CONTROL PLANNING OF EROSION IN JELOK VILLAGE, KALIGESING SUB-DISTRICT, PURWOREJO REGENCY, CENTRAL JAVA PROVINCE

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Abstract

Jelok village is a village dominated by the topography of the steep slopes. As the population increases with the carrying capacity of land use is more diverse. Inappropiate land use can increase the potensial of erosion in the area. This research aims to a calculate the magnitude of run off in the research area, the magnitude of erosion in the research area, and determine the direction of management techniques in accordance with the classification of erosion levels in the research area.

The metods used in conducting this research is survey method and small plot method. This sampling is done on purposive. Data analysis with the calculation of the magnitude of erosion in each rain event converted into ton/ha/yr. The parameters used are slope and land use.

*Based on the research of the result, in **Vegetation 1** with a slope of 30%, the mean of run off each plot is 16,761 liter or 83805 liter/ha and erosion is 5,28 ton/ha; in **Non Vegetation 1** with a slope of 30%, the mean of run off each plot is 24,551 liter or 122755 liter/ha and erosion is 10,51 ton/ha; in **Vegetation 2** with a slope of 15%, the mean of run off each plot is 14,64 liter or 73200 liter/ha and erosion is 3,18 ton/ha; in **Non Vegetation 2** with a slope of 15%, the mean of run off each plot is 19,787 liter or 98935 liter/ha and erosion is 5,91 ton/ha; in **Non Vegetation 3** with a slope of 25%, the mean of run off each plot is 23,182 liter or 115910 liter/ha and erosion is 11,4 ton/ha; in **Vegetation 3** with a slope of 25%, the mean of run off each plot is 19,293 liter or 96465 liter/ha and erosion is 5,3 ton/ha. The classification of erosion at various angles of the slope and land use is very large. The recommended conservation effort is to apply rock terrace in the research area to reduce run off and the magnitude of erosion that occurs.*

Keyword: run off, erosion, slope, classification of erosion, conservation, land use