ASSESSMENT OF NATIONAL SHORELINE CHANGE

- Coastline of India is 7500 km long; of which mainland coast extends to 5500 km and 2000 km of island territory
- The coast is subjected to multiple coastal processes and anthropogenic pressures, making it vulnerable to erosion
- The loss (erosion) and gain (accretion) of coastal land is a visible result of the way shorelines are reshaped in the face of these dynamic conditions
- Appropriate use of remote sensing technology coupled with limited Digital Geo-Positioning System (DGPS) surveys was integrated in GIS platform to obtain historical shoreline information
- Rate of shoreline changes and the Erosion/Accretion zones were calculated using Digital shoreline Analysis System (DSAS) a model compatible in GIS by U.S Geological Survey.

NATIONAL ASSESSMENT OF EROSION & ACCRETION HAS BEEN MADE TO UNDERSTAND THE PRESENT AND PREDICT SHORELINE POSITIONS
Findings

- Nearly 7% of Indian coast experiences high erosion (<-5 meter/year) and 7.6% of the coast has seawalls, embankments etc. as coastal protection measure
- A few stretches along the coast of West Bengal, Puducherry and Kerala, are highly eroding
- Government of India is currently demarcating the hazard line to protect coastal communities
- Erosion is also a major issue in Lakshadweep Islands

Recommendations

- It is advisable to implement any anti-erosion strategy into a broader perspective
- Drawing up site-specific shoreline management plan and Integrated Coastal Zone Management plan, are essential for effective shoreline protection
- Promote soft protection measures i.e. restoration/conservation of protective ecosystems such as beaches/coastal wetlands
- Include options such as beach nourishment and dune rehabilitation and planting bio-shields

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