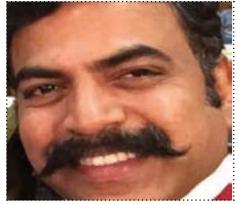
"If the highest aim of a captain were to preserve his ship, he would keep it in port St. Thomas Aquinas

Blue Economy – Wave 78

ARTICLE

(Series on "Blue Economy" By Capt. Gajanan Karanjikar)



Capt. Gajanan Karanjikar, Blue **Economy Social Activist & Multi Modal Logistics Expert**

Blue Economy and National waterways Energy (cont..)

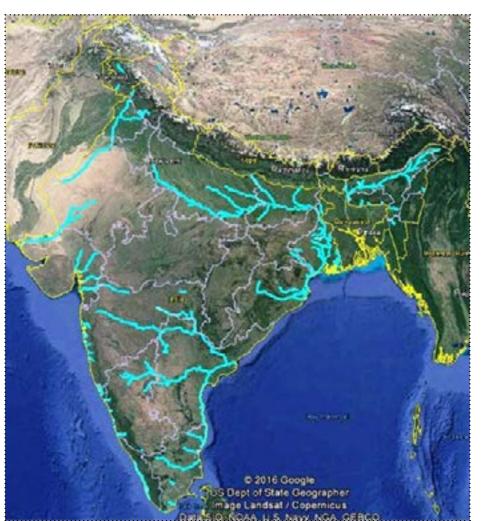
India's 14,500 km of navigable inland waterways are being rapidly developed. The first containerized cargo has already transited on the India-Bangladesh Protocol. Cargo ships are routinely ferrying between Farakka and Haldia and these are significant developments.

The national waterways go through almost all major rivers of the India. In India a large number of traditional wooden boats open on top operate in the rivers carrying passengers and cargo and as fishing vessels in rivers, river mouths, lakes and near coastal areas. These are not covered by any rules for safety. So these vessels are not only unsafe, but also the contribute to local area pollution both in terms of CO2 emission and noise. Of late there has been a lot of awareness with regard to this and safety rules for such boats may be made shortly. Cochin water metro boats will be driven by battery power. There is a large effort to use batteries even for very small powers and effort is also on for augmenting such power with solar energy.

(the map has been compiled by one of the authors Jinda Sandbhor, with the support of Ahemad Shaikh, Manthan Adhyayan Kendra. Since the National Waterways Act, 2016 only gives the coordinates for the start and end points, and details of the intervening path are only occasionally given, the waterways shown on the maps have been traced out using the end points and rivers/canals/water bodies as seen on the map.)

One of the major drawbacks the nation had was the lack of a shallow water test facility. The Shipping Ministry has sanctioned a major research and test facility at IIT Kharagpur by setting up a Centre of Inland and Coastal Maritime Technology. This will have a testing tank facility having dimensions 112m x 16m x 4m as a replacement to the existing





overworked testing facility. The new tank will have a facility for shallow water testing at any draught. This will have a CPMC carriage with x, y and ϕ motion capability. This tank will also have a wave maker at one end and a wave absorber at the other end.

Iwai, mandated to develop the inland water transportation system in country has proposed a project "capacity augmentation of the nation waterway 1 (1620 kms, with minimum water depth of 2.5-3M) between haldia and Allahabad". National waterway 1(nw 1) has the potential to develop into aMost economic, reliable, safe and environmentally friendly form of transport.

Apart from the waterways or the channels themselves, these national waterways will also need, and hence involve the construction of other related infrastructure facilities like riverside jetties andports, navigational aids and control points, material handling sites, storage godowns, bargemaintenance and repairing centers, refuelling points, associated dredging equipment, parking areasfor vessels and so on. Some of the port/terminals are planned as multimodal hubs which willconnect rail, road and waterways, for e.g., the multi-modal hub at Varanasi.

Moreover, there is a plan to link many of the national waterways to each other, to roads andrailways and to major ports. This scheme is being called the Integrated National WaterwaysTransportation Grid. According to the National

Waterway Transportation Grid Studyby InlandWaterway Authority of India:

National "Integrated Waterways Transportation Grid study is undertaken with an aim to link all National Waterwaysto National/ State Highways, Railways and Sea Ports so that all these waterways become an integral part of the total transportation grid."

The study led to a Cabinet note proposing setting up of Integrated National WaterwaysTransportation Grid at an estimated cost of Rs. 2631 crore for phase I (2015-18) and Rs. 20132 crorefor phase-II (2018-23) totalling to Rs. 22763

Another aim is to also connect the waterways to the different economic corridors being planned like Eastern Freight corridor, Western Freight Corridor as well projects like the Sagarmala Project, which aims to promote port-led direct and indirect development. According to the Vision for CostalShipping Tourism and regional Development of the Shipping Ministry,

"The Sagar Mala project at hand envisages seamless connectivity of seaborne cargo with inland waterways for hinterland movement."

Under this project, IWAI has proposed to develop a multimodal inland water terminal at Ramnagar, on River ganga in Varanasi district in Uttar Pradesh. This terminal will provide the berthing facility for shipsand loading and unloading facility for the goods. The construction and operation of this facility will have associated social and environmental impacts, requiring effective mitigation measures for its elimination and a minimization. Thus, detailed environmental & social impact assessment study has been carried outfor assessing the impacts associated with development and operation of the proposed terminal. EIA reportCovers in detail the environmental and social aspects of the proposed terminal bothConstruction/development during and operation stage.

