

In 2023¹, the Emergency Events Database (EM-DAT) recorded a total of 399 disasters² related to natural hazards. These events resulted in 86,473 fatalities³ and affected

93.1 million people. The economic losses amounted to US\$202.7 billion. The 2023 earthquake in Türkiye and the Syrian Arab Republic was the most catastrophic event of the year regarding mortality and economic damage, with 56,683 reported deaths and US\$42.9 billion in damages. This earthquake impacted an estimated 18 million people, making it the second most impactful event in terms of affected individuals, following the 2023 Indonesian Drought, which affected 18.8 million people from June to September 2023.

The year 2023 experienced high disaster mortality, with a total of 86,473 deaths, exceeding the 20-year average of 64,148 deaths and a median value⁴ of 19,290 deaths for the same period, mainly due to the dramatic earthquake in Türkiye and Syria in February 2023, counting for two-thirds of the EM-DAT total deaths. The number of individuals affected by disasters, standing at 93.1 million, is below the 2003-2022 yearly average

A Significant Year of Disaster Impact

of 175.5 million. The difference is mainly due to the relatively low number of new significant droughts⁵. Furthermore, the report likely underestimates the mortality from heat waves and the number of 2023 heatwave events⁶. In terms of economic losses, the reported figure of US\$202.7 billion is slightly higher than the EM-DAT 2003-2022 yearly average of US\$196.3 billion.

In Türkiye, an earthquake sequence with magnitudes of 7.8 Mw and 7.5 Mw on February 6 led to 50,783 casualties and affected approximately 9.2 million people. In the Syrian Arab Republic, reports indicate 5,900 deaths and 8.8 million people affected by this disaster. The total economic damage is currently estimated at least at US\$34 billion for Türkiye and US\$8.9 billion for Syria. Additionally, two other seismic events are among the top-10 deadliest disasters. On September 8, a magnitude 6.8 Mw earthquake in the High Atlas Mountain Region, southwest of Marrakesh, Morocco, resulted in 2,946 fatalities and economic losses estimated at US\$7 billion. In Western Afghanistan, an earthquake on October 7 in the Herat

¹ Preliminary data as of 2024-03-24

² In this report, disasters are related to natural hazards, excluding biological and extra-terrestrial hazards, reported at the country level in EM-DAT.

³ Death figures include missing persons

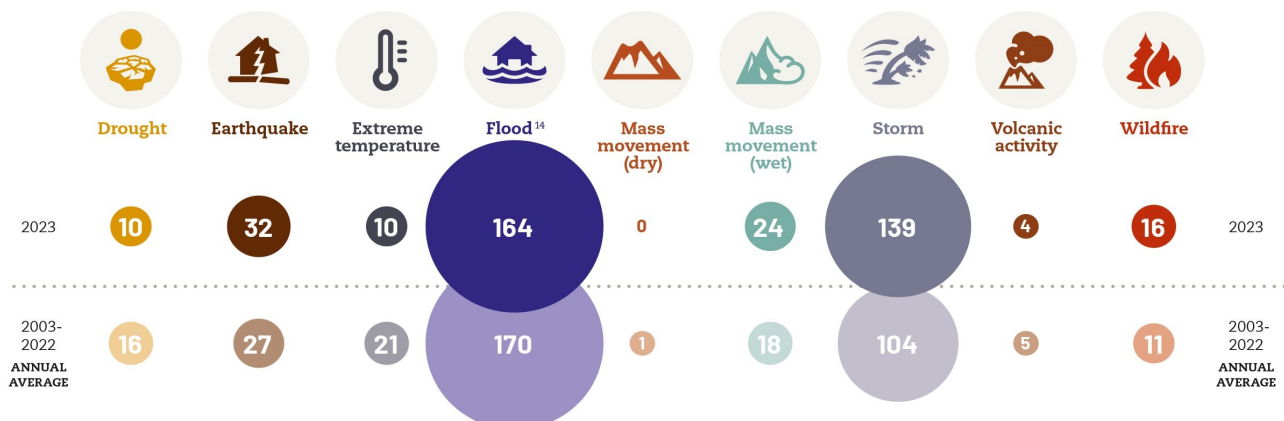
⁴ The median is the middle value of a variable, such that 50% of the observations are above it and 50% are below it.

⁵ Drought figures include only events starting in 2023 and their provisional impacts, i.e., it does not include previous events that continued into 2023

⁶ The full report includes a section dedicated to heat waves

Occurrence by Disaster Type: 2023 Compared to the 2003-2022 Annual Average

369 < **399**
2003 to 2022 in 2023



province led to 2,445 reported fatalities. In terms of severe storm events, Storm Daniel struck Türkiye, Bulgaria, and Greece before reaching Libya in September, causing floods that led to 12,352 casualties – including 8,000 missing persons – and economic losses of US\$6.2 billion. Earlier in the year, Cyclone Freddy passed through Madagascar, Mozambique, and Malawi, with the greatest impact in Malawi, resulting in 1,209 fatalities and affecting 2.3 million individuals. Typhoon Doksuri, occurring at the end of July, hit the Philippines and China, where economic losses are evaluated at US\$25 billion, marking it the year’s second most expensive disaster.

Regarding the most prominent floods, the Democratic Republic of the Congo experienced severe flooding and landslides in May due to torrential rainfall in the South Kivu province. The death toll remains uncertain and is currently estimated at

2,970, with 470 confirmed deaths and thousands missing. In North-East Nigeria, floods in October resulted in 275 fatalities. Monsoon floods also struck Pakistan and India from April to July, with India recording at least 1529 fatalities and 10.2 million affected people between June and September 2023.

Regarding drought-related events, Indonesia’s dry season, from May to October, severely impacted approximately 18.8 million residents. In the United States of America, the Southern and Midwestern regions experienced a significant drought, coupled with a heat wave, which was recorded as the costliest event of 2023 in the USA, with damages evaluated at US\$14.5 billion. Additionally, in August, the Lahaina Wildfire on Maui Island, Hawaii, was identified as one of the top ten costliest disasters, with economic losses amounting to US\$5.5 billion.

Table 1

Top 10 Mortality – 2023



 Türkiye	Earthquake	50,783	 Afghanistan	Earthquake	2,445
 Libya	Storm Daniel	12,352	 India	Flood	1,529
 Syrian Arab Rep.	Earthquake	5,900	 Malawi	Tropical Storm Freddy	1,209
 Congo (Democratic Rep.)	Flood	2,970	 Nigeria	Flood	275
 Morocco	Earthquake	2,946	 Yemen	Flood	248

Table 2

Top 10 Total Affected – 2023











 Indonesia	Drought	18.8 million	 India	Tropical Storm Michaung	4.4 million
 India	Flood	10.2 million	 Tanzania	Flood	2.9 million
 Türkiye	Earthquake	9.2 million	 Somalia	Flood	2.5 million
 Syrian Arab Rep.	Earthquake	8.8 million	 Malawi	Tropical Storm Freddy	2.3 million
 Guatemala	Flood	4.4 million	 Philippines	Flood	2.1 million

Table 3

Top 10 Economic Losses - 2023

 Türkiye	Earthquake	34 billion	 Syrian Arab Rep.	Earthquake	8.9 billion
 China	Tropical Storm Doksuri	25 billion	 Morocco	Earthquake	7.0 billion
 USA	Drought	14.5 billion	 Lybia	Storm Daniel	6.2 billion
 Mexico	Tropical Storm Otis	12 billion	 USA	Storm	6 billion
 Italy	Flood	9.8 billion	 USA	Wildfire (Lahaina)	5.5 billion

CRED Updates

- The CRED team has held its second Scientific and Technical Advisory Group (STAG) meeting on March 18 and 19, 2024, in collaboration with the North-West University, Potchefstroom, South Africa.
- This CRED Crunch issue is adapted from : CRED. “2023 Disasters in Number”, Brussels: CRED, 2024. The full report is available at : https://files.emdat.be/reports/2023_EMDAT_report.pdf