

**Report of the ISDR Scientific and Technical Committee**

**Professor Walter Erdelen, Assistant Director General, Natural Sciences, UNESCO**

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Excellencies, Ladies and Gentlemen,

I am very pleased to speak to you this morning on an important matter – the factual foundations of our disaster risk reduction business.

We cannot scale up disaster risk reduction action on the basis hearsay. We cannot achieve the halving of losses that the Secretary-General Ban Ki-moon has called for without a very solid knowledge of what works and what does not. The ISDR Scientific and Technical Committee was formed last year in response to such concerns.

The Committee's main role is to provide scientific and technical advice to the Global Platform, as called for at the first session of the Global Platform in 2007. Its remit covers the natural, environmental, social, economic, health and engineering sciences, and relevant matters of technology, engineering practice and implementation.

The first report of the Committee to the Global Platform, labeled SD-03 in your documents, addresses the following issues.

Firstly, climate change

Our current knowledge of climate change represents a major success for science. As a result of recent submissions by the UNISDR secretariat and the government of Norway, the IPCC has decided to undertake a new Special Report on managing the risks of extreme events and disasters. This 2-year IPCC assessment will provide a crucial evidence base for both climate adaptation and disaster risk reduction. We must strongly back the assessment, and ensure that top scientists are nominated by countries and are well supported to engage in it.

Secondly, early warning systems

Early warning systems are high-payoff activities to reduce disaster impacts and save lives. But too often they are not in place, or do not serve those truly at risk, or the warning messages are inconsistent or unclear. We need to solve these problems. The natural and engineering sciences need to be joined by the social sciences, which can inform on such things as attitudes to risk, behaviour during a crisis, and processes for communication and eliciting public responses.

Thirdly, health impacts of disasters

The health impacts associated with disasters are now known to extend well beyond the immediate crisis phase, but this knowledge has not been well applied in policy and practice. Thinking must span the whole breadth and longer timeframe of potential health impacts, including and beyond preparedness and recovery.

#### Fourthly, building resilience

The idea of resilience is highlighted in the subtitle of the Hyogo Framework. But what exactly is it and how can we enhance it? Why is it that people expose themselves by building houses in steep ravines or on active volcanoes? How do social and economic conditions, poverty, environmental factors, institutions and governance affect resilience? We need to get beyond the superficial answers to the deeper understandings that actually lead to improved resilience.

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Beyond these specific topics – and others of equal importance such as seismic risks – there lies a further serious problem. Namely, that decision makers frequently do not access, and sometimes simply ignore, the scientific and technical knowledge that is relevant to their responsibilities.

The awful consequences of this were vividly demonstrated during the 2004 Indian Ocean tsunami and the 2005 Hurricane Katrina.

Many examples show that scientific and technical knowledge can lead to greatly reduced disaster risks. But if we are to maximize the gains, we will need a much more effective interplay of science, technology and policy. In particular:

Recommendation 1. Promote knowledge into action. Better mechanisms for systematically integrating scientific and technical knowledge into policy processes are required. The scientific community must find better and faster ways to communicate their findings to policy makers.

Recommendation 2. Use a problem-solving approach that integrates all hazards and disciplines. Collaborative problem-solving approaches are potent means to pull together diverse insights and methodologies and to involve all stakeholders including government institutions and communities at risk.

Recommendation 3. Support systematic programmes of scientific research, observations and capacity building.

Recommendation 4. Guide good practice in scientific and technical aspects of disaster risk reduction. ISDR capacities should be strengthened to improve the level of strategic guidance – on the state of knowledge, on research needs and on good practice. The ISDR Scientific and Technical Committee should play a greater role in these activities in the future.

Finally, on behalf of the Committee, I can assure you that we will not stop here. Yesterday the Committee met here in Geneva to consider how to translate the conclusions of the report into concrete action. We will need your support to realize this objective.

I am honoured to be able to voice the contributions and concerns for the scientific and technical community. Let me conclude by expressing my appreciation to the UNISDR Secretariat for their support to the Committee. Thank you for your attention.