Disasters not one-time events

Experts urge risk-based approach to disaster preparedness

Efforts to protect people from natural hazards should begin to focus on disasters not as isolated incidents but events for which the threat is constant, heard delegates at a conference held at the Royal Society in London, UK this week, which marked the International Day for Natural Disaster Reduction.

Andrew Maskrey, Chief of the Disaster Reduction Unit of the United Nations Development Programme Bureau for Crisis Prevention and Recovery in Geneva, Switzerland, said that globally, progress in risk-reduction efforts has been mixed, with low-income countries lagging behind in capacity to deal with the threat.

But political momentum has grown in many countries, he added, probably due to recent emergencies such as pandemic flu and major disasters in Haiti and Pakistan. “‘Risk’ does tend to resonate now as a word... in a way that it didn’t 3–4 years ago.”

Maskrey told the conference that scientists and practitioners working on preparedness need to shift their focus from disasters, generally viewed as one-time events, to risk, which implies that the threat is constant.

The impact of natural hazards isn’t necessarily limited to major disasters that grab the headlines. Maskrey pointed to an “extensive spread of risk” from smaller-scale events, such as flash-floods, that hit relatively small areas. He told delegates that the disaster community needs to acknowledge that these types of disaster occur frequently and affect people on a regular basis.

Scientists and professionals working with governments or non-governmental organisations gathered at the one-day conference, organised by the UK Collaborative on Development Sciences (UK CDS), to discuss ways of improving the evidence that feeds into preparedness and response to disasters, as well as efforts to make places more resilient to natural hazards.

According to global models, the risk of disasters caused by floods, cyclones and other natural hazards has increased rapidly — at least three-fold since 1980, said Maskrey, who serves as a Senior Coordinator for the UN International Strategy for Disaster Reduction (ISDR) Global Assessment report on Disaster Reduction.

The ISDR represents a strategic framework adopted by UN member states in 2000, which acts as a guide and helps manage the activities of governments and any organisation involved in reducing the impact of disasters and building communities resilient to them. It is also central to the implementation of a 10-year action plan set out in the Hyogo Framework for Action, endorsed by 168 governments in 2005.

The population living in hazard-prone areas is growing faster than elsewhere, Maskrey told the conference. Vulnerability in these areas seems to be decreasing, “but not fast enough to compensate for the increase in exposure”.

This increase has a large impact both in terms of mortality and economic losses. This impact feeds the cycle of poverty, where places hit by a disaster event suffer long-term damage that limits their chances for developing the infrastructure that helps them withstand these events.

Poverty, a damaged environment, and poor governance in flood-prone areas — particularly cities — are the main driving forces behind disaster risk. Globally, disaster risk is “intensively concentrated” geographically and “unevenly distributed” due to factors such as socio-economic conditions and vulnerability, said Maskrey. Climate change will only add to these, he noted, amplifying the unequal effects and existing patterns of disaster risk.

Anne Glover, Chief Scientific Adviser for Scotland and Chair of the UK CDS, closed the conference with remarks that echoed the participants’ call for more collaboration and better communication not only between professionals working in different areas of disaster reduction, but also with the communities at which their efforts are targeted. But she noted that questions remain over how input from different areas of expertise should be channelled.

The day’s discussions also centred on the usability of research, with many delegates taking the view that science-based information is often more detailed and more precise than necessary to take the steps needed for better preparedness.

The World Health Organization marked the International Day for Natural Disaster Reduction by focusing on preparedness in cities, “calling on governments and the international community to take measures that ensure existing and new health
facilities are resilient enough to survive earthquakes, floods, cyclones and other hazardous events”.

Reference and links


UN Office for the Coordination of Humanitarian Affairs information on disaster response preparedness
WHO information on emergency response