

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION No. 583  
TO BE ANSWERED ON WEDNESDAY, FEBRUARY 6, 2019**

**THREAT TO COASTAL COMMUNITY**

**583. PROF. RICHARD HAY:**

**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 his Ministry 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**

**MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND  
MINISTRY OF EARTH SCIENCES  
(DR. HARSH VARDHAN)**

- (a) Yes, Madam. Recognizing the importance of coastal vulnerability due to sea erosion, a set of shoreline maps have been prepared for the entire main coastline of India on 1:25,000 scale. Under this programme, about 6632 km long coastline distributed among nine coastal States and two Union Territories was analyzed using 26 years of satellite data for the period 1990-2016 and field verifications to estimate the shoreline change i.e. erosion, accretion and stable. From the analysis, it is found that 33% of coast was eroding, 29% was accreting and 38% was in stable state. The analysis revealed that the West Bengal (63%) coast was the most vulnerable to erosion followed by Puducherry (57%), Kerala (45%) and Tamil Nadu (41%), respectively.**
- (b) Yes, Madam. Steps have been taken to demonstrate prevention of such hazardous situation by implementing anti-sea erosion techniques.**

- (c) Towards undertaking new measures to protect and restore the entire coastline of the country, Ministry of Earth Sciences through National Institute of Ocean Technology has developed innovative solutions for coastal protection and demonstrated at two sites, Kadalur Periyakuppam in Tamil Nadu and City of Puducherry as pilot projects which includes both technical and financial support from the Ministry of Earth Sciences. A segmented submerged dyke all along the three Kadalur fishing villages covering 1.7 km length of coast with a gap of 60 m between each segment of 200m length using geosynthetic tubes has been designed and implemented. Similarly, in Pondicherry a submerged north Reef in triangular wedge of length 170 m projecting into sea, in which 120 m is below water protects the coast by reducing wave energy. As a result of scientific innovation and implementation, beach has been restored in both Pondicherry and Kadalur village.**
- (d) Yes, Madam. The various stakeholders viz., Government of Pondicherry, Government of Tamil Nadu, local fisher men, villagers, local panchayats have been taken into confidence while implementing the projects.**

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