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EFFECTS OF HUMAN FOOTPRINTS ON MMILI-EZIGBO, ALOR IN IDEMILI SOUTH L.G.A. ANAMBRA STATE, NIGERIA

Ezeomedo, Innocent C., & Aziagba, Oluebube T.
Department of Environmental Management, Chukwuemeka Odumegwu Ojukwu University Uli, Anambra State, Nigeria

E-mail: ic.ezeomedo@coou.edu.ng

Abstract

Water is life if untainted, but across the world, particularly in developing countries like Nigeria, inland water resources are under pressure of pollution from agrochemicals, and municipal and other domestic wastes, capriciously affecting the water quality. The effects of human footprints on the water quality of Mmili-Ezigbo were assessed in 2022 using some selected parameters as indicators of water quality: temperature, pH, Electrical conductivity (EC), Dissolved Oxygen (DO), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), turbidity, phosphates, nitrates and nitrites. The major intentions were to determine whether there was variation in the selected physicochemical parameters of water; to investigate and identify various human footprints affecting Mmili-Ezigbo and their effects on the quality of water of Mmili-Ezigbo, the methods used for the study were field observation, measurements, questionnaires and laboratory analysis to generate both quantitative and qualitative data. Water samples were collected at three (3) different locations along Mmili-Ezigbo and questionnaires were administered to 100 respondents residing around the study area. It was discovered that Mmili-Ezigbo contributes on no small scale to the economic development of the studied population, result shows that out of sixteen (16) analyzed parameters, only four (4) parameters (conductivity, copper, zinc and iron) were within the acceptable limit while twelve (12) parameters (temperature, turbidity, Ph, BOD, COD, TDS, cadmium, arsenic, nitrate, nitrite and faecal & total coliforms) were relatively above the WHO/ NESERA standard for drinking water. To abate the effects of human footprints on the water quality of Mmili-Ezigbo, the study recommends that government policies and regulations should be enforced to guide water users on sustainable strategies; regular team monitoring by the Ministry of Environment and Water Resources is advised to checkmate the activities of industrial, commercial and agricultural dealers to ensure that water utilization is done in an eco-friendly manner, free from environmental and health hazards and/or pollution.

Keywords: Human Footprints, Physiochemical Parameters, Water Quality