

A simple and Quick Remedy for Sea – erosion

In the context of ‘Tsunami’, it is necessary to think seriously of sea-erosion and its quick control. There is a long pending and cheap method of ‘Enrichment of the sea-shore’ proposed by the late Dr. Velukutty Arayan of Karunagappally. Early in 1952 Dr. Velukutty Arayan submitted to the then-government of T-C state a memorandum in which he had explained his scheme in detail. But it went into the deaf-ears of the lobby comprised of engineers, contractors, and politicians who are the real beneficiaries of the sea-wall constructions.

The author had a similar scheme in his mind but it was unfortunately left off in his paper. The article of Sri. L. Dinesh Babu prompted him to include Dr. Arayan’s scheme modified with working plans and to up-date his website.

The proposal of Dr. Velukutty Arayan is very simple, cheap and effective and its results are perceivable with in a couple of years, throughout Kerala. The same project according to the author is to create a channel in the sea, parallel to and about one kilometre away from the shore. The width of the channel can be about 100 feet (30m) and the depth about 15 to 20 feet (5 to 7m). The water currents when fall into the channel, will lose its energy and there fore fail to form into big waves. As a result, subsequent flow of water will be calm. The result will perhaps be a revival of the old Arabian sea of Malabar coast, when Vasco da Gama came to Malabar in the monsoon of 1498.

The channel will not affect any operation in the sea, but at the same time contribute for increase in fish population in the enriched zone. In fact, the area close to the shore is likely to function as an artificial ‘Chakara’.

The channel must be kept off from the harbour channel by about half-a-kilometre on both sides, to prevent mid-way drop in pressure of water flow from the harbour, to prevent sedimentation at bar-mouth and harbour.

With two medium size dredgers working for an year, the channel can be formed along the entire coast of Kerala (580 km). The dredged materials can be simultaneously deposited along the shore for its enrichment. The enriched shore must entirely be utilised for eco-plantations with mangrove and casuarina plants. The result will be perceptible within a couple of years.

The maintenance of the channel needs be regularly done by engaging one of the dredgers throughout the year. When the scheme works successfully, the channel can be slowly and systematically moved towards west by caving the western bund of the channel during maintenance dredging. In a long spell, a reasonable part of the lost shore can be regained.

The approximate cost of forming the channel and establishing the eco-forest along the shore will be less than Rupees Ten crores. Annual maintenance expenditure will be less than Rupees One crore only.

The only disadvantage of the scheme is that it will permanently cut off a regular source of misappropriation of hundreds of crores of rupees by way of sea wall construction.

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