**10 Percent of Odisha Coast Prone to Erosion, Reveals Study**

By Siba Mohanty - BHUBANESWAR , Published: 09th May 2014 09:17 AM

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At least 10 per cent of the 480-km Odisha coast is highly erosion prone and the stretches near Puri, Chandrabhaga, Gopalpur, Satabhaya and Pentha are most vulnerable, the first ever Regional Coastal Process Study (RCPS) has revealed.

The study, conducted as part of the Integrated Coastal Zone Management Project (ICZMP) of the State, states that the Odisha coast is subject to a strong littoral drift. The process accompanied by the sediment movement has led to a constant change in the shoreline. The creation of a new mouth of Chilika and change in profile of several estuaries along the coast are caused by this phenomenon, the report stated.

The study, the first such assessment in India under the World bank-aided ICZMP, estimated that annually 0.90 million cubic metre littoral drift takes place from  south-west to north-east direction during the south-west monsoon.

The return drift takes place during the winter monsoon.

The dynamic sediment movements have, over the years, resulted in constant changing of the shoreline. As a result of the sediment transport and creation of manmade structures, coastal erosion has been seen mostly near Puri, Chandrabhaga, Gopalpur, Satabhaya and Pentha.

“The high demographic pressure and associated development activities within the coastal stretch have compounded these issues and called for an integrated approach for sustainable management,” the report added.

Barring the vulnerable 10 per cent, the study observed, rest of the shoreline is fairly stable offering a good opportunity for sustainable planning and management of the coast. It also revealed that seabed in the southern part is steeper than the northern coast of the State while formation of good sand dune system along southern coast provides a good defence against erosion.

The study was carried out over a 12-month period between 2012 and 2013 as part of the integrated coastal zone management plan, which the State Government is chalking out to tackle the issue of climate change in future. The RCPS is a first of its kind study in India for better understanding of changes as well as dynamics of shoreline process, movement of sediments, area of accretion, erosion and bathymetry of the coastal zone.

The study, sources said,  will provide a road map for coastal zone planning process in the State.

The ICZM plans are expected to be completed by October 2015.