

**PEMETAAN KERAWANAN BENCANA TANAH LONGSOR DI DESA
TULUNGREJO, KECAMATAN GANDUSARI, KABUPATEN BLITAR
MENGGUNAKAN METODE BERJENJANG TERTIMBANG**

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INTISARI

Kabupaten Blitar termasuk dalam zona rawan pergerakan tanah. Berdasarkan data dari 2018 hingga 2020, 10 longsor terjadi. Salah satu kecamatan yang berpeluang terjadi longsor adalah wilayah Gandusari yang pergerakan tanahnya sedang. Salah satu desa yang rawan longsor adalah Desa Tulungrejo di Kecamatan Gandusari Kabupaten Blitar. Tercatat, telah terjadi 12 kejadian tanah longsor dalam kurun waktu tahun 2017 sampai 2020. Tanah longsor dapat menyebabkan kematian yang serius dan kerusakan harta benda di daerah pemukiman, fasilitas umum dan lahan pertanian. Tujuan dari studi ini adalah untuk: pertama, Menyusun peta kerawanan Bencana tanah longsor didesa Tulungrejo, Kecamatan Gandusari, Kabupaten Blitar. Dan kedua memetakan parameter bencana yang berpengaruh terhadap kerawanan bencana tanah longsor.

The research was conducted using spatial modeling with a weighted quantitative approach as a determinant of the weight or impact of each parameter used by referring to the 2004 Puslitanak and PU 2007 regulations. In this survey, field verification was carried out using five parameters of land use CSRT. It achieves 93.54% accuracy, gradient from DEM data, rainfall intensity, soil type and landform.

Berdasarkan pengolahan penelitian didapat 3 kelas kerawanan bencana Longsoran tanah yaitu: rendah, sedang dan tinggi. Tingkat kerawana rendah dikelaskan dengan nilai total harkat bobot tertimbang 1,9 – 2,47. Tingkat kerawanan sedang dengan nilai harkat total bobot tertimbang 2,47 – 3,04. Dan tingkat kerawanan tinggi dengan nilai harat total bobot tertimbang antara 3,04 – 3,61. Tingkat Kerawanan rendah memiliki luas sebesar 1035,35 Ha. Tingkat kerawanan longsor sedang memiliki luas 1009,109. Tingkat kerawanan longsor tinggi memiliki luas 143,117 Ha. Luas Kawasan yang paling luas yaitu tingkat kerawana longsor rendah, luas Kawasan rawan longsor yang memeiliki luasan wiayah paling sempit yaitu Kawasan longsor dengan kerawanan tinggi dengan luas 143, 117 ha. Persebaran Kawasan longsor tinggi terletak pada bagian tengah menjorok ketenggara desa tulungrejo yang didominasi wilayah pemukiman dan lereng curam, sehingga memungkinkan terjadinya longsor diwilayah tersebut serta pada bagian yang menjorok ke puncak gunung yang menampilkan tingkat kerawanan longsor tinggi. Untuk sebaran Kawasan kerawana longsor sedang mengelompok dan menyebar diseluruh desa tulungrejo. Sedangkan untuk Kawasan kerawanan longsor rendah.terdapat menyebar di desa tulungrejo.

Kata kunci: Tanah longsor, SIG, Desa Tulungrejo, Berjenjang Tertimbang.

**VILLAGE, GANDUSARI DISTRICT, BLITAR REGENCY USING THE
WEIGHTED TIERED METHOD**

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ABSTRACT

Blitar Regency is included in the zone prone to land movement. Based on data from 2018 to 2020, 10 landslides occurred. One of the sub-districts that have the opportunity for landslides to occur is the Gandusari area, which has moderate soil movement. One of the villages prone to landslides is Turungrejo Village in Gandusari District, Blitar Regency. It is recorded that there have been 12 landslides in the period from 2017 to 2020. Landslides can cause serious deaths and damage to property in residential areas, public facilities and agricultural land. The objectives of this study are: first, to develop a landslide hazard map in Tulungrejo village, Gandusari district, Blitar district. And secondly, mapping disaster parameters that affect vulnerability to landslides.

The research was conducted using spatial modeling through a weighted tiered quantitative approach as a determinant of the weight/level of influence of each parameter used with reference to the 2004 Puslitanak and PU 2007 Regulations. There are 5 parameters used in the study, namely land use obtained from imagery. CSRT was then carried out field validation which obtained an accuracy of 93.54%, slope obtained from DEM data, rainfall intensity, soil type, and landform.

Based on the results of the study, there were 3 classes of landslide susceptibility, namely low, medium and high. The low vulnerability level is classified with a total weighted value of 1.9 – 2.47. The level of vulnerability is moderate with a total weighted value of 2.47 – 3.04. And a high level of vulnerability with a total weight value of 3.04 – 3.61. Low Vulnerability has an area of 1035.35 Ha. The moderate landslide susceptibility level has an area of 1009,109. The high landslide susceptibility level has an area of 143,117 Ha. The widest area is the low landslide susceptibility level, the landslide-prone area which has the narrowest area is the landslide area with high vulnerability with an area of 143, 117 ha. The distribution of the high landslide area is located in the middle part protruding to the southeast of Tulungrejo village which is dominated by residential areas and steep slopes, thus allowing landslides to occur in the area as well as in the part that protrudes to the top of the mountain which displays a high level of landslide susceptibility. As for the distribution of the landslide prone area, it is clustered and spread throughout the Tulungrejo village. As for the low landslide susceptibility area, there are spread in the village of Tulungrejo.

Keywords: Landslide, GIS, Tulungrejo Village, Weighted Tiers.