

INTISARI

Kabupaten ende merupakan salah satu daerah di Indonesia yang memiliki 5 dari 7 bencan aalam yang disebutkan dalam UU 24 tahun 2007 yaitu gempa bumi, longsor, tsunami, banjir, kekeringan dan gunung api sehingga akses jalan sebagai penunjang mitigasi bencana alam sangat diperlukan. Untuk itu diperlukan akses khusus atau jalur evakuasi khusus agar masyarakat dapat mengevakuasi diri secepat mungkin. Di kota ende aktifitas masyarakat, banyak dilakukan di tepi pantai seperti pasar, pemukiman, sekolah, puskesmas bahkan bandar udara, sehingga akan berdampak besar apabila terjadi bencana tsunami.

Penelitian ini dilakukan di Kabupaten Ende yang mempunyai 20 kecamatan namun dalam pelaksanaannya penelitian hanya dilakukan di 2 lokasi yaitu di Kota Ende dan Kecamatan Maurole, yang mana 2daerah ini merupakan daerah yang paling rawan bencana khususnya tsunami. Penelitian ini dimulai dengan melakukan pengumpulan data primer dan sekunder yang didapatkan dengan survey langsung ke lokasi penelitian. Fokus penelitian terletak pada sarana transportasi di kawasan rawan bencana khususnya tsunami yang menyangkut pada proses evakuasi dan pendistribusian bantuan bagi masyarakat yang mengungsi akibat bencana

jarak terjauh orang melakukan evakuasi menuju tempat aman evakuasi adalah sebesar 998 m dengan waktu tempuh adalah 6,5 menit. Sedangkan untuk Kecamatan Maurole waktu tempuh tecepat menuju teempat evakuasi adalah 4.03 menit. Dalam skenario 1 perlu di rencanakan jalan alternatif yang terbebas dari ancaman tsunami apabila terjadi bencana tsunami di utara Pulau Flores karena diperkirakan jalan akses menuju kecamatan maurole terputus.. Dalam seknario 2 bencana, distribusi bantuan dengan transportasi udara dan tranportasi laut dialihkan melalui Bandara Frans Seda dan Pelabuhan maumere di Kota Maumere yang kemudian baru disalurkan melalui jalan darat. Dari hasil uji laboratorium diketahui bahwa agregat lokal yang diambil dari *quary* yang berada di Kecamatan Nangapanda tdak memenuhi persyaratan, yaitu Berat Jenis dibawah $2,5 \text{ gr/cm}^3$ dan penyerapan agregat terhadap air $< 3\%$. Dari hasil uji Marshall Immersion didapat nilai sebesar 63,308 % nilai ini juga tidak memenuhi syarat dari Kementerian Pekerjaan Umum, Direktorat Jenderal Bina Marga, yaitu $\geq 90 \%$. Sehingga agregat lokal yang diambil dari *quary* di Kecamatan Nangapanda ini tidak dapat dijadikan bahan perkerasan jalan.

Kata Kunci: Jaringan Transportasi, Evakuasi Tsunami, Mitigasi Bencana

ABSTRACT

Ende District, is one of the areas in Indonesia which has 5 of the 7 natural disasters that is mentioned in UU 24 of 2007, namely earthquakes, landslides, tsunamis, floods, droughts and volcano so that the access road to support natural disaster mitigation is needed. It required special access or special evacuation route for people to evacuate as quickly as possible. In the ende city community activities, mostly done on the waterfront as markets, residential, schools, health centers and even airports, so it will have a major impact in the event of tsunami.

This research was conducted in Ende which has 20 sub-districts, but in practice only study conducted in two locations: in the town of Ende (which includes the District of Central Ende with 27 222 inhabitants, District of North Ende with 17 658 inhabitants, District of South Ende with 21 270 inhabitants) and the District of Maurole , which 2 of this area is the most disaster-prone areas, especially the tsunami. This study begins with the collection of primary and secondary data were obtained by direct survey to the study site. The focus of the research lies in the means of transport in the tsunami disaster-prone areas, especially concerning the evacuation process and the distribution of aid for people displaced by the disaster.

The furthest distance to evacuate to the evacuation site is at 998 m with a travel time is 6.5 minutes furthest distance people to evacuate to the evacuation site in the district amounted to 624 m maurole with travel time is 4 minutes. In the first scenario of disaster, should be planned alternative way that is free from the threat of a tsunami in the event of a tsunami disaster in the north of the Flores Island because estimated the access road to the subdistrict maurole disconnected so that distribution logistics by land transportation can be inhibited. Therefore In the second scenario of disaster, the distribution of aid with air transport and marine transport will be routed through Frans Seda airport and maumere port in the town of Maumere, which is then distributed by road. From the results of laboratory tests, note that the local aggregate taken from quarry in Subdistrict Nangapanda have gravity under the 2.5 g / cm^3 and has a water absorption of the aggregate of 3.8% greater than the specified requirements is less than 3%. From the Marshall Immersion test results obtained value of 63.308%, this value does not qualify from the Ministry of Public Works, Directorate General of Highways, that is $\geq 90\%$. So the local aggregate taken from quarry in District Nangapanda can not be used as road pavement.

Keywords: *Transport Networks, Tsunami Evacuation, Disaster Mitigation*