Work begins on artificial reef

Will reduce wave activity and allow sand to move freely at Puducherry beach

S. PRASAD
PUDUCHERRY

The National Institute of Ocean Technology (NIOT) has commenced the process of building an offshore artificial reef opposite the Chief Secretariat to ensure restoration of the sandy beach in the coastal town.

Sanctuary Beach, a Singapore-based consultant with expertise in beach restoration in various countries, was selected for the nourishment plan for the promenade stretch starting from the northern side of the harbour.

Sources said work had commenced on construction of a floating working platform to a distance of 50 metres from the shore opposite to the Chief Secretariat.

The reef will be 125 metres in length and 100 metres in width. The artificial reef will comprise boulders and a steel caisson will also be built in the sea on the submerged reef.

According to the project,



Restoring sand: The artificial reef will consist of boulders.

■T. SINGARAVELOU

two submerged reefs will be built at a distance of 125 metres from the sea near the Chief Secretariat and the south of the new pier. The reef coming up near the Chief Secretariat will be funded by the NIOT at ₹ 25 crore while the second reef will be funded by the Puducherry government.

The submerged structure will reduce wave activity and allow sand to freely move towards the north and prevent erosion along the coastline. Once the steel caisson is completed, about 70% of the sand will be bypassed to the north in the first year, followed by 100 % from the next year, an official of NIOT said.

Deadline in August

The reef structure is expected to be completed before August. If everything goes as per plan, the natural equilibrium will be brought back and city would be able to have 60 metres of sandy beach in the next two years, he said.

As per initial estimates, sand to the extent of 3.0 cubic million metres need to be placed north of the harbour, according to a NIOT report. Over the last several years, the beach has been undergoing erosion and nourishment now will result in restoration of sand level.

Suction dredger pressed into service in Puducherry

It will deepen outer channel near Ariyankuppam breakwater

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The Dredging Corporation of India (DCI) has pressed into service a trailer suction hopper dredger in addition to its hi-tech cutter section dredger to deepen the outer channel near the Ariyankuppam breakwater for commencement of operation of the Puducherry port and also for the ongoing beach nourishment project.

The Government of Puducherry had awarded the contract to DCI to dredge 3.75 lakh cubic metres of sand and deposit it behind the Gandhi statue to restore the beaches in front of the town with funding from HUDCO.

However, the dredging process was delayed as the DCI faced a number of challenges, including the sub-optimal functioning of the high-tech dredger.

Sources, on condition of anonymity, said that DCI was supposed to have dredged 1.5 lakh cubic metres of sand before June. However, the cutter suction dredger was



Mechanical wonder: A hi-tech dredger of the Dredging Corporation of India pumping sand using the rainbow technique at the old pier in Puducherry on Tuesday. •T. SINGARAVELOU

facing technical problems in dredging the outer channel. The government is also keen to deepen the outer channel to enable commencement of port operations by the Chennai Port Trust.

Adopts rainbow method

"DCI has now engaged a trailer suction hopper dredger with a capacity of 5,500 cubic metres near the old pier. The trailing suction hopper dredger will also help nourish the beach and

will be adopting the rainbow method of pumping sand of the beach restoration project. The dredged sand on the outer channel will be put into the hopper for pumping sand near the old pier," M.V. Ramanamoorthy, scientist, NIOT, told *The Hindu*.

The DCI will also be pumping out sand through the pipelines laid till the old pier till natural nourishment of the beach begins.

The DCI has so far pumped 30,000 cubic

metres of sand against 1.5 lakh cubic metres of sand till June.

Artificial reef

Mr. Ramanamoorthy said work on construction of an offshore artificial reef had begun opposite the Chief Secretariat.

The reef will be 125 metres long and 100 metres wide. It will comprise boulders and a steel caisson will be built in the sea on the submerged reef.