

Sethusamudram : Who stand for Sri Lankan interests?

Sethusamudram Sea Canal will have serious negative impacts on Sri Lanka and India. It can damage most rich fish resources in Mannar Bay. This will also affect the coral reef in the area

Construction of Sethusamudram Ship Canal by the Indian government has become a controversial issue among the environmental groups in India and Sri Lanka. Unfortunately Sri Lankan Government's position has not been made clear to the public yet. It was reported that the Indian government has suggested to the Sri Lankan Government that this canal could be used as a barrier to the terrorist movements. That could be a reason for the silence of the Sri Lankan Government.

India takes very defensive reactions with regard to its bordering issues. India has many controversial projects which has some impacts on the bordering countries. River linking, nuclear power generation are some of them. India has number of nuclear power reactors in the Kanyakumari district. This also poses threats to the Gulf of Mannar. Sri Lanka being an island it was not directly affected so far by its development projects. However, proposed Sethusamudram may affect this harmony.

India has already approved the project and has called for bids. It was reported that Boksalis a Dutch dredging company and several other companies have already bid for the project. Boksalis was criticised in Sri Lanka for the death of three people during a mass action of the fishermen requesting compensation, in a dredging and filling operation carried out by the said company in Kerawalapitiya, Muthurajawela.

An Environmental Impacts assessment for the Sethusamudram has been prepared by the Consultants of the National Environmental Engineering Research Institute in May 2004 on behalf of the Tuticorin Port Trust.

According to the executive summary of the EIA, "India does not have, within her own territorial waters, a continuous navigable route around the peninsula due to the presence of a shallow (1.5 to 3.5 m depth) ridge called "Adam's Bridge" between Pamban Island on south-eastern coast of India and Talaimannar of Sri Lanka. Consequently, the ships calling at ports on the east coast of India have to go around Sri Lanka entailing an additional distance of more than 400 nautical miles and 36 hours of ship time."

The Sethusamudram Ship Canal Project under the consideration of the Ministry of Shipping, Government of India, envisages creation of a ship canal to suit different drafts (9.15 m, 10.7 m and 12.8m) through dredging/excavation in Adams Bridge and parts of Palk Bay. The navigation route will originate from the 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. Availability of depths in middle channel in Palk Bay area, capital dredging across Adams Bridge and in Palk Strait and continuous maintenance of dredging along the proposed transit are the critical project related issues.

The EIA summary states that the routes selected through earlier studies particularly in Gulf of Mannar area have been rejected, keeping in view of sensitivity along the coastal stretch of Gulf of Mannar harbouring marine national park. Instead a navigation route keeping a minimum 6-8 km distance from Van Tiu near Tuticorin and about 20 km from shringle in Adams Bridge approach area has been suggested.

The Executive summary states that the proposed Sethusamudram ship canal will have two legs, one near the Point Calimere called the Bay of Bengal Channel and the other across the Adams Bridge. The Bay of Bengal Channel traverses the Palk Bay wherein the sea-bed is mostly soft to hard clayey-sand in nature. The entire coast of Dhanushkody Peninsula on the North and the South is sandy.

While navigational depths will be used in Gulf of Mannar from Tuticorin Port to Adam's Bridge area, a 20 km long, 300 m wide canal with 10.7 m draft and with two way controlled traffic will be created by dredging shallow area of Adam's Bridge upto 12 m depth. Similar excavation will be done in Palk Strait, to achieve required draft over a stretch of around 36 km.

Environmental Regulations

According to the EIA at the Indian national level, the environmental clearance to the project is subjected to compliance with the stipulated safeguards under the provisions of Environment (Protection) Act, 1986 and number of other environmental laws including the Wildlife (Protection) Act of India (1972) which provides legal protection to many marine animals including reef associated organisms. They also bound to the International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 73/78) for which India is a signatory, during the operational phase of the project. The Gulf of Mannar Marine Biosphere Reserve (GOMMBR) has been notified in 1989 through an executive communication from the Secretary to the Government of India, Ministry of Environment and Forests

to the Chief Secretary, Government of Tamil Nadu.

The project would also attract the international legal regime envisaged by the United Nations Convention of the Law of the Sea (UNCLOS) and South Asia Co-operative Environmental Programme (SACEP).

Environmental and social impacts

However people live in Sri Lanka and India has serious environmental and social concerns with regard to this project. We found that the EIA dated May 2004 does not fulfil our concerns and it does not refer to the environment and /or the communities within the Sri Lankan territory.

The area covers some best coral reefs which contribute to the both Sri Lankan and Indian biodiversity. This benefits fishermen of both countries in fishing in the Gulf of Mannar. Some ESCAP reports suggest that 35% -70% of the fish stock for the Sri Lankan side comes from these coral reefs.

According to the EIA there will be dredging of over 80 million cubic meters of sand and clay. Although there are proposals to deposit this dredged material in the Bay of Bengal and to create some lands in Pumban Island the fine particles which will be deposited on the coral can easily damage the reefs and will affect the biodiversity and the fishermen.

Continues dredging during the operational phase will also create the same set of problems. Sri Lankan scientists are in the opinion that these fine particles can travel long distance and this dredging can affect not only the areas in the vicinity of the construction site but also in other areas. This EIA fails to study the impacts of the dumping of dredging material whether it deposits in the Bay of Bengal or in the Pumban Island. According to the EIA report, due to dredging the bottom flora and fauna on an area approximately 6 km² along the canal alignment in Adams Bridge will be lost permanently. Although the EIA suggest that this loss is very insignificant compared to the total area of 10,500 km² of the Gulf of Mannar Marine Biosphere Reserve, when considered the continuous damage to the coral reefs from continuous dredging and by depositing the fine particles, this is very significant.

This area is habitat to several species of whales, dolphins, turtles dugong and many other threatened species. Therefore serious investigation on the biodiversity in the area is very important.

According to the Hydraulic engineers, there are two circulations of water masses in the Bay of Bengal, the clockwise circulation of the south-west monsoon and the counter clockwise circulation of the north-east monsoon. Hydrological models shows that the sea water from Bay of Bengal or sea water from the western side does not cross over or hardly cross over due to the Adam's bridge sand deposits. Sri Lankan scientist are in the opinion that the construction of the Ship Canal will damage this pattern and the changing of the water quality, water currents, temperature and possible arrival of alien species may affect the biodiversity.

This may also affect the wave height and which could result beach erosion in the both countries.

Dumping of oil and grease and the waste material along the Ship Canal can damage the biodiversity too. This can affect the fish stocks in the area. This is already a problem in the existing ship route around Sri Lanka. Shallow water level will increase the risk of accidents. Any oil spill can easily damage the sea bed and the coast due to the shallow nature of the bed. Navigation of oil tankers or ships containing chemical waste and material will increase the risk of damage. Sea turtle and many other species and the shallow water environment are highly vulnerable to oil spills. This aspect has not seriously considered in the EIA document. Suggested mitigations state that measures will be taken to ensure that ships navigating in this region do not use such paints and anticorrosive agents which are known to cause damage to marine organisms on ship bottoms, this cannot be implemented.

We do not think the mitigatory measure mentioned in EIA which state "A pilot should be trained or environmental watcher will board the ship to watch marine animals viz. turtle, dolphins, sea cow etc. in the region and navigate the ship safely avoiding any damage to this fauna" is possible.

The ship navigation route will affect the fishermen in the area. There will be 7 kilometer strict security zone to the either side along the ship canal. Both Sri Lankan and Indian fishermen will be affected due to this new condition.

To our knowledge there are no adequate research done by the Sri Lankan side due to the restrictions as a result of the civil crisis in the area. Therefore Sri Lankan scientists do not hold adequate data to consider the impacts or to suggest any mitigatory measures.

The proposal does not contain an alternative proposal which is a deficiency in the EIA procedure. This does not include any risk assessment, a cost benefit analysis and a compensation package. Also this EIA does not contain a contingency plan and has not considered the worst case scenario.

Sri Lankan government response

Both Indian and Sri Lankan environmental groups so far has made several appeals to the respective governments and to the United Nations Environment Programme. Although Sri Lanka has an Environmental Impacts Assessment procedure under the Coast Conservation Department this project does not come within their jurisdictions. Therefore we believe that the Sri Lankan environmental concerns also need to be addressed in the Environmental Impacts Assessment process by Indian authorities. However, Sri Lanka had no such opportunity.

In number of occasions environmental groups urged to conduct a joint Indo-Lanka Environmental and Social Impacts Assessment. But Indian approach is very defensive. The UNEP Executive Director Klaus Topfer in his response to the Centre for Environmental Justice state that if the Sri Lankan Government were to propose a joint EIA they would be please to consider it. They further state that they would provide funds and expertise for such an initiative.

However Sri Lankan Government approach is very bureaucratic for some reason. Although they have appointed a committee they haven't announced the response yet. The reason could be it is too hot or tempted by the proposal to make a barrier for terrorist movements. But it will be too late when the impacts of the project are realized, which is always the case in Sri Lankan politics.

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