

MOROCCO

Earthquake

CRISIS IMPACT OVERVIEW

On 8 September, at 11:11 pm local time, a 6.8-magnitude earthquake hit central Morocco. Its epicentre was in the High Atlas Mountains, southwest of Marrakesh city. The earthquake's depth is at 18.5 km, according to the US Geological Survey. The municipalities affected are al-Haouz, Marrakesh, Ouarzazate, Azilal, Chichaoua and Taroudant. This is considered the most powerful earthquake in a century to strike Morocco (OCHA 09/09/2023; BBC 09/09/2023 ; CNN 09/09/2023 a). Hundreds of aftershocks were recorded, the strongest reached up to 5.9 magnitude (Al Ghad 09/09/2023).

As at 10 September, the Ministry of Interior announced that at least 2,012 people were killed and 2,059 were injured by the quake, including 1,404 people in critical conditions. Most fatalities are reported in al-Haouz municipality. The number of damaged and destroyed buildings remains unknown but estimated at hundreds. The earthquake mainly impacted villages near Marrakesh where houses are old and vulnerable to earthquakes (Al Jazeera accessed 10/09/2023; CNN 09/09/2023 a). The number of fatalities is expected to rise as an unknown number of people are still under collapsed buildings, waiting for rescue.

Food, water, and tents are the main needs reported. Despite the high temperatures during the day, the Moroccan mountain areas are cold at night, and people might need warm blankets. Psychosocial support is also needed, especially for children, following the shock (CNN accessed 09/09/2023).

The number of people exposed to the earthquake's impact and living within 50 km from the epicentre is estimated at 380,000 people, including nearly 30,000 people living within 15 km from the epicentre and considered to be the most impacted (WFP 08/09/2023).

The last earthquake that affected Morocco (6.5 magnitude) was in 2004 in the northern Rif Mountains. It killed about 600 people (Al Jazeera 09/09/2023). More than 15,000 people were displaced and 2,500 houses were completely damaged. Tents, blankets, food, medicine, and clothes were the main needs for the affected. The government also needed to increase sanitation facilities in temporary displacement camps (OCHA 05/03/2004).

ANTICIPATED SCOPE AND SCALE

The number of injuries is expected to increase in the upcoming days, resulting in more needs for medical treatment. Hospitals in the affected areas, such as the Mohammed VI International University Hospital in Marrakesh, will likely need more medical supplies and staff. Both can be provided from other medical facilities across the country. There are already calls for blood donations coordinated by the government (Morocco World News 09/09/2023; WSJ 09/09/2023).

The region was already facing recurrent heatwaves in the summer months (usually June–August) that have exhausted people. Those who lost their homes and others who are afraid to go back to their homes because of the risk of aftershocks will likely remain outside under the heat. This means that there can be more risks for heat exhaustion, heatstroke, and dehydration, resulting in more health needs (Crisis24 22/08/2023; Al Hurra 14/08/2023).

HUMANITARIAN CONSTRAINTS

The most damage caused by the earthquake is in remote villages in mountainous areas that are considered hard-to-reach. In addition, roads leading to those areas need to be cleared from rubble and collapsed stones to allow rescue teams and ambulances to reach the people in need. There are also people staying in their cars on those roads, causing traffic and delays in rescue operations (Al Jazeera 09/09/2023; Sky News 09/09/2023 a; Islamic Relief 09/09/2023).

There are internet and mobile network disruptions reported because of power cuts, as the earthquake affected some power plants. It is unclear how long the power cuts are lasting (Al Jazeera accessed 09/09/2023; France 24, News Wires 09/09/2023).

There will likely be an impact on economy in the aftermath of the earthquake, more evident on the livelihoods of the people impacted by the earthquake, especially for those working in the agricultural sector. The impact on agriculture is compounded by the impact of climate change that Morocco has been experiencing in the past few years. Temperatures have been on the rise, resulting in dry conditions, wildfires, and consequently reduced harvests (FAO 26/07/2023; The New Arab 28/06/2023; Reuters 30/05/2023).



KEY PRIORITIES

380,000

PEOPLE EXPOSED

Hard-to-reach areas

DUE TO BLOCKED
ROADS AND REMOTENESS

Needs for

TENTS, FOOD, WATER,
AND PSYCHOSOCIAL
SUPPORT

INFORMATION GAPS

- The numbers of people displaced and of buildings damaged and destroyed remains unknown.
- There is limited information on vulnerable groups' needs, such as refugees, asylum seekers, and migrants in an irregular status.
- There is no publically available disaggregated data on children, women, the elderly, and people with disabilities who have been affected by the earthquake.
- There is lack of information on people missing.
- There is limited information on shelter conditions and needs of the affected populations.

Disclaimer: This report gives a snapshot of the scale and impact of the earthquake at the time of publication, using available secondary data and information. The situation, however, remains dynamic and further updates of information and data might be needed.

CRISIS IMPACT

Shelter

Tents and shelters are needed for an unknown number of people who have lost their homes. An unknown number of buildings have collapsed in the affected areas. Some public buildings were also affected such as schools, mosques, and hospitals. Some patients in the headquarters of Mohammed VI International University hospital were evacuated to a field hospital due to fears of the aftershocks (Masrawi 09/09/2023). Similar to the impact of the last earthquake that affected Morocco in 2004, most people who lost their homes are living in open areas. They are likely to stay in mosques and makeshift shelters near the rubble of their homes and be vulnerable to hot temperatures during the day and cold temperatures during the night, especially those living in the mountains. Moroccan Civil Protection staff have already started delivering aid, including tents, to the people in need (OCHA 05/03/2004; Sky News 09/09/2023 b; The Guardian 09/09/2023).

Food and clean water

Ready to eat food and safe drinking water are needed for the people affected by the earthquake, especially for those who are staying in open areas, public buildings, or temporary shelters. Across the country, about 7.1 million people have insufficient food consumption (WFP 08/09/2023).

WASH services

More sanitation facilities were needed for displacement camps following the earthquake that struck Morocco in 2004 (OCHA 05/03/2004). There is a likelihood that water and sanitation facilities were also damaged or destroyed during this earthquake and that WASH assistance is needed for those who have lost their shelters.

Health

As at 10 September, more than 2,000 people were injured, including 1,400 with serious conditions. The injured people have been receiving medical treatment in hospitals and other health facilities in Marrakesh. Some patients are being treated outside the hospitals as beds were moved outside due to the risk of aftershocks (Nation 09/09/2023; CNN 09/09/2023 b; Al Jazeera accessed 10/09/2023). No shortages in medicine are reported, but there is a need for blood donations. Many people across Morocco are going to hospitals to donate (Morocco World News 09/09/2023; WSJ 09/09/2023).

Non-food items

Hygiene items, kitchen kits, blankets, mattresses and clothing will likely be needed for displaced people. Those items were among basic needs during an earthquake that struck Morocco in February 2004 (OCHA 05/03/2004 and 24/02/2004).

Psychosocial support

Following the earthquake, many people will likely suffer from trauma, especially children, and will need mental health support (CNN accessed 09/09/2023). Activities for children including games and music were part of the response during the 2004 earthquake in Morocco (OCHA 05/03/2023).

AGGRAVATING FACTORS

Landslides

The shaking of the ground as a result of the earthquake increases the likelihood of landslides, especially in mountainous areas. Access to people in need in areas hard to access is already hindered by landslides and the presence of rocks on the roads leading to those remote villages (FT 09/09/2023). More landslides will likely further hinder rescue operations, prolonging people's suffering and leading to more fatalities in the worst case scenario.

Wildfires

Morocco experiences wildfires almost every year, mostly during the summer months because of high temperatures and dry weather. Between January and July 2023, at least 182 wildfires were reported across Morocco. In August, major fires also broke out in Tangier, destroying forests (Morocco World News 11/07/2023; Africa News 13/08/2023). Even though wildfires might not break out in the earthquake-affected areas, their occurrence will require emergency response from the government, putting a strain on its capacity to respond to the earthquake emergency too.

Damage to dams

There is a low risk of cracks in dams and flooding following the earthquake and aftershocks, increasing response needs and probably resulting in more fatalities. There are four dams in the municipalities affected by the earthquake, namely are Moulay Youssef in Marrakesh, Al Mansour Al Dahabi in Ouarzazate, Bain Al Wedyan in Azilal, and Ouluz in Taroudant.

Disease outbreaks

Inadequate sanitation in displacement sites can lead to disease outbreaks, being cholera and typhoid outbreaks amongst the most common in these cases in other countries (NIH 20/12/2019). There have been no recent outbreaks of cholera, typhoid, or other diseases (except COVID-19) in recent years in Morocco. In 2018, neighbouring Algeria had a cholera outbreak that Morocco was able to avoid (AA 29/08/2018). Any disease outbreak will likely require more health needs response and overwhelm hospitals.

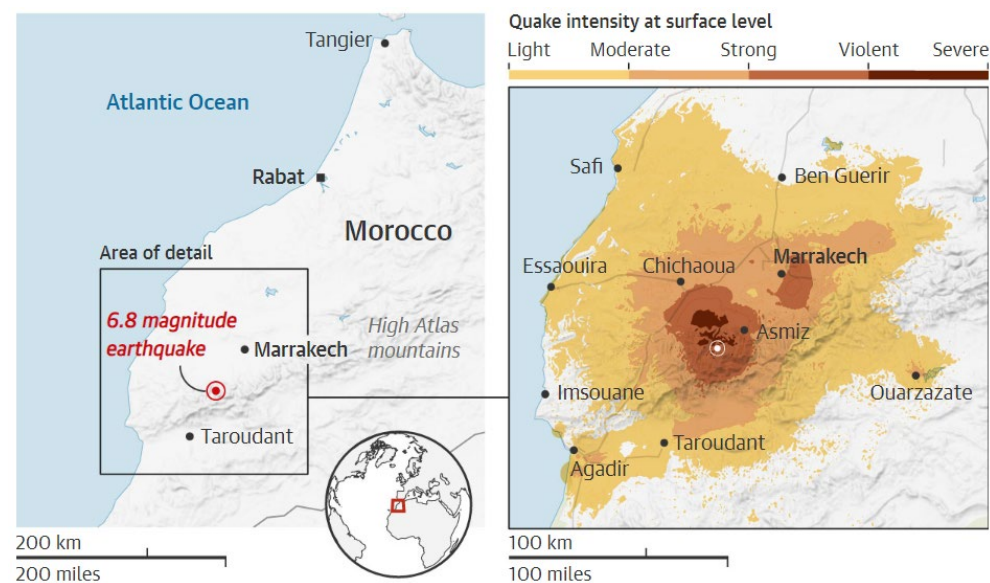
NATIONAL AND INTERNATIONAL RESPONSE

The Government authorities, including the Royal Armed Forces, are leading the rescue operations and aid delivery in the affected areas. The Moroccan Red Crescent is cooperating with the government and has a presence in the affected areas (OCHA 09/09/2023).

Many foreign governments offered to provide aid and deploy rescue teams for Morocco. Algeria's air space is open for delivering humanitarian aid and for transferring injured people from Morocco. Other countries that offered to send aid or rescue teams include Türkiye, Germany, the United States, France, Tunisia, the United Arab Emirates, inter alia (Reuters 09/09/2023).

Some international organisations are already operational in Morocco such as UNHCR and IOM but mainly focusing on the response of needs for migrants, refugees, and asylum seekers (UNSDG accessed 09/09/2023). Other UN and INGO organisations such as MSF and Save the Children offered to send teams and conduct needs assessments (MSF 09/09/2023; UN News 09/09/2023; Save the Children 09/09/2023).

Map of Morocco showing the earthquake's epicentre



Source: The Guardian accessed 09/09/2023