

Statement on establishing an international science advisory mechanism for disaster risk reduction to strengthen resilience

The imperative now

The role and value of scientific information in disaster risk reduction and resilience has long been recognised. However, it is vital that research becomes more directly actionable, coupled with more effective ways of providing evidence-based advice to support disaster policy and practice. Given the coalescence in 2015 of three major international instruments¹ under discussion, there needs to be an immediate step change in the use of science in these international efforts. In particular:

- We² call upon governments and other stakeholders engaged in preparations for the post 2015 international discussions on the successor to the Hyogo Framework for Action and the post 2015 Sustainable Development Goals to support the implementation of an Action Agenda for an international science advisory mechanism for disaster risk reduction to strengthen resilience.
- We invite scientists, scientific organisations, science networks and other entities around the world to share ideas and actions for advancing this Statement. Further details can be found here: <http://preventionweb.net>, <http://www.unisdr.org/partners/academia-research> and www.icsu.org

An Action Agenda

1. **Champion and reinforce existing and future programmes and initiatives for integrated research and the scientific assessment of disaster risk.** To strengthen the provision of actionable research, we particularly emphasise the importance of co-design, production and delivery of research with public, private and civil society stakeholders, engagement of scientists from across the world and that all the necessary natural, social and health sciences, engineering, and humanities disciplines needed are deployed to conduct research and to connect research, policy and practice on disaster risk reduction and resilience across sectors and scales.
2. **Establish and promote an international science advisory mechanism for disaster risk reduction** to strengthen the evidence base to effectively reduce disaster risk and enhance resilience. The mechanism will provide scientific information and evidence to support countries and other stakeholders to implement and monitor progress on disaster risk reduction in the context of the post 2015 sustainable development agenda and the successor to the Hyogo Framework for Action. The mechanism will draw on existing programmes, initiatives and resources and introduce new elements where appropriate. These could include, but not necessarily be limited to:
 - (a) producing periodic reports on current and future disaster risks and on the status of efforts to manage such risks at global, regional, national and local scales.
 - (b) monitoring progress toward internationally-agreed targets for reducing disaster losses and building resilience to disasters.
 - (c) providing guidance on terminology, methodologies and standards for risk assessments, risk modelling, taxonomies and the use of data.
 - (d) convening stakeholders to identify and address demands for scientific research, information and evidence on disaster risk and resilience.

¹ the Hyogo Framework for Action on building resilience to disasters; the Sustainable Development Goals; and the 2015 climate agreement under the UN Framework Convention on Climate Change

² This Statement was developed by a number of DRR experts and stakeholders at a meeting hosted at the Wellcome Trust, London, 27-28 March 2014, see Annex 1

(e) enhancing the communication of complex scientific information and evidence to support the decision-making of policy makers and other stakeholders.

These actions are partly derived from the conclusions reached in the Chair's Summary of the Global Platform for Disaster Risk Reduction (May 2013) and recognition of the following:

1. ***The gravity of disaster risk facing many high, middle and low income countries is escalating.*** The prospect for disaster losses in the future is increasing as a result of greater human and physical exposure to hazards and the impacts of climate change on extreme events and sea-level rise.
2. ***Disaster risk reduction is important in achieving Sustainable Development Goals, in tackling the impacts of climate change, and in building resilience to extreme events.*** Accordingly, we support the prominent inclusion of disaster risk reduction in the post-2015 sustainable development agenda, the agreement of an ambitious successor to the Hyogo Framework for Action, and for these policy frameworks to be mutually reinforcing.
3. ***The role of science and education is central in supporting the efforts of governments and other stakeholders.*** Science and education across the natural, socio-economic, health and engineering sciences are critical in raising awareness of disaster risk, pursuing disaster risk reduction, and strengthening resilience from local to global levels. We recognise the value that evidence plays in tracking progress towards internationally-agreed goals, targets, indicators and commitments, and its role in improving the human condition, including protecting cultural heritage.
4. ***Existing efforts to strengthen scientific information and evidence should be utilised in supporting disaster risk reduction.*** These include, but are not limited to, the important work of the (i) United Nations International Strategy for Disaster Reduction (UNISDR) Science and Technical Advisory Group, (ii) the Integrated Research on Disaster Risk programme of the International Council for Science (ICSU), the International Social Science Council and UNISDR, (iii) the Group of Experts on Disaster Risk Assessment, working under ICSU sponsorship to provide expert assessments on disaster risk reduction science, (iv) UNESCO's intergovernmental scientific and research programmes related to DRR in water (such as the International Flood and Drought Initiatives), oceans (Tsunami Early Warning Systems) and geohazards (IGCP) (v) the UNISDR Biannual Global Assessment Report, (vi) the Intergovernmental Panel on Climate Change's Special Report on Managing the Risks of Extreme Events and Disasters for Advancing Climate Change Adaptation and the 5th Assessment Report, and (vii) current and existing programmes and initiatives of specialised UN agencies and other international agencies
5. ***Co-ordinated, consolidated approaches to scientific information and evidence in the management of present and future disaster risks are important.*** These are required for the effective implementation and monitoring of disaster risk reduction and resilience in the post 2015 sustainable development agreement and in the successor to the Hyogo Framework for Action, and in meeting the demands for such information from communities, governments and other stakeholders.
6. ***The diversity, representation, and independence of science are important to disaster risk reduction and resilience.*** Existing initiatives, groups, networks and organisations need to be supported, in particular in developing countries, to ensure global coverage and visibility with national and local governments, and to be responsive to needs, particularly of those most at risk. Providing scientific information and evidence, recognising the importance of gender, on a full range of issues and functions is critical for successful disaster risk reduction and in strengthening resilience.

Annex 1. The meeting to develop this statement involved the following participants:

First name	Last name	Organisation
Sophie	Abraham	Willis Research Network
Delilah	Al-Khudhairy	Joint Research Centre, European Commission
Adrian	Alsop	ESRC
Colin	Armstrong	UKCDS
Pedro	Basabe	UNISDR
Sam	Bickersteth	CDKN
Julie	Calkins	NERC KE Fellow, Public Health England
Andrée	Carter	UKCDS
William	Castell	Wellcome Trust
Erin	Coughlan	Red Cross Red Crescent Climate Centre
Susan	Cutter	University of South Carolina, USA & IRDR
Rowan	Douglas	Willis Research Network
Tracey	Elliott	Royal Society
Belinda	Gordon	Royal Society
Lisa	Guppy	Elrha
Alexandros	Makarigakis	UNESCO
Tom	Mitchell	ODI, CDKN
Howard	Moore	ICSU
Virginia	Murray	Public Health England
Mark	Pelling	Kings College London & IRDR
John	Rees	Research Councils UK
Cathy	Roth	World Health Organization
Antonio	Sgamellotti	IAP-the global network of science academies
Kimio	Takeya	Japan International Cooperation Agency
Margareta	Wahlström	UNISDR
Torsten	Welle	UNU-EHS
Dennis	Wenger	United States' National Science Foundation
Steven	Wilson	ICSU