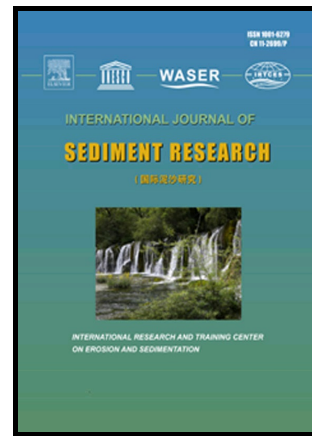


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# Shoreline management plan for a protected but eroding coast along the southwest coast of India

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## Abstract

Coastal erosion is a serious problem of concern along the southwest (SW) coast of India. Various coastal protection measures have been applied for the recovery of the coast, but the devastating effect of erosion still continues. The present study focuses on a coastal stretch situated on the southern sector of the SW coast of India, where Sundar and Sannasiraj (2006) proposed a groyne field along with an existing seawall to control severe erosion. In order to confirm the net littoral drift of this region and for a preliminary assessment of the performance of the groynes prior to construction of the proposed groyne field, two groynes were initially constructed as a pilot program in 2008-09. Periodic monitoring of shoreline position with the two groynes in place was carried out during 2009-14. A shoreline evolution model for the study region was setup, calibrated, and validated using field observations during 2010-11. In addition to traditional shoreline evolution modelling procedures, a profile simulation model was applied for simulating the shoreline behaviour during extreme monsoon seasons. The validated LITPACK model has been used to

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