

Floods : the most frequent natural disasters

1993-2012

Worldwide, among the different types of natural disasters, floods appeared to be the most frequent during the last two decades. In the EM-DAT database, with an occurrence of 2,872, two natural disasters on five are floods (Fig.1) which, with 2,480 million people affected, represent more than half of all affected by disasters (Fig.2). However floods are not the most killing ones, and appear, with 11.6 per cent (154,222 dead) of all people killed by natural disasters, at the fourth rank, after earthquakes and tsunamis (59.6%), storms (17,9%) and aggregated death toll from extreme temperatures, extreme winter conditions and wildfires (11.9%) (Fig.3). The amount of damages reported for floods for the last two decades (625 billion 2012 US\$) rank them at the third position after storms (913 billion 2012 US\$) and Earthquakes and tsunamis (770 billion 2012 US \$). Floods occurrence increased dramatically during the years 1999-2000 and 2005-2006. In 2006 and 2007, more than half of all natural disasters were floods and, in spite of their diminishing occurrence in the following years, the number of floods remained above its two decades average (42 % of all disasters) from 2008 to 2011 (Fig.4). The highest number of floods occurred in Asia, where their number increased significantly during the first years of the 2000’s, attaining a level in the years 2005-2007, and then decreasing to a shelf of around 60 floods per year. In Africa, the number of floods increased regularly until a peak in 2007 and a decrease afterwards. In the Americas, the number of floods grew regularly until 2003, and then tend to decrease very slowly. In Europe the floods were at their highest level in the years 2000 -2005, diminishing afterwards but with an important peak in 2010. In Oceania, the number of floods is low compared to the other continents, and appears to occur slightly more frequently in the last 10 years (Fig.5). The number of people affected by floods tends to decrease slowly over the years in Asia and more strongly in Europe. Inversely, over years, floods appear to affect more people in Africa, but mainly in the Americas and Oceania, in spite of the decrease of occurrences in these three continents during the last five years. Except in Oceania, numbers of deaths from floods tend to decrease slowly over years. The high numbers of floods reported in the first half of the 2000’s and improved forecasts have probably led up to actions aimed at reducing the impacts of floods and then the deaths toll. Because of low reporting rates, especially in developing countries, losses data have to be regarded with caution. However, the main trend is of an increase in flood reported losses but with large variations between years .

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Fig.1 Occurrence of natural disasters

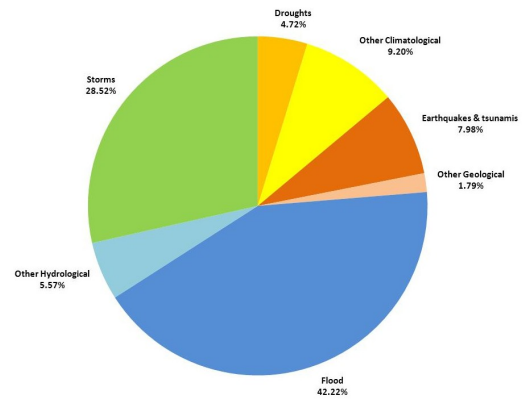


Fig.2 Number of people affected by natural disasters

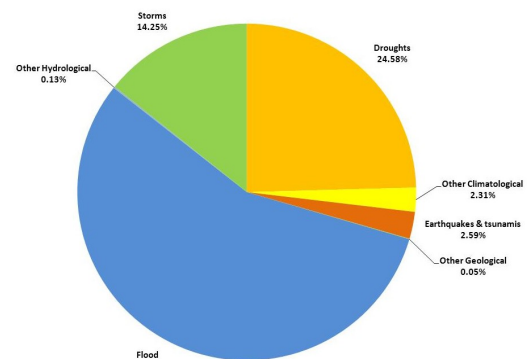
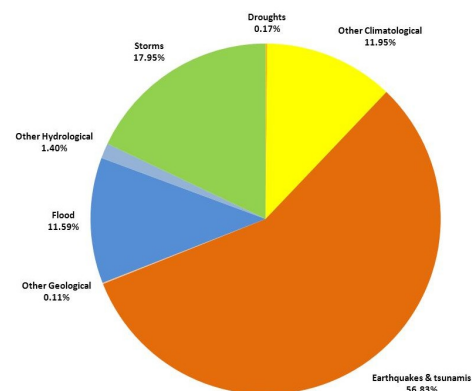


Fig.3 Number of deaths by natural disasters



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

Fig.4 Trends in floods and other types of natural disasters

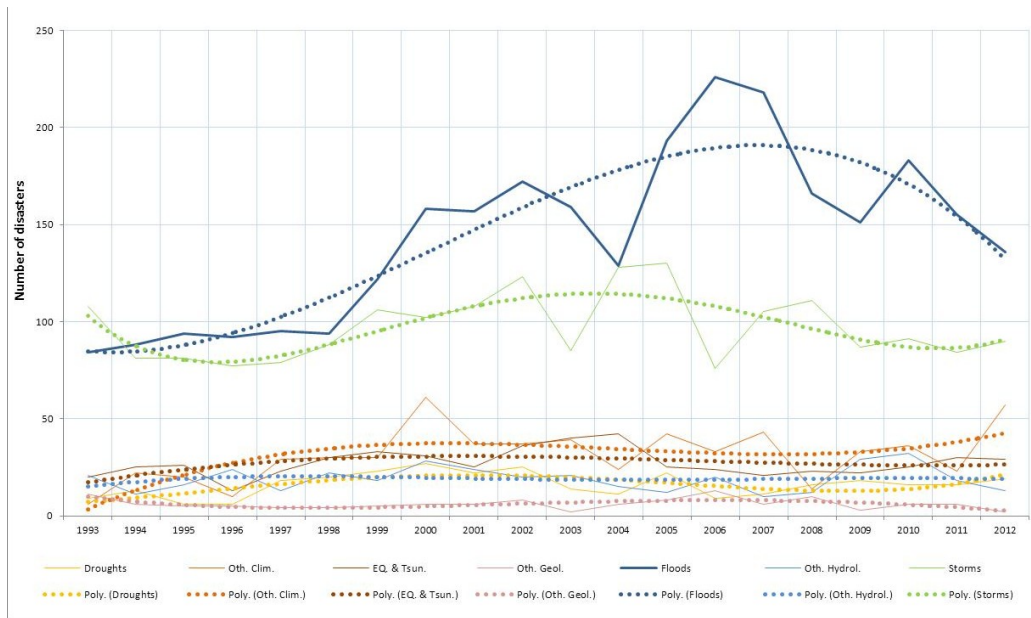
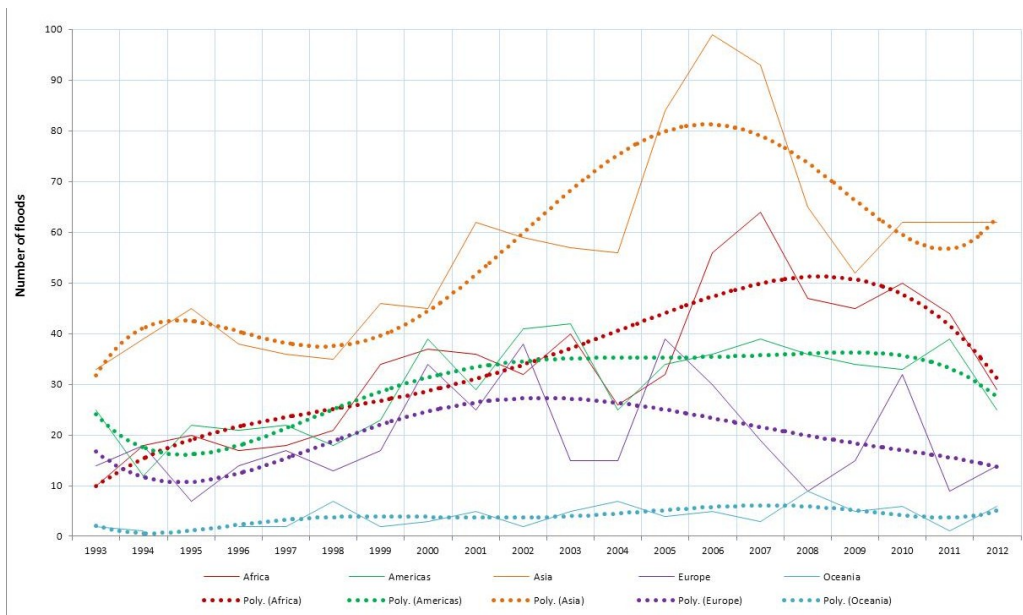


Fig. 5 Trends for floods occurrence by continent



CRED News

- ◆ The upcoming EM-DAT Technical Advisory Group meeting is planned to be held in Autumn 2013. More details will soon be provided on our website: www.emdat.be.
- ◆ CRED is pleased to present the Seventh Edition of the Annual Statistical Review: Numbers and Trends 2012. This 7th edition analysis the 2012 disaster figures with comparisons to previous years. The report can be downloaded at: http://www.emdat.be/Documents/Publications/ADSR_2012.pdf

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