Analisis Tipologi Kawasan Rawan Bencana Gempa Bumi Berdasarkan Data Geomorfologi dan Nilai Peak Ground Acceleration Di Kecamatan Maos, Kabupaten Cilacap = Typology Analysis of Earthquake Prone Areas Based on Geomorphological Data and Values of Peak Ground Acceleration in Maos District, Cilacap Regency

Hasdy Muhammad, author

Abstrak

Kecamatan Maos di Kabupaten Cilacap pada tahun 1916 dan 1923 pernah mengalami gempa bumi yang mengakibatkan perekonomian lumpuh. Tidak menutup kemungkinan gempa bumi dapat terjadi kembali. Oleh sebab itu, perlu tindakan meminimalisir dampak gempa bumi dengan salah satu caranya membuat Peta Kawasan Rawan Gempa Bumi yang telah diatur melalui Peraturan Menteri PU No. 21/PRT/M/2007. Peraturan ini mengklasifikasikan kawasan rawan gempa bumi berdasarkan kajian tipologi informasi geologi. Informasi geologi diambil dari pemetaan geomorfologi pada Kecamatan Maos dimana diketahui bahwa litologi umum di Maos berupa batupasir dan tanah aluvium dengan tingkat kemiringan lereng dibawah 10 hingga 30% dimana terdapat sesar naik di sisi barat dan tenggara Maos serta sesar normal di barat laut Maos. Nilai kegempaan Maos dapat diketahui dari nilai PGAnya sebesar 0,6869 - 0,8764 g. Dari informasi geologi ini, dilakukan skoring dan pembobotan sehingga didapatkan nilai kestabilan wilayah Kecamatan Maos ada di rentang 33 hingga 51 dimana terdapat lima kelas klasifikasi tipologi di Kecamatan Maos yaitu Kelas A, Kelas B, Kelas C, Kelas D, dan Kelas E. Direkomendasikan bagi daerah yang berada di kawasan Kelas E untuk tidak membangun kawasan budidaya dan infrastruktur sebab di kawasan ini memiliki potensi bahaya tinggi jika terjadi bencana gempa bumi.

.....Maos District in Cilacap Regency in 1916 and 1923 experienced an earthquake which resulted in the economy being paralyzed. It is possible that an earthquake could occur again. To anticipate that, action is needed to minimize the impact of an earthquake by making an Earthquake Hazard Map which has been regulated in Minister of Public Works Regulation No. 21/PRT/M/2007. This regulation classifies areas prone to earthquake disasters based on geological information typology. Geological information was taken from geomorphological mapping in Maos District where it is known that the general lithology in Maos is sandstone and alluvial soil with a slope level <= 10 - 30% where there are thrust faults on the west and southeast sides of Maos and normal faults on the northwest side of Maos. The seismicity value of Maos can be known from its PGA value of 0.6869 - 0.8764 g. From this geological information, scoring and weighting were carried out to obtain a regional stability value for Maos District in the range of 33 to 51 where there are five typological classification classes in Maos District, namely Class A, Class B, Class C, Class D and Class E. Recommended for areas in Class E are not to build cultivation areas and infrastructure because this area has a high potential for danger if an earthquake occurs.