## CONTRIBUTIONS OF DIGITAL **VOLUNTEERING TO COMMUNITY** DISASTER RESILIENCE



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Adoption of location-based information sharing technologies and the emergence of digital volunteering has seen changes to community involvement in disaster management. We examine how geoweb 2.0 platforms, including crowd mapping and social media, can support elements of resilience building, and how these practices potentially undermine resilience.

The internet empowers individuals to organize themselves in unprecedented ways, as evidenced by the formation of spontaneous volunteering groups.

Online platforms allow two-way sharing of local information & facilitate more open discussion of risk reduction.

Digital volunteering enables citizens to contribute alternative representations of and responses to risk, increasing flexibility in the system with diversity of information.

Opportunities are created by geoweb 2.0 for collaborative disaster management between individuals, communities and authorities.

Developing flexibility Collaboration between

Capacity for selforganisation



communication

Increased awareness of local risk, hazards and vulnerability through digital platforms enables individuals to make assessments about preparation, planning, and likelihood of danger/damage.

**COMMUNITY** DISASTER RESILIENCE



Web 2.0 can increase exchange of knowledge and resources, which has been associated with increased adaptive capacity.

Use of local knowledge & resources

Social connectedness

People sharing geographic information collaboratively can add to community cohesion.

Digital volunteering can aid community engagement in preparation through increased

awareness, local knowledge, and community connectedness.





Empowerment

Geoweb 2.0 results in reduced agency control over information, potentially empowering citizens through greater participation.

## Digital volunteering may also undermine resilience.

Various associated challenges require further attention, including: data quality and trust of diverse sources; compromised privacy and security; underrepresentation of particular citizens in online information; negative consequences and compounding risk; responsibility of digital volunteers, liability, and data ownership; disruptions to authoritative emergency management; and, potential for increased community tensions.

Further reading: www.billyhaworth.com/publications









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