

944. **Sikka, A.K. 1995.** Estimation of leaf area index as an input to hydrologic modelling of Causey watershed in Utah using remote sensing and geographic information system. Proc. Nat. Symp on Remote Sensing of Environment with special emphasis on Green Revolution, Ludhiana, Nov. 22-24, 1995: 279-287.

In the paper, the author attempts to develop the relationship between normalized difference vegetation index (NDVI) and LAI for different vegetation types. These relationships were applied to the Causey watershed (208.64 sq km) in Utah, USA for estimating LAI using Landsat Thematic Mapper (TM) data in a GIS environment. Estimated values of LAI for spatially distributed hydrologic response units (HRUs) were used as input to model hydrologic response of the watershed. The results of this study in general confirm the applicability of Landsat TM data and the approach followed in estimating LAI on large watersheds and regional basis for modelling hydrology and ecology.