



Disaster loss and damage databases and their role in damage and loss assessment – **UNDP's experience and lessons learned**

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Presentation Outline

- Disaster loss and damage databases
- UNDP's work on disaster loss and damage
 - *Global*
 - *Regional*
- Guiding principles for disaster loss databases
- Lessons for loss and damage assessment

Why disaster loss and damage databases?



- 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



Disaster loss and damage database?

- Collection of homogeneous data about disasters
- Data capture over a period of time and geographical unit
- Storage, retrieval and compilation of data and information
- Sharing of data and information to all stakeholders in real time
- Analysis of data over a period of time and space to understand patterns and trends of risks



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

Specific applications of loss and damage data



- Guiding relief, recovery and reconstruction
- Assessing risks of future disasters
- Calibrating the cost-effectiveness of investments intended to reduce losses
- Tracking loss patterns and trends
- Performing thematic analysis
- Tracking, monitoring and evaluating the outcome indicators on loss and damage

Disaster loss and damage databases:



DesInventar on-line Query/Search - Windows Internet Explorer

http://desinventar/DesInventar/results.jsp

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

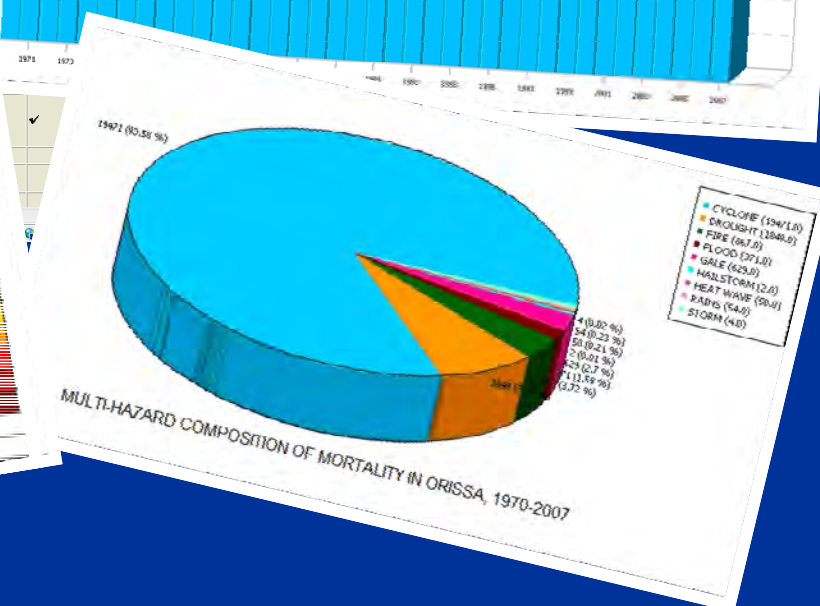
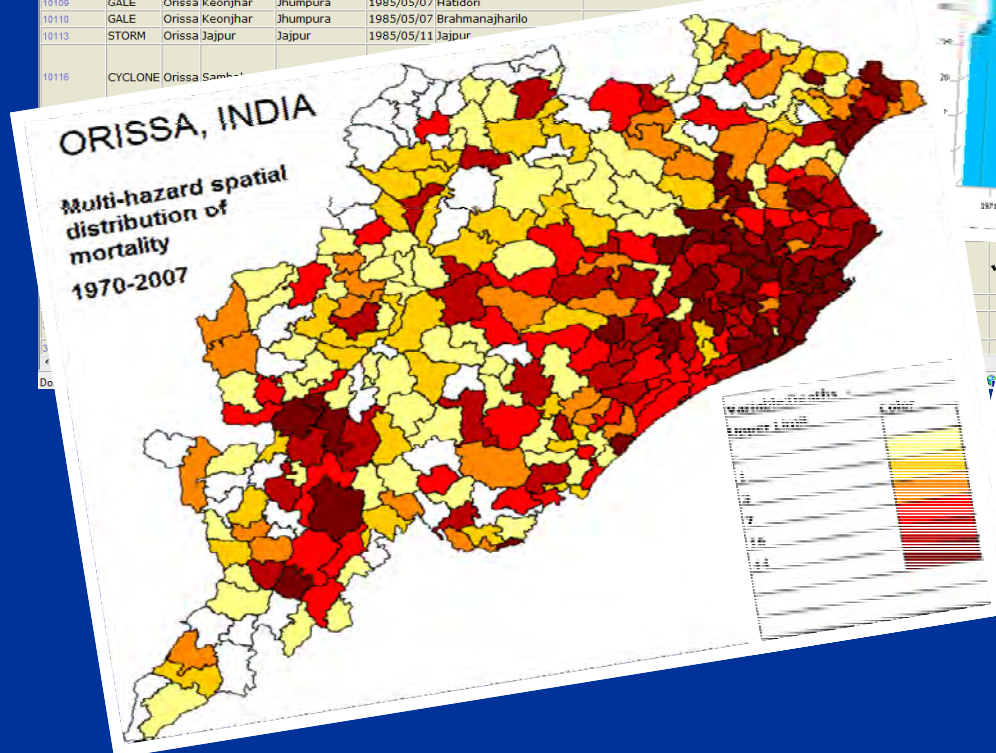
English | Español | বাংলা | العربية | Français | Bahasa | Português

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

Region **Orissa** - [OR]

Data: Query Results

Serial (Click for details)	Event	State	District	Block	Date	Location	Comments	Deaths
62	CYCLONE	Orissa	Jajpur	Bari	1970/06/18	Bari panchayat		1
195	CYCLONE	Orissa	Balasore		1970/11/15			11
10056	GALE	Orissa	Kendrapara	Kendrapara	1985/03/31	Chhoti Village	Many trees are fell on the road.	
10092	STRONG WIND	Orissa	Cuttack	Cuttack Sadar	1985/04/30	Cuttack Sadar		
10099	STORM	Orissa	Jagatsingpur	Jagatsingpur	1985/04/29	Jagatsingpur		2
10100	GALE	Orissa	Jajpur	Jajpur	1985/04/29	Kalapani, chirigunia, Patana, Dhabahali		2
10103	STORM	Orissa	Bhadrak	Tihidi	1985/05/04	Nuananda		4
10108	GALE	Orissa	Keonjhar	Jhumpura	1985/05/07	Naopani		
10109	GALE	Orissa	Keonjhar	Jhumpura	1985/05/07	Hatidori		
10110	GALE	Orissa	Keonjhar	Jhumpura	1985/05/07	Brahmanajharilo		
10113	STORM	Orissa	Jajpur	Jajpur	1985/05/11	Jajpur		
10116	CYCLONE	Orissa	Samalpur					





UNDP's work on disaster loss and damage databases

Global



- Out of **50** national disaster loss and damage databases globally, UNDP has supported the development of **25** databases and more are under development
- Of **57** regional, country and sub-national loss and damage databases, **45** use a common format
- Globally, most databases hosted by governments

A comparative review of *Country-level and regional disaster loss and damage databases*



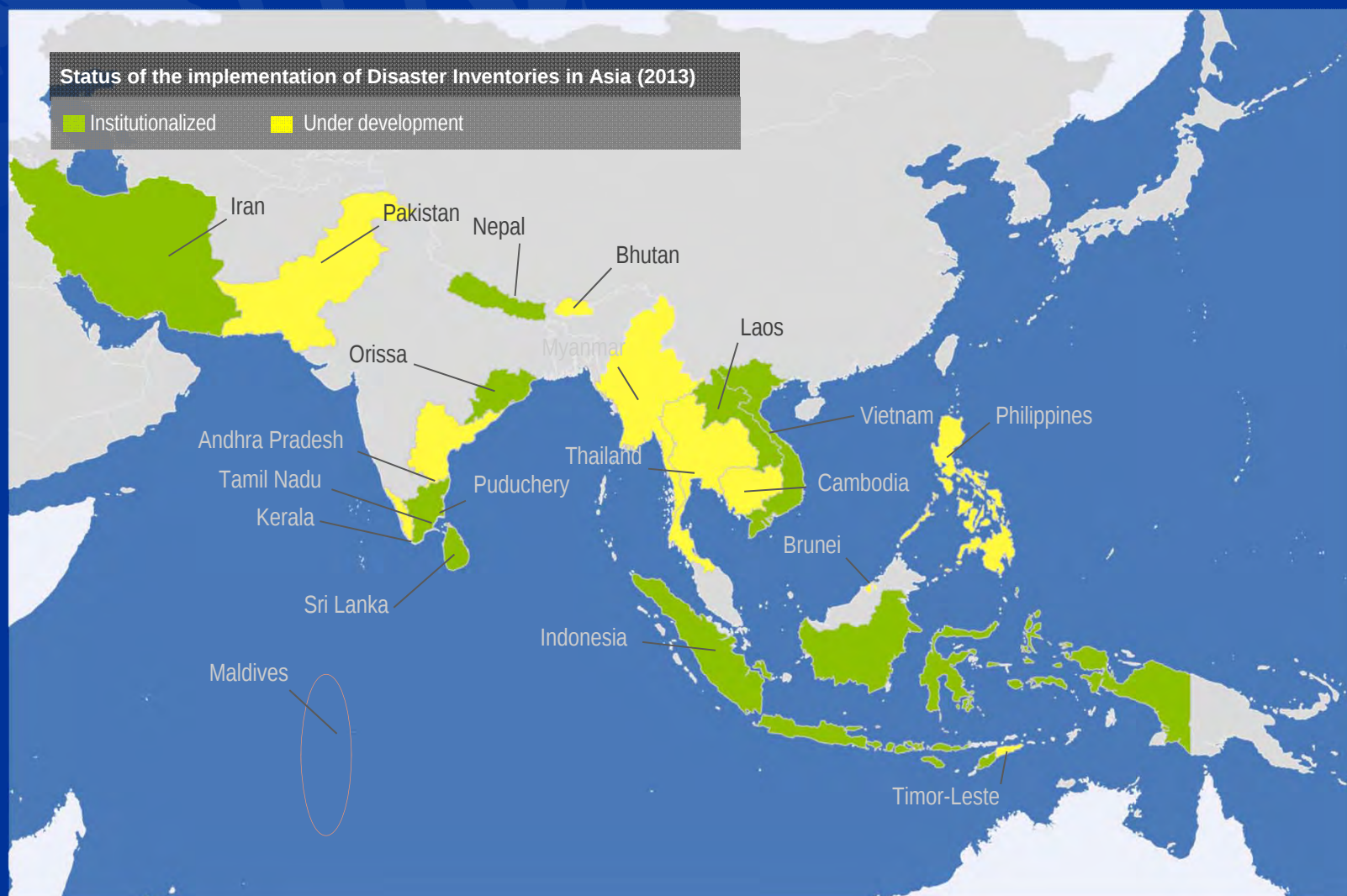
Analysis of databases by

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



Regional: Disaster databases in Asia

- In Asia, UNDP started supporting pilot implementation in 2002 in the Orissa 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



202,000 records

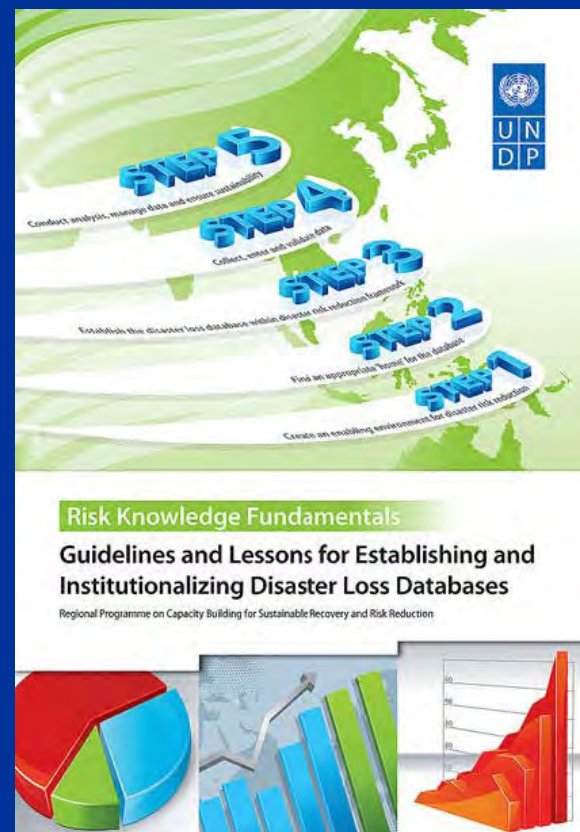
First event in **1815**AD

15 countries

Experiences of establishing disaster loss databases from Asia



Risk Knowledge Fundamentals:
Guidelines and Lessons
for Establishing and
Institutionalizing
Disaster Loss Databases



Available online at: <http://www.snap-undp.org/elibrary/Publications/DLDGuidelines.pdf>



Applications

- GAR 2009, 2011 and 2013
- Extensive 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
- Establishing and sustaining nationally led processes to create ownership and relevance
- Establishment of database is guided by institutional and legal context
- The database should address the needs and priorities of the country
- Sharing of database and analysis with all stakeholders



Lessons for loss and damage assessment

- Generate evidence for raising awareness on loss and damage emanating from climate change
- Develop potential impacts on sectors and geographical units to warrant actions
- Coherent and harmonized analysis of potential impacts
- Utilize disaster loss and damage databases to monitor emerging trends and patterns of disaster events and potential loss and damage



Lessons for loss and damage assessment (2)

- Build on existing institutional processes
- Provide support for inclusion of the potential loss and damage in national and sub-national development processes
- Develop national capacity to promote internalization and institutionalization



*Empowered lives.
Resilient nations.*

Thank you very much

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