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Influence of Changes in Watershed Landuse pattern on the Wetland of Sultanpur National Park, Haryana using Remote Sensing Techniques and Hydrochemical analysis.

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Abstract

Change in water supply and drainage patterns of surface and subsurface moisture zones are greatly enhanced due to anthropogenic activities. Monitoring changing wetland ecosystems helps to determine their tolerance to such anthropogenic activities.

Sultanpur National Park, a wetland ecosystem located in Gurgaon district of Haryana state is such an ecosystem, harbouring plant and animal biodiversity. Increase in agriculture and builtup area in the surrounding region along with artificial deepening of the lake area for rainwater accumulation has led to the degradation of the central lake both in terms of quantity and quality. The anthropogenic influence was validated by landuse landcover mapping (through K-means unsupervised classification) of LANDSAT data within the wetland catchment for year 2000 and 2015 having an overall accuracy of 89.45% for 2000 and 80.48% for 2015.

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