EVALUATION OF LAND CONDITIONS IN THE SILENG SUB-WATERSHED IN BOROBUDUR DISTRICT MAGELANG REGENCY

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ABSTRACT

The Sileng Sub-Watershed is an area that has significant land degradation due to various human activities and natural factors. This research aims to evaluate the land conditions in the Sileng Sub-Watershed. There are 18 sample points determined based on the Land Map Unit. This research using survey method by collecting soil samples and land condition data. Based on the results of the research, Sileng Sub-Watershed has an erosion index dominated by the good class, namely 17 land systems and 1 land system in the poor class. The index of land cover by permanent vegetation is 1,944.16 ha (63,71%), while for land not covered by permanent vegetation is 1,107.28 ha (36,29%). The index of land use suitability compared with the arrangement of regional space order plan (RTRW-Rencana Tata Ruang Wilayah) is 2,696.34 ha (88,36%), while the area of unsuitable land is 355.10 ha (11,64%).. Land susceptibility index to landslides obtained 11 land systems are in the class of low susceptibility level and 7 land systems in the level of moderate susceptibility. The land conditions of Sileng Sub-Watershed showed 11 land systems in good condition, 6 land systems in fair condition and 1 land system in moderate condition.

Keywords: erosion, land conditions, land cover, landslide, land use.