

2023 TURKIYE EARTHQUAKE DISASTER BRIEF

GLIDE N° EQ-2023-000015-TUR - EUROPE-REGION FEBRUARY 2023

DISASTER OVERVIEW

An earthquake of 7.7 magnitude occurred in Turkiye at 04:17 am on 6 February 2023, followed by 2000+ aftershocks; an additional separate earthquake of 7.65 magnitude occurred at 13:24 PM on the same day. The earthquakes occurred at the peak of the winter season, and is considered the largest earthquake in centuries in the region – the tremors were felt as far away as Israel and Egypt. More than 2.65 million people were living in the 50 kilometers radius of the epicenter [ADAM, WFP]. Up to 70,000 people were exposed to violent shaking, according to USGS [USGS]. Final casualty estimations vary between 34,000 to as high as 200,000 people killed. As of 2 pm on Monday the 13th, 31,643 people have lost their lives in Turkiye.

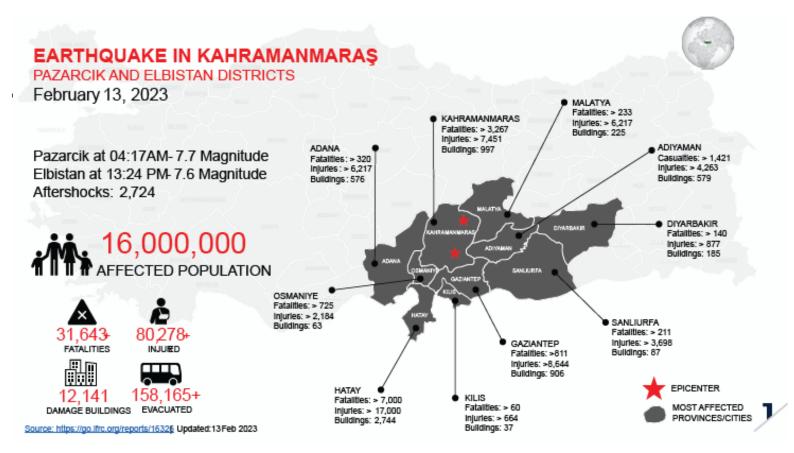
As of February 7, according to the Ministry of Interior Disaster and Emergency Management Presidency (AFAD) reports, people lost their lives, **81,000** people were injured and **24,921** building have been destroyed, or severely damaged, in ten provinces. Search and rescue efforts are still ongoing in all affected provinces. Damage assessments are currently carried out by AFAD and related official agencies, supported by a large scale international aid mobilization from 45+ countries, with over **233,000** personell on the ground. The first week of the response has been focused on search and rescue efforts, followed by lifesaving relief efforts focused on food, shelter, and NFIs for evacuees. According to the Presidency, more than **158,165** people have been evacuated from the area.

TOTAL AFFECTED POPULATION

~16 MILLION

TOTAL AFFECTED REFUGEE POPULATION

~1.8 MILLION



SCOPE AND SCALE

Damage to shelter and housing: The earthquake impact on shelter and housing has been devastating in most of the affected area, with very high levels of damage to dense residential areas, hosting both Turkish citizens as well as Syrian refugees and asylum seekers. Several cities, notably Iskenderun, Antakya, Maras, Gaziantep, Kahramanmaras and Osmaniye, have suffered heavy destruction. Official figures stand at 120,940 individual units within 24,921 buildings collapsed in total [AFAD]. District level collapses were tracked initially, however due to the scale of the distater information on these became limited. Paritially damaged numbers are very high as well, with 729,435 indipendent sections within 122,279 buildings at least partially damaged as of Sunday the 12th. Several key UNESCO World heritage sites were damaged, including Gaziantep Castle, Diyarbakır Castle and Hevsel Gardens Cultural Landscape Area.

Impact on Health systems and structures: Impact on Health systems and structures: Hatay province as been the most affected area in terms of damage due to the earthquake: three main hospitals were reportedly destroyed, 15 hospitals were damaged including 4 Kizilay blood banks. The total number of personnel operational in the affect areas is 233 thousand people, of whom 10,000 represent international staff. In addition, 8700 thousand health personnel and 157 (3 airplanes, 1 helicopter, 76 long vehicles, 39 trucks, 38 medical trucks) healths service vehicles were transferred to the affected regions as of 10th of February to sustain and increase local health system capacity to cope with the disaster. As a week has elapsed since the earthquake, it is likely that most of the remaining people trapped within the rubble will not be retreived in time.

Damage to key infrastructure: Most of damage has been sustained by the road network, with limited impact to other key transport infrastructures such as airports and railways. Major airports in the affected area are all now open for aid and releif flights, with numerous airlines offering programs for both volunteers and staff flying in to support the response and evacuees moving to other areas of Turkiye [AFAD]. 4,097 air sorties have been carried out thus far. Similarly, railway communications are functional [AFAD]. Road access is available for most highways but many local roads are still blocked, and extreme traffic jams related to the releif effort have prevented movement in the region. [General Directorate of Highways]. According to the Presidency, aid is delivered by air as well as by buses and trucks. Adana airport has become the main logistics base for the response, although Gaziantep has begun to be an additional center as some areas of the city are still functional. No damage has been reported to power plants or power grids.

Timeline



A 7.7 magnitude earthquake struck outside of Pazarcik district of Kahramanmaras province. The quake struck during the middle of the night, when most people were sleeping, leading to large loss of life.



13:24 PM Feb 6th 2023- Second Quake-

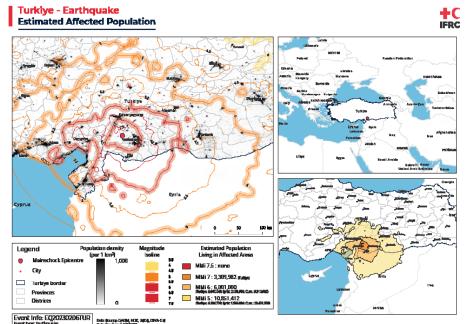
In the afternoon of the first day, a second quake of similar magnitude 7.6 struck north of the previous quake, in the town of Elbistan within the same province. This quake was larger than the aftershocks and led to further destabilization of damaged buildings.

Data source: GADM, HDX, USGS, DIVA-GIS, IFRC.

Date produced: 06.02.2023

Feb 6th-7th 2023 - Aftershocks –

Over the course of the first two days, 312 aftershocks were reported, some as large as 6.8 in magnitude. Over the course of the first day, numerous buildings collapsed. Road and infrastructure damage has been extensive, with explosions at pipelines and closed airports reported in multiple cities.



Humanitarian Conditions

Shelter & NFIs. Shelter and NFIs are a priority need for the response due to large amount of damage to housing, and shelter as well as low temperature due to the winter season. In Diyarbakir, a camp settlement was established for people left homeless [STL]. In Killis, at least 6,000 people are staying in centers and 9,000 in Sanliurfa [IBC]. Extensive structural damage has been reported in more than the 10 provinces, also in Alazig, Bartin and Mardin. As a result of the damage assessments, the number of buildings that were reported as damaged is 11,302, the number that were demolished is 6,444 and the total number assessed for safety is 122,152 [BBC Turkce]. 102,274 tents have been installed. 1 million 50 thousand citizens in temporary accommodation centers, 158,165 people are evacuated to provinces outside of the crisis area. Damage assessment work continues, and citizens will be return to the undamaged buildings after the determinations are made though the exact timing of this process is unknown. At the end of the damage assessment studies, rent assistance will be provided by the state. The goal of the Presidency is declared to be to build and deliver houses within 1 year. Local authorities have specifically demanded containers instead of tents as they are a better fit for the winter conditions, which is the case especially for Kahramanmaras, Adiyaman and Malatya.

Health. High number of casualties will increase the burden on local health system capacities, which are directly affected by the Earthquake especially in the Hatay province. In addition to the 31,643 fatalities, 80,278 people have reportedly been injured across 10 provinces [AFAD]. Even in functioning centers, lack of medicine, equipment and water is limiting care possibilities [Al Monitor]. As a result, many of the people rescued have been transferred to Istanbul or other cities [AA]. The need of staff for hospitals is a priority and deployment of ERU teams to support the HR capacity of the hospitals is under discussion. According to the field observations of IFRC teams, psychosocial support (PSS) is a substantial need and TRC is discussing with the Turkish Association for Psychologists for bilateral agreement possibility in specific areas. There have been reports of children suffering from diarrhea possibly because of their limited access to clean drinking water. Some municipalities cannot collect garbage leading the Turkish Medical Association to emphasize the risk of an outbreak in the coming weeks [STL]. People suffering from chronic diseases are likely as well to have their access to quality health care support limited in the coming months.

Food. Affected population directly impacted by the earthquake have lost assets and livelihoods in addition to the damage and loss of their shelters and household items. In a context of adverse weather conditions, pre-crisis socio-economic duress and high inflation rates, most vulnerable groups will struggle to access sufficient quantity of quality foods in the coming monthsl. More than 123K households who receive ESSN are in the affected areas of the earthquake. From the previous results from PDMs and IVS, it is evident that ESSN population is less vulnerable compared to the non-recipient refugee population. It is expected that this will still be the case, but the vulnerability of all affected groups will definitely deteriorate. In some provinces relief goods that arrive at the crisis desk's coordination are gathered in a warehouse in the industrial areas of the cities. Volunteers who came from nearby provinces distribute the relief goods, while some aid may go to waste due to coordination issue in delivery after aid arrives to the industrial areas. WFP is on the ground distributing immediate food relief reaching around 142,000 people as of 10 February [WFP]. WFP is appealing for USD 77 million to provide assistance through hot meals for a total of 874,000 quake-affected people in Turkiye and Syria.

Aggravating Factors

Harsh weather conditions due to peak winter season. In the earthquake zone, the night frost continues with all its intensity, there is an expectation for the coldest nights of the year ever recorded to occur in the coming days as of 13 February. The mountains of Kahramanmaraş are under snow, and transportation to the mountains and villages where the snow thickness is 70 centimeters in places is difficult in Elbistan and Kahramanmaraş. At the heights of Malatya, the snow thickness exceeds 20 centimeters. During the day, the area between Malatya and Elbistan remains below zero degrees, while the surroundings of Antakya-Adana-Osmaniye can warm up to 10-13 degrees, and Adıyaman-Kahramanmaraş to 5-7 degrees. After the 20th of February, Turkey may be affected by a new cold air wave, and on February 21-22-23, especially Elbistan, Malatya, Kahramanmaraş and Adıyaman may receive heavy snowfalls in the earthquake region [Haberturk]

Economic downturn and high inflation. Official inflation in Türkiye has recently hit an all-time high of 85.5% in October 2022, easing to 64.3% in December 2022, with the Turkish Lira hitting a new record low after the earthquake, slipping to 18.85 per 1 USD. Because of these economic issues, cost of living has increased enormously, and food has grown more expensive and less affordable. Turkey's stock exchange suspended trading on Wednesday 8 February, until 15 February. The ratings agency Fitch preliminary estimates that the earthquake could cause economic losses exceeding USD 4 billion [Fitch Ratings]. Turkish Enterprise and Business Confederation [TÜRKONFED] has prepared a report on the effects of earthquakes in Kahramanmaraş on the economy which estimates the financial damage of the at the level of 84.1 billion dollars.

Projected Outlook

In the short term, casualties are expected to increase due to the gradual search and rescue efforts of collapsed buildings and the harsh weather conditions. Given the scale of the devastation, this relief effort is likely to be on a large scale and require significant investment and will require time to address the main drivers of the crisis. Shelter, health and food response relies on effective and timely supply pipelines, which requires adequate logistical solutions. TÜRKONFED's report "The Disaster Status Report for the Kahramanmaraş Earthquake in 2023" which references 1999 Marmara Earthquake; predicts that the Kahramanmaraş earthquakes would cause 72,663 loss of life [TÜRKONFED].