Kelman, I. 2009. "Don't Forget the People". <u>Weather and Society Watch</u>, vol. 3, no. 2 (January), pp. 7,14.

Full text:

Without people, a "disaster" cannot happen by most definitions of the word. Why, then, does so much work in weather and society forget the people?

I have seen colourful PowerPoint presentations extolling the virtues of detailed GIS maps for analyzing critical infrastructure vulnerability to weather and other events—without mentioning schools or hospitals. One GIS-based loss model for floods (and earthquakes) did not include deaths and injuries because, according to the presenter, casualties were too difficult to consider, so they were assigned a loss value of zero. Many papers are published using quantitative scales and tick boxes to understand people's thoughts on and perceptions of weather without recognizing that numbers, scales, and judgments are always culturally contextual.

Warning systems are a frequent example. Decades of research and practice, with some bibliographic examples here, indicate that weather-related warnings are most effective when considered to be a social process rather than a technical challenge. Warning systems need to considered as a long-term endeavor, integrated into sustainability and development processes, not as a one-off event that sets up sirens or emergency radio and SMS transmissions, activated only when needed.

One aspect is that trust and credibility are essential for successful warning messages. Trust and credibility cannot be created after a message has been released. Instead, they require continual demonstration over the long term, as with any relationship. The information and information dissemination must be accepted by people and communities (irrespective of the difficulties with the concept of "community") on their own terms rather than being maintained as separate elements until someone else decides that "they" need to know.

A good example is a flood warning system as part of local people collecting daily flow rate and water quality data, which they use for water management, drinking water, irrigation, and livestock. That is, water monitoring and interpretation are used and accepted by the community on a daily and livelihood basis, engraining water behavior into their consciousness rather than being invoked when the water becomes a flood. Installing warning technologies and techniques for flash or other forms of flood, in cooperation with the water monitors, makes the extremes more connected to the normal, enhancing warning effectiveness—while always trying to identify and strengthen any possible weak points in such a system, such as relying on a single water monitor and flood warden who takes holidays or who gets drunk.

Similarly, much hype has been on "The Last Mile" for warning systems, referring to the need to connect the top-down warning technology to the people who use the warnings. According to this discourse, that connection is The Last Mile and it should be bridged. Although the sentiment is understandable, that connection makes more sense as "The First Mile" instead.

A top-down, externally imposed system frequently fails to induce effective warning-related actions, even if it is technically perfect. In contrast, if the system is made by starting with the potentially affected locals, then the scientific evidence shows that people are more likely to accept external warning information. Of course, nothing is perfect or absolute. But by

embedding a technology within an already existing social structure rather than expecting a social structure to reform itself around a technology, warning systems are liable to be more successful.

Even where the technological approach to a warning system is similar with The First Mile or The Last Mile approach, the process of creating the warning system has been different by selecting The First Mile or The Last Mile. The First Mile approach is more robust by explicitly starting with the people who will reap the rewards of the system so that the system is accepted from the beginning. In contrast, The Last Mile tends to imply (even though that is rarely the intention) that the people are an add-on at the end—the last step in the process—after most decisions have been made.

When dealing with disasters, we must always remind ourselves that we are dealing with people.

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