Inter-agency meeting on Outer Space Activities Open informal session Paris, 20 January 2006



# Disaster Reduction and some applications

Pedro Basabe, Dr. ès Sc. Senior Programme Officer ISDR secretariat, Geneva





## The UN International Strategy for Disaster Reduction (ISDR)



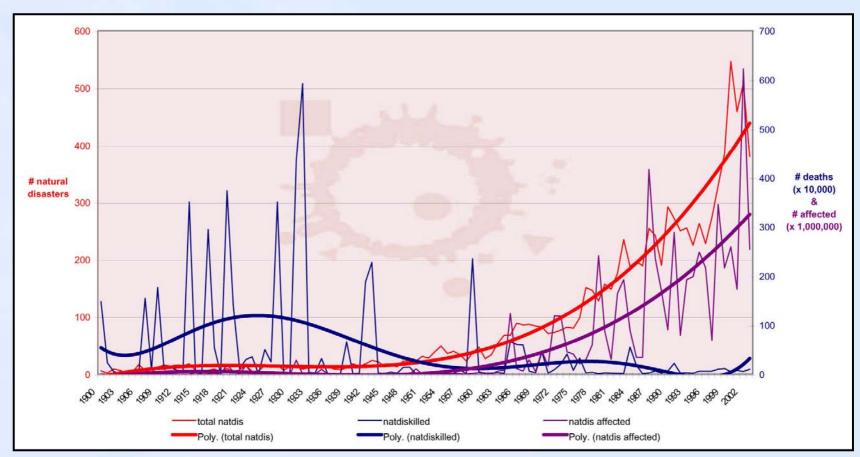
The Hyogo Framework for Action 2005-2015 (WCRD)



The Global Information Platform on disaster risk reduction and linkage with the Technology Hyper-database



## Natural disaster: Trends in events, deaths & people affected. World 1900 - 2004



Source: EM-DAT: The OFDACRED International Disaster Database; www.em-dat.net - Université catholique de Louvain - Brussels - Belgium



#### The vision of disaster risk reduction

Can sustainable development be achieved without taking into account the risk to natural hazards?
Short answer: NO!

Identification of hazards/vulnerability; monitoring and management of risk are integral to sustainable development.

- Risks will always remain
- Address root-causes to vulnerability: social, economic, environmental, technical-physical factors





## **International Strategy for Disaster Reduction**

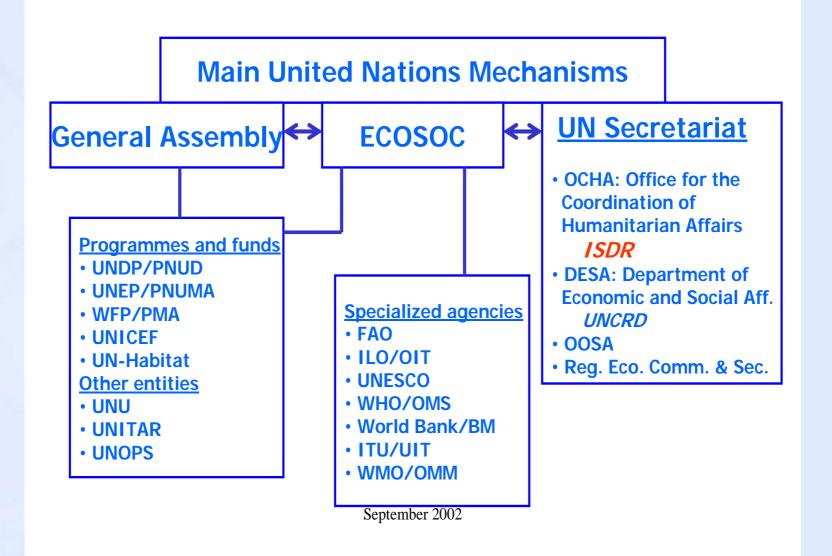
Launched in 2000 by UN General Assembly Resolution A/54/219 as successor of the International Decade on Natural Disaster Reduction – IDNDR, 1990-1999:

The ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an <u>integral component of sustainable development</u>, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters.





# ISDR and disaster reduction within the UN system





## ISDR: system, bodies

#### MANAGEMENT AND SUPPORT

- USG/ASG
- Oversight advisory board
- ISDR support group (donors)

#### **MAIN BODIES**

- Inter-Agency Task Force on DR (Global platform, 34 members)
   (2 meetings/year: April/May and Oct/Nov. in Geneva)
- Inter-Agency Secretariat
- Headquarters in Geneva (PN & IEH-2)
- Regional offices (LAC, Africa, Asia, Central Europe, Bonn for EW, NY liaison)

#### **IMPLEMENTATION**

- Regional platforms
- National platforms, UN country team
- Thematic networks and panels



# **ISDR Main functions:**

- (a) Policy, Strategy and Coordination
- (b) Advocacy and Communication
- (c) Information Management and Networks
- (d) Regional outreach and national platforms



## (a) POLICY/STRATEGY: examples

#### UN mainstreaming of DRR:

- UN millennium Road Map
- WSSD Johannesburg, Sep. 2002 (political declaration)
- Humanitarian agenda
- Poverty eradication
- LDCs action plan for sustainable development
- SIDS and Barbados programme for action

#### DRR into agendas, sectors or hazards:

- Climate change, policy paper process (VARG...) for UNFCCC & IPCC
- Early warning and tsunami: platform for promotion (Boon), UNESCO/IOC, EW-III
- Freshwater: Integrated flood management
- Cooperation to reduce impacts of the El Niño phenomenon (CCIFEN, Gye Ecuador)
- UN initiative towards Earthquakes Safe Cities
- Space technologies for DRR (UNOOSA, UNITAR/UNOSAT)
- Drought & desertification, dust storms
- Landslides (ICL, IPL)
- Mountains & forest
- Human settlements (UN/HABITAT)
- Gender, etc.

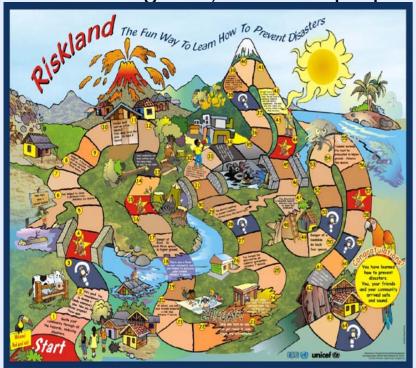
#### WCDR 18-22 January 2005



## (b) ADVOCACY: examples

- Annual Awareness Campaign
- UN Sasakawa Award for Disaster Reduction (annual)
- ISDR Highlights (monthly)
- ISDR Informs (biannual)
- Guidelines (floods), education & training materials –

Riskland game, radio soap-operas, book







## (c) INFORMATION: examples

## Living with Risk 2004 version

- Launched in NY by USG (14 July 2004)
- Translations into: Spanish, Chinese
- Used as training material in many universities (Australia, India, Pacific, South Africa, UK, USA, etc...)

### • Website: increase in users. PreventionWeb (under development)

- Hits in 2005 average of 1,500,000 hits
- Updated information, publications, incl. WCDR
- On-line dialogue on Framework for DRR, Living with Risk, Flood guidelines...

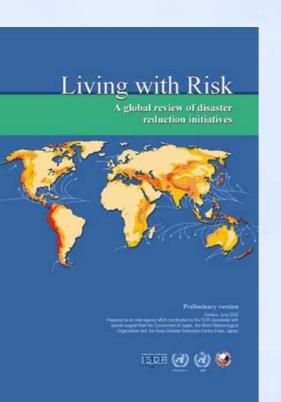
## Hazard and vulnerability profiles by country

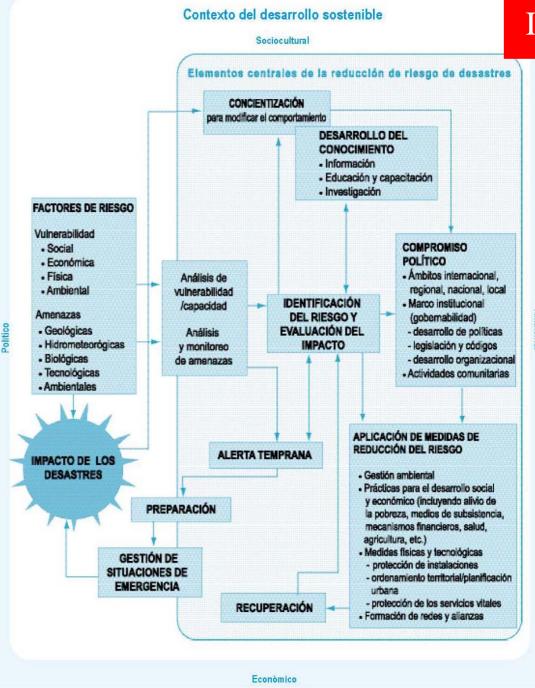
- Joint development with UNEP / DEWA / Global Resource Information Database (GRID)
- Link to: <a href="http://preview.grid.unep.ch/scripts/esrimap.dll?name=Preview2&cmd=Map">http://preview.grid.unep.ch/scripts/esrimap.dll?name=Preview2&cmd=Map</a>

### Marco para la

Reducción del Riesgo de Desastres,

Living with Risk 2002, 2004 Vivir con Riesgo 2005





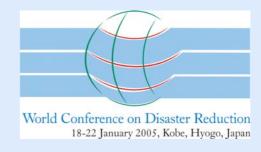


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# The Hyogo Framework for Action 2005-2015:

**Building the resilience of Nations and Communities to disasters** 



## **Key Messages from Hyogo**

2005: Hyogo Framework for Action 2005-2015

- ✓ Integrate disaster risk reduction into policies, plans and programmes of sustainable development and poverty reduction
- ✓ Member States, Regional organizations, United Nations system, financial institutions and NGOs to engage fully in supporting and implementing the International Strategy for Disaster Reduction, and cooperate to advance integrated approaches to building disaster resilient nations and communities
- ✓ Focus on National Implementation, through bi-lateral, regional and international cooperation.



#### World Conference on Disaster Reduction

## **Hyogo Framework for Action 2005-2015**

#### **Content:**

- 1. Preamble
- 2. Objectives, expected outcome and strategic goals
- 3. Priorities for action 205-2015
  - 1. **Governance**: ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation
  - 2. Risk identification: identify, assess and monitor disaster risks and enhance early warning
  - 3. **Knowledge:** use knowledge, innovation and education to build a culture of safety and resilience at all levels
  - 4. Reducing the underlying risk factors (environment, CC, gender, etc.)
  - 5. Strengthen disaster preparedness for effective response



## **SUMMARY** of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA)

#### Expected outcome, strategic goals and priorities for action 2005-2015

#### **Expected Outcome**

The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries

#### **Strategic Goals**

The integration of disaster risk reduction into sustainable development policies and planning

Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards

The systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery programmes

#### **Priorities for Action**

- Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation
- DRR institutional mechanisms (national platforms); designated responsibilities
- DRR part of development policies and planning, sector wise and multisector
- Legislation to support DRR
   Decentralisation of

Key Activities

- responsibilities and resources
- Assessment of human resources and capacities
- Foster political commitment
- · Community participation

- 2. Identify, assess and monitor disaster risks and enhance early warning
- Risk assessments and maps, multi-risk: elaboration and dissemination
- Indicators on DRR and vulnerability
- Data & statistical loss information
- Early warning: people centered; information systems; public policy
- Scientific and technological development; data sharing, spacebased earth observation, climate modeling and forecasting; early warning
- · Regional and emerging risks

- Use knowledge, innovation and education to build a culture of safety and resilience at all levels
- Information sharing and cooperation;
- Networks across disciplines and regions; dialogue
- . Use of standard DRR terminology
- Inclusion of DRR into school curricula, formal and informal education
- Training and learning on DRR: community level, local authorities, targeted sectors; equal access
- Research capacity: multi-risk; socioeconomic; application
- Public awareness and media

- 4. Reduce the underlying risk factors
- Sustainable ecosystems and environmental management
- DRR strategies integrated with climate change adaptation
- Food security for resilience
- DRR integrated into health sector and safe hospitals
   Protection of critical public facilities
- Recovery schemes and social safety- nets
   Vulnerability reduction with diversified income options
- Financial risk-sharing mechanisms
- Public-private partnership
- . Land use planning and building codes
- Rural development plans and DRR

- 5. Strengthen disaster preparedness for effective response at all levels
- Disaster management capacities: policy, technical and institutional capacities
- Dialogue, coordination & information exchange between disaster managers and development sectors
- Regional approaches to disaster response, with risk reduction focus
- Review & and exercise preparedness and contingency plans
- Emergency funds
- Voluntarism & participation

#### **Cross Cutting Issues**

Multi-hazard approach

Gender perspective and cultural diversity

Community and volunteers participation

Capacity building & technology transfer



#### World Conference on Disaster Reduction

## **Hyogo Framework for Action 2005-2015**

#### **Content:**

## 4. Implementation and follow-up

- A. General considerations
- B. States
- C. Regional organizations and institutions
- D. International organizations
- E. The International Strategy for Disaster Reduction (Inter-agency Secretariat and Task Force)
- F. Resources mobilization



#### Continued

#### SUMMARY of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA)

#### Implementation and Follow-Up

In order to achieve the goals and act upon the priorities identified in this Framework, the following tasks have been identified to ensure implementation and follow-up by States, regional and international organizations in collaboration with civil society and other stakeholders. The ISDR partners, in particular the Inter-agency Task Force on Disaster Reduction and secretariat, are requested to assist in implementing this Framework for Action.

#### **General Considerations**

Implementation by different stakeholders, multisectoral approach; participation of civil society (NGOs, CBOs, volunteers), scientific community & private sector is vital

States primarily responsible: an enabling international environment is vital, incl. strengthened regional capacities

Build multistakeholder partnerships Particular attention to:

- Small island developing States: Mauritius Strategy:
- Least developed countries:
- Africa

States, regional and international organizations to foster coordination among themselves and a strengthened International Strategy for Disaster Reduction (ISDR)

Follow-up integrated with other major conferences in fields relevant to DRR: reviews as appropriate

#### Actors

#### States

- . Designate national coordination mechanisms for the implementation and follow up, communicate to the ISDR secretariat:
- National baseline assessments of the status of DRR;
- Publish and update a summary of national programme for DRR including international cooperation;
- Develop procedure for reviewing national progress including systems for cost benefit analysis and ongoing monitoring on risk;
- Consider acceding to, approving or ratifying relevant international legal instruments and to make sure they are implemented;
- Promote the integration of DRR with climate variability and climate change into DRR strategies and adaptation to climate change; ensure management of risks to geological hazards.

#### Regional Organizations and Institutions

- Promote regional programmes including for technical cooperation, capacity development, the development of methodologies and standards for hazard and vulnerability monitoring and assessment, the sharing of information and effective mobilization of resources:
- . Undertake and publish regional and sub-regional baseline assessments:
- . Coordinate and publish reviews on progress and support needs, and assists countries in preparation of national summaries:
- Establish specialized regional collaborative centers;
- . Support the development of regional mechanisms and capacities for early warning, including for tsunami

#### International Organizations (including UN System and IFIs)

- . Engage in the implementation of the ISDR by encouraging integration of DRR into humanitarian and sustainable development fields:
- Strengthen the capacity of the UN system to assist disaster-prone developing countries in DRR and implement measures for assessment of progress;
- Identify actions to assist disaster-prone developing countries in the implementation of the HFA, ensure their integration and that adequate funding is allocated; assist in setting up national strategies and programmes for DRR;
- Integrate actions into relevant coordination mechanisms (UNDG, IASC, RCs and UN Country Teams);
- Integrate DRR into development assistance frameworks such as CCA/UNDAF, PRSP;
- . In collaboration with networks and platform support: data collection and forecasting on natural hazards and risks; early warning systems; full & open exchange of data;
- Support States with coordinated international relief assistance, to reduce vulnerability & increase capacities;
- . Strengthen international mechanisms to support disaster stricken States in post-disaster recovery with DRR approach Adapt & strengthen inter-agency disaster management training for DRR and capacity building.

#### ISDR (Inter-Agency Task Force on Disaster Reduction & secretariat)

- Develop a matrix of roles and initiatives in support of follow/up to the HFA;
- . Facilitate the coordination of effective actions within the UN system and other international and regional entities to support the implementation of the HFA, identify gaps, facilitate processes to develop guidelines and policy tools for each priority area:
- . In broad consultation, develop generic, realistic and measurable indicators. These indicators could assist States in measuring progress in the implementation of the HFA;
- · Support national platforms & regional coordination;
- Register relevant partnerships with Commission on Sustainable Development;
- · Stimulate the exchange, compilation, analysis and dissemination of best practices, lessons learnt;
- Prepare periodic review on progress towards achieving the objectives of the HFA and provide reports to the UNGA & other UN bodies

#### Resource Mobilization: States, Regional and International Organizations

- Mobilize resources and capabilities of relevant national, regional and international bodies, including the UN system;
- . Provide and support the implementation of the HFA in disaster prone developing countries, including through financial and technical assistance, addressing debt sustainability, technology transfer, public-private partnership and North-South and South-South cooperation:
- Mainstream DRR measures into multilateral and bilateral development assistance programmes;

- . Provide adequate voluntary financial contribution to the UN Trust Fund for DR to support follow-up activities to HFA; review usage and feasibility for the expansion of this fund;
- . Develop partnership to implement schemes that spread out risks, reduce insurance premiums, expand insurance coverage and increase financing for post-disaster reconstruction, including through public and private partnerships. Promote an environment that encourages a culture of insurance in developing countries.



PoA 2005-2015: Means to reduce disaster risk

B. 17. (g) Support the improvement of scientific and technical methods and capacities for risk assessment, monitoring and early warning, through research, partnerships, training and technical capacity-building. Promote the application of in situ and space-based earth observations, space technologies, remote sensing, geographic information systems, hazard modelling and prediction, weather and climate modelling and forecasting, communication tools and studies of the costs and benefits of risk assessment and early warning.





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## Concept and strategy

#### **Objective:**

To respond to ISDR mandate and the HFA Information hub based on existing networks and partner participation (20)

**Added value:** information system and web register → good practices, lessons learned, technologies and programmes that are really reducing risk

**User survey:** ISDR website/PreventionWeb

#### **Guiding principles** (clearinghouse concept):

- information networks
- decentralised characteristic → nodes of information
- open: broad participation
- friendly and free access
- user-oriented
- flexibility

#### Main elements:

#### Implementation process

- Strategic and sustainable approach
- Partnership development
  User requirements and main tasks
  Link with communication strategy
- Resource mobilisation



### **Main Components**

Disaster risk reduction information platform (in coordination with regional information platforms and partners)

#### Information system, DBs **Knowledge network** · Identification and Platform to exchange compilation of data, criteria, knowledge and information, technologies, experience; tools and projects; · Promote forums and Systematic classification analysis and categorization; Definition of concepts Analysis of information to and terminology; identify lessons learned • Training courses on and good practices. DRR. Web-based portal (PreventionWeb) Information services Specialised library, Field libraries and · Dissemination of multimedia useful information and good practices · Catalogue and bibliographic information • Country information UN publications and Disaster statistics resolutions, selected Hazard profiles and literature on-line maps · CD-ROMs and · National contacts and multimedia products; experts, etc. On-line library documents, field



For further information please visit:

www.unisdr.org in English

www.eird.org en Español

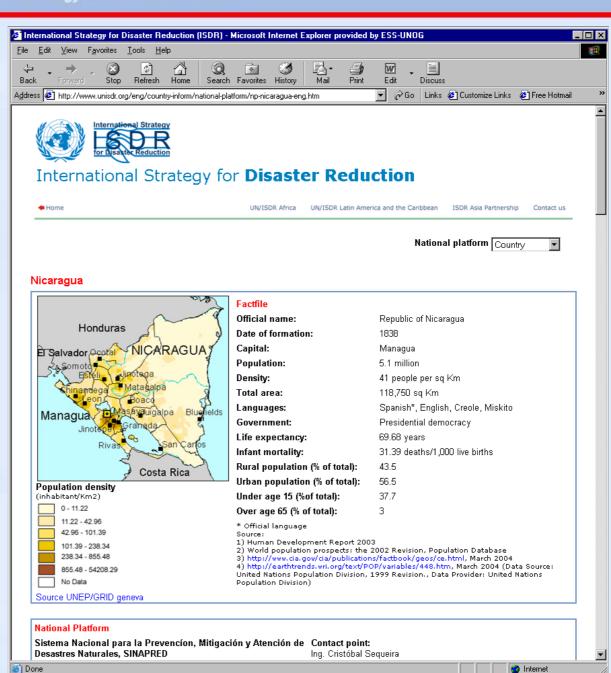
Thank you for your attention





#### **PreventionWeb**

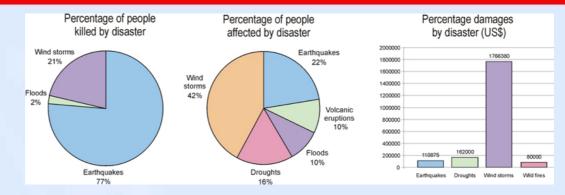
On-line country information



## On-line

# **Disaster impact information**

1900-2003



#### Number of people killed

#### Number of people affected

## Based on EM-DAT (CREL

	Disaster	Date	Killed	Disaster	Date	Affected
D	Earthquake	23-Dec-1972	10,000	Wind Storm	26-Oct-1998	868,228
	Wind Storm	26-Oct-1998	3,332	Earthquake	23-Dec-1972	720,000
	Earthquake	4-Feb-1906	1,000	Wind Storm	22-Oct-1988	360,278
	Earthquake	31-Mar-1931	1,000	Volcano	10-Apr-1992	310,075
	Flood	Oct-1960	325	Drought	22-Sep-1997	290,000
	Earthquake	1-Sep-1992	179	Drought	Jul-2001	187,645
	Wind Storm	22-Oct-1988	130	Wind Storm	10-Aug-1993	123,000
	Wind Storm	23-May-1982	71	Flood	Sep-1999	107,105
	Wind Storm	28-Jul-1996	42	Flood	May-1990	106,411
		'		Drought	Jul-1994	80,000



On-line hazards and vulnerability maps Identification of people/zones at risk

**UNEP/GRID** and **UN/ISDR** 



