

## **Reviews of Landscape Function Analysis (LFA) applications in rangeland ecosystems and its links with vegetation indices (VI's)**

### **ABSTRACT**

Monitoring and evaluating the distribution and dynamics of vegetation cover in rangelands is very important to study the impact of human activities and climate change on rangeland ecosystems. The scientist's predictions of positive and negative changes in rangeland conditions were difficult in many cases due to weak understanding of the interaction between causes and effects as well as limited information about vegetation and soil at large areas. The use of some newly developed indicators has changed this status and increased our knowledge about rangeland ecosystem. Recently, the most used indicators to monitor rangeland ecosystem dynamics is Landscape Function Analysis (LFA). This paper aims to review the recent applications of LFA methodology and its relationship with some Spectral Vegetation Indices (VIs) in rangeland ecological studies and discuss its expected key role in future researches.

**Keyword:** LFA application; NDVI; Rangeland ecosystems; VIs