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Study of Landslide Disaster in Aceh Tamiang Area of Nanggroe Aceh Darussalam Province Indonesia

By

sofyan. RACHMAN , harry PRAMUDITO

Prodi Teknik Geologi FTKE-Usakti, Indonesia

Department Engginering Geology of University of Trisakti Phone: 08156243486,

email:sofyan@trisakti.ac.id

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Flood and landslide disaster seems to be continuing. After landslide disaster in Bohorok, Pacet, and Jember. One of the accusations as the cause of the disaster is the environment, especially the depletion of forests. This at the same time strengthen the allegations of banjir bandang and landslide disaster is no longer as a natural disaster, but as a natural disaster due to human (man made disaster). Along with the help of environmental damage as a result of illegal logging, mining, and land conversion, it will increase the risk of disaster. Unfortunately, disaster risk is not exactly the same as the community. Allowing the population to live with such risks can be seen as inhumane (inhuman). Because, it is tantamount to the victims of death and loss for the population, which actually can still be avoided. For that purpose, we need to assemble the Map of Disaster Prone Areas. The map is based on the possibility of disaster, including through the calculation of potential natural disasters.

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Natural Disaster Classification.

Actually mapping of natural disasters can be obtained from geomorlogi maps and other sources such as image data and seismicity, this map is prepared in detail for survey purposes. Which includes natural disasters are:

1. Earthquake (earthquake damage)
2. Ground or landslide.
3. Flooding (flooding)
4. Volcanic disaster
5. Soil subsidence (sub-sidence of the subsoil)
6. Volcano and Drought (drought).

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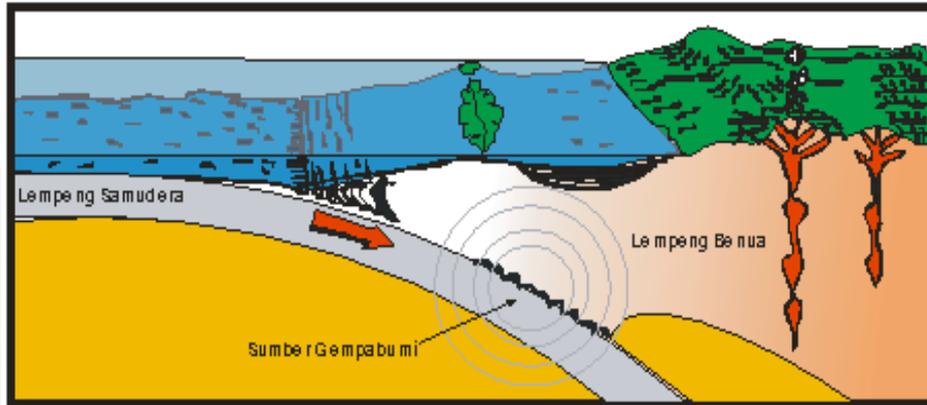


Figure 1. Proses Occurrence of earthquakes in subduction zones

Table 1. Area and name of sub-district in Aceh Tamiang district

NO	KECAMATAN	LUAS		JUMLAH				
		(Km2)	(Ha)	MUKIM	DESA	LURAH	DUSUN	LINGK.
1:	Tamiang Hulu	447,00	44.700	2	9	-	60	-
2	Bandar Pusaka				15	-	-	-
3	Kejuruan Muda	420,03	42.003	2	15	-	82	-
4	Tenggulun				5	-	-	-
5	Rantau	51,71	51.71	2	16	-	66	-
6	KotaKuala Simpang	4,48	448	-	4	1	16	5
7	Seruway	188,49	18.849	4	24	-	83	-
8	Bendahara	180,50	18.005	8	33	-	113	-
9	Banda Mulia				9	1	-	-
10	Karang Baru	380,40	38.040	4	45	-	119	-
11	Sekera							
12	Manyak Payed	267,11	26.711	1	32	-	102	-
Jumlah		1.939,72	193.972	25	208	1	641	5

Catatan : Belum ada Data yang jelas mengenai Kecamatan yang baru mengalami pemekaran.

Methodology

Materials Research

Includes data collection in the form of maps and data of related agencies or agencies such as Bakosurtanal, Directorate of Geology, Bappeda.

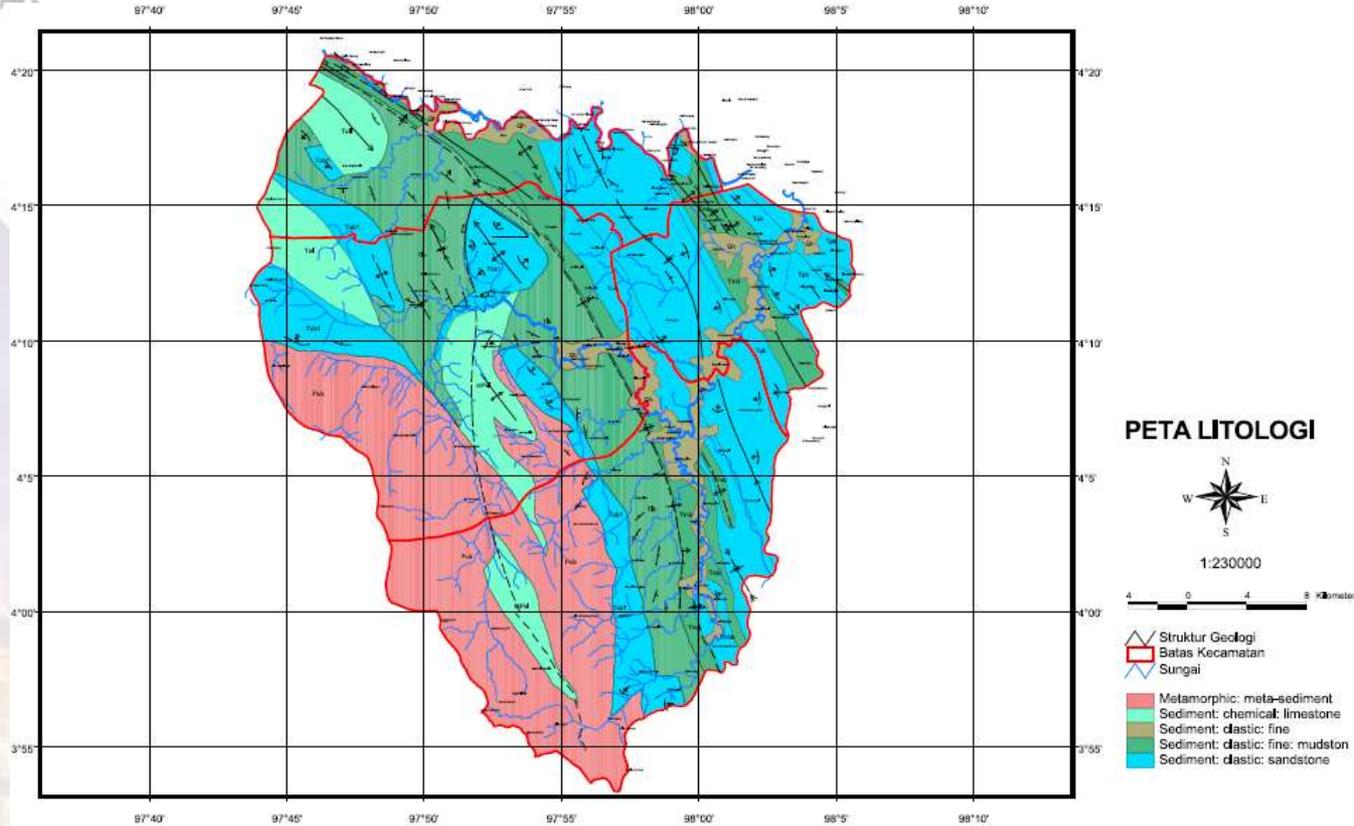
The map data in question includes:

- A. Topographic maps scale 1: 250,000
- B. Map of Landsystem Reprot in 1997.
- C. Geographical sheet of Langsa, Sumatra 1: 250,000 scale
- D. Land use map based on Satellite imagery interpretation in 2000
- E. Earthquake Resistance Map scale 1: 5000.000 in 2001
- F. Map of Rupa Bumi Indonesia in 1991
- G. Seismotectonic map of Indonesia scale 1: 5000.000 in 1998

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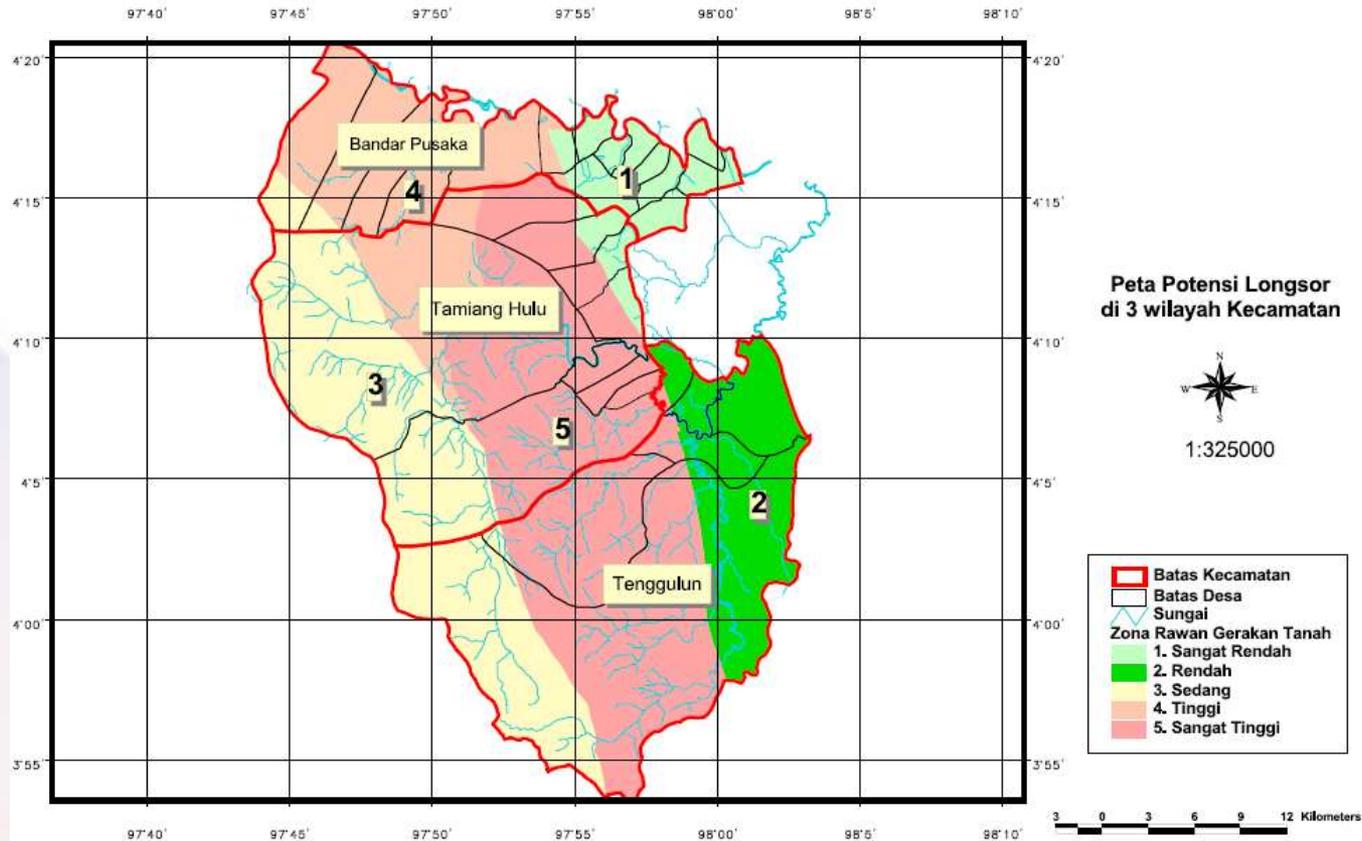
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Foto.1 Potential of ground motion that happened in elephant groove kec. Tamiang Hulu



Foto.2 Movement of land that occurred in Tenggulun kec. Tenggulun, litologi is dominated by sandstone

ulu,

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Zona	Kondisi Fisik/Conditiono fisik	Potensi	Kendala/effect	Penilaian		Bobot (Nx B)
				Nilai (N)	Bobot (B)	
Sangat Tinggi/ Very high	Mountain-hilly landscape, 45% area, slope <50% elevation 50-100%, area of survival and g.hulurangas	Consists of limestones, sandstones, limestone at sandstone and mika	Completely complex soil movement of combined soil movement ie glide, avalanches and slippage, difficult to access for transportation	5	2	10
Tinggi/ high	Wetland hill are wavy, 20% wide, 30-50% cesarean slopes are large and growing	Coral limestone, dolomite, sandstone sandstone, conglomerate and black mudstone	Movement of glide usually in the area with low sedimentation,	4	2	8
Sedang/medium	The landscape of the hills, the area of 10%, the slope of 15-30%, avalanches can be a fall due to very hard rocks ie meta limestone	Metaconglomerates, little quartzite and metabatugamping, sandstones and claystone	Soil movement in the form of slippage, recharge and recharge area,	3	2	6
Rendah/low	Ground landscape, 20%, 15-5% slope of a good kendal,	Sandstones, mudstone and gampingan mudstone	Watershed area, the existence of gravel-kerakal	2	2	4
Sangat rendah/very low	Bentang alam Dataran, luas 10%, lereng 0-5% biasanya menempati daerah yang sangat rendah	Mudstone gampingan, sandstones and glokonitan	Poor water flow, very difficult to dig	1	2	2

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