

Erosion hazard study in Kokap river Basin Kulonprogo Regency, Yogyakarta Province, Indonesia

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20408311&lokasi=lokal>

Abstrak

Geographic Information System (GIS) is used in erosion hazard mapping in the area of Kokap River Basin, Kulonprogo Regency, Yogyakarta Province, Indonesia. The erosion hazard is estimated from the parameters indicating rainfall erosivity, slope length and slope steepness, soil erodibility, crop cover, and land management using USLE and erosion plot observation. The erosion hazard factors were directly observed in the field and through laboratory tests of soil samples originating from each mapping unit. The delineation of mapping unit is based on landform, slope class, and landuse type differences. Four landforms are delineated, i.e. colluvial footslope, dissected hills and mountainous which are developed on andesite intrusive rocks, and dissected mountain formed on andesitic breccias. Using the USLE, the units which are densely by covered vegetation are characterized by erosion hazard which varies from low to moderate class, while the units are covered by mixed gardens and dryfield are indicated by moderate to high class. Depending on the erosion plot observation, the study area is characterised by erosion hazard which varies from every low to very high class.