

David Applegate October 14, 2009

U.S. National Science & Technology Council Subcommittee on Disaster Reduction

- SDR is an element of the President's National Science & Technology Council charged with establishing clear national goals for Federal science and technology investments in disaster reduction.
- Promotes interagency cooperation for natural and technological hazards and disaster planning.
- Facilitates interagency approaches to identification and assessment of risk, and to disaster reduction.
- Advises the Administration about relevant resources and the work of SDR member agencies.
- Serves as the US national platform for UN International Strategy for Disaster Reduction

USGS



National Science & Technology Council Subcommittee on Disaster Reduction

- Centers for Disease Control and Prevention
- Department of Defense
- Department of Energy
- Department of Homeland Security
- Department of Housing & Urban Development
- Department of the Interior
- Department of State
- Department of Transportation
- Environmental Protection Agency
- FEMA
- NASA
- National Geospatial-Information Agency U.S. Public Health Commissioned

- National Guard Bureau
- National Institute of Standards and Technology
- National Oceanic & Atmospheric Administration
- National Science Foundation
- U.S. Agency for International Development
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Agriculture
- U.S. Forest Service
- U.S. Geological Survey
- U.S. Public Health Commissioned Corps



The Hyogo Framework for Action



Words Into Action: Implementing the Hyogo Framework for Action

Document for consultation Draft November 2006



 Ensure that disaster risk reduction is a national and local priority;

- 2. Identify, assess and monitor disaster risks and enhance early warning;
- 3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
- 4. Reduce the underlying risk factors; and
- 5. Strengthen disaster preparedness for effective response at all levels.

For tsunamis, seismic is the start





All Hazard Alert Broadcast system installed at Ocean Shores, Washington.



Credit: Washington Emergency Management

Global Assessment Report on Disaster Risk Reduction: Risk and Poverty in a Changing Climate





Floods, droughts, storms, earthquakes, fires and other events, when combined with 'risk drivers' such as increasing urbanization, poor urban governance, vulnerable rural livelihoods and the decline of ecosystems, can lead to massive human misery and crippling economic losses. The risks posed by global climate change and rising sea levels carry additional grave implications for how we will live in the near future.

While we cannot prevent natural phenomena such as earthquakes and cyclones, we can limit their impacts. The scale of any disaster is linked closely to past decisions taken by citizens and governments – or the absence of such decisions. **Pre-emptive risk reduction is the key. Sound response mechanisms after the event, however effective, are never enough.**

-- Ban Ki-moon

Chair's Summary of the Second Session of the Global Platform for Disaster Risk Reduction



Second Session, Geneva, Switzerland

16 - 19 June 2009

Urgent action is required to harmonise and link the frameworks and policies for disaster risk reduction and climate change adaptation, and to do so within the broader context of poverty reduction and sustainable development.

...disaster risk reduction must be a concrete part of the deal on climate change that is sealed at the United Nations Climate Conference in Copenhagen in December 2009.

...addressing the underlying drivers of disaster risk therefore offers the potential for a **triple win** – for adaptation, disaster risk reduction and poverty reduction.



Disaster risk reduction needs to inform climate adaptation strategies



Given the relationships between climate change and extreme events, the community of researchers, engineers and other experts who work on reducing risks from natural and humancaused disasters will have an important role to play in framing climate change adaptation strategies and in providing information to support decisionmaking during implementation.



-- Presidential science advisor John Holdren

Framing the Grand Challenges for Disaster Reduction

 Objective: To enhance disaster resilience by composing a ten-year agenda for science and technology activities that will produce a dramatic reduction in the loss of life and property from natural and technological disasters.



Grand Challenges for Disaster Reduction

Grand Challenges *for* **Disaster Reduction**

National Science and Technology Council Committee on Environment and Natural Resources





- 1. Provide hazard and disaster information where and when it is needed.
- 2. Understand the natural processes that produce hazards.
- 3. Develop hazard mitigation strategies and technologies.
- 4. Recognize and reduce vulnerability of interdependent critical infrastructure.
- 5. Assess disaster resilience using standard methods.
- 6. Promote risk-wise behavior.

Implementation plans released March 2008

Grand Challenges for Disaster Reduction

National Science and Technology Council Committee on Environment and Natural Resources



A Report of the Subcommittee on Disaster Reduction

June 2005 Second Printing Janua

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More information available at www.sdr.gov



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In a more disaster-resilient world...

- Relevant hazards are recognized and understood.
- Communities at risk know when a hazard event is imminent.
- Property losses and lives at risk in future natural hazard events are minimized.
- Disaster-resilient communities experience minimum disruption to life and economy after a hazard event has passed.



More Information

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www.sdr.gov www.preventionweb.net



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