Abstract:

Land use often undergoes changes due to human activities. Identifying and reviewing these changes can help planners and planners identify the factors affecting land use and land cover, and use it at different levels of planning. The purpose of this study was to determine the land use change by using remote sensing technique, determining the land use classes and studying the land use change status with physiographic conditions in the Nukabad watershed of Khash district, Sistan and Baluchestan province. Determination, analysis and review of land use changes in the studied watershed was performed using multi-sensory data. To this end, the boundary of the study area was determined using maps 1: 50000 and satellite images of the study area were prepared. For this purpose, images from the Landsat Satellite of the American Geosciences Organization were used due to their good resolution, long history and shorter time intervals, and easier identification of ground effects. Then the image was processed for geometric, radiometric and atmospheric corrections. And classification was made on satellite imagery and land use was studied for time periods. In the following, land use change was done between study courses. Finally, ArcGIS software provided the land use map. Based on the results, the overall accuracy of user maps for the years 1994 (97.94%), 2000 (97.91%), 2005 (98.4%), 2010 (97.99%) and 2016 (06 / 97%) is fairly good. Also, the results showed that residential areas had changed during the period 2000-1994, 2000-2005, and 2016-2010, and in the period from 2005 to 2000, most of the changes were made in agricultural land. Also, the results of the assessment of changes in use indicate the decreasing trend of rivers in the study area, which is mainly due to climate change and human interference. Agricultural lands, residential areas and mountain ranges have been increasing, among which the highest changes during the statistical period (1994-2016) are mountain ranges. Regarding the results, the importance of planning for the implementation of appropriate management plans to improve the status of the watershed as well as improving the livelihoods of the people of the area is becoming more and more evident.

Key words: Land use, Watershed, Satellite Images, Remote Sensing

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