

Application of Satellite Imagery for precise Change Detection (case study; Taleghan Basin)

H.Arzani¹ M. Faraji² A. Tavili³ J. Feghi⁴

Abstract

The main purpose of this study was to extract landuse map by applying new method of Object Oriented Plus Ancillary data with ERDAS and studying land-use changes during 1987-2001 via ETM+ sensors. Result showed that land-uses in 1987 and 2001 are specified and the method of comparison for changes making prominent are used after classification. The result demonstrates that in the interval of 15 years, the surface of abandoned dry farming and very week rangelands are increased and the surface of dry farming being used, semi accumulated ranges up to relative accumulated, low accumulated ranges, irrigated farming and gardens has been decreased. Based on the results, it is possible precisely evaluate landuse change detection using RS data.

Keywords: Remote sensing, Landuse, Object oriented + Ancillary data, NDVI

¹Prof., Dep. of Reclamation of Arid and Mountainous Regions, Natural Resources Faculty, University of Tehran.

²MSc in Range Management, Graduated from University of Tehran

³ Assistant Prof., Dep. of Rehabilitation of Arid and Mountainous Regions, Natural Resources Faculty, University of Tehran.

⁴ Assistant Prof., Dep. of Forestry, Natural Resources Faculty, University of Tehran