



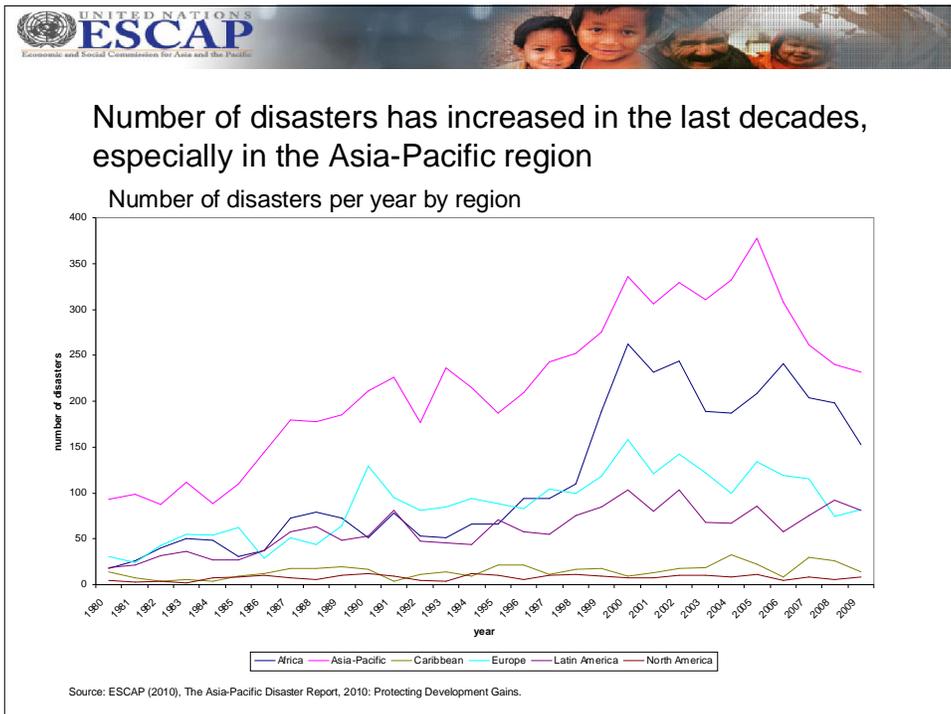
Geo-reference information, tracking disaster risks and their socio-economic impact

Expert Group Meeting on Geo-reference Disaster Risk Management Information System in Asia-Pacific Region
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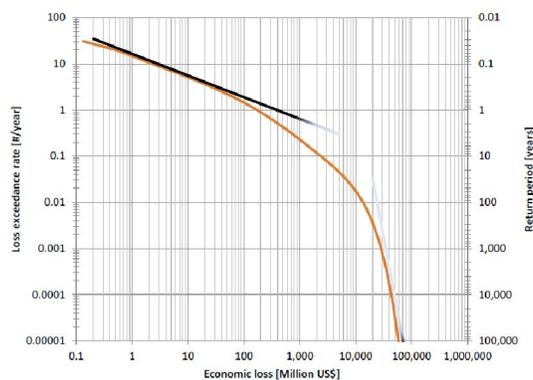


But, how has risk changed?

- § Has the risk of being killed by a disaster caused by natural hazard increased or decreased?
- § Has the risk of economic damage and loss owing to a disaster caused by natural hazard increased or decreased?

What is risk?

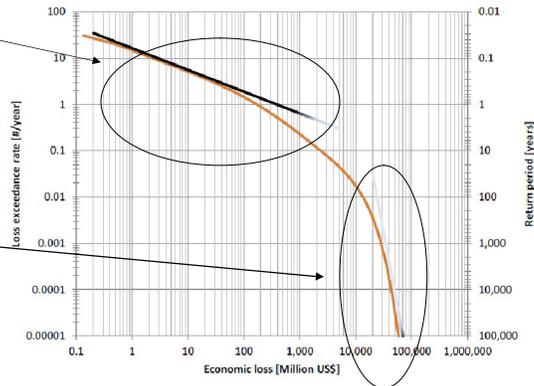
- § Probability of surpassing a determined level of economic, social or environmental consequences at a certain place and during a certain period of time



Source: ERN-AL (2011), Probabilistic modelling of natural risks at the global level: the hybrid loss exceedance curve. Development of methodology and implementation of case studies phase 1a: Colombia, Mexico and Nepal.

Extensive x Intensive risks

- § Extensive: higher frequency & low impact
- § Intensive: lower frequency & higher impact



Source: ERN-AL (2011), Probabilistic modelling of natural risks at the global level: the hybrid loss exceedance curve. Development of methodology and implementation of case studies phase 1a: Colombia, Mexico and Nepal.

Extensive x Intensive risks

- § Threshold (GAR 2011):
 - 25 deaths
 - 600 houses destroyed



Source: United Nations (2011), 2011 Global Assessment Report on disaster Risk Reduction: Revealing Risk, Redefining Development.

Tracking extensive risk

Trend in disaster risk, Asia-Pacific country groupings – 2000-2004 to 2005-2009

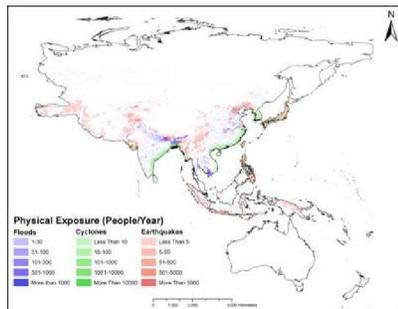
Country grouping	Multi-hazard			Geophysical			Meteorological			Hydrological			Climatological		
	Casualties	Total People Affected	Econ. Damage and Loss	Casualties	Total People Affected	Econ. Damage and Loss	Casualties	Total People Affected	Econ. Damage and Loss	Casualties	Total People Affected	Econ. Damage and Loss	Casualties	Total People Affected	Econ. Damage and Loss
Asia and the Pacific	▲	▼	■	■	■	■	▲	■	■	■	■	■	▲	■	▼
East and North-East Asia	■	■	■	■	▼	■	■	■	■	■	■	■	▲	■	■
North and Central Asia	▼	▼	▼	■	■	■	▼	▲	▼	▼	▲	▼	▼	■	▼
Pacific	■	▲	■	▲	▼	■	▼	■	■	▲	▲	■	▲	▲	▼
South-East Asia	■	▲	■	■	■	■	▲	▲	■	■	■	■	■	▲	▼
South and South-West Asia	■	■	■	■	▼	■	▲	■	■	■	■	■	■	▼	▼
LDC	▲	■	▲	■	▲	■	■	▲	▲	■	▼	▼	▼	■	▼
LLDC	■	▼	■	▼	■	■	▲	▼	■	▲	▲	■	▼	▼	■
Low income	▲	■	■	■	■	▼	■	▲	▲	■	■	■	■	■	▼
Lower middle income	▼	■	■	■	▼	▼	■	■	■	■	▲	■	■	▼	■
Upper middle income	■	■	▼	▲	▲	▼	▲	■	▼	■	■	■	▲	▲	▼
High income	■	■	■	■	▲	▼	■	▼	■	■	■	■	▲	▼	■

Source: ESCAP (2010), The Asia-Pacific Disaster Report, 2010: Protecting Development Gains.

Can we say something about risk of future events?

§ Modeling risk

- Risk = (exposure, vulnerability)



Source: ESCAP based on P. Peduzzi, UNEP/GRID-Europe



Source: Cities Alliance

What risk information could be of relevance for decision makers?

- | | |
|---|--|
| § Intensive: risk of disaster's impact that are very rare and catastrophic happening in a not well defined area | § Extensive: risk of disaster's impact that are frequent and creeping, affecting a well defined area |
| § Risk transfer, emergency & response | § Prevention and mitigation, regulation (codes and norms) |

Data available

- § International Disaster Database (EMDAT)
 - Global coverage
 - Disasters:
 - Ten (10) or more people reported killed,

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/?reportId=5_7755

