

CRED CRUNCH

Issue No. 19

“Disaster Data: A Balanced Perspective”

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Natural disasters in 2009

In 2009, 328 natural disasters were recorded in the EM-DAT database. They killed more than 10 thousand people, affected nearly 113 million others and caused almost 35 billion US\$ of economic damages.

No mega-disasters occurred in 2009, the event ranking highest in death toll being the earthquake in Indonesia on September 30 which killed over 1,100 people, followed by a series of typhoons and floods that caused many deaths, making Asia once again the most affected continent. In fact, six of the top ten countries with the highest number of disaster-related deaths were in Asia. However, when looking at the top 10 countries in terms of number of deaths per 100,000 inhabitants, the Islands of Samoa, American Samoa and Tonga topped the list.

Compared to previous years (2000-2008), there is a reduction in 2009 in disaster mortality with 10,443 killed, which is below the annual average of 85,541; as well as the number of affected, with 112.8 million compared to the annual average of 230.4 million.

In terms of economic impacts, disasters costs were also below the 93.8 billion 2000-2008 annual average and were mainly attributed to winter storm Klaus which hit France and Spain in January (5.1 billion US\$), the L'Aquila earthquake in Italy in April (2.5 billion US\$) and a tornado in the United States in February (2.5 billion US\$).

Even if 2009 appears as a relatively quiet year, we cannot draw conclusions based on one single year. Individual major events happening in a specific year can influence disaster statistics, as was already shown by the disastrous losses caused by the earthquake in Haiti in early 2010. Longer-term statistics on disaster occurrence and impacts can shed light on the underlying trends.

Debarati Guha-Sapir
Director, CRED

Economic impact in 2009

10 most affected countries

In absolute amounts (US\$ billion)		As percentage of the GDP	
United States	9.1	Samoa	28.7
China P Rep	4.2	El Salvador	4.4
France	3.2	Tonga	3.6
Italy	2.6	Lao P Dem Rep	1.9
Indonesia	2.0	Burkina Faso	1.9
Spain	1.9	Fiji	1.6
Australia	1.5	Viet Nam	1.2
Japan	1.4	Honduras	0.7
Viet Nam	1.0	Philippines	0.6
Switzerland	1.0	Nepal	0.5

Natural disasters¹ in 2009: summary

	2009	2000-2008 yearly average
No. of country-level disasters	328	392
No. of countries affected	111	119
No. of people killed	10,443	85,541
No. of people affected	112.8 mil.	230.4 mil.
Economic damages (US\$)	34.9 bil.	93.8 bil.

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

Human impact in 2009

10 most affected countries

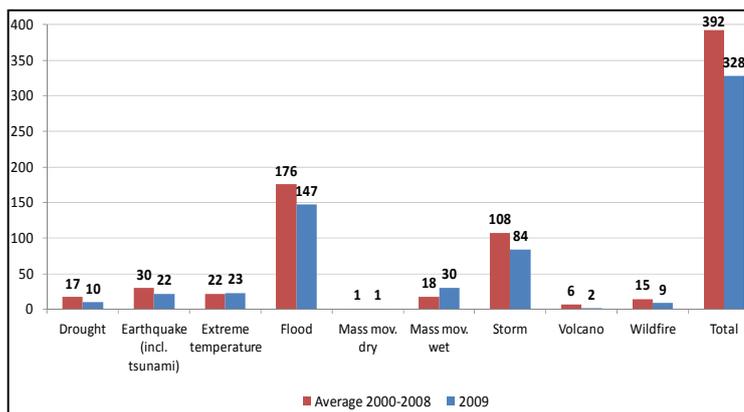
No. of people killed		No. killed/100,000 inhabitants	
India	1,733	Samoa	81.5
Indonesia	1,466	American Samoa	51.4
Philippines	1,362	Tonga	8.7
Taiwan (China)	630	El Salvador	4.5
China P Rep	561	Namibia	4.4
Australia	535	Bhutan	3.3
Peru	429	Taiwan (China)	2.7
Viet Nam	356	Australia	2.5
Italy	323	Solomon Is	2.0
El Salvador	275	Sierra Leone	1.9

No. of people affected (million)		No. affected/100,000 inhabitants	
China P Rep	68.7	Guatemala	18,382
Philippines	13.6	Namibia	16,555
India	9.0	Philippines	15,000
Bangladesh	4.6	Taiwan (China)	10,044
Viet Nam	3.8	China P Rep	5,183
Guatemala	2.5	Zambia	4,872
Taiwan (China)	2.3	Viet Nam	4,312
Brazil	1.9	Honduras	4,145
Indonesia	1.0	American Samoa	3,782
Zambia	0.6	Paraguay	3,416

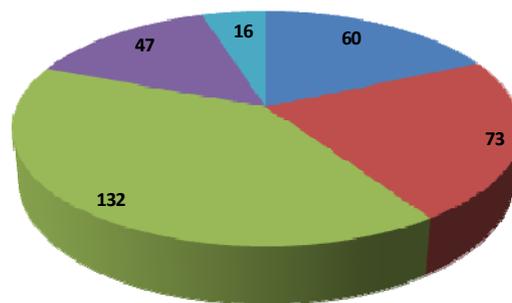
All figures presented in the CRED CRUNCH come from "EM-DAT: The OFDA/CRED International Disaster Database"

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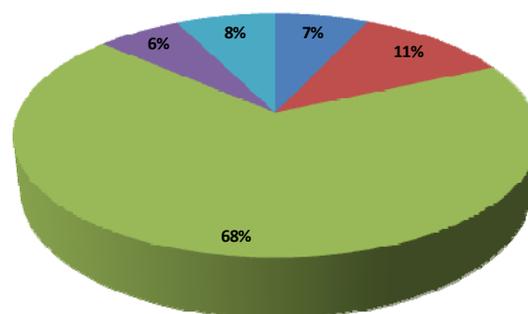
Disaster occurrence by disaster type 2009 vs 2000-2008 average



Number of disaster events by continent 2009



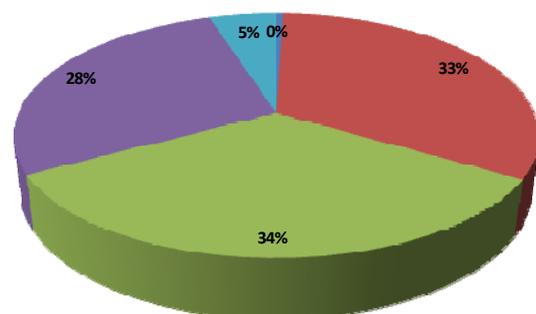
Disaster mortality by continent (%) 2009



Number of reported disasters per country in 2009

Philippines	26
China P Rep	23
United States	16
India	13
Indonesia	12
Brazil	10
Australia	7
Mexico	7
Bangladesh	6
Viet Nam	6

Disaster economic costs by continent (%)



Hispaniola: same island, 2 country profiles

10 most recent natural disasters that occurred in both countries

Date	Disaster Type	Haiti		Dominican Republic	
		Killed	Affected	Killed	Affected
September 2008	Hurricane Hanna	529	48,000	1	10,745
August 2008	Hurricane 'Gustav'	85	73,006	8	6,257
August 2008	Tropical Storm 'Fay'	10	220	4	20
December 2007	Tropical Storm 'Olga'	3	2,090	33	61,605
October-November 2007	Tropical Storm 'Noel'	90	108,763	129	79,728
August 2007	Hurricane Storm 'Dean'	9	3,966	1	1,600
May-June 2007	Flood	2	12,500	9	16,000
March 2007	Flood	14	15,014	3	3,830
October 2005	Tropical Storm 'Alpha'	12	2,192	9	1,000
September 2004	Hurricane 'Jeanne'	2,754	315,594	11	14,009
Total		3,508	581,345	208	194,794

■ Africa ■ Americas ■ Asia ■ Europe ■ Oceania

CRED News

- CRED is pleased to present the 2010 Summer Course on Assessing Public Health in Emergency Situations (APHES). This course will take place on July 5-16, 2010 in Brussels, Belgium. More information at: <http://www.cred.be/Aphes/>.
- The CE-DAT team recently published an article in The Lancet: *Degomme O., D. Guha-Sapir (2010). Patterns of mortality rates in the Darfur conflict, The Lancet, 375: 294-300.* Available at: <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2809%2961967-X/abstract>
- The MICRODIS Project has been awarded a one year extension (02/2010 - 01/2011) to continue its work on integrated natural disaster assessment and disaster data analysis in Asia and Europe (www.microdis-eu.be).
- Discover the recently published CRED paper "Disaster in India: Policy overview of vulnerability, risks and human impacts", Guha-Sapir D., Hoyois P. (2010), in: *Recovering from earthquakes: Response, Recovery and impact mitigation in India*, (edited by S.B. Patel and A. Revi), Routledge: New Delhi, pp.14-38.

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