

Mercer, J. and I. Kelman. 2007. "Combining indigenous and scientific knowledge for PNG disaster risk reduction". ISISA Newsletter (International Small Islands Studies Association), vol. 7, no. 2, p. 6.

### Full Text

This research project, for Jessica's PhD, is developing a framework to identify how indigenous and scientific disaster risk reduction practices used on islands may be integrated effectively to improve disaster risk reduction. Field work was completed in three rural villages in Papua New Guinea (PNG), which is a small island developing state (SIDS), to understand the disaster threats which they face, their current coping mechanisms, and ways of improving those. Two papers are currently in press from this work.

The paper for the journal "Environmental Hazards" (Mercer et al., 2007, "The Potential for Combining Indigenous and Western Knowledge in Reducing Vulnerability to Environmental Hazards in Small Island Developing States") identifies the need for a specific framework identifying how indigenous and scientific knowledge bases may be combined to mitigate against the intrinsic effects of environmental processes and therefore reduce the vulnerability of the case study sites. Following a review of work on this topic, the paper concludes that the vulnerability of indigenous communities in SIDS to environmental hazards can only be addressed through using both indigenous and scientific knowledge bases in a culturally compatible and sustainable manner.

The forthcoming paper in the geography journal "Area" (Mercer et al., 2008, "Reflections on Use of Participatory Research for Disaster Risk Reduction") contributes to recent debates over the use of participatory approaches by examining the use of participatory research within disaster risk reduction. Drawing on the field research experiences in which participatory techniques were used with indigenous communities to determine strategies for dealing with environmental hazards, the value of such techniques is critiqued. The significance of participatory research as a research methodology is discussed as is its possible contribution to disaster risk reduction policy.

Two more papers are being prepared, covering a proposed framework for integrating indigenous and scientific knowledge bases and the results from the field work. This work is being completed in the Human Geography Department at Macquarie University in Sydney, Australia and is funded by an International Macquarie University Research Scholarship. For more information, please contact [jmerc@els.mq.edu.au](mailto:jmerc@els.mq.edu.au) and see <http://www.islandvulnerability.org/png.html>

Ilan Kelman

<http://www.ilankelman.org>