

Rama Setu a bridge built by Lord Rama



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On 12th May 2007, an International seminar on scientific and security aspects of Sethu Samudram Channel Project (SSCP) was held in Chennai. Several scholars, Geologist, Marine Archaeologists and Social activists took part and expressed their concern and apprehension about the impending disasters, which will happen if the proposed project goes underway. Excerpts of the Experts' opinion are given below:

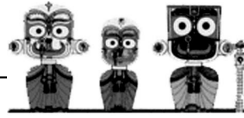
According to S. Badrinarayanan, Director (Retd), Geological Survey of India, formerly, Coordinator, Survey Division, National Institute of Ocean Technology, "It is a well known fact that coral reefs can only form in clean and unpolluted water and these being marine organisms require firm and compact formation as foundation. Corals grow only in hard rocks. The presence of loose marine sands below these clearly indicates that these are not natural and are transported. Unless somebody has transported and dumped them these could not have come there. This is an ancient causeway and an engineering marvel".

According to Prof. M.D. Nalapat, Professor of Geo Politics, Manipal University and former Editor of the Times of India, "The importance of Ram Setu is that which establishes the clear cultural links with the rest of India, for

that reason, it should be protected. It is very clear that it is an effort to deny our history. Lord Ram was not a myth. He was a reality. Unless this fact is openly admitted the young women and men of India will not have the link that gives them the ability to see themselves as equal of any other people and as the generation that would restore India to greatness. Lord Ram is not Hindu icon; He is an Indian hero and glimmer.

According to J. Balakrishnan, Capt (Retd), Indian Navy, "The Indian Meteorological Department has assigned the Palk Bay area as a 'High Risk Area' for cyclonic activity. The cyclone season in the Bay of Bengal is generally between months of October to January. It is interesting to note that the IMD's records from 1891-2001, states that of the 452 cyclones that hit the Indian coastline, 256 were on the East coast. We mariners in a lighter vein, refer to the Tamil Nadu coast between *Rameswaram* and Cuddalore as the 'cyclone coast.'

According Dr. S.R. Rao, Former Advisor Marine Archaeology Center, National Institute of Oceanography, Founder of Marine Archaeology Society of India, "It is no less important than Swami Vivekananda Rock where a memorial is built, we found at Dwarka a natural rock was dressed suitably as a wharf for berthing ships



about 3600 years ago. Similarly rock connecting Mannar and *Rameswaram* must have been used by piling up rubble manually on it to enable the *vanaras* to reach Srilanka. For the ancient marine engineers who could build a tidal dock at lethal in 2300 B.C. and modify a ridge for berthing ships at *dwaraka*, the piling up of stones on the so called Adam's bridge for an army to reach *Lanka* was an easy task. Hence both from marine archaeological and traditional points of view *Ram Setu* deserves to be declared as an underwater world heritage site.

According to Prof. C.S. Player, Executive Director, Centre for Marine Analytical Reference and Standards, Trivandrum, "The Gulf of Manner and the Palk Bay form a backwater system. The Adam's bridge acts as a barrier to flow of water. In the area, a complex ecosystem exists. A factor for serious consideration is the fact that the Palk Bay is a sedimentation sink with high deposition rate, various sedimentation rates have been reported, depending on the area studied. The EIA report of NEERI selectively takes a convenient value for the Sedimentation rate which does not reflect the true picture. Even accepting the NEERI report, around 85 million m³ of material has to be dredged (20 km of dredging at Adams Bridge and 54.2 km in the Bay of Bengal). In addition, for the maintenance of the canal, material of 0.1 million cubic meters has to be removed annually for the Adam's Bridge Legal one. This is excluding the Bay of Bengal leg for which no value has been reported. Due to dredging, the bottom flora and fauna would be destroyed. Doubts have also been expressed about the nature of sea bed in this area. It is feared that with depth some places would be rocky which would call for blasting. The damage to marine life by such underwater blasting can be imagined. The impact of dredging and dumping on the marine life has not been assessed. Literature

survey has brought out very clearly that turbidity, which would result from such activities would drastically reduce the productivity in the area and thus of the fish population. Many of the species in this region would face extinction. Similarly the corals would also be destroyed. Excessive inputs of sediments can destroy coral reefs by smothering, reducing the light availability and potentially reducing coral photosynthesis. Once the material is dredged, the next important question is the dumping site. It is suggested that the sites for dumping would be over *Pampam* Island between Rameswaram and Dhansukodi and in the Bay of Bengal. In case of Adam's Bridge is broken making wider passage, it is feared that the waves coming into the Palk Bay, would be funneled through this passage. The funneling process would increase the intensity of the waves. Further increase would take place due to the waves propagating from south of Sri Lanka. Thus, if these waves of higher intensity were to hit the Kerala coast, the devastation would be catastrophic. The funneling effect and the destruction it can cause are noted to a certain extent at *Valiazhekal* on the Kerala Coast.

According to Justice Parvatha Rao, former Judge, Andhra Pradesh High Court, "We are duty bound to preserve what has been given to us by our ancients i.e. heritage. It is the duty of the state to protect and preserve it. I am not able to understand why we have waited so long for this. The state dares because we are silent. Just like the *Tehri Dam* case the Supreme Court should appoint a committee to get the fact"

According to Justice K.T. Thomas, former Judge of Supreme Court, "In projects like this, decision are to be based not only on a study of geological implications; the religious sentiments of the people are also to be taken into account. The sentiments of the people of India must be



honoured and there exists a tradition in this land of honouring religious sentiments. So it is my definite opinion that *Rama Sethu* must not be broken”

According to Justice V.R. Krishna Iyer, former Judge of Supreme Court, “Our nation will be weaker and may suffer new dangers with American presence in the *Setu Samudram* waters by doing what for centuries has never been considered necessary or feasible or in any manner advantageous to the people of India. The choice of a channel alignment for SSCP should be done only after a detailed multi-disciplinary evaluation of the impact of tsunami of the type which struck the Indian coastline. *Rama Setu* reduced the impact of the tsunami. If the work is continued on the present alignment, an enormous energy of the next tsunami will be absorbed through this channel and result in the destruction of Kerala and significant parts of Tamil Nadu coastline. The PMO has raised 16 objections, including the observations of tsunami expert Prof Tad S. Murthy of Canada who has been engaged by India to set up tsunami-warning system. There is the issue of thorium and other rich mineral deposits close to the *Ram Setu* in Kerala sands. The project will have a profound impact on the country’s nuclear programme according to the website of Bhabha Atomic Research Centre.

Re-Design of *Setusamudram* Canal Project

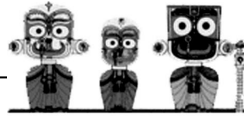
There are other feasible alternatives which will not affect either the sentiments of the people or the environment. The following conclusion in the paper presented by Dr. S.Badrinarayanan should compel a re-design of the channel passage project into a land-based canal project on the lines of the Panama canal with adequate protective measures to maintain the relatively clamor waters in Gulf of Manner.

The dredging and opening of the Adam's Bridge in all likelihood may cause the sediments and turbulent tide to center the tranquil Gulf of Manner and choke and destroy the delicate coral island. As an alternative dredging in the Pamban or nearby areas and by passing the Adam's Bridge could be favorably considered like other inter sea canal (Panama Canal) locks could be provided both in the Palk Bay side and Gulf of Manner side so that such calamities could be prevented. This should be done, in addition to incorporating adequate protective measures along the coastline to cope with another tsunami on the pattern of high-walls constructed along the coastline areas of Japan, as may be seen from the following report.

Textual evidences for *Rama Setu* or *Setu Bandha*

Apart from the Ramayan which has emphatic references to the construction of *Setu Bandha* in 85 slokas in a separate sarga in *Yuddha Kanda*, *Mahabharata* also refers to the continued protection of *Nala Setu* following the command of Sri Rama. Kalidasa’s *Raghuvamsa* also refers to the *Setu* of mountains. So does *Skanda Purana*, *Vishnu Purana*, *Angi Purana*, *Brahma Purana* refer to the construction of *Rama Setu*.

The evidences - textual, epigraphic, scientific marine-archaeological explorations document *Rama Setu* or, *Setu Bandha* as an ancient monument. A channel linking *Tuticorin* Port with *Haldia* can be designed without damaging this monument which is an object of national importance, indeed, a world heritage site with Ramayana episodes including the construction of *Setu Bandha* by *Nala* venerated in many *Ramayanas* in many parts of the world. Development imperative or *abhyudayam* can co-



exist with protection of monuments, places and objects of national and international importance. Let us hope that Government of India will see it fit to realign the Setusamudram Channel to avoid impacting on *Rama Setu*, the heritage which should be immediately declared as a protected monument under the AMASR Act-1958. This is a solemn duty of all states of India.

Conclusion

The proposed project will destroy, the most ancient Hindu relic of Heritage, the RAMA SETU, linking Sri Lanka and *Rameshwaram*, traditionally believed by all Hindus to have been built by LORD SRI RAMA and hence accepted to be a matter of National Pride.

At a time when the whole world is becoming more and more aware of the need for preserving their ancient heritage and even, the UNESCO is liberally funding the preservation of such heritage sites, it is inconceivable, even sacrilegious for India to destroy the World's most ancient heritage by a willful act of wanton destruction. The project will have very serious consequence on the security of the country. It will also throw open India's National waters for International Navigation. The project will create a catastrophic situation to the coastal regions, if

another tsunami takes place. The large scale Thorium deposits in the coastal area will be washed away with the result that our nuclear potentialities will be radically destroyed. The current plan does not take into fact the possibility of alternate routes which will be free from the above said undesirable consequences.

The persistence with which the dredging activities are being carried out in spite of well informed and well-intentioned criticism by eminent people gives rise to suspicion that there may be ulterior motives to entire project. Hence the concerned authorities should postpone the current activities and explore other available alternatives. It also calls upon the people in general to jointly save the *Setu Bandha* or *Rama Setu*. The project is deliberately designed to destroy the oldest Hindu relic and heritage, the ancient Rama Setu built by Lord Rama. At last I understand that this project will not bring any economic advantage to India and was never wanted by the masses or by any of the World's shippers. So in the greater interest of the country's security the project should be abandoned forthwith.

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