

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 4586
TO BE ANSWERED ON WEDNESDAY, DECEMBER 14, 2016
MARINE ECOSYSTEMS**

4586. SHRI M. CHANDRAKASI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether marine ecosystems in Indian seas have been damaged/disturbed due to sea-warming, acidification, oil spill and other factors and if so, the details thereof alongwith its impact on marine life forms;**
- (b) the details of research activities being undertaken by the Ministry to assess level of deterioration of sea environment in India seas and if not, the reasons therefor; and**
- (c) the steps being taken to safeguard the natural habitat of marine species and the interests of fishing sector?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a) Yes Madam. Although there is no significant damage reported, research studies indicate that there were disturbances in marine ecosystems in the seas around India which are sporadic and episodic in nature. These changes are due to warming of sea water, coastal pollution, mass bleaching of Indian corals etc. These are caused both by anthropogenic and natural variability viz., oceanic processes, man-made pressures, global warming events like Indian Ocean Dipole/El Nino Southern Oscillation, etc.**
- (b) The Ministry has been implementing a program for assessment of health of the coastal waters of India by periodically monitoring the pollutant levels in the seawaters of India. There were occasionally marginal increases in the levels of pollutants in few locations in the Indian coast. The increase in marine pollution was specific to a few locations and increasing trend is localized in nature primarily relating to nutrient flux like nitrate and microbial activity due to discharge of untreated domestic sewage in coastal waters. The data on coastal pollution is being provided to the Ministry of Environment and Forests to minimize pollution load into the coastal waters.**
- (c) A massive sewage treatment scheme has been implemented for treatment sewage of Mumbai. Incentives have been provided to the industries for installation of pollution control equipment. Common Effluent treatment plants have been installed in several industrial estates for treatment of wastes from small and medium scale industries. The Ministry of Earth Sciences is also undertaking satellite based Indian Coral Watch studies and issuing their monthly status bulletins. The Ministry of Environment & Forests and Climate Change is also performing studies to manage and conserve these fragile ecosystems. NCSCM has mapped the boundaries of coastal ecologically sensitive areas (ESAs) (CRZ I areas) areas which include mangroves, coral reefs, salt marshes, seagrass beds, turtle nesting grounds, etc., for the entire country as per the Coastal Regulation Zone (CRZ) 2011 notification, issued under the Environment Protection Act, 1986.**
