NDC JOURNAL
Security Through Knowledge

UTILIZATION OF INLAND WATER PORTS FOR ECONOMIC DEVELOPMENT OF BANGLADESH : THE CASE OF BIWTA

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INTRODUCTION

In order to attain the targeted growth rate of 8% by the end of 2015 and to attain middle income status, improvement of transportation facilities is considered as one of the most crucial factors besides other ingredients (Ministry of Planning, 2013). Rivers are the lifeline of the country and provide the cheapest means of transportation (Bangladesh Bureau of Statistics, 2012, p-xxiv). The inland waterways of Bangladesh is formed by the Jamuna (Brahmaputra), the Padma (Ganges) and the Meghna and their tributaries numbering about 700 with a total length of about 24,000 km. The history of Bangladesh reveals preference of water transportation since the country is basically riverine. The importance of river communication with Sonargaon to northern part of India got priority during Mughal period when Dhaka became the capital. Once the British rule started, Kolkata (Calcutta) became more important than Dhaka in terms of administration. Thus, for the purpose of establishing trade with river ports of Kolkata and Hughli, several ports of the then East Bengal became important means of communication. Over the period rivers have changed their course and importance of many river ports varied due to siltation and development of road and rail network (Banglapedia, 2012, Volume-12, p-227).

Navigable rivers are important for commerce and most of the commercial centers of Bangladesh are located on the banks of the rivers beside river ports. Optimum utilization of these inland water ports would result large traffic flow carrying passengers and cargo, sharing much of the burden of the total transportation.Navigability has been important factor causing hindrance to the development of IWT. Besides, there has not been much improvement of most of the inland river ports since their inauguration. This has resulted, reduction of public demand on water transport.Since the task of maintaining inland water area and inland river ports is entrusted to Bangladesh Inland Water Transport Authority (BIWTA), it is essential to identify and recommend ways and means for utilization of inland water ports with specific reference to the assets of BIWTA for economic development of the country.

With this short introduction the paper aims to ascertain present state of utility of inland water ports with a view to optimizing capacity for contributing to national development. The paper first states background of IWT with a brief overview of BIWTA covering its potentials. Then it highlights present condition of inland waterways and matters affecting navigability. The paper examines existing facilities of inland river ports in order to identify limitations and formulate recommendations. It also assesses

major challenges of BIWTA and identifies possible options including the lessons in light of the experiences of the Netherlands. Finally, the paper recommends some measures for development of inland river ports and the waterways.

OVERVIEW OF BIWTA AND POTENTIALS OF INLAND WATER TRANSPORT IN BANGLADESH

BIWTA- Brief Overview

To set up an authority for development, maintenance and control of IWT and inland navigable waterways, on 31 October 1958 the then Government promulgated an ordinance called Inland Water Transport Authority Ordinance, 1958 (Ordinance No. LXXV of 1958) (BIWTA, 2010). BIWTA is established under the stated ordinance as an autonomous body under Ministry of Shipping responsible to ensure smooth and safe navigation for the transportation of passenger and cargo through the inland waterways of Bangladesh. Though BIWTA is responsible to ensure safe navigation in the inland waterways, vessel safety is ensured by the Department of Shipping (DOS). The financial condition of BIWTA indicates that Annual budget allocation does not suffice the requirement of fulfilling its role. Only 1.4% of the total budget allocated against transport sector of Bangladesh is allocated for BIWTA (BIWTA, 2009, p-99). As a result BIWTA generally is a loss incurring public organ having expenditure more than its income. However, the Income and Expenditure trend of BIWTA over the period of Financial Year 2003-04 to 2010-11 indicates gradual progress in reduction of net loss with growing income as stated belowin Table 1:

Table: 1 Income-Expenditure Trend of BIWTA (In Crore Taka)

Financial Year	Revenue Income	Actual Expenditure	Net Profit/Net Loss
2003-2004	79.77	106.17	-26.41
2004-2005	92.56	111.58	-19.01
2005-2006	117.15	134.46	-17.31
2006-2007	122.09	142.72	-20.63
2007-2008	120.29	137.93	-17.64
2008-2009	160.15	160.53	-0.38
2009-2010	177.56	182.74	-5.18
2010-2011	202.96	205.10	-2.14
2011-2012	289.13	Not known	-

Source: Bangladesh Economic Review, 2011

Potentials of IWT for Development of Bangladesh

More than 50% of the economic activities of the country are located within 10 km away from navigable waterways. About 25% of the rural households have access to IWT (Ministry of Planning, 2011,p-193). Particularly for the people living in the coastal areas amounting to 12.5% of rural population, where no alternative mode of transportation is available, IWT is the only means of transportation (Planning Commission, Moving Ahead, 2008). Besides these, dynamic activities of private sector contributing to national economic growth like ship construction, cargo transportation etc. are dependent on IWT. As such IWT can significantly contribute in the development of the country.

INLAND WATERWAYS NETWORK

Classification of Waterways Network

Out of the total waterways, about 6,000 km is navigable during the monsoon and 3,800 km during the dry season. As almost all the routes are wider than required, the navigability depends on the Least Available Depth (LAD). The current classification of waterways in use was introduced in 1989 based on LAD. In this system the navigability of a route is expressed in terms of the loaded draught of a vessel, which a route can sustain during the dry season. Existing classification of IWT network is as stated below in Table 2:

Table 2 : IWT Network Classification

Class	Indicated Draft (m)	Length (km)	% of Route	Classification Criteria
I	3.6	683	11	These routes are major transport corridors where LAD of 3.6m is required to be maintained round the year
II	2.1	1,000	17	These routes link major inland ports or places of economic importance to Class-I routes
III	1.5	1,885	32	Being seasonal in nature, it is not feasible to maintain higher LAD throughout the year
IV	<1.5	2,400	40	These are seasonal routes where maintenance of LAD of 1.5m or more in dry season is not feasible
Total		5,968	100	

Source: BIWTA, 2009

Present Condition of Inland Waterways Network

During monsoon in general sufficient depth is available as per the LAD throughout the waterways network. However, due to sediment carried by the river from upstream during the monsoon and reduction of water level during winter, critical spots develop along the long stretches of waterways and causes hindrance to navigation. Due to shortage of hydrographic survey vessels, required number of dredgers and fund scarcity, BIWTA normally carries out dredging only in routes on priority basis. Therefore, over the period, hydrographic survey and related studies has not been carried out over a vast area of inland waterways. Present condition of some of the important IWT network routes are appended below (BIWTA, 2009 and Khan, 2012):

a. **Dhaka/Narayanganj Inland Port to Chittagong Seaport IWT Route.** This route is classified as Class-I and is of prime national importance. The route has adequate draft in most of its length except few spots where sedimentation deposits. The route also requires specially built vessel as it passes through an open coastal waterways of the Bay of Bengal and subject to facing rough seas.

b. **Dhaka/Narayanganj Inland Port to Khulna IWT Route.** This route is also classified as Class-I and is of national importance. The route has adequate draft round the year connecting Dhakaand Narayanganj inland river ports with Mongla seaport. Despite dredging re-siltation rate is much high and as learnt, it is becoming increasingly difficult to main navigability in this route.

c. **Chittagong Seaport to Baghabari Inland Port IWT Route.** This route falls under Class-II and Class-III waterways but requires much of hydrographic survey. The route is of national importance because much needed fuelandfertilizer are carried to the northwestern part of Bangladesh through Baghabari inland port.

d. **Inland Waterways Route to Northern Part of Bangladesh.** For communication to Chatak and Sylhet the inland waterways route to the northern part of the country is classified as Class-I uptoBhairab Bazar and thereafter the depth reduces to 2.1m to 1.5m.

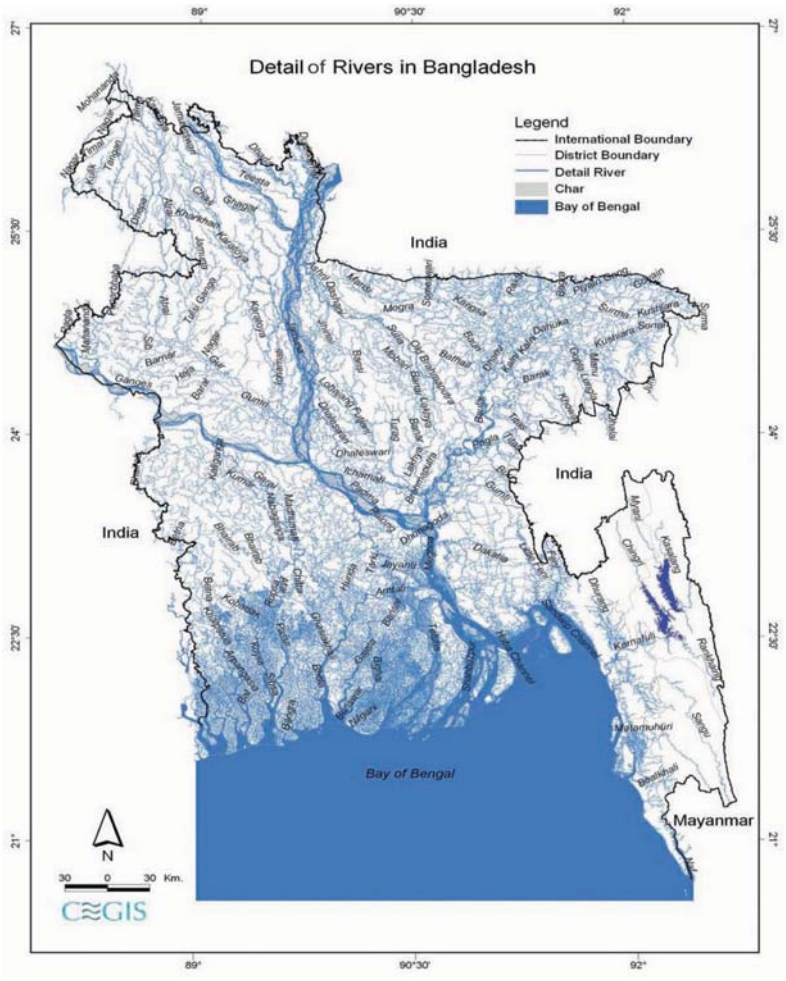
e. **Class-IV Classified Routes.** Class-IV classified routes are supposed to support vessel traffic of less than 1.5m draft. However, approximately 1,000 km of classified waterways belonging toClass-IV classification becomes unusable in winter even for vessels of <1.5m draft.

Introduction of Core Waterways Network Concept

The IWT Master Plan Study document prepared by the Planning Commission, Government of Bangladesh in 2009 suggests for the introduction of core waterways network. This is due to difficulties in re-classification in the absence of required survey

data. The IWT Master Plan Study document finds that the existing classification system introduced in 1989 has outlived its usefulness and is required to be revised. As time and other constrain do not permit for required investigation leading to re-classification, the document refers to the feeling of the 'consultants' to identify the 'Core Waterways Network' in order to indicate areas requiring 'priority attention'. Furthermore, the current waterways classification system is considered to be 'at its face value' in view of the present activities involving container transport by IWT, increased waterways transport and possibility of introducing multi-modal transportation as stated in the document. A Map depicting the Core Waterways Network as per the IWT Masterplan Study is appended below:

Map-1: Core Waterways Network



Source: http://spartandojo.com/carmelospartan/map-bd

On scrutiny it appears that the proposed 'Core Waterways Network' does not consider vessel size and Least Available Draft (LAD) to be maintained in the waterways. It essentially covers important waterways and mostly covers the waterways of Class-I and Class-II category with few waterways of Class-III of present classification system. Such approach though delineates specific waterways covering important areas of the country; in the absence of information related to LAD and vessel size with class,the overhead clearance is not ensured. Thereby, this may cause hindrance to vessel movement. Information on IWT classification of India and the Netherlands reveal that both the countries have classified their waterways on the basis of size of vessel with vertical clearance required (http://iwai.gov.in/gazette2/ classification/1.htm accessed on 04 May 2014 and http://www.riversoftheworld.nl accessed on 25 Feb 2014). In view of above and the need for extensive hydrographic survey, the approach for having 'Core Waterways Network' seems to be not feasible.

MAINTENANCE OF THE INLAND WATERWAYS NETWORK

Hydrographic Survey

At present BIWTA conducts survey of limited areas on priority basis. Four segments of waterways are surveyed almost every year due to the importance of the route. These Routes are: Dhaka-Chittagong, Chandpur- Aricha, Meghna-Barisal and Aricha-Baghabari (BIWTA, 2009).

Dredging

Allocation of Budget for Dredging Works

Approximately one-third of the total budget of BIWTA is usually allocated for dredging works.Due to importance of road connectivity, dredging of the river areas affecting ferry transportation get priority in the dredging plan of BIWTA taking more than 50% share of the total maintenance dredging of BIWTA (BIWTA, 2009, p32).

Dredging Plan of BIWTA

To ensure navigability of waterways, BIWTA has formulated a Five year Dredging Plan on 30 January 2013 covering the period 2012 to 2017 (BIWTA, 2013). In order to revive the waterways unused over the period due to siltation, BIWTA has a plan for Capital Dredging of 12 Important River Routes. BIWTA also has plan for Capital Dredging of 53 River Routes in two subsequent phases. The total planned dredging in the five year plan under Maintenance and Approved projects is approximately 1628.5 cubic meter (BIWTA, 2013). The five year Maintenance and Capital Dredging plan of BIWTA if implemented would indicate efficient performance of BIWTA in terms of dredging.

Other Matters Affecting Navigability in the Waterways

a. **Enforcement of Vertical and Horizontal Clearance.** The classification of waterways specifies vertical and horizontal clearance to be ensured for each Class of waterways as stated in Table 3:

Table 3: Vertical and Horizontal Clearance as per Classification

Class	Minimum Vertical Clearance		Minimum Horizontal Clearance	
	Meter	feet	meter	feet
I	18.30	60	75	250
II	12.20	40	75	250
III	7.60	25	30	100

1. Vertical clearances are measured from the Standard High Water Level (HW)
2. For electrical/power cables an additional 3.05 m or 10 ft to be added to get minimum vertical clearance at maximum height of structure of the vessel.
3. For Class-IV waterways, general specification of Class-III waterways applies.

Source: (BIWTA, 2009, p-20)

However, in most cases the enforcement of the above clearance is not adhered to. For example, the vertical clearance over the waterways at 'Bangladesh-China Friendship Bridge' is of 40 feet over a Class-I waterways, where it should have been 60 feet (Khan, 2012, p-15).

b. **River Training While Constructing Bridges.** Proper river training though is done; it is not followed over the period to identify its effectiveness after the construction of bridge is over. This in many cases cause changes of flow of water and navigability over the period of time.

c. **Removal of Wrecks.** BIWTA is responsible for removal of sunken vessels causing navigational hazards in the inland waterways. For the purpose, two salvage vessels namely 'RUSTAM' and 'HAMZA' are being used, which were procured in 1964 and 1984 respectively. Lifting capacity of the vessels have much reduced over the period including the speed of the vessels (BIWTA, 2009, p-107). On the contrary, the size and weight of the commercial vessels has grown over the period.It is thus essential for BIWTA to procure new salvage vessels of required capability.

INLAND RIVER PORTS

Present Condition of Inland River Ports

Inland river ports have been declared by the Government over period of time in recognition of their important role serving the IWT. Inland river ports of Dhaka, Chandpur, Barisal and Khulna were inaugurated in 1967. The number of inland river ports haveincreased from 06 in 1971 to present 22 and some of the ports do not have required infrastructure to serve for the services expected from the port. In addition, a total of 379 Launch Landing Stations and around 548 Launch Ghats in the form of berthing points are scattered around the country. Despite varying degrees of facilities with wide range of difference in terms of construction of the ports, all inland river ports are graded under the same category. Differentiating by category of ports subject to importance and facilities may facilitate focusing development priorities of the inland river ports.

Dhaka Inland River Port

Dhaka, the largest inland port of the country is situated on the bank of the River Buriganga connecting to Class-I waterways. Passenger movement in this port is more prominent than any other ports having more than 30% of the total movement of passengers through inland river ports. With a volume of 29.86% of the total cargo movement through all the inland ports, it accounts for the largest volume of cargo handling in any inland port.However, the terminal building does not have adequate facilities for passengers and there is no mechanical handling arrangement of cargo.Vertical clearance under the Bangladesh-China Friendship Bridge constructed over the River Buruganga connecting Dhaka-Mawa highway is 40 ft (12m) contrary to the specified vertical clearance over a Class-I waterways (60 ft/18.30m). As such, vessels with higher masthead height configuration cannot approach the port.

Narayanganj Inland River Port

Narayanganjinland port situated on the bank of the River Sitalakhya connects Class-I waterways. It is also a ‘Port of Call’ under ‘Bangladesh-India Protocol’ and thereby contributes to national economy through regional connectivity. The port is generally used for transportation of cargo and accounts for 13% of total cargo movement through inland river ports ranking 2nd after Dhaka. However, the only crane available at Khanpur Jetty dedicated for Bangladesh-India Protocol is over 25 years old and its effective capacity has much reduced.This results a 600 ton vessel about 3 to 4 days to clear the cargo. The port has both road and railway connectivity.

Chandpur Inland River Port

Chandpur inland river port situated on the bank of the River Dakatia is located at the mouth of the meeting of three rivers, the Padma, Meghna and Dakatia connecting to Class-I waterways. Due to geographical location, all passenger carrying vessels travelling Dhaka to southern part of the country stop at Chandpur Port. Flow of the three rivers cause a serious whirlpool especially during monsoon, which vessels entering the port have to encounter. Besides being a concern for vessel safety during monsoon, the whirlpool at the entrance of the port is a serious threat to the existence of the port area due to erosion. The port has good connectivity with road and railway network.

Barisal Inland River Port

Situated on the bank of the River Kirtonkhola, Barisal inland river port serves as the gateway to southern region connecting to Class-I waterways. The port handles about 10% of the total passenger movement through inland ports and is in 2nd position after Dhaka inland port in terms of passenger handling. Despite this, till 2012 Barisal inland port did not have well equipped passenger terminal. Recently a modern terminal building has been inaugurated at Barisal inland port on 19 March 2014. In terms of cargo handling, Barisal inland port ranks 4th position combined with Ashuganj-Bhairab Bazar.

Khulna Inland River Port

Situated on the bank of the River Rupsha, Khulna inland river port is designated as a port of call under Bangladesh-India Protocol connecting to Class-I waterways. The port is connected with both railway and road network. As Mongla seaport is not connected to railway network, bulk cargoes used to arrive Khulna by IWT for onward transportation. In recent time, with the development of Noapa inland river port, most of the cargo is now diverted to Noapara for onward transportation by railway.

Noapara Inland River Port

Noapara inland river port is situated beside the River Bhairab about 10 km north of Khulna inland river port. The waterways it is connected to is not yet classified, however, the LAD available serves as Class-I route. The river port is basically for cargo transportation and does not have any facilities for passenger handling. In terms of cargo handling Noapara ranks 3rd among all the inland ports.Its utility in cargo handling is getting importance due to inclusion in Bangladesh-India Protocol as it is connected to railway network.

Narsingdi Inland River Port

Narsingdi inland river port is situated beside the River Dhanu connecting to Class-III waterways. The Port has good connectivity and to national highway. Waterway access channel to the port does not require dredging and is accessible round the year.

Patuakhali Inland River Port

The port is located beside the River Lohalia and connected to Class-III waterways. It is also connected to highway by a good connecting road. During winter navigability of the river reduces;however, it is learnt that BIWTA is not in a position to carryout yearly dredging of the river to keep the port functional (BIWTA, 2009). Vessels negotiate the siltation areas by sailing with tidal advantage.

Baghabari Inland River Port

Baghabari port located on the bank of the River Baralis connected to Class-III waterways and is exclusively dedicated to cargo handling with no passenger facilities. The port has access to Class-I waterway via the River Hurasagar flowing into the River Jamuna. The port has good road connectivity and does not have railway connection.

Ashuganj-Bhairab Bazar Inland River Port

Ashuhanj and Bhairab Bazar are two different places situated on eastern and western side respectively of the Upper Meghna River constitute a single port Ashuganj-Bhairab Bazar connecting to Class-I waterways. In terms of cargo handling, Ashuganj-BhairabBazar ranks 4th combined with Barisal inland port. Ashuganj being the port of call of Indian transit traffic deals with cargo for transshipment.

Barguna and Bhola Inland River Ports

These two inland river ports are located in the offshore area connected to Class-III waterways. Barguna inland river port is located in the coastal region on the bank of the River Bishkhali. Due to river dominated area, people of Borguna generally rely on waterways transportation though road communication is available with not so good condition of road. Bhola on the other hand being an offshore island is totally dependent on IWT. These ports are prone to river bank erosion.

Chatak, Meghnaghat, Mirkadim and Tongi Inland River Ports

The above mentioned inland river ports are the last in the list declared in 2008-2009 due to their growing importance in riverine sector. The river ports of Chatak, Meghnaghat and Tongi are all located beside national highway and Mirkadim has connectivity with Dhaka by ferry. Chatak inland port located on bank of the River Surma has importance

for supplying cement and building material to rest of the country. Mirkadim inland port located beside the River Ichamati serves Munshiganj and adjacent area for supply of foodgrain, vegetable and fish to the capital city Dhaka. Tongi inland port serves industrial and commercial city of Tongi(BIWTA, 2009).

Container Terminal Port

The container terminal constructed at Pnagao beside the River Buriganga is a landmark in the development of IWT. It will much relieve the pressure on road and railway in transporting container to and from Chittagong/Mongla to Dhaka. The terminal is constructed on the land provided by BIWTA and operated by Chittagong Port Authority (CPA). With the Pangao container terminal in operation since November 2013, IWT is expected to share about 40% of the total container transportation to and from Chittagong to Dhaka. Having capacity of 2300 TEUs, the terminal can handle 1,16,000 containers yearly.

Probable Sites for New Inland River Ports

According to the study of BIWTA appointed consultants, Sirajganj, Gaibandha and Fenchuganj/Sherpur deserve attention for establishment of inland river ports (BIWTA, 2009, p-67). In line of the stated document, a detailed feasibility study is recommended to evaluate technical aspect and economic viability of the points stated for further considerations as inland river ports.

Launch Landing Stations

Launch Landing Stations provide access to places of economic or administrative importance and serve as the lifeline for the people around the area. According to BIWTA statistics there are total 379 in number Launch Landing Stations across the waterways. Most of the stations are equipped with floating pontoons or jetties or both.

Launch Ghats

Launch Ghats are landing places without any infrastructure, where movement of passenger and goods take place by simple use of planks from the vessel to the shore. These places are generally selected by the local people on need basis According to BIWTA statistics, there are around 548 such landing places without any facilities across the waterways of the country.

FUTURE PROSPECT OF INLAND RIVER PORTS

Passenger Transportation

The analysis of total number of passenger and cargo handled by individual inland river port during the period of 2005 to 2010 indicates that there is a rising trend of passenger and cargo movement in individual inland river port and also in total (Khan, 2012). On the contrary also, a study was carried out by BIWTA and it has been estimated that the forthcoming Padma Bridge will effect passenger movement using IWT from Dhaka to south-west. In this regard, depending on bus journey time and fares, up to 30% of passengers may be diverted from IWT to road (BIWTA, 2009). Improvement of national highways may further divert the IWT passengers to roads transportation subject to requirement of time limitation and facilities available on roads transportation.

Cargo Transportation

According to BIWTA statistics of 1998-1999 relating to percentage of commodity transported by IWT, cement has the major share (27.3%) followed by food grain (18.2%) and fertilizer (17.25. The record of cargo transportation through individual ports over the past indicates that there will be substantial increase of cargo movement in the coming years) (BIWTA, 2009). However, despite the predicted increase of cargo volume in IWT Sector, forthcoming Padma Bridge and further development of National Highways may divert certain portion of fast moving cargo from the IWT to roads sector, in the coming years.

Transportation of Coal and Petroleum

For power generation, coal based electricity can be the best option since coal is the largest source of electricity in the world. (Farashuddin, 2014). The strategy if adopted with coal based power plants established beside rivers would require transportation of coal either from seaports or from northern part of Bangladesh to the designated places of power plant beside rivers. For such transportation inland waterways would get priority due to bulk transportation. Petroleum on the other hand also is ideal for transportation by IWT.

Vessel Safety

Promulgation and enforcement of vessel safety regulations in IWTis the responsibility of the Directorate of Shipping (DOS) working under the Ministry of Shipping. A study undertaken by BIWTA with data provided by the DOS covering the period of 1995 to 2005 indicates that 'collision/human element' is the main cause for accidents taking place in the inland waterways (BIWTA, 2009). According to BIWTA study, even the accidents occurred during 'bad weather' has 45% attributable to 'human element' and 17% to

bad weather (BIWTA, 2009). This study agrees with the above findings of BIWTA and highlights the fact of shortage of certified deck and engine room crew as mentioned in the IWT master Plan Study (BIWTA, 2009, p-110). Prevention of overloading at the inland port is an important factor ensuring vessel safety, which is not enforced in many occasions. This highlights the requirement of close role between DOS and BIWTA. Further in terms of trained manpower, BIWTA is responsible to conduct training of Deck and Engine Room crew, however, DOS is the competent authority to certify the competence of the personnel and provide certificate. The overlapping responsibilities require high level of coordination between these two public organs.

MAJOR CHALLENGES FOR BIWTA AND OPTIONS

Following are the major challenges of BIWTA:

a. **Maintaining Waterways.** Gradual deterioration of navigability in inland waterways obstructing vessel movement has been identified as the main problem hindering development of IWT (Planning Commission, 2008).

b. **Maintaining Inland River Ports and Launch Landing Stations.** Maintenance and development of inland river ports in order to upgrade the standard for passenger comfort is a need of the time. Development of mechanical cargo handling facility is of prime importance to ensure efficient freight handling and reduce vessel turn round time. These all need fund allocation, which need to be formulated in the planned development programme.

c. **Capacity Building.** Capacity building is a continuous task and needs appropriate attention. Training of manpower is the responsibility of BIWTA, while certification of competency is provided by DOS. This dual nature of job by two separate public organs needs to be viewed with appropriate concern.

Options for BIWTA

Following may be the options for BIWTA:

a. To overcome the challenges, BIWTA needs to focus its development activities and therefore essentially requires a Master Plan. A pragmatic dredging plan is vital to keep the waterways navigable. Hydrographic survey and dredging with procurement of more 11 in number new dredgers as planned (BIWTA: Fiveyears dredging Plan, 2013) may be considered as the key element in maintaining the waterways. This would require substantial investment in IWT.

b. A study was conducted to prepare a Master Plan in 2009 under the Planning Commission of the Government of Bangladesh with a team of experts under

the supervision of a Steering Committee, which was headed by the Secretary, Ministry of Shipping. The study for Master Plan was in pursuance of the need of sub-sector Master Plan to generate Integrated Multimodal Transport Policy (IMTP) that was supposed to be under consideration by the Cabinet (BIWTA, 2009, p-8). The study after detail investigation identified measures to upgrade BIWTA assets and recommended a 20 year investment program to revive the IWT system. However, there has been no further development on the Master Plan prepared and the proposed 20 year implementation program has not been implemented mainly due to fund constrain and low priority given to this sector (Khan, 2012, p-59). The IWT Master Plan Study despite having certain limitations,it has well identified pertinent issues and contains well formulated general information for study and policy guideline, which may be taken in consideration for required development.

EXPERIENCE OF DUTCH AND LESSONS FOR BANGLADESH

Brief Study of Dutch IWT for Generating Lessons

In line of the study conducted on inland waterways and river ports of the Netherlands, it appears that much difference is observed between the waterways of Bangladesh and the Netherlands, including the level of management. The Dutch waterways and IWT is an integral part of the European IWT contributing in regional connectivity. Unlike the waterways of Bangladesh, the waterways of the Netherlands is well navigable, and is not prone to siltation. Ports are managed by an efficient organ with educated manpower and much emphasis is given on container terminal. Vessel traffic management in the waterways is ensured by using River Information Services (RIS) providing electronic data transfer between vessels and shore. Finally, in Dutch waterways one singe public organ is tasked with maintaining waterways, port and ensuring safety aspects.

Lessons for Bangladesh

Following lessons may be generated in line with study of Dutch IWT:

a. BIWTA may enforce better management for improved services.

b. Technical competency of the concerned personnel may be ensured through regular training arrangement.

c. RIS may be introduced for vessels other than boats for better management of traffic through the inland waterways.

d. Effectiveness of the dual role of two public organs in the same sphere i.e. BIWTA and DOS in IWT may be reviewed.

RECOMMENDATIONS

The study puts forward following recommendations:

a. Required budget for BIWTA may be allocated enhancing the share of budget of transport sector to meet the capability requirement for conducting hydrographic survey, dredging and up-gradation of port facilities.

b. Planned dredging may be conducted in line with appropriate hydrographic survey to maintain the navigability of waterways, with special emphasis to the waterways having national importance.

c. Infrastructural development of inland river ports may be undertaken in line with the importance and utility of the ports.Additional berthing facilities with berthing space may be created at Sadarghat, Narsingdi and Patuakhali inland port to reduce vessel congestion and turn round time. Mechanical cargo handling facilities may be introduced at least in important ports designed for cargo handling. Priority may be given to Ashuganj, Khanpur Jetty at Narayanganj (upgrading existing crane) and Noapara due to the involvement in Bangladesh-India Protocol Route; besides Baghabari inland port due to its national importance.Terminal buildings of the inland river ports which have increase of flow of passenger movement may be upgraded with adequate facility.

d. Feasibility study to develop Launch Landing Stations may be undertaken, specially of the Landing Stations in the coastal area.

e. Specific regulations may be enforced for ensuring prescribed overhead clearance while constructing bridges and passing high tension overhead electric cables across the waterways.

f. River Training conducted for construction of bridges may be subsequently followed for further adjustment.

g. River bank erosion may be considered for establishing permanent terminal/port area.Developing an alternative site of Chandpur river port into a full-fledged inland port may be considered due to regular river bank erosion of the main port/ terminal area. In this regard, MadrassahGhat may be developed to take over port activities round the year instead of seasonal shifting the area of operation (IWT Master Plan Study, 2009).

h. Inland river ports may be classified into two Categories subject to the infrastructure and importance to conduct more focused development.

j. Industrial bases may be developed beside the river banks approachable by Class I/II/III waterways network with required facilities to use IWT for cargo transportation.

k. Feasibility study may be conducted to justify re-classification of the internal waterways due to reduction of navigable waterways over the period of time.

CONCLUSION

Waterways and inland water ports are the lifeline of Bangladesh having much potential for the national development. Despite the importance, IWT has not developed as per the requirement due to fund constrain of BIWTA and general tendency of negligence. Lack of proper hydrographic survey and systematic dredging has raised the requirement of Re-Classification of the waterways, which is not possible within short period of time. Establishment of Core-Waterways Network may be an option, but needs much deliberation prior to its adoption. At present, planned dredging of the waterways on priority basis may be an option as is already being undertaken by BIWTA to keep the important waterways navigable. Development of inland water ports is the need of the time to sustain the development pattern of handling of passenger and goods, requiring appropriate prioritization and budget allocation. To materialize the stated developments, a pragmatic Master Plan is essential and BIWTA may consider a holistic approach to fulfill the obligation it is entrusted with.

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