

VRV Super City Liner Service



Overview , present scenario and way forward...

Inland Water transport



□ Transport by



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Coastal Shipping



- ❑ Coastal shipping is the most energy efficient and comparatively cheaper mode of transport for carriage of bulk traffics over long hauls, particularly when the origin and destination of a traffic stream is located along the coast.
- ❑ It is ideally suited to carry long distance bulk cargo and passenger traffic, especially for destinations located on the waterfront.
- ❑ Coastal shipping can, play an important role in integrated transport network of the country, particularly when inland modes are strained.



- Coastal shipping has several advantages when compared with other modes of transport.
- As a reliable mode of transport that is fuel efficient and eco-friendly, coastal shipping has few parallels. Most of the larger economies in the world have developed efficient coastal transport systems.
- River Sea transport is in its infancy in India. Considering its potential and the opportunities ahead, river sea transport has a long way to go.
- The regulations applicable to coastal ships were considered to very elaborate making its

Environmental Perspective



- Inland barge transport produces far fewer emissions of carbon dioxide for each ton of cargo moved compared to transport by truck or rail ,according to a recent study conducted by the Texas Transportation Institute, comparing transport emissions per ton-mile.
- Emissions generated while shipping one ton of cargo one mile by rail-39%,truck-371% more CO2 emission than inland barge.

Earlier Constraints



- Until the new changes in river sea rules were announced, operating ships in the Indian Coast have been a relatively costly affair.
- The specification of the ships required to do the coastal transport had been quite stringent making the cost of operation uneconomic.
- Lack of port infrastructure had also been a hindrance to the development of coastal trade.

Recent Developments



- With the recent amendments, the capital cost has reduced substantially owing to the construction parameters of the vessels which are not as involved as that of larger ships. Moreover, the competency levels of the onboard personnel are also not as stringent as ocean going vessels, lowering the crewing cost.
- This opens up an avenue for smaller ships of relatively less operating costs to trade in the Indian coast.
- Newer opportunities have now opened up and an economically viable service can be operated between many minor ports and some of the major ports.
- Ships can now parcel smaller lots of cargoes and operate regularly not only between major ports but also between many of the minor ports. By directly calling the minor ports, overall cost of transportation can be brought down significantly.

Liner Shipping



- The concept of Liner Shipping involves ships plying between regular ports of call with a pre-determined frequency and with a declared tariff structure.
- Such a service can be successful only if a combination of cargoes that can absorb higher freight levels is and those cargoes which cannot attract the higher freight levels are carried together.

Brief Note On Cargoes



- ▮ Some of the dry cargoes which absorb higher freight levels are steels and steel products, long pipes, other over dimensional cargoes such as structural items and project cargoes, heavy machinery, hazardous cargoes and automobiles.
- ▮ A closer look at these cargoes shows that there are opportunities in attracting these cargoes to the coastal trans



Roll-on-Roll-off ships (Ro-Ro)

- ❑ Ferries are now employed on a multitude trade routes based on Roll-on-Roll-off concept.
- ❑ This facilitates loading and unloading of all types of cargoes which can be rolled on horizontally including cars, lorries, and other wheeled type of cargoes.
- ❑ Most large Ro-Ro vessels carry their own specially designed cargo handling facilities.
- ❑ This type of cargo handling facilities helps to load and unload a host of non-wheeled commodities such as pallets bundled goods, pre-slung bags and containers.



- ❑ The cargo operations in a RO-RO ship are extremely speedier and are independent of special shore

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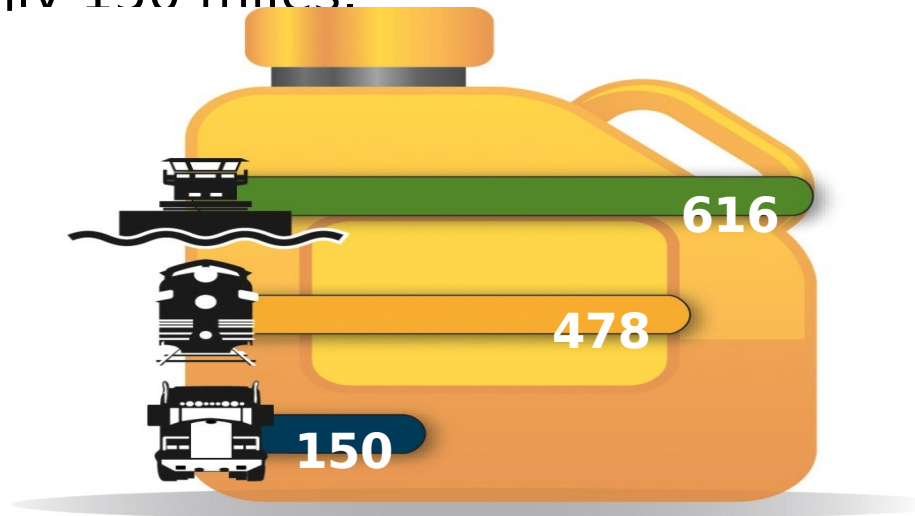
Roll-on-Roll-off ships (Ro-Ro)

- Heavy earth moving equipment, automobiles, trailers laden with over dimensional cargoes and the likes can be driven into these ships at the origin and can be driven out at a point very close to their final destination.
- There may not be need for handling gear as the trailers or wheeled units can be driven in



Moving Freight Efficiently

- ▣ **Transporting freight by water is also the most energy-efficient choice.**
- ▣ Barges can move one ton of cargo 616 miles per gallon of fuel. A rail car would move the same ton of cargo 478 miles, and a truck only 150 miles.

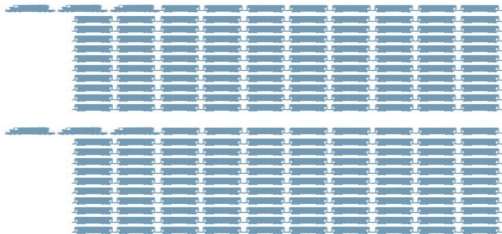


One 15-Barge Tow Equals 216 Rail Cars or 1,050 Trucks

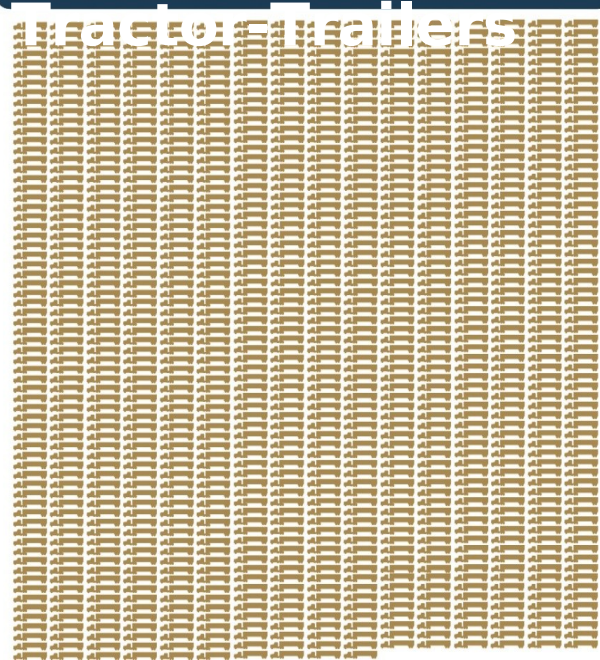
One 15-Barge Tow



216 Rail Cars + 6 Locomotives



1,050 Large Semi



Conclusion

- The demand for a transport system to supplement the road and rail system can in no way be over looked.
- Increasing the capacity of the road and the rail network to meet the requirement of a growing economy of the size of India is no mean task.
- The vast coast line in India with its port network of 12 Major ports, a few mega ports and nearly 200 minor ports can be used to

- The key to this challenge is the river sea vessel. These small vessels can turn into work horses that move cargoes directly to small towns and remote locations (minor ports) away from the congestion of big cities and major ports.
- Let us look forward to a time when India can boast of hundreds of such ships meandering their way in the coast carrying a potpourri of cargoes to meet the requirements of a modern day India which, according to Goldman Sachs, will have an economy as big as the USA in 2047.

- As the opportunity exists the following are the key aspects to take this forward.
- Developing infrastructure like smaller ship yards to design and develop smaller crafts like the coastal passenger liners, coastal cargo liners and coastal RO-RO liners.
- Visakhapatnam-Kakinada region is the best for this type of Yards as the land availability is there for the construction and the required skilled manpower is available.

A Freight Transportation Solution for the Future



With the least impact of any surface mode on air quality, the environment, and public safety, as well as capacity to spare, inland waterways is a transportation

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Thank you
for your attention

