

NDVI Differencing and Post-classification to Detect Vegetation Changes in Halabja City, Iraq.

ABSTRACT

This study presents vegetation change detecting in Halabja city, Iraq by using Landsat-5 Thematic Mapper images. This city was shelled with chemical weapons on 16 March, 1988. The Normalized Difference Vegetation Index (NDVI) image differencing and post-classification techniques were applied. The NDVI was derived first then classified to produce vegetation maps followed by quantifying the changes. The results indicated a drastic decrease in the dense, sparse and moderate vegetation by 55%, 7% and 9% respectively. In contrast, the non-vegetation class increased by 5%. This means that, the field and planted areas were at risk of losing vegetation.

Keyword: remote sensing; vegetation