

**Kajian Stabilitas Lereng Terhadap lahan Pertanian
Di Desa Tieng Kecamatan Kejajar Kabupaten Wonosobo, Jawa Tengah**

Abstrack

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Dieng plateau has a slope of between 25-40% even in some areas of > 40%, with Andosol soil type and rainfall average of > 3,000 mm / year. Thus the Dieng plateau has steep slopes with a grade that is sensitive to the type of soil erosion and landslides and rainfall is very high. This study aimed to explore the safety factor on a slope that has a steepness of > 40% is used as the agricultural land in the village of Tieng District Kejajar Wonosobo regency, Central Java.

The experiment was conducted in a qualitative and quantitative survey methods and analisis fellenius method. Where the resulting value will determine the safety of the slope, in this study researchers took several samples from the slope of the body that is used to perform testing of the soil shear strength in wet or dry state, and researchers to test the infiltration rate of the soil that is in the body of the slopes with a slope > 40 %. Agricultural land is used as slope areas will only add to the body burden of the slope, because the slope does not have good vegetation, coupled with high rainfall greatly affects the infiltration into the slope so that the load line slope will increase water infiltration is done by land.

The results showed that, steep slopes and used as agricultural land becomes unstable slope stability analisis results with the slope value of 0,959 researchers located in the area unstable and far from safety factor, the infiltration rate of 2.586 cm / min without vegetation and 1,229 cm / min with vegetation, plus the average of 3307mm rainfall / year. This shows that the slope likely to experience movement. By doing this research, the researchers provide management direction by changing the geometry of the slope in order to withstand the movement of the slope.

Keywords: Slope, Slope Stability, Agricultural Land, landslides