



A study on the impacts of eutrophication related to lake ecosystem: The case from Saragama lake of Kurunegala

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Abstract

Water Eutrophication has become a worldwide environmental problem in recent years. The paper continues with an explanation of the less well documented indirect ecological effects of nutrient enrichment on lake structure and function, including effects of excess growth on physical habitat, and alterations to aquatic life community structure from the microbial assemblage to fish and mammals. Eutrophication in most often from farms, paddy, and other fields tends to be heavily fertilized and from natural events. If a stream, lake floods, it may wash away any excess nutrients off the land and into the water. The study attempted to find the impacts of Eutrophication related to Lake Ecosystem in Saragama Lake. As the study area, selected Saragama and Udadigana GNDs are situated in Kurunegala District. 40 questionnaires given to people and interviewed 10 key persons selected through a convenient sampling method. This lake was support to agriculture and others. The present-day lake is polluted because of the hotel industry and agricultural activities. The Hotel Indoora and Green Valley resort are contributed to lake pollution by wastewater discharge. Lake Ecosystem has become destroyed and the effects of its negative impact on aquatic life. The paper also discusses effects on the ecosystem level including changes to productivity, respiration, decomposition, carbon and other geochemical cycles and discussing the significance of these direct and indirect effects of nutrient enrichment on designated uses- especially recreational, aquatic. All Sri Lankan results find no more findings for sustainable situations to reduce the impact of Lake Eutrophication in Sri Lanka. Only have short time conditions for mitigating the impact. The paper ends by discussing the new findings for reducing the impacts of eutrophication. Among them, composting, not polluting, limiting the amount of water pollution, from EIA have given some regulation to factories and some vegetation, policy regulations must be harden, awareness programs, implementation of appropriate solid waste management system, new rules and regulations regarding water pollution in lakes, elimination of unauthorized construction useful for responded institutions for decision to solve the problem in Sri Lanka.

Keywords: Eutrophication, Impacts, Lake Ecosystem, control the impact