

-
-
-
-
-
-
-
-
-
-

Centre for Research on the Epidemiology of Disasters - CRED

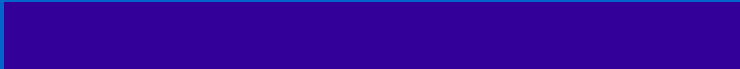
EM-DAT



International Disaster
Database

Regina Below

Database Manager



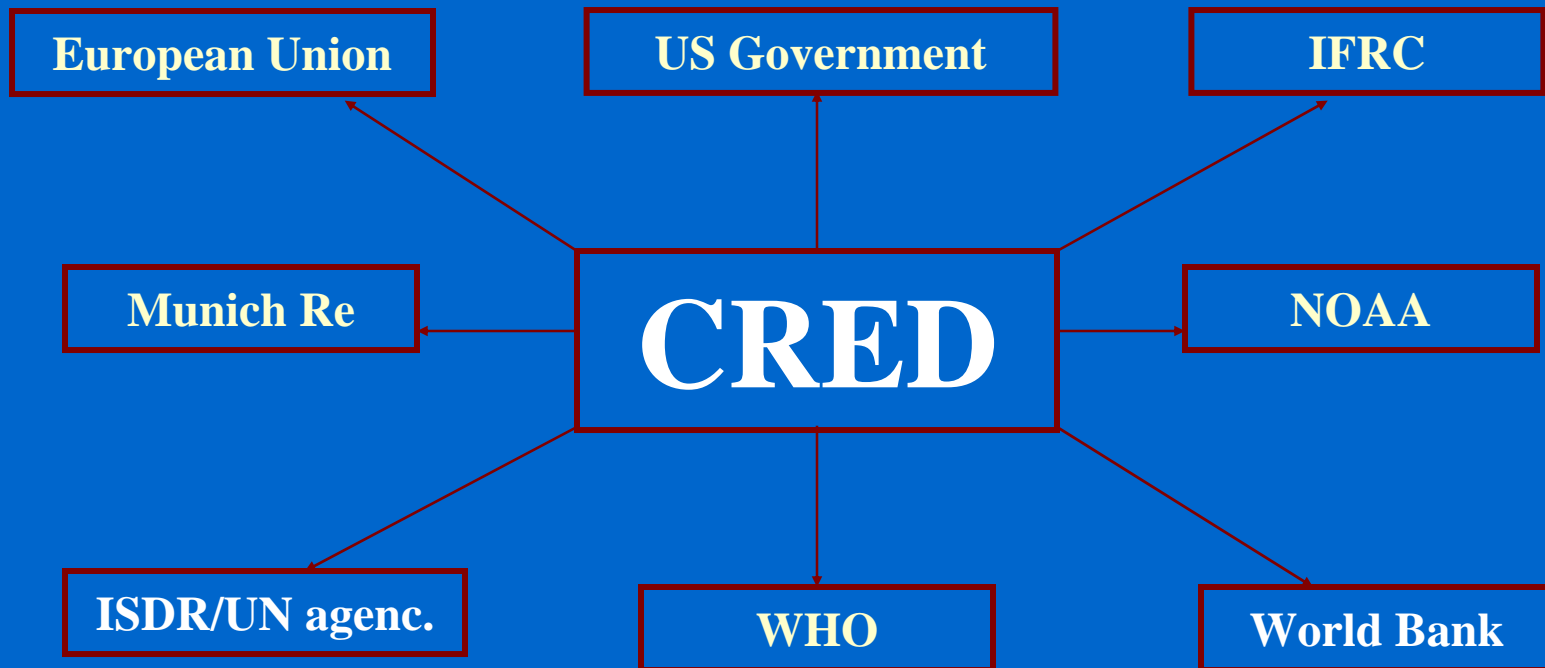
-
-
-
-
-
-
-
-

-
-
-

CONTEXT

**EM-DAT developed and maintained by
CRED, Department of Public Health,
Université catholique of Louvain
(Brussels, Belgium)**

COLLABORATION NETWORK



EM-DAT: HISTORY

1988 : Creation of EM-DAT database, with the initial support of WHO and Belgian Government

Aim: Serve the purposes of humanitarian action at national and international levels

1999: Collaboration between OFDA/USAID

Aims: (i) Complete the EM-DAT database, (ii) Validate content & place it on a dedicated website to provide users a reliable source of disaster data

2002: NOAA assists CRED in developing web-based services to allow dynamic display of EM-DAT as well as its online management

-
-
-

EM-DAT

**EM-DAT is the international and most
important publicly
available source of disasters data**

www.em-dat.net

EM-DAT: CONTENT

EM-DAT contains core data on the occurrence and effects of over 15,700 disasters from 1900 to present, including:

- Natural disasters (63%)**
- Technological disasters (37%)**

-
-
-

DISASTER DEFINITION

Disasters in EM-DAT are defined as:

“a situation or event which overwhelms local capacity, necessitating a request to the national or international level for external assistance, or is recognised as such by a multilateral agency or by at least two sources, such as national, regional or international assistance groups and the media”

-
-
-

EM-DAT: CRITERIA

- **10 or more people reported killed**
and/or
- **100 or more people reported affected**
and/or
- **Call for international assistance/declaration of a state of emergency**

EM-DAT: CONTENT (1)

(1) Disaster identification and information

Disaster number, disaster group/type/sub-type, name, criteria

(2) Spatial information

Country, continent, location, latitude/longitude

(3) Temporal information

Start - end date, local time

(4) Additional information

Origin, associated disasters, scale/value

EM-DAT: CONTENT (2)

(5) International status

OFDA/EU response, request for int. assistance, disaster/emergency declaration

(6) Human and economic impact

Figures on deaths, injured, homeless, affected, estimated damage (direct/indirect and sectors), insured losses, reconstruction cost, aid contribution, disaster impact, sectors affected

(7) Sources and comments

-
-
-

DATA COLLECTION

Database is validated and updated daily and compiled from various sources according a priority list

MAIN DATA SOURCES

- United Nations (OCHA, IRIN, WHO, ...)
- Governmental sources (Official country figures)
- US Government (OFDA, NOAA, ...)
- IFRC and NGO's
- Reinsurance Companies (SwissRe, MunichRe)
- Insurance Magazine (Lloyd Casualty Week)
- Research Centres
- Press (Reuters, AFP)
- Private/other

SPECIFIC DATA SOURCES

- **Earthquake: USGS database**
- **Floods: Darmouth Flood Observatory (DFO)**
- **Epidemics: WHO Diseases Outbreak News**
- **Economic losses: ECLAC and Reinsurance companies**
- **Insured losses: Reinsurance companies, LCW**
- **Other databases or information sources (i.e. ReliefWeb)**

SITE STRUCTURE

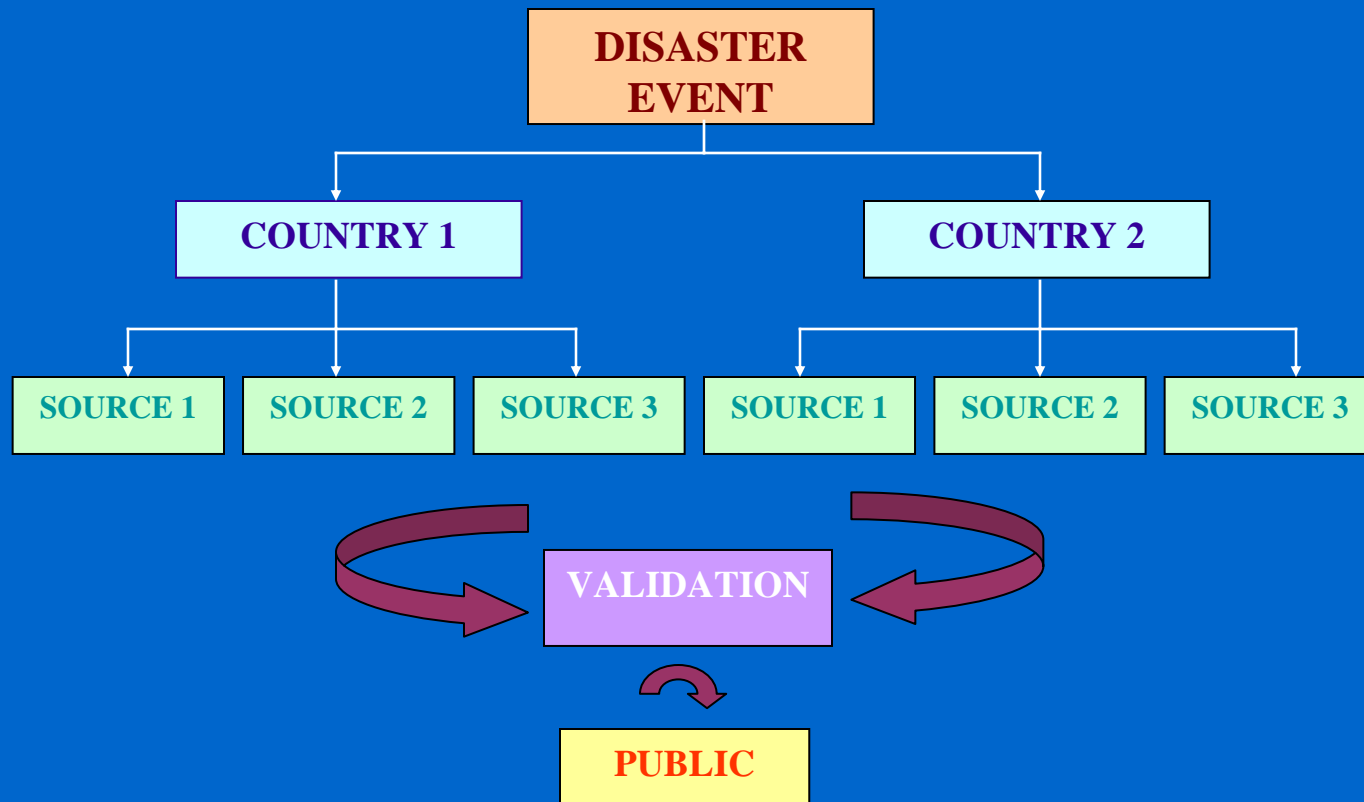
(1) The “managers” section is where CRED can develop their databases, edit material, and send e-mail updates, etc.

= > Data entry

(2) The “mainpage” is designed to allow visitors to access charts, tables, download data, as well as sign-up/register to receive e-mail notices

=> Visualization

DATA ENTRY/METHODOLOGY



METHODOLOGY

- **At least 2 sources to confirm figures**
- **Figures validated from priority sources but can be completed by secondary ones**
- **Secondary sources can be priority ones depending of the updating of reports**
- **Monthly validation process**
- **Internal cross error checking (testing phase)**
- **Figures available for the public every month**
- **Yearly quality data control**

EM-DAT: VISUALIZATION

Users can access different search possibilities

- (1) Country profiles***
- (2) Natural and technological disasters profiles***
- (3) Disasters list***
- (4) Advanced search***
- (5) Maps**
- (6) Trends figures**

* Dynamic

1. COUNTRY PROFILES

Provide:

- **Top 10 tables of Natural and Technological Disasters in a country, sorted by numbers of people killed, total affected and economic damage losses**
- **Summarized Table of natural Disasters in a country**

2. DISASTER PROFILES

Provide:

- **Top 10 table of countries affected by a disaster type, sorted by number of people killed, total affected and by economic damage**
- **Summarized Table of a specific disaster (i.e. Earthquakes sorted by Continent from 1900 to current year)**

3. DISASTER LIST

Provide basic information from a selected disaster set

The selected Dataset is:

Country(ies)	all
Year(s)	2006;
Disaster type(s)	Drought; Earthquake; Epidemic; Extreme Temperature; Famine; Flood; Insect Infestation; Slides; Volcano; Wave / Surge; Wild Fires; Wind Storm;

Here is the list of disasters from the working dataset

There are 25 entries. ([Download](#) the Rawdata used to build the list)

Dates: Start date End date	Country:	Location:	Disaster: Type SubType Name	Numbers:	DisNo:
31/Jan/2006	Afghanistan	Kohistan district (Badakhshan province)	Slides Avalanche	15 killed	2006-0045
13/Jan/2006	Afghanistan	Sar-i-Pul, Badakhshan provinces	Slides Landslide	13 killed 300,000 affected	2006-0021
Feb/2006	Afghanistan	Badakhshan province	Wind Storm Winter	42 killed	2006-0068
1/Jan/2006 5/Jan/2006	Afghanistan	Kabul, Dadakhshan Baghlan and othe provinces	Wind Storm Winter		2006-0029
Jan/2006	Angola	Huila, Benguela provinces	Flood	225 homeless	2006-0023
Jan/2006	Australia	Victoria state	Wild Fires Forest	2 killed 81 homeless	2006-0057
9/Jan/2006 30/Jan/2006	Australia	Kimberley and Pilbara Coast, Gascoyne, Swanland regions	Wind Storm Cyclone Clare	1,500 affected	2006-0043
25/Jan/2006 30/Jan/2006	Bolivia	City of La Paz, Los Yungas, Luribay, Papel Pampa, San Pedro de Curahuara (La Paz), Viloma, Aymaya, Tiraque (Cochabamba) Jorochito, Tiquipaya, El Espino, Boyuibe, Pailas, Cuatro Canadas, San Julin, Okina (Santa Cruz), Trinidad, San Borja (Beni), Pando, Potosi, Chuquisaca, Tajira	Flood	13 killed 175,000 affected 35,000,000 US\$ damage	2006-0039
1/Jan/2006	Bolivia	El Salao	Flood	29 injured 475 affected	2006-0015

4. ADVANCED SEARCH

Provide 3 search options: Frequency, Cross Tabulation and Totals

Advanced Search

The selected Dataset is:

Country(ies)	all
Year(s)	2006;
Disaster type(s)	Drought; Earthquake; Epidemic; Extreme Temperature; Famine; Flood; Insect Infestation; Slides; Volcano; Wave / Surge; Wild Fires; Wind Storm;

Step 2 :

Please choose one of the following 3 options.

From the selected dataset, I want to know,

the Number of disasters that occurred by

the Number of disasters that occurred by and by

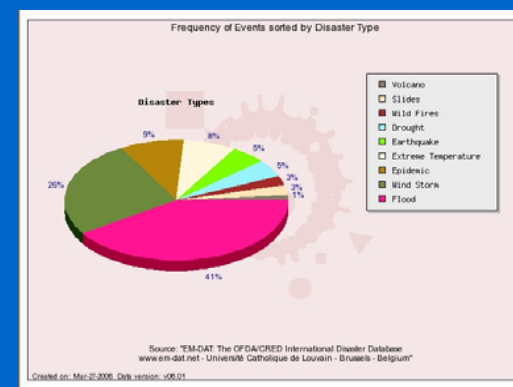
the Total number of by and by

(Download or Graph it.)

	Drought	Earthquake	Epidemic	Extreme Temperature	Flood	Slides	Volcano	Wild Fires	Wind Storm	Total
2005	149	76241	3144	2020	6135	649	3	47	4672	93060
Total	149	76241	3144	2020	6135	649	3	47	4672	93060

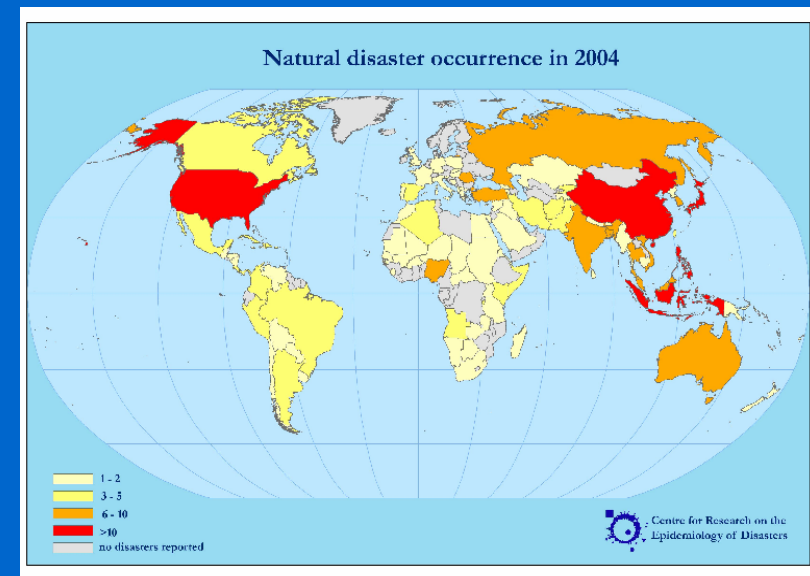
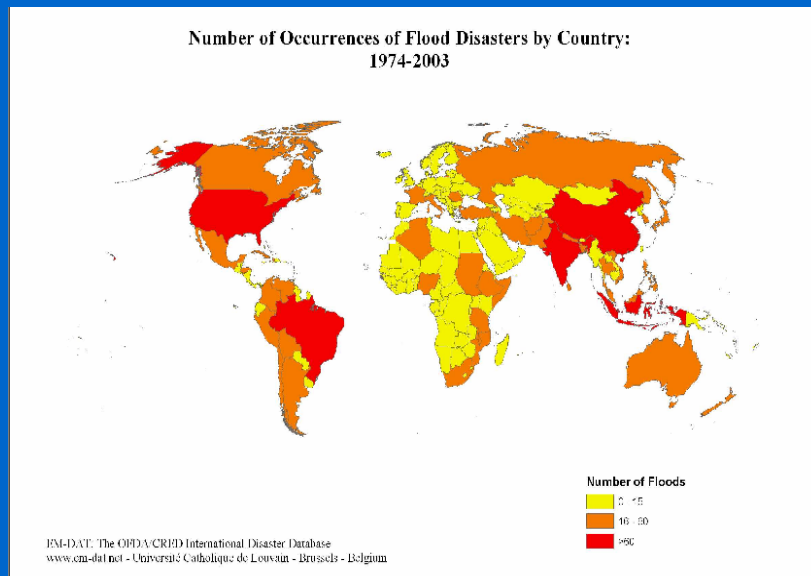
Created on: Mar-27-2006. - Data version: v06.01

Source: "EM-DAT: The OFDA/CRED International Disaster Database
www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium"



6. DISASTER MAPS

The maps provide geographical summaries of disaster events and impacts over the last 30 years



OTHER INFORMATION

- **Conditions and terms of use**
- **Glossary**
- **Guidelines/methodology**
- **Special issues (i.e. Tsunami, windstorms)**
- **Meeting reports**
- **Related EM-DAT documents**
- **Press Citations**
- **Disasters of the week**

USERS OF EM-DAT

- **International and national community**
- **Research centres**
- **Universities**
- **Private sectors**
- **etc. ...**

EM-DAT : TAG MEMBERS

EM-DAT Technical Advisory Group

Columbia University

World Bank

FAO

WHO

UNDP

USAID/OFDA

NOAA

UN/ISDR

OCHA/ReliefWeb

IFRC

-
-
-

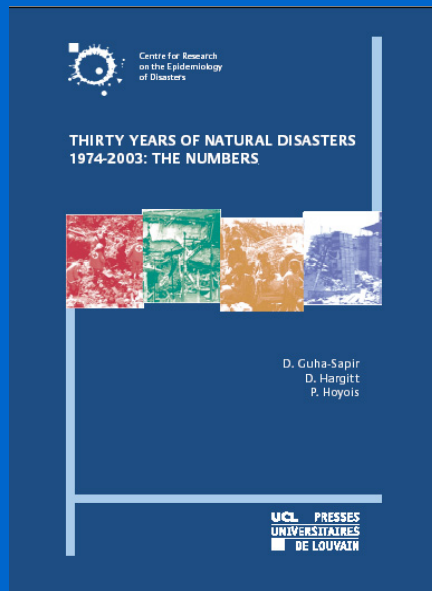
TAG : OBJECTIVES

- **Once a year**
- **Objectives: to discuss specific issues related to EM-DAT in order to enhance the database and improve its services**

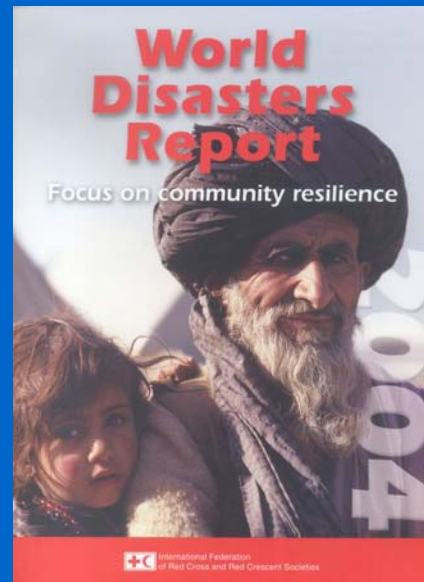
EM-DAT: CREDIBILITY

- Long experience in data collection and management
- Normative rules, clear definition
- Clearly-stated methodology
- Validation methods and tools
- Transparency
- Automatization: data entry and outputs

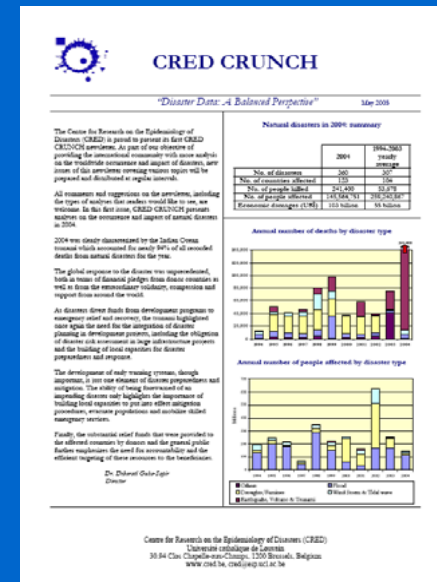
EM-DAT: CRED Output Products



**CRED
Publication**

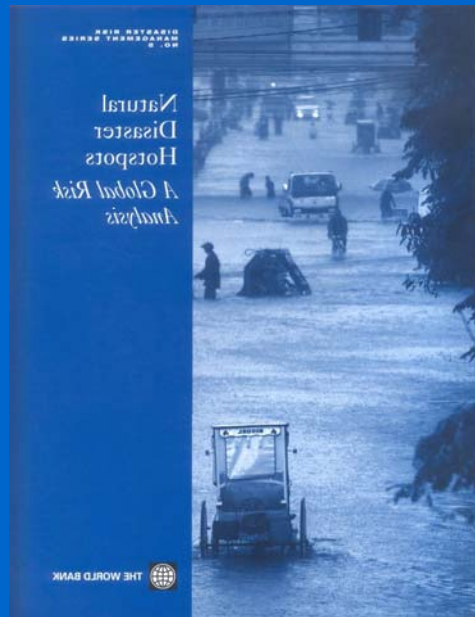


**World Disaster
Report - stat. annex**

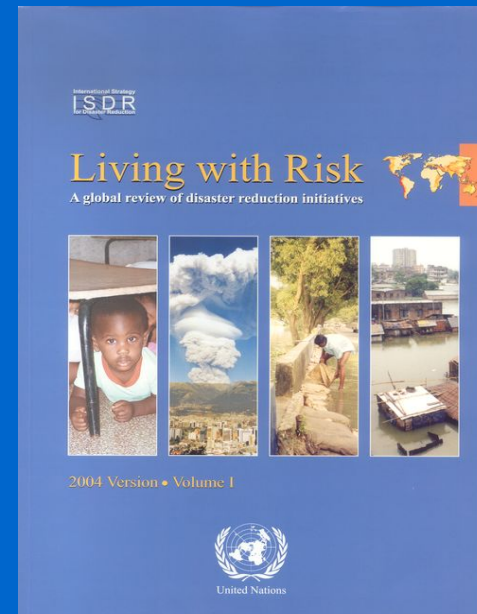


**CRED Crunch
Newsletter**

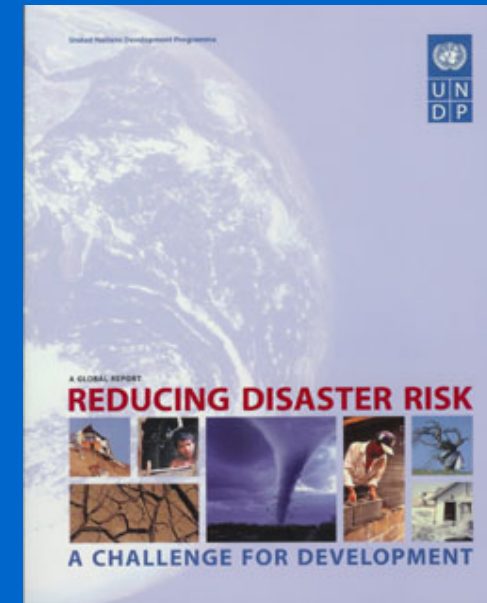
EM-DAT: External Output Products



**Natural Disaster
Hotspots, WB**



**Living with Risk
ISDR**



**Reducing Disaster
Risk, UNDP**

UNDP/CRED-Bangkok-April 2006

-
-
-

For more information:

Centre for Research on the Epidemiology of Disasters (CRED)

Université catholique de Louvain

Ecole de Santé Publique

30.94 Clos Chapelle-aux-Champs

1200 Bruxelles - Brussels

Belgique - Belgium

Tel: +32-2-764-33-27

Fax: +32-2-764-34-41

E-mail: cred@esp.ucl.ac.be

Web-site: <http://www.cred.be> and/or [http:// www.em-dat.net](http://www.em-dat.net)