# GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES LOK SABHA UNSTARRED QUESTION No. 629 TO BE ANSWERED ON WEDNESDAY, 20<sup>TH</sup> JULY, 2022

## COASTAL VULNERABILITY INDEX

### 629. SHRI A. GANESHAMURTHI:

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

- (a) the details of erosion of coastline of Indian mainland along with the estimated Indian loss in terms of percentage as reported by National Centre for Ocean Information Services (INCOIS);
- (b) whether atlas of Coastal Vulnerability Index (CVI) maps for the entire coastline of India is prepared;
- (c) if so, the details thereof;
- (d) whether the 15th Finance Commission recommended creation of National and State Disaster Risk Management Fund comprising a mitigation fund at the national and State levels and a response fund; and
- (e) if so, the steps being taken to mitigate the impact of coastline erosion in the country in future?

# ANSWER

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

- (a) Indian National Centre for Ocean Information Services (INCOIS) has not estimated the percentage of loss specifically due to coastal erosion, however, INCOIS has estimated Coastal Vulnerability Index (CVI) for the Indian coastline, which is a cumulative impact of seven coastal parameters. Further, the National Centre for Coastal Research (NCCR), an attached office of the Ministry of Earth Sciences (MoES) is monitoring shoreline erosion since 1990, using remote sensing data and GIS mapping techniques. Totally, 6907.18 km long coastline of the mainland has been analyzed for the period from 1990 to 2018. It is observed that (33.6%) of the coastline is under varying degrees of erosion for the past 28 years.
- (b) Yes sir.
- (c) INCOIS has carried out Coastal Vulnerability Index (CVI) mapping to assess the probable implications of sea-level rise along the Indian coast. This exercise has generated maps using seven input parameters: shoreline change rate, sea-level change rate, coastal elevation, coastal slope, coastal geomorphology, significant wave height and tidal range. An atlas composing 156 maps of the entire Indian coast on a 1:1 lakh scale was released in 2012.
- (d) Yes, Sir.15<sup>th</sup> Finance Commission recommended the creation of National Disaster Risk Management Fund (NDRMF) and State Disaster Risk Management Fund (SDRMF) comprising Mitigation Fund at the National and State level (NDMF/SDMF) and Response Fund at the National and State level (NDRF/ SDRF) for the award period from 2021-22 to 2022-26.
- (e) The Finance Commission has also made specific recommendations for "Mitigation Measures to Prevent Erosion" under NDMF and "Resettlement of Displaced People Affected by Erosion" under NDRF. To operate these funds, the Commission also suggested that NDMA and/ or Ministry of Home Affairs may develop suitable norms for mitigation measures to prevent erosion and both the Union and the State Governments develop a policy to deal with the extensive displacement of people caused by coastal and river erosion. At present, NDMA is in the process of preparing the suitable norms for mitigation measures and developing a policy to deal with the extensive displacement of people'