

Abstract Details

Title: Identification of Water Logged Area in Rohtak District using NDWI

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Abstract: Water logging is one of the major environment issue and hurdle in development of the area. The study was carried out to identify the water logged area in Rohtak District, Haryana. Landsat image of the area is used which have Green band and Mid Infra Red band as Band-2 and Band-7 respectively. For the purpose modified version of NDWI (Normalized difference water index) is used. In NDWI there is noise of built-up area and soil in the water traces, to minimize these noise modified version of NDWI (MNDWI) is used in which Mid Infra Red band is used instead of Near Infra Red Band with Green band. The open water features were enhanced and built-up land noise was suppressed, even removed. By analyzing it was found that MNDWI has high value in those areas where there is canal network and few major patches were found where water logging is identified. Patch 'A', 'B' and 'C' were identified as major patch in the study area and those areas were visited for the ground truth and found that there is highly intense water logging.

Keywords: NDWI, Mid Infra Red, Water logged.