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Editorial

The Tsunami challenge

Many lives could have been saved on 26 December 2004, when the tsunami unleashed by an earthquake of magnitude 9.0 off the coast of the Indonesian island Sumatra struck a dozen coastal villages along the Indian Ocean.

Those lives could have been saved if, on that day, science communication had not resulted in a complete failure to communicate scientific information adequately in many cases, in different places and at different levels.

A long time passed between the violent shock and the devastation caused by the tsunami waves – in most cases, many hours. During that period many scientific centres around the world received fairly accurate information. However, this fairly accurate information could not be transmitted rapidly to the thousands living along the Indian Ocean coasts, whose lives it might otherwise have been saved.

At the heart of this inefficiency lie at least two failures in the process of science communication. The first failure lies in the transmission of information from scientists to policy-makers. The existing global networks of seismometers did record in real time the powerful earthquake. Many scientists realised that the coastal regions around the Indian Ocean faced a significant threat from tsunamis. But without direct channels of communication to government officials and/or to relief workers, there was no way that this information could promptly reach those who needed it.

Government officials and/or relief workers were, in fact, warned of a tsunami threat promptly enough. However, they did not choose the right communication channels to ensure that news was spread to the communities under threat, although some channels – for example, alert systems of active hurricanes in some of the regions affected – could have been used effectively.

It would be helpful in greater detail to investigate the causes of the two complete failures to communicate scientific data on 26 December 2004. According to David Dickson, important lessons are to be learnt about the need to communicate scientific information more adequately to policy- and/or decision-makers, and to the general public. Therefore, professional communication skills have a vital role to play for scientists, and not only in times of emergency.

In his editorial published in *SciDev* on January 17, Dickson however raises another question, namely "what science" scientific journalists and, in general, the mass media should communicate in order to increase accessibility to scientific knowledge in today's society. The point raised by the *SciDev* editor is critically important – and again, not only in times of emergency. This topic will be dealt with in greater detail in *JCOM* forthcoming issues.

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¹ David Dickson, "Tsunami disaster: a failure in science communication", *SciDev*, 17 January 2005. https://www.scidev.net/Editorials/index.cfm?fuseaction=readEditorials&itemid=143&language=1