

WATER QUALITY ASSESSMENT OF KHAZIPALLY LAKE, SANGAREDDY DISTRICT, TELANGANA STATE, INDIA

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Abstract

Khazipally's ever-increasing population, urbanization, and modernization are posing problems with sewage disposal and contamination of surface water. Natural water gets contaminated due to weathering of rocks, leaching of soils, mining and industrial processing, etc. Various problems in lakes that cause nutrient enrichment in them have been reviewed. Land use change and longer growing seasons could increase the use of fertilizers with subsequent leaching into water courses, rivers, and lakes, increasing the risk of eutrophication and loss of biodiversity. Water quality can be assessed by parameters such as pH, TDS, DO, BOD, COD, Cl^- , NO_3^- , SO_4^{2-} and TH were analyzed. Their results suggest deteriorating status of lake waters. To keep it alive and usable, it is suggested that routine analysis of the lake water atleast once a month is essential. This will assist lake authorities in protecting the lake's water and reducing impurities levels. This study will also raise public awareness about the importance of maintaining a healthy and green environment. These bodies of water are very precious and their waters should be protected from pollution.

Keywords: Khazipally lake, BOD, COD, Eutrophication and Water quality Index