RULE BASED CLASSIFICATION APPROACH FOR MAPPING LAND DEGRADATION

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Abstract:

Land Degradation is one of the major ecological problems faced by the world today. Remote sensing, now-a-days plays an important role to map degraded lands w.r.t. their extension, type, and severity. Traditional classification methods are mostly based on the properties of spectral reflectance which results in pixel value. Thus, classification of features which have similar structure or remotely sensed data which have a few bands are often met some difficulties such as mixed classes. For land degradation mapping, it is observed that getting good result in classification of land degradation is not easy because various types of degraded areas appear only slightly different in terms of their spectral information. To overcome this challenge, a classification approach using multi-inputs as indices was implemented in this study. This study focuses on mapping land degradation using two methods, namely, supervised classification and rule based approach. Compared with supervised classification for the area under study, rule based classified map using different set of indices is found more suitable for the extraction of degraded landforms.