



Coastal protection work using Geotubes

Region	Kerala (India)
Type	Coastal Protection
Client	Irrigation Deptt, Ernakulam
Execution of the work	Renesco India Private Limited
Construction Period	2018 – 2020

Project Description

The project involves use of Polypropylene based high strength woven fabric (Geotube). The tube has high strength and permeable fabric which is able to hold back material while water flows through. Coastal stretch along Chellanam, Kochi (southern part of India) was severely eroded during 2018 monsoon flood. In order to reduce the coastal erosion, sand filled geotube work started. Geotubes are large tubes filled with sand slurry mix. The mix usually comes from dredged sand from the nearby sea area

Scope of work

- Demolishing and rearranging the existing damaged sea wall and dumping in position (to form as 1:3 slope, not to be packed) with Granite stones 300kg to 500kg
- Supply of Geo textile tube of length 25 m, circumference of 15.70 m to provide an inflated height of 2.5 m or above after filling using dredged sea sand - fill or slurry.
- Providing woven Geo textile layer to act as scour apron beneath the bottom layer Geotubes.
- Installation of Geotubes - Installation of 3 Nos of Geotubes, 2 Nos at bottom and one at top of length 25m at site Hydraulic filling of Geotextile tubes using excavated sand with the help of dredged pump.

