# FREQUENTLY ASKED QUESTIONS ON THE 2018 LOMBOK EARTHQUAKE



#### LIVING WITH EARTHQUAKES

Indonesia is surrounded by sources of earthquake. They are always moving, sometimes leading to the occurrence of both minor and major earthquakes.



Photographs from the 1979 Lombok Island earthquake Source : Kompas

History shows that Lombok suffered several major earthquakes. In 1257, there was a volcanic eruption and earthquake lasting for a week resulting in a tsunami. Earthquakes also occurred in 1815, 1856, 1970, 1978, 1979, 2000, 2013, and 2016.

All active tectonic plates in Indonesia, including the Indo-Australian plate located underneath the Lombok island, move with the average speed of 7 cm per year, slower than the growth rate of human fingernails. These tectonic plates are colliding and moving slowly. At times, one plate may be forced to move under the other. The Earth accumulates the energy generated and releases it in the form of minor or major earthquakes.



A century old earthquake-resistant traditional house in Bayan (Doc: Irina Rafliana)

It is not the earthquake that causes a disaster, but the unsafe buildings.

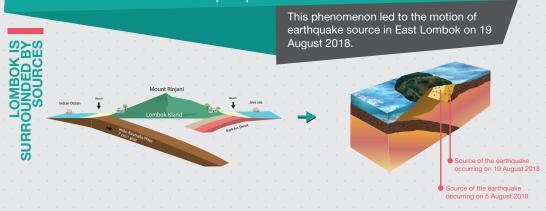
HARMONIOUS LIVING WITH EARTHQUAKES MADE POSSIBLE BY THE EARTHQUAKE-RESISTANT BUILDINGS AND DISASTER PREPAREDNESS

## WHAT CAUSED SERIES OF LOMBOK EARTHQUAKES?



**Lombok Island** is surrounded by several sources of earthquake. However, there are still sources of earthquake that are yet to be known due to the limited number of studies conducted.

The source of earthquake in the northern part of Lombok released the energy slowly and gradually, triggered by the earthquake occurring on 29 July 2018 and the one occurring on 5 August 2018 as well as the aftershocks which still occur up to present.



# WHEN WILL LOMBOK BE FREE FROM EARTHQUAKES?

Today's technology is able to predict the potential energy accumulated and released on an earthquake segment. Unfortunately, it has yet to be able to predict the exact date and time of the potential earthquake.

The aftershocks triggered by the major earthquake occurring a while ago are now starting to dissipate. Minor earthquakes will continue to take place on Lombok until the energy release in the northern segment is completed. It is worth noting that an earthquake happens in cycle. Therefore, it is possible that another majorearthquake reoccurs in Lombok in the future.

Additionally, the vibrations caused by an earthquake will affect the strength of buildings, including houses

Therefore, it is important to ensure that your house is **safe** for aftershocks



Simple Instant Healthy House (RISHA).

Source: The Ministry of Public Works and Housing (Kernen PUPR)



Traditional House of Sasak Tribe, Lombok. WE CANNOT PREDICT WHEN THE EARTHQUAKE WILL END

> It is worth to note that an earthquake may cause landslides, liquefaction, tsunamis, and fires.

## 3 WILL THE FUTURE EARTHQUAKES CAUSE A TSUNAMI?

It is possible, An earthquake may lead to a tsunami with its strong vibrations (the vibration that renders people unable to stand) or when it occurs for a long period (more than 1 minute), with the depth of hypocenter less than 40km

Therefore, it is crucial to **know the nearest evacuation route** and location to your house/position. Prepare **the emergency kits** and put them somewhere accessible.





WHAT TO DO WHEN THERE IS POTENTIAL FOR A TSUNAMI When you are somewhere near the beach and feel a strong earthquake vibration, a prolonged earthquake, or there is an early warning issued by the Meteorology, Climatology, and Geophysical Agency (BMKG), **conduct self-evacuation** immediately to a haven safe from tsunami impacts or a place located 20 meter high 2km away from the coastline. **Bring your emergency kits during the evacuation.** 

#### WELLS ARE RUNNING OUT OF WATER AND ACCUMULATING SAND; WHAT DOES IT MEAN?

Drying wells and sand deposit is an impact of strong vibration on the loose sandy soil layer which leads to the movement of the said soil to the surface. It may occur through the wells.

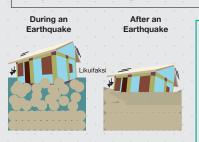
Additionally, water and sand may spurt through the cracks on the ground formed after an earthquake.

#### LIQUEFACTION: DEFINITION AND IMPACTS

This phenomenon is called as **liquefaction**. Liquefaction is not the preliminary sign of an earthquake, but it is the impact of earthquake.



**↓ ↓** Loose Soil Water



THE PREVENTIVE MEASURES

Under certain circumstances, liquefaction may cause a building to tilt and even collapse when the structure and foundation are not strong enough. If liquefaction occurs in your area, be sure that when you rebuild the house, its structure and foundation are strong enough against liquefaction.

# 5 HOW DO I KNOW THAT MY HOUSE IS SAFE AFTER AN EARTHQUAKE?

Pay attention to the houses having cracks following an earthquake. It is possible that the house will be damaged further during the upcoming earthquake. However, it is likely that your house is still safe if it appears to be strong and stable enough (not tilted or crumbled), its columns and blocks connections are intact, and ties between columns (or blocks) and the wall are intact.



## ASK FOR A PROFESSIONAL ASSISTANCE IN OBSERVING YOUR HOUSE CONDITION\*

\* Consult with the Office of Public Works and Housing of East and West Lombok; the Office of Public Works and Housing of North and Central Lombok; and BPBD in Mataram or the local universities such as UNRAM. The regional office of PUPR provides assistance for public facilities such as offices, schools, and religious places of worship.

Houses with small cracks may still collapse if the foundation is weak or the tie structure (beams and columns) is not attached completely within the walls.

## THERE ARE STILL VALUABLE ITEMS IN THE HOUSE, HOW CAN I SAVE THEM?

Avoid entering the house or building if you are unsure whether it is safe. If it is gravely necessary to enter the building/house, learn the entrance and exit route first, and exercise caution when entering and exiting the house or building.

#### Be sure that your head is protected

when entering the house and look out for the dropped items. Exercise caution when coming to contact with shreds of glasses, sharp objects, and power line. If possible, equip yourself with the protective gear such as helmet, gloves, whistle, long pants, shoes with thick soles, and safety glasses.

**Be sure** to inform your relatives (waiting outside) before entering the house.



### THAT TO PREPARE FOR EMERGENCIES?



Please note that the content and the number of the emergency kits may vary in accordance with the type of disaster threats, location, and the characteristics of the people using them.

For example, for people with asthma, it is important to include an inhaler/ medication in the emergency kits. Or, for people with diabetes/hypertension who need to take daily medicine, it is important to include the relevant.

In addition, ensure that others know where to find these emergency kits and how to use them.







Documents







Identity Card Books/Cards

PREPARE THE EMERGENCY KITS IN

Put them somewhere accessible

## 8

#### WHAT TO DO DURING AN EARTHQUAKE?

The main principle is: **identify the dangers and reduce the risks.** First, be sure that the building is safe for aftershocks. If unsafe, evacuate from the building.

If the earthquake occurs while you are indoor, conduct the "drop, cover, and hold on". If there is no table close to you, remember the basic principle: protect your vital body parts (head, neck, and chest).

If you are in the seemingly unsafe building with a safe exit route, exit the building immediately while protecting your head, neck, and chest.

If you are outdoor, conduct the "drop, cover, and hold on" in the spacious place, far from buildings, posts, and trees that may collapse

If you are in the middle of cooking, immediately turn off the stove.

Once the earthquake dissipates, shut off the power and exit the building in orderly manner.

THE PRINCIPLE OF TAKING COVER DURING ANEARTHQUAKE
THE CORRECT POSITION
EXIT THE BUILDING IN AN ORDERLY MANNER ONCE THE EARTHQUAKE DISSIPATES

No table available (In the refugee camp)

Table available





On the bed



Under the door frame



## 9

## WHAT TO DO WHEN EVACUATING THE SCHOOL IN CASE OF AN EMERGENCY?

#### TIPS ON WHAT TO DO WHEN EVACUATING THE SCHOOL IN CASE OF AN EMERGENCY



Activities at school during an emergency Source : National Secretary of Disaster-Safe Educational Uni

- a) Identify the hazards in the classroom and the surroundings.
- b) Be sure that the location is safe from posts, trees, buildings, or potential dropped objects.
- Exercise caution when you come into contact with glasses, building debris, and sharp objects.
- d) Make sure that the evacuation route is free from debris and other obstructions.
- e) Identify the assembly points.
- f) Use games, drawings, and songs in the learning process.
- g) Use the local materials as the learning aid at arithmetic and games.
- h) Make sure that the learning materials used are safe for children.
- i) Inform the parents about the assembly point
- j) Make sure that the school has emergency kits.
- k) Make sure that the students have emergency kits in their bags.
- l) Conduct the "drop, cover, and hold on" during an earthquake.
- m) Once the vibration dissipates, conduct orderly evacuation to the assembly point.
- n) Count the number of the students and teachers, and check their condition after the earthquake.
- o) Report the situation to the school supervisor and the local education office.

# N WHAT TO DO

### WHAT TO DO AT THE REFUGEE CAMP?

- a) Be sure that the location is safe from posts, trees, buildings, or potential dropped objects.
- b) Exercise caution when you come into contact with glasses, building debris, and sharp objects.
- c) Use blanket and mat when sleeping during the night.
- d) Provide exclusive breastfeeding for infants aged up to 6 months.
- e) Use soap when washing hands.
- f) Protect the source of clean water and food from dirt, dust, and flies.
- g) Boil water before drinking it.
- h) Do not litter.
- i) Use toilets for when urinating or defecating.
- j) When fall sick, see the immediate health professional.
- k) Protect children from violence.
- l) Consume the nutritious food.
- m) Avoid smoking in the refugee tent.
- n) Manage stress by doing group activities.
- o) Conduct learning and playing at the refugee camp and temporary learning center.



Activities at the refugee camp

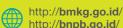
HOW DO WE ENSURE THE ACCURACY OF THE INFORMATION DISSEMINATED THROUGH THE SOCIAL MEDIA?

## BE WARY OF PROVOCATIVE TITLES

Be sure that the information provided is sourced from reliable and official agencies (for example, BMKG or BNPB).

Read the full information thoroughly before forwarding it to the relatives, family, and others.

Compare the information provided to that on the official website or other reliable media.



READ THE INFORMATION THOROUGHLY BEFORE FORWARDING IT



# 12 NOTES

#### DRAFTING TEAM

#### "ANSWERING THE CONCERNS RELATED TO THE 2018 LOMBOK EARTHQUAKE"

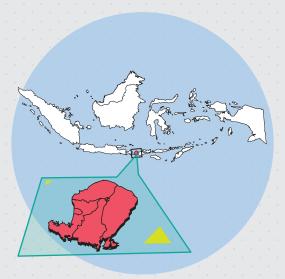
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