Abstract

Uncontrolled tourism activities harbours deteriorated environment and depreciated economy. The major aim of the study was to evaluate the relationship of advancing tourism in Northern areas of Pakistan with degrading environmental state and economic development of local community. Mixed method approach incorporating the use of questionnaires, meteorological record of the study area, focused group interviews and enhanced use of satellite imagery was utilized to extract the definite information. Study area was categorized into several classes depending upon the area distribution including agriculture land, forest cover, vegetation cover, settlements, roads, barren land, river and streams. The snowballing development of the community has led to greater tourist attracting to this area which degraded the environment at a relatively slow pace but becomes visible after decades. The results indicates that land use and land cover (LULC) has been altered since the last decade to which NDVI (Normalized Difference Vegetation Index) visibly present an increasing trend of the land degradation which shows that the forest area in the region has decreased altering into settlements. Apparent change in the area of forest cover (41.7%→38.4%), barren land (43.2%→40.3%), agriculture land (8.3%→2.9%), vegetation cover (0.4% →6.3%) and settlements (2.5%→6.6%) as deduced using Arc GIS. Mismanaged tourism at these tourist attractions have deteriorated the region to such extent that interviewees during the focused group interviews specifically mentioned the carelessness of the authorities, littering menace and irresponsible behaviour portrayed by tourists. Meteorological data shows anomaly in the rainfall patterns and extreme temperature sequences warming up the atmosphere, to which tourist car exhausts were added. Spearman's correlation applied on the data collected via questionnaire showed a moderate correlation representing an indirect link between increasing tourism and enhancing degradation. Considering the significant magnitude of degradation over the last decade, appropriate and urgent actions are needed to address it.