

CRED CRUNCH



2016 preliminary data¹: Human impact of natural disasters² December 2016 Issue No. 45

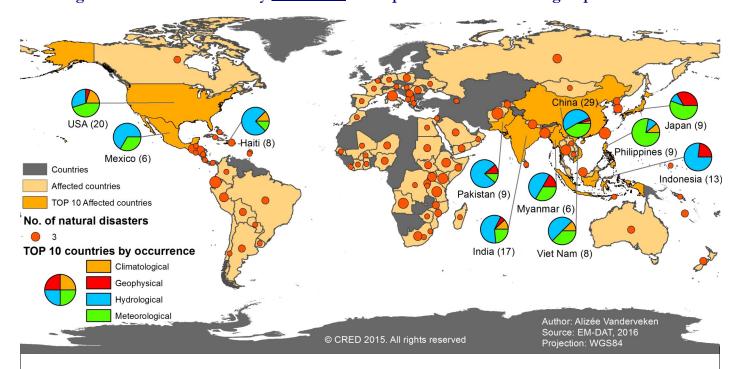
301 disasters

102 countries

7,628 deaths 411 million affected

US\$97 billion damages

Figure 1: TOP 10 countries by occurrence and repartition of disaster subgroup occurrences



In 2016, EM-DAT preliminary data indicates that 301 country level disasters occurred, affecting 102 countries. The impact of which sums up to a total of 7,628 deaths, 411 million affected people, and US\$97 billion of economic damages.

China was the most disaster-affected country, with a total of 29 events, of which 52% were hydrological and 41% meteorological (Fig. 1). Those disasters killed a total of 1,151 people, which brings China to the TOP10 of countries ranked by number of death, and resulted in 13 million affected people (Fig. 2). It was followed by the U.S. where 20 events (Fig. 1) caused the death of 250 people and affected 360,000 others (Fig. 2). In India, 17 natural disasters (Fig. 1) caused 884 deaths and 331 million affected, which brings it to the first place when countries are ranked by number of affected people (Fig. 2). This result is mainly explained by a severe drought that affected 330 million Indians (80% of the 2016 affected people).

The two deadliest events in 2016 occurred on the American continent. The 7.8 magnitude Ecuador earthquake, on April 16th, killed 676 people and affected 1.23 million others. The total economic losses were estimated at \$US3.3 billion. This was followed in Septembre-October by Hurricane Matthew which was responsible for the death of at least 546 people in Haiti and 49 in the USA. In the Democratic People's Republic of Korea, 538 people lost their lives because of intense flooding events in August-September.

The analysis by disaster type (Fig. 3) suggests that 50% of 2016 events are related to flooding, and storms represent 22% of all natural events reported this year. Together, those two types of disasters are responsible for 71% of all natural disasters related deaths, followed by earthquakes (17% related deaths). Droughts account for a tremendous part of the disaster affected population (94%). On the other hand, the reported number of people affected by floods and storms is really low (5%) but this might be due to data reporting issues resulting from the difficulty in defining and measuring the "affected" variable.

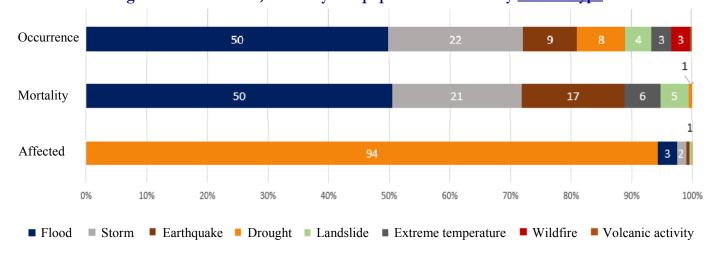
Debarati Guha-Sapir, Director, CRED

¹ Data as of 15th of December ² Epidemics and insect infestations not included.

Figure 2: TOP 10 countries by human impact

Deaths		Deaths/100,000 inhabitants		Affected (million)		Affected/100,000 inhabitants	
China	1,151	Haiti	5.56	India	331.2	Micronesia	96,113
India	884	Fiji	5.16	China	13.0	Haiti	54,076
Ecuador	686	Ecuador	4.25	Ethiopia	10.2	Somalia	43,571
Korea Dem. Rep.	598	Korea Dem. Rep.	2.39	Malawi	6.5	Fiji	39,792
Haiti	596	Macedonia	1.06	Haiti	5.8	Marshall Islands	39,628
Pakistan	310	Rwanda	1.00	Somalia	4.7	Malawi	37,759
Italy	299	Sri Lanka	0.97	Zimbabwe	4.1	Mongolia	32,611
Indonesia	251	Taiwan	0.90	South Sudan	3.6	South Sudan	29,352
United States	250	Nepal	0.63	Viet Nam	3.6	Swaziland	27,196
Taiwan	212	Italy	0.49	Bangladesh	3.2	Zimbabwe	26,277

Figure 3: Occurrence, mortality and population affected by disaster type



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

CRED News

- ♦ We are happy to announce the 2016 Summer Course on Assessing Public Health in Emergency Situations (APHES). This course will take place on July 4-15, 2016 in Brussels, Belgium. More information at www.aphes.be.
- ♦ We are also pleased to present its 'Annual Disasters Statistical Review' 2015, which can be downloaded at: http://www.cred.be/sites/default/files/ADSR 2015.pdf
- ♦3 new articles published in scientific peer reviewed journals:
- TATAH L., DELBISO T.D., RODRIGUEZ-LLANES, J.M., GIL CUESTA, J., GUHA-SAPIR D. (2016) Impact of refugees on local health systems: A difference-in-differences analysis in Cameroon. *PLOS one.* 11 (12): e0168820.
- VAN LOENHOUT JAF., GUHA-SAPIR D. (2016) How resilient is the general population to heatwaves? A knowledge survey from the ENHANCE project in Brussels and Amsterdam. *BMC Research Notes*; 9:499
- VAN LOENHOUT, J.A.F., RODRIGUEZ-LLANES, J.M., GUHA-SAPIR, D. (2016) Stakeholders perception on national heatwave plans and their local implementation in Belgium and The Netherlands. *Int J Environmental Research and Public Health;* 13: 1120

Analyses for this issue were done by Alizée Vanderveken 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, www.emdat.be, contact@emdat.be



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.