

Analisis Tingkat Bahaya Erosi Pada Kemiringan Lereng Yang Berbeda Di Desa Girirejo, Imogiri, Yogyakarta

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ABSTRAK

Desa Girirejo berada di sebelah timur wilayah Kabupaten Bantul memiliki kemiringan lereng yang curam dan sangat curam lebih dari 40 % serta curah hujan rata-rata mencapai 20-60 mm per hari. Tujuan penelitian adalah menganalisis serta memetakan sebaran laju erosi tanah dan menghitung luas wilayah TBE pada kemiringan lereng yang berbeda di Desa Girirejo. Penelitian ini dilakukan pada bulan Mei 2019 - Oktober 2019 menggunakan metode *survey* untuk mengetahui kondisi umum wilayah. Metode pengambilan sampel tanah metode *purposive sampling* dengan penentuan titik sampel berdasarkan peta sistem lahan yang dibuat dengan cara *overlay* peta jenis tanah, peta kemiringan lereng dan peta tataguna lahan dengan masing-masing skala 1:20.000 menggunakan *ArcGis* 10.2. Data primer meliputi struktur dan kedalaman solum sedangkan data sekunder meliputi data curah hujan bulanan. Rumus USLE untuk menentukan nilai laju erosi sedangkan nilai laju erosi dan kedalaman solum untuk menentukan TBE. Hasil penelitian menunjukkan bahwa laju erosi di Desa Girirejo pada kemiringan datar didominasi erosi maksimum <15 ton/ha/th seluas 69,75 Ha, kemiringan landai didominasi erosi 15-60 ton/ha/th seluas 25,54 Ha, kemiringan sedang didominasi erosi 60-180 ton/ha/th seluas 33,12 Ha dan kemiringan curam serta sangat curam didominasi erosi 180-480 ton/ha/th masing-masing memiliki luas 34,77 Ha dan 28,34 Ha. Tingkat bahaya erosi di kemiringan datar Desa Girirejo didominasi tingkat bahaya erosi sedang seluas 69,75 Ha. Kemiringan landai didominasi tingkat bahaya erosi rendah seluas 25,54 Ha. Sedangkan pada kemiringan sedang, curam dan sangat curam di dominasi tingkat bahaya erosi sangat berat dengan masing-masing luasan yaitu 55,19 Ha, 71,72 Ha dan 32,43 Ha.

Kata kunci : Erosi, Kemiringan Lereng, Laju Erosi Tanah, Tingkat Bahaya Erosi

**Analysis of Erosion Hazard Levels on Different Slopes in Girirejo Village,
Imogiri Sub-district, Bantul Regency, Special Region of Yogyakarta**

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ABSTRACT

Girirejo village at the east Bantul Regency with steep and extremely steep slopes of more than 40% and the average rainfall reaches 20-60 mm per day. This study aims to analyze and map the distribution of erosion rates and calculate the area of EHL on different slopes in Girirejo Village. This research was conducted in May - October 2019 using a survey method to determine the general condition of the area. The soil sample was collect using a purposive sampling method by determining the sample point based on an overlay of soil type, slope, and land use maps with a scale of 1: 20,000 using ArcGis 10.2. The primary data covered the structure and depth of solum, while the secondary data were monthly rainfall records. It used the USLE formula to determine the value of the erosion rate. Then, the value of the erosion rate and depth of the solum was to determine the EHL. The result shows that the erosion rate in Girirejo village on a flat slope is dominated by erosion with a maximum of <15 tons/ha/year covering an area of 69.75 Ha and the gentle slope is dominated by the erosion rate of 15-60 tons/ha/year covering an area of 25.54 Ha. Then, the moderate slope is dominated by an erosion rate of 60-180 tons/ha/year covering an area of 33.12 Ha. The last, steep and extremely steep slopes are dominated by the erosion rate of 180-480 tons/ha/year covering areas of 34.77 Ha and 28.34 Ha of each. The erosion hazard level on the flat slope of Girirejo Village is dominated by a moderate level of 69.75 Ha. The gentle slope is dominated by a low level of 25.54 Ha. Meanwhile, the moderate, steep, and extremely steep slopes have a very high erosion hazard level of 55.19 Ha, 71.72 Ha, and 32.43 Ha respectively.

Keywords: Erosion, Slope, Soil Erosion Rate, Erosion Hazard Level