

GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 2703
ANSWERED ON 11.08.2026

**COASTAL EROSION AND PROTECTION OF PORT INFRASTRUCTURE IN
ODISHA**

2703. DR. SASMIT PATRA:

Will the Minister of PORTS, SHIPPING AND WATERWAYS be pleased to state:

- (a) whether the Ministry has undertaken any assessment of coastal erosion affecting ports, fishing harbours and maritime infrastructure in Odisha;
- (b) the vulnerable coastal stretches identified and the impact on existing and proposed port infrastructure;
- (c) the details of coastal protection projects sanctioned, completed and under implementation during the last five years; and
- (d) the measures taken to ensure climate-resilient development of ports and coastal infrastructure in Odisha?

ANSWER

MINISTER OF PORTS, SHIPPING AND WATERWAYS
(SHRI SARBANANDA SONOWAL)

(a) to (b) The National Centre for Coastal Research (NCCR), an attached office of Ministry of Earth Sciences, has carried out a comprehensive assessment and mapping of shoreline change analysis, along the Odisha coast for the period 1990–2022. The study reveals that approximately 28.3% of the coastline is undergoing erosion, 17.6% remains stable (no significant shoreline change), and 54.1% is experiencing accretion. The district-wise erosion status along with vulnerable stretches along the Odisha coast identified based on long-term shoreline change analysis is available at Annexure 1.

(c) The detail of coastal protection projects sanctioned for financial support under Sagarmala scheme is available at Annexure 2.

(d) Government of Odisha has informed that all non-major ports developed or under development in Odisha are under the Public-Private Partnership (PPP) mode. The respective port developers/ concessionaires are entrusted for ensuring the safety, sustainability and climate resilience of coastal areas and port infrastructure under their respective jurisdiction,

including consideration of coastal hazards and environmental conditions, as applicable, while planning and executing port development works.

As per the applicable norms, Environment/ Coastal Regulation Zone (CRZ) clearance from the Ministry of Environment, Forests and Climate Change (MoEF&CC) and/or State Coastal Zone Management Authority (CZMA) is required for port infrastructure and development. As stipulated by MoEF&CC and CZMA, studies like Environment Impact Assessment (EIA) and Environment Management Plan (EMP) are undertaken as a part of the development of the projects. Based on the studies for the project, requisite mitigation measures to protect the environment are undertaken.

In addition, MoPSW has issued dredging guidelines for major ports, applicable to Paradip port which is a major port in Odisha, to ensure implementation of dredging projects with optimum utilization of the resources and re-use of dredged material for sustainable development of ports.

Annexure 1

(a): Status of shoreline change status along the coasts of Odisha for 1990-2022:

District Name	Coastal Length in (km)*	In Percentage		
		Erosion	Stable	Accretion
Ganjam	60.18	45.7	27.7	26.6
Puri	138.16	10.2	11.5	78.3
Jagathsingpur	55.80	47.6	13.5	39.0
Kendrapara	149.36	45.0	16.8	38.1
Badharak	72.36	4.6	19.6	75.8
Baleshwar	88.28	23.8	22.3	54.0
Total	564.14	28.3	17.6	54.1

*Coastal length represents analysis purpose.

(b): Vulnerable stretches along the Odisha coast identified based on long-term shoreline change analysis:

Sl. No.	District	Locations
1	Ganjam	North of Gopalur Port, Mayurpada to Bhramarakudi
2	Puri	Either side of Chilka Sea Mouth, Keutajanga, South of Devi River mouth, Devi River mouth
3	Jagatsinghpur	Kusupur to Sahadabedi, Sahadabedi to Jatadhartanda,
4	Kendrapara	Hetamundia, Hukitola, Pentha to Satbhaya, Satbhaya to Gahirmatha
5	Bhadrak	Amarnagar
6	Baleshwar	Bagda, Chaumukh, Narayan Mohanty Padia, Bindhapadmapur to Talasari

Annexure 2

Sl. No.	Name of project	Implementing Agency	State	Status	Project cost (Rs in crore)
1	Anti erosion work on the left bank of river Hooghly/ Bhagirathi Block & P.S. Kalyani, Nadia district, Kolkata (WB)	Syama Prasad Mookerjee Port Authority	West Bengal	Completed	16.63
