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Does capacity building make resource-dependent communities more adaptive?

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As socioeconomic and environmental impacts unfold, affecting both millions of people and the ecosystems they depend on, there is an urgent need to bolster the capacity of resource-dependent communities to adapt. Indeed, local and national governments, development agencies, and non-governmental organizations are increasingly engaged in efforts to build social adaptive capacity. These include ensuring that people have assets to draw upon in times of need, have necessary knowledge about ongoing and future changes and adaptation options, and empowering people to have a say in what happens to them. So far, most work on adaptive capacity has focused on stress caused by climate change, and most empirical work concerns this. As a consequence, decisions about adaptive capacity in areas other than climate change are frequently taken without a good understanding of the likely positive or negative outcomes these interventions might actually have.

In Chile, artisanal fishing communities are currently undermined by two key stressors: poaching and market forces. We surveyed 42 of them to explore whether generic elements of adaptive capacity like assets, flexibility and agency were effective at bolstering other stressor-specific capacities such as the availability of multiple fishing gears to adapt catch to ever changing species values (for market forces) and high surveillance efforts to apprehend offenders (for poaching). We found a significant positive correlation, meaning that fishing communities with high 'generic' adaptive capacity also developed strong 'specific' adaptive capacity. Surprisingly, however, communities with strong adaptive capacities –'generic' and 'specific'- did not necessarily adapt successfully: they often failed to effectively reduce their exposure to the impacts of poaching and markets. This suggested that barriers may be preventing fishers to mobilize their capacity into action.

Thus, we argue in this paper that while focusing policy on building 'generic' and 'specific' capacity is an important first step, it may not always be sufficient to effectively improve fishers' situations. Knowledge of the mechanisms that help resource-dependent communities exercise their capacities to adapt to non-climate stressors can assist in the design of policies seeking to effectively reduce social vulnerability.

Caleta Los Molinos, Los Ríos Region, Chile, one of the 42 artisanal fishing communities surveyed in our study. Credit: Susana Cárcamo Rojas.

A watchman outpost in the middle of a Territorial User Rights for Fisheries (TURF), Los Lagos Region, Chile. It is used by the local fishing community to deter outsiders from fishing illegally within the TURF, and indicates good adaptive capacity to poaching. Credit: Sebastian Tapia-Lewin.

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