

Crossing borders: A comparative assessment of community resilience to natural hazards in Arica, Chile and Tacna, Peru

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Disasters of natural origin already cause many fatalities and massive losses every year worldwide. This is expected to increase under climate change, overpopulation and rising urbanisation. In light of this, disaster risk reduction has emerged as a global challenge and all major international frameworks, such as the Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction 2015-2030, the Paris Agreement and the Addis Ababa Action Agenda recognise the importance of fostering disaster resilience. The concept of resilience, however, remains clouded. While several frameworks have been built for disaster resilience assessment, there is little evidence of what resilience actually means, and how to compare communities with one another in terms of their resilience. These frameworks also often rely on expert judgement, failing to capture community perceptions, and have been predominantly applied in developed countries. Furthermore, there is a lack of studies addressing multi-hazard resilience, as well as cross-border resilience. In an effort to address these gaps, the authors conducted a comparative assessment of community resilience to natural hazards in the towns of Arica and Tacna, on the border between Chile and Peru, as part of UNESCO's "Enhancing Natural HAZards resilience iN South America" (ENHANS) project. Community leaders and institutional authorities were involved to innovatively explore how the perceptions of these two groups may differ and how governance/national borders can play a role in shaping differential disaster resilience. Three methods were used: 1) a multivariate data analysis based on national censuses, 2) the Resilience Performance Scorecard (RPS), and 3) the UNISDR Disaster Resilience Scorecard. This study found that Arica, Chile is perceived to have a greater degree of disaster resilience across the different socio-economic, institutional, infrastructural and environmental themes explored. Arica especially performs well in terms of critical services and public infrastructure, as well as in emergency planning and response. Both in the case of Arica and in the case of Tacna, there appears to be a consistent gap between institutional stakeholders and community leaders, with the former generally showing overconfidence in achieved results, of which the communities often seem to be less aware.