



Landslides followed by massive flashfloods in large areas of Nangroe Aceh Darussalam (NAD) Province, occurred on 22 December 2006

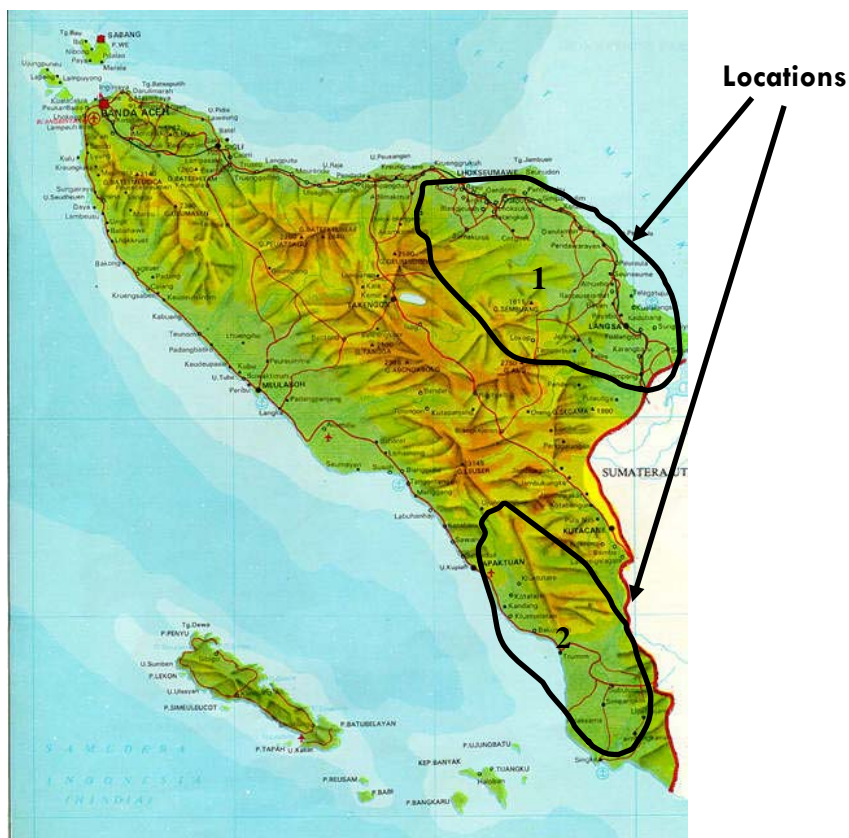
Type of Emergency

Landslides followed by massive flashfloods.

Date of emergency incidence

First event: 22 December 2006 in North, Central and East Nangroe Aceh Darussalam Province.
Second event: 30 December 2006 in Aceh Singkil (South Nangroe Aceh Darussalam Province).

Location and Incidence site mapping: Aceh, Sumatra, Indonesia, South-East Asia



Background

Earthquakes, heavy rains caused landslides followed by flashfloods causing significant material damage and population displacement in South, North, Central and East Aceh Districts reported since 22 December 2006. The worst affected districts are Aceh Tamiang, Aceh Timur, Aceh Utara, Bireun, Gayo Lues, Bener Meriah and Aceh Tengah.

Current Situation

The water level in areas affected on 22 Dec 06 subsided within first hours-days leaving vast contaminated areas covered with 20-40 cm of mud, drainage system blocked or damaged, pools of water and mud covering located low land. Metrological reports predict further rainfalls in coming days.



Causalities and Impact

It is estimated that disaster affected 337 villages in 18 sub-districts, forcing evacuation of 200,000 people, killing 70 and isolating thousands for days or even weeks.

GOI reporting the following numbers:

No	District	Population	Affected	Displaced	Dead	Missing	In Patients	Out Patients
1	Aceh Utara		147,085	10,488	4	1	-	10,516
2	Aceh Tamiang	246,852	203,722	77,700	52	163	30	1,857
3	Aceh Timur			3,055	5	-	-	-
4	Bireun			-	-	-	-	1,014
5	Bener Meriah			290	2	3	14	771
6	Gayo Lues			4,290	7	-	37	14,158
	Total			91,903	70	40	81	14.158

Needs Identified

- 1) Potable water! – Assessment team expressed serious concerns about observed shortages of potable water supplies. Initial distribution of bottled drinking water should be supported ASAP by additional measures (mass distribution by tanker trucks, other equipment for distribution and storage bladders positioned in strategic location and easily accessible for population, chlorination supplies, testing kits, setting up devices to produce drinkable water. Monitor access to fuel for boiling water. (Top priority!)
- 2) Issues with disposal of human excreta – It has been observed that ground water level remains high in many locations making impossible to use pitch-latrines. Consultation with WatSan experts needed to implement alternative solutions in adequate scale
- 3) Health
 - a) Restore operational capacities of affected health facilities (HFs):
 - i) Cleaning-repair infrastructure (mud)
 - ii) Repair-replace furniture and equipment (many items damaged beyond repair)
 - iii) Provide HF with replacement stock of basic medicines (90% of existing stock damaged by water or contaminated).
 - b) Health surveillance – put in place extraordinary monitoring measures (Early Warning System, reporting weekly on epidemiological situation, outbreaks hot-line, etc.).
- 4) Logistics, transport
 - a) Ensure **adequate fuel supplies** (diesel, gasoline, kerosene, LP Gas) to prevent unreasonable rise of prices and maintain self-sustainable assistance within affected communities. Also for boiling water and cooking food. High priority!
 - b) All-terrain trucks to continue provision of urgently needed humanitarian aid items
 - c) Boat (-s) - hard-hull, river type to maintain humanitarian bridge for pouches of population isolated along the upper parts of river (-s) in areas without road access.
- 5) Temporary shelter to serve population during cleaning-decontamination period (up to 2 months):
 - a) Plastic sheets, tarpaulin
 - b) Family tents
 - c) Utility tents (health centers, schools)
- 6) Maintain Food assistance. - Where most affected villages received already initial emergency food aid (e.g. Rice, Instant noodles, drinking water, etc.) due to serious damages there are needs to maintain aid delivery for some time till communities will restore their sustainability.
- 7) Maintain Non-food assistance (Hygiene kits, clothes, blankets, etc.)
- 8) Communication, Coordination – Recommended support to organizations that could set public Internet access in District Coordination centers facilitating better coordination, flow of information and knowledge.



Government Action

- 1) GOI put in place coordination mechanism based on Bupati Offices (Head of District) and involving emergency-specialized authorities. BAKORNAS (national level), SATKORLAK PBP(provincial), SATLAK (district) and involving others (e.g. TNI, BRR, PMI) , UNORC works closely with GOI coordinating response involving international humanitarian organizations. Relief operations received support from the Indonesian President Office. Aceh Utara Bupati has been appointed as the Regional Coordinator for Aceh Timur, Aceh Utara, Aceh Tamiang, Gayo Lues and Bener Meriah. POSKO (District Coordination Centers) have been set up in Aceh Utara, Aceh Tamiang and Bener Meriah.
- 2) Provincial Government and BRR provided statement asking international humanitarian community for well coordinator support.
- 3) Government of Indonesia (GOI) supported by invited international humanitarian community continues aid delivery by road and air (helicopters, planes). Helicopters have been used for aid drops to isolated, mountainous areas like Gayo Lues, Bener Meriah, and other locations inaccessible by road.
- 4) MOH input till the date:
 - a) Crisis Center has deployed 3 Emergency Teams
 - b) Operational funds (Rp 75 million)
 - c) Logistics: 2 rubber boats
 - d) Initial supplies: 100 amps ATS 1500 IU, 10 000 face mask, 500 Body bags. Further deliveries planned after receiving results of assessments)

WHO Actions

- A. WHO completed Aceh Tamiang assessment leading the UN Joint Assessment Mission in this District (29 Dec 06 – 01 Jan 07. WHO Team found 85% HFs not operational. Buildings are covered with thick mud but with no substantial structural damage. Significant loss in furniture, medical equipment, 95% of supplies destroyed or contaminated. Health services are still disorganized due to local staff dealing with damage to their own households or evacuated to higher grounds. GOI established 19 temporarily medical posts. Humanitarian organizations (International and national) launched already relief operations supporting several public health centers. Relief efforts increase from day to day. Majority of locations still not covered by organized and operational services. According to submitted health surveillance reports, number of diarrhea cases increased significantly during last 3 days indicating serious risk to affected population from water-born diseases. Shortages of potable water and contamination of water sources in vast areas increase significantly this risk. Probability of increasing malaria case among IDPs in future. Health workers reported increased population vulnerability to vector born diseases (Malaria, Dengue). Main reported health problems include: injuries, diarrhea, respiratory tract infection, fever and skin problems. No major outbreak reported till the date.
- B. WHO provided New Emergency Health Kit (NEHK-98) units for organizations sending emergency medical teams to the affected areas (IOM, Save the Children, LNGO-Matahari). Small quantities of bottled drinking water, mosquito nets, emergency lights have been distributed directly during assessment mission to health facilities in affected areas.
- C. Facilitated PHO-NAD efforts to organize transport of medical supplies available from the provincial emergency stock. Further donation of health emergency 9NEHK-98 and surgical emergency kits depend on results of relief coordination and field assessments.
- D. WHO has been working closely with PHO-NAD, GOI Emergency Coordination Board and with District Health Offices in affected areas establishing emergency health surveillance system that will monitor epidemiological situation in affected areas for next several weeks.



- E. WHO has been gathering, processing and disseminating health-related information from humanitarian organizations working in affected areas

UN – NGO – Donor Actions

- F. UNHAS helicopter has been delivered food aid provided by WFP to various isolated sites in Aceh Tamiang. Exxon mobile donated fuel to continue air operation till 29 December.
- G. UN organizations continue distribution of aid by road (WFP-food, UNICEF's-105MT Non-Food Items including school tents.
- H. ICRC provided many trucks and relief items. Preparing to send two water treatment units with trained PMI teams to service them.
- I. OCHA has agree to release USD 2M from CERF for relief operations
- J. Preparations to launch UN Flash Appeal.
- K. UN has established UNORC/WFP joint floods response centre for Aceh Utara located in the UNORC Lhokseumawe field office
- L. Number of NGOs and humanitarian organizations involved in relief operations significantly increased despite Idul Adha and New Year holiday season (CARDI, Cordaid, GTZ, Malteser, Oxfam, Save the Children)
- M. In terms of damage, 59 elementary schools have been damaged. 1,755 houses have been destroyed and 4,537 have suffered heavy damage. Over 3,000 goats and 840 cows have been lost.

Important Contacts

Name	Designation	Organization	Phone	Fax	E-mail
Dr. Rustam S. Pakaya, MPH	Head of Department	Crisis Center (PPK) MOH	021-5265043 08129602324	0215271111	ppkdepkes@yahoo.com
Dr. Kyaw Win (Vijay Nath)	Medical Officer	EHA, WHO	0811 933821	0215201164	wink@who.or.id
Dr. Tomasz Starega	Head of Aceh Field Office	EHA, WHO	0813 17662208	0651 635308	staregat@who.or.id

Source of Information from Indonesia

Information is gathered from the following sources. This report is for reference only and should not be quoted as factual accuracy can change.

1. WHO
2. UN system
3. BAKORNAS
4. Crisis Center (PPK), MOH
5. Indonesian Red Cross
6. NGOs and INGOs
7. Local and international news media



Photos from WHO Assessment Mission to Aceh Tamiang



Health Assessment, Floods, Aceh Tamiang District

No	Sub-District	Health Facility								Mobile Health Unit		Emergency Health Assistance Available		
		Number of Damaged Health Facility			Scale of damaged (1 - 5)	Repair needed (Y/N)	Availability for emergency	Availability of Water Supply (Y/N)	Electricity	Availability	Expected Duration	Local NGO	Government	INGO
		Hospital	Puskesmas	Pustu / Polindes										
1	Manyak Payed	—	1	—	3	Y	1	N	Y	N	1 week		Y	
2	Bendahara	—	2	1	1	Y	1	Y	N	Y	4 weeks			
3	Seruway	—	1	14	2	Y	1	Y	Y	Y	1 week	Y	Y	N
4	Karang Baru	—	1	3	3	Y	7	N	N	Y	4 weeks	Y	Y	
5	Rantau	—	1	1	5	Y	2	N	N	N	4 weeks	Y	N	
6	Kejuruan Muda	—	1	15	3	Y	1	N	N	Y	1 week	N	Y	N
7	Tamiang Hulu	—	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	Banda Mulia	—	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	Sekerak	—	—	—	—	N	3	N	N	Y		N	Y	N
10	Tenggulun	—	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Bandar Pusaka	—	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Kota Kuala Simpang	—	1		3	N	1	N	N	N	4 weeks	N	N	Y

No	Sub-District	Blood Transfusion Facility		Laboratories		Delivery		Essential Medical Equipment (Y/N)	Need of Key Medical Equipment			Available Essential Medicine and Medical Consumables (Y/N)
		Availability	Need for assistance in augmenting	Availability	Sufficient to cover the affected areas	Availability Emergency Services (Scale 1 - 5)	Sufficiency to cover the affected area (Y/N)		Number and Type	Locally available	Needed Externally	
1	Manyak Payed	N	Y	N	N	2	N	N		Y	Y	N
2	Bendahara											
3	Seruway	N	Y	Y	Y	4	Y	Y		Y	N	Y
4	Karang Baru	N	Y	Y	N	3	N	Y		Y	Y	Y
5	Rantau	N	Y	N	N	2	N	N	5 tensimeter and stethoscope	Y	Y	N
6	Kejuruan Muda	N	Y	N	N	1	N	Y		Y	Y	Y
7	Tamiang Hulu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	Banda Mulia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	Sekerak	N	Y	N	N	1	N	Y		N	Y	N
10	Tenggulun	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Bandar Pusaka	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Kota Kuala Simpang	N	Y	N	N	3	N	N/A		Y	Y	Y

No	Sub-District	Health Staff		Public Health System					Need of Psycho-Social Support	Community					
		Availability	Affected	Surveillance	Outbreak disease (Y/N)	Major Health Problem for vulnerable	Increase of vector	Status of Immunization Program (Scale 1 - 5)		Death	Cause of Death	Missing	Injured	Availability of injury treatment	Availability for correction of disability
1	Manyak Payed	Y	2	Y	N		N	1	Y	1	drown	—		Y	N
2	Bendahara	Y	20	Y	N		N	1	Y	7	drown	—		Y	N
3	Seruway	Y	N/A	Y	N	ARI			N						
4	Karang Baru	Y	N/A	Y	N	Diarrhea, Skin dss	N	1	Y	12	drown	—		Y	N
5	Rantau	Y	5	Y	N	Diarrhea, Skin dss	Y	1	Y	6	drown	—		Y	N
6	Kejuruhan Muda	Y	6	N	N	Diarrhea, Eye Infection, ARI, Skin dss	N	1	Y	15	shock, drown	32		Y	N
7	Tamiang Hulu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	drown	—		N/A	N/A
8	Banda Mulia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	drown	—		N/A	N/A
9	Sekerak	N	N/A	N	N	Diarrhea, Skin dss, Malaria	Y	1	Y	1	drown	—		Y	N
10	Tenggulun	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	drown	—		N/A	N/A
11	Bandar Pusaka	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	drown	—		N/A	N/A
12	Kota Kuala Simpang	Y	80%	Y	N	ARI, Diarrhea	Y	4	Y	2	drown	—		Y	N