Abstract:

Hamoon wetland is one of the important the biggest country wetlands in Sistan Region. In this study for evaluating changes of detection and vegetation cover of Hamoon wetland was used from satellite picture relation to remote landsats TM of 1366, 1374, 1384, 1389 and also and also remote satellite LissIII 1389 . The pictures were selected for spring season and in summer that vegetation cover had Maximum Canopy. For supplying pictures the newest picture was Georefrenced by scale map 1:25000. And the other pictures were entered in this model. RMSE in the all of matters was more less than 1. When recorded pictures spatial resolution of the picture by method of Resampling was was converted to 30 meters. Topography correction on pictures was done with applying Region DEM and with use of Lumberty model. In this study land use map and land cover were supplied from method for supplying map of vegetation cover percentage at beginning data related to characteristics of indexes supplied by Satellite pictures.

With due attention this subject that in the arid and semi arid region because of low density vegetation cover, reflectance of radiation is more severs than the other phenomenons. So in this study for decreasing effect of soil reflectance was used for vegetation indexes. For selection of suitable indexes at the beginning was evaluated correlation between parameter of plant quality and indexes. And was selected parameter that had the highest amount correlation with each parameter. In this research significant correlation was observed between plant parameter and plant indexes of SAVI had the most description sufficiency of vegetation cover percentage with use of this index, the map of vegetation cover percentage was supplied in the 3 classes also with use of GIS and RS techniques supplied watery layers, Saline soil layers, bare lands. Finally supplied layers by GIS techniques were combined with together and was supplied maps were between 80-90% detection appearing change produced maps, the map overlay each other then qualitative and quantitative change was determined between years of 1366 and 1374, 1374 and 1384, 1384 and 1389, 1366 and 1389.

Key words: Hamoon, wetland, data of Remote sensing, vegetation index, change of vegetation index.

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Assessment of land cover change trend using remote sensing data in Hamoon wetland

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