



Credit: Diego Fernandez

# Executive Summary

Natural disasters and violent conflicts have always been part of human existence. But the number of humanitarian crises has been rising in recent years. Moreover, disasters strike most frequently, and with the most devastating impact, in the least developed countries. These countries also have the weakest communications infrastructures, which poses a particular challenge to governments, aid agencies, and the affected population at every stage of a crisis, from the run-up to a disaster through to long-term reconstruction.

There have been dramatic advances in communications technology: in the number of new technologies, the mobility and range of functions available, and the spread of these technologies. Growth has been particularly strong in the penetration of mobile phones and more recently the uptake of social networking websites including Facebook and Twitter. One important change is a shift from one-to-many forms of communication, such as television and radio, to many-to-many forms of communication, such as social networking and crowdsourcing websites, that is changing the way in which information is delivered and exchanged.

Communications advances present an opportunity for humanitarian organizations to harness modern technology to communicate more effectively with communities affected by disasters and to allow members of those communities to communicate with each other and with the outside world. People in affected communities can recover faster if they can access and use information. A look at the use of communications technology during disasters in recent years shows

that while it has played a positive role, its full potential has not yet been realized.

Moreover, governments, humanitarian agencies, and local communities face challenges and risks associated with modern technological innovation. These include:

- Information flows must be two-way to be effective—from the external world to the affected community, but also from those affected to the agencies seeking to help them in useful ways.
- Information will not be used unless it is trusted. The utility of any technologies will depend on the social context. People are a vital part of the communication system.
- Information will be helpful only if it is accurate. There are risks in unregulated information flows, especially when these are spread rapidly online, and these risks need to be managed. Authentication is a key challenge.

This tension between the potential benefit to humanitarian efforts from harnessing these technologies and the risks that they pose is a key theme of this report. The report examines how authorities and humanitarian and aid organizations can best balance the opportunities and challenges of exploiting different technologies at the key stages on the timeline of crisis—early warning and preparedness, immediate humanitarian relief, and reconstruction and long-term development.