

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 541
TO BE ANSWERED ON WEDNESDAY, 22ND JULY, 2025**

EROSION-PRONE COASTAL DISTRICTS IN ANDHRA PRADESH

541. SHRI APPALANAIDU KALISETTI:

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) the details of shoreline change and coastal erosion assessed by the National Centre for Coastal Research (NCCR) along the Andhra Pradesh coast during the last five years, district-wise especially in Vizianagaram;
- (b) the details of coastal stretches identified as high, moderate and low erosion zones by the Government in the aforesaid districts of Andhra Pradesh, district-wise;
- (c) whether the Government has undertaken any site-specific coastal erosion assessments in the aforesaid districts and if so, the details of the findings and mitigation measures recommended thereunder; and
- (d) whether any assessment has been undertaken regarding the population, coastal habitations and infrastructure vulnerable to coastal erosion in the aforesaid districts and if so, the details thereof?

ANSWER

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)**

- (a) During the last five years, NCCR has completed a comprehensive assessment of shoreline change along the Andhra Pradesh coast using satellite data covering the period 1990–2022. District-wise shoreline change statistics, including for Vizianagaram district, are given in the Annexure.

District	Coastal Length (km)	Erosion (%)	Stable (%)	Accretion (%)
Sri potti Sriramulu Nellore	111.2	35.09	36.17	28.74
Prakasam	48.52	27.12	29.39	43.49
Anakapalli	70.92	7.02	35.17	57.81
Kakinada	119.26	52.99	14.76	32.25
Konaseema	84.96	30.37	9.44	60.19
Bapatla	101.88	20.20	4.50	75.30
Krishna	125.18	42.71	11.58	45.71
West Godavari	16.94	52.54	2.13	45.34
Tirupati	93.76	28.82	23.38	47.80
Vishakhapatnam	68.08	26.85	49.47	23.68
Vizhianagaram	21.44	3.26	39.55	57.18
Srikakulam	165.44	32.14	34.20	33.66
Total	1027.58	31.95	23.86	44.20

In Vizianagaram district, 57.18% of the coastline exhibited accretion, 39.55% remained stable and 3.26% was under erosion during the assessment period (1990–2022).

- (b) Based on the long-term shoreline change assessment (1990–2022), NCCR has identified erosion-prone coastal stretches in the coastal districts of Andhra Pradesh. The district-wise erosion-affected stretches are listed below.

Tirupati - North of Pulicat lake, SHAR (Sriharikota) coastal stretch, South of Rayadoruvu inlet, North of Swarnamukhi River, North of Krishnapattinam port.

Sri Potti Sriramulu Nellore - North of Krishnapattinam port, SDSTPS to Koduru beach, Gangapatnam Inlet, Penna River Estuary, Ramatheerdam beach, Isakapalle coast, Juvvaladinne Coast, Kotha bangaru palem FH to Thummalapenta Beach, Ramayapatnam coast, Karedu coast

Prakasam - Binginapalli to Ullapalem, Paleru River mouth, Devaram Padu coast, Devaram Padu coast, Gundlakamma Spit, North of Gundlakamma River to Chinnamgari Pattapu Palem.

Bapatla - North of Romperu Canal Mouth, Dindi coast, Western side of Lankevani reserved forest.

Krishna - False Divi Point to Nagayalanka lighthouse, Ramakrishnapuram to Hamsaladeevi beach, Krishna River to Machilipatnam beach, Kara Agraharam coast.

West Godavari - Perupalem to Godavari River mouth

Konaseema - Antarvedi coast, Godavari River mouth to Komaragiriapatnam, Northern tributary of Godavari River.

Kakinada – Godavari River mouth - Spit (Yanam), Eastern side of Coringa mangroves and tail end of Hope Island, Western side of Hope Island, Western side of Hope Island (Middle Portion), Nemam to Uppada coast, Uppada to Konapapapetta Coast, Konapapapetta to Kothapakalu Coast.

Anakapalli - Cheepurupalle East

Visakhapatnam – Yarada, Mangamari Peta to Bheemili, Bheemunipatnam to Pedanagamayyapalem.

Srikakulam - Thonangi coast, Suryamanipuram coast, Kambala Rayudu Peta Beach to Vajrapukotturu Beach, Dokulapadu Beach to Yerramukkam, Battigalluru Beach to north of Isakalapalem, Kalingapatnam beach to Donkuru.

- (c) Yes. Ministry of Earth Sciences through NCCR has prepared the Shoreline Management Plan (SMP) for the Andhra Pradesh coast, including site-specific assessment of identified erosion-prone stretches. Based on shoreline behaviour, coastal processes and local conditions, the SMP recommends appropriate shoreline management measures, including beach nourishment, dune restoration, ecosystem-based measures, and location-specific engineering interventions, wherever required. Major site specific studies are listed here

1	Coastal protection at SDSC-SHAR	Tirupati
2	Coastal Protection at Vodlarevu	Dr. B R Ambedkar Konaseema
3	Coastal Resilience for Coringa-Uppada coast	Kakinada
4	Coastal Resilience along Visakhapatnam Bheemunipatnam belt	Visakhapatnam
5	Inlet management and development of coastal infrastructure at Vamsadhara, and Nagavalli mouth and Bhavanapadu inlet	Srikakulam
6	Integrated mitigation strategies along Krishna Delta	Krishna

- (d) Yes. The National Centre for Coastal Research (NCCR) has prepared the Shoreline Management Plan (SMP) for the Andhra Pradesh coast, which includes assessment of coastal erosion vulnerability, coastal habitations, critical infrastructure and shoreline management requirements. The SMP is based on the analysis of coastal geomorphology, tidal inlets, ecologically sensitive areas, existing coastal protection structures, infrastructure, population (Census 2011), socio-economic aspects and stakeholder inputs. Based on these assessments, the SMP provides location-specific shoreline management strategies to support the State Government and other implementing agencies in planning coastal protection and sustainable development measures.
