ABSTRACT

This study assessed the vegetation cover changes and soil erosion hazard in the Muzvezve sub-catchment located in Sanyati catchment, Zimbabwe. A descriptive research design was used in this study. Data was collected using Geographical Information System (GIS) and remote sensing, key informant interviews, and direct field observations. ArcGIS 10.5 was used to analyze the data collected using GIS and remote sensing. Content analysis was used to analyze data collected from direct field observations and semi-structured interviews. The results indicated that the major causes of deforestation and soil erosion in the sub-catchment were anthropogenic activities such as urban and agricultural expansion, resettlement programs, veld fires, brick molding, and mining. Vegetation cover changes fluctuated from 2008 to 2019, experiencing gains and losses in vegetation cover over the years. The erosion hazard fluctuated between the different erosion hazard classes from 2008 to 2019. These changes were attributed to land use and land cover changes. and conservation practices in the sub-catchment. Some of the strategies that were undertakento deal with deforestation and soil erosion were not effectively implemented. The study recommends more community engagement programs such as awareness campaigns in order to educate local people on sustainable forest and soil resource management.