

Early Warning and Risk Management

Disasters and hazards cause loss of life and property and create social and economic disruption. Exogenous (floods, drought, storms, landslides and avalanche), endogenous (volcanism and earthquakes) or anthropogenic (collapse of structures, desertification, fires, accidents etc): all have impact. New concepts of disaster management focus on risk management rather than the impossibility of complete hazard prevention. Maps are important for the whole risk-management process; for knowledge, to make decisions, to communicate information and to raise awareness.

Working Group

ICA has decided to form a Working Group on Early Warning and Risk Management whose broad objective is to explore and co-ordinate how cartography can be used to rapidly prepare and produce simple, standardised and informative maps for use in tackling natural and manmade hazards. The Group's first activity was to organise two sessions on Early Warning and Risk Assessment during the 2005 International Cartographic Conference in A Coruña. Terms of Reference have been agreed:

- provide leadership in the development of concepts and standardisation of early warning for hazard, risk and vulnerability mapping and cartographic modelling
- promote the use of remotely sensed and other geospatial data and various analysis techniques for early warning and risk management by organising workshops
- promote capacity building, quality mapping and cartographic modelling for early warning and risk management through topic-related publications
- participate in and contribute to global initiatives, for instance through the maintenance of a website
- promote hazard, risk and vulnerability mapping for risk management and communication
- develop mechanisms and networks for exchange of information among relevant stakeholders.

A further landmark is formation of the University Network for Disaster Risk Reduction in Africa (UNEDRA). This came into being during a workshop held at Makerere University, Kampala, Uganda in September 2005, organised by ITC and local geographers within the framework of the United Nations University Programme on Disaster Risk Information Management (www.itc.nl/unu/dgim/unedra/default.asp).

Other activities of the Working Group include development of a Web-based course on hazard mapping and modelling, providing a curriculum for university instructors teaching courses at undergraduate and graduate level. The course in progress is listed on the US Federal Emergency Management Agency's (FEMA) useful resources website (www.fema.gov/about/training/emergency.shtm). Of interest too was the 2006 Chicago meeting of the Association of American Geographers, where several sessions addressed disaster management, notably the role of mapping in the aftermath of Hurricane Katrina.

The group is currently developing its website (www.rcmrd.org/lca/web/icamain.html). It is also exploring funding mechanisms to promote workshops and publications, organising a workshop on Risk and Vulnerability Mapping and Modelling for Emergency Managers in October 2006 in Nairobi and preparing a publication for the next ICA conference to be held in Moscow in August 2007. The group welcomes suggestions on website design and content, along with comments on our activities, and is keen to promote participation from all continents.