

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 3080
TO BE ANSWERED ON WEDNESDAY, 19TH MARCH, 2025**

Beach Pollution and Coastal Water Quality Monitoring

3080. SHRI TANGELLA UDAY SRINIVAS;

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of beach pollution levels recorded along Country's coastline during the last five years including key pollutants and their impact on marine ecosystems as per data from the National Centre for Coastal Research (NCCR);
- (b) the trends in marine litter and plastic pollution along beaches and coastal waters, along with the measures taken to address them, State-wise;
- (c) the number and locations of Blue Flag-certified beaches in the Country, along with the environmental monitoring criteria and compliance mechanisms in place;
- (d) the specific steps taken by the Government to reduce industrial and municipal waste discharge into coastal ecosystems including enforcement actions and waste treatment initiatives; and
- (e) whether the Government is developing a national framework for coastal waste management to prevent marine pollution and if so, the proposed structure and implementation timeline of such a framework?

ANSWER

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

- (a) Sir, based on data collected by various studies conducted by National Centre for Coastal Research (NCCR), an attached office of MoES, one of the most dominant key pollutants on the beach environment was found to be plastic litter. The main source of plastic litter on the studied beaches are observed to be public-derived litter followed by non-sourced litter and fishing activity related litter.
- (b) As per the study conducted by NCCR, in 2021, the percentage of beach plastic litter was 74%. It then declined sharply, reaching 40% by 2022. The percentage of beach plastic litter was 43% in 2023 and stayed stable in 2024. MoES has conducted various awareness events such as, PAN India beach clean-up and awareness program at more than 250 beaches (2017-2024) through various initiatives such as Swachh Sagar Surakshit Sagar/ International Coastal Clean-up Day, World Ocean Day, Swachhata Pakhwada/ Swachhata Hi Seva. etc These mega-awareness drives were conducted by engaging various government and non-government organizations, students from various schools and colleges, and other stakeholders. The Ministry of Environment, Forest & Climate Change (MoEF&CC) notified the Plastic Waste Management Amendment Rules, 2021, on 12th August 2021, prohibiting identified single use plastic items, which have low utility and high littering potential, from 1st July 2022. The MoEF&CC has also notified the

Guidelines on the Extended Producer Responsibility (EPR) for plastic packaging vide Plastic Waste Management Amendment Rules, 2022, on 16th February, 2022. The Guidelines stipulate mandatory targets on EPR, recycling of plastic packaging waste, reuse of rigid plastic packaging and use of recycled plastic content. The implementation of ban on identified single use plastic items coupled with Extended Producer Responsibility on plastic packaging has contributed in reduction of pollution caused by littered and unmanaged plastic waste.

- (c) Under the Integrated Coastal Zone Management Project (ICZMP), the Ministry of Environment, Forest & Climate Change (MoEFCC) has piloted Beach Environment & Aesthetic Management Service (BEAMS) Programme. Under this programme, various activities and parameters related to pollution abatement, beach awareness, aesthetics, safety, surveillances services and environment education, etc., have been done at identified beaches aimed to achieve international standards for Blue Flag Beach Certification. Total 10 beaches situated in 6 States and 3 Union Territories have been developed at par with best international beaches with safety and ecologically sustainable infrastructure, acceptable bathing water quality, self-sustaining energy supply and environmentally sound services/management measures. Beaches that have been conferred with internationally recognized Blue Flag Certification are:

- Shivrajpur, Devbhumi Dwarka District, Gujarat
- Ghoghla (Diu) Dadara Nagar Haveli and Daman & Diu
- Padubidri, Udupi District, Karnataka
- Kasarkod, Karwar District, Karnataka
- Kappad, Kozhikode District, Kerala
- Kovalam, Kanchipuram District, Tamil Nadu
- Eden, Puducherry District, Puducherry
- Rushikonda, Vishakhapatnam District, Andhra Pradesh
- Golden, Puri District, Odisha
- Radhanagar (Havelock), Andaman & Nicobar Islands

- (d) In order to reduce the industrial and municipal waste discharge into coastal ecosystems, the Government has taken following initiatives:

- i. Industry specific standards for emission or discharge of environmental pollutants for 79 industrial sectors under Schedule-I and general standards under Schedule-VI of E (P) Rules, 1986 have been notified.
- ii. The State Pollution Control Boards (SPCBs)/ PCCs issue consent to establish / consent to operate and authorization to the industries in the States. SPCBs / PCCs monitor the compliance of industrial effluent according to the prescribed norms. In case of non-compliance, action against industry is taken under provisions of the Water Act, 1974, the Air Act, and the E (P) Act, 1986.

- iii. Central Pollution Control Board (CPCB) has directed SPCBs / PCCs to inspect and designate Red, Orange, and Green categories of industries at a minimum inspection frequency of 6 months, 1 year and 2 years respectively for verification of compliance of environmental norms. In addition, 17 categories of high pollution potential industries, common waste management /treatment facilities such as Sewage Treatment Plants (STPs), Common Effluent Treatment Plants (CETPs) and Common Bio-Medical Waste Treatment Facility (CBMWTFs) are inspected on quarterly basis by SPCBs / PCCs.
 - iv. In addition to the regular monitoring through SPCBs/PCCs, CPCB also randomly inspect 17 categories of high pollution potential industries and common facilities based on the exceedance alerts generated through Online Continuous Effluent / Emission Monitoring Systems (OCEMS) installed in these units. In case of non-compliance with respect to environmental norms, action is taken against the violators as per the provisions of the Environmental Acts.
 - v. Central Pollution Control Board has issued directions to 9 Coastal State Pollution Control Boards (SPCBs)/4 Pollution Control Committees (Andhra Pradesh, Andaman & Nicobar, Daman, Diu & Dadra and Nagar Haveli, Goa, Gujarat, Karnataka, Kerala, Lakshwadeep, Maharashtra, Odisha, Puducherry, Tamil Nadu & West Bengal) under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974, regarding treatment of untreated sewage and Industrial effluent and disposal in coastal towns of India.
 - vi. Most of the industries located in coastal area are allowed to dispose their pre-treated effluent in Common Effluent Treatment Plant (CETP) and treated effluent from CETP is allowed to discharge into sea through pipeline. The existing shore discharge shall be converted to Marine Outfalls. In cases where the marine outfall provides a minimum initial dilution 1500 times at the point of discharge and a minimum dilution of 1500 times at a point 100 meter away from discharge point, then the State Board may relax the Chemical Oxygen Demand (COD) limit, provided that the maximum permissible value for COD in treated effluent shall be 500 milligrams /liter.
- (e) Marine pollution, originating from both land and sea, poses one of the greatest threats to the health of the world's oceans. This pollution can take many forms, including plastic pollution, agricultural runoff, industrial and municipal waste, marine litter, and oil spills, each with significant implications for marine biodiversity, human health, and economic activities. United Nations Environment Agency (UNEA) Resolutions on Marine Litter and Microplastics support global efforts to reduce marine litter. It supports and guides in the development of national and regional marine litter action plans. Consequently, National Centre for Coastal Research (NCCR), MoES has prepared a blueprint (technical report) for a national marine litter policy in India. According to this report, NCCR has proposed 4 targets and 20 strategies to combat the marine litter.
