OPTIMALISASI KELEMBAGAAN SEBAGAI UPAYA ANTISIPASI TERHADAP BENCANA GEMPA BUMI DI KABUPATEN TANGGAMUS

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07/262405/PMU/5194

Telah dipertahankan di depan Dewan Penguji
Pada tanggal 25 Maret 2009

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ABSTRACT

Road is a very important infrastructure to link one region to other regions, and its existence should be fully paid attention by government. One of the road spaces that should be paid attention by government is those of Kalawara–Kulawi roads in Km 57+000 – Km 61+500 in lengths. Along the year, the road spaces were critically damaged as a result of landslide, in turn disturbing many transportation activities that link Kalawari and Kulawi villages. The road status was a provincial road located in Sigi Regency and near the southern of Palu City of + 60 km in distance with hilly topographical conditions. The handling of the road-related problem has been temporary in nature, and there was no study about it and effort of coping with it yet. Therefore, the research is conducted to find out the condition of nature there and the underlying causes of the landslide.

Main purposes of the research were to find out the underlying causes of the landslide, to determine areas frequently vulnerable to the landslide in order that a model of coping with the problem can be found out, and to investigate the physical and mechanical properties of soil and rock by using the laboratory test, as well as to determine the safe slope conditions by using the SLOPE/W software.Based on the result of the study, it can be known that the underlying causes of the landslide were high rainfall, and human factors. Landslide types in the location of the study were rotational landslides.

Solution of the problems was to mitigate them through physical and non-physical ways in accordance with the existing environmental conditions around the road spaces, such as reducing the slope at STA 57+100, STA 58+900, STA 61+100 and planting trees (*Bio Engineering*) at STA 58+500, so that transportation can be smoother over the seasons.

Keywords:
Landslide, Slope/W, Mitigation