



In 2020, 389 natural disasters were reported in EM-DAT killing 15,080 people, affecting 98.4 million others and costing 171.3 billion US\$². The year 2020 rivalled 2016 as the world’s hottest recorded year despite the absence of a strong El Niño effect. Apart from the COVID-19 pandemic, the year was dominated by climate-related disasters.

In comparison to the previous two decades (2000-2019), 2020 had a higher impact in terms of number of recorded events and economic losses (US\$ 151.6 billion). There were considerably fewer deaths compared to the annual average of 61,709 and fewer people directly affected compared to the annual average of 201.3 million people. This decrease in impacts is due to the absence of mass casualty events, such as the 2004 Indian Ocean Tsunami (227,000 deaths) and the 2010 Haiti Earthquake (222,500 deaths) or high impact events, such as the 2015/2016 drought in India (330 million people affected). However, in 2020 there were 26% more storms than the annual average of 102 events, 23% more floods than the annual average of 163 events, and 18% more flood deaths than the annual average of 5,233 deaths (Fig.1)

The impacts of the events were not equally shared: Asia experienced 41% of disaster events and 64% of total people affected. Heatwaves in Europe accounted for 42% of total reported deaths. In a year of record-breaking storms and wildfires the Americas suffered 53% of total economic losses, largely in the USA which experienced the bulk of the year’s most costly climate-related disasters. Indonesia had the highest number of disasters (29 total events), including 25 floods. However, India and China suffered the largest human impacts with 19.6 million people and 14.9 million people affected, respectively. Floods were the most common disasters worldwide (201 events), while storms affected the highest number of people (45.5 million) and caused the most economic losses (US\$92.7 billion). Extreme temperatures were the deadliest type of disasters accounting for 42% of total deaths, followed closely by floods which accounted for 41% of total deaths. Summer heat waves in Europe (France, Belgium and the Netherlands) were the deadliest events for the 2nd year in a row with a total of 6,340 deaths³.

The impact of floods was felt heavily throughout Africa and Asia. In Africa, floods affected 7 million people and caused 1,273 deaths, the highest figure since 2006. In South Asia, monsoon flooding, often associated with landslides, affected 5.4 million people in Bangladesh and caused 448 deaths in Nepal. In India, flooding was responsible for the 3rd deadliest event of the year costing 1,922 lives. China also faced significant flooding as a series of four summer floods across the country killed a total of 397 people, affected 14.3 million people, and caused US\$ 21.8 billion in economic losses.

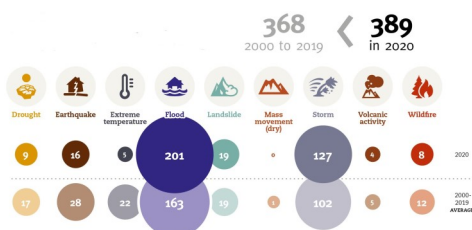



















Figure 1: Occurrence by disaster type: 2020 compared to 2000-2019 annual average

1. Biological disasters excluded
2. Economic loss figures were adjusted using yearly consumer price index (CPI) data from the OECD (2019).
3. Figures derived from excess mortality statistics. Figures do not include excess mortality due to COVID-19.


Top 10 mortality – 2020

 UK	Heat Wave	2,556	 Pakistan	Flood	410
 France	Heat Wave	1,924	 Netherlands	Heat Wave	400
 India	Flood	1,922	 Kenya	Flood	285
 Belgium	Heat Wave	1,460	 China	Flood	280
 Nepal	Flood	448	 Bangladesh	Flood	257

Top 10 total affected – 2020

 India	Cyclone Amphan	18.0 million	 Honduras	Hurricane Eta	4.6 million
 China	Flood	10.0 million	 China	Flood	4.2 million
 Mali	Drought	6.8 million	 Niger	Drought	3.7 million
 Bangladesh	Flood	5.4 million	 Philippines	Typhoon Rolly (Goni)	3.4 million
 Philippines	Typhoon 'Ulysses' (Vamco)	4.9 million	 Burkina Faso	Drought	2.9 million

Top 10 economic losses – 2020

 China	Flood	17 billion	 USA	Storm	6.8 billion
 India	Cyclone Amphan	13 billion	 USA	Hurricane Sally	6.3 billion
 USA	Hurricane Laura	13 billion	 Japan	Flood	5.8 billion
 USA	Wildfire	11 billion	 Croatia	Earthquake	5.6 billion
 India	Flood	7.5 billion	 Honduras	Hurricane Eta	5.0 billion

With 30 events, the 2020 Atlantic Ocean hurricane season broke the record for the highest number of named storms. Hurricane Eta was the most impactful of these storms, killing 394 people and affecting 7.1 million people in 10 countries stretching from Colombia to the USA. Honduras and Guatemala suffered the worst impacts with 4.6 million people and 2.4 million people affected, respectively. Despite the record in the Atlantic, Asia accounted for the highest number of people affected by storms in 2020. In May, Cyclone Amphan struck South Asia affecting a total of 18 million people in India and 2.6 million people in Bangladesh. In the latter part of the year, a series of storms in South-East Asia caused widespread damage. In Vietnam, six successive storms, combined with flooding and landslides over three months, killed a total of 294 people and affected 2.2 million people, and in the Philippines, five storms over the same period killed a total of 185 people and affected 9.2 million people.

Droughts were most heavily experienced across the Sahel, affecting a total of 13.4 million people in Mali, Burkina Faso, and Niger. Wildfires across the west coast of the USA marked the third year in the past four years with US\$10 billion in economic losses. Finally, although it was a relatively quiet year for geophysical events, an earthquake that killed 115 people in Turkey served as a reminder of the severe threat of earthquakes, the deadliest type of disaster over the previous 20 years. Overall, the most notable features of the year were significant flood events across East Africa, South Asia, and China; a record year in the number of storms in the Americas; a series of storms in quick succession to strike South-East Asia; and summer heat waves across Europe which accounted for the deadliest disaster events for the 2nd year in a row.

CRED updates and recent publications

- Huang, Kai-sen ; Guha-Sapir, Debarati ; Tao, Qian-Lan et al. *Disability-Adjusted Life Years (DALYs) Due to Ischemic Heart Disease (IHD) Associated with Natural Disasters: A Worldwide Population-Based Ecological Study*. In: *Global Heart*, 16 (1) (2021).
- Vanderplanken, Kirsten ; van den Hazel, Peter ; Marx, Michael et al. *Governing heatwaves in Europe: comparing health policy and practices to better understand roles, responsibilities and collaboration*. In: *Health Research Policy and Systems*, 14p. (2021).
- van Loenhout, Joris ; Vanderplanken, Kirsten ; Kashibadze, Tamari et al. *Heatwave-protective knowledge and behaviour among urban populations: a multi-country study in Tunisia, Georgia and Israel*. In: *BMC Public Health*, 21 (1). (2021).
- Moitinho de Almeida, Maria ; van Loenhout, Joris ; Singh Thapa, Sunil et al. *Hospital Resilience After the 2015 Earthquake in Nepal: Results From Semi-structured Interviews With Hospital Staff*. In: *Frontiers in Public Health*, 9. (2021).
- van Loenhout, Joris ; Vanderplanken, Kirsten ; Rodrigues Leal Moitinho De Almeida, Maria et al. *Heatwave preparedness in urban Georgia: A street survey in three cities*. In: *Sustainable Cities and Society*, 15p. (2021).
- There are currently two open positions in CRED. Please check our website: <https://www.cred.be/index.php?q=work-with-us>

This CRED Crunch issue is adapted from : CRED & UNDRR. 2020: *The Non-COVID Year in Disasters*. Brussels: CRED; 2021.
This document is available at: https://emdat.be/sites/default/files/adsr_2020.pdf