



Action plan for Combating desertification in cold dry sub-humid region of Kathua District (J&K)

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Abstract: Desertification process has been active in the cold arid regions of Jammu and Kashmir. Not much work has been reported on combating the process of desertification in a dry sub humid region. Bhini watershed (1C1B2), Kathua district of Jammu Kashmir state has been selected to generate locale specific-action plans to combat desertification. Physiographically, the area is characterized by highly undulatory terrain and dis-sected hills. Geologically, the terrain encompasses rocks of 'Siwalik Group' comprising sandstone, siltstone and transported quartzite rocks. Geomorphologically, study area is exhibited by piedmont plains, structural ridges, flood plain and low highly dissected hills. The study area has poor forest cover leading to excessive soil erosion and poor crop yield. Land use/ land cover, soil and slope and ground water prospect maps are prepared by using multirate satellite data, ancillary information and collateral data. Composite Land Development Units (CLDU's) are generated by integrating thematic maps in GIS environment. Based on the CLDU characteristics of study area, the land resources development plans that are suggested for combating desertification in Bhini watershed are: 1) afforestation with proper soil water conservation, 2) protection and gap filling, 3) agro-forestry with contour bunding, and, 4) agro-horticulture with ground-water exploration.