



Shisham Priyadarshini, Partner, Rajani Associates



Amish Shroff, Principal Associate, Rajani Associates

## Inland Waterways : The Way Forward

### CONVERTING RIVERS TO NATIONAL WATERWAYS

Inland waterways in India makes up a paltry 3% of the total transport compared with China's 47%; in the European Union it stands at 44%. India is estimated to have nearly 14,500 km of navigable inland waterways & can open up economic opportunities to new regions. **AMISH SHROFF**, Principal Associate at Rajani Associates and **SHISHAM PRIYADARSHINI**, Partner at Rajani Associates explore the possibilities

**W**aterways have played a critical role in development of civilizations around the world, such as the Sumerian civilization on the flood plains of river Tigris and Euphrates, the Egyptian civilization on the Nile and the Indus Valley civilization on the river banks of Indus. Indus Valley civilization, brought to light the existence of well-built ports and docks in Lothal which dates back to the 3rd millennium BC. These ports were used as a prime source of trade and transportation over many years. However, during the 19th century, with the development of roadways and railways, the prospect of this mode of transportation got adversely affected.

#### Inland Waterways Authority of India

Taking a cue from our past and realising the resource potential of 14,500 kms of navigable inland waterways (which comprises rivers, canals, backwaters, creeks etc.), the Government in the year 1986 set up the Inland Waterways Authority of India (IWAI) under the Inland Waterways Authority of India Act, 1985 (IWA Act) for revamping the inland waterways for shipping and navigation. The IWA Act empowers the Government to declare potential waterways feasible for development of shipping and navigation as National Waterways. The IWAI under the administrative control of Ministry of Shipping acts as a statutory and advisory

body for both the central government and the state government and primarily undertakes projects for development and maintenance of inland waterways transport (IWT) infrastructure on National Waterways through grants received from Ministry of Shipping, Road Transport and Highways. The IWAI is also responsible for conducting surveys, investigations, and techno-economic feasibility analysis for developing National Waterways. Some other functions of the IWAI include regulation of traffic, study of the transport requirement, and coordination of inland water transport with other modes of transport, establishment and maintenance of pilotage, to regulate the construction or alteration of structures on across or under the National Waterways.

#### National Waterways

IWT is an economic, fuel-efficient, environmental-friendly and low-cost mode of transport and commerce. However, despite a glorious history and abundance of resources, out of the total navigable waterways, only 4,300 km comprising 5 waterways have been designated as National Waterways. While the state government can regulate and make policies for the development of the inland waterways, the central government has power to develop those inland waterways that are recognised as National Waterways. The government while exercising its powers under the IWA Act, enacted the National Waterways Act 2016, and has declared 106 additional inland waterways, as the national waterways. After the inclusion of 106 additional inland waterways to the existing 5 national waterways, the

total number of national waterways goes up to 111.

For the systematic development of 111 National Waterways, the government has divided National Waterways into the following three (3) categories:

- Category 1 includes 8 rivers for which the government intends to release tenders for awarding EPC work;
- Category 2 includes 46 rivers for which the government intends to conduct feasibility and thereafter prepare detailed project report on the viability; and
- Category 3 includes 52 rivers for which the government intends to release tenders for the conduct of feasibility test and preparation of detailed project report for such feasible waterways.

#### Mammoth Task

Developing 111 National Waterways is an ambitious plan and mere identification of these National Waterways alone is not enough as there are several issues that need to be effectively addressed to optimally utilize the National Waterways to achieve the desired results. Most waterways in the country require constant dredging on account of heavy silting and hence for making the projects effective adequate infrastructure for periodical dredging may be required. Besides the government has several other factors to consider like (i) conducting the techno-feasibility study (ii) providing infrastructure for docking and inland shipping ports, (iii) identifying critical gaps in transport sector such as roads, railways etc. (iv) providing seamless connectivity with the roads and railways, (v) cleaning of the rivers to make them conducive for travel and tourism, (vi)



environmental and ecological concerns, (vii) proper planning, (viii) clear policies, (ix) adequate investments for this sector, and (x) timely completion of the projects.

### Huge Requirement of Investment

The task of developing the National Waterways will also require enormous investments. The Government in concert with the IWA can explore various funding options available in the IWA Act which includes charging of fees, granting loan, setting-up of dedicated funds. In addition, the IWA Act itself provides for various modes and options of funding like issue of bonds, debentures or by way of issue of other instruments through which the funds can be raised.

Considering the government has its own limitations, the involvement of private players is inevitable in varied areas like construction and operation of terminals, designing and construction of vessels and barges, fairway development including hydrographic surveys, navigational aids, to name a few. All this again will involve lot of investment. In order to attract the private investments, the government can also pitch in and infuse funds initially in this sector and further support the private players by giving various concessions and tax incentives coupled with assured returns.

### Need to Align the Interests of Project Participants

Besides the funding requirement, looking into the past experience in public private partnership (PPP) projects, there is also the need to create positive atmosphere among the private players who intend to participate in such projects. The need of the hour is to realign the whole inland waterways sector, by amending the legal and regulatory framework taking into consideration the requirement of this sector and the project participants like the project company, the sponsors, lenders, equity investors, advisors (financial, technical, legal). The substantive role for public private partnership as a means for harnessing private sector investment cannot be ignored. In

order to encourage and facilitate the private investors, the process of awarding and undertaking the PPP projects requires to be streamlined and made transparent and competitive. There is also need to standardise certain vital interpretations and processes of PPP to provide clear and consistent common position. Given the complexity and the varied nature of the issues involved, the model document available with the government departments require to be updated : to provide amongst other terms conditions for clear roles and responsibilities and adequate risk mitigation steps.

### Risk Mitigation

Like any other project for the successful implementation of National Waterways project, the identification of the associated risk factors is essential at the outset for the project participants to have a close understanding and to factor appropriate risk mitigation steps. The major risk associated are related to the feasibility of the project which can be identified at the stage when the techno-feasibility studies are being undertaken by the various agencies. Once the project is awarded there is construction and operation risk, besides the financial, political, regulatory and environmental risks. Considering the current market scenario it is also pertinent to factor the cost of inflation, foreign exchange, liquidity and pricing risk while bidding for the projects.

Complex transaction require various and varied interlocking transaction documents, which require to be carefully drafted and negotiated keeping in mind the nuances of the transaction and interest of the project participants.

### Conclusion

Water being a scarce resource with competing needs, the use of water for transport may be difficult to justify. However, considering the various advantages and taking into account the commercial viability, the numerous opportunities for employment and economic development, the National Waterways can be effectively used as the way forward. [Kan]

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**India**

INTERNATIONAL TRADE AND EXHIBITIONS INDIA PVT LTD  
CIN No. U92490DL2004PTC124343  
1106-07, Kalkaji Building, 26 K.G Marg, New Delhi, India  
Tel: +91 11 40262626, Email: events@iti-in

**China**  
Jy Zhang  
Project Manager  
CT China  
Tel: +86 10 5795 2655 ext. 800  
Email: jy.zhang@iti-china.com

**Middle East**  
Tarek Saboura  
Project Manager  
ETI GULF LLC  
Tel: +971 4 332974  
Email: tarek.saboura@eti-dubai.com

**Taiwan**  
Sandra Liung  
Business Development Services Co., Ltd.  
Taiwan  
Tel: +886 2 8269 3618  
Email: sandra.liung@eti-taiwan.com

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