



L'Aquila earthquake of 2009 offers lessons in disaster response

By analysing previous disasters, lessons learnt can be incorporated into policies and plans to manage the effects of future disasters. A recent study examining the 2009 L'Aquila earthquake in Italy suggests that although the national response effectively dealt with the emergency, longer-term measures to help local populations cope with the aftermath of the disaster need to be set out more clearly.

There is a risk of earthquakes in a number of European countries, including Italy, Greece, Turkey, Malta and Spain. Even moderate earthquakes can cause severe social and economic hardships for local populations. In 2009, a moderately powerful earthquake (6.3 magnitude) struck L'Aquila, in central Italy. In the city of L'Aquila, 308 people died and about 1500 were injured. 100,000 buildings were damaged and 67,500 people were made homeless.

As part of the EU MICRODIS¹ project, this study investigated the political and policy implications of the L'Aquila disaster. It praises the success of the early and overwhelming response to the disaster by the national government and voluntary organisations, but suggests that national response replaced the local response during the emergency phase. In Italy, civil protection encompasses emergency operation centres at all levels of governance, from national government to local municipal levels. However, the executive heads of civic protection are locally elected mayors of the country's municipalities.

In addition, the study suggests more could have been done to improve local self-sufficiency and enable greater local participation, particularly in decisions about the medium to longer-term recovery of the area.

Survivors of the earthquake were housed in tents for up to eight months after the event and then re-housed in buildings designed to be durable and able to withstand the impact of an earthquake. Despite being provided with all the basic necessities, these housing complexes tend to be remote from shops and other amenities. In addition, service industries and commercial enterprises that could have provided employment left the area because of a lack of accommodation, causing about 16,000 jobs to be lost. Under conditions of economic austerity central government assistance has been curtailed, which is having an adverse effect on local economic conditions and is one factor in the relative impotence of local-level decision making.

The study draws a number of policy lessons from the L'Aquila disaster. These include the following:

- Apply the precautionary principle and take action to prepare for disaster when short-term forecasts of earthquakes are made, even if these are judged to be unreliable. There were hundreds of minor tremors prior to the major L'Aquila event, in addition to local observations of precursory conditions.
 - Scientifically backed monitoring and alert systems should be supported by local plans to prepare for emergencies. In L'Aquila, local communities were advised that there was no threat of an imminent earthquake and thus they took no action.
 - Local efforts to respond to disaster should be supported and enhanced, not replaced, by national or external responses.
 - Clear lines of responsibility need to be created by the different levels of hierarchy in public administration bodies that deal with emergency management
 - Programmes and systems implemented to reduce the risks associated with disasters should be maintained and developed, even in the face of budget cuts, as disaster preparedness is an ongoing process.
1. MICRODIS (Integrated Health Social and Economic Impacts of Extreme Events: Evidence, Methods and Tools) was supported by the European Commission under the Sixth Framework Programme. See: www.cred.be/project/microdis

Source: Alexander, D.E., (2010) The L'Aquila Earthquake of 6 April 2009 and Italian Government Policy on Disaster Response. *Journal of Natural Resources Policy Research*. 2: 325-342.

Contact: david.alexander@grforum.org

Theme(s): Natural disasters, Risk assessment

The contents and views included in Science for Environment Policy are based on independent, peer-reviewed research and do not necessarily reflect the position of the European Commission.

To cite this article/service: "Science for Environment Policy": European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.