

ABSTRAK

RIZKI SYAMSUL FAUZI, 2023. **KESIAPSIAGAAN MASYARAKAT TERHADAP BENCANA TANAH LONGSOR DI DESA PARENTAS KECAMATAN CIGALONTANG KABUPATEN TASIKMALAYA.** Jurusan Pendidikan Geografi Fakultas Keguruan dan Ilmu Pendidikan. Universitas Siliwangi Tasikmalaya.

Penelitian ini bertujuan untuk menganalisis tingkat kerawanan bencana tanah longsor serta tingkat kesiapsiagaan masyarakat di Desa Parentas, Kecamatan Cigalontang, Kabupaten Tasikmalaya. Desa Parentas merupakan wilayah perbukitan dengan topografi curam, curah hujan tinggi, dan sejarah kejadian longsor yang sering (7 kali pada tahun 2022), sehingga menjadi daerah rawan bencana hidrometeorologi. Penelitian menggunakan pendekatan deskriptif kuantitatif. Populasi penelitian adalah seluruh Kepala Keluarga (KK) di Desa Parentas sebanyak 872 KK. Sampel diambil secara *random sampling* sebesar 4% (34 responden). Teknik pengumpulan data meliputi observasi lapangan, wawancara dengan Kepala Desa dan BPBD Kabupaten Tasikmalaya, kuesioner, serta studi literatur dan dokumentasi. Analisis tingkat kerawanan bencana tanah longsor dilakukan dengan memetakan dan mengolah tujuh variabel utama (kemiringan lereng, curah hujan, jenis tanah, penggunaan lahan, kerapatan vegetasi, kondisi geologi, dan kegempaan) menggunakan sistem informasi geografis (GIS) melalui perangkat lunak ArcGIS 10.8 dan Global Mapper. Variabel-variabel tersebut di-overlay secara spasial untuk menghasilkan peta kerawanan longsor. Sementara itu, tingkat kesiapsiagaan masyarakat diukur dengan teknik persentase, skoring, dan penghitungan indeks berdasarkan lima parameter UNESCO/ISDR dan LIPI (2006), yaitu: Pengetahuan dan Sikap (KA), Perencanaan Kedaruratan (EP), Sistem Peringatan Dini (WS), Mobilisasi Sumber Daya (RMC), serta Kebijakan dan Panduan (PG). Hasil penelitian menunjukkan bahwa tingkat kerawanan bencana tanah longsor di Desa Parentas termasuk kategori tinggi/rawan. Faktor dominan yang teridentifikasi melalui analisis GIS adalah kemiringan lereng 30° – 45° (41,63% luas wilayah), curah hujan rata-rata 2.405,3 mm/tahun, jenis tanah Andosol dan Latosol yang peka longsor, penggunaan lahan yang belum sesuai kaidah lingkungan, kerapatan vegetasi sedang (36,72%), serta kegempaan sedang (251 kejadian gempa 4,5–6,5 SR dalam radius 150 km periode 2013–2023). Sementara itu, tingkat kesiapsiagaan masyarakat secara keseluruhan berada pada kategori kurang siap dengan indeks total 51,23. Secara rinci: parameter KA (61,34 – hampir siap), EP (45,80 – kurang siap), WS (47,25 – kurang siap), RMC (38,62 – belum siap), dan PG (38,60 – kurang siap). Masyarakat masih mengandalkan pengetahuan tradisional dan respon pasca-bencana, belum memiliki sistem peringatan dini terpadu, jalur evakuasi resmi, maupun kebijakan desa yang memadai. Penelitian ini membuktikan kedua hipotesis yang diajukan. Disarankan agar pemerintah desa, BPBD, dan stakeholder terkait segera menyusun regulasi kebencanaan, meningkatkan edukasi dan simulasi secara berkala, serta membangun sarana prasarana mitigasi berbasis masyarakat agar risiko bencana dapat diminimalisir.

Kata Kunci : kesiapsiagaan masyarakat, tanah longsor, kerawanan bencana, analisis GIS, Desa Parentas, mitigasi bencana

ABSTRACT

RIZKI SYAMSUL FAUZI, 2023. COMMUNITY PREPAREDNESS AGAINST LANDSLIDE DISASTER IN PARENTAS VILLAGE, CIGALONTANG DISTRICT, TASIKMALAYA REGENCY. Department of Geography Education, Faculty of Teacher Training and Education, Siliwangi University Tasikmalaya.

This study aims to analyze the level of landslide disaster vulnerability and the level of community preparedness in Desa Parentas, Cigalontang District, Tasikmalaya Regency. Desa Parentas is a hilly area with steep topography, high rainfall, and a frequent history of landslides (7 events in 2022), making it highly prone to hydrometeorological disasters. The research employed a descriptive quantitative approach. The population consisted of all 872 heads of households (KK) in Desa Parentas. A sample of 4% (34 respondents) was selected using random sampling. Data were collected through field observation, interviews with the Village Head and the Tasikmalaya Regency Regional Disaster Management Agency (BPBD), questionnaires, as well as literature and documentation studies. Analysis of landslide vulnerability was conducted by mapping and processing seven main variables (slope gradient, rainfall, soil type, land use, vegetation density, geological conditions, and seismicity) using Geographic Information System (GIS) with ArcGIS 10.8 and Global Mapper software. These variables were spatially overlaid to produce a landslide vulnerability map. Meanwhile, the level of community preparedness was measured using percentage techniques, scoring, and index calculation based on the five parameters of UNESCO/ISDR and LIPI (2006): Knowledge and Attitude (KA), Emergency Planning (EP), Warning System (WS), Resource Mobilization Capacity (RMC), and Policies and Guidelines (PG). The results indicate that the level of landslide disaster vulnerability in Desa Parentas falls into the high/vulnerable category. The dominant factors identified through GIS analysis are slopes of 30°–45° (covering 41.63% of the area), average annual rainfall of 2,405.3 mm/year, Andosol and Latosol soils that are highly susceptible to landslides, land use that does not comply with environmental principles, moderate vegetation density (36.72%), and moderate seismicity (251 earthquake events of 4.5–6.5 SR within a 150 km radius during 2013–2023). In contrast, the overall level of community preparedness is in the less prepared category with a total index of 51.23. The detailed parameters are as follows: KA (61.34 – nearly prepared), EP (45.80 – less prepared), WS (47.25 – less prepared), RMC (38.62 – not prepared), and PG (38.60 – less prepared). The community still relies on traditional knowledge and post-disaster responses, lacking an integrated early warning system, official evacuation routes, or adequate village policies. This study confirms both proposed hypotheses. It is recommended that the village government, BPBD, and relevant stakeholders immediately formulate disaster management regulations, intensify regular education and simulation programs, and develop community-based mitigation infrastructure to minimize disaster risks.

Keywords: community preparedness, landslide, disaster vulnerability, GIS analysis, Desa Parentas, disaster mitigation