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2007

Online at <https://mpa.ub.uni-muenchen.de/13965/>  
MPRA Paper No. 13965, posted 11 Mar 2009 15:24 UTC

**Socio-economic Impact of Sethusamudram Project**  
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**Introduction**

Any major development project has both benefits and disadvantages to the society. Many development projects have very high economic benefit and at the same time lead to environmental hazard. One such project is Sethudamudram project initiated by Government of India. This is a project which aims at minimising the distance of navigation for the goods transport in the sea. This paper is an attempt to study the socio-economic impact of the project based on the secondary data.

**Facts on EIA for Sethudamudram Project**

Sethusamudram Ship Canal Project was initiated by ministry of Shipping, Government of India. This project envisages creation of a ship canal to suit different drafts namely, 9.15 m, 10.7 m and 12.8 m through dredging/excavation in Adams Bridge and parts of Palk Bay. The proposed navigation route will originate from Tuticorin new harbour in the Gulf of Mannar(GOM) using available navigation depths (>20 m) up to south east of Pamban Island, pass through a canal created in Adams Bridge within the international boundary and proceed parallel to the International Medial Line for fishing rights as the Bengal channel. In Palk Bay area availability of depths in middle channel, capital dredging across Adams Bridge and in Palk Strait and continuous maintenance dredging along the proposed transit are the critical project related issues. It is reported that the navigation will be used in Gulf of Mannar from Tuticorin Port to Adam's Bridge 20 km long, 300 m width canal with 10.7 m draft with two way controlled traffic will be created by dredging shallow area of Adam's Bridge upto 12 m depth. It is also reported there will also be a similar excavation in Palk Strait to achieve required draft over a stretch of around 36km.

According to some activists along the coast in the Gulf of Mannar and the Palk Bay there are 138 villages and towns spread over 5 districts. The socio-economic profile of the fishermen in the villages of Gulf of Mannar coast is low, and more than 40% of families are in debt. While the local people welcome the project, they might have an apprehension that the construction of the canal might result in a reduction in their fishery income.

**Socio-economic Impact**

The canal is aimed at establishing a continuous navigable sea route around peninsular coast within the Indian territorial waters, reduce shipping distance by about 400 nautical miles and voyage time of about 36 hours as also the attendant operating costs. It is intended that the canal will become a valuable asset from national defence and security point of view enabling easier

and quicker access between the coasts. It is also found that due to the construction infrastructure in the island, the land access, now available to the local fisher men, to Dhanushkody area for traditional fishing will be hindered unless alternative arrangements are made. The dredging and shipping operations will have to be so regulated as to cause minimum disturbance to the normal fishing activities. The project envisaged to provide employment opportunities and avenues of additional income through establishment of small ancillary industries. It is also projected that the project will also trigger development of coastal trade between the ports south and north of Rameshwaram consequently reducing the load and congestion on railways and roadways. The project aims at saving considerable foreign exchange through reduction in oil import bill and generate revenue income from dues levied on ships transiting the canal which will subsequently add to the national economy. It is also reported that initiatives of GoI in port sector viz. development of a transshipment terminal at Vallarpadam, Kochi and the implementation of the Sethusamudram ship channel project would augment the economic development of the region. Planners viewed the terminals at Vallarpadam and Vizhinjam would be complementing each other. The reports by the Government states that the proposed Sethusamudram channel between Sri Lanka and India would help liners to bypass Colombo and hence reduce the voyage distance between the ports on the east and west coasts of India. It is also mentioned that this would enhance coastal shipping in a very large way besides accelerating the development of Vizhinjam, Vallarpadam and Tuticorin ports in the region. The planners viewed the Sethusamudram project and the Vallarpadam terminal will result in a quantum jump in shipping, particularly in coastal shipping and Inland Water Transport, and also opening a new era for economic development of this region.

On the other hand according to the statement by the authority, “after the final phase of Sethusamudram Canal is completed within the next 10 years, only ships with maximum 25,000 DWT will be able to pass through it. "This means aircraft carrier and many other deep drafted vessels may not be able to negotiate the canal”

### **The perceived benefits of the canal**

1. The time gain of 20 to 30 hours once the canal is commissioned pointing out that this gain will be offset by embarkation and disembarkation of pilots and officials, cumbersome inspection procedures and slow movement at almost half the speed through the 80 nautical mile canal.
2. The net gain may be only 12 to 16 hours at the cost of risky and tiring piloting of the vessels through the narrow canal at slow speed. He pointed out that the pilotage and toll charges would be another disincentive for foreign vessels to opt for the canal route.
3. The benefit for the Tuticorin-Chennai route from the project will come down once the Kudamkulam project becomes operational by 2008
4. The current traffic of 1 to 2 vessels per day mainly carrying coal would decrease after that.

### **Economic appraisal**

The cost of dredging for various segments of channel for three different drafts viz 30, 31, and 35 feet were worked out along with cost estimates for other components of the the project including

those of navigational aids and floating crafts. The construction period for 31 feet draft was estimated as four years with a capital expenditure of Rs.760 Crores. The operation and maintenance cost was estimated Rs.4.52 Crores per year.

Economic Appraisal of the Sethusamudram ship Canal project taking into account cost estimates and cost benefits of the proposal, were made by PTCS Ltd. Based on Net Present Value method of appraisal and Internal Rate of Return of 10 – 17% on the project investment was arrived at. Considering the then interest rate of 9% per annum of government lending to ports on capital employed the project would have generated surplus from the 16<sup>th</sup> to 17<sup>th</sup> year of this operation and thereafter the benefits to the canal company would have been 4 Crores in the first year and this would have been 47 crores in the first year, and this would have increased to 100-120 crores every year.

**Traffic potential through the canal at various draughts projected by the studies:**

	Upto 30' draught	31-32' draught	Above 32' draught
1983 Committee	2100	2200	2300
1996 Report	3791	3875	4211

**Socio-economic Impact**

The channel will establish a continuous navigable sea route around peninsular coast within the Indian territorial waters, reduce shipping distance by about 400 nautical miles and voyage time of about 36 hours as also be attendant operating costs. The channel will become a valuable asset from national defence and security point of view enabling easier and quicker access between the coasts. During construction of the channel traditional fishing will be hindered unless alternative arrangements are made. The project will provide employment opportunities and avenues of additional income through establishment of small ancillary industries. This will also trigger development of coastal trade between the ports south and north of Rameshwaram consequently reducing the load and congestion on railways and roadways.

**Conclusion**

From the above it is clear that it is difficult to see any economic benefit from the project immediately. However, one has to wait and see after the commissioning of the project. Based on the data available, the economic feasibility is not established by the reports. A detailed study on the Economic impact needs to be done.

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