

# Disaster Loss Accounting in the Arab Region

2009 = problem identified

2010 = solution rolled out

2011 = results in GAR2011

2012 - 2014 = scaling up

- \* In the Arab Strategy for Disaster Risk Reduction 2020 (LAS)
- \* In the Loss & Damage Work Programme under Cancun Adaptation Framework (UNFCCC)



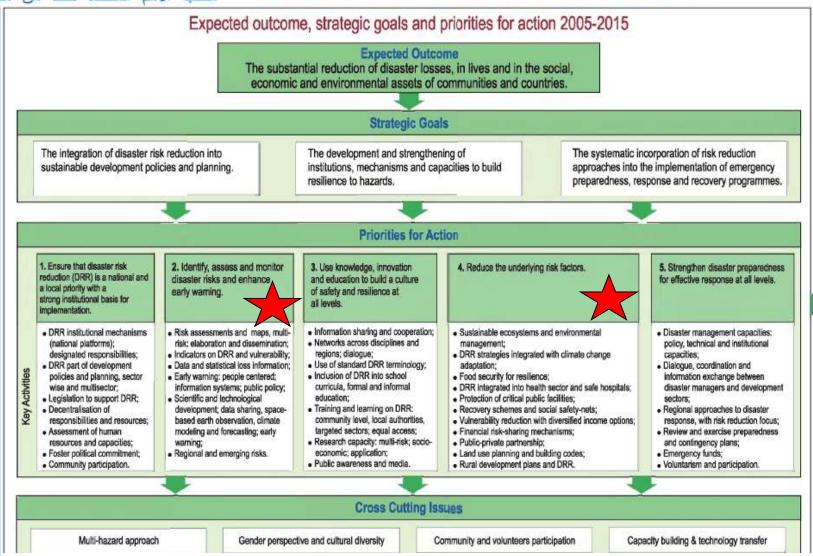


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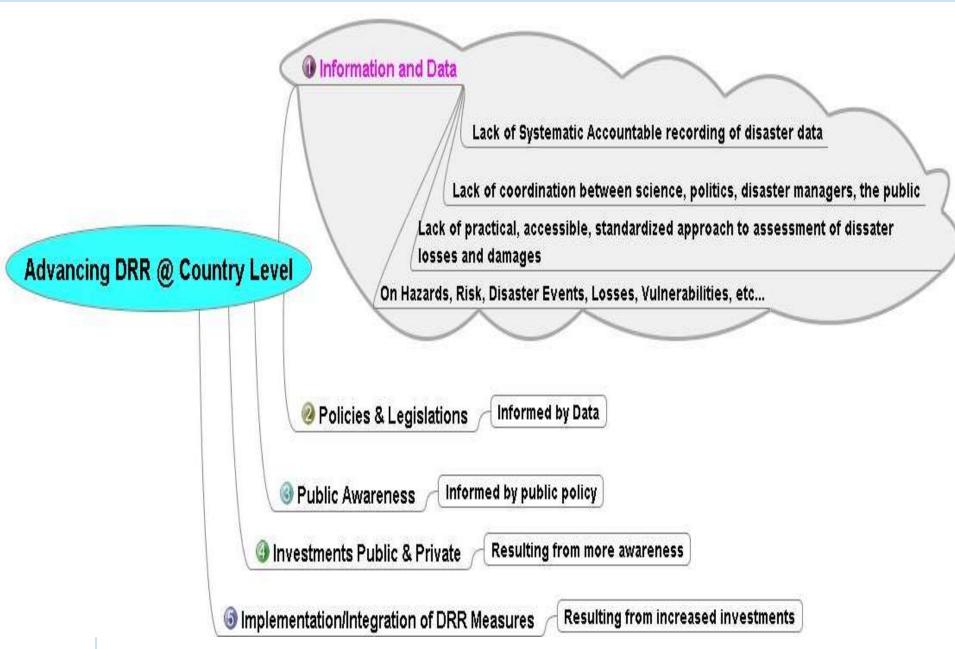
### SUMMARY of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters



Using disaster databases and risk models to assess loss and damage associated with climate change impacts



## **Pre-Intervention Status**<sup>3</sup>





# NISDR An incomplete picture of disaster losses and impacts

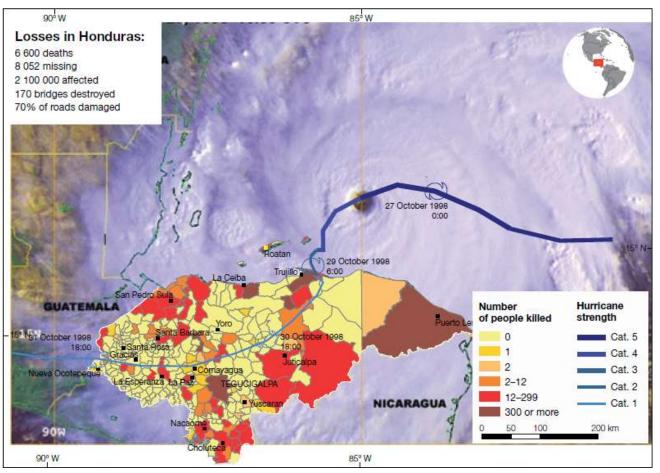
- **EM-DAT:** Public domain coverage of large-scale mortality. Weak coverage of smaller disasters. Inconsistent reporting of economic loss.
- NAT-CAT and SIGMA: Re-insurance industry databases. Insured losses in developed markets. Restricted access.
- ECLAC methodology evaluations: comprehensive data 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



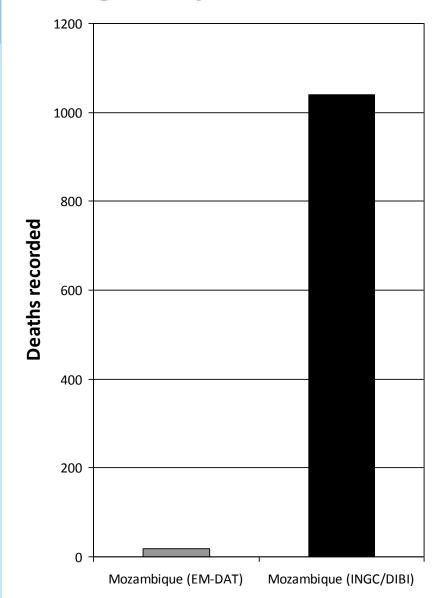
National database: Local level of Observation, municipality level resolution

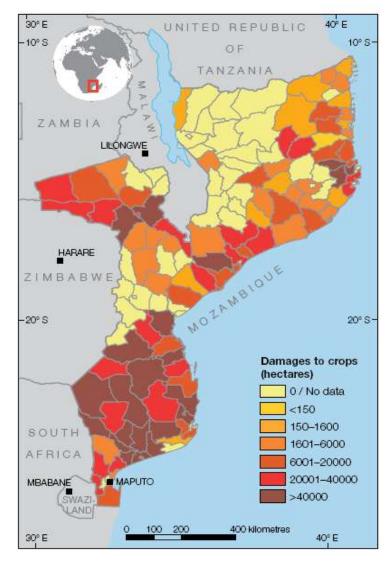


# A better picture of disaster 6 losses and impacts

- 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

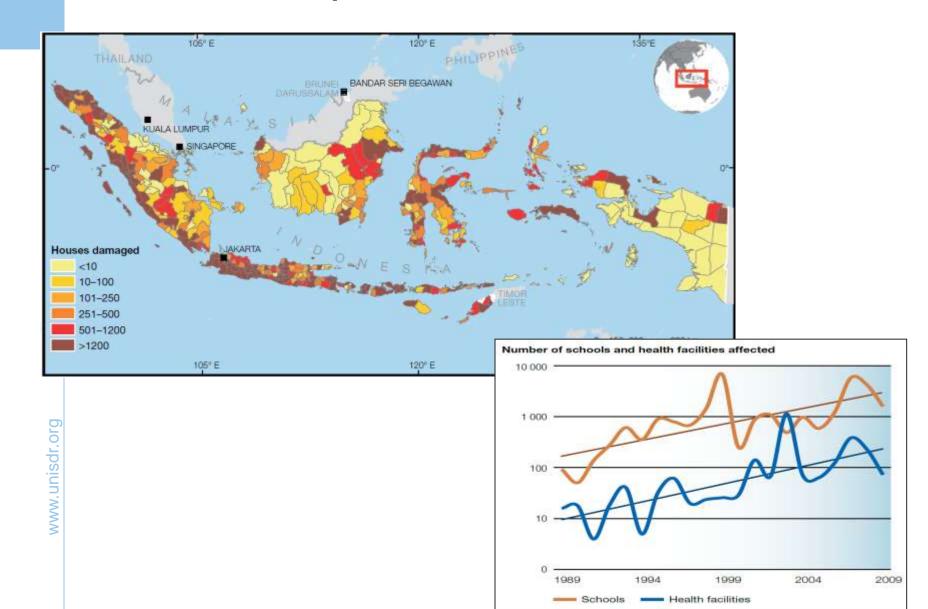
### Drought impacts in Mozambique (1990 - 2009)



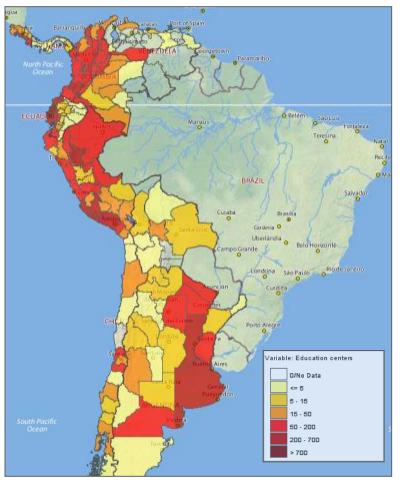




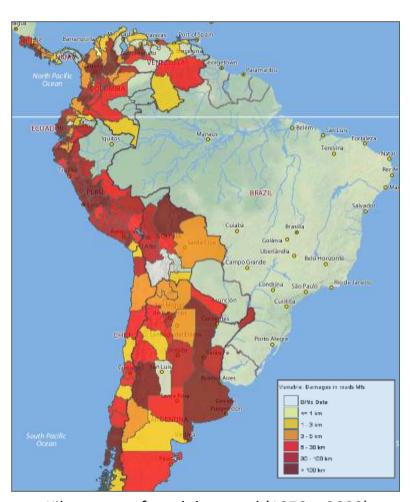
# National databases: Trends and patterns of realized risk



### Damages absorbed by local and national governments



Number of education facilities damaged (1970 – 2009)



Kilometers of road damaged (1970 – 2009)

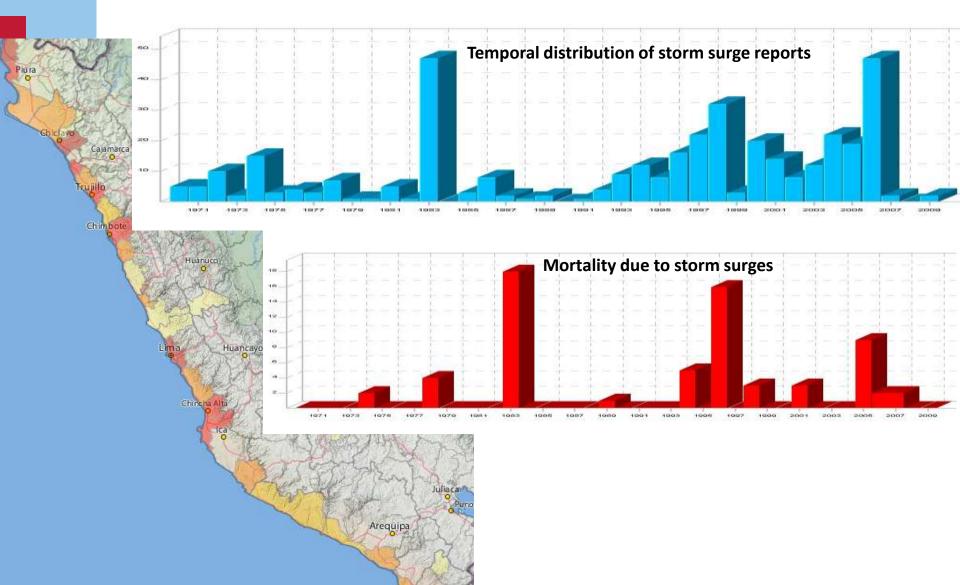
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(Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Panama, Peru, Venezuela)



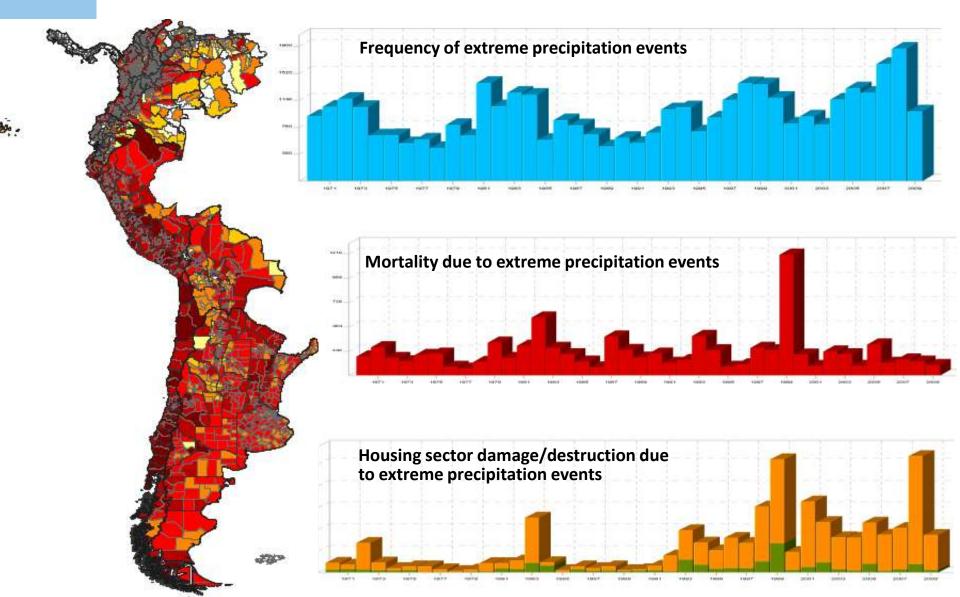
### **Storm surges in Peru (1970 – 2009)**



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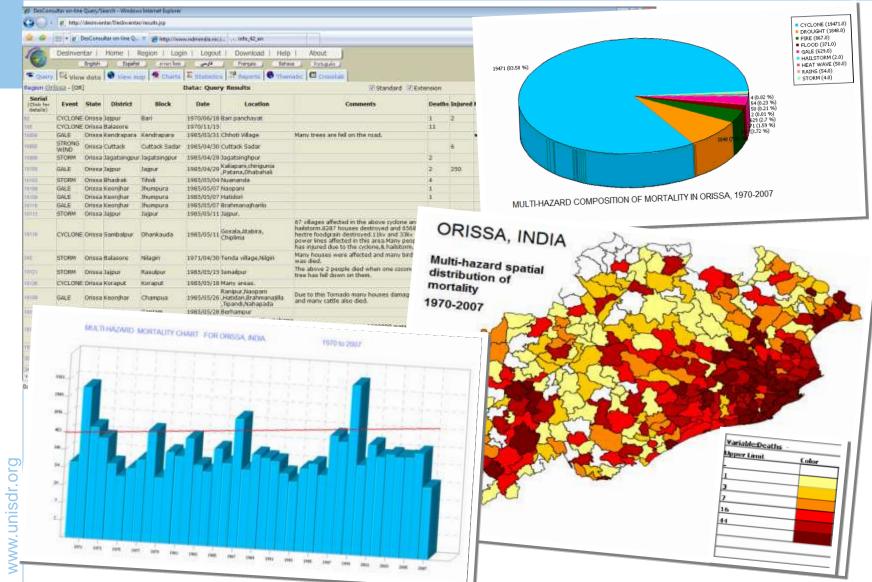


### Extreme weather events in S. America (1970 – 2009)





### Disaster loss data analysis and reporting 12



## 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, definitions and identifiers to enable comparison
- A global picture built from the local level upwards
- From damages to losses to impacts



### R The direct impact of

# systematic disaster loss accounting

- 1. Defining baselines.
- 2. Assessing countries' vulnerability (at national and local levels).
- 3. Understanding full spectrum of economic loss risk.
- 4. Assessing effectiveness of adaptation measures, building back better,
- development planning.

  5. Using a multi-purpose, comprehensive
  " ----- risk reduction.



# JORDAN (1981-2010, 454 data cards)

### **Key Findings:**

- 1. Most 'deadly': flash floods, floods, snowstorms and cold waves.
- 2. Most 'destructive': Snowstorms and earthquakes
- 3. Most 'people affected' by: Drought.
- 4. Most 'economic loss': Frost, epidemics, drought.
- 5. Most impacts on health: Forest fire, epidemics.
- 6. Most impact on education: Snowstorms, frost.



# **SYRIA** (1980-2009, 7326 data cards)

## **Key findings:**

- 1. Most 'deadly': Fires.
- 2. Most 'destructive': Rains, flash floods, fires.
- 3. Most 'affected' by: Drought and frost.
- Most 'economic loss': Forest fires, frost, flash floods.
- 5. Most impacts on health: Strong winds, floods, frost.
- 6. Most impact on education: Rains, snowstorms, floods.



# YEMEN (1971-2011, 8945 data cards)

### **Key Findings:**

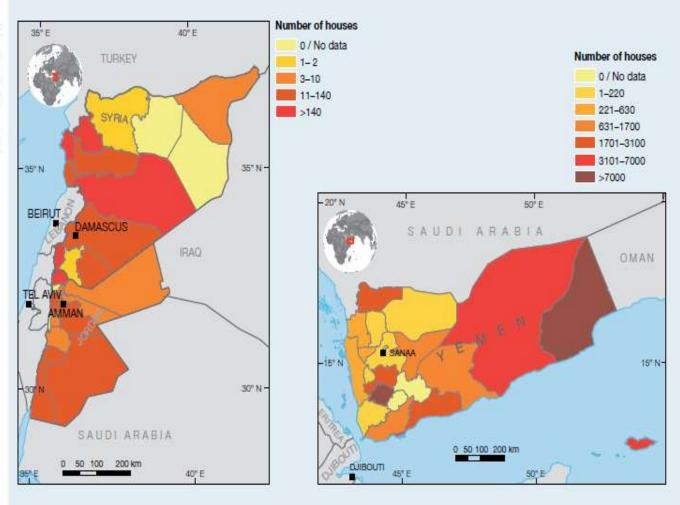
- Most 'deadly': epidemics, liquefaction, earthquakes, floods.
- 2. Most 'destructive': Liquefaction, floods, earthquakes.
- 3. Most 'affected' by: Floods, liquefaction.
- 4. Most 'economic loss': Floods, liquefaction, fires.
- 5. Most impacts on health: Floods, epidemics.
- 6. Most impact on education: Epidemics, liquefaction, floods and rain.



# **PUNISOR** Participation in GAR 11

level disaster loss data in the Arab states, where until then, the absence of systematic information on disaster impacts had been a major obstacle to strengthening capacities for disaster risk reduction. Jordan, the Syrian Arab Republic and Yemen (Figure 2.23) have recently published national disaster inventories, included in GAR11, and it is expected that the other two countries will soon follow. Mozambique and the Arab states also plan to include age- and gender-enabled indicators when such information is available.

Figure 2.23 Housing damage by governorate in Jordan and the Syrian Arab Republic (left), and by province in Yemen (right), 1989-2009





# Informing risk governance and population





### DIFFERENT DISASTERS & THEIR IMPACTS



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 records did not



Animal Attack People Affected, Damaged and Destroyed Houses... However, unlike

people affected, deaths appear to be fluctuating within the last.

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.....

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

Read More

Nuwara Eliya

Vavuniya

Kilinochchi

### **Partner Organisations**

Mannar

Multaitivu



# www.desinventar.net

#### OVERVIEW

What is DesInventar?

Basic Methodology

Definition of Effects

**Data Sources** 

Disaster Reporting Format

Want Desinventar in your country?

#### Disaster type definitions

Cyclones

Tornado

Storm/Gale

Extreme Rain

Lightning/Electrical Storm

Hailstorm

Snowstorm

Cold Wave

Frost

Flood

Urban flood

Flash flood

Surge/Coastal flood

Landslide

Alluvion

Avalanche

Drought

Heat Wave

Sandstorm

Urban or industrial fire

Forest fire

Volcano Eruption

#### AVAILABLE DATASETS



#### Americas

Argentina (GAR11)

Bolivia

Chile

Colombia:

Costa Rica

Ecuador

El Salvador

Guatemala Guyana

Honduras

Jamaica:

Mexico

Nicaragua

Trinidad & Tobago

Panama:

Paraguay Peru

Republica Dominicana

Uruquay

#### Asia Pacific

India (Orissa) India (Tamil Nadu)

India (Uttranchal)

India (Uttar Pradesh) India (Mizoram)

Indonesia

Iran

Jordan

Laos

Lebanon Maldives

Nepal

Solomon Islands

Sri Lanka

Syria (GAR11) Timor Leste

Vietnam Yemen.

Africa

Diibouti Egypt

Mali Morocco

Mozambique

NOTE: we make our best effort to publish in this server the most recent data collected by partners and stakeholders listed below. They are the rightful owners of the respective information. It is requested that proper citation be made when quoting this data. Please refer to the list of servers at the right side of this screen. Note some countries maintain their data private.

Executive Summary

Tutorial

Interactive Help

Preliminary Analysis

Analysis Module - User Manual

Admin Module - User Manual

Installation Guide

Full list - Other languages



Global Assessment Report 2011



Global Assessment Report 2009



Sri Lanka National Report on Disaster Risk ....



Viet Nam Flood and Storm Analysis.



Impact of disasters on children

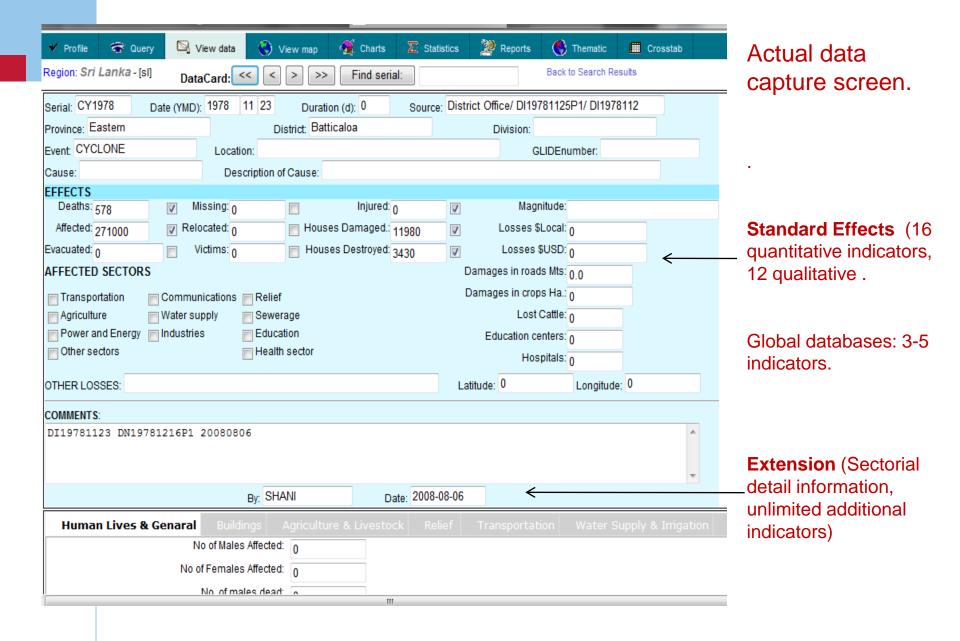


Extensive Risk Analysis GAR11

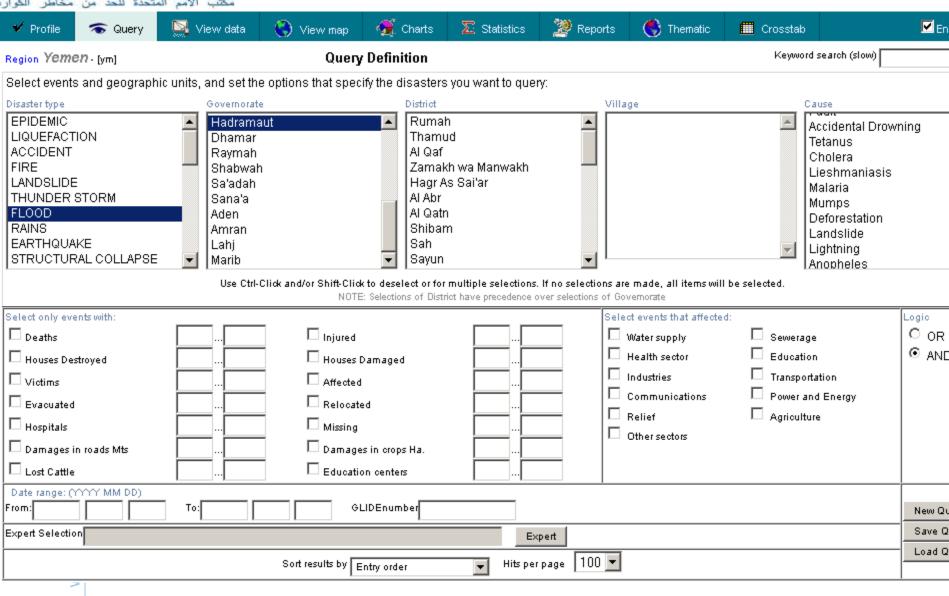
email us if you have a document to share.



## Typical contents of the dataset









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HAZARDS



Serving the information peeds of the disaster reduction community

GO Search PreventionWeb ( All DRR Sites

### Features

 Climate change and disaster risk reduction

HYOGO FRAMEWORK

- Global Assessment Report on Disaster Risk Reduction
- What is PreventionWeb?
- What is the Hyogo. Framework for Action?

### Events Calendar

### Upcoming

- Understanding risk: Mapping global risk 02-06 Jul 2012
- People centered, people led and people owned disaster risk reduction initiative 02-07 Jul 2012
- Sea change: Evaluation of climate change interventions for excluded populations webinar 06 10 2012

Vew all -

### Pakistan: Disaster risk

- No possibility of floods in monsoon, says PMD

4 Jul 2012, Express Tribune, the

COUNTRIES & REGIONS

'We have requested the government to include disaster

management as a subject in the syllabus till matriculation,' said DG National Disaster Management Authority at the 2-day Disaster-risk Reduction and Emergency Response event. 'Disasters, whether natural or technological occurrences, have an adverse effect on efforts aimed at sustainable development.'...

THEMES & ISSUES

### Climate change and cities

4 Jul 2012, AlertNet

With most of the world's population now urban and cities set to continue surging in size, climate change has become an urban problem. How will cities deal with the coming pressures? A Laurie Goering, AlertNet Climate editor package...

#### Is it time to reconsider appointing a humanitarian ombudsman?

4 Jul 2012, Guardian, the

The Guardian analyzes the finding of ALNAP's State of the Humanitarian System 2012, highlighting that indeed, disaster-risk reduction-related investments amount to only 1% of the \$150bn spent in 20 countries that received the most humanitarian aid in the past five years...

View all -

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PROFESSIONAL RESOURCES

**GAR 2013** 

Explain the GAR -

### Post-HFA

Post-HFA Consultation Paper on substantive issues and the consultative process as the disaster risk reduction community heads toward the end date of the Hyogo Framework of Action 2005-2015.

Read the consultation paper -

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### **DRR Publications**

 The state of the humanitarian system (2012)

2012, ALNAP

Millennium Development Goals & DRR

Implementing a risk-sensitive approach to ensure accelerated achievement and



# www.preventionweb.net24



Vulnerable Populations

**DURBAN, SOUTH AFRICA** 

03 Jul 2012 - 25 Feb 20