

**GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA**

STARRED QUESTION NO:403

ANSWERED ON:08.12.2010

SEA EROSION

Maadam Shri Vikrambhai Arjanbhai; Sayeed Muhammed Hamdulla A. B.

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether the coastal areas have become more vulnerable to sea/beach erosion in the aftermath of global warming;
- (b) if so, the reaction of the Government thereto;
- (c) whether any study is being carried out in this regard;
- (d) if so, the details thereof;
- (e) whether any scheme has been operationlised to prevent the erosion; and
- (f) if so, the details thereof?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH)

(a) to (f) A Statement is laid on the Table of the House.

Statement referred to in reply to Part (a) to (f) of Lok Sabha Starred Question No. 403 by Shri Hamdullah Sayeed and Shri Ahir Vikrambhai Arjanbhai Maadam regarding Sea Erosion.

The main causes of the sea erosion include both natural causes like action of winds, waves, tides, storms etc. and anthropogenic activities including construction of artificial structures, mining of beach sand, offshore dredging, or building of dams or rivers. In addition to that, various catastrophic events also trigger coastal erosion which include tsunamis, tectonic movement etc. The coastlines are threatened by a combination of human pressures and climate change and variability arising especially from sea-level rise, increases in sea surface temperature, and possible increases in extreme weather events. Key impacts include accelerated coastal erosion, saline intrusion into freshwater lenses, and increased flooding from the sea. Sea-level rise will exacerbate inundation, erosion and other coastal hazards, threaten vital infrastructure, settlements and facilities.

Studies conducted by the National Institute of Oceanography in the northern part of Indian Ocean in the last 40 years concluded that the sea level rose by 1.06-1.75mm/year in the past century. Scientific studies on climate change show that the period up to the end of the century and beyond project a likely rise in sea level of the order of 55-60mm. Survey of India has established 26 tide gauges. All of these tide gauge stations are transmitting data in real time to the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad under the Ministry of Earth Sciences (MoES).

Appropriate protection measures arising out of the coastal erosion are addressed jointly by respective state governments and the Central Water Commission.