

**23^e Congrès Mondial de la Route
C 3.2 Risk Management for Roads**

Paris, 19 September 2007



**Implementation of the Hyogo
Framework for Action –
Risk management for roads**

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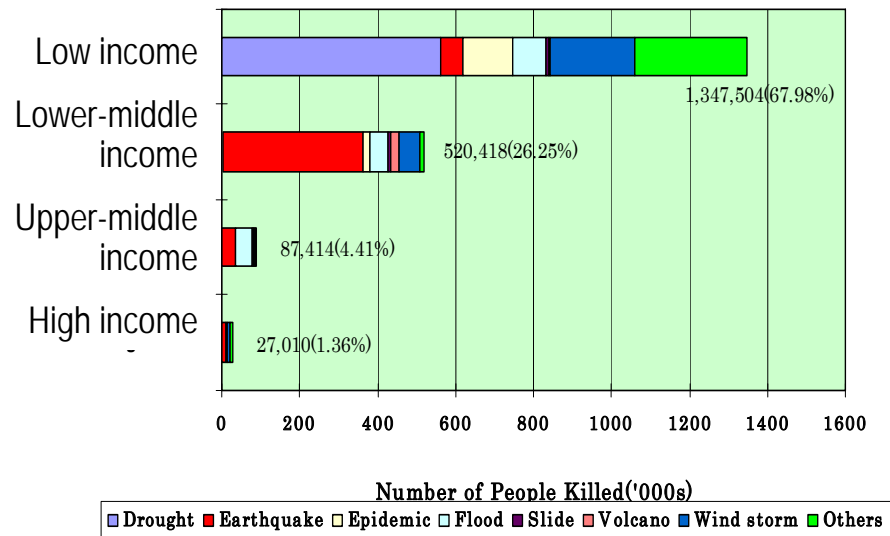
Disaster trends & impacts -> rising

OVER THE LAST DECADE:

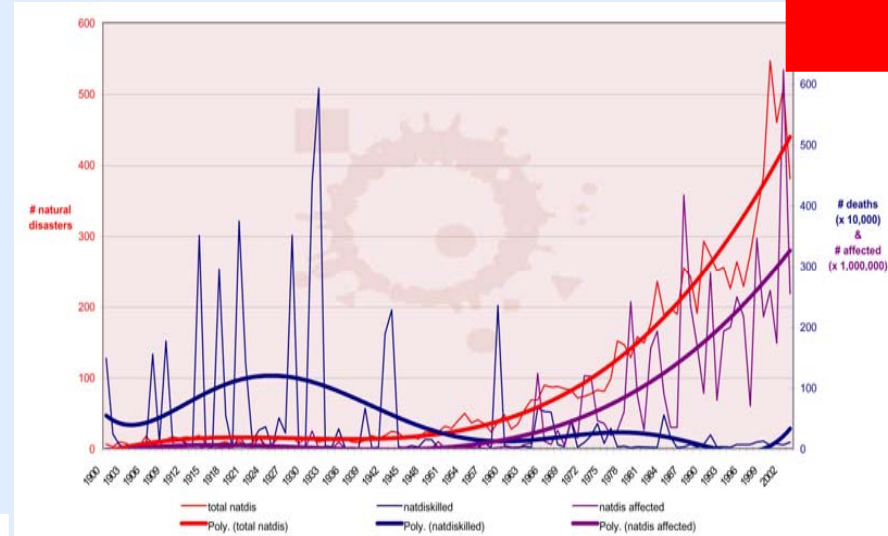
- 900,000 dead,
- US\$ 570B losses,
- 2,600 million people affected,
- poor people and countries most affected,
- most disasters are weather/climate related

1b. Human losses: hazards by personal income

Number of People Killed(Income Class/Disaster Type)
(1975-2000) World Summary

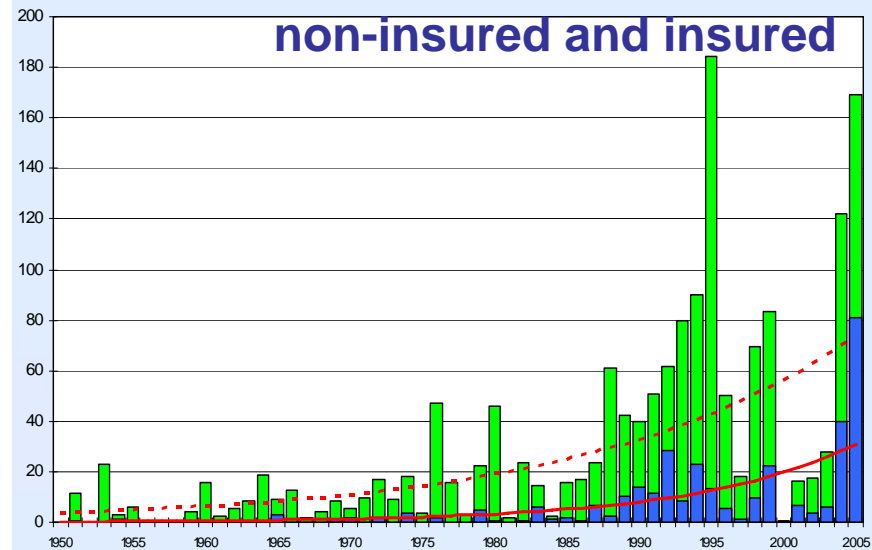


1a. Human losses: numbers



2. Economic losses:

non-insured and insured

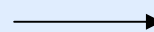


Common root causes → Risk components

Vision

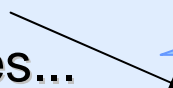
Natural and human-induced hazards

eg: geological, hydro-meteorological hazards, land degradation, climate change, etc.



**HAZARDS +
EXTREME EVENTS**

Socio-economic: poverty, unplanned urban growth, lack of awareness and institutional capacities...

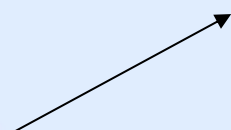


Physical: insufficient land use planning, housing, infrastructures located in hazard prone areas...



VULNERABILITY

Environmental impact
ecosystem degradation; coastal, watershed, marshlands...), etc.



Hazard

X

Vulnerability

=

Disaster Risk

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 integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters.



▶ ISDR

Main functions:

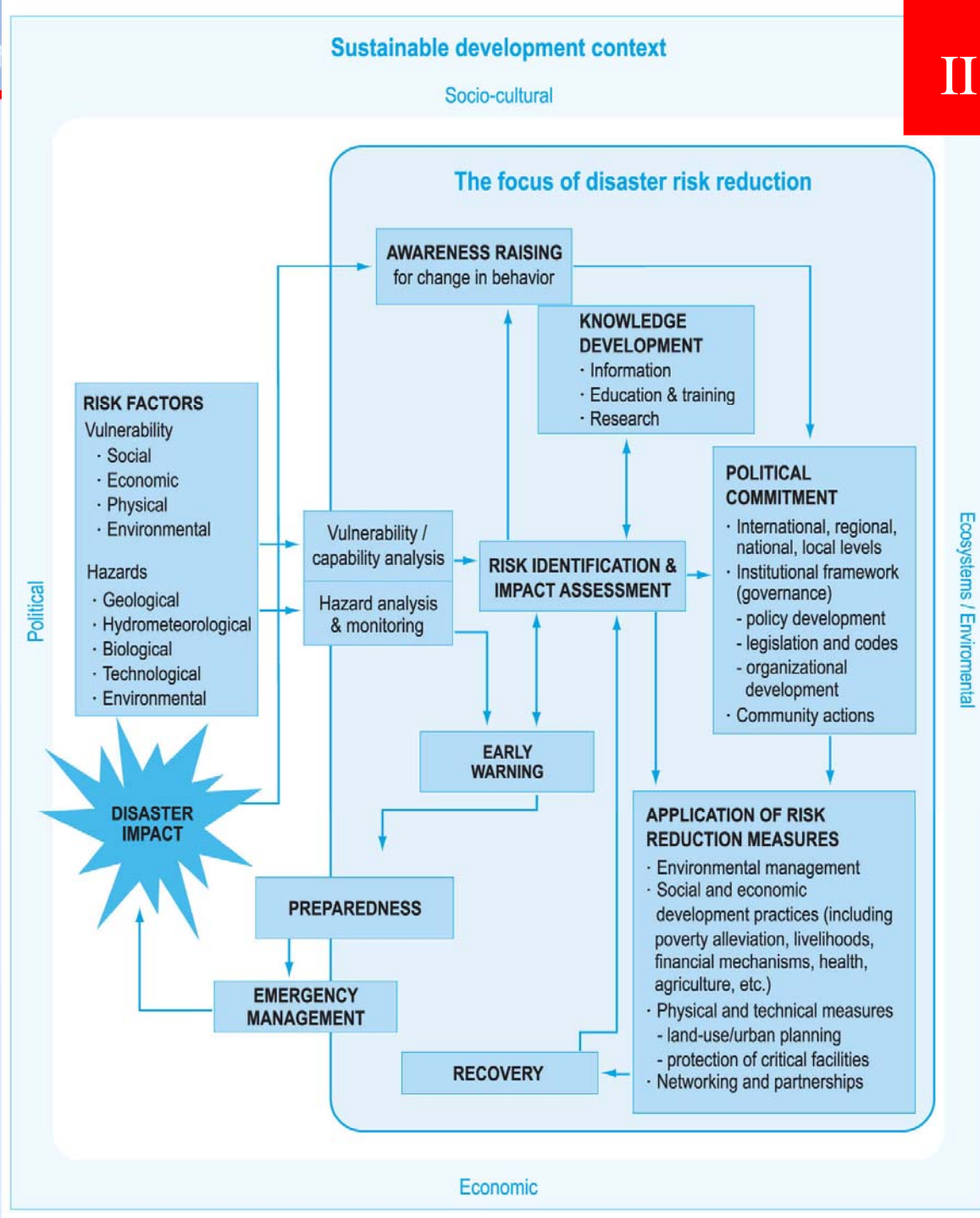
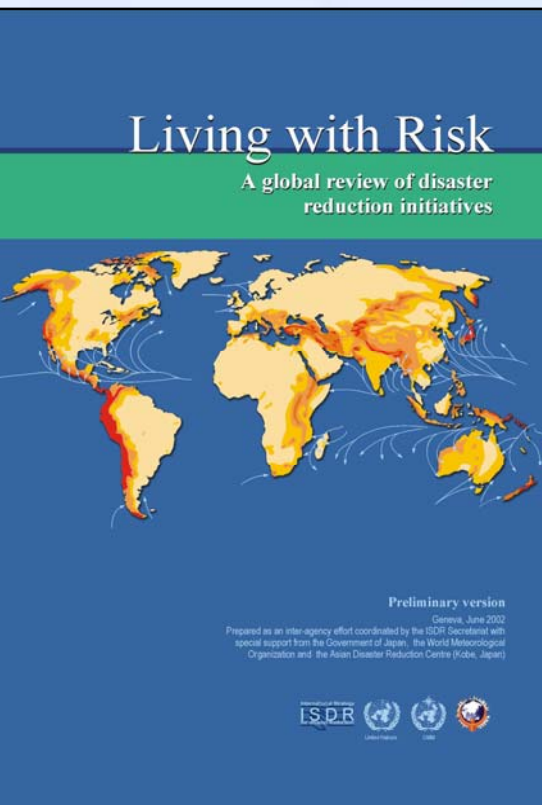
- (a) Policy, Strategy and Coordination**
- (b) Advocacy and Communication**
- (c) Information Management and Networks**
- (d) Regional outreach and partnership for implementation**

(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
 - Freshwater: Integrated flood management
 - Cooperation to reduce impacts of the El Niño phenomenon (CIIFEN)
 - UN initiative towards Earthquakes Safe Cities
 - Space technologies for DRR (UNOOSA, UNITAR/UNOSAT)
 - Drought, desertification, dust storms (UNCCD, FAO, WFP, WMO, UNESCO)
 - Landslides (ICL-IPL, JTC-1)
 - Mountains & forest
 - Human settlements (UN/HABITAT)
 - Gender
 - Roads and bridges

Framework for Disaster Risk Reduction, Living with Risk 2004





The Hyogo Framework for Action (HFA) 2005-2015: Building the resilience of Nations and Communities to disasters

*Adopted by 168 governments at the 2nd World
Conference on Disaster Reduction
in Kobe, Japan on January 2005
(>4000 participants)*





Strategic goals

- The integration of disaster risk reduction into sustainable development policies and planning
- The 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, response and recovery programmes



Priorities for action 2005-2015

- 1. Policies and 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:**
 - 1. Environment and natural resources management.*
 - 2. Social and economic development practices.*
 - 3. Land-use planning, building codes and other technical measures.*
- 5. Strengthen disaster preparedness for effective response**

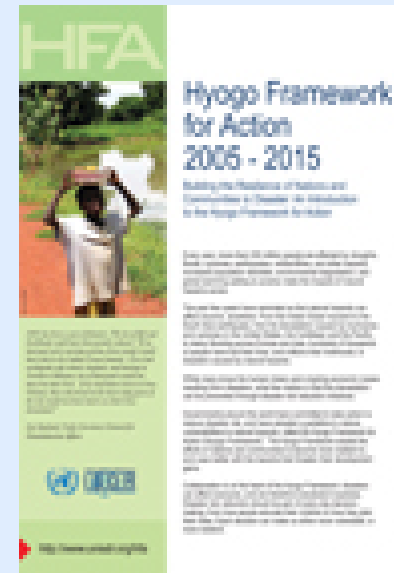
Content (continue....):

4. Implementation and follow-up

- A. General considerations
- B. States - constituencies
- C. Regional organizations and institutions
- D. International organizations
- E. The International Strategy for Disaster Reduction (Global Platform and coordination mechanisms)
- F. Resources mobilization

Monitor progress:

- Guidelines and indicators
- Yearly report to the GA

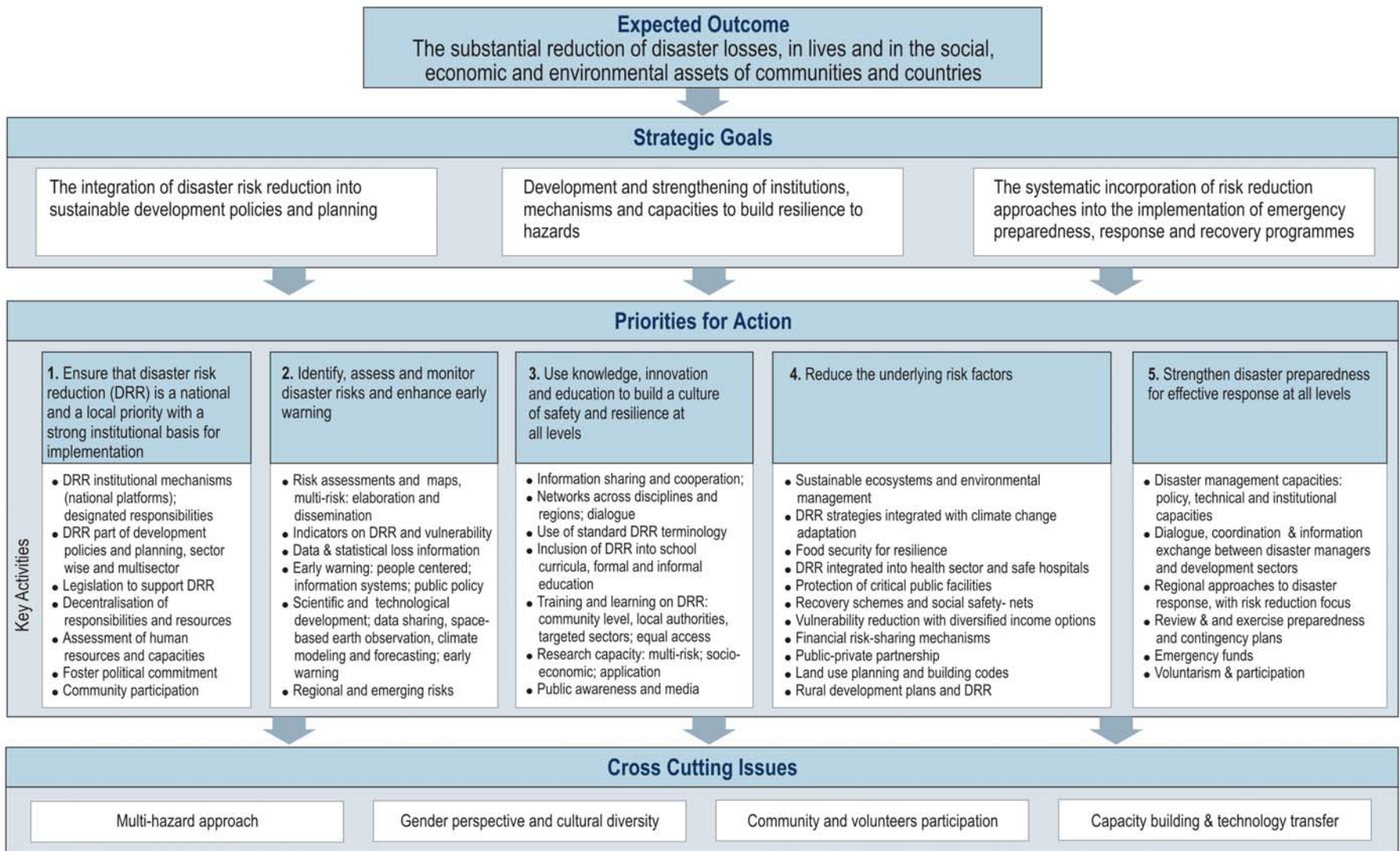


Summary

The Hyogo Framework for Action 2005-2015



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



Summary (continued)

The Hyogo Framework for Action 2005-2015



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, multi-sectoral 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 multi-stakeholder 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

Critical tasks

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 assist 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.

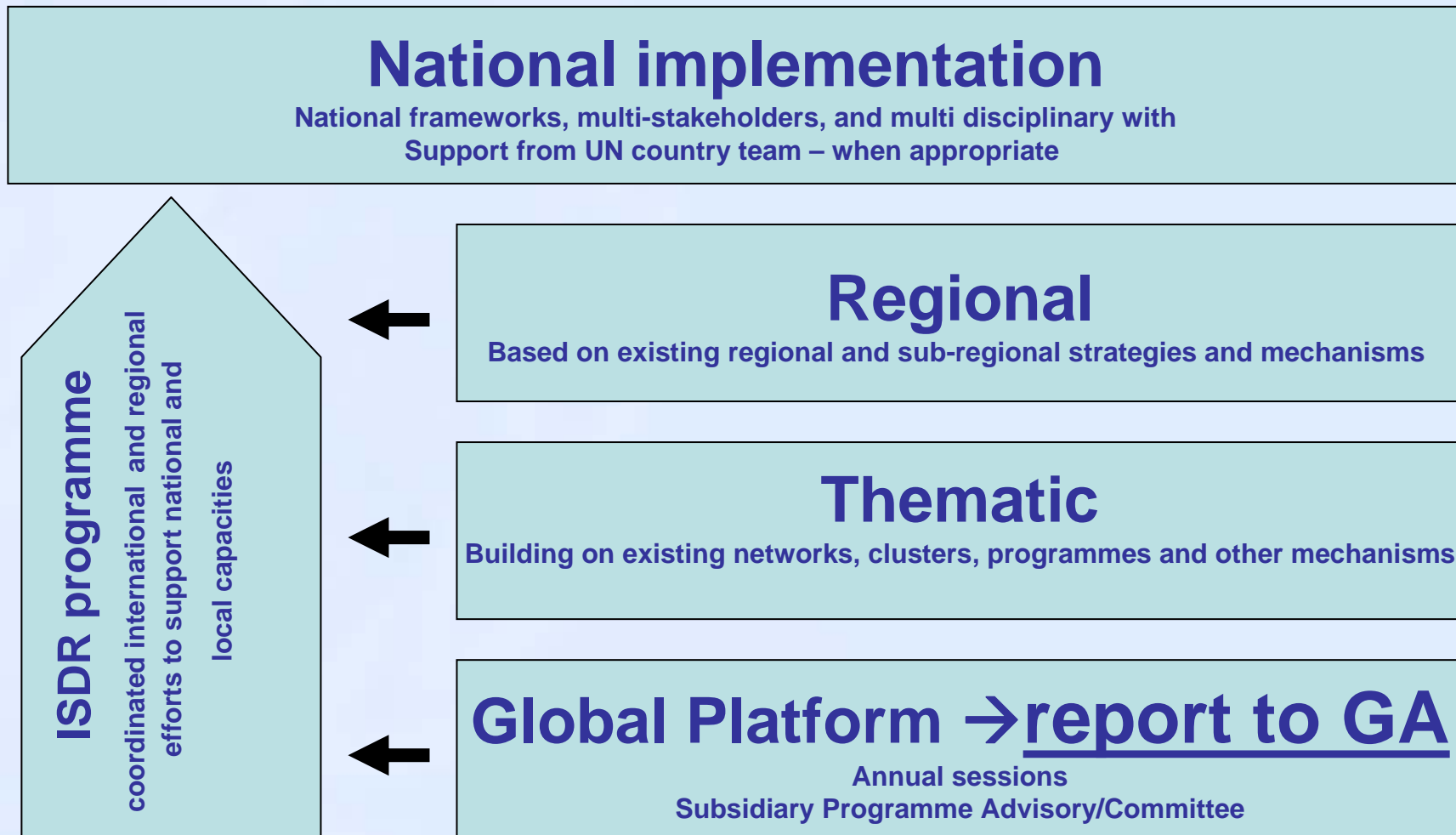
How to implement the HFA:

Build a disaster risk reduction movement (ISDR system)

- ✓ Our objective: To reduce disaster risk, worldwide, focussing on nations and communities
- ✓ The instrument: Hyogo Framework for Action 2005-2015
- ✓ The vehicle: ISDR system - ‘movement’



ISDR system levels of action (“platforms”)



Roads and bridges

Key infrastructures to be protected from disasters.

Serious damages would not only cause mortalities during the disasters but also disturb assistance, relief, rescue operation and recovery process after disasters.

For safety: main roads and highways should be protected as much as possible from natural hazards, such as landslides, floods, earthquakes, strong wind, high tide, waves, ice, snow, etc.

Example: 1995 Hanshin-Awaji Earthquake in Japan

Many roads, highways, and bridges were destroyed.

Main circulation system and city functionality collapsed.

Amplified the magnitude of disasters



Other examples:

Blizzards: road accidents, people stuck in automobiles for many hours.

Flash floods: roads and bridges washed away, people drawn to death by trying to drive through the stream on road.

Landslides, floods, tsunamis: roads and bridges damaged and washed away.

Tropical cyclones and tornadoes: automobiles are at risk to be blown away.

Fog, heavy rain, and ice/snow on road: road accidents.

▶ Risk management for roads

Key activities in line with the HFA:

- Strengthen/develop policy, mechanisms, technical and institutional capacities.
- Hazard risk assessment is a key to reduce road disaster risk.
- Vulnerability identification and analysis: physical, social, economic, environmental, etc.
- Location, building codes and protecting measures of roads and bridges should consider risk identification (hazards and vulnerabilities).

▶ Risk management for roads (continued)

Key activities in line with the HFA:

- Roads and bridges as part of integrated land-use planning.
- Management of roads and bridges to be considered in integrated risk and disaster management, including EW systems, and relief and rescue systems.
- Ensure the establishment of funds to maintain, reinforce and rehabilitate roads and bridges in case of disaster.
- Develop and regularly update risk identification, preparedness and contingency plans.

We invite you to participate in a common approach and to take advantage of the Hyogo Framework for Action 2005-2015, as a tool for integrated Road Disaster Risk Management.

Thank you for your attention

For further information please visit: www.unisdr.org