

CRED CRUNCH

Issue No.4

"Disaster Data: A Balanced Perspective"

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This year was once again marked by several high profile disasters that are still, months later, affecting thousands in Pakistan, the Gulf of Mexico and elsewhere.

A useful line of thought regarding methods for assessing the impacts of natural disasters is illustrated by two of the high profile disasters of 2005.

The death toll from the earthquake in Pakistan accounted for 83% of the total mortality for the year and 3% of total economic damages. By contrast, Hurricane Katrina accounted for 1.5% of total deaths and 78% of total economic damages.

That both events were catastrophic is beyond debate. What this reveals nonetheless, is that the impact indicators for natural disasters do not capture the full effects of lives lost, let alone the longer-term impacts on social and economic systems.

Despite the ethical and moral implication of such exercises, without addressing the valuation of lives, poorer countries will always be at the bottom of the economic damage ranking regardless of the magnitude of the catastrophe.

Actuarial sciences may be one way forward in developing more complete methodologies to assess loss and damage more completely than it is done now. Similarly, scientificallysound standardised methods for the evaluation of the short and longer-term health, social and economic impacts of extreme events are urgently required.

Dr. Debarati Guha-Sapir Director

Economic impact in 2005: 10 most affected countries

In absolute amounts (US\$ billion)		As percentage of previous-year GDP	
U.S.A.	132.30	Guyana	59.17 %
China	7.15	Pakistan	5.20 %
India	5.82	Guatemala	3.60 %
Pakistan	5.00	Cuba	2.45 %
Romania	1.73	Tajikistan	2.41 %
Cuba	1.40	Romania	2.37 %
Switzerland	1.10	El Salvador	2.25 %
Guatemala	0.99	U.S.A.	1.13 %
United Kingdom	0.50	Bulgaria	1.07 %
Guyana	0.47	India	0.84 %

Natural disasters¹ in 2005: summary

	2005	1995-2004 yearly average
No. of country-level disasters	428	322
No. of countries affected	127	108
No. of people killed	89,916	77,320
No. of people affected	160 million	253,895,912
Economic damages (US\$)	159 billion	65.5 billion

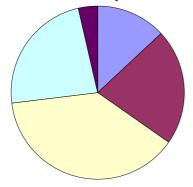
1: The CRED CRUNCH newsletter does not include epidemics as natural disasters unless explicitly stated.

Human impact in 2005: 10 most affected countries

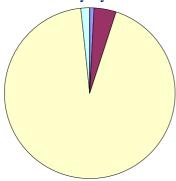
No. of people killed		No. killed/100,000 inhabitants	
Pakistan	74,151	Pakistan	45.65
India	4,286	Guatemala	10.52
China	1,548	Samoa	5.08
Guatemala	1,542	Guyana	4.44
United States	1,452	Burundi	1.88
Indonesia	1,281	El Salvador	1.79
Ukraine	801	Ukraine	1.69
Iran	734	Afghanistan	1.54
Afghanistan	461	Grenada	1.12
Bangladesh	319	Iran	1.08

No. of people affected		No. affected/100,000 inhabitants	
China	91.2 million	Comoros	42,309
India	28.3 million	Malawi	37,376
Pakistan	10.4 million	Guyana	35,905
Malawi	4.5 million	Burundi	33,827
Niger	3.6 million	Djibouti	34,466
Mexico	3.0 million	Niger	30,859
Cuba	2.6 million	Cuba	22,914
Kenya	2.5 million	Albania	11,240
Burundi	2.2 million	Zambia	10,655
Mozambique	1.4 million	Mali	8,151

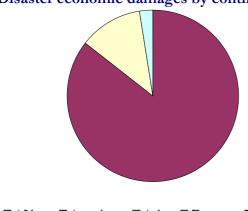


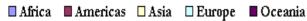


Disaster mortality by continent, 2005



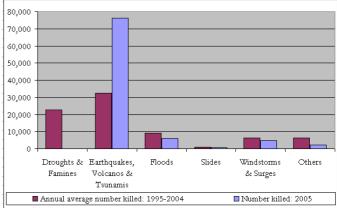
Disaster economic damages by continent, 2005



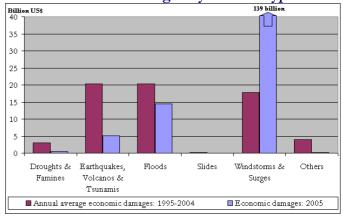


Disaster occurrence by disaster type 200 180 160 140 120 100 80 60 40 20 Earthquakes, Floods Windstorms Others Droughts & Volcanos & & Surges Famines Tsunamis ■ Annual average number of disasters: 1995-2004 ■ Number of disasters: 2005





Economic damages by disaster type



CRED News

Workshop to improve the compilation of reliable data on disaster occurrence and impact. This workshop, organized by CRED and the United Nations Development Program, will take place in Bangkok from April 2-4, 2006. Participants will include representatives from countries involved in disaster database development and international experts. The purpose of the workshop is to compile and synthesize experiences to date, particularly within Asia, in the development, enhancement and maintenance of historical databases on disaster losses. The workshop will be an important step in the preparation of the ProVention Consortium's Global Risk Identification Program (GRIP). For more information, please contact: david.hargitt@esp.ucl.ac.be

CE-DAT Technical Advisory Group meeting: Sharing and use of mortality and nutrition data on conflict settings. This upcoming meeting will take place in Washington DC, USA in the later part of May. Participants will include individuals from United Nations agencies, non-governmental organizations, donor countries, universities and research centres. Discussions will focus on the compilation of reliable and accurate mortality and nutrition indicators in conflict-affected populations for use in decision-making. The meeting is being organized by CRED and the Bureau of Population, Refugees and Migration of the U.S. Department of State. For more information, please contact: vicente.teran@esp.ucl.ac.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. For any enquiries, please contact cred-crunch@em-dat.net or go to www.em-dat.net