

Mangrove Forests in Navi Mumbai: Traps for Marine Debris

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Abstract: *Marine debris from mangrove forests in Navi Mumbai was studied for material type, % composition, overall shape, sizes and sources to understand the impact of human activities. The results show that more than 90% of the marine debris came from the land-based and human activities. Of the total marine debris, more than 70% items are plastics followed by styrofoam, fabrics and glass. Composition of marine debris reveals materials such as plastics, styrofoam, wood, paper, metal, rubber, fabrics, glass and other material. More than 75% of the marine debris is of large-size (>10 cm & ≤1 m) and oversize (>1 m) followed by medium-size (≥2.5 cm & ≤10 cm). The results suggest that mangrove forests of Navi Mumbai are barriers for the medium-/big-size marine debris and acting as traps for marine debris. Mangrove forests in Navi Mumbai are filled with marine debris and plastic litter is a serious concern for the mangrove ecosystem.*

Keywords: Creek, Mangrove, Marine debris, Navi Mumbai, Plastics, Pollution

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