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IMPLICATION OF GEOINFORMATICS AND GIS TO IDENTIFY THE CHANGE DETECTION OF EAST KOLKATA WETLANDS

Biraj Kanti Mondal

Abstract

Geoinformatics is the science and the technology dealing with the acquisition, storage, processing, production, presentation and dissemination of geoinformation which develops and uses different information to solve the problems of diverse environmental aspects. Wetland is recognised as one of the most productive ecosystems of the earth, from environmental as well as socio-economic point of view and it has immense importance to maintain the biodiversity and ecological balance of the biosphere by its uniqueness. But the irony lies in the fact that wetlands have not been given due importance that they are supposed to deserve and they are being degraded due to lack of appreciation of their role. The wetland covered area of the globe has dropped by almost 6% in last 20 years. East Kolkata Wetlands (Ramsar Site) act as an absorber basin for huge amount of contaminants drained from the Kolkata Metropolitan City. This wetland, extended up to the Bidyadhari and Matla River confluence, is upshot frequently not only by the dynamics of Hugli, Bidyadhari and Matla River but also by the human encroachment. The degradation and transformation of wetlands is a slow poisoning risk made us think about its past history and hopes and doubts about its future. Reclamation of land for agriculture, aquaculture and urban expansion occur which threatened different sites of this wetlands. Furthermore, huge population pressure, rapid growth and their increasing economic demands, the wetlands area has been victimise by different ways as an aftermath. Therefore, an in depth study was attempt for the change detection analysis of the wetlands of East Kolkata and ten selected blocks of North and South 24 Parganas districts. Geoinformatics is the key solicitation technique to recognize the change detection and geospatial analysis of the present study area.

Key Words: *Wetland, change detection, geoinformatics*