



Developing mechanisms to enhance relationships between earthquake scientists and the NGO community for disaster risk reduction

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The extent to which scientific understanding of earthquakes is successfully accessed and understood by those people engaged in community-based disaster risk reduction (DRR) is variable. The group of interest in this paper are non-mandated international non-governmental organisations engaged in development and/or humanitarian activities and their local partners (hereafter termed NGOs). The 2010 Haiti earthquake highlighted the vulnerability of this group and their capacity to respond to an emergency, to devastating effect. NGOs operating in Haiti were not aware of the potential for a large earthquake hitting Port-au-Prince despite this being well-established in the literature. A key issue is therefore to ensure that NGOs engaged in DRR activities are aware of and have access to appropriate scientific knowledge and expertise, and also understand its implications, which can then inform both their programming and organisational activities.

In practice, this can be very difficult for a number of reasons. Given the complex and challenging environments in which these organisations tend to operate, NGOs and their staff have to deal with a wide range of humanitarian and development issues and are required to be generalists. Conducting earthquake risk reduction activities, may be just one of many demands on the resources available to these organisations, and the importance that can be given to a particular hazard will be sensitive to the local context. In terms of managing earthquake risk, what is appropriate in one place may not be suitable in another. Community-based participatory methods are central to NGO working practice and used to assess the risks facing a community. These methods are widely applied but tend to rely largely on the communities themselves for information. As such, there is a danger that these approaches may fail to highlight high risk events with long recurrence intervals, such as large earthquakes, leaving the NGO, their operations and the communities in which they work vulnerable.

Earthquake information resources abound but they also present significant challenges for this group. In particular, given the huge amount of information available, how do non-experts judge what information is or isn't trustworthy? And how do NGOs gauge when they know enough or indeed, how do they know what they don't know or have misunderstood and should be aware of? Furthermore, then understanding the implications of the information from a programming perspective is very important. As web-based initiatives like the Global Earthquake Model develop, it raises interesting questions about how such resources can best serve NGO information needs. We argue that human relationships are critical for ensuring that the information needs of NGOs are met and for transforming scientific information into action. In particular, for identifying and addressing critical knowledge gaps, and delivering information with an understanding of the local context in which it will be applied.

Gauging how best to broker and support the development of such relationships in the future requires an understanding of the relationships between NGOs and scientists currently, and of the drivers for the development and maintenance of these relationships. This is being investigated in conjunction with Concern Worldwide's Bangladesh programme. The findings will inform the development of a framework for partnering NGO staff and earthquake scientists and a code of practice for researchers working in earthquake-prone environments or whose work impacts on risk reduction activities. We hope that this work will also stimulate a wider discussion of these issues amongst the seismological community.