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The Asian tsunami had affected 38 revenue villages and 73 coastal habitations along the coast zone. Among the confirmed human loss of 8081 people in Tamil Nadu, Nagapattinam coast alone inhabit 6065 deaths, which is 76 percent of the state's total loss. The coast zone was declared as “Ground Zero” because of the fact that within 10 kilometer range 4592 deaths were recorded, 73 affected habitations along the coast line, flattened 51 fishing hamlets devastated, total power cut and water supply, Pilgirim town of Nagore and Vailankanni severely hit and almost 450 death per square kilometer. The tsunami has also affected the destruction of houses, boats and catamarans, fishing harbors, fishing landing and auction centers in Nagapattinam. Damages were also reported due to the intrusion of salt water into the aquifers and inundation of sand over agriculture and aquaculture farms. The present study necessitates the impact of tsunami on the coastal hamlets, the loss incurred to human lives and assets and rehabilitation processes activated during the post tsunami time periods; the study also highlights the demarcation of coastal regulation zone enunciated by the Ministry of Environment and Forests (GOI) and to design a GIS and GPS data base of the rehabilitated settlements and new houses constructed by the various agencies.

The present research is focused upon taking all the parameters concerned are the latest technological development to identify and analyze the problem by
using Remote Sensing and GPS technology. The research would help the administration to plan for the future and the scientists to continue to manage the coastal regulation zone and maintaining quality of life in this region. The tsunami waves have brought out tremendous damages to the aquaculture farms too, as most of the farms are very close to the shoreline. Many hatchery and farm infrastructure facilities were severely damaged. Surging tidal waters carried pumps and other machineries away. Bunds and fencing of shrimp farms got collapsed. In the areas of Kovalam, Marakkanam, Pondicherry, Cuddalore, Chidambaram, Sirkali, Tharangambadi, Nagapattinam, Velankanni and Vedarnyam along the Tamil Nadu coast, one can notice the trails of the devastation of tsunami on the aquaculture farms. It is estimated that there is a loss to aqua farms on the Indian coasts to the tune of US dollars 1.5 million. Besides these property and infrastructure loss, collapsing of bunds due to the massive tsunami waves, and the resultant flooding of the polluted effluents caused further damages to the physical and human environment. Thus there is a further damage to the coastal eco-system in the post-tsunami period. Small aqua farmers may find it very difficult to recover from this loss.

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