ANALYSIS OF RANGELAND PRODUCTIVITY OF LIDDER VALLEY USING GEO-SPATIAL TECHNIQUES

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Abstract

The study area selected for this research is Anantnag district of Jammu & Kashmir, India. Commonly known as Lidder valley one of the best tourists destination in Kashmir. There are extensive rangeland in the upper stretches of lidder, the livelihood of semi and migratory grazers locally called Gujars and Bakherwals is linked the sustainability of these rangeland lands. The once lush green regime lands have deteriorated in quality, due to excessive tourism pressure and unmanaged grazing activity. The productivity of these rangeland lands would have to be estimated by using remotely sensed and field data. Results show that Rangeland lands increases 16% because of deforestation. The two approaches were used in this research on is on the 'basis of NDVI i.e. high NDVI indicates High productive rangelands and moderate NDVI indicate and low indicates low productive or degraded, Another integrated approach is on the basis of slope, NDVI and other soil properties i.e. high NDVI and low slope indicates high productive, moderate NDVI and moderate slope indicates moderately productive, and while as low NDVI and low slope indicates low productive or degraded. The overall aim of this research is to demonstrate the usefulness and applicability of remote sensing, GIS and geo-spatial modeling techniques.

Keywords: *Productivity, Rangelands, NDVI, Remote sensing, GIS, Geospatial Modeling*

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