GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION No. 1297 ANSWERED ON 28/07/2022

PROBLEM OF MARINE POLLUTION

1297. SMT. MAUSAM NOOR:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details and progress of joint effort by India, Australia and Singapore to address marine pollution with a focus on plastic debris;
- (b) the details of the magnitude of problem and the marine litter monitoring program;
- (c) the progress of the research on plastic debris in the Indo-Pacific Region;
- (d) the technologies explored/deployed for free and healthy ocean in tandem with global benchmarks for sustainable development; and
- (e) the suggestions shared by various participants as to the manner in which the growing problem of marine pollution is to be dealt with in the coming years?

ANSWER

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

- (a) The Governments of India, Singapore, and Australia jointly organized an online EAS Marine Plastic Debris workshop on 14th and 15th February 2022. About 100 participants from thirteen countries participated in the workshop and deliberated on four different themes:
 - The magnitude of the marine litter problem: monitoring programs and research on plastic debris in the Indo-Pacific Region.
 - Best practices, novel approaches, and solutions to prevent plastic pollution.
 - Polymers and plastics: technology and innovations.
 - Opportunities for regional collaboration to remediate or stop plastic pollution.
- (b) Marine Litter is monitored in coastal water, sediment, beach, and biota and analyzed for micro/meso/macro plastics pollution. An increase in the abundance of microplastics observed along the east coast during the monsoon with relatively higher concenations at river mouth. Urban beaches have higher accumulation rates than rural beaches. Under the pan India coastal monitoring, beach clean-up activities at regular intervals to assess the marine litter from 2018-2022, it was found that the majority of the waste with more than 50% composition was contributed by Single-Use Plastics (SUPs).

- (c) Ministry of Earth Sciences through its attached office National Centre for Coastal Research (NCCR), has initiated monitoring of temporal and spatial distribution of marine litter and plastic debris along the Indian coasts and adjacent seas. The research so far indicates that plastic debrisis spread along entire water column and sediment and high quantities are noticed during monsoon due to its spread into coastal water through creeks/rivers/estuaries by rainwater.
- (d) Low cost floating debris traps at small river mouths, creeks and canals to prevent the inflow of the plastic to the sea was installed and trapping floating debris in the harbor and port areas can be deployed to trap the floating plastics and debris.
- (e) The participants agreed that litter pollution being transboundary, collaborative action plans are important for combating this menace. The following suggestions were given:
 - Ban on single-use plastic, behavioral changes in plastic use
 - Technology can track or stop plastic from entering our oceans
 - Initiate activities at a local level, regional level, national and international level.
 - Local placed-based solutions to tackle the issues
 - Responsibility needs to extend high up in the supply chain and change in behavior to the plastic used in packaging by brands/producers.
 - Strengthening baseline information through monitoring programs and research to inform policymakers
 - Sharing of plastic monitoring data which helps to build a dataset to countermeasure and reduce ocean plastics
 - Identify and develop technologies for eco-friendly alternatives to plastic
 - Enforcement of policy and regulation
 - Enhancement of waste management system.
 - Enhancing the dialogue between countries
 - Technology that innovates the repurposing, recycling, and reuse of plastic waste Citizen science, education, community program, and outreach
