

Vizhinjam India's first Transshipment Port

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Abstract

Vizhinjam is India's First Mega Transshipment Container Terminal is located at Vizhinjam in the State of Kerala. It is an ambitious plan of APSEZ (Adani Ports and Special Economic Zone). Vizhinjam has definite multiplier effects for the Kerala economy. It can generate ten of thousands of indirect jobs by promoting industrial development across Kerala. It will improve Kerala's economy and generate direct and indirect jobs. Vizhinjam has natural depth of 18-24 m and it is a green field port with high levels of automation and being a State port is outside the purview of Tamp restrictions. The agreement granting concession for 40 years to the Adani Group was signed on 17th August, 2015 between Adani Vizhinjam Port Pvt Limited and Government of Kerala for the development of this ambitious, green-field project. It will be India's gateway to international transshipment. Hence the present study attempts to understand the project of Vizhinjam as India's First Transshipment Port.

KEYWORDS: Transshipment, Kerala, Adani Ports and SEZ Private Limited (APSPL)

Introduction:

There has been a sound growth of container traffic at the Indian ports. Majority of these ports rely on direct services or use far off ports for their transshipment needs. This necessitates the establishment of an International Deepwater Seaport and Container Transshipment Terminal in the Southern Indian Peninsula.

The port is proposed at Vizhinjam, 16 km away from Thiruvananthapuram, capital of State of Kerala. Kerala being the southern most state in India beset by Arabian Sea. The proposed Vizhinjam port is just 10 nautical miles from the International Shipping Lane. The Vizhinjam port is endowed with a natural seawater depth of up to 24 m as close as one nautical mile from the seacoast. Due to this natural depth, Vizhinjam can attract the largest container vessels currently in operation and also the future mega container carriers. Site needs minimal capital dredging thus the project cost and maintenance cost will be minimum.

Figure I: Location of Vizhinjam Port



Adani Ports and SEZ Private Limited (APSPL) was the lone bidder with quoted grant amount of Rs 1635 crore. Vizhinjam is an ambitious plan of APSEZ to develop India's first Mega Transshipment Container Terminal. The project, to be developed under Design, Build, Finance, Operate and Transfer (DBFOT) mode will be completed in four phases.

Based on a market study performed by Drewry Shipping Consultants, container traffic, especially transshipment of containers, is identified as the main market potential. Besides that, there is potential for Multi-Purpose cargo, petroleum products and possibly even cruise liners.

An overview of the market potential for Vizhinjam is presented below (Study performed by Drewry Shipping Consultants)

Table No I : An Overview of the Market Potential for Vizhinjam

	Unit	Phase 1		Phase 2		Phase 3	
		Base	High	Base	High	Base	High
Container Terminal							
Gateway Container Traffic	(TEU)	138,459	152,232	392,371	452,635	768,904	922,563
Transshipment Container Traffic	(TEU)	683,798	769,123	1,292,842	190,437	2054545	3,151,126
Total	(TEU)	822,256	921,356	1685,212	2359,071	2,823,449	4,073,689
Vessel calls-main liners	(#)	156	-	312	-	520	-
Vessel calls-feeders	(#)	260	-	312	-	468	-

Multi Purpose terminal							
Fertiliser and FRM	(tons)	20000	-	180000	-	540000	-
Timber	(tons)	24000	-	91,000	-	104,000	-
Raw Casher(Break-bulk	(tons)	63000	-	88000	-	133,000	-
Total	(tons)	107,000	-	359,000	-	777,000	-
Vessel calls	(tons)	n/a		n/a	-	n/a	--
Liquid terminal							
Petro Products	(tons)	159,000	-	518,000	-	1051,000	-
Total	(tons)	159,000	-	518,000	-	1051,000	-
Vessel Cells	(#)	n/a		n/a	-	n/a	-
Cruise Terminal							
Vessel Cells	(#)	30	-	60	-	120	-

Objective of the study

To understand the cost and benefits of the Project Vizhinjam as transshipment port in India.

Research methodology

The research study is conceptual study which is based on secondary data. The research is purely qualitative research with explorative techniques being used.

Rationale of Vizhinjam Project:

Indian ports need to keep up with the changing trends in international trade to become competitive. Ports all over the world are handling container ships of 16000 TEUs (twenty-foot equivalent units, or the size of standard 20 feet long container), while Indian major ports still accommodate a maximum of 9000 TEUs. Average turn-around time of a vessel from an Indian port is one day, while it's four –six hours in the case of Singapore. Even today, some of the major ports handle cargo manually, adding not just to cost but also delayed evacuation of cargo from ports. Either the ports function much lower than their actual capacity, or handle higher volume of cargo than their capacity, leading to congestion due to infrastructural deficits.

The main rationale behind the Vizhinjam project is its proximity to international East-West Shipping route, deep natural draft and reduction in import/export cost. It will cater primarily to transshipment traffic. According to VISL (Vizhinjam International Seaports limited) estimates, of the total vessels expected to call at the port, 80% will account for transshipment of which 60% will be foreign ships. Only 20% of the traffic will handle gate way cargo. According to Drewry, as a part of study commissioned by VISL shows

that Colombo handles 35% of the Indian Sub-continent (ISC) transshipment traffic. Only around 4% of ISC transshipment is handled by other ports within the subcontinent. Hence Vizhinjam will attract transshipment from these ports and increase India's share in the transshipment business of the region.

Vizhinjam is located right on the coast and hence does not need a channel like estuarine ports such as Ernakulam. Deep water ports, that typically are located on the coast and make use of breakwaters have now taken over older, shallower, estuarine ports like Kolkata, Shanghai or London.

The key Suez-Malacca shipping lane runs very close to Vizhinjam, some ten nautical miles away, much closer than to any other Indian port. With changing technology, bigger vessels -- such as the 19,224 TEU MSC Oscar, the 19,100 TEU CSCL Globe or the 18,000 TEU Maersk Triple-E class -- are becoming popular because of their economies of scale and the consequent reduction in shipping costs. ("Triple E" refers to "Economies of scale", "Energy efficient" and "environmentally improved"; the TEU figure correlates to the number of twenty-foot containers that can be carried by the vessel).

Vizhinjam will need lower maintenance dredging because the natural depth within 1Nm of the shore is over 25m. Any minor issues that do still arise with sediment transport due to the breakwater construction can be easily overcome with sediment bypass system that pumps sediment from one side of the port to the other to prevent differential erosion and deposition.

Figure II: Benefit of Vizhinjam Project

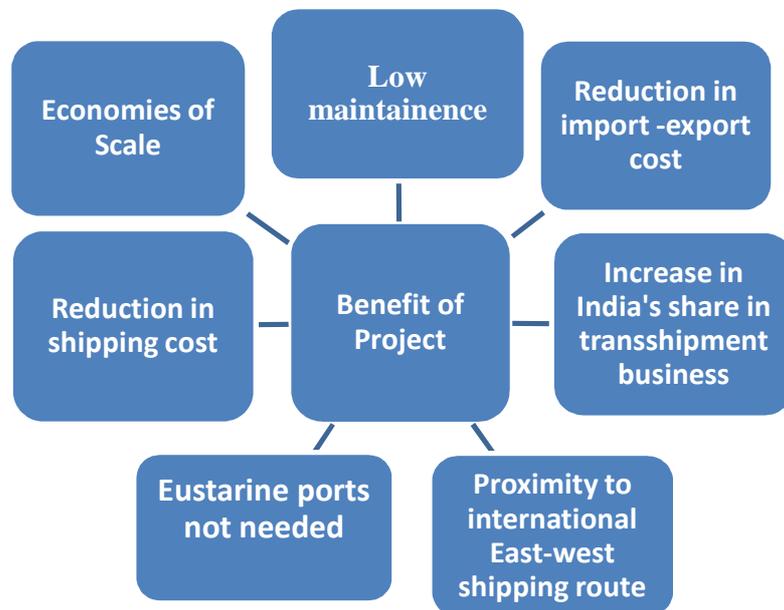


Table II : Cost of the Project

Sr no	Nature of Work	Total cost
1	Dredging and reclamation , development of roads of berths, roads, substations, superstructure and equipment and operation	4089
2	Funding and Development of breakwater and fishing harbour	1463
3	Cost of external infrastructure	1973
	Total	7525

Source: CAG, Audit Report No.4 (PSUs) for the year ended 31st March 2016

Table III: Net Incremental Economic Benefits of the Project

Net Incremental Economic Benefits	Economic Benefit India (incl Kerala)	Economic Benefit Kerala
Incremental Direct Economic Benefits		
Transshipment to India		
Reduced Transshipment to India	41	-
Economic Benefits from port operations	5	5
Transshipment to outside India (Pakistan, Bangladesh)		
Economic benefits from port operations	2	
Gateway traffic		
Reduction of hinterland transportation costs	55	46
Concession payments		
Concession lease fees	0	
(Corporate) Tax payment by concessionaires	29	29
Revenues from berth dues and port dues	8	8
Construction		
Economic benefits during construction of port	47	46
Incremental Indirect Economic Benefits		
Employment		
Benefits from direct employment at the terminal	18	18
Incremental Economic activity due to reduced transportation cost		
Reduced transshipment cost to India	4	-
Reduced hinterland transportation cost	5	5
TOTAL	214	159

Source: IFC-Vizhinjam Preliminary Project Plan

Form the above analysis it can be seen that there is economic benefit for India as a whole of 214 million USD (Net Present value) and close to 160 million for the state of Kerala.

Other non-quantified benefits:

- Strengthening the role of South India as transshipment hub
- Attracting other maritime business in the future
- Economic progress and pride among the people of Kerala

Advantages of Vizhinjam are:

- Availability of 20m contour within one nautical mile from the coast.
- Minimal littoral drift along the coast, hardly any maintenance dredging required.
- Links to national/regional road, rail network
- Flexibility in design and expansion being a Greenfield project
- Proximity to International shipping route
- Negligible maintenance dredging
- No tariff regulations
- Near to State Capital city, that has an International airport, the required human resources and well developed social infrastructure.
- Scope for tourism infrastructure development in future due to proximity to Kovalam and Poovar.

Few Criticism about the Project

- There is strong opposition from the fishermen community of the place as the port will bring huge traffic because of which their life will become miserable.
- As per Expert Appraisal Committee for CRZ (Coastal regulations zone) the construction of seaport would alter the natural geography of the coast and affect the marine ecosystem along the coast of Kerala. It will impact highly marginalized and low income community.
- Based on International Financial Corporation report , a port based primarily on transshipment traffic is a high-risk investment that not many credible and experienced investors will not be willing to bid. It was also observed that Vizhinjam project does not have significant linkages and synergies with the local economy and so one of the key priorities of the Government of Kerala i.e development of Kerala, is unlikely to be served optimally, if the port develops primarily as a transshipment port.
- As high investment is required in constructing a world class port and also there is lot of competition from foreign ports, the Vizhinjam port is projected to have relatively low revenues because of low traffic and low tariffs. Also cash flows are not enough to support high levels of debt.
- As per the findings of the study conducted by Ernst &Young Feasibility Report, the tariffs at Vizhinjam are to be capped at Cochin rates for gateway traffic and Colombo rates for transshipment. Even after discount upto 35% over Colombo rates to attract vessels, tariff does not come close to pose any serious threat to Colombo, which is also planning to expand its capacity.
- According to the Feasibility Report submitted to VISL in 2015, the project is not financially viable because of long gestation periods and limited returns. It

is seen as a glorified real estate project with no real contribution to the state exchequer.

Conclusion

Vizhinjam project aims to fulfil the need of providing Transshipment on Indian cost. It has more advantages compared to Colombo and if developed can be harbour of panamax class and futuristic vessel . If the port is built it can be in the best interest of Thiruvananthapuram and India as a whole.

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