Enhancing Knowledge and capacity for the management of disaster risks for a resilient future in Asia and the Pacific

## *Ex Ante* Tool for Risk Sensitive Development Planning: Probabilistic Catastrophic Hazard Risk Assessment



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Probabilistic hazard risk assessments for risk sensitive development planning

- Target 1. Identifying the potential economic losses, despite insufficient historical data for analyzing
- Target 2. The ex-ante assessment tool to support the analysis of the future impact from the natural hazards
- Target 3. Creating powerful incentives for countries to develop planning options and tools to cope with risk
- Target 4. Contributing well-structured resource allocations to reduce those potential damage and safeguard development
  - Target 5. Achieving mainstreaming Disaster Risk Reduction



## Hazards, Vulnerability, Exposure and Risk Data

Reference: Piers Blaikie, Terry Cannon, Ian Davis, Ben Wisner, 2011, At Risk



## A concept of 'Probable Maximum Losses'



Reference and source: European Environment Agency (2008), http://www.eea.europa.eu/data-and-maps/figures/example-of-the-adjustment-of-loss-distribution-as-a-consequence-of-changing-risk

## Probable Maximum Losses (100-200 yrs) in South East Asia



Reference and source: World Bank, GFDRR, ASEAN and UNISDR (2011), Advancing Disaster Risk Financing and Insurance un ASEAN Countries

Introduction of Probabilistic Catastrophic Hazard Risk Assessment for Development Planners <u>Case Study : Nepal</u>

bilistic risk assessment model opment Planners Perspectives

Identifying insufficient data and capacity ry for conducting probabilistic risk

Easy to access and manage with insufficient alysis

Developing less complicated and easyapplications

More concentrates on Macro-level es: Using GDP and actively working

Approach to sectorial analysis