



Systematically accounting and assessing disaster losses and impacts

Headline news

The economic damage from natural disasters has reached roughly 265 billion dollars, or about 21 trillion yen, in the first six months of 2011, surpassing the previous full-year record of 220 billion dollars in 2005, according to leading reinsurer Munich Re.

Global Disaster databases: EMDAT

EM-DAT
The International Disaster Database
Centre for Research on the Epidemiology of Disasters - CRED

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Home > Search Details Disaster List

Published by Super AdminEMDAT

Search Details

Country(ies): Belgium;

Year(s): 1970; 1971; 1972; 1973; 1974; 1975; 1976; 1977; 1978; 1979; 1980; 1981; 1982; 1983; 1984; 1985; 1986; 1987; 1988; 1989; 1990; 1991; 1992; 1993; 1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011;

Disaster type(s): Drought; Earthquake (seismic activity); Epidemic; Extreme temperature; Flood; Insect infestation; Mass movement (dry); Mass movement (wet); Storm; Volcano; Wildfire;

There are 44 entries.

Dates		Geo		Disaster			Numbers			
Start	End	Country	Location	Type	Sub-Type	Name	Killed	Pop. Affected	Est. Damage (US\$ Million)	DisNo
00/07/1976	00/00/1976	Belgium		Drought	Drought					1976-1962
13/04/1992	13/04/1992	Belgium		Earthquake (seismic activity)	Earthquake (ground shaking)				100	1992-0093
08/11/1983	08/11/1983	Belgium	Seraing (Liège)	Earthquake (seismic activity)	Earthquake (ground shaking)		2	1030	50	1983-0146
00/01/2009	00/01/2009	Belgium		Extreme temperature	Cold wave		1			2008-0633
00/06/2006	00/07/2006	Belgium		Extreme temperature	Heat wave		940			2006-0383
27/12/2005	30/12/2005	Belgium		Extreme temperature	Extreme winter conditions					2005-0713

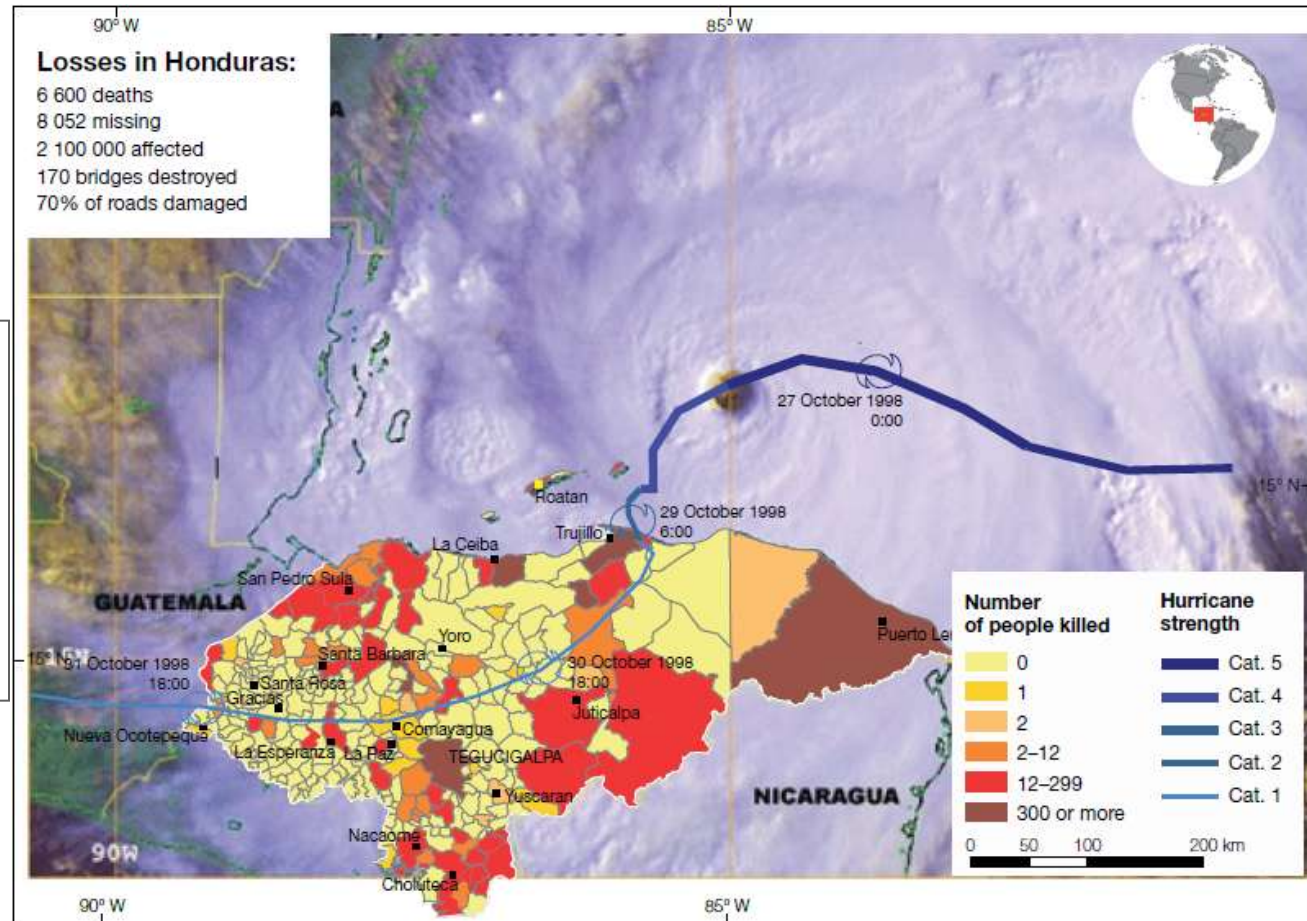
An incomplete picture of disaster losses and impacts

- **EM-DAT:** Public domain coverage of large-scale mortality. Weak coverage of smaller disasters. Inconsistent reporting of economic loss.
- **NAT-CAT** and **SIGMA:** Re-insurance industry databases. Insured losses in developed markets. Restricted access.
- **ECLAC methodology evaluations:** comprehensive data for selected large disasters
- **National data:** heterogeneous, dispersed and inaccessible data held by governments, NGOs, universities and others.

National databases: Deconstructing disasters



EM-DAT: Global level of Observation, National level resolution



National database: Local level of Observation, municipality level resolution

A better picture of disaster losses and impacts

- Richer set of indicators
- Wider coverage of small and medium scale disasters.
- Disaggregation of data to usable units (county/municipality)
- Collected and validated locally within the country

DeCesultar on-line Query/Search - Windows Internet Explorer

http://deinventar/DeCesultar/result.jsp

Deinventar | Home | Region | Login | Logout | Download | Help | About

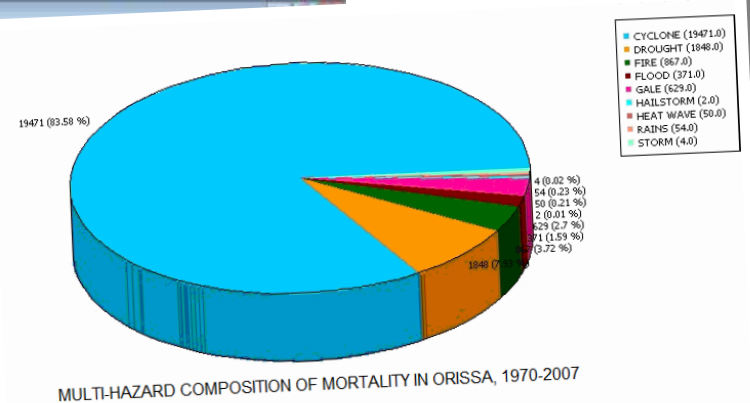
English | Español | العربية | हिन्दी | বাংলা | বাংলা

Query | View data | View map | Charts | Statistics | Reports | Thematic | Crosslinks

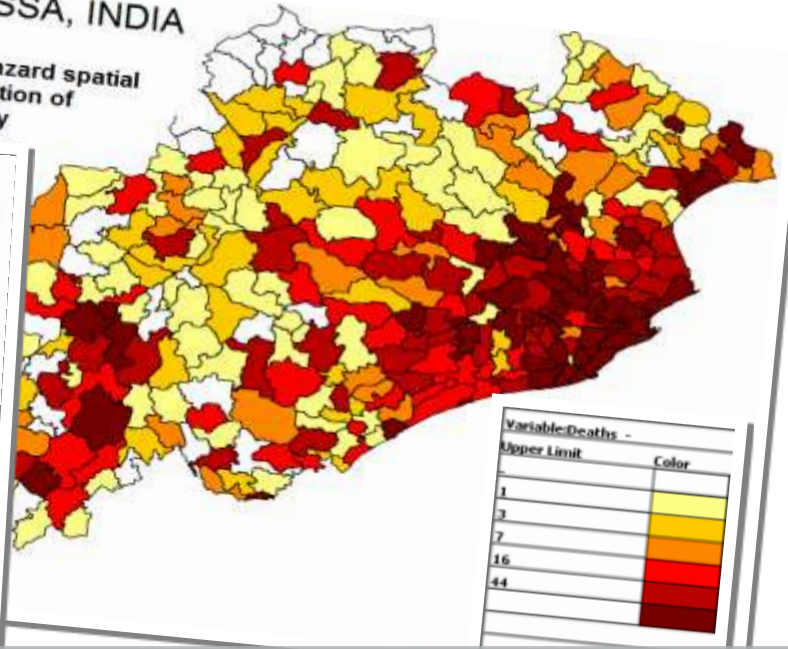
Region: Orissa - [OR]

Data: Query Results

Serial (Click for Details)	Event	State	District	Block	Date	Location	Comments	Deaths Injured
1007	CYCLONE	Orissa	Jajpur	Bari	1970/06/18	Ram panchayat		1 2
1008	CYCLONE	Orissa	Balasore		1970/11/19			11
1009	GALE	Orissa	Kendrapara	Kandrapara	1985/03/31	Chhoti Village	Many trees are fell on the road.	
1010	STRONG WIND	Orissa	Cuttack	Cuttack Sadar	1985/04/30	Cuttack Sadar		6
1011	STORM	Orissa	Jagatsingpur	Jagatsingpur	1985/04/29	Jagatsingpur		2
1012	GALE	Orissa	Jajpur	Jajpur	1985/04/29	Kalapara,Chengunia Patana,Dhabahal		2 200
1013	STORM	Orissa	Bhadrak	Tihak	1985/05/04	Nuananda		4
1014	GALE	Orissa	Keonjhar	Jhumpura	1985/05/07	Nagapani		1
1015	GALE	Orissa	Keonjhar	Jhumpura	1985/05/07	Haldol		1
1016	STORM	Orissa	Jajpur	Jajpur	1985/05/11	Jajpur		
1017	CYCLONE	Orissa	Sambalpur	Ohankauda	1981/05/11	Goala,Atabira, Chiplina	07 villages affected in the above cyclone an hailstorm.8297 houses destroyed and 0569 hectre foodgran destroyed.11kv and 33kv power lines affected in the area.Many peopl has injured due to the cyclone,hailstorm.	
1018	STORM	Orissa	Balasore	Nilgiri	1971/04/30	Tenda village,Nilgiri	Many houses were affected and many bird was dead.	
1019	STORM	Orissa	Jajpur	Kasulpur	1985/05/25	Simalpur	The above 2 people died when one cocoon tree has fall down on them.	
1020					1985/05/28	Many areas.		



ORISSA, INDIA
Multi-hazard spatial distribution of mortality



Typical contents of a DesInventar dataset

Region: Sri Lanka - [sl] DataCard: << < > >> Find serial: Back to Search Results

Serial: CY1978 Date (YMD): 1978 11 23 Duration (d): 0 Source: District Office/ DI19781125P1/ DI1978112

Province: Eastern District: Batticaloa Division:

Event: CYCLONE Location: GLIDNumber:

Cause: Description of Cause:

EFFECTS

Deaths: 578 Missing: 0 Injured: 0 Magnitude:

Affected: 271000 Relocated: 0 Houses Damaged: 11980 Losses \$Local: 0

Evacuated: 0 Victims: 0 Houses Destroyed: 3430 Losses \$USD: 0

AFFECTED SECTORS

Transportation Communications Relief

Agriculture Water supply Sewerage

Power and Energy Industries Education

Other sectors Health sector

Damages in roads Mts: 0.0

Damages in crops Ha.: 0

Lost Cattle: 0

Education centers: 0

Hospitals: 0

OTHER LOSSES: Latitude: 0 Longitude: 0

COMMENTS:

DI19781123 DN19781216P1 20080806

By: SHANI Date: 2008-08-06

Human Lives & General	Buildings	Agriculture & Livestock	Relief	Transportation	Water Supply & Irrigation
No of Males Affected:	0				
No of Females Affected:	0				
No. of males dead:	0				

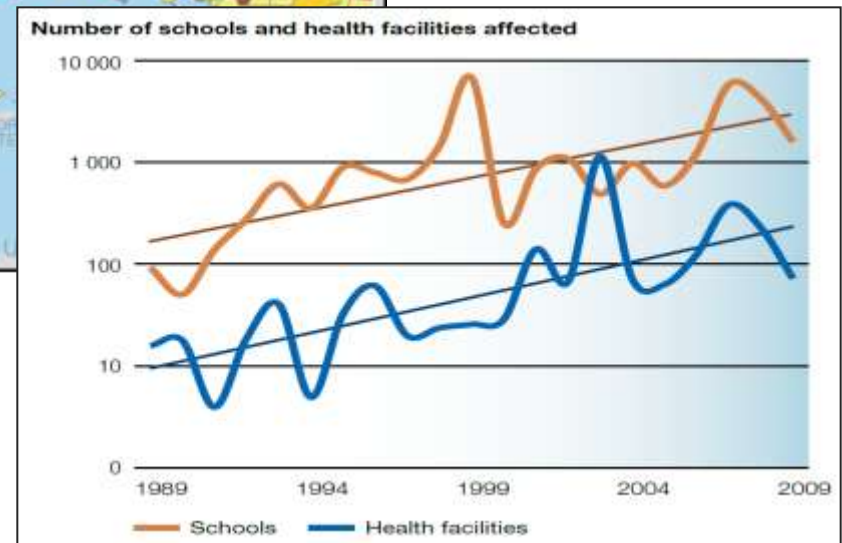
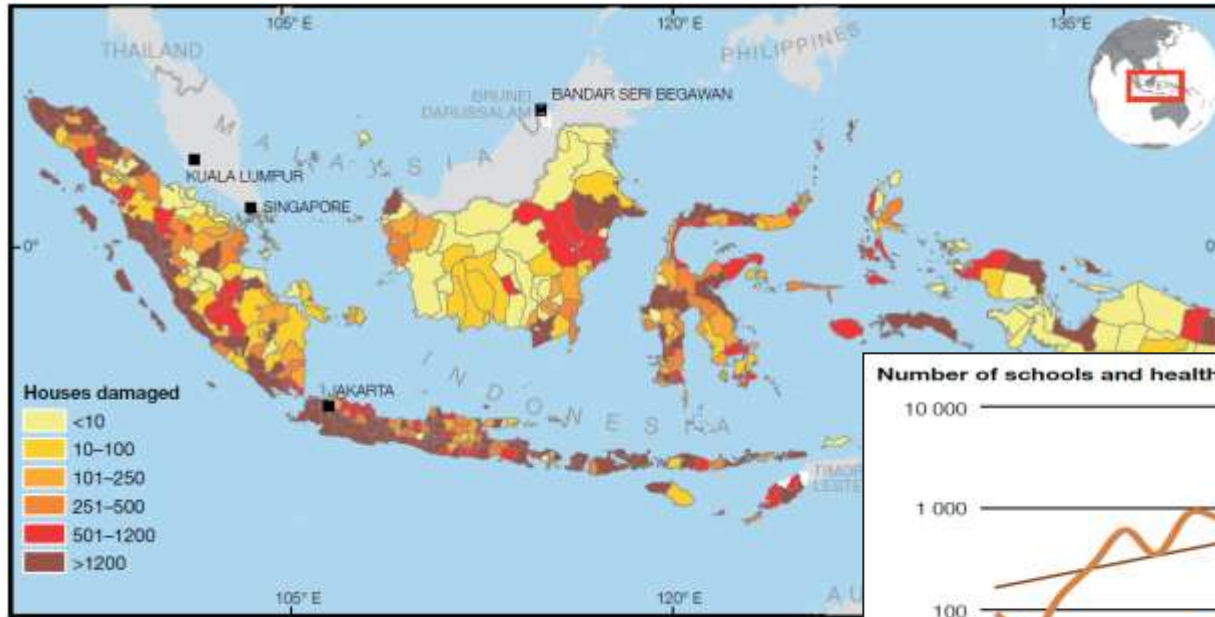
Actual data capture screen.

Standard Effects (16 quantitative indicators, 12 qualitative)

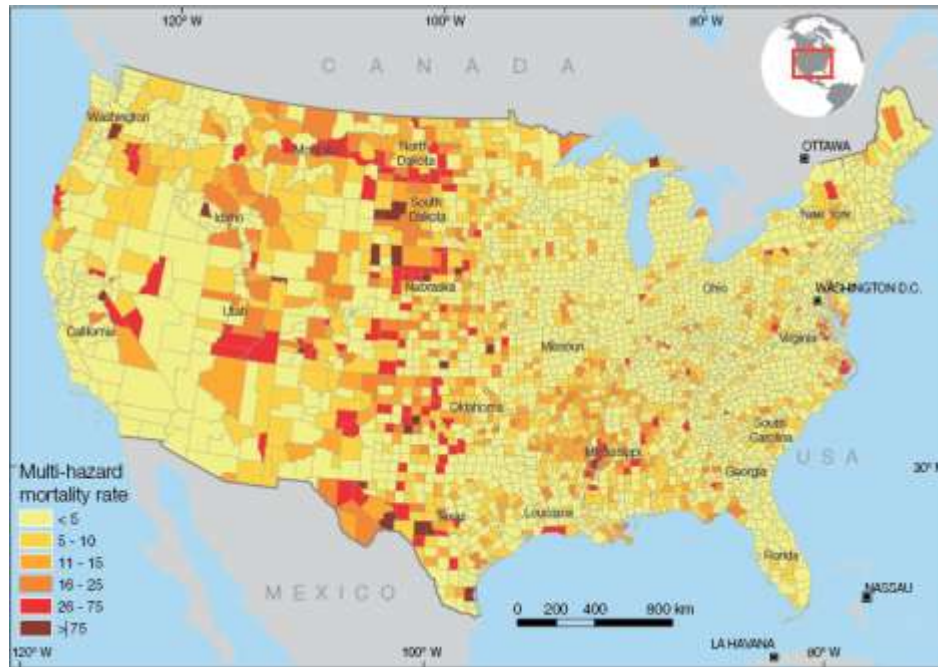
Global databases: 3-5 indicators.

Extension (Sectorial detail information, unlimited additional indicators)

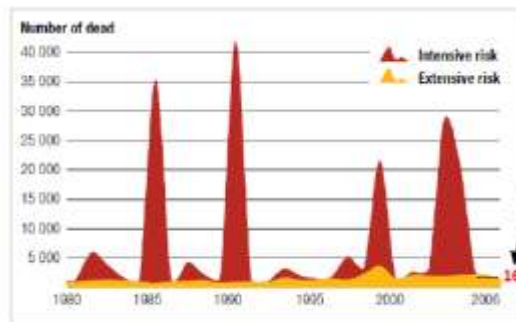
National databases: Trends and patterns of realized risk



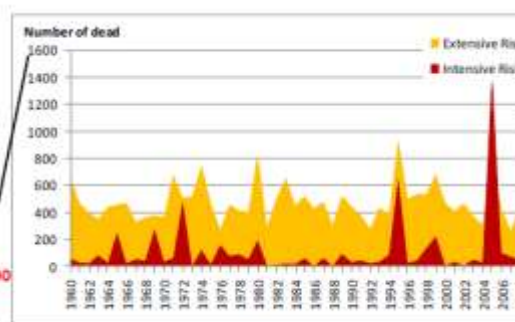
SHELDUS database in the USA



National/Local level of Observation,
County level resolution

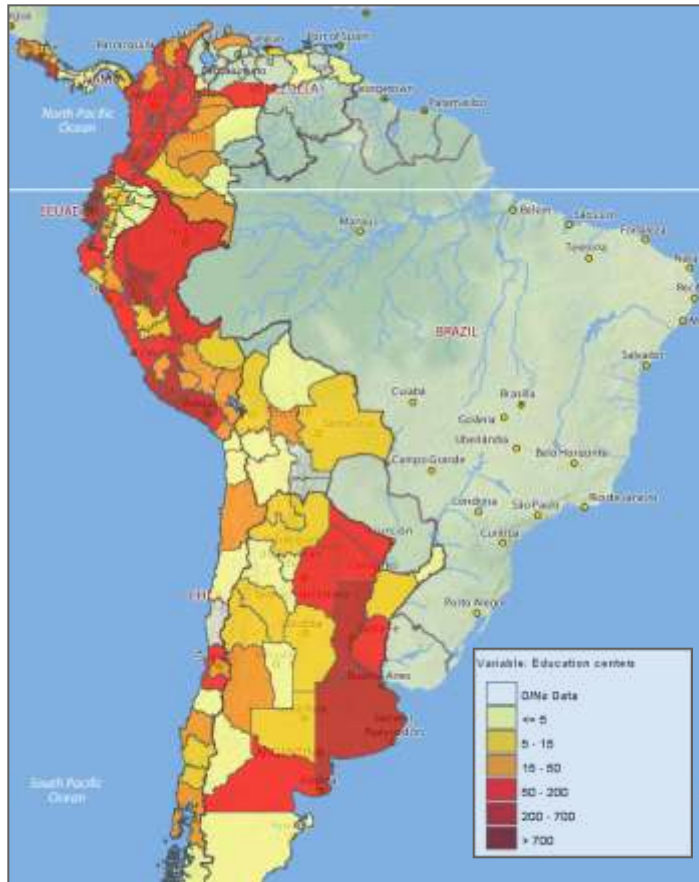


Extensive/Intensive Risk pattern in LAC-Asia Sample

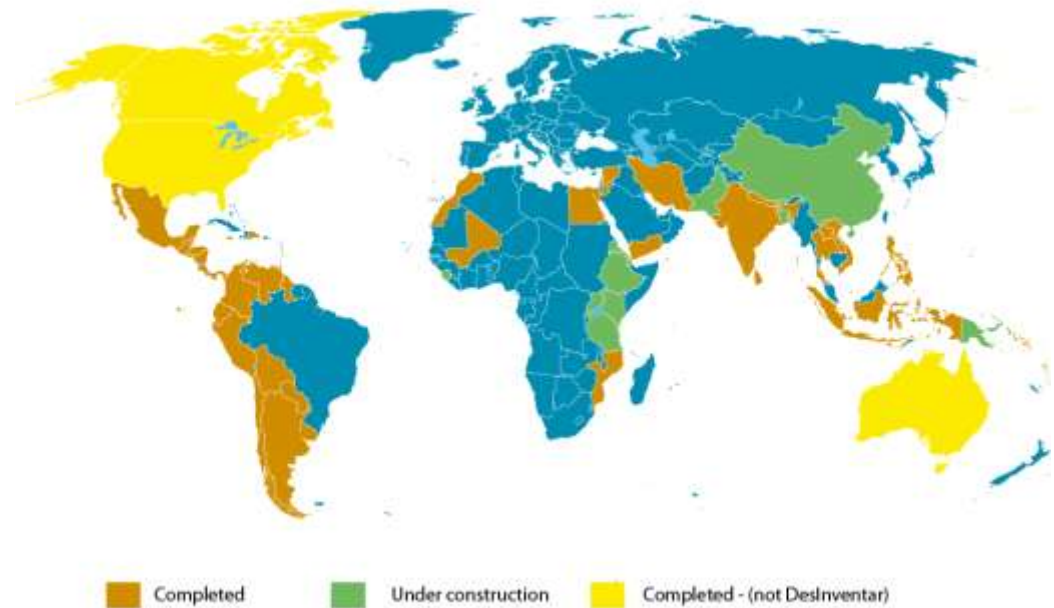


Extensive/Intensive Risk pattern in USA

UNISDR support to countries building DLDB



Number of education facilities damaged (1970-2009) per province (Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Panama, Peru, Venezuela)



Status of Progress in building National Disaster Datasets
June 2011

Informing risk governance and population


Disaster Information Management System - SRI LANKA

WELCOME to Disaster Information Management System in Sri Lanka
Search [GO](#)

ABOUT US

- What is Disaster Information Management System
- Data Sources
- Data Collection Process
- Data Validation
- Disaster Definitions
- Incident Reporting Forms
- User Manual
- Training and Awareness



Lightning

Lightning is a disaster that has occurred throughout the period with a cyclical pattern. Seasonally, too, it has taken on a cyclical pattern. Although the number of people affected, damage to houses and agricultural loss are not very high, there have been relatively high levels of death due to lightning.

LATEST DISASTER INCIDENT IN SRI LANKA

Colombo, 11 January, Sri Lanka recent flooding causes Rs. 30 billion loss
The most devastating floods that had battered the Eastern coast of Sri Lanka and wreaked havoc in most parts of the island had cost the emerging economy a staggering Rs. 30bn...

Over 200,000 acres of paddy land destroyed by floods in Sri Lanka
Heavy rains, landslides, and strong gusty winds continue to devastate several...

Unfavorable weather to continue in Sri Lanka
From yesterday onwards, due to the influence of the atmospheric disturbances, the showery weather with strong winds of times will continue over most parts of the co...

DISTRICTS PROFILES



Colombo	Gampaha
Kandy	Puttalam
Katutura	Galle
Matara	Hambantota
Ratnapura	Angara
Tirinoonstee	Batticaloa
Kegalle	Monaragala
Kurunegala	Anuradhapura
Polonnaruwa	Matale
Nuwara Eliya	Mannar
Vavuniya	Mullaitivu
Kilinochchi	

Disaster Information Management System - Sri Lanka

Welcome to ...

The Disaster Management Centre (DMC) of the Ministry of Disaster Management with technical and financial support from the Disaster Risk Management (DRM) programme of the United Nations Development Programme (UNDP) and the UNDP Regional Centre in Bangkok (RCB) has initiated the development of a database on the past disaster incidents from 1974 to date. The Disaster Information Management System is a sustainable arrangement within an institution for the systematic collection, documentation and analysis of data about losses caused by natural and man made disasters.

Please click on Following Link to Enter in to the Database:

This querying system will provide you with basic data about the effects of many types of natural disasters occurred in the country.
[Disaster Information Management System in Sri Lanka from 1974 to 1996 Date](#)

DISASTER PROFILE IN SRI LANKA

INTRODUCTION
2011 Jan 05

The disaster event profile of Sri Lanka presents how disaster events of different categories have been distributed chronologically, seasonally and spatially. Distribution wise, the overall disaster typology in Sri Lanka is not distributed evenly in terms of annual time series distribution...

[Read More...](#)

PUBLICATIONS



SRI LANKA NATIONAL REPORT ON DISASTER RISK, POVERTY AND HUMAN DEVELOPMENT RELATIONSHIP

[Read More](#)

DIFFERENT DISASTERS & THEIR IMPACTS

Drought
People Affected, Losses to Agricultural Crops
It is also important to note that major droughts occurred in 1992 and 2001.

Landslide
People Affected, Damaged and Destroyed Houses, Losses to Agricultural Crops
Until the year 2002, the annual average number of landslide incidents did not exceed 30.

Animal Attack
People Affected, Damaged and Destroyed Houses...
However, unlike people affected, deaths appear to be fluctuating within the last...

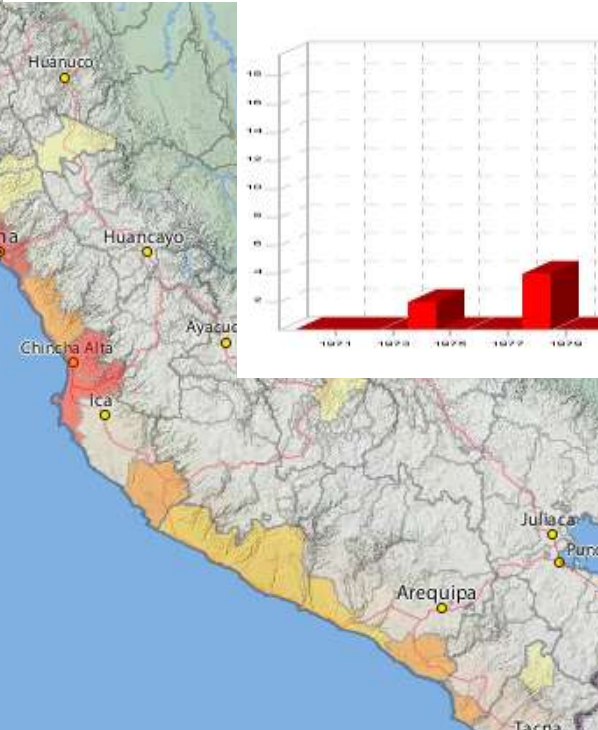
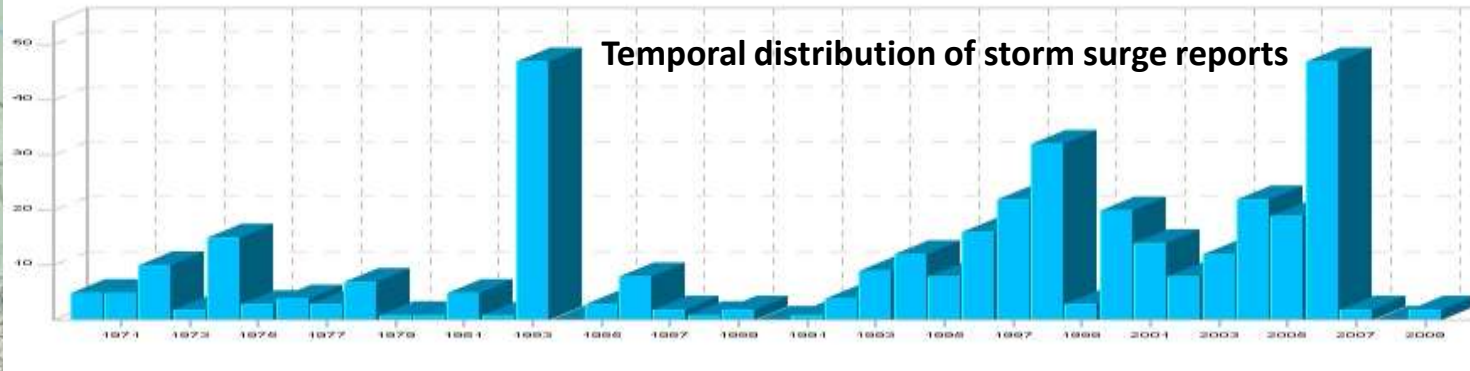
Partner Organisations


100%

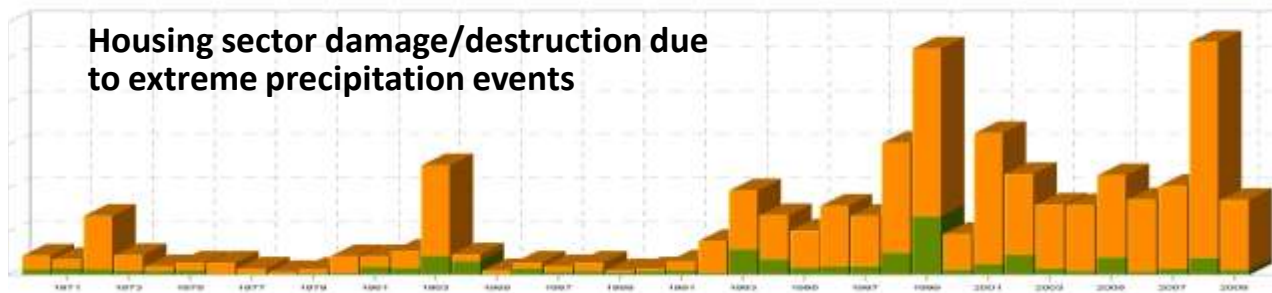
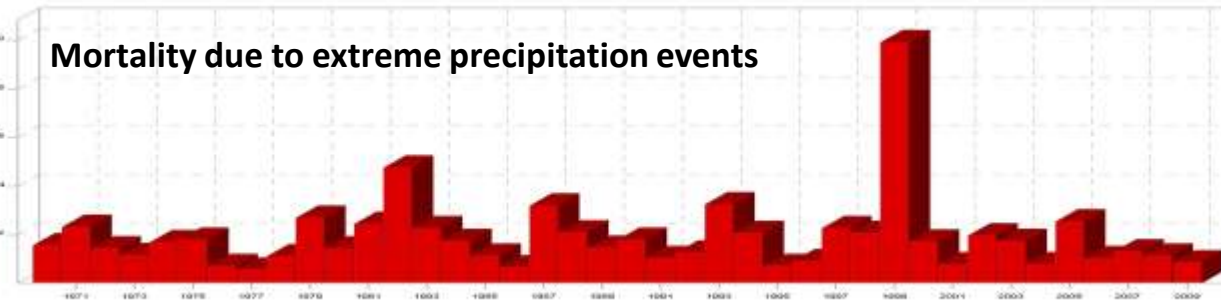
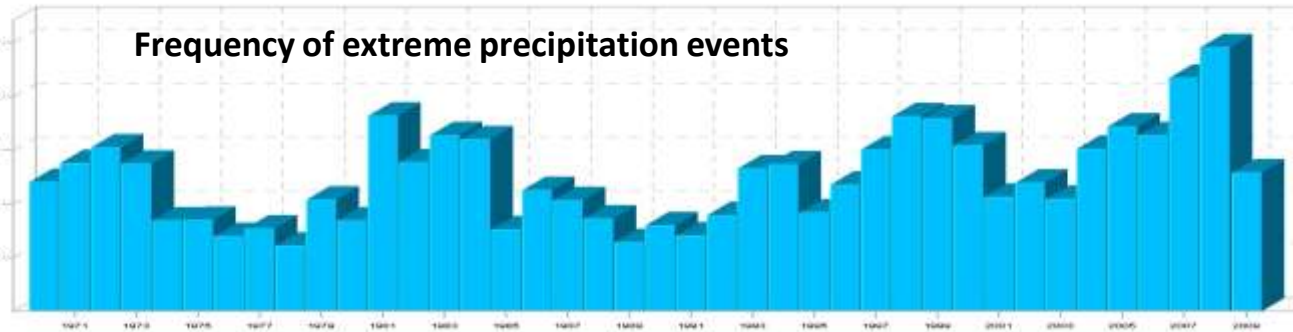
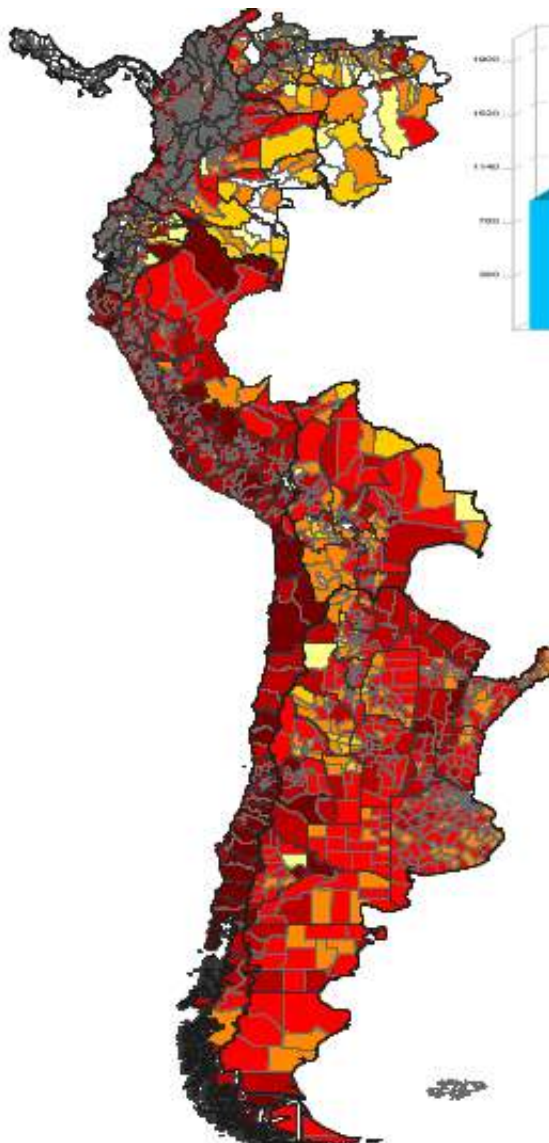
Addressing the challenges

- Disaster loss data informing risk assessment and investment in DRR
- Account for both intensive **and** extensive disaster losses
- National governments institutionalising disaster loss accounting systems
- Standardised criteria, indicators and definitions to enable comparative/cross-boundary studies
- From physical damages to economic loss
- A global picture built from the local level upwards

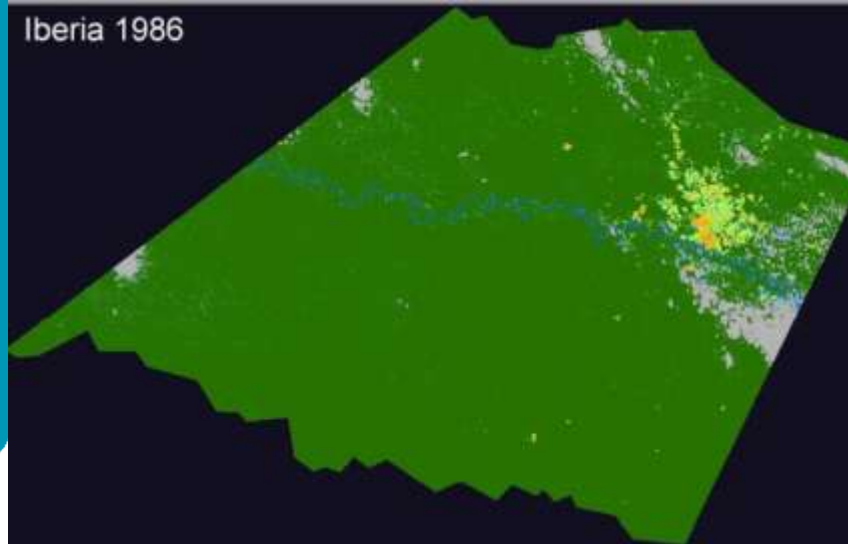
DRR and CCA: Storm surges in Peru (1970 – 2009)



Weather related disasters in S. America (1970 – 2009)

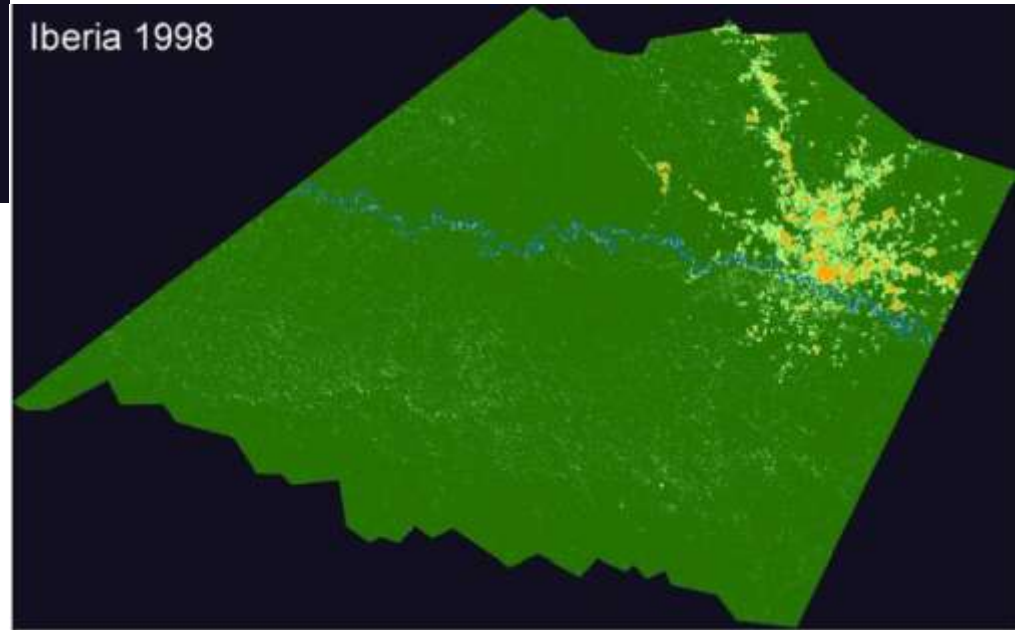


Climate Change Adaptation and Environment.



Environmental degradation and Disaster Risk,
A quantitative approach

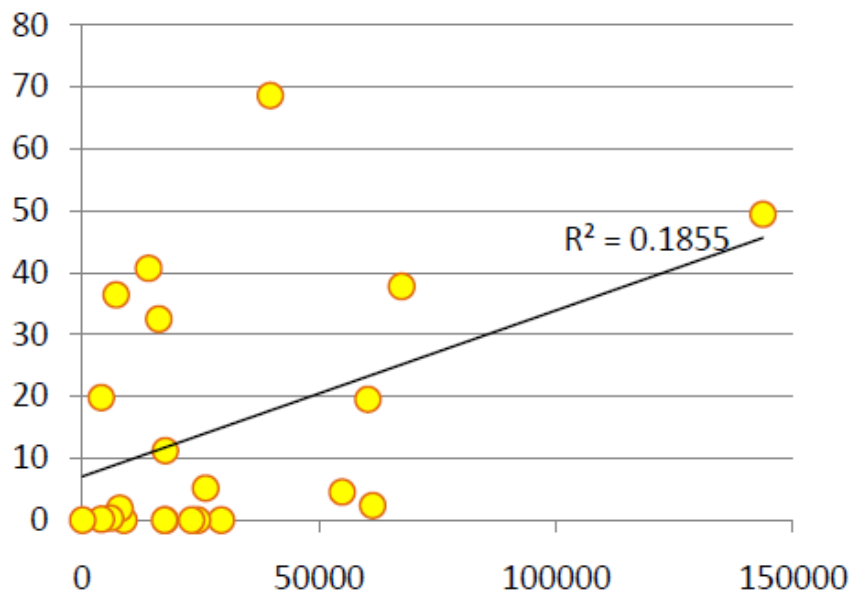
Unclassified Forest Water Cloud Bare soil Agriculture



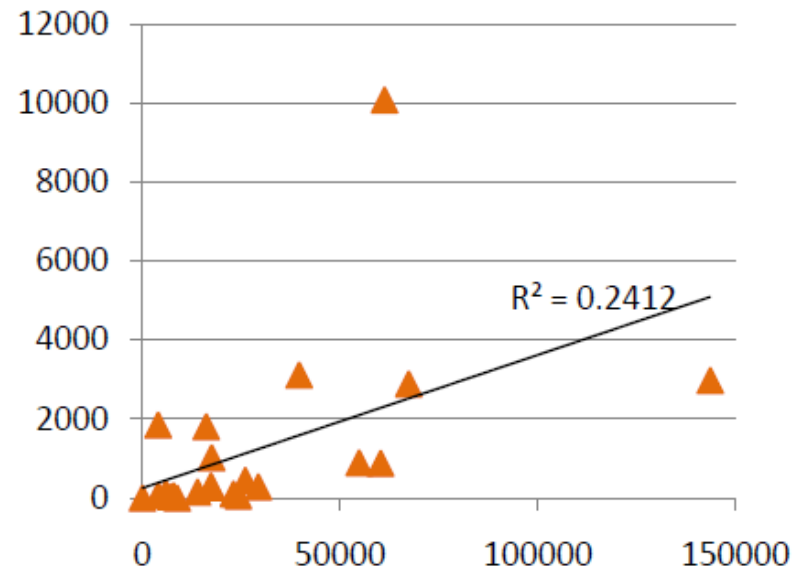
Classified Landsat images acquired on 1986 (left) and 1998(right). The deforestation and environmental degradation can be seen easily as the lighter areas of the image, where forests have been turned into agricultural and bare soil.

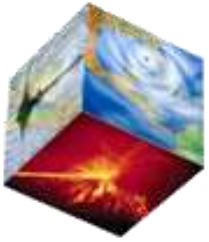
Drivers of Risk: environmental degradation

Deforestation - Extensive Risk Mortality



Deforestation - Extensive Risk Housing impact

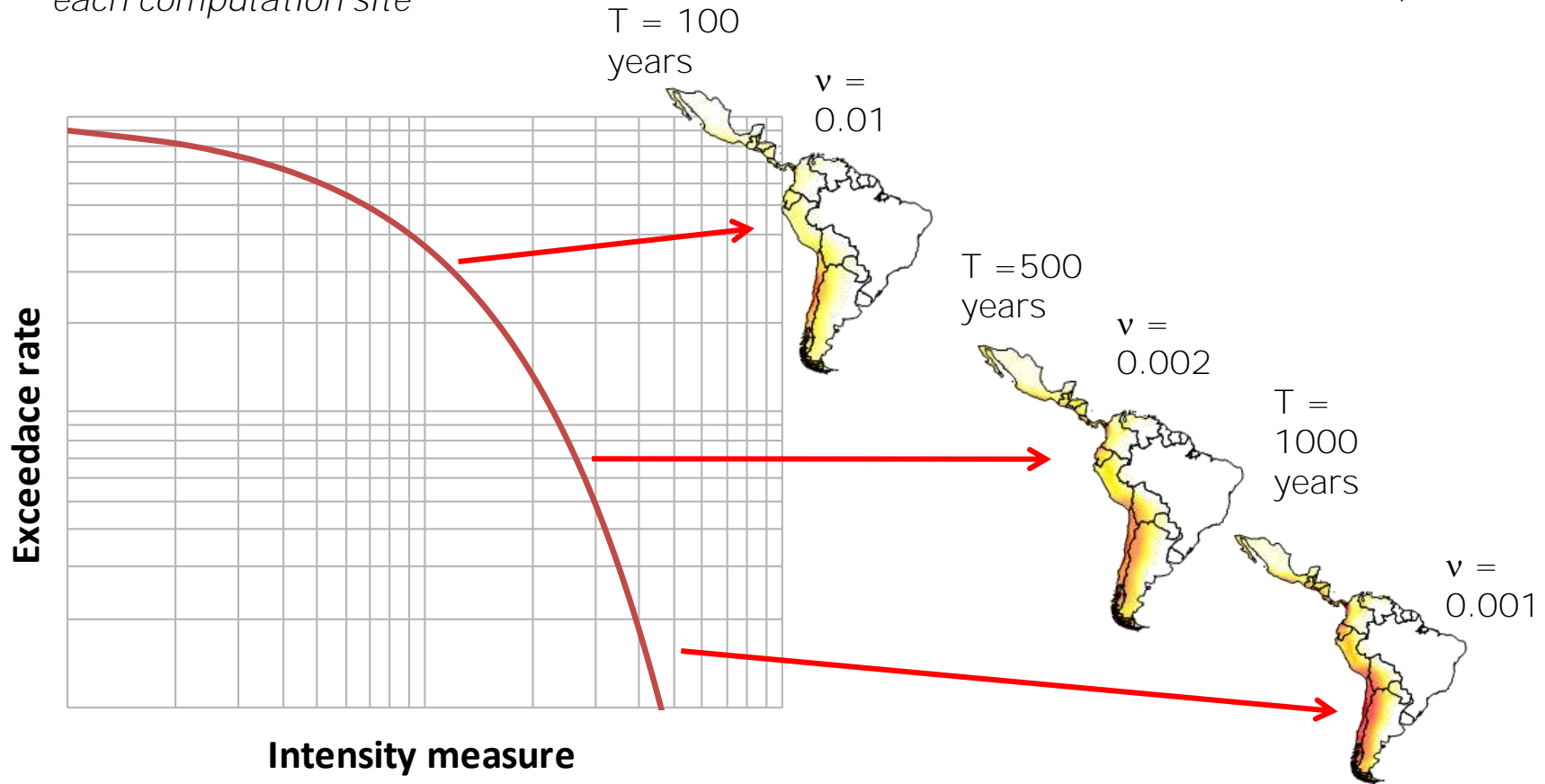




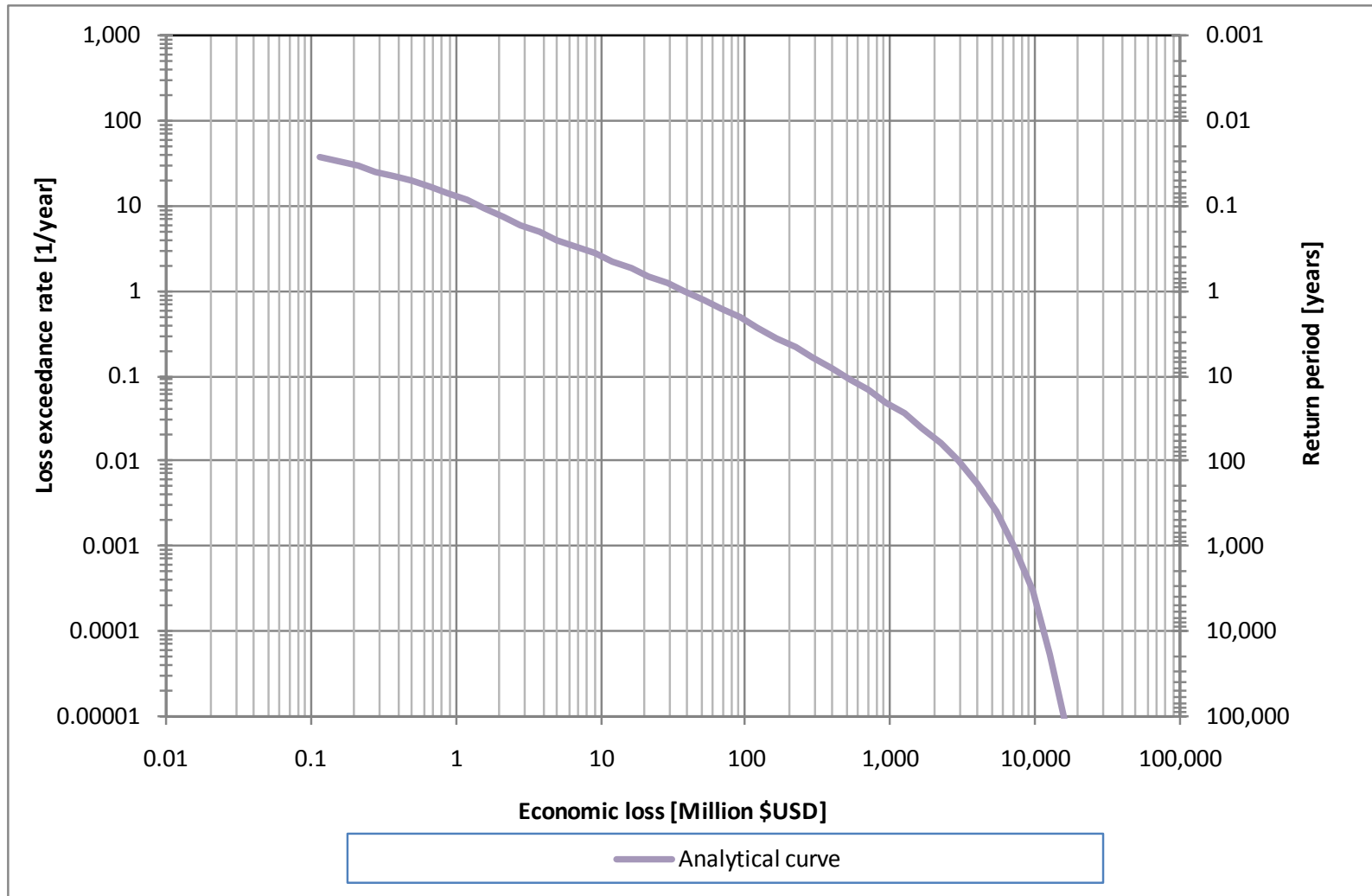
CAPRA: Probabilistic Risk Assessment And Hybrid Risk Assessment Models

*Intensity exceedance curve for
each computation site*

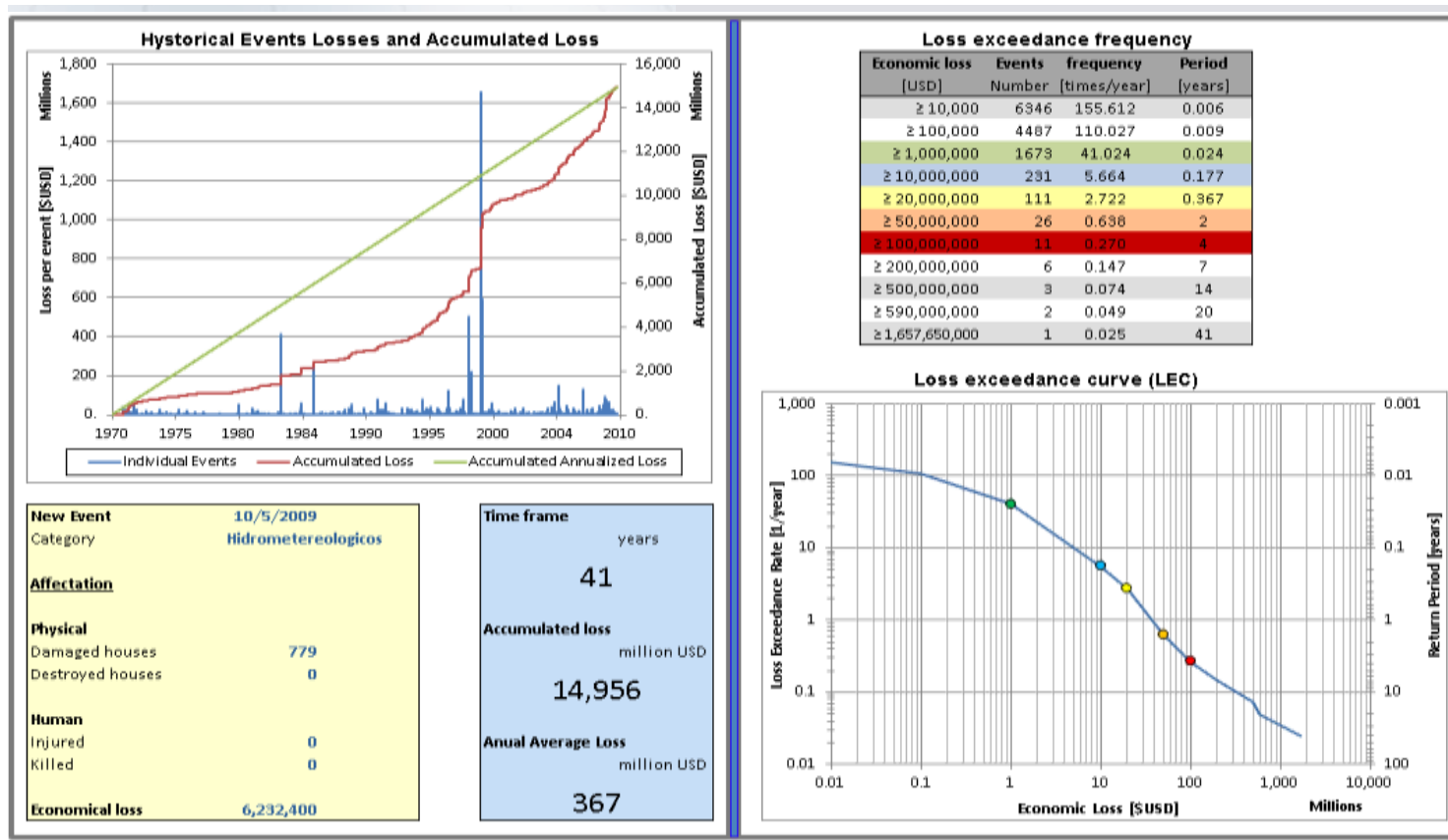
*Hazard maps for several return
periods*



Modeled Loss Exceedance Curves

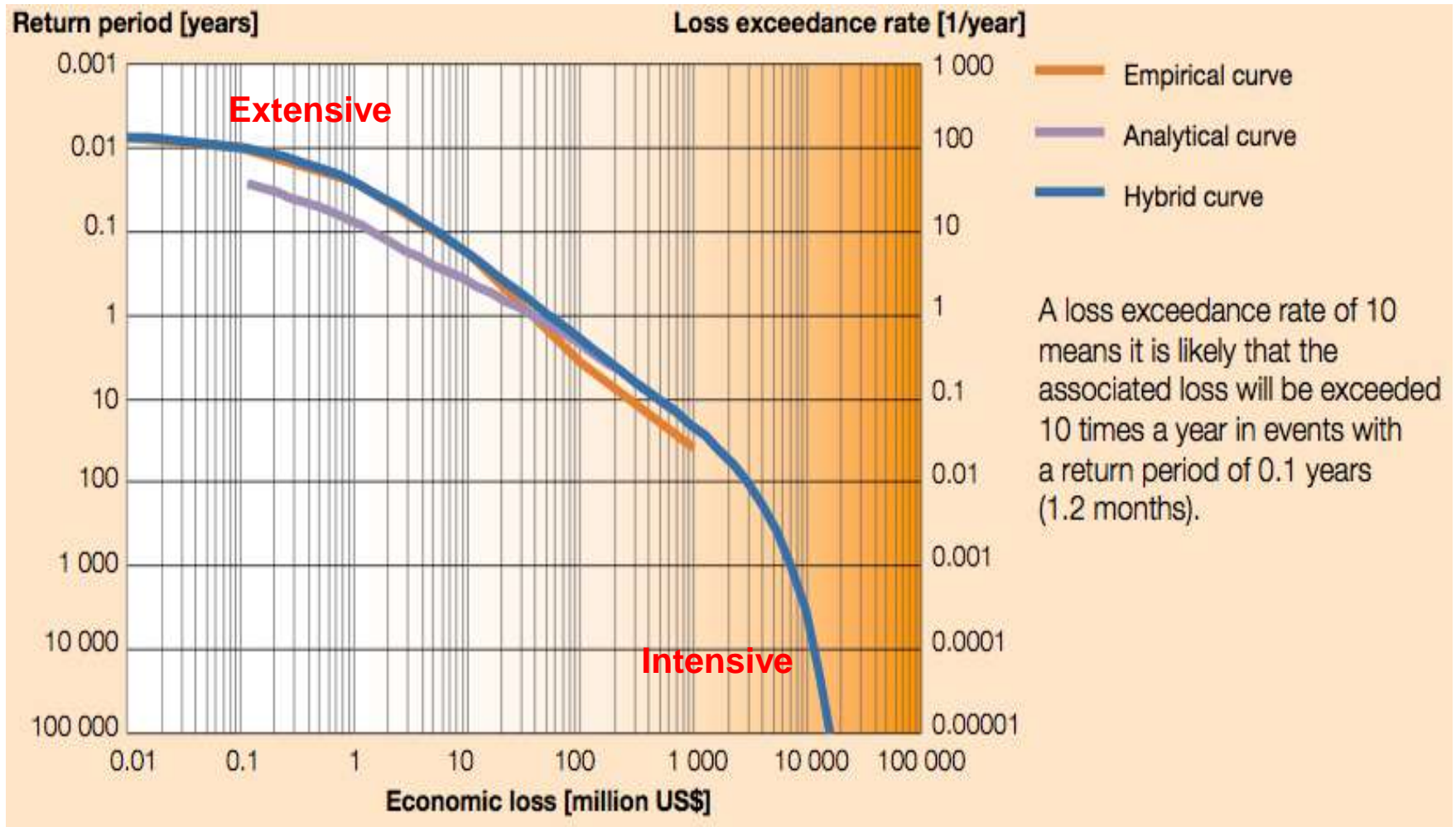


Extensive Risk Assessment: 'Empirical' Loss Exceedance Curves

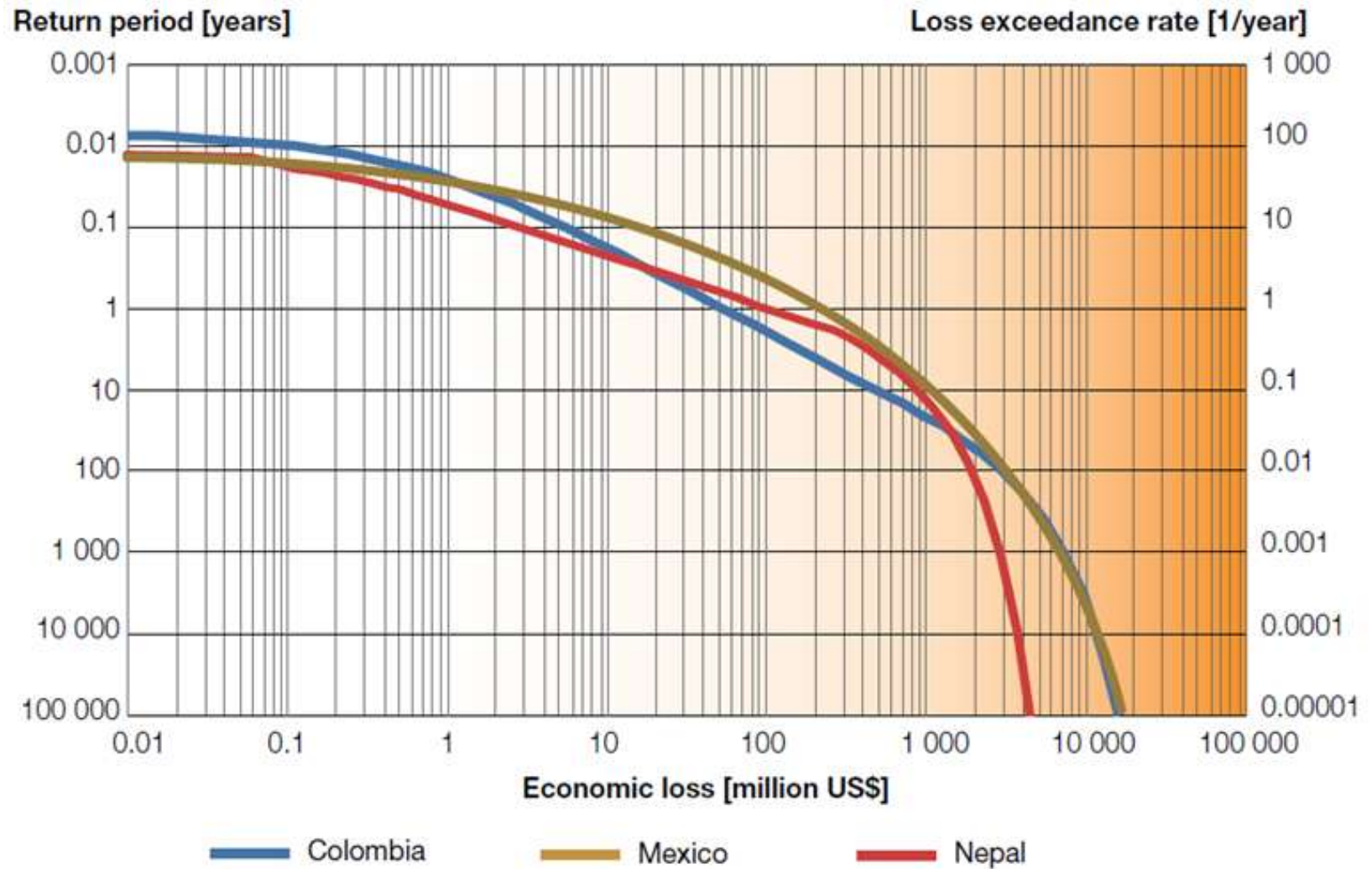


Empirical loss exceedance curve and historic risk metrics for Colombia as generated by DesInventar

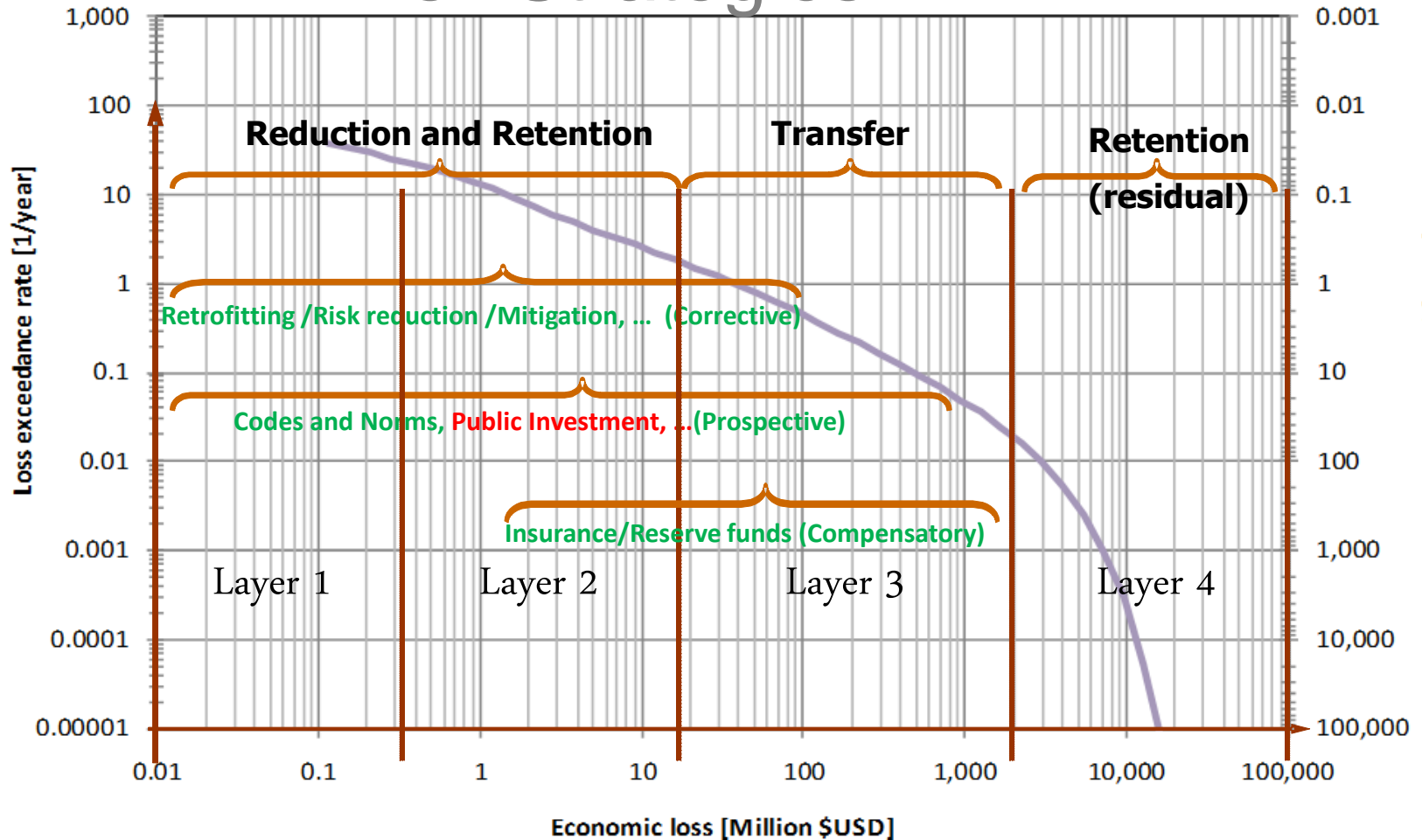
Reveal risk: integrate analytical and empirical views



CAPRA Hybrid models for 3 countries

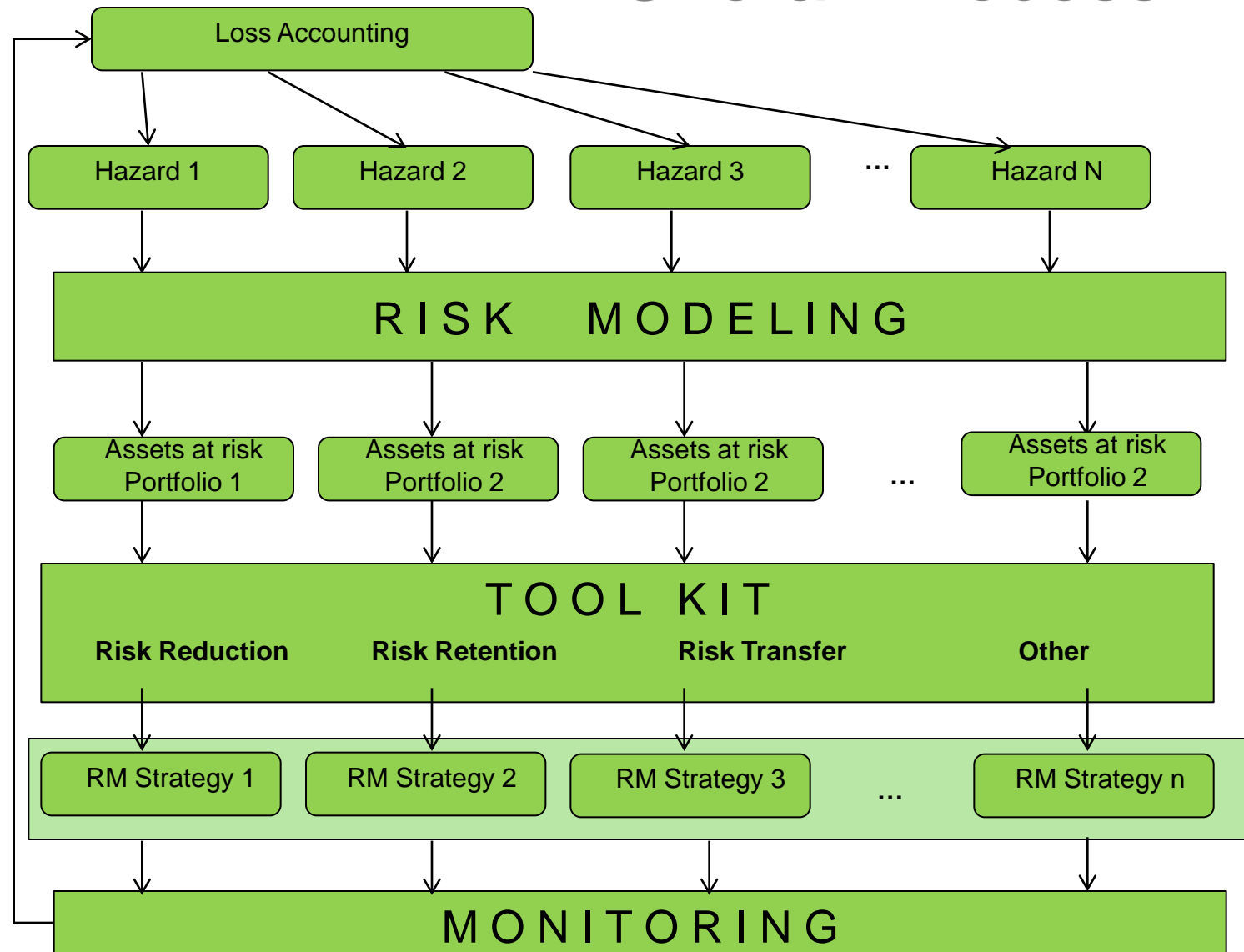


Risk Strategies



- 1 = High probability & low/moderate losses
- 2 = Medium probability & moderate/high losses
- 3 = Low probability & high losses
- 4 = Very low probability & very high losses

Overall Process





THANK YOU