

SARI

Indonesia merupakan negara tropis yang membuat negara ini banyak terjadi bencana hidrometeorologi. Salah satu bencana hidrometeorologi adalah gerakan tanah. Gerakan tanah merupakan pergerakan massa batuan, tanah, atau bahan rombakan pembentuk lereng ke arah bawah lereng. Salah satu wilayah dengan kejadian gerakan tanah cukup banyak adalah Kecamatan Pagentan, Kabupaten Banjarnegara, Provinsi Jawa Tengah, dengan total kejadian sebanyak 71 titik gerakan tanah selama tahun 2021. Berdasarkan hal tersebut, diperlukan adanya pemetaan zonasi kerentanan gerakan tanah untuk Kecamatan Pagentan, Kabupaten Banjarnegara, Provinsi Jawa Tengah, sehingga proses mitigasi terhadap bencana ini dapat dilaksanakan dengan lebih baik. Proses pemetaan zonasi dilakukan berdasarkan pada SNI 8291 Tahun 2016 mengenai Gerakan Tanah. Dari panduan tersebut, digunakan 5 (lima) parameter kerentanan gerakan tanah, yaitu Kemiringan Lereng, Geologi, Penggunaan Lahan, Lokasi Kejadian Gerakan Tanah dan Curah Hujan. Modifikasi dilakukan pada penelitian ini dengan cara mengubah bobot dan skor dari penelitian lain. Lalu, selama proses penelitian digunakan data primer dan sekunder. Data primer berupa pengamatan litologi, struktur geologi dan stratigrafi dan juga lokasi kejadian gerakan tanah yang diamati langsung. Sedangkan data sekunder berupa peta geologi regional, peta RBI skala 1:25.000, *Digital Elevation Model* (DEM), dan data lokasi kejadian gerakan tanah dari BPBD Banjarnegara. Setelah data terkumpul, dilakukan pengolahan yang menghasilkan 11 satuan batuan dan ditemukan sesar dan kekar pada Kecamatan Pagentan, lalu dihasilkan 4 zonasi kerentanan gerakan tanah, yaitu Zona Kerentanan Gerakan Tanah Sangat Rendah, Rendah, Menengah dan Tinggi. Selain itu juga dihasilkan saran langkah mitigasi seperti konservasi lereng, pemantauan curah hujan dan sosialisasi kesiapan masyarakat.

Kata Kunci : mitigasi, modifikasi, pembobotan, SNI.

ABSTRACT

Indonesia is a tropical country that causes many hydrometeorological disasters to occur in this country. One of the hydrometeorological disasters is land movement. Land movement is the movement of rock mass, soil, or debris forming slopes toward the bottom of the slope. One area with quite a lot of land movement is Pagentan District, Banjarnegara Regency, Central Java Province, with a total of 71 ground movement points during 2021. Based on that, it is necessary to map the zoning of land movement vulnerability for Pagentan District, Banjarnegara Regency, Central Java Province, so that the mitigation process against this disaster can be carried out better. The zoning mapping process is carried out based on SNI 8291 of 2016 concerning Land Movements. From this guide, 5 (five) parameters of landslide vulnerability are used, there are Slope, Geology, Land Use, Location of Land Movements and Rainfall. Modifications were made in this study by changing the weights and scores from other studies. Then, during the research process, primary and secondary data were used. Primary data in the form of observations of lithology, geological structure, and stratigraphy as well as the location of the occurrence of ground motion which was observed directly. Meanwhile, secondary data is in the form of regional geological maps, 1:25,000 scale RBI maps, a Digital Elevation Model (DEM), and data on the location of ground movement events from the Banjarnegara BPBD. After the data is collected, the processing is carried out which resulted in 11 rock units and faults and joints were found in Pagentan District, then 4 zones of soil movement susceptibility were produced, namely Very Low, Low, Medium and High Earth Movement Vulnerability Zones. In addition, recommendations for mitigation measures such as slope conservation, rainfall monitoring and socialization of community preparedness were also produced.

Keywords : mitigation, modification, overlay, SNI.