



National disaster loss and damage databases – **UNDP's experience and lessons learned**

Presented by

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Why disaster loss and damage databases? (2005)



- Losses and damages from disasters are **not systemically recorded**
- Poor understanding of emerging **patterns and trends** of disaster risks resulting in **lack of targeted action**
- **Climate change and variability posing threats to development**
- **Intensities and frequencies of disasters changing**



Types of data captured by the databases

- Data captured at high resolution – *sub-district level*
- Information about occurrences and impacts are captured over a long period of time (20-30 years)
- Direct impacts of an event
 - Event details (*date, location, intensity*)
 - Population affected (*death, injured, affected, ...*)
 - Damages and losses to sectors (*education, road, health, etc.*)
- Analysis undertaken at provincial, district and sub-district levels to derive emerging trends and patterns of events and impacts to feed into national and sub-national planning

Disaster Loss Database for Cambodia (example)



National Committee for Disaster Management

Disaster Loss Database (CamDi)

Profile
Query
View data
View map
Charts
Statistics
Reports
Thematic
Crosstab
English Data

Region **Cambodia** - [n855] Query Definition Keyword search (slow)

Select events and geographic units, and set the options that specify the disasters you want to query:

Disaster type	Province	District	Commune	Cause
Flood	▲ Kep	▲	▲	▲
Fire	Kampot			
Drought	Takeo			
Storm	Kandal			
Lightning	Koh Kong			
Pest Outbreak	Kratie			
Epidemic	Pailin			
River Bank Collapse	Siem Reap			
	Kampong Thom			
	▼ Prey Veng	▼	▼	▼

Use Ctrl-Click and/or Shift-Click to deselect or for multiple selections. If no selections are made, all items will be selected.
NOTE: Selections of District have precedence over selections of Province

<p>Select only events with:</p> <p><input type="checkbox"/> Deaths</p> <p><input type="checkbox"/> Houses Destroyed</p> <p><input type="checkbox"/> Victims</p> <p><input type="checkbox"/> Evacuated</p> <p><input type="checkbox"/> Hospitals</p> <p><input type="checkbox"/> Damages in roads /Mts</p> <p><input type="checkbox"/> Lost Cattle</p>	<p><input type="checkbox"/> Injured</p> <p><input type="checkbox"/> Houses Damaged</p> <p><input type="checkbox"/> Affected</p> <p><input type="checkbox"/> Relocated</p> <p><input type="checkbox"/> Missing</p> <p><input type="checkbox"/> Damages in crops /Ha.</p> <p><input type="checkbox"/> Education centers</p>	<p>Select events that affected:</p> <p><input type="checkbox"/> Water supply</p> <p><input type="checkbox"/> Health sector</p> <p><input type="checkbox"/> Industries</p> <p><input type="checkbox"/> Communications</p> <p><input type="checkbox"/> Relief</p> <p><input type="checkbox"/> Other sectors</p>	<p><input type="checkbox"/> Sewerage</p> <p><input type="checkbox"/> Education</p> <p><input type="checkbox"/> Transportation</p> <p><input type="checkbox"/> Power and Energy</p> <p><input type="checkbox"/> Agriculture</p>	<p>Logic</p> <p><input type="radio"/> OR</p> <p><input checked="" type="radio"/> AND</p>
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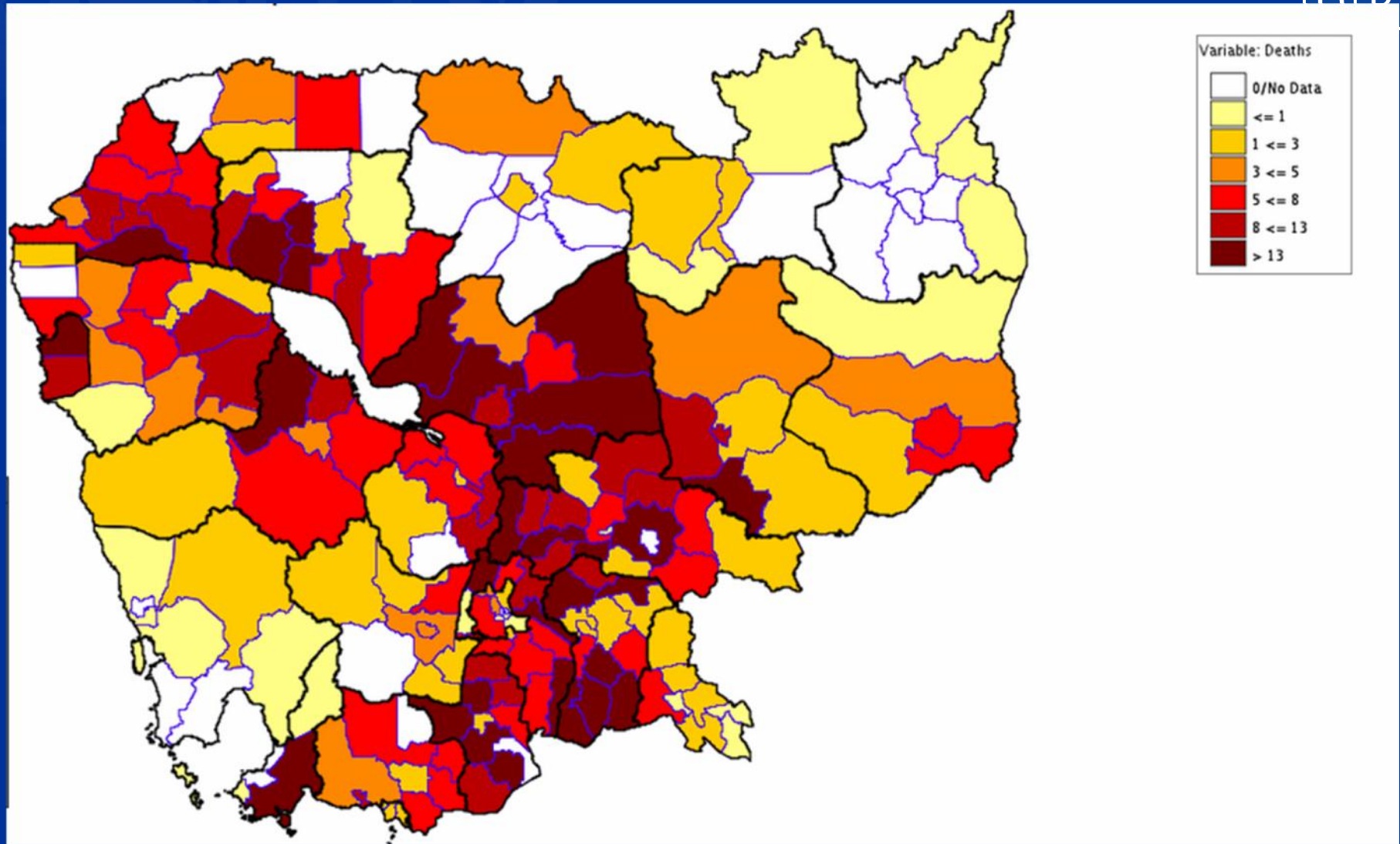
Date range: (YYYY MM DD)

From: / / To: / / GLIDNumber:

Expert Selection Expert

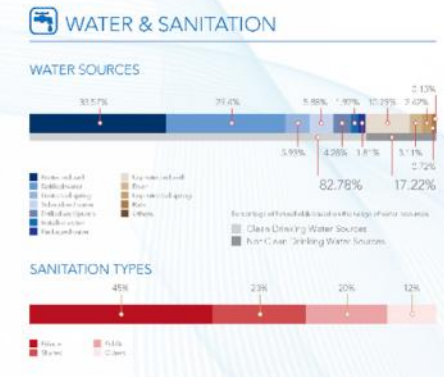
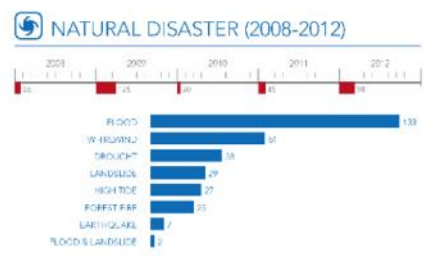
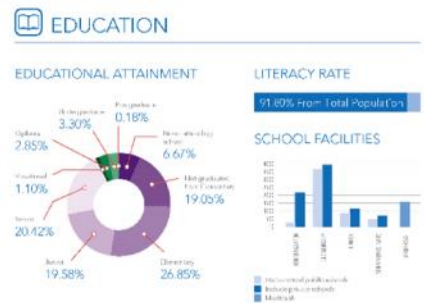
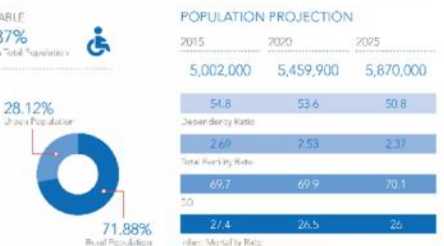
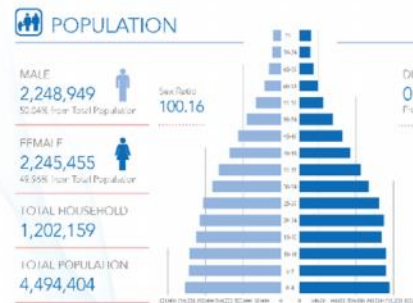
Sort results by Hits per page

Disaster Loss Database for Cambodia (example)





PROVINCE INFOGRAPHIC – Aceh (Indonesia)



DATA SOURCES

Landscan Global Population Database
<http://www.landscan.gov.id>

Food Security and Access
<http://www.ilo.org/counterpart>

Water, Sanitation and River Management Information System
<http://www.watman.gov.id>

Administrative Boundary
<http://www2.pl.nsw.gov.au>

Provision of Health and Social Services
<http://www.kemkes.go.id>

Other: World Bank, Country and River Information System, Population, Water & Sanitation, Education, Health, Information Systems, Indonesia National Disaster Preparedness Policy

PROVINCE BPBD CONTACT DETAILS:

Jl. Tgk. Diyan Surokambilo No. 10, Kota Banda Aceh, Phone: 652-3473, Fax: 855-13478

This product is prepared by:

NATIONAL ASSESSMENT REPORT ON DISASTER RISK REDUCTION (2013)

NAR

Redefinition of Indonesia's Disaster Management Strategy

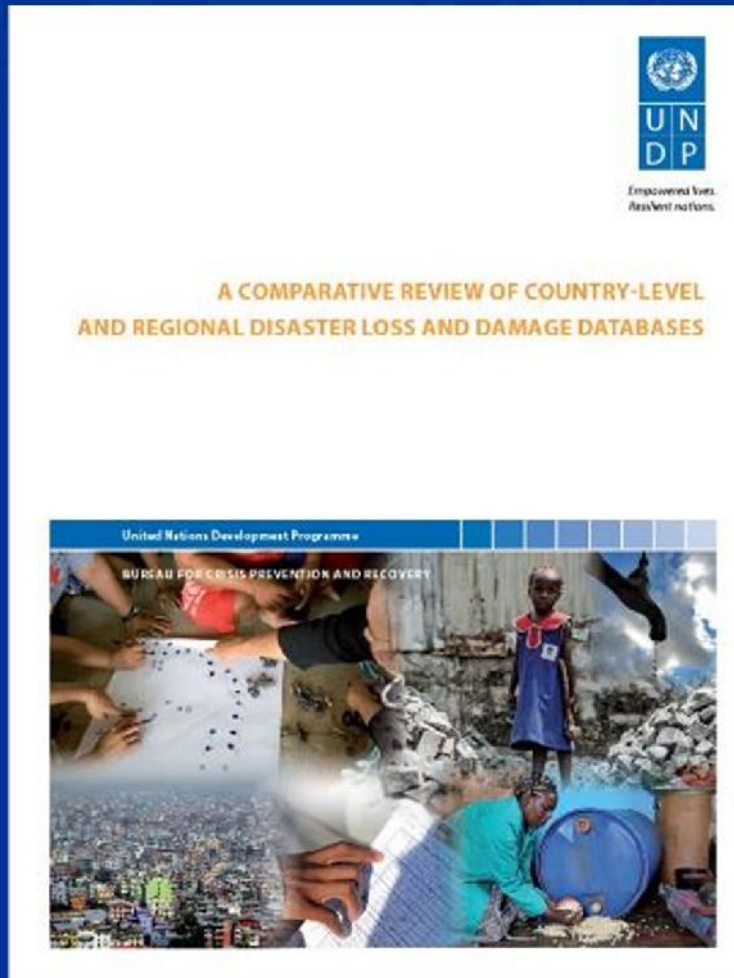
THE GOVERNMENT OF THE REPUBLIC OF INDONESIA



UNDP's work on disaster loss and damage databases

A comparative review of

Country-level and regional disaster loss and damage databases



Analysis of databases by

- *Database characteristics*
- *Database content profile*
- *Quality assurance*
- *Accessibility*
- *Database uses*

Available online at:

<http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/loss-and-damage-database/>



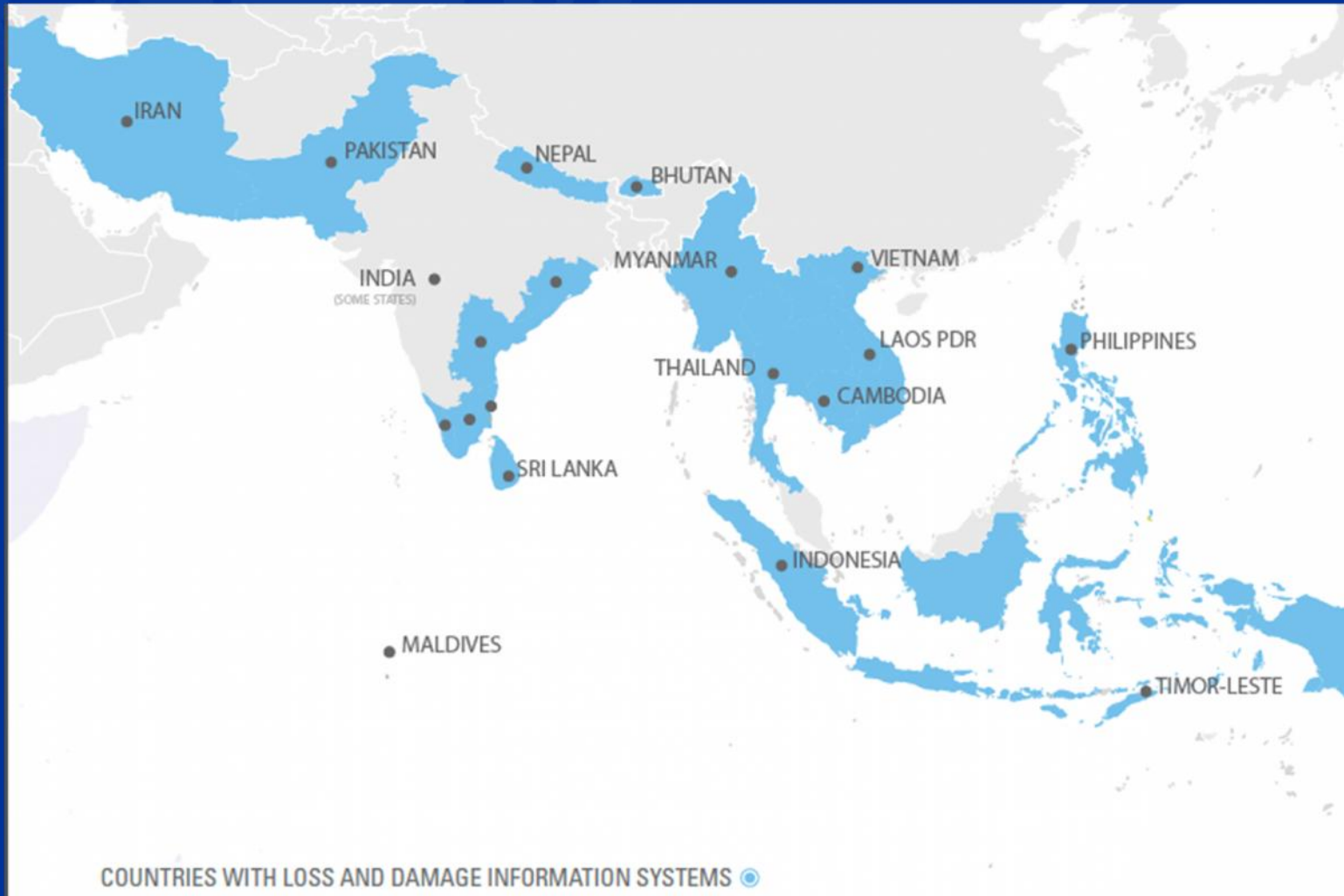
Global

- Out of **60** national disaster loss and damage databases globally, UNDP has supported the development of **31** databases and more are under development
- Of **57** regional, country and sub-national loss and damage databases, **45** use a common format (DesInventar)
- Globally, most databases hosted by governments



Regional: Disaster databases in Asia

- In Asia, UNDP started supporting pilot implementation in 2002 in Odisha state of India
 - Sri Lanka
 - Nepal
 - Iran
 - Indonesia (*more than 10 provinces*)
 - India (*Orissa, Tamil Nadu and other States*)
 - Lao PDR
 - Timor-Leste
 - Cambodia
- Several ongoing databases
 - Vietnam, Myanmar, Philippines, Pakistan and Bhutan
- Database highly configurable to country specific needs



220,000 records

First event in **1815**AD

15 countries



Applications

- GAR 2009, 2011 and 2013
- Extensive and intensive risk analysis
- Disaster risk and poverty analysis
- Poverty monitoring
- Allocation of funds based of levels of risks
- Local disaster management plans



Guiding principles for disaster loss databases

- Developing national capacities
- Establishment of database is guided by institutional and legal context
- Establishing and sustaining nationally led processes to create ownership and relevance
- The database should address the needs and priorities of the country
- Sharing of database and analysis with all stakeholders



Lessons and challenges

- National DRR focal organizations in the region are relatively young (5-10 yrs old)
- Consistency in the definitions of terms and data fields is to be established
- Typically countries capture disaster occurrences and impacts in their national languages which are at times different from their standard English equivalents
- Processes for capturing and validating data need to be streamlined to ensure consistency and quality control

Partnership with Japan



- UNDP has been collaborating with the International Research Institute of Disaster Science, Tohoku University to promote developing more coherent way of collecting disaster-related damage and loss data and statistics to meet with requirement at the global level, in particular monitoring Post 2015 DRR Framework and SDGs to be adopted in 2015.

Why common minimum standards for disaster data?



- Regional and sub-regional analysis (ASEAN) can be undertaken to better understand the impacts of disasters
- Variety of analyses can be undertaken – urban/rural, gender, ecosystem based, river basin (Mekong river), impact on sectors (agriculture), climatic zones
- Common minimum disaster data standards required given the context of climate change



Data and Information to support research

- Improvements in data collection, compilation, dissemination, analysis tools & methodologies
- Modelling of risks at national and local levels for guiding public investments
- Strengthening risk governance for efficient and effective management and reduction of risks
- Integration of disaster data with development data to derive new insights for development planning



Input to WCDRR:

- Governments should have stronger capacity in disaster statistics and analysis of impact to poor people
- Governments should have stronger capacity for setting loss reduction (SDG/HFA) targets and indicators as well as in monitoring, reporting and analysis
- Government should have increased risk informed public investments in DRR and Development
- Governments should have stronger capacity for preparedness for resilient recovery



*Empowered lives.
Resilient nations.*

Thank you very much

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