Study Mass Movement of Soil and Rocks Against Residential In Jrakah Village, Selo District, Boyolali Regency, Province of Central Java

By :

ARYANTO

114.070.026

ABSTRACT

The study area is located in Jrakah village, Selo district, Boyolali regency, Central Java. Geographically the study area located in 110°26'20" East Longitude - 7°27'11" South Latitude and 110°26'56" East Latitude - 7°31'50" with the extensive area 118,85 Ha. Generally the study area are including in vulnerable landslide area. The purpose in this study is to determine the degree of vulnerability of land mass movement and to evaluate the existing residential with land suitability for residential class criteria at Jrakah village, Selo district, Boyolali regency.

The research method uses Survey Methodology, Mapping and Scoring. The methode involve observation, rainfall measurement, soils thickness, soils permeability, springs of discharge, slope, and direct observation about the condition in site such as the weathering of rocks, hardness of rocks and land use. The phases of the study includes the preparation phase, site works phase, analysis of data, and creates of report. The primary data obtained in the site directly and secondary data obtained of various literature and agencies. The method used in determining the unit of land area of research using mixed methodsflats (overlay) map.

Based on the results of analysis and evaluation, researcher obtain there are two vulnerability zone of soil and rocks mass movement, that is : (1.) Vulnerability zone of soil and rock mass movement levels III (intermadiate criteria) with 31,76 Ha of extensive area, (2.) Vulnerability zone of soil and rock mass movement levels IV (high criteria) with 87,09 Ha extensive area, from the study area, from 118,85 Ha of the study area. In the study area there is two class criteria of suitability for residential, there are : (1). Marginal suitability for residential for the most part located in the fields, (2). Unsuitable class for residential at present located in the Hamlet Tempel.

Keywords: Vulnerability, Land Suitability, Mass Movement of Soil and Rock