

## Methods to build resilience in indigenous communities: A case study from Maori, New Zealand.

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Communicating natural hazard and risk to indigenous peoples generally focusses on presenting information related to the physical process of the hazard and the impacts of those hazards at a time of emergency. This is not consistent with building resilience and DRR strategies worldwide.

Ultimately hazard and risk information is presented in the form of hazard maps and evacuation or exclusion zones. This western science based view of natural hazard processes and management can cause conflict with indigenous communities that at times see this as a threat to their livelihood or cultural connections to the area. Differences between perceived risk and past experiences that indigenous peoples have responded to and recovered from during their long-term occupation of an area can also be a source of conflict. Questions remain on how these differing world-views can be bridged to ensure that risk is minimised. Research into methods on how to transfer local and indeginous knowledge, while maintaining cultural integrity, has focused on the application of participatory research methods, whereby communities are directly involved in transferring their past experiences and traditional knowledge in a collaborative environment to create joint hazard maps and emergency management strategies.

To build resilience in New Zealand's indigenous Maori communities' research has focused on having Maori communities and Maori scientists/researchers develop research initiatives founded in traditional practices that extract traditional hazard and "resilience" language as well as records of past response and recovery. This information has been used to inform community hazard management plans and management of other tribal assets. Particular outcomes of this initiative has seen the successful use of communal tribal assets as foci during the response to natural hazards.