The effect of floods on restoring vegetation of Hamoun international wetland

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Abstract

Hamoun international wetland is common in Iran and Afghanistan that the water supply carried out from Afghanistan. Wetland vegetation bed is affected by torrential achievements. Therefore, monitoring the impact of floods on vegetation recovery of the wetland can help in management of the restoring wetland vegetation. Thus, this study was done on the temporal and spatial changes in vegetation of international Hamoun wetland Using information of Landsat bands (L8), OLI and TIRS sensors in both 1394 and 1395 And NDVI index value. To evaluate the quality changes of vegetation, numerical values of these indices is classified to four class is very weak, weak, average and good. The results shows that due to the definition of the ratio of restored vegetation area to dewatering area in any part of the wetland, Hirmand Hamoun, Sabori Hamoun and Pouzak Hamoun as 34.7, 9.5 and 79.7 percent of floods caused vegetation restoring. The reason of this low value in Sabori Hamoun is increased in vegetation quality rather than its quantity and the reason of this high value in Pozak Hamoun is due to lack of human settlements around it as well as its catchment of the river's Khash Rod and Khospas in winter. Flood in the quarter ranged generally makes the restoration of this international wetland vegetation in 23.93 percent that 8.23 percent owned by vegetation recovery in Iran and 15.7 percent is related to Afghanistan.

Keywords: Remote sensing, Hamoun wetland, vegetation. NDVI.