo destined and originated from Dhaka area. The same study identified that in case of Benapole land port around 39% trucks are originating and destined from Dhaka, 32% from Jessore, 18% from and to Khulna and 11% from the rest of the country. On the other hand, as for imports goods from India, more than 82% originate from West Bengal; around 6% are from Haryana and 2% from Andhra Pradesh which indicates that the trading areas are very near to the waterways.

Transboundary waterways

Bangladesh is the largest delta constituted by three mighty trans-boundary river systems. Ganges-Brahmaputra-Meghna all enter Bangladesh flowing a

long route through India. The river Ganges rises in the western Himalayas in the *Indian* state of Uttarakhand, and flows *south* and east through the North India into Bangladesh, where it empties into the Bay of Bengal. In its way it connects the Indian states of *Uttarakhand, Uttar Pradesh, Bihar, Jharkhand,* and *West Bengal*. Originated from the northern side of Himalaya Brahmaputra enters into India through the Arunachal province and flows southwest through the Assam valley and enters into Bangladesh. Meghan River the main water receiver from both the Ganges and Brahmaputra flows to the Bay of Bangle. However, this river receives water from the Barak River as well which has entered into Bangladesh from the Indian state of Assam originated from the hill country of Manipur. The extensive stream of these rivers shows the significance of their presence in the daily life of people of the catchment areas. However, the utility of these rivers for navigational purpose is remarkably less in the Indian part compared to the Bangladesh part. The contribution of water transport system in the total freight transportation system in case of India is around 0.5% (World Bank Website, 2017), whereas in Bangladesh it is around 16% (WB, 2007).

Figure 3: The Trans-boundary river network
Source: http://www.futuredirections.org.au/wp-content/uploads/2016/05/Major-Rivers-of-India-and-Bangladesh.png

There are about 14,500 km of inland waterways in India comprising of five national waterways of which National waterways 1 and 2 are representing the Ganges and Brahmaputra rivers (IWAI, 2017) respectively. They are of great interest for India-Bangladesh trade. These two waterways with an extensive area of connectivity in India entered into Bangladesh and

connected to each other in Bangladesh. There are about 24,000 km of waterways in Bangladesh that cover about 7% of the country's surface. Most part of the country is linked by a complex network of waterways which reach its extensive size in the monsoon period. Out of these 24,000 km only about 5,968 km is navigable by mechanized vessels during monsoon period which shrinks to about 3,865 km during dry period. The very large rivers fall into class I and Class II having a least available draft (LAD) of respectively 3.6 meter and 2.1 meter.

Challenges of Inland Water Transport System

Lack of infrastructure, investment, awareness, and longer lead time, lack of service providers, imbalance trade, inflexibility, water depth and institutional weaknesses are some of the major challenges for the optimum utilization of IWT system in both the countries. In Bangladesh it has been found that an average 5% of the total allocation of development budget for the surface transport sector is allocated for the IWT system (BIWTA Officials). As identified by Hasan and Khondoker (2016), among other the most significant challenges for IWT system are the navigability problem at certain area, slow steaming, poor government allocation, limited infrastructure and poor allocation and limited awareness as well (Hasan et al, 2015 and Rahman & Hasan, 2015). It seems a similar scenario could be found in case of India as well. The poor performance of the sector reveals the poor allocation of development budget. The navigational benefit of waterways is also not discussed properly both in macro and micro level. The benefit of waterways in terms of cost, environment and safety has always been deviated from discussing the slow steaming phenomenon. However, the highly congested road sometimes takes more time compared to IWT in case of Bangladesh. Introduction of proper liner services in waterways could be identified as another constraint for the less market share. Numerous small parcels using the small vehicle over road could have diverted to IWT if proper scheduled service is introduced. Imbalance of trade is never ending issue in trade, however, the less the imbalance the more the cost benefit leading towards more investment in service development. Water borne trade needs designated facilities to origin as well as destination, limiting the flexibility compared to road vehicles specially. Moreover, the double handling of IWT cargo sometimes leading towards cost increments, but obviously for the small haulage not for a longer haulage as the less operating cost would recover the cost of double

handling there. Problem of navigability is the most vulnerable problem in the deltas as the river course shows dynamic changes and carries tremendous amount of silt with the monsoon flooding. In Bangladesh most of the investment in IWT goes to dredging activities. Institutional capacity is obviously an important area of development. The professional development of the human resource would obviously increase the sector output as efficiency and productivity would be gained.

Prospects of IWT system in India-Bangladesh Trade

It is identified that the trade pattern is the key prospect for the IWT system. Most of the areas from where the cargo is originated and destined have connectivity with IWT. The cargo composition is also suitable for using IWT along with the greater connectivity. The inherited benefit of larger connectivity to the main hinterland with class I depth, cheap, safe and environment friendly, less maintenance cost, and the good experience of using IWT as a means of transportation (Hasan &Khondoker, 2016) could create additional benefit here. There is already a protocol to use the waterways of both countries. The development of Inland container handling facilities through IWT near Dhaka and introduction of liner services between Pangaon and Kolkata, even though are irregular in nature but still an opportunity for small traders. The slow steaming nature of IWT could be considerable if the total time is compared between the road and IWT trade in parallel to the cost as well. It is found that a shipment through IWT from Kolkata to Dhaka area takes almost 20 days through IWT, which could be reduced to half by introducing efficiency at different levels of operation and development of infrastructure. On the other hand, in case of road haulage it also takes almost ten days because of high waiting time at the border for customs and other procedures (AITD). The WB (2007) identified that to transport 1 ton of cargo for 1 km it costs near Tk.1 for IWT, Tk.2.5 for rail and Tk. 4.5 for road in case of Bangladesh and the use of IWT rather road is reducing the emission of around 155,000 tons of carbon. Moreover, number of development projects initiated in both the countries for the development of IWT system would create ample opportunities for IWT trade. The Indian initiation to develop NW 1 and 2 as well as the Bangladesh initiation of developing the inland waterways under protocol would facilitate better connectivity between these two countries. The following table sums-up the prospects of IWT in India-Bangladesh Trade.

Table 1: Comparative position of different modes of trade

Modes of trade	Road	Maritime	IWT
Comparative Advantage	a. Flexibility b. Suitable for small parcel c. Time	a. Low cost b. Environment friendly c. Safe	a. Low cost b. Environment friendly c. Flexible compare to Maritime d. Low maintenance cost e. Greater connectivity f. Trade pattern g. Introduction of liner service h. Safe i. Institutional arrangement j. Initiation of different development schemes
Comparative Disadvantage	a. Expensive b. Pollution	Slow steaming	a. Slow steaming b. Awareness c. Lack of service providers

From the above table it is observed that the utilization of IWT other modes of transportation could create large benefit for the traders as well as the end users. However, to gain this benefit the following steps could be undertaken:

- ✓ Timely implementation of the project that has been identified for the sector development in the both countries;
- ✓ Initiation of more regular services through IWT;

- ✓ Awareness building and undertaking of promotional activities to secure more private investment in the IWT sector;
- ✓ Easing the customs and other trade procedures.

Conclusion

The trade between India and Bangladesh is very significant from different economical, social and geographical aspects. Withdrawal of different trade barriers would obviously encourage growth in bilateral trade, but the procedure and mechanism is relatively complex. Reduction of trade barriers leading to the reduction of trading cost could also be achieved by efficiency and optimization. The natural gift of IWT system that connects the cities of two countries could create the opportunities of gaining efficiency and optimization. The least cost, environment friendly, safe, and congestion free as well as extended connectivity characteristics of IWT possesses the every prospects of penetrating the largest share of transporting trade between these two countries.

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