

**KAJIAN UPAYA PENANGANAN BENCANA LONGSOR
PADA RUAS JALAN KALIBAKUNG--SENGGANG
KECAMATAN BALAPULANG KABUPATEN TEGAL**

MOHAMAD TULUS SETIYOBUDI

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ABSTRACT

Almost in every wet season, part of Kalibakung-Senggang road, in Balapulang district, Tegal regency is vulnerable to land slide. Function of the road is vital, as connector of Slawi, a regency capital, with Bojong and Bumijawa districts. The road part is very important as tourism route to Guci tourism object and alternative route to Pemalang and Banyumas. In 2002, 2004 and 2007 there were slide disaster that caused total traffic jam for some days. Regency Government has dealt with temporary the disaster. However, due to there is concern that there will be slide again when wet season come, it needs an analysis of comprehensive action to minimize risk or reduce loss due to the slide.

This research analyzed mechanism of slide, by studying causes and slide types. It also evaluated actions by Tegal government in dealing slide disaster. Methods used include descriptive analysis based on identification, observation and interview that is then developed using software Arc View 3.3 to analyze map. Slope stability analysis was done using Slope/W software.

Results indicated that slide disaster occurring in research area is caused by controlling factors such as geological condition, steepness, soil type and land use, while triggering factors are high rainfall, bad drainage, and human activities. All land slides occurred in locations with high probability for slide with average annual rainfall of 2844 mm/year, land used as dry field with steepness of from ± 90 -140 (rather steep) to 140-220 (steep). Sliding mechanisms are "earth sliding" (L1, L2, L3, L4) and "earth and rock sliding" (L5, L6). Treating simulation by anchore for L1, L4, L5 and L6 $F_s > 1,2$ (safe), L2 $F_s = 1,081$ (nearly safe) and L3 $F_s = 0,680$ (unsafe). Some alternative handling and disaster mitigation include application and maintenance of surface/undersurface drainage system on slope and slope foot or road side along Kalibakung-Senggang road, land use management by avoiding seasonal plant and prevent massive tree cutting and dissemination of sliding sensitive area. The efforts should be done to prevent greater loss in the future.

Keywords :

natural disaster, mitigation, slope stability, sliding mechanism