Abstract

Today, because of increasing demands for agricultural products and existence of restrictions against resources such as lack of natural water resources for producing agricultural products using traditional methods, it is a need to use modern techniques such as satellite remote sensing to manage natural resources. The need for agriculture is to increase the production by optimum utilization of resources. Remote sensing satellites could be a good option for water and nutrient requirement and disease detection. In this paper a feasibility study is carried out for using remote sensing images for managing agricultural resources in the area of Beyza, a land in Fars province in Iran. After a study on availability of different imagery resources covered this area and the way of accessing such data in a good manner, ETM+ of Landsat satellite is selected as the source of data. After that the image processing steps required for extracting useful information are discussed and finally a practical model is proposed that should be implemented for applying the model on the real condition. The simulation results based on prototype data and previous studies showed the effectiveness of the proposed model.

References
- Iranian Space Agency Website: http://www. isa. ir [accessed September 2012].

**Index Terms**

Computer Science

Information Sciences

**Keywords**

Remote sensing agriculture management Beyza land image feasibility study model