

ABSTRAK

Ulina Najwa Furqona, NIM 3213131032, Analisis sebaran dan kesiapsiagaan Sekolah menengah pertama (SMP) di daerah rawan Bencana Erupsi Gunung Api Sinabung Kabupaten Karo. Skripsi, Jurusan Pendidikan Geografi, Fakultas Ilmu Sosial, Universitas Negeri Medan, 2025.

Penelitian ini bertujuan Menganalisis sebaran lokasi Sekolah Menengah Pertama (SMP) di daerah rawan bencana erupsi Gunung Sinabung Kabupaten Karo dan Menganalisis tingkat kesiapsiagaan sekolah-sekolah tersebut terhadap bencana erupsi Gunung Sinabung..

Pendekatan yang digunakan adalah deskriptif kuantitatif berbasis Sistem Informasi Geografis (SIG) dengan model penilaian LIPI–UNESCO/ISDR (2006). Penelitian dilakukan pada tahun 2025 di SMP Swasta Namanteran, SMPN 1 Namanteran, SMPN 1 Payung, SMPN 1 Tiganderket, SMPN 2 Simpang Empat yang berada di zona KRB I–III. Data dikumpulkan melalui observasi, dokumentasi, dan kuesioner kepada kepala sekolah, guru, dan siswa. Indeks kesiapsiagaan dihitung berdasarkan lima parameter: kebijakan dan panduan, pengetahuan dan sikap, rencana tanggap darurat, sistem peringatan bencana, dan mobilisasi sumber daya.

Hasil penelitian menunjukkan bahwa sekolah tersebar pada seluruh kawasan risiko, dengan SMP Swasta Naman Teran di KRB III, dua sekolah di KRB II, dan dua sekolah di KRB I. Tingkat kesiapsiagaan tertinggi diperoleh SMPN 2 Simpang Empat (75%, kategori siap), sedangkan terendah pada SMP Swasta Naman Teran (38%, belum siap). Temuan ini menegaskan bahwa kesiapsiagaan tidak semata dipengaruhi jarak terhadap sumber bahaya, tetapi juga kapasitas kelembagaan dan dukungan sumber daya. Hasil penelitian diharapkan menjadi dasar bagi pemerintah daerah dan satuan pendidikan dalam memperkuat strategi mitigasi berbasis sekolah di kawasan rawan erupsi Gunung Sinabung.

ABSTRACT

ULINA NAJWA FURQONA. NIM. 3213131032. Analysis of the Distribution and Preparedness of Junior High Schools in Areas Prone to the Eruption Disaster of Mount Sinabung, Karo Regency. Thesis. Department of Geography Education, Faculty of Social Sciences, State University of Medan. 2025.

This research was conducted in Karo Regency, specifically in Junior High Schools (SMP) located in areas prone to the eruption disaster of Mount Sinabung. This research aims to: (1) analyze the distribution of Junior High School (SMP) locations in areas prone to the eruption disaster of Mount Sinabung in Karo Regency, and (2) analyze the level of preparedness of these schools toward the eruption disaster of Mount Sinabung.

The approach used in this research is a descriptive quantitative method based on Geographic Information Systems (GIS) with the LIPI–UNESCO/ISDR (2006) assessment model. The research was conducted in 2025 at SMP Swasta Namanteran, SMPN 1 Namanteran, SMPN 1 Payung, SMPN 1 Tiganderket, and SMPN 2 Simpang Empat, which are located in hazard zones KRB I–III. Data collection techniques were carried out through observation, documentation, and questionnaires distributed to principals, teachers, and students. The preparedness index was assessed using five parameters: (1) policies and guidelines, (2) knowledge and attitudes, (3) emergency response planning, (4) disaster warning systems, and (5) resource mobilization.

The results of the study showed that the schools are distributed across all risk zones, with SMP Swasta Namanteran located in KRB III, two schools located in KRB II, and two schools located in KRB I. The highest level of preparedness was obtained by SMPN 2 Simpang Empat with a score of 75% (ready category), while the lowest level was obtained by SMP Swasta Namanteran with a score of 38% (not ready category). These findings indicate that preparedness is not solely influenced by distance from the hazard source, but also by institutional capacity and resource support. The results of this study are expected to serve as a reference for local governments and educational institutions in strengthening school-based disaster

mitigation strategies in areas prone to the eruption of Mount Sinabung.

