

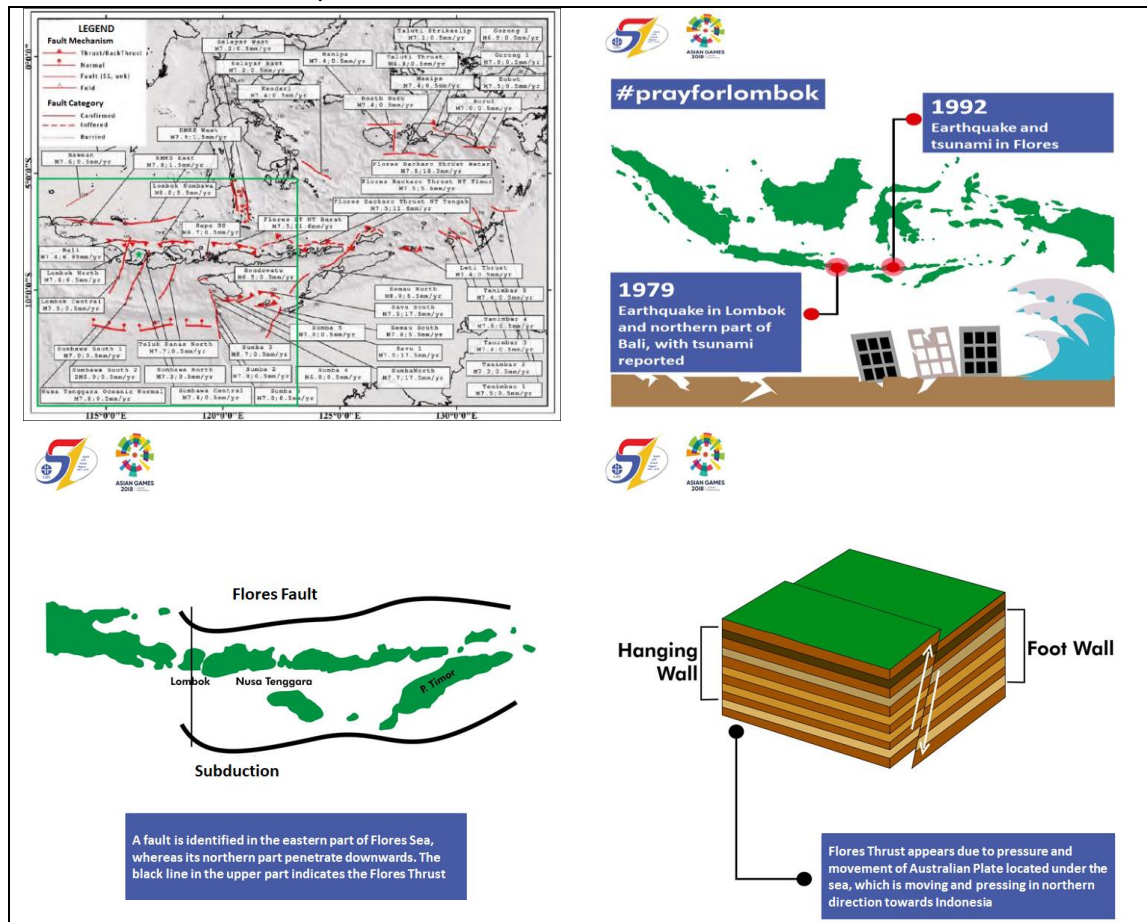
1. HIGHLIGHTS

- a. A Magnitude 7.0 earthquake occurred on 5 August 2018 18:46 hrs (UTC +7), with epicenter at a depth of 10 km and located at 8°22'12.0" S & 116°28'48.00" E (inland), in the area of West Nusa Tenggara Province, Indonesia ([BMKG](#)). The earthquake was felt in Lombok, Bali and Sumbawa Island. A tsunami warning was triggered, which was cancelled after two hours since only minor tsunami was observed (BMKG). It occurred one week after a strong M 6.4 earthquake hit the same area on 29 July 2018 and series of aftershocks, adding further humanitarian needs
- b. According to the latest government figure (8 August 2018), there are 131 recorded fatalities, 1,477 injuries, 156,003 internally-displaced people (IDPs), 42,239 damaged houses, and 456 damaged schools ([BNPB](#)).
- c. **The Government of Indonesia through the National Disaster Management Authority (BNPB) has strongly stated that international assistance is not required at this point of time.** BNPB has encouraged all line ministries to support monitoring of international stakeholders' activities. BNPB has also encouraged all national/local NGOs based in Indonesia not to invite their international partners. Those who already arrived will be put on hold and cannot implement any of their activities until further notice. Current emergency response period is until 11 August 2018.
- d. Initial sectoral damage and impact assessment activities are being undertaken by various national government agencies and organizations.
- e. The AHA Centre is in close coordination with the BNPB of Indonesia and providing support on information management and dissemination of information to regional and international stakeholders both at headquarter and field levels. This includes inclusion of official National Disaster Management Authority (BNPB) statement into the AHA Centre Situation Update. An In-Country Liaison Team (ICLT) was dispatched by the AHA Centre to Lombok Island on 6 August 2018 for supporting on-site coordination.
- f. The AHA Centre is mobilizing ASEAN Emergency Response and Assessment Team (ERAT) on 8 August 2018. While BNPB has welcomed ASEAN-ERAT, their primary deployment purpose is to learn from Indonesia on its experience in managing the disaster and get exposure on the ongoing emergency response operation.
- g. Prior to ICLT deployment, the AHA Centre has provided initial flash updates (#1 and #2) on this disaster, which is available here: <https://ahacentre.org/flash-updates/>

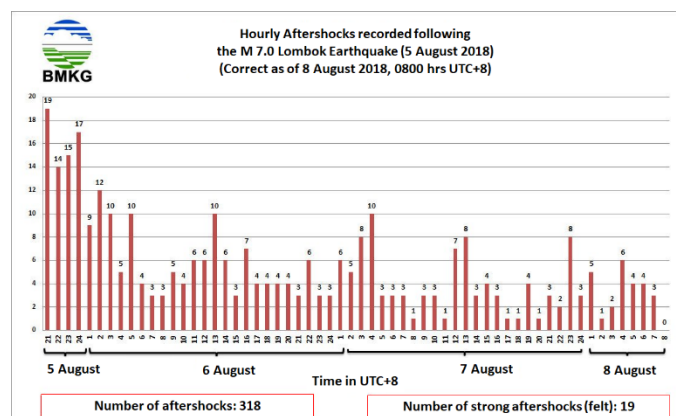
2. SUMMARY OF EVENTS, FORECAST, AND ANTICIPATED RISK

- a. The M 6.4 earthquake and M 7.0 earthquake were triggered due to activities of Flores Back Arc Thrust. As can be seen in the figure below (the 2017 Seismic Hazard Map

of Indonesia), green star indicates the location of main epicentre and green box indicates area of interest and source of seismic hazard around Lombok Island. Due to the movement, various aftershocks were recorded along Flores Back Arc Thrust and Megathrust Sumba seismic zone. At least there are nine other fault lines crossing and surrounding Lombok Island. The figure below (upper-left) also shows the information of recorded fault movement and potential maximum earthquake magnitude in the area. On the source of M 6.4 and M 7.0 earthquakes, the maximum potential magnitude is M 7.4; thus, with the released energy on 29 July and 5 August 2018, we can expect smaller scale aftershocks ([BMKG](#)). Indonesian Institute of Science (LIPI) provides an illustration on the mechanism, source, and historical context of the earthquakes in Lombok below.



- b. As can be seen in the right figure, until 8 August 2018, Indonesian Meteorological, Climatological, and Geophysics Agency ([BMKG](#)) recorded 318 aftershocks following the M 7.0 earthquake on 5 August 2018, 1846 hrs (UTC+7), with 19 of them were felt due to moderate shaking ($\geq M$ 4.5). These aftershocks may become additional risk to



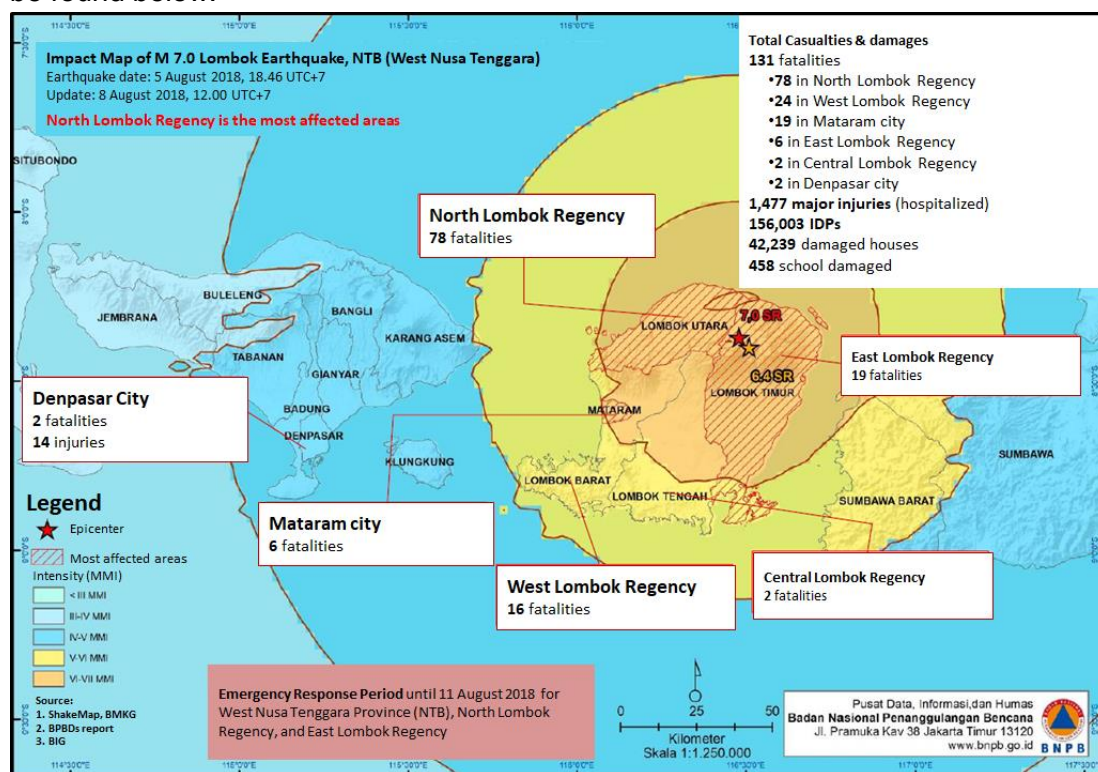
crippled buildings, responders, affected population houses and infrastructures. The latest one was M 4.9 earthquake, with epicenter located 8.31 S and 116.17 E, at 12 km below ground surface. The intensity felt in Mataram City, Lombok, was MMI III-IV (BMKG).

- c. It is currently hot and dry in Lombok, Bali and Sumba islands. A drought occurrence has been identified in Lombok and Sumbawa islands of West Nusa Tenggara (NTB) Province since rainfall record is only around 0-20 mm. The total needs of clean water for affected populations should be projected by considering the rainfall pattern. Figure on the right below showcase the rainfall accumulation across the affected areas ([AHA Centre DMRS](#)).



3. ASSESSMENT OF DAMAGE, IMPACT, AND HUMANITARIAN NEEDS

- a. As of 8 Aug 2018, 1200 UTC +7, BNPB's casualties and damage information as can be found below.

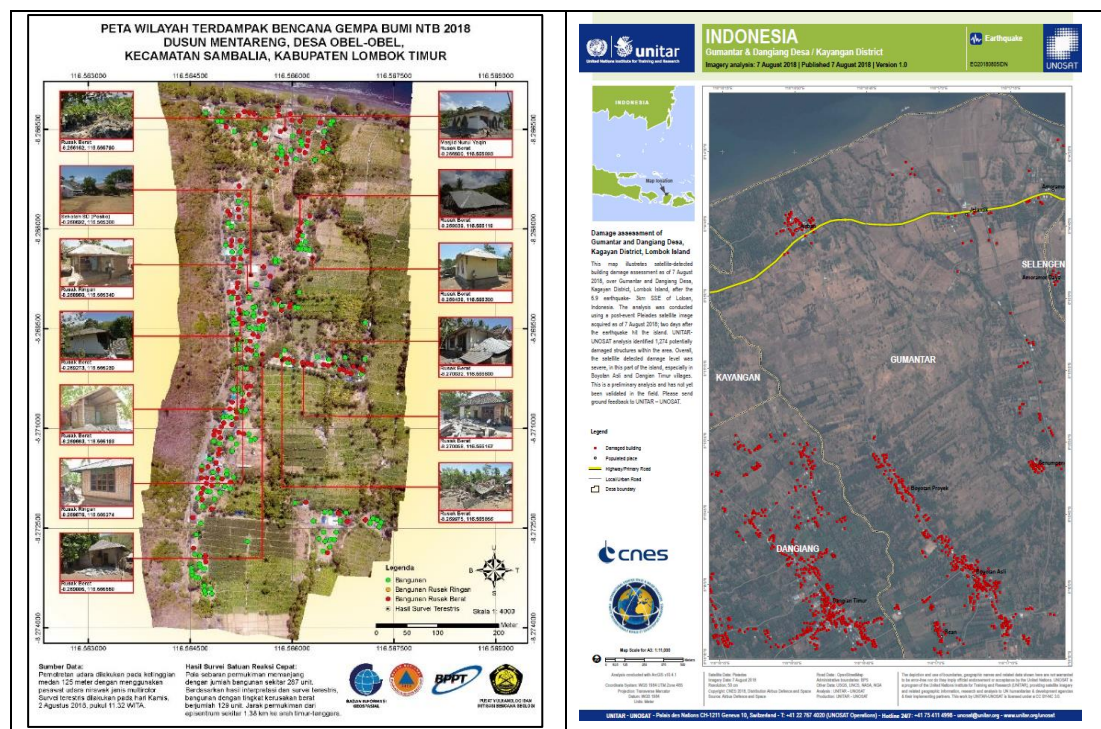


- b. Based on the Ministry of Health (MOH) Health Crisis Center (infographics attached), health teams from government institutions, non-government organisations and local universities have been mobilised to affected areas to serve and provide environmental health, nutrition and medical logistics and assistance. There are currently 123 deployed health personnel and teams in Lombok Utara, Lombok Barat

and Lombok Timur. The health teams and personnel are comprised of orthopedic physicians, surgeons, anesthesiologists, pediatricians, medical internists, ophthalmologists, psychiatrists, neurologists, psychologists, emergency nurses and general practitioners and nurses.

As of 7 August 2018, there have been 105 casualties, 1,407 inpatients and those with serious injuries, 124 outpatients and those with minor injuries and 2,000 persons in shelters which include refugees and IDPs. Patients were treated in six hospitals namely the NTB provincial hospital, Mataram City Hospital, Patut Patuh Patju Hospital in Western Lombok, Selong Hospital in Eastern Lombok, Indonesian National Police Hospital and the Indonesian Armed Forces Hospital.

- c. Indonesian National Space and Aeronautical Agency (LAPAN) has made available pre and post satellite imageries of the affected areas for operations purpose: <http://pusfatja.lapan.go.id/simba/qr/earthquake/Layout Gempa Lombok 300dpi/>
- d. Indonesian Geospatial Agency (BIG) also has made available [imageries and Line of Sight \(LOS\) Displacement Map](#) in some areas of Lombok.
- e. Following the activation of Sentinel Asia platform and Disaster Charter, at least three remote damage assessment activities through aerial survey and satellite observation have been completed: 1) by Indonesian agencies (BNPB, BIG, BPPT, and PVMBG) following the M 6.4 earthquake (upper-left figure); and 2) by UNOSAT following the M 7.0 earthquake (upper-right); and 3) Regional Service of Image Processing and Remote Sensing (SERTIT) (bottom). Higher resolution images are available in the attachment.



f. As of 8 August 2018, there has been limited changes in the situation of isolated areas as follows:

| No | Regency | District | Village | Required Assistance | Remarks |
|----|--------------|-------------|-----------------------------|---|---|
| 1 | North Lombok | Bayan | Bayan Beleq | Food, tarpaulin, blanket, clean water, lighting, medicines, medical personnel | The local water company (PDAM) in Giri Menang, North Lombok, has cut the water supply due to the mostly damaged water pipes. A crisis of clean water is expected for the next twelve days. |
| 2 | | Bayan | Mumbul Sari | Food, tarpaulin, blanket, clean water, lighting, medicines, medical personnel | |
| 3 | | Tanjung | Teniga Village | Food, medicines, medical personnel | |
| 4 | | Kayangan | Tukak Bendu Santong Village | Food, drink water, clothes, and logistics | |
| 5 | | Kayangan | Salut Village | | |
| | | | | Drink water, medicines, medical personnel, blanket | Required medical personnel: midwife. There are still lots of untreated injured persons. |
| 6 | | | Medane Village | Food | Teluk Dalam Village |
| 7 | | Bayan | Sambik Elen Village | Doctor/medical team | Lenggorong Village |
| 8 | | Tanjung | Tegal Maja Village | | Sempak Village has not received any assistance. |
| 10 | West Lombok | Gunungsari | Mekar sari Village | Tent, floor mat, blanket, food, medicines, generator, medical personnel | 100% of the houses in the village is uninhabitable. This village has not received any assistance. |
| 11 | | Gunung Sari | Kekait Village | Tarpaulin, tents for elderly people and toddlers | |
| 12 | | Gunungsari | Wadon | Food and tent | |
| 13 | East Lombok | Sambelia | Obel - obel | Food, blanket, drinking water | |
| 14 | | Semabalun | Sajang | Ready-to-eat food, clean water, toilet, support for study activities | The children IDPs are asking to get back to school as they are bored with no activities. |
| 15 | | Semabalun | Semabalun Lawang | Clean water, food, drinking water, trauma healing support | Numerous IDPs are still frightened or being traumatised of getting hit by collapsing building or houses. |
| 16 | | Semabalun | Semabalun Timba Gading | Clean water, toilet | |
| 17 | | Semabalun | Semabalun Bumbung | Trauma healing support | IDPs in Jorong Village, Semabalun Bumbung, are consist of toddlers, children, pregnant women, and elderly people. Most of them are traumatised by collapsing buildings and the earthquake itself. |
| 18 | | Semabalun | Bilok Petung | Clean water, toiler, public kitchen | |
| 19 | | Sambalia | Belanting | Medical personnel, medicines, toilet | IDPs start experiencing symptoms such as fever, influenza, diarrhea and vomiting. |
| 20 | | Sambalia | Dara Kunci | Medical personnel, medicines, trauma healing support | In addition to experiencing fever and influenza, the IDPs are also still being traumatised. |
| 21 | | Sambalia | Madayin | Medical personnel (midwife), medicines, toddler necessities | |
| 22 | | Sambalia | Bagik Manis | Ready-to-eat food, medicines, blanket | |



- g. Electricity recovery by National Electricity Company (PLN) has managed to restore partially power in Tanjung District, North Lombok Regency.
- h. In Education sector, according to the data received from the Ministry of Education and Culture on 7 August 2018 it was recorded that the following education facilities are affected: nursery & kindergarten (34 units), elementary school (265 units), junior high school (83 units), senior high school (34 units), vocational high school (36 units) and special education school (6 units). It was also recorded that the affected schools in the affected Regency are as follow: 28 schools in Western Lombok Regency, 206 schools in Northern Lombok Regency, 122 schools in Central Lombok Regency, 58 schools in Eastern Lombok regency and 44 schools in Mataram City.
- i. A total of 8.381 local and international tourists and Gili residents had been evacuated on 7 August 2018 at 3.00 PM using 13 boats to Benoa Port (Bali), Lembar Port (northern Lombok), and Bangsal Port (northern Lombok).

4. ACTIONS TAKEN AND RESOURCES MOBILISED

Response by Government of Indonesia

- a. Incident Command Post(s) have been established by the local disaster management organisations (BPBDs) on scene. BNPB has established National Assisting Post (Pospenas) in Tanjung District, North Lombok Regency, (8°22'12.0" South & 116°28'48.00" East). Indonesian Armed Forces is opening a post in Halim Perdanakusuma Airport for receiving relief items and resources, and sending to Lombok.
- b. Joint Search and Rescue activities on 8 August 2018 were divided into six sectors, and involving 190 personnel. Indonesian Search and Rescue (BASARNAS) had searched three Gili islands using helicopters and through land to ensure there is no victims left in the rubble.

| Sector | Location | SAR activities |
|----------|--|---|
| Sector A | Supek Village | Rescue in a collapsed building |
| Sector B | Mosque in Bangsal Village | Rescue in a collapsed mosque |
| Sector C | Dompo Indah Village, Kayangan District, North Lombok Regency | Assessment and rescue to landslide area and collapsed buildings |
| Sector D | Bili Betung, Gangga District, North Lombok Regency | Rescue in a landslide zone |
| Sector E | Betek Village, Gangga District, North Lombok Regency | Assessment and rescue effort in a landslide location |
| Sector F | Jugil Barat Village, Gangga District | Assessment in an isolated areas due to landslide |

For the evacuation process, the government deployed 18 heavy equipment, 4 K9 dogs and search and rescue personnel. Additional heavy equipment are currently being sent from Bali, Lombok area and contributions from private sectors.

- c. Naval Hospital Ship KRI dr. Soeharso has arrived in Northern Lombok Regency on 7 August 2017 at 7.45 PM and have started operational. Floating Hospital Ship Prabu Airlangga is currently enroute to Northern Lombok Regency. Field hospital has also been operational from the following: (i) 1st Health Battalion Hospital in Sembalun District, Eastern Lombok Regency and (ii) 2nd Health Battalion Hospital in Northern Lombok Regency by the Indonesian Army Strategic Command (KOSTRAD) and Indonesian Marine Corps.
- d. The Ministry of Health is coordinating the teams to ensure synchronicity of information and to facilitate movement of medical teams. To date, five orthopedic physicians and 30 emergency nurses are still needed.



- e. The Ministry of Education and Culture has deployed cross directorate emergency response team with the support from National Secretariat for Disaster Safe School (*Sekretariat Nasional-Satuan Pendidikan Aman Bencana*). The activities conducted by the National Secretariat are: (i) establishment of education post; (ii) data collection; (iii) coordination in establishing temporary schools and (iv) information management. The team also distributed some relief items: (i) emergency school tents (56 units); (ii) school package (63 boxes); (iii) recreation package (60 boxes); (iv) nursery, kindergarten and school kits (10 boxes); (v) tents which will be distributed (18 pcs) and (vi) school uniforms (1000 pairs) (infographics attached).

Response by the AHA Centre

- a. The AHA Centre is in close coordination with the BNPB of Indonesia and providing support on information management and dissemination of information to regional and international stakeholders both at headquarter and field levels. This includes inclusion of official BNPB products and information into the AHA Centre Situation Update. An In-Country Liaison Team (ICLT) was dispatched by the AHA Centre to Lombok Island on 6 August 2018 for supporting on-site coordination.
- b. The AHA Centre is mobilizing ASEAN Emergency Response and Assessment Team (ERAT) on 8 August 2018. While BNPB has welcomed ASEAN-ERAT, their primary deployment purpose is to learn from Indonesia on its experience in managing the disaster and get exposure on the ongoing emergency response operation.



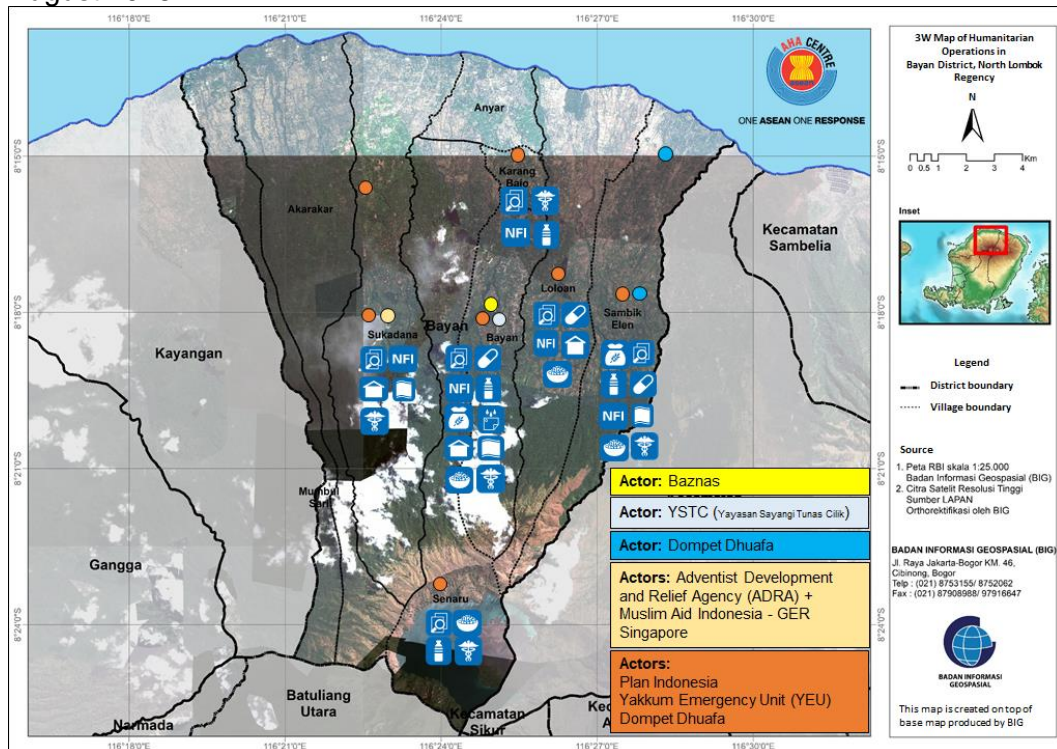
AHA Centre ICLT on-site coordination support to BNPB at National Assisting Post (Pospenas)

Response by Humanitarian Partners

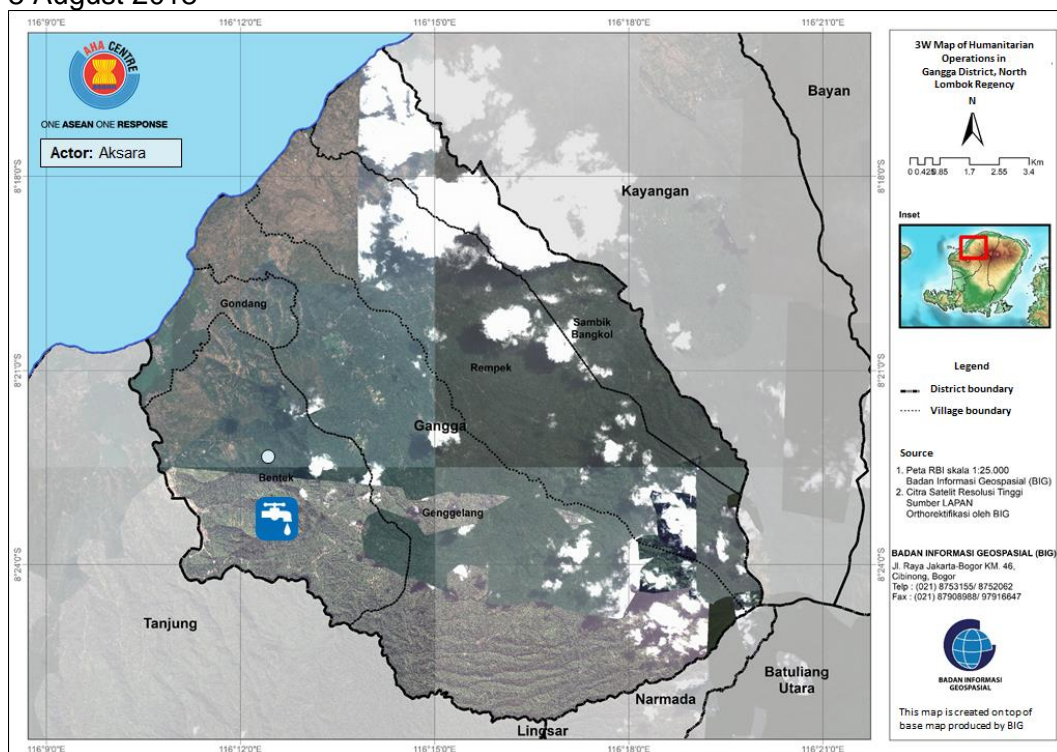
- a. As of 8 August 2018, 15 Indonesian-based national/local humanitarian partners are present on the ground: Indonesian Red Cross (PMI), Plan Indonesia, Yakum Emergency Unit (YEU), Dompot Dhuafa, ADRA, Muslim Aid, Oxfam, Baznas, Yayasan Sayangi Tunas Cilik (YTSC / Save the Children), Wahana Visi Indonesia (WVI), PKPU Human Initiative, Muhammadiyah Disaster Management Centre (MDMC), Aksara, and Islamic Relief Indonesia. As shared during national cluster on protection coordination meeting their activities ranging from assessment, distribution of food, non-food-items, WASH assistance, etc. Overall, the assistance able to reach 25 villages (out of 52) in North Lombok and East Lombok Regency.
- b. As of 8 August 2018, PMI has mobilized 26 tons of relief items containing family kit (205), hygiene kit (250), tarpaulin (2,500), blanket (2,250), water bladder (50), body bag (100), water tank (20), mattress (2,000), tent (45), water pump (1). They also dispatched 182 personnel and 10 ambulances for public kitchen support, and clean water provision.



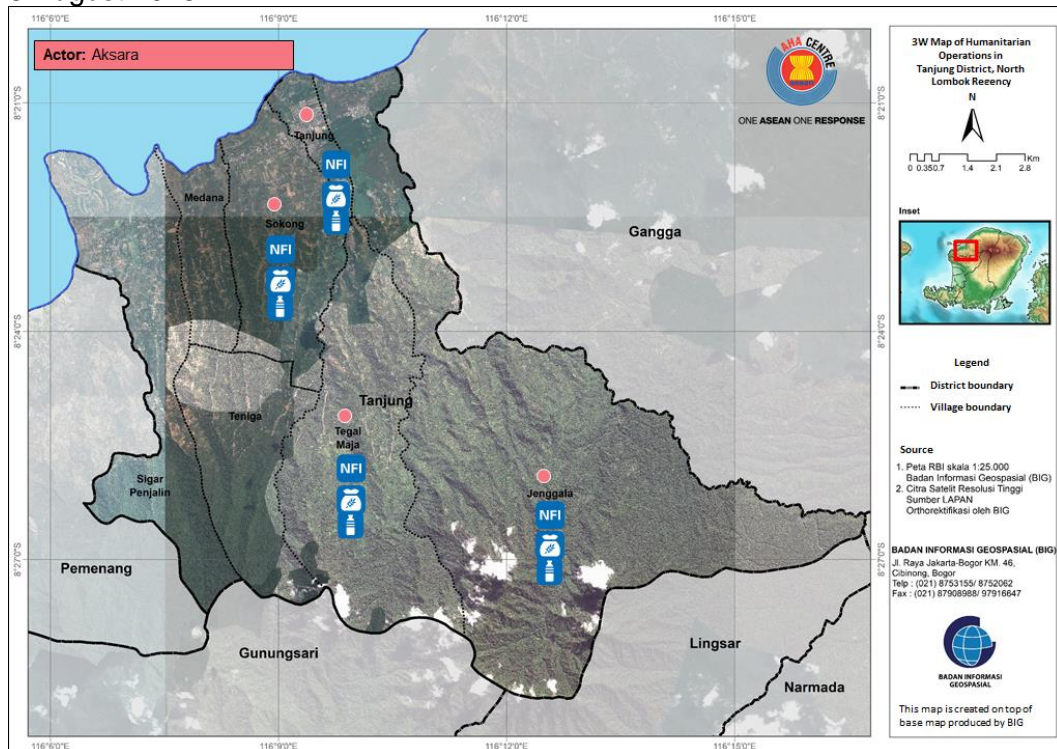
c. Humanitarian operations / 3W Map in Bayan District, North Lombok Regency, as of 8 August 2018



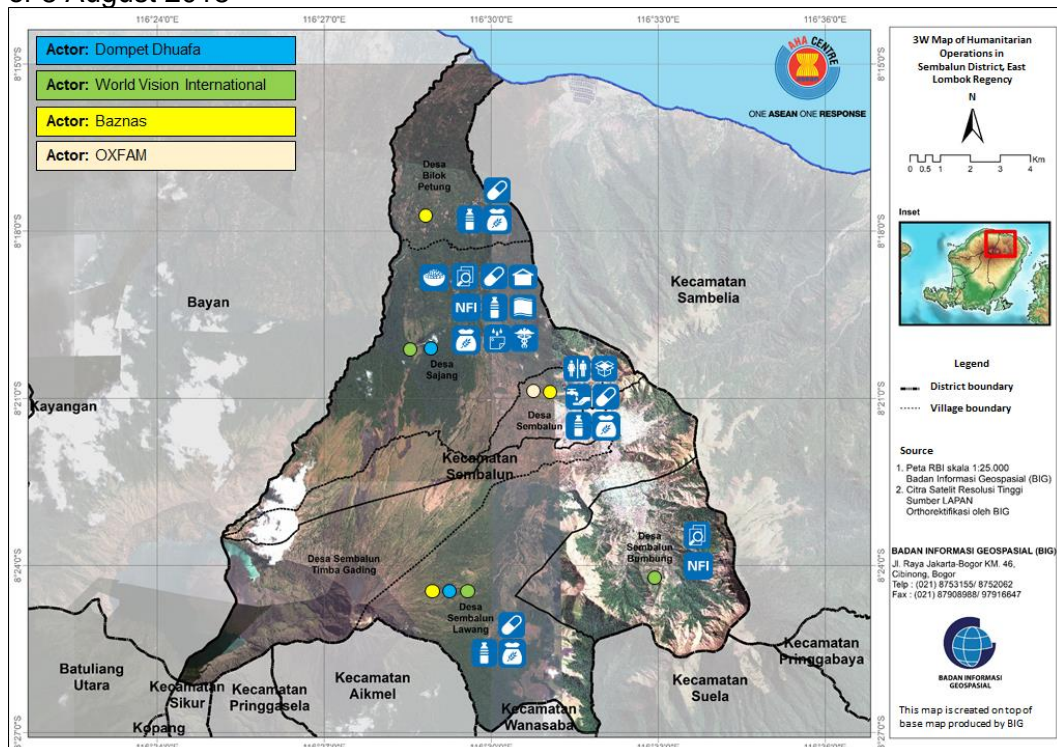
d. Humanitarian operations / 3W Map in Gangga District, North Lombok Regency, as of 8 August 2018



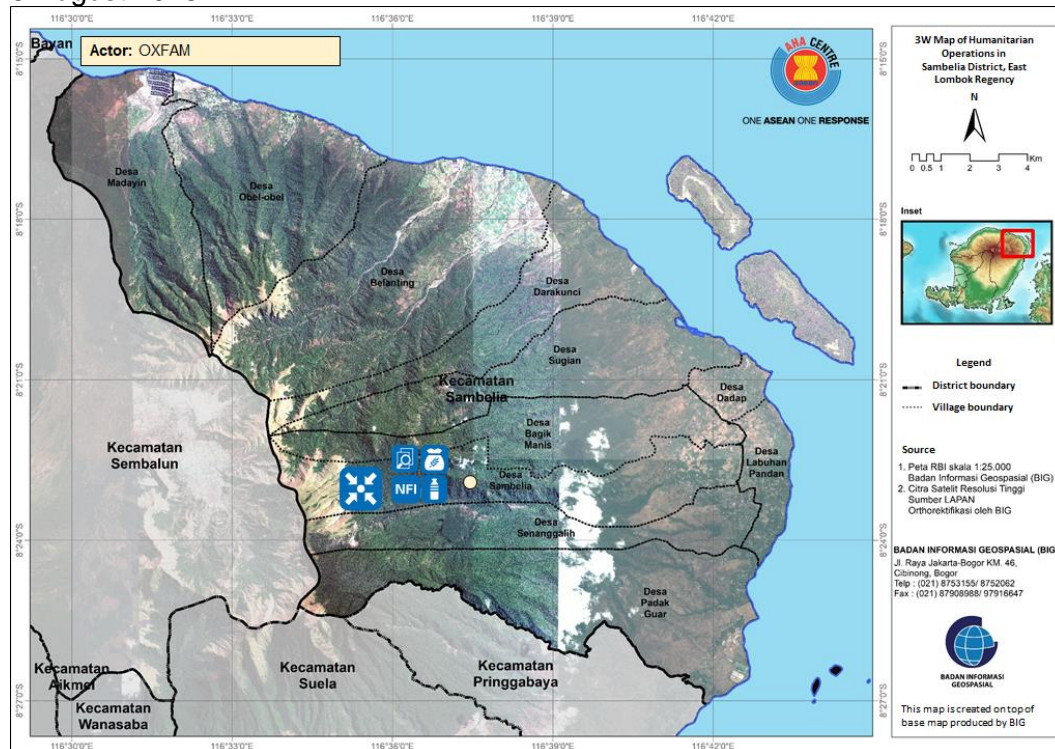
- e. Humanitarian operations / 3W Map in Tanjung District, North Lombok Regency, as of 8 August 2018



- f. Humanitarian operations / 3W Map in Sembalun District, East Lombok Regency, as of 8 August 2018



- g. Humanitarian operations / 3W Map in Sambelia District, East Lombok Regency, as of 8 August 2018



5. RECOMMENDATIONS AND PLANNED ACTIONS

Recommendations to be considered by humanitarian partners

- Due to seismic hazard characteristics in the affected areas, as described in Section 2, humanitarian partners and responders should exercise cautions during their operations, prepare and implement a security plan, and be alerted to potential collateral disasters.
- Safety of humanitarian workers has to be ensured due to identified security risk of looting on the ground.
- Disaster responders and humanitarian workers have to ensure safe evacuation sites, preferably outdoor in a solid ground, in anticipation of aftershocks or landslides.
- With the current and near-future availability of satellite imageries and aerial survey, it can be used for on the ground validation and assessment of building damages and need of rehabilitation and reconstruction.
- Local/national humanitarian organisations may wish to maintain information sharing and assistance tracking available in [this page](#).
- Recommendation on health emergency response
 - Maintain a triage system and areas where to receive patients needing medical help across the affected areas for proper patient classification and referral to appropriate health facilities
 - Promote reinforcement of medical (Emergency Medical Teams - surgery, orthopedic, pediatric, general practice) and public health teams in the area especially in most affected areas
 - Sustain a functional referral system across primary (medical field tents), secondary and tertiary hospitals to address different cases adequately
 - Provision of medical/ hospital supplies/ medicines/ anesthesia
 - Sustain provision of clean water and food in evacuation/ relocation sites
 - Sustain provision of water and sanitation facilities in evacuation/ relocation sites



- vii. Promote reinforcement of trauma healing support (psychological/ mental health support) especially in evacuation/ relocation sites

Planned actions by AHA Centre

- a. The AHA Centre is seconding staff to BNPB's Data and Information Centre (*Pusdatin*) for supporting dissemination of official information to regional and international stakeholders.
- b. The AHA Centre is mobilising ASEAN-ERAT, with estimated time of arrival in Lombok on 8 and 9 August 2018. Their primary deployment purpose is to learn from Indonesia on its experience in managing the disaster and get exposure on the ongoing emergency response operation.
- c. The AHA Centre will provide further updates as situation progresses and more information is available.

Prepared by:

AHA Centre - Emergency Operations Centre (EOC) in collaboration with BNPB's Data and Information Centre (*Pusdatin*)

Contact:

- 1) Qingyuan Pang, Asst. Director, Disaster Monitoring & Analysis, qing.pang@ahacentre.org
- 2) Mizan B. F. Bisri, Disaster Monitoring & Analysis Officer, mizan.bisri@ahacentre.org

ABOUT THE AHA CENTRE

The AHA Centre - ASEAN Coordinating Centre for Humanitarian Assistance on disaster management - is an inter-governmental organisation established by 10 ASEAN Member States – Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam - to facilitate the cooperation and coordination among ASEAN Member States and with the United Nations and international organisations for disaster management and emergency response in the region.

The ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre), Graha BNPB 13th Floor, JL Raya Pramuka Kav 38, East Jakarta, 13210, Indonesia

Phone: +62-21-210-12278 | www.ahacentre.org | email: info@ahacentre.org



Attachment

Infographics on education sector impact & response (Ministry of Education & Culture)



Infographics on health sector (Ministry of Health)



SITUATION UPDATE

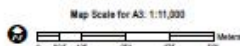


Damage assessment of Gumantar and Dangiing Desa, Kayangan District, Lombok Island

This map illustrates satellite-detected building damage assessment as of 7 August 2018, over Gumantar and Dangiing Desa, Kayangan District, Lombok Island, after the 6.9 earthquake- 3km SSE of Loloan, Indonesia. The analysis was conducted using a post-event Pleiades satellite image acquired as of 7 August 2018; two days after the earthquake hit the island. UNITAR-UNOSAT analysis identified 1,274 potentially damaged structures within the area. Overall, the satellite detected damage level was severe, in this part of the island, especially in Boyotan Asli and Dangiing Timur villages. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR – UNOSAT.

Legend

- Damaged building
- Populated place
- Highway/Primary Road
- Local/Urban Road
- Desa boundary

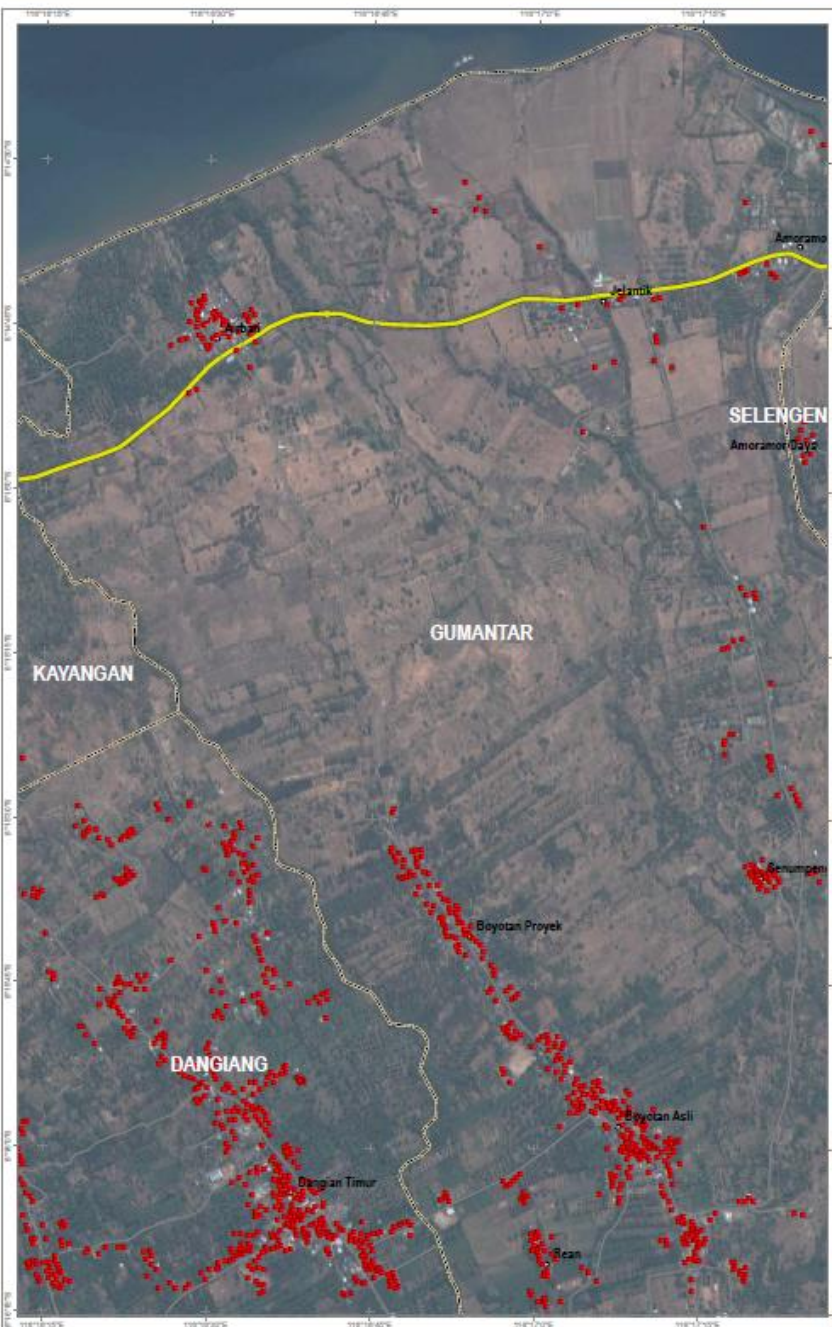


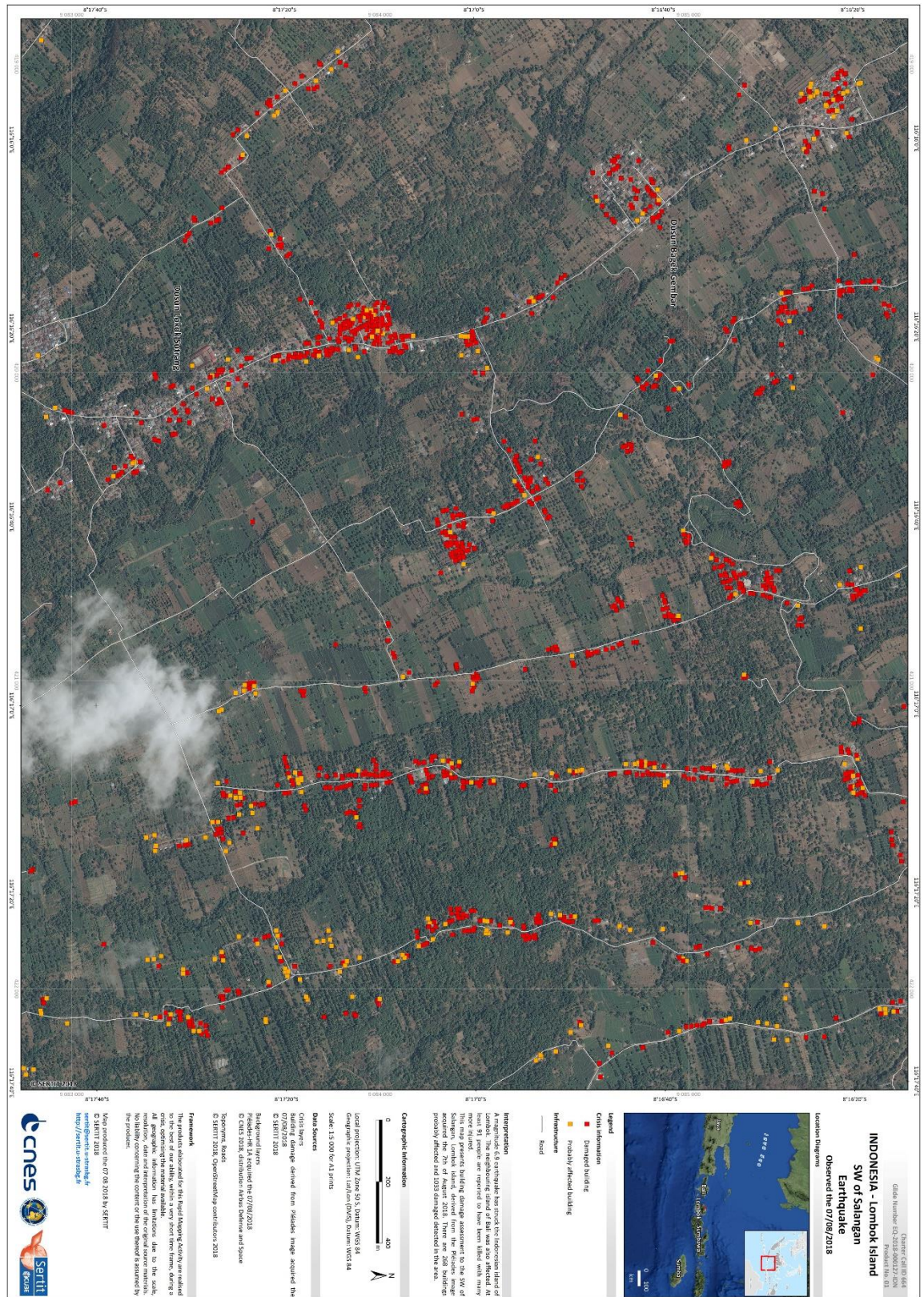
Analysis conducted with ArcGIS v10.4.1
Coordinate System: WGS 1984 UTM Zone 48S
Projection: Transverse Mercator
Datum: WGS 1984
Units: Meter

Satellite Data: Pleiades
Imagery Date: 7 August 2018
Resolution: 50 cm
Copyright: CNES 2018, Distribution Airbus Defence and Space
Source: Airbus Defence and Space

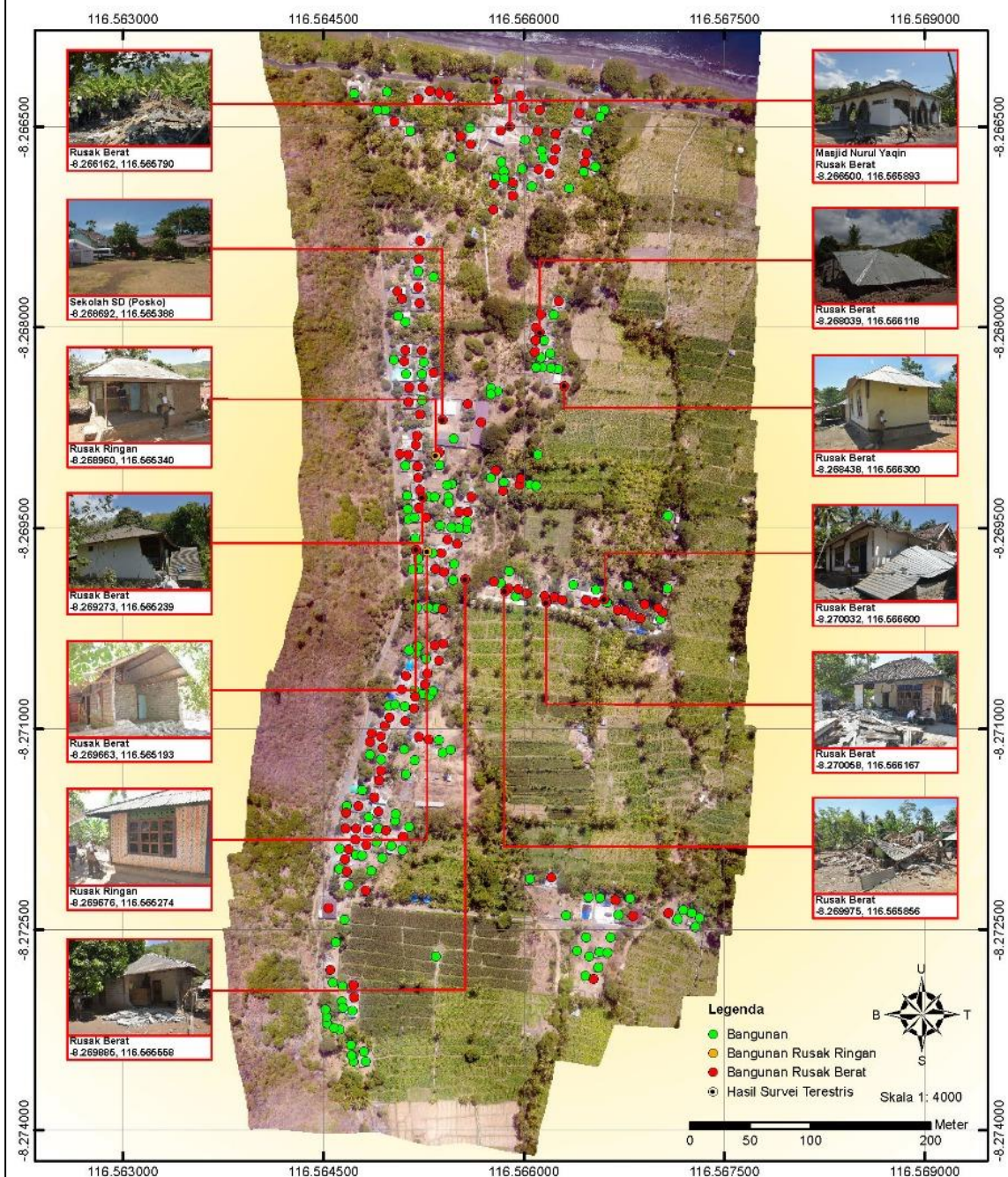
Road Data: OpenStreetMap
Administrative boundaries: GFS
Other Data: USGS, UNCS, NASA, NGA
Analysis: UNITAR - UNOSAT
Production: UNITAR - UNOSAT

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the United Nations. UNOSAT is a program of the United Nations Institute for Training and Research (UNITAR), providing satellite imagery and related geographic information, research and analysis to UN humanitarian & development agencies & their implementing partners. This work by UNITAR-UNOSAT is licensed under a CC BY-NC 3.0.





**PETA WILAYAH TERDAMPAK BENCANA GEMPA BUMI NTB 2018
DUSUN MENTARENG, DESA OBEL-OBEL,
KECAMATAN SAMBALIA, KABUPATEN LOMBOK TIMUR**

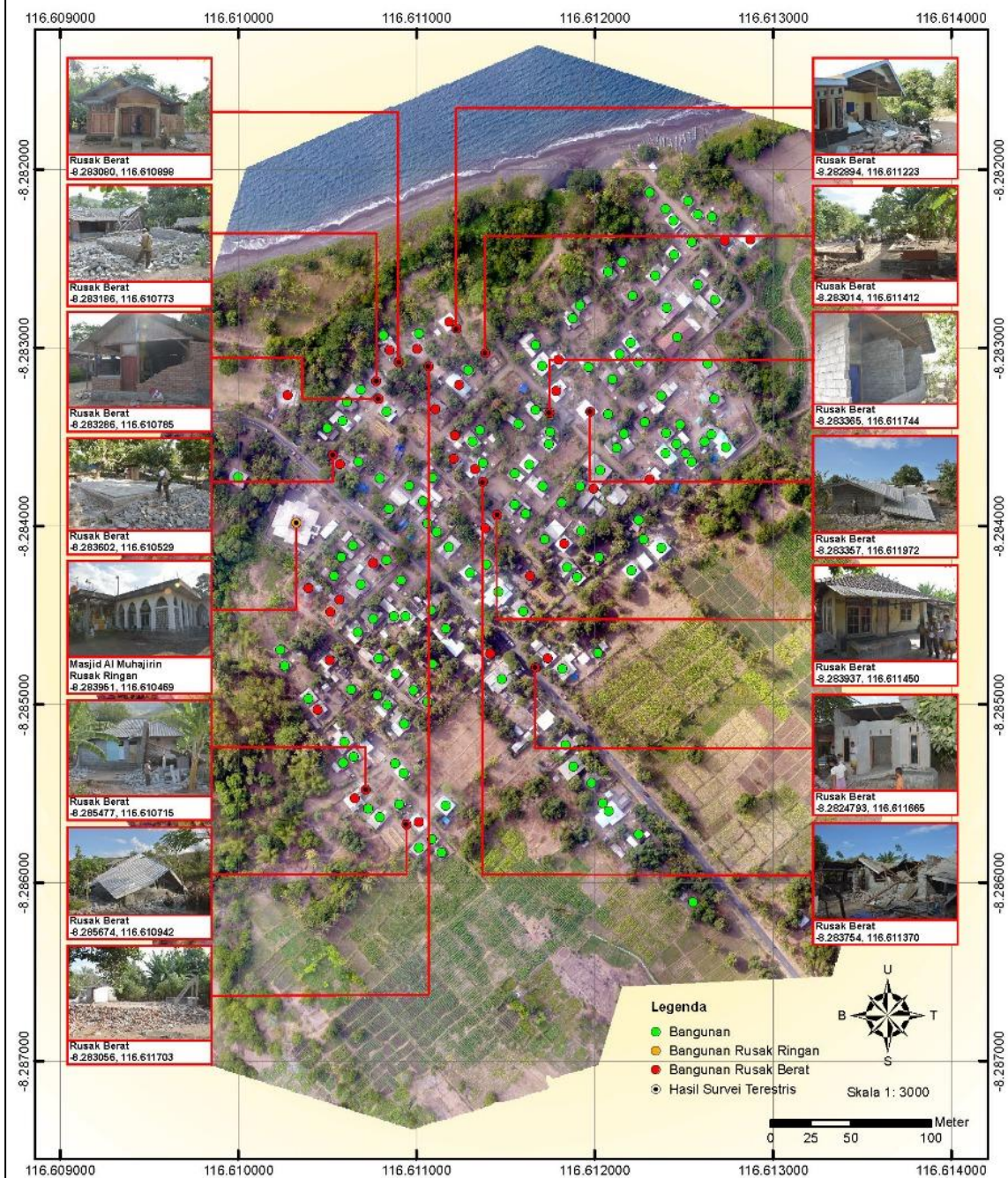


Sumber Data:
Pemotretan udara dilakukan pada ketinggian medan 125 meter dengan menggunakan pesawat udara nirawak jenis multirotor. Survei terestris dilakukan pada hari Kamis, 2 Agustus 2018, pukul 11.32 WITA.

Hasil Survei Satuan Reaksi Cepat:
Pola sebaran permukiman memanjang dengan jumlah bangunan sekitar 287 unit. Berdasarkan hasil interpretasi dan survei terestris, bangunan dengan tingkat kerusakan berat berjumlah 129 unit. Jarak permukiman dari episentrum sekitar 1.38 km ke arah timur-tenggara.



**PETA WILAYAH TERDAMPAK BENCANA GEMPA BUMI NTB 2018
DUSUN PEMADEKAN DESA OBEL-OBEL,
KECAMATAN SAMBALIA, KABUPATEN LOMBOK TIMUR**



Sumber Data:

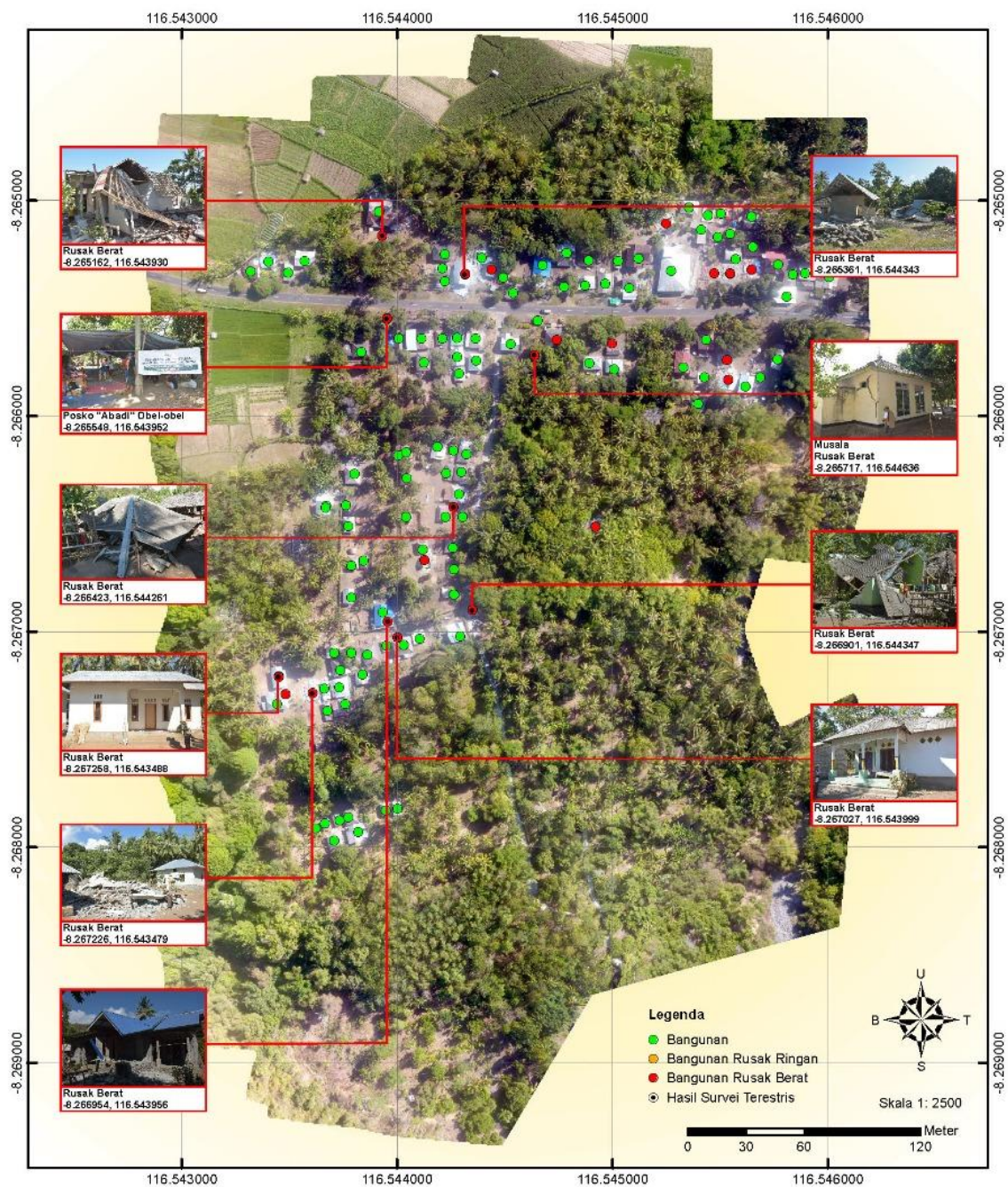
Pemotretan udara dilakukan pada ketinggian medan 150 meter dengan menggunakan pesawat udara nirawak jenis multirotor. Survei terestris dilakukan pada hari Kamis, 2 Agustus 2018, pukul 15.35 WITA.

Hasil Survei Satuan Reaksi Cepat:

Pola sebaran permukiman mengelompok dengan jumlah bangunan sekitar 165 unit. Berdasarkan hasil interpretasi dan survei terestris, bangunan dengan tingkat kerusakan berat berjumlah 34 unit. Jarak permukiman dari episentrum sekitar 4,38 km ke arah timur-tenggara.



**PETA WILAYAH TERDAMPAK BENCANA GEMPA BUMI NTB 2018
DUSUN OBEL-OBEL, DESA OBEL-OBEL,
KECAMATAN SAMBALIA, KABUPATEN LOMBOK TIMUR**



Sumber Data:
Pemotretan udara dilakukan pada ketinggian medan 125 meter dengan menggunakan pesawat udara nirawak jenis multirotor. Survei terestris dilakukan pada hari Kamis, 2 Agustus 2018, pukul 09.30 WITA.

Hasil Survei Satuan Reaksi Cepat:
Pola sebaran permukiman tidak teratur dengan jumlah bangunan sekitar 116 unit. Berdasarkan hasil interpretasi dan survei terestris, bangunan dengan tingkat kerusakan berat berjumlah 18 unit. Jarak permukiman dari episentrum sekitar 1,04 km ke arah barat daya.

