

INTISARI

Penelitian ini dilakukan di Kecamatan Ngantang, Kabupaten Malang. Kecamatan Ngantang merupakan salah satu wilayah yang terkena dampak paling parah saat erupsi Gunungapi Kelud tahun 2014. Penelitian ini menilai kerentanan menggunakan dua unit analisis. Analisis pertama dilakukan di Kecamatan Ngantang sedangkan analisis kedua dilakukan di Dusun Kutut, Desa Pandansari, yang letaknya paling dekat dengan Puncak Gunungapi Kelud.

Tujuan dari penelitian ini yaitu: (1) Mengkaji tingkat kerentanan fisik (2) Mengkaji tingkat kerentanan sosial (3) Mengkaji tingkat kerentanan ekonomi (4) Mengkaji tingkat kerentanan lingkungan, dan (5) Mengkaji tingkat kerentanan total Kecamatan Ngantang dan Dusun Kutut terhadap jatuhnya piroklastik. Pengumpulan data dilakukan secara multi skala pada level kecamatan dan level dusun melalui interpretasi citra, survei data kependudukan, dan sensus. Metode *Spasial Multi Criteria Evaluation (SMCE)* digunakan sebagai analisis data.

Hasil analisis kerentanan fisik menunjukkan bahwa 23% desa di Kecamatan Ngantang dan 18,3% rumah tangga di Dusun Kutut termasuk dalam kategori kerentanan tinggi. Penilaian kerentanan sosial menghasilkan 31% desa di Kecamatan Ngantang dan 14,9% rumah tangga di Dusun Kutut termasuk dalam kategori kerentanan tinggi. Penilaian kerentanan ekonomi menghasilkan 23% desa di Kecamatan Ngantang dan 21,3% rumah tangga di Dusun Kutut termasuk dalam kategori kerentanan tinggi. Penilaian kerentanan lingkungan menghasilkan 46% desa di Kecamatan Ngantang dan 13,2% rumah tangga di Dusun Kutut termasuk dalam kategori kerentanan tinggi. Desa Ngantru merupakan Desa yang selalu masuk dalam kategori kerentanan tinggi berdasarkan 4 skenario kerentanan. Dusun Kutut memiliki 15 rumah tangga (6,4%) yang selalu masuk dalam kategori kerentanan tinggi berdasarkan 4 skenario kerentanan.

Kata Kunci: Kerentanan, Spasial, Piroklastik, *SMCE*, Gunungapi Kelud

ABSTRACT

This research was conducted in Ngantang District, Malang Regency. Ngantang Districts is one of the worst affected areas during the eruption of Kelud volcano in 2014. This study attempts to assess vulnerability using two units of analysis. The first analysis was conducted in Ngantang District, while the second analysis was conducted in Kutut Hamlet, Pandansari Village, where located closest to Kelud Volcano.

The objectives of this study are: (1) Assessing the level of physical vulnerability (2) Assessing the level of social vulnerability (3) Assessing the level of economic vulnerability (4) Assessing the level of environmental vulnerability, and (5) Assessing the total vulnerability level of Ngantang District, and Kutut Hamlet to the pyroclastic fall. Data collection was conducted on a multi-scale basis at the district and the hamlet level through image interpretation, population data survey, and census. Spatial Multi Criteria Evaluation (SMCE) method is used as data analysis.

The results of physical vulnerability analysis showed that 3 villages in Ngantang District and 18.3% of households in Kutut Hamlet included in high vulnerability category. Social vulnerability assessment generated 31% of villages in Ngantang District and 14.9% of households in Kutut Hamlet categorized as high vulnerability. Assessment of economic vulnerability generated 23% of villages in Ngantang District and 21.3% of households in Kutut Hamlet categorized as high vulnerability. Assessment of environmental vulnerability generated 46% of villages in Ngantang District and 13.2% of households in Kutut Hamlet categorized as high vulnerability. Ngantru Village is a Village that always included in high vulnerability category based on 4 vulnerability scenarios. Kutut Hamlet has 15 households (6.4%) that are always categorized as high vulnerability based on 4 vulnerability scenarios.

Keywords: Vulnerability, Spatial, Pyroclastic, SMCE, Kelud Volcano