IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, March 2021

The Role of Ocean Currents in Distributing Plastic Pollution and its Ecosystem Impacts

Ravi Bhushan Xess¹ and Dr. Nirmal Sharma²

Research Scholar, Department of Environment Science¹ Research Guide, Department of Environment Science² NIILM University, Kaithal, Haryana, India

Abstract: Ocean currents play a pivotal role in distributing plastic pollution across the globe, transforming localized waste into a global environmental crisis. This paper examines the mechanisms through which ocean currents transport plastics, the formation of accumulation zones such as gyres, and the subsequent impacts on marine biodiversity and ecosystem health. It also highlights the socio-economic implications of plastic pollution and underscores the need for coordinated global efforts to mitigate its effects.

Keywords: Great Pacific Garbage Patch, Marine debris, Biodiversity, Ecosystem impacts, Plastic accumulation zones

