

Combating Hazards and Reducing Global Risks

Institute of Hazard and Risk Research, Durham University

Meeting Global Challenges

- The Institute of Hazard and Risk Research (IHRR) is changing the way we think about hazards and risks to meet the challenges of international security, health and well being and climate change. Recent research includes studies to improve security at major events, investigations into an environmentally sustainable and socially resilient long-term energy policy, support for earthquake hit areas, work to develop the global insurance industry and assistance with the reconstruction of tsunami devastated communities.

A Multidisciplinary Approach

- The institute has particular expertise in reframing problems and developing solutions by allowing a broad range of expertise to be brought to address a problem. The Institute challenges the core scientific, economic and social assumptions about how we live with hazard and risk. This can only be done by bringing together researchers from across the natural and social sciences, engineering, health and humanities, including history, theology, english and music.

Research Impact

- An investigation into how communities can live with future energy sources and the risks of nuclear power is informing energy policy development and mapping out implications.
- A study into security issues and border control within airport risk management and security politics at large sporting events is informing the security policy at the 2012 London Olympics and helping to combat terrorism.
- The Institute has worked in partnership with Project Sri Lanka, which assists the reconstruction and regeneration of tsunami devastated communities in Southern Sri Lanka and the long term sustainable development of both coastal and inland villages. It has advised governments across South Asia on landslide hazard and associated risks.
- Dr Alex Densmore, Director of Hazards at IHRR visited Sichuan Province to analyse the earthquake zone soon after the major earthquake hit. Building upon his pre-quake predictions about an increased risk of earthquakes he analysed the zone and advised on reconstruction efforts and how to protect against loss of lives from future quakes.
- A team of geographers working in partnership with engineers are discovering how storms, floods and heatwaves caused by climate change might affect the elderly and how infrastructure, health and social care provision can be tailored to cope involved. The research is informing planning, environmental and health policy globally.
- Research on global flood risks is making a major contribution to the global insurance and reinsurance industry in partnership with the Willis Group of insurance brokers.

Funding Sources

- The Institute was established in 2005 with initial funding by QR resource for staffing, alumni benefactions and SRIF3 support for a building. Building on its early success, more recent funding has been secured from OneNorthEast, the Environment Agency, NERC, the ESRC and a 2008 grant of £1.06M from the EPSRC to bringing together researchers in engineering, health and geography to make use of the Institute's state-of-the-art facilities.