

318
disasters
354 *

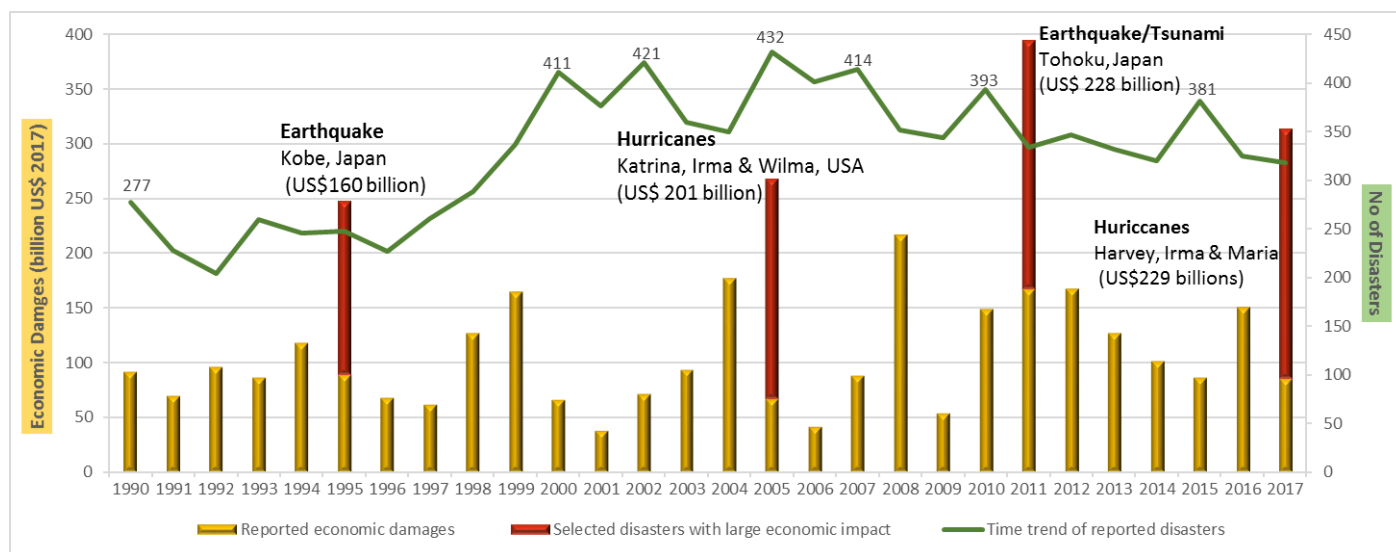
9,503
deaths
68,302 *

96 million
affected
210 million *

US\$ 314 billion
damages
US\$153 billion *

* 2007-2016 yearly average

a) Annual occurrence and economic damages: 1990-2017



In 2017, EM-DAT¹ data indicates that **318 natural disasters**² occurred, affecting 122 countries. The impact of which resulted in **9,503 deaths**, **96 million people affected**, and **US\$314 billion** in economic damages.

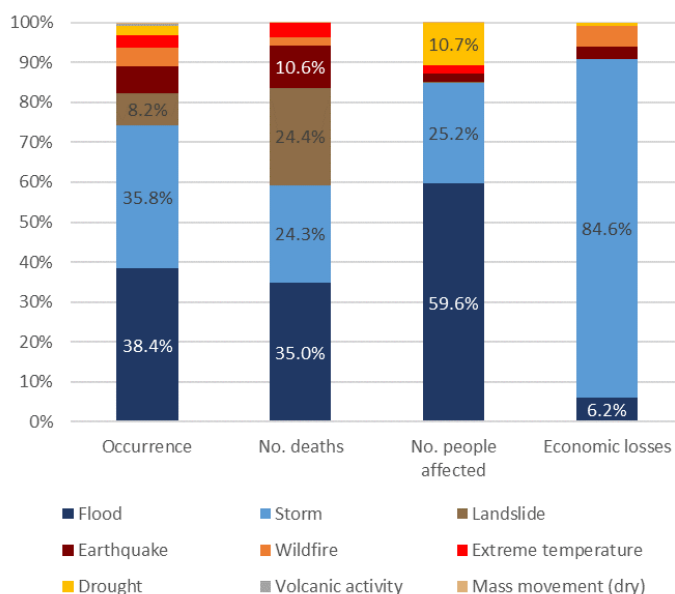
The human impact of natural disasters in 2017 was much lower than the last 10 year average, where events with extremely high mortality occurred, such as the 2010 earthquake in Haiti (225,570 deaths) and the 2008 Nargis Cyclone in Myanmar (138,400 deaths).

In 2017, there was no single major event responsible for increased mortality. This is unlike more recent years where the earthquake in Nepal (2015) killed 8,831 people and Typhoon Haiyan in the Philippines (2013) killed 7,354. Still both these years had a mortality below the 10 year average.

The year with the highest economic losses was 2011, at US\$400 billion, mainly due to the earthquake/tsunami in Japan (a). However, **2017 is the second most costly year**³, reflected in the impact of three hurricanes - Harvey (US\$95 billion), Irma (US\$66 billion) and Maria (US\$69 billion), affecting the United States and the Caribbean (cfr [Cred Crunch 49](#)).

Weather-related disasters were responsible for the majority of both human and economic losses in 2017 (B). Almost 90% of deaths in 2017 were due to climatological, hydrological or meteorological disasters. Nearly 60% of people affected by disasters in 2017 were affected by floods, while 85% of economic damages were due to storms (mainly from the three hurricanes cited above).

b) Share by disaster type for 2017



¹ As of the date of the 21st of March 2018

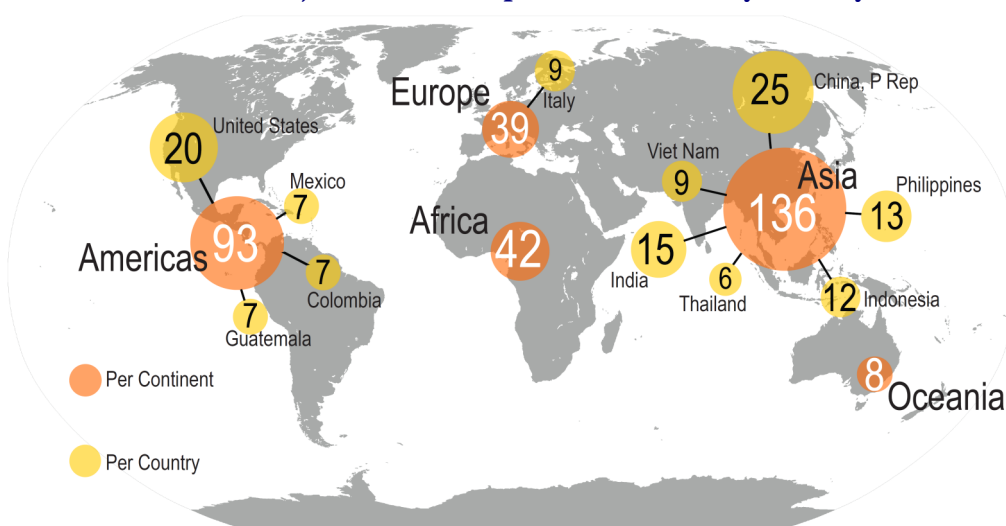
² The CRED CRUNCH newsletter does not include epidemics and insect infestations as natural disasters unless explicitly stated.

³ EM-DAT contains data on disasters from 1900 to the present day

All figures presented in the CRED CRUNCH come from "EM-DAT: The OFDA/CRED International Disaster Database"

Analysis for this issue was done by Pascaline Wallemacq
Centre for Research on the Epidemiology of Disasters (CRED)
Research Institute Health & Society (IRSS), Université catholique de Louvain
30, Clos Chapelle-aux-Champs, Box B 1.30.15, 1200 Brussels, Belgium
www.cred.be, contact@emdat.be

c) Number of reported disasters by country



d) Human impact in 2017 - 10 most affected countries

No. of deaths	No. deaths/100,000 inhabitants
India	2,291
Sierra Leone	1,102
Iran (Islamic Rep.)	509
China P. Rep.	498
Mexico	498
Colombia	384
Sri Lanka	329
Bangladesh	323
Viet Nam	316
United States of America (U.S.A)	288
Dominica	86.57
St Barthelemy	42.43
British Virgin Islands	28.85
Anguilla	26.83
Saint Martin	19.94
Sierra Leone	14.58
Sint Maarten	9.97
U.S. Virgin Islands	4.77
Macao SAR (China)	1.61
Sri Lanka	1.58

No. of people affected (million)	No. affected/100,000 inhabitants
India	22.33
China P. Rep.	15.15
Bangladesh	11.48
Cuba	10.00
Viet Nam	5.13
Philippines	4.87
Mauritania	3.90
Peru	3.88
Thailand	3.82
Chad	1.89
Anguilla	100,000
Dominica	96,575
Mauritania	88,137
Cuba	87,073
St Maarten	28,415
Chad	12,663
Peru	12,052
Bangladesh	6,973
Niger	6,243
Nepal	5,848

e) Economic impact in 2017 10 most affected countries

In absolute amounts (US\$ billion)	As % of Gross Domestic Product-GDP (2016)
U.S.A	186.1
Puerto Rico	68.0
China	18.1
Mexico	8.3
British Virgin Island	3.5
Australia	3.2
Peru	3.2
Viet Nam	3.1
Italy	2.6
Sint Maarten	2.5
Sint Maarten	811.9
British Virgin Islands	284.3
Turks & Caicos Islands	68.3
Puerto Rico	65.9
Dominica	65.4
Antigua and Barbuda	10.3
Macao SAR (China)	3.1
Cuba	2.5
St Kitts & Nevis	2.2
Peru	1.7

In 2017, similar to previous years, the Asian continent experienced the highest disaster occurrence (43% of the total). China was the most disaster-affected country with 25 events (c): 15 floods / landslides and 6 storms.

In terms of human impact, India witnessed the highest burden of natural disasters in 2017 with almost 2,300 deaths and 22.5 million people affected (mostly by floods and storms). Sierra Leone was hit by a mudslide, killing 502 persons and left 600 people missing. People living in Anguilla and 87% of the population in Cuba were affected by Hurricane Irma. In Dominica, 96% of the population was affected by Hurricane Maria. In Mauritania, 88% of the population was affected by a drought (d).

The small Caribbean islands were highly affected by hurricanes Maria and Irma. Sint Maarten lost the equivalent of 812% of its GDP from Hurricane Irma, while the British Virgin Islands lost 284% of its GDP (e).

Overall, the high mortality and number of people affected correlated to the country's' population, as well as economic losses correlated to GDP, highlight the burden of disasters on small islands in 2017.

CRED News

♦ CRED will organise the Summer Course on Assessing Public Health in Emergency Situations (APHES). This course will take place from July 2-13, 2018 in Brussels, Belgium. More information : www.aphes.be / contact@aphes.be

♦ Recent publications:

→ Van Loenhout JAF., Gil Cuesta J., Abello JE., Isiderio JM., De Lara-Banquesio ML., Guha-Sapir D. (2018) The impact of Typhoon Haiyan on admissions in two hospitals in Eastern Visayas, Philippines. Plos One, January 30.

→ Van Loenhout JAF., Delbiso TD., Kiriliouk A., Rodriguez-Llanes J., Segers J., Guha-Sapir D. (2018) Heat and emergency room admissions in the Netherlands. BMC Public Health. 18:108

Please note that disaster data are subject to change as validation and cross-referencing of the sources is undertaken and as new information becomes available. For any enquiries please contact contact@emdat.be or visit www.emdat.be

