

ADDRESSING MARINE POLLUTION

Plastics and micro plastics from numerous sources, untreated wastewater, e-waste, radioactive waste and nutrient run-off pollute the oceans. It is alarming when more than 3.5 billion people depend on oceans as their primary source of food, and continuous threat being faced by aquatic life on daily basis. Taking into account the anthropogenic interference and the potential impacts of marine pollution on human health and ocean ecosystems, the United Nations Convention on the Law of the Sea accurately defines 'pollution of the marine environment' as the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as to harm living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities. Moreover, the issue of marine pollution is strongly interconnected with the other two planetary crises- Climate Change and Biodiversity loss. Climate change threats have exacerbated this issue, as warmer waters hold less oxygen. Consequently, nearly 500 dead zones (areas where there is too little oxygen to support marine organisms) have been identified in coastal areas around the world. The COVID-19 pandemic has also introduced new and evolving challenges related to waste and pollution, and consequently affected the marine environment adversely. Resolution 5/14 and 5/2 of the fifth session of the United Nations Environment Assembly specifically laid emphasis on plastic pollution and sustainable nitrogen management in the context of marine environment. Target 14.1 of the Sustainable Development Goals calls for the prevention and considerable reduction of marine pollution of all kinds, including marine debris and nutrient pollution, particularly from land-based activities. Despite the numerous efforts already undertaken globally to prevent and reduce pollution and the progress achieved, marine pollution continues to be pervasive and persistent. This has been further recognized through the United Nations Decade of Ocean Science for Sustainable Development 2021–2030, which emphasizes the need to understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems, so as to develop solutions in order to remove or mitigate them.

It is however important to mention here that the interconnectedness of marine environment and the transboundary effects of pollution calls for a holistic understanding and coordination beyond national and regional jurisdictions to effectively address marine pollution. As a part of mitigation and control strategy, international legally binding instruments addressing different aspects of marine pollution need to be implemented with compliance-related actions, monitoring and reporting. Moreover, parties to the already existing international conventions need to carry out their general and specific obligations in tune with the agreement. For example, parties to the UNCLOS have a general obligation to protect and preserve the marine environment, as well as specific obligations to take, individually or jointly as appropriate, all measures consistent with the Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities. States are also required to, inter alia, take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment. It is important to note that the obligations on the State to address marine pollution in accordance with their capabilities has weakened the effective management of marine environment since developing countries shrouded their responsibilities by taking initiatives according to their financial capacity and less technical know-how. Lack of knowledge on the part of various stakeholders about sustainable marine environment prevention measures is also a major concern in policy decision-making. So, additional innovation and scientific research to obtain real picture of critical areas for priority interventions is must. It entails building national monitoring capacities, promoting regional cooperation, information sharing, technology transfer and involvement of environmental NGOs with respect to research to assess the diverse impacts of anthropogenic interference on marine pollution and prepare a roadmap for prevention, mitigation and control of marine pollution in all forms.