



CRED CRUNCH

Issue No. 16

“Disaster Data: A Balanced Perspective”

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Natural disasters in 2008

The human and economic losses caused by natural disasters in 2008 were devastating. More than 235,000 people were killed, 214 million people were affected and economic costs were 190 billion US\$.

In 2008, 354 natural disasters were recorded in the EM-DAT database, which is less than the 2000-2007 yearly average number of 397. The death toll was three times higher than the annual average of 66,813 for 2000-2007, mainly caused by two major events: Cyclone Nargis which killed 138,366 people in Myanmar and the Sichuan earthquake in China which caused the deaths of 87,476 people. Disaster costs in 2008 were more than twice the US\$82 billion annual average for 2000-2007 and were mainly attributed to the Sichuan earthquake in China (US\$85 billion) and hurricane Ike in the U.S. (US\$30 billion).

Asia remained the most affected continent. Nine of the top 10 countries with the highest number of disaster-related deaths were in Asia. While China, the Philippines, the U.S. and Indonesia reported the largest number of natural disasters, Angola, Tajikistan, Djibouti and Somalia topped the list of number of victims per 100,000 inhabitants.

In 2008 once again, large populations were affected by natural disasters. The earthquake and severe winter conditions in China affected a total of 122 million people. Droughts in Asia (12 million) and Africa (14 million) and severe weather conditions in the U.S. in May and June 2008 (11 million) affected many other people.

Although fewer disasters occurred in 2008, events seem to have a larger impact on human settlements. This is especially true in middle income countries such as China which was the largest contributor to economic losses last year. As countries move up the development ladder, their economic vulnerability tends to increase. Ideally, these countries need to invest more in disaster risk reduction measures if they want to better protect development gains.

Debarati Guha-Sapir
Director, CRED

Economic impact in 2008:

10 most affected countries

In absolute amounts (US\$ billion)		As percentage of the GDP	
China P. Rep.	111.0	Turks and Caicos Is.	69.3
United States	57.8	Myanmar	30.5
Myanmar	4.0	Tajikistan	22.6
Cuba	3.6	China P. Rep.	3.4
Germany	2.7	Cuba	2.8
Australia	2.5	Ecuador	2.3
Brazil	1.0	Yemen	1.8
Ecuador	1.0	Viet Nam	0.9
Ukraine	1.0	Madagascar	0.8
Tajikistan	0.8	Belize	0.8

Natural disasters¹ in 2008: summary

	2008	2000-2007 yearly average
No. of country-level disasters	354	397
No. of countries affected	120	118
No. of people killed	235,264	66,813
No. of people affected	214 million	231 million
Economic damages (US\$)	190 billion	81.8 billion

1: The CRED CRUNCH newsletter does not include epidemics as natural disasters unless explicitly stated

Human impact in 2008:

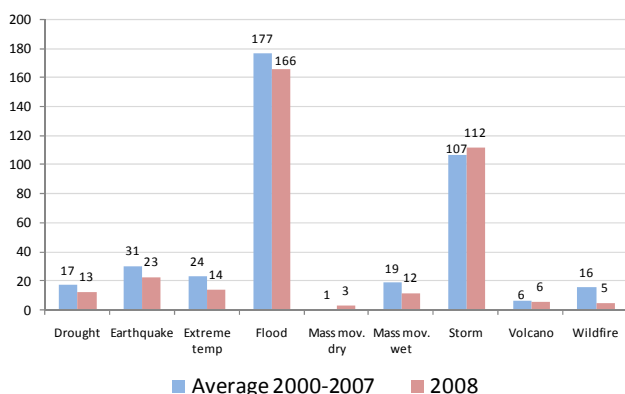
10 most affected countries

No. of people killed		No. killed/100,000 inhabitants	
Myanmar	138,366	Myanmar	283.6
China P. Rep.	88,450	Turks & Caicos Is.	17.9
India	1,808	Angola	11.6
Afghanistan	1,317	Haïti	7.3
Philippines	959	China P. Rep.	6.7
Haiti	698	Afghanistan	4.2
Viet Nam	411	Belize	2.6
United States	303	Mongolia	2.0
Pakistan	249	Kyrgyzstan	1.4
Brazil	203	Philippines	1.1

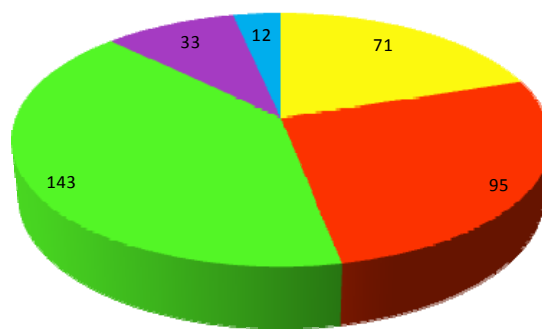
No. of people affected (million)		No. affected/100,000 inhabitants	
China P. Rep.	133.3	Tajikistan	41,543
India	14.0	Djibouti	40,817
United States	13.4	Somalia	38,547
Thailand	11.6	Antigua&Barbuda	38,393
Philippines	8.5	Eritrea	35,111
Ethiopia	6.5	Thailand	18,131
Somalia	3.4	Belize	15,789
Tajikistan	2.8	Guyana	13,540
Myanmar	2.4	China P. Rep.	10,097
Brazil	1.8	Philippines	9,625

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

Disaster occurrence by disaster type, 2008 vs 2000-2007 average



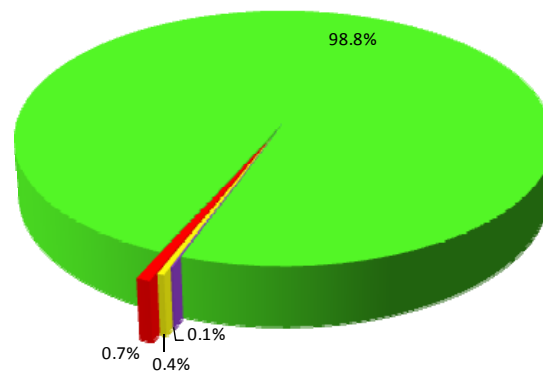
Number of disaster events by region, 2008



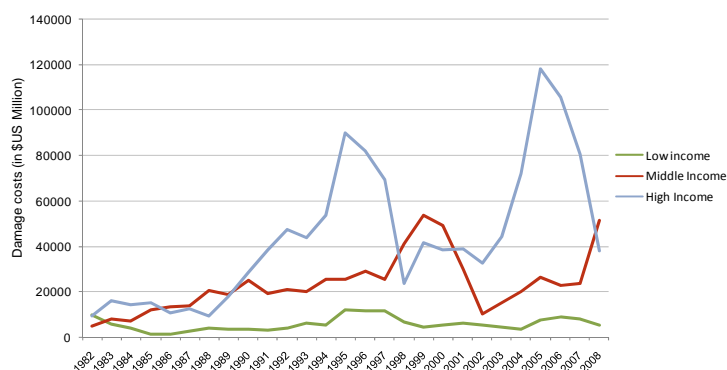
Major earthquakes in Asia since 1989

Country name	Event	Year	No. killed	Richter
China P. Rep.	Earthquake	2008	87,476	8.0
Pakistan	Earthquake	2005	73,338	7.6
Indonesia	Tsunami	2004	165,708	9.3
Sri Lanka	Tsunami	2004	35,399	9.3
India	Tsunami	2004	16,389	9.3
Iran Islam Rep.	Earthquake	2003	26,796	6.6
India	Earthquake	2001	20,005	7.7
Turkey	Earthquake	1999	17,127	7.4
Iran Islam Rep.	Earthquake	1990	40,000	7.3

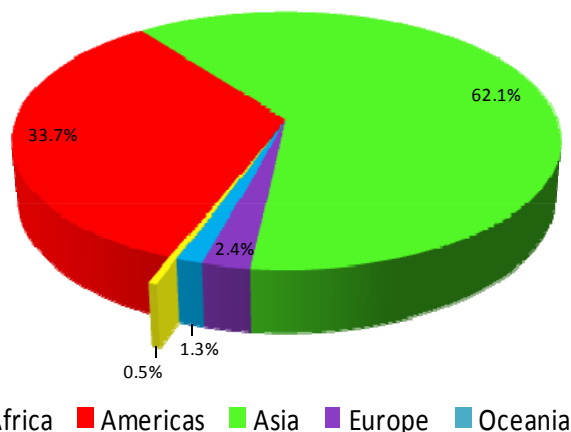
Disaster mortality by region (%) 2008



Economic damage per income group



Disaster economic costs by region (%) 2008



CRED News

- CRED is pleased to present the 2009 Summer Course on Assessing Public Health in Emergency Situations (APHES). This course is scheduled to take place on July 6-17, 2009 in Brussels, Belgium. More information at: <http://www.cred.be/Aphes/>
- The upcoming EM-DAT Technical Advisory Group meeting will take place in Spring 2009. More details will be provided soon on our website www.cred.be
- CRED is happy to announce the launch of the new CE-DAT Website www.cedat.org

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