

ABSTRAK

ANALISIS JALUR EVAKUASI BENCANA TSUNAMI DENGAN MENGUNAKAN *NETWORK ANALYSIS* DI DESA CARINGIN, KECAMATAN LABUAN, KABUPATEN PANDEGLANG

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Tsunami merupakan serangkaian gelombang laut besar yang diakibatkan oleh gempa letusan gunung api dan longsor yang terjadi di laut. Kurangnya informasi kawasan rentan tsunami serta mitigasinya, maka dibutuhkan suatu upaya untuk mengurangi dampak terhadap bencana tsunami. Penelitian ini bertujuan untuk menganalisis daerah rawan tsunami, menganalisis tempat evakuasi sementara, menganalisis serta memetakan daerah layanan bencana tsunami terbaik, dan menganalisis serta memetakan waktu tempuh terbaik di wilayah Desa Caringin, Kecamatan Labuan menggunakan metode *network analysis*. Penelitian ini dilakukan pada Oktober – November 2023 di Kecamatan Labuan, Kabupaten Pandeglang, Provinsi Banten. Pengolahan data dalam penelitian kali ini dilakukan menggunakan metode analisis geospasial atau sistem informasi geografis (SIG) dengan dukungan data primer. Hasil penelitian menunjukkan daerah yang berisiko tsunami ditentukan oleh ketinggian daerah serta kawasan permukiman yang berada di selatan Desa Caringin. Berdasarkan skenario ketinggian tsunami mencapai 15 m, terdapat 3 tempat evakuasi sementara di bagian timur desa. Sebagian besar daerah di Desa Caringin membutuhkan waktu kurang dari 30 menit untuk mencapai titik evakuasi sementara. Namun, masih terdapat beberapa lokasi di bagian selatan desa yang membutuhkan waktu tempuh evakuasi 40-50 m.

Kata kunci : Evakuasi, tsunami, network analisis, waktu tempuh, Banten

ABSTRACT

THE ANALYSIS OF TSUNAMI DISASTER EVACUATION PATH USING NETWORK ANALYSIS IN CARINGIN VILLAGE, LABUAN DISTRICT, PANDEGLANG DISTRICT

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A tsunami is a series of large sea waves caused by earthquakes, volcanic eruptions and landslides that occur at sea. There is a lack of information on tsunami-prone areas and their mitigation, so efforts are needed to reduce the impact of the tsunami disaster. This research aimed to analyze tsunami-prone areas, analyze temporary evacuation places, analyze and map the best tsunami disaster service areas, and analyze and map the best travel times in the Caringin Village area, Labuan District using the network analysis method. This research was conducted in October – November 2023 in Labuan District, Pandeglang Regency, Banten Province. Data processing in this research was carried out using geospatial analysis methods or geographic information systems (GIS) with primary data support. The research results showed that areas at risk of a tsunami were determined by the height of the area and residential areas located south of Caringin Village. Based on the scenario of a tsunami height reaching 15 m, there were 3 temporary evacuation places in the eastern part of the village. Most areas in Caringin Village took less than 30 minutes to reach the temporary evacuation point. However, there were still several locations in the southern part of the village that required an evacuation travel time of 40-50 m.

Keywords: Evacuation, tsunami, network analysis, travel time, Banten