

# SAMUDRAMANTHAN

**12<sup>th</sup>**  
edition

In Association With



&



## CASE STUDY

- Case Description
- Questionnaire
- Rules & Regulations

**Topic: Ways and Means for  
Quantum Jump in Share of Coastal  
Shipping in Overall Freight Market in India**

Indian Institute of Technology  
Kharagpur



# Ways and Means for Quantum Jump in Share of Coastal Shipping in Overall Freight Market in India

## Case Description

Logistics is the most crucial driver of competitiveness in the modern economy, and an important and integral factor of the value-chain that links production to consumption. It therefore needs to be seen as a core activity and not a supporting pillar of any economic activity.

Logistics costs to Indian economy are estimated at 13–14% of India's GDP, which is significantly higher than costs of developed nations of USA (9.5% of GDP) and Germany (~8% of total GDP). Recognizing the critical contribution of the logistics sector for improving efficiencies in domestic and global trade networks, the Indian Government has set a target of reducing logistics cost to GDP from 14% to 10% by 2022.

To optimally meet the demand of growing economy, India needs to lay emphasis on logistics improvement through an integrated approach aligning the development of each element of logistics infrastructure—rail, roads, ports and terminals, airports, waterways, and storage/interchange segments.

It is well established that compared to other modes, waterway transportation is a cost-effective, sustainable and environment friendly mode of movement. Maritime shipping is the world's most carbon-efficient form of transportation – far more efficient than road or rail transport. On a per metric ton of cargo basis a large container vessel emits half the carbon dioxide than rail and almost one-sixth to that of road transport, thus, playing an important role in reducing carbon emission and pollution in the mainland.

In spite of these advantages of waterway movement, India is not able to fully utilize its 7,500 km coastline and over 14,000 km of navigable inland waterways. In the past few years, several initiatives have been taken to promote coastal shipping such as green channel clearance, priority berthing, discount on vessel and cargo related etc.

A Rapid growth of coastal shipping of around 13% Compounded Annual Growth Rate (CAGR) in the last two years compared to about 4% in preceding years underline the positive impact of these initiatives. However, the country has not realized the full potential of its waterways. With only 6.4% modal share of water transport, India's transport modal share is relatively more skewed towards road and rail. This has significant implications on congestion and pollution levels on key land-based trade routes. By contrast, waterways contribute to 24% in People's Republic of China's (PRC) freight modal mix, 17% in Australia, 11% in Germany, making India's waterway modal share lowest amongst top 10 economies of the world. Moreover, developing economics of South Asia such as Bangladesh (16%) and Thailand (12%) too have a higher share of water-based transport than India.

The benefits of water transport and India's peninsular geography provides an excellent opportunity to tap an environmentally friendly water-based modal transport that would complement rail and road transport mode. To realize the vast potential of coastal shipping sector, a more focused approach is required to identify the key issues that are preventing the growth of coastal shipping in the country.

## Questionnaire

Comment and expand on the above with reference to the following thoughts:

1. The challenges faced by the Water Transport which explain the low share of coastal shipping *in spite of water transport cost being cheaper than road/rail transportation cost.*
2. Cargo availability for coastal shipping and a comparative study of the same with the case in rail and road means of transport.
3. Availability of vessels for cargo shipping.
4. Inadequacies in various facets of the process which leads to overall inefficiency of waterways mode of transport.

5. *Short Term, Medium Term and Long Term* strategies/measures that can be adopted to assist in quantum Jump in Share of Coastal Shipping in Overall Freight Market in India.
6. Some novel ideas that can be piloted to address the problem statement.

## Rules & Regulations

1. The event will comprise of 2 rounds:
  1. Round-1: An Abstract needs to be submitted by all the teams containing the basic idea of the proposed solution. The abstracts will be evaluated for their relevance and supremacy and the shortlisted teams will be notified for their qualification.
  2. Round-2(Presentation): The final round, Round 2 will be organized in IIT Kharagpur during the meet. The selected teams will make a PowerPoint presentation describing their solution and strategies. Teams which are not present for their presentation will be disqualified.
2. The abstracts for round 1 are to be submitted online before 11:59 pm, 2<sup>nd</sup> March 2020 at [samudramanthan.iitkgp.2020@gmail.com](mailto:samudramanthan.iitkgp.2020@gmail.com).
3. The maximum permissible number of members in a participating team is 4. However, they need not belong to the same institute.
4. The presentation for the final round will be in PowerPoint (.pptx) format only.
5. Diagrams and pictorial information should be neat and clearly labelled and reference information including the images and tables must be properly acknowledged giving credit to their very source.

6. The submissions will be checked for plagiarism and shall not be accepted if found copied.
  7. The event consists of 100 points with initial abstract comprising of 35 points and presentation holding 65 points.
  8. The presentation time shall be 15 minutes, 10 minutes for the presentation followed by a 5 minutes Q/A session.
  9. The teams have to wrap up the presentation within the given limits. A warning bell shall be issued one minute before the end of 15 minutes. Failing to abide by the time limit will lead to negative marking or even disqualification.
  10. Extra marks will be awarded for teams answering the on spot questions as well as for posing questions to other teams (Only valid questions posed will be awarded marks and vague questions will be subjected to negative scoring as well).
  11. The judgement will be given on the overall richness of the presentation.
  12. The decision of the judges will be the final.
- 