

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 953
TO BE ANSWERED ON WEDNESDAY, 8TH FEBRUARY, 2023**

Coastal Vulnerability

**953. SHRI G.M. SIDDESHWAR:
SHRIMATI PRATIMA MONDAL:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the coastal vulnerability due to sea erosion, cyclones, floods, etc., has become a reality which poses a big threat to the lives of large coastal communities, especially the fishermen, and if so, the details thereof;
- (b) whether the Government has taken steps to prevent such hazardous situation by implementing newer anti-sea erosion techniques;
- (c) if so, the details thereof and the new measures taken to protect and restore the entire coastline of the country; and
- (d) whether the stakeholders have been taken into confidence while implementing preventive measures 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) Yes Sir. Ministry of Earth Sciences (MoES) through National Centre for Coastal Research (NCCR) has undertaken assessment of sea erosion and identified coastal areas subjected to sea erosion. 526 maps were prepared for the entire Indian mainland coast for identifying vulnerable areas to coastal erosion in 1:25000 scale, along with 69 district maps, and 9 State and 2 UT maps. A report on "National Assessment of Shoreline Changes along Indian Coast" was released in July 2018 and the report was shared with various Central and State Government agencies and stakeholders for implementing shoreline protection measures. An updated version of Atlas, along with a digital version of the report, containing all the maps, was released on 25th March 2022. In addition, Indian National Centre for Ocean Information Services (INCOIS), MoES has prepared the Coastal Vulnerability Index (CVI) maps for the entire coastline of India at a 1:100000 scale by using 7 parameters such as shoreline change rate, sea-level change rate, coastal elevation, coastal slope, coastal geomorphology, significant wave height and tidal range. Further studies have been done on Multi-Hazard Vulnerability Mapping to identify potential areas of coastal inundation for the mainland of India at a 1:25000 scale using data on extreme water levels, coastal erosion, sea-level change and high-resolution topography.

(b) & (c) Yes, Sir. Ministry had successfully demonstrated the innovative coastal erosion mitigation measures at Pondicherry and Chellanam in Kerala, which helped in restoration and protection of coastal areas and lost beach at Pondicherry. NCCR is providing technical support to coastal states, namely Tamil Nādu, Pondicherry, Kerala, Andhra Pradesh, UT Lakshadweep and Goa for implementation of coastal protection measures at vulnerable stretches and preparation of Shoreline Management Plan.

(d) Yes, Sir. Coastal stakeholders like fishermen and local administration/Government bodies were taken into confidence while implementing the preventive measures.
