



Games, social media, citizen science... In the face of environmental hazards, how effective are different forms of two-way communication in informing and involving the public?

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Climate change is intensifying the vulnerability of communities worldwide to environmental hazards such as floods, severe weather conditions, or pollution (World Economic Forum 2016). When these hazards are impossible to prevent, private protection measures at the individual and community level, as well as public involvement become key in reducing the effects of hazards and regaining equilibrium (Grothmann and Reusswig 2006).

In the case of flooding, for instance, private protection measures could mean having an evacuation plan in order, or having a provision of sandbags. Raising public awareness of these risks and effectively sending out information on how to behave is thus key in fostering prepared communities (Hopner et al. 2010). Citizen involvement in knowledge production practices with experts, in which local expertise complements scientific knowledge, is also key in fostering resilient communities but has proven to be a challenge for a number of reasons. Distrust of experts based on previous unsuccessful experiences, technical jargon and inappropriate materials used by the experts, and an incapacity to create a safe space in which the public feels empowered to contribute with knowledge, are the most reported ones (Whatmore and Landstrom 2011).

It is therefore, critical to find effective communication for the short term (e.g. issuing warnings and encouraging protective behaviour) and long term (e.g. raising awareness and facilitating expert and non-expert encounters in which tensions and notions of distrust disappear, and the public feels encouraged to participate and contribute with local knowledge).

Here we present early findings of a literature review analyzing different two-way communication formats that have been used worldwide to communicate in relation to different environmental hazards. We focus on factors such as: the purpose of communication (e.g. short term or long term), the actors involved (e.g. what experts and what publics), and the characteristics of those formats (e.g. face-to-face or mediated). We further scrutinize these findings in focus groups with experts and the public and investigate what formats, or characteristics of those formats, are already working or could work for them in the future.

References

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