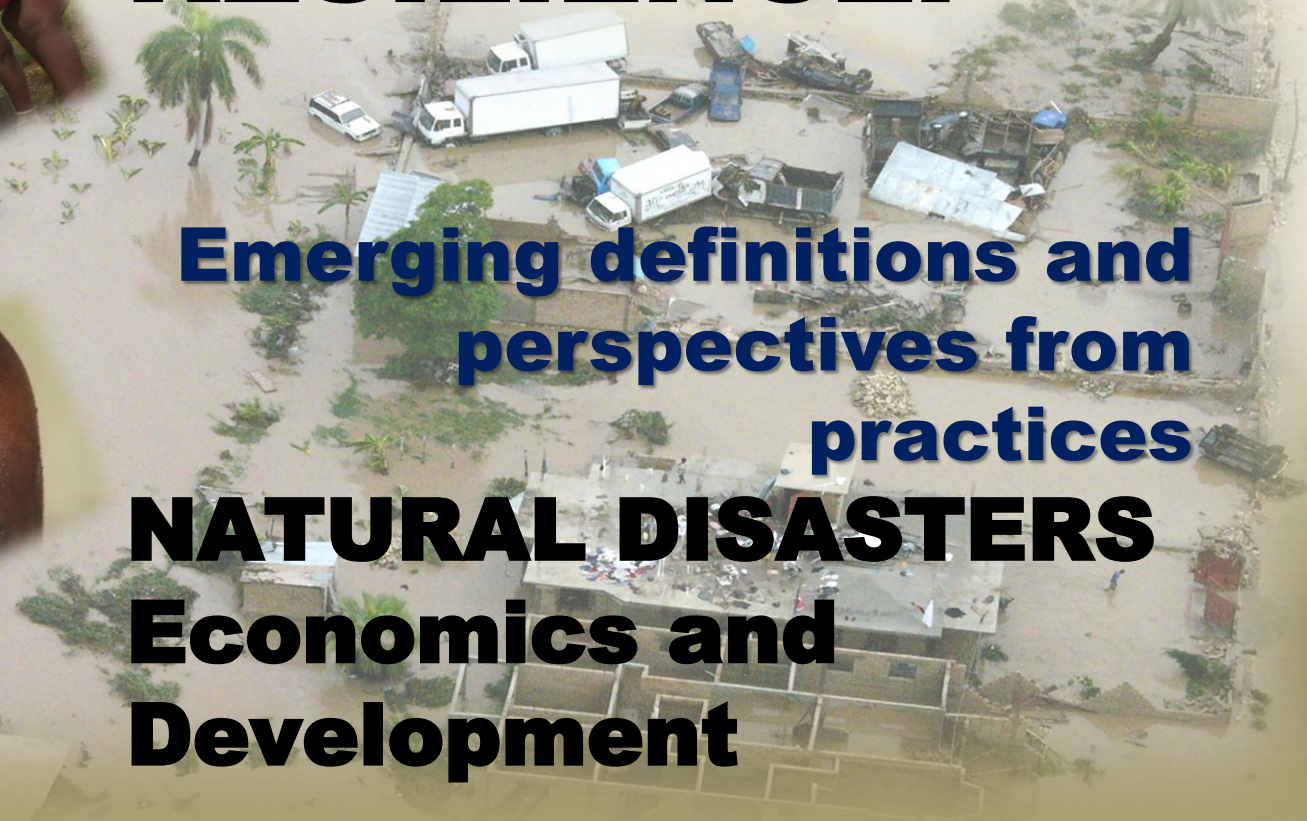


RESILIENCE:

**Emerging definitions and
perspectives from
practices**

**NATURAL DISASTERS
Economics and
Development**

**Dr. Katalin Zaim, Program Manager,
UNDP**



Disasters are growing ...

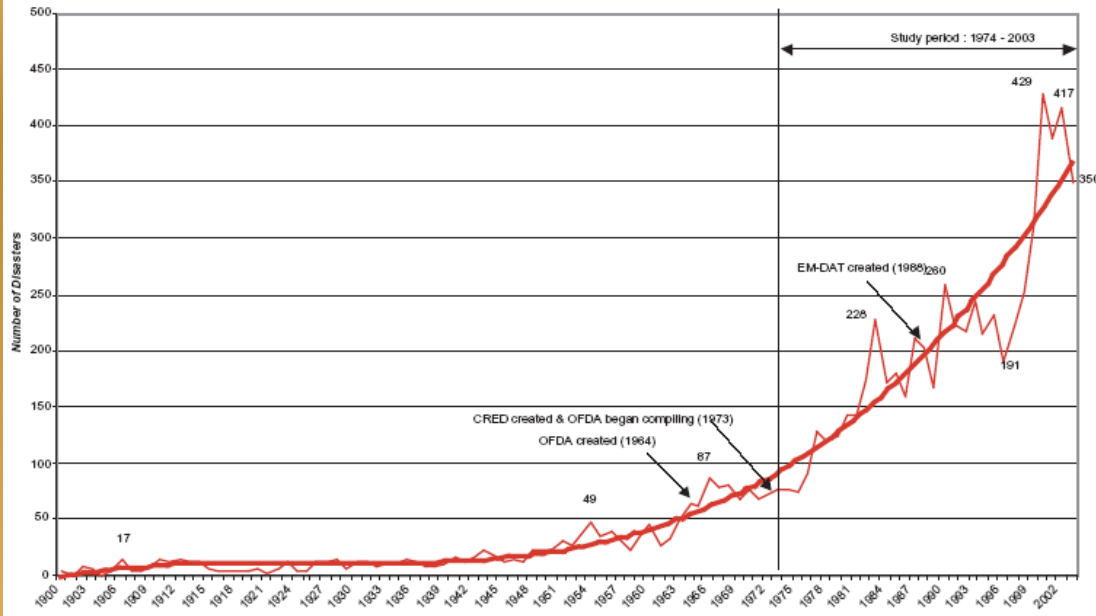


75% of the global population is exposed to disaster provoked by droughts, tropical cyclones, earthquakes or floods...

More than 4000 recorded disasters from 2000 to 2009

Over the last 20 years disasters have killed 1,3 M people, affected 4,4 B and resulted in economic losses of \$2 trillion. Disaster losses are equal to 25 times the ODA over the same period

Occurrence of natural disasters as reported in EMDAT: 1900 - 2003



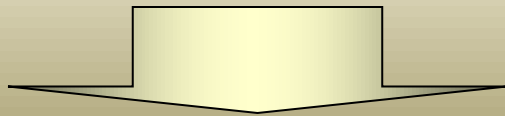
What does it mean in terms of setbacks of development and missed development opportunities?

Development and disaster risk are linked



Disaster risk is lower in high development countries than in low development countries.

Development processes : translation of physical exposure to hazards into disaster risk



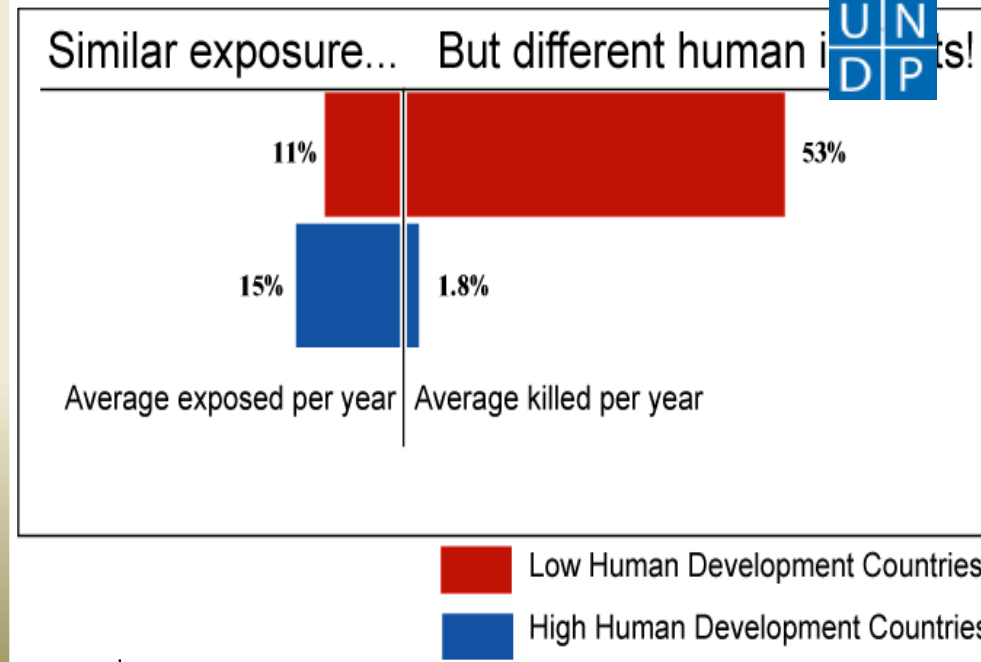
DISASTERS happen where there are risk conditions

... and those conditions have been man-made

MULTI-HAZARD

Context

Increased VULNERABILITY



... Simultaneously to the development processes

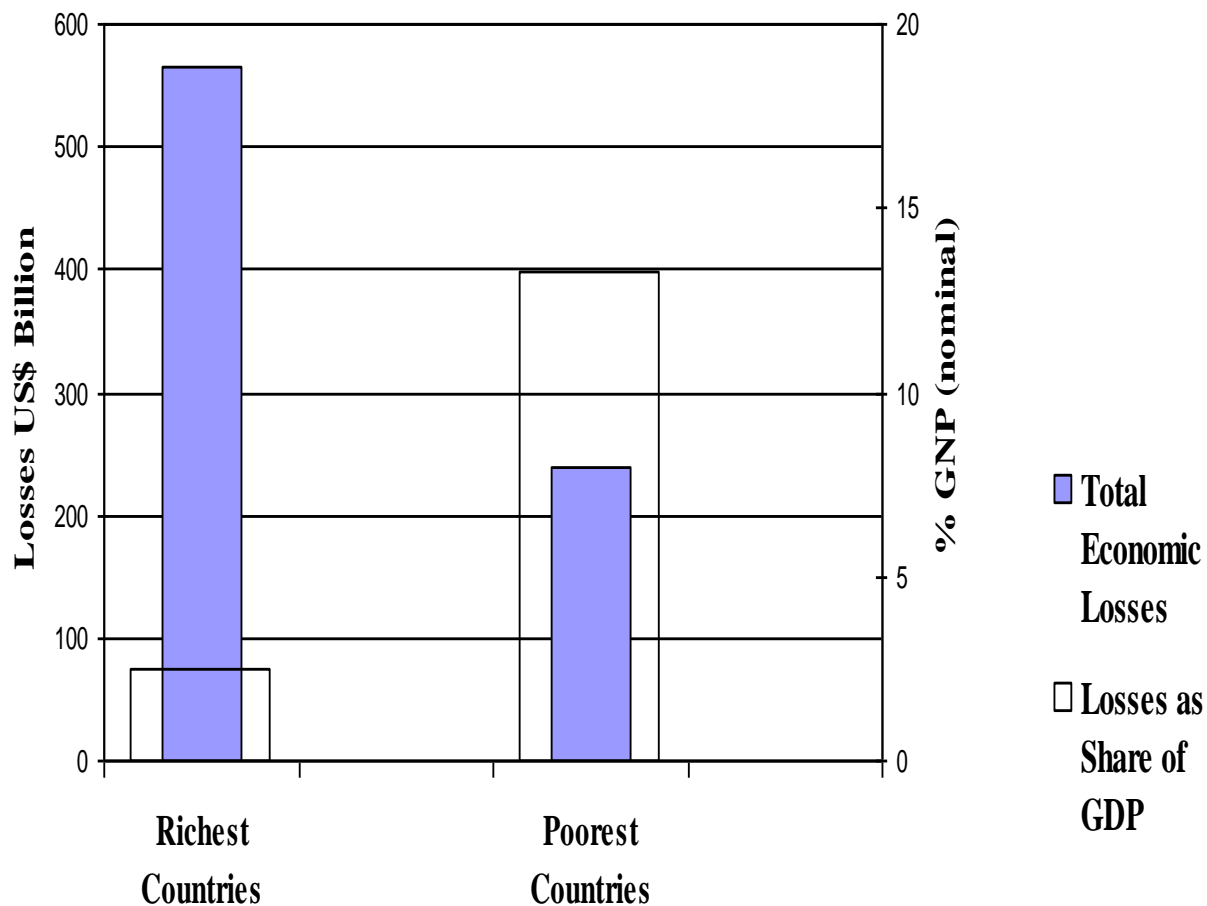
...that may INCREASE or DECREASE disaster risk.



disaster affectation deep inequalities (1)



Disaster Losses, Total and as Share of GDP, 1985-99



Economic losses: growing economies

GDP impact: low income countries 2% vs. 15%

... how development may increase risks



URBANIZATION : unplanned and rapid growing
social exclusion and poverty, migrations .

Poorly planned INVESTMENTS : critical
infrastructure as nuclears, hydro-reservoirs & flooding
settlements; turistic investment and mangroves or coral
reef, globalization and marginalization of rural areas....

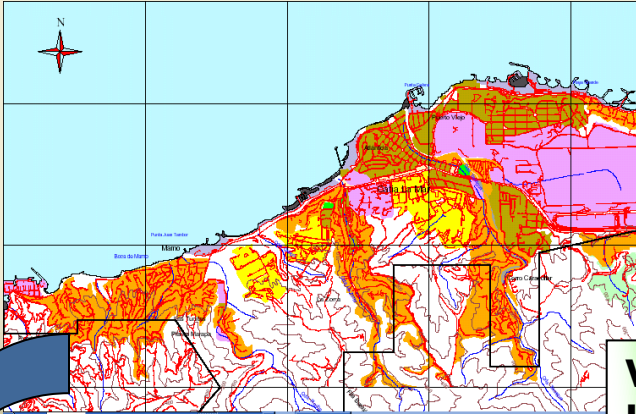
GOVERNANCE/ Non-inclusive growth, recurrent crisis , and distribution of social
capital economic: Decisions affecting resource distribution, Policy and Institutional: Policies
and plan for DRR, institutions capable of manage risks
Normative: Application of law and normatives (building codes, land us planning, watersheed
management, fiscal policies, regulation of prices, etc. Social trust and gov. legitimacy

Environmental management and CLIMATE CHANGE

Links between economic growing, consum paterns and global warming. Less
developed countries has a lower adaptation capacity and are more vulnerable to the
effects of climate changes

Modification of meteorological patterns to increase frequency and variability of
extreme weather

RISK



H A Z A R D S

Natural

Socio - natural

Man made

V U L N E R A B I L I T I E S

C A P A C I T I E S

Factors

Physical

Environmental

Economic

Social

Political

Organizational

Institutional

Educational

Ideological - Cultural

Risk Scenarios



C h a r a c t e r i z a r

Dynamic

Difference

R Perception

Social Character of **R**



RISKS



INCREASING **VULNERABILITY**

- Inappropriate land use planning
- Environmental degradation
- Inequalities and economic dependency
- Weak social contract/weak organization
- Deficient infrastructure
- Weak administrative systems



MULTI **HAZARD** CONTEXT

- Seismic and volcanic activities
- Cyclones
- Floods
- Landslides
- Coastal Erosion
- Drought ...



**BAD
DEVELOPMENT
PATTERNS**

EVOLUTION OF DISASTER CONCEPTS



1970

Hazard : Earthquake

Year : 1971

Intensity: 6,6

Context: urban

Fatalities: 65

Place : San Francisco

Hazard : Earthquake

Year : 1972

Intensity: 6,2

Context: urban

Fatalities: 11,000

Place : Managua

2010

Hazard : Earthquake

Year : 2010

Intensity: 8,8

Duration: 3'

Context: urban

Fatalities: +- 500

Afec. GDP: 17%

Place : Chile

Hazard : Earthquake

Year : 2010

Intensity: 7,3

Duration: 35''

Context: urban

Fatalities: 300,000

Afec. GDP: 120%

Place : Haiti

Implications in our approach (DRR)



- 1. Move from a reactive to a preventive model**
 - Resilience involve anticipation to the shock
- 2. Connect dots: integrated approach**
 - Linkages with CC, poverty, governance, conflict
- 3. Anchor the solutions on development**
 - From the extraordinary to the ordinary/day to day basis
- 4. Turn on disasters/shocks on opportunities for Transformation**
 - Take advantage of the momentum for change and transform. Resilient recovery
- 5. Strengthen your strengths and weak your weaknesses**
 - Resilience reinforce the idea of focus on (existing) capacities.
- 6. Empower people, empower groups, empower institutions,**
 - Resilience is inside individuals/societies, it is more people centered, relies on a principle of subsidiarity

examples of programmatic interventions



1. Colombia (women as agents of transformation)
2. Bangladesh (institutional resilience)
3. Ecuador (securing livelihoods)
4. Indonesia/Mozambique (preparedness and early warning)

What UNDP could do?



1. **Provide policy advice**, facilitate learning and interchange of experiences
2. **Accompany the process of institutional change/transformation**, facilitate the connection
3. **Support governance for DRR and Rec (national and local level)** and build institutional capacities on preparedness, early recovery and recovery
4. **Support the gov. to turn on the disaster into opportunity** (assessment & strategic planning for (early) recovery) bridging the hum/development, incorporating development principles into Hum.

BCPR-Funded Portfolio, ECIS, 2004-13



| • Thematic Area | Funding 2004-13 |
|---------------------------|------------------------|
| • Disaster Risk Reduction | \$ 22,181,318 |
| • Recovery/Response | \$ 6,629,165 |

Financial Architecture

The seed funding:

- CPR thematic trust fund, which provides the backbone for BCPR's work. For DRR in ECIS, TTF funds are allocated according to a prioritization following conflict and disaster risk (Tajikistan, Kyrgyzstan, Georgia, Kosovo, BiH, and Central Asia at regional level).
- This year Armenia and Moldova were additionally designated for disaster risk. TTF has been shrinking, which has made serving even the prioritized countries increasingly difficult.

In the event of a disaster, funding is provided for immediate early recovery needs (TRAC 3 Category II) and recovery (as in the Van project).

TTF requested on the basis of :

- regional and national capacity development actions for priority countries in Central Asia Western Balkans and
- reasonable expectation of own support in the event of significant govt financing.

Thematic Focus Areas

1. Enabling environment:

- national and local DRR strategies,
- National DRR Platforms

2. Risk assessment and information management:

- National Disaster Observatory,
- national and local risk assessment,
- support to command centers and early warning systems,
- ICT applications

3. Capacity development:

- capacity and assessment;
- training programmes and facilities,
- networks

4. Disaster prevention:

- **integration of DRR/CRM into development frameworks,**
- **structural and non-structural mitigation actions,**
- **delivery through area-based development**

5. Disaster preparedness:

- response coordination mechanisms, search and rescue,
- community-based preparedness

6. Community of practice:

- systematization of knowledge,
- exchange of capacity among practitioners



Thank you for your attention.
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