Mechanism for International Science Advice for Disaster Risk Management:

Discussion of a proposal to support the post 2015 agenda

Meeting report

Hosted at: The Wellcome Trust, London UK 27-28 March 2014

This meeting was organised by UKCDS in collaboration with the Wellcome Trust, the United Nations Office for Disaster Risk Reduction (UNISDR), The Royal Society and the International Council for Science (ICSU) for senior representatives of international, regional and national institutions who have a common interest in discussing how science, engineering and technology can be more effectively used in disaster risk reduction to strengthen resilience.

Background

The successor to the Hyogo Framework for Action[1] will be agreed at the Third World Conference on Disaster Risk Reduction in Japan in March 2015. The critical need for science[2] and evidence and how it can best contribute to Disaster Risk Management have been raised in many of the negotiations taking place ahead of the World Conference in 2015.

Given the coalescence in 2015 of three major international initiatives - the Hyogo Framework for Action on disaster risk reduction; the Sustainable Development Goals; and the 2015 Conference of Parties of the UN Framework Convention for Climate Change – integrated science needs to play a major role in actions resulting from these international efforts. This meeting was therefore organised to provide the opportunity for representatives of a wide range of interested stakeholders to agree in principle a joint statement to ensure research becomes more directly actionable and effective in providing evidence-based advice to support disaster policy and practice.

Key discussion points

The different stakeholders reflected a diversity of perspectives and interests, yet there was a good consensus of opinion which ensured discussions and decisions focussed on outcomes that would advance the role of science in disaster risk reduction and strengthening resilience. The following key points summarise the discussions:

- Effective implementation and monitoring of disaster risk management will require a coordinated, consolidated approach to science and evidence.
- It was recognised that existing national, regional and international structures and organisations will need to be strengthened and work together to respond to this need. The creation of any new organisations or institutions was discouraged.

[1] The Hyogo Framework for Action (HFA) is the first plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses. It was developed and agreed on with the many partners needed to reduce disaster risk - governments, international agencies, disaster experts and many others - bringing them into a common system of coordination. The HFA outlines five priorities for action, and offers guiding principles and practical means for achieving disaster resilience. Its goal is to substantially reduce disaster losses by 2015 by building the resilience of nations and communities to disasters. This means reducing loss of lives and social, economic, and environmental assets when hazards strike. Discussions are now underway to build on the HFA for the next stage, 2015 onwards

[2] Science here is taken to include natural, social, economic, engineering, arts and humanities, health and behaviour sciences as they pertain to disasters and disaster risk and to include the collection, assessment and communication of evidence on policy and practice. Disasters are taken to include those associated with natural and technological hazards and their interface with shocks associated with human conflict and economic and financial crises.

- A full 'map' of international/regional organisations that have interests in science and DRR, is required. A review should examine their current mandates and their contribution is required to understand available resources and connectivity with other stakeholders.
- Coordination may be required to help convene the various key interests to progress their agendas to ensure there is added value of working together.
- Participants acknowledged that greater efforts and different skills were needed to ensure that the role of science is better communicated to ensure maximum benefit in the post 2015 negotiation on the HFA, Sustainable Development Goals and UN Framework Convention for Climate Change.
- A draft 'Statement on establishing an international science advisory mechanism for disaster risk reduction to strengthen resilience' was reviewed and agreed in principle. The final version and the agreed 'Action Agenda' with the list of participants can be found at Annex 1.

Conclusions

- Delegates agreed that scientists, scientific organisations, science networks and other entities around the world should be invited to share ideas and actions for advancing this Statement.
- They called upon governments and other stakeholders engaged in preparations for the post 2015 initiatives to support the implementation of this Action Agenda for an international science advisory mechanism for disaster risk reduction to strengthen resilience; this will:
    - Champion and reinforce existing programmes and initiatives for integrated research and the scientific assessment of disaster risk.
    - Establish and promote international science advisory mechanism for disaster risk reduction to strengthen the evidence base to effectively reduce disaster risk and enhance resilience.
- Further details can be found here: initially http://www.ukcds.org.uk/mechanism-for-international-science-advice-for-disaster-risk-management and www.unisdr.org/we/inform/publications/32609 and www.icsu.org

Next Steps

1. UNISDR will present the Statement to its regional offices for further consideration during discussions scheduled over the next months. It will promote the Statement through its Science and Technology Advisory Group (STAG) and explore the participation of other partners at regional platforms. UNISDR STAG will further develop its ideas on how the role of STAG can be developed and how it will be resourced.
2. ICSU will discuss the Statement with their stakeholders and will develop a view and response over the next weeks.
3. UNESCO and other participants agreed to disseminate and consult on the Statement as appropriate and identify how they can contribute.
4. UKCDS will provide resources to collate existing knowledge of organisations concerned with science and DRR, stakeholders are asked to help provide relevant information.
5. UKCDS will continue to work with stakeholders to raise awareness of the Statement, facilitate exchange of ideas and dissemination of views and assist key parties to work on implementation plans.

If you have any comments or queries please contact Dr Andrée Carter, Director of the UK Collaborative on Development Sciences (a.carter@ukcds.org.uk or +44 (0)207 611 8327) who is initially coordinating on behalf of the collaborating institutions and other interested organisations.

ANNEX 1

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 instruments[3] under discussion, there needs to be an immediate step change in the use of science in these international efforts. In particular:

- We[4] 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://www.unisdr.org/we/inform/publications/32609 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 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.

[3] The Hyogo Framework for Action on disaster risk reduction; the Sustainable Development Goals; and the 2015 Conference of Parties of the UN Framework Convention for Climate Change

[4] This Statement was agreed by a number of DRR experts and stakeholders at a meeting hosted at the Wellcome Trust, London, 27-28 March 2014

(d) convening stakeholders to identify and address demands for scientific research, information and evidence on disaster risk and resilience.

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

These actions are 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 (as elaborated in Annex I)

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, 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.

This statement is in the process of being by the signatories below:

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UNISDR

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ICSU

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UNESCO

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 of the European Commission
Adrian	Alsop	ESRC
Colin	Armstrong	UKCDS
Pedro	Basabe	UNISDR
Sam	Bickersteth	CDKN
Julie	Calkins	NERC Knowledge Exchange 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
Jamie	Enoch	UKCDS
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	RCUK
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
Jenny	Wilson	UKCDS
Neil	Young	UKCDS

Annex 1

To be completed

Relevant organisations concerned with Disaster Risk Reduction who wish to be listed should contact a.carter@ukcds.org.uk in the first instance.

A mapping project will be carried out in 2014 to ensure Annex 1 provides a comprehensive list.

Annex 2

To be completed

Organisations wishing to support the Statement but not formally sign it will be listed here