

CRISIS OVERVIEW

- On 21 November 2022, an earthquake measuring 5.6 on the Richter scale occurred at a depth of 10km in the West Java province of Indonesia. The epicentre of the earthquake was located 10km southwest of Cianjur regency (ECHO 21/11/2022). Cianjur regency is in the western part of Java island, near Jakarta (the capital of Indonesia) and Bandung (the capital of West Java province). It has 2.4 million inhabitants, and most of its population live from micro-industrial processes and local industries (BPS Kabupaten Cianjur 28/09/2020). West Java is the second most densely populated province in Indonesia, just after Jakarta, with 1,369 people per square kilometre (BPS Kabupaten Cianjur accessed 28/09/2020).
- The earthquake had a relatively low magnitude on the Richter scale, but its epicentre was shallow and in a densely populated area, leading to several human and infrastructure casualties (TWP 22/11/2022; The Conversation 23/11/2022). At least 526,000 people experienced very strong shaking, while 276,000 experienced severe shaking (USGS accessed 23/11/2022).
- The earthquake has killed more than 270 people and injured more than 2,080. As at 23 November, around 40 people were still missing. The earthquake has displaced close to 61,000 people and partially or totally damaged around 56,000 houses (BNPB 23/11/2022 a).
- A large number of aftershocks has been affecting rescue work for the missing population. According to the Governor of West Java province, there have been around 170 aftershocks since the main earthquake. The earthquake and its aftershocks have generated landslides, which continue to put the population at risk (Euronews 24/11/2022; BBC 24/11/2022).

ANTICIPATED SCOPE AND SCALE

- The 2022–2023 rainy season in Indonesia is projected to peak in December and last until May 2023. There are people missing under the rubble who may not be saved in the event of further rainfall. The rains have also caused landslides that endanger displaced people and prevent rescue efforts from continuing (Tempo 01/09/2022; LA Times 23/11/2022). Displaced people are sleeping on the streets in makeshift shelters, where they are exposed to rainfall and landslides (Spectrum News 22/11/2022).
- The large number of aftershocks after the earthquake have limited rescue efforts. After the initial destruction of houses, aftershocks can lead to new collapses and landslides (Euronews 24/11/2022; BBC 24/11/2022). If aftershocks continue at the same rate, the number of people displaced, injured, or killed by the earthquake could increase.

- Given that at least 40 people are still missing, which may increase as more people report, rescue operations could save many lives (BNPB 23/11/2022 a; BNPB 23/11/2022 b).

HUMANITARIAN CONSTRAINTS

- Aftershocks since the earthquake have produced new landslides that, adding to the initial damage of the earthquake on roads, have made access to the affected populations difficult (CNA 23/11/2022; Outlook 23/11/2022).
- Until 23 November 2022, one of the main roads between Cianjur–Puncak was restricted to one-way traffic to prioritise rescue activities (Tempo 23/11/2022). Even ambulances and aid transportation have taken much longer than usual because of the high level of congestion on roads. The Indonesian Government has said that organisations must coordinate all humanitarian assistance with them, as the high volume of individuals and organisations responding is creating bottlenecks in aid delivery (CNA 23/11/2022).
- Some affected areas are isolated and remain unreachable, meaning that the number of injured, dead, or displaced may increase as new areas are located and accessed (CNBC 23/11/2022).

IMPACT

Shelter and NFIs

The earthquake has damaged at least 56,300 houses (with 22,200 severely damaged, 11,600 moderately damaged, and 22,090 slightly damaged). It has displaced around 61,000 people (BNPB 23/11/2022 a). At least 58,000 people are living in shelters (Outlook 23/11/2022). An undetermined number of displaced people are staying in makeshift shelters close to government institutions, where conditions are inadequate to stand against the effects of the rains (Spectrum News 22/11/2022). Since aftershocks, rains, and landslides can generate new collapses, even people whose houses have not been completely destroyed cannot return to their homes (Desa Tenggulang Baru 23/11/2022).

The people displaced by the earthquake are in need of food, blankets, mosquito tents, cooking utensils, clothing, and drinking water (Zawya 23/11/2022; Human Initiative 22/11/2022).

Health

At least three hospitals have suffered some damage from the earthquake (BNPB 23/11/2022 a). More than 2,000 people have been injured, and an unknown number are in need of healthcare services (CNBC 23/11/2022). Some people have reported not receiving medical attention and waiting hours outside hospitals to be treated. Hospitals are overwhelmed because of the number of people in need of medical care (CNBC 23/11/2022; LA Times 23/11/2022).

Education

As the earthquake occurred during school hours, around 100 of the people who perished were children in educational institutions at the time. The earthquake has affected about 80 schools (Save the Children 23/11/2022). The displaced population has also been using some schools as shelters (BBC 24/11/2022; The Guardian 23/11/2022). One of the effects of the earthquake may be the disruption of children's education for several weeks, which adds to the over 18 months of school closures related to the COVID-19 pandemic. The school closures have resulted in an estimated 0.9–1.2 school years of learning loss and a reduction in reading comprehension among children in Indonesia (WB 17/09/2022). In West Java province, there are approximately 15.4 million children (33% of the total population) (UNICEF accessed 24/11/2022).

Livelihoods

Aside from houses, commercial premises have also suffered damage. Most of West Java's economy comprises manufacturing (43%), trade (15%), and agriculture (8.7%) (EIBN accessed 23/11/2022). Around 60% of people in Indonesia are informal workers, meaning that their livelihoods depend on what they can produce daily (Purwaningsih et al. 02/06/2022). In Cianjur regency, the most affected by the earthquake, people's livelihoods are generally small- and medium-sized enterprises that rely on local consumption (IFRC 22/11/2022). The earthquake has likely disrupted people's livelihoods and will continue to do so until reconstruction has at least progressed.

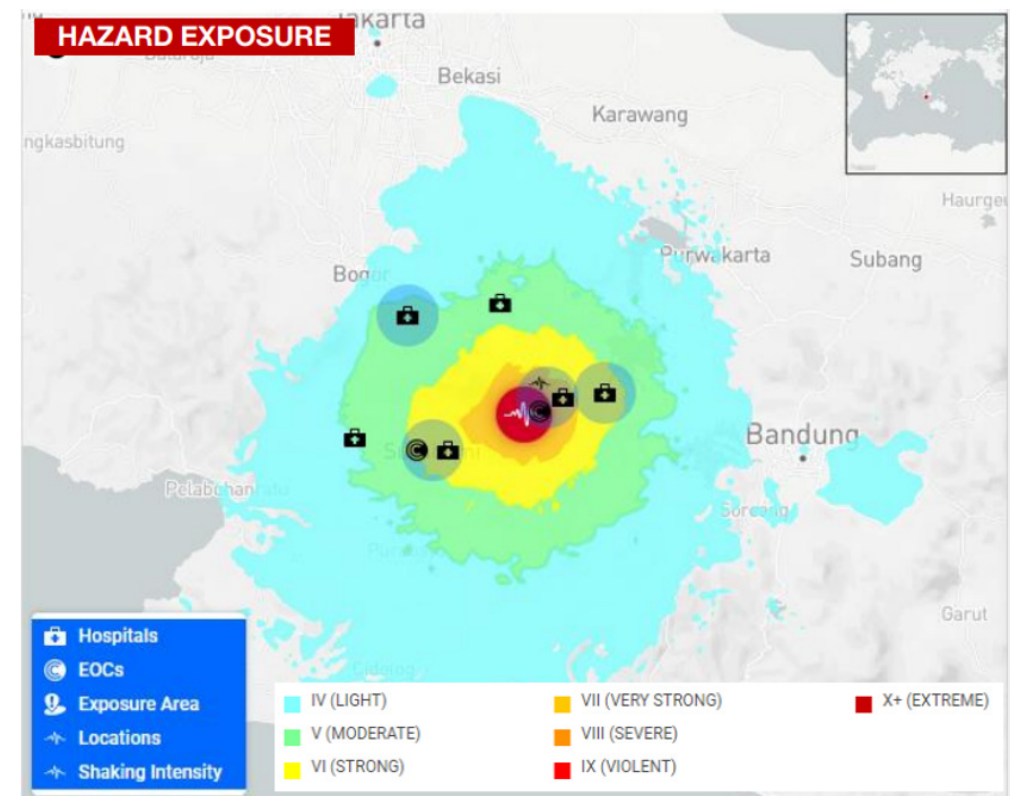
AGGRAVATING FACTORS

Monsoon season

The current monsoon season in Indonesia started between September–October, depending on the province, and is projected to last until May 2023, with its peak occurring in December

(Tempo 01/09/2022). Between 23–25 November, there have been heavy rains in in the same areas that have suffered from the earthquake (DW 23/11/2022). Aside from putting displaced people who are not in shelters at risk, the rains also prevent the rescue of people who are still missing (AP 23/11/2022; Daily Sabah 23/11/2022). At the same time, the accumulation of the earthquake debris that the rains are washing into rivers can lead to flash floods and landslides. The Indonesian Meteorology, Climatology, and Geophysical Agency has said that the rapid relocation of the displaced population and clearing of earthquake debris can help prevent further disasters from occurring because of the rains (Zawya 23/11/2022).

Map: hazard exposure to the earthquake.



Source: AHA Centre (22/11/2022)