Defining the "social" in the social-ecological system: a rural landscape

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Abstract

There is now widespread acceptance that all environments have been modified by human activity and function as co-evolving social-ecological systems (SES). Resilience thinking provides a framework to understand the processes of change in SES and may be used to guide those seeking to influence or initiate adaptation or transformation of an SES. A first step is to scope the "boundary" or the nature and extent of the SES. How does one frame the "social" in a social-ecological system? In this paper we discuss how others have accomplished this task and then explain and reflect on our recent research scoping the SES of a farming landscape in North East Victoria, Australia. We were drawn to this SES because it presented as being "too resilient" in that there appeared to be very limited appetite for change following the collapse of the tobacco industry, despite there being substantial and underutilised water resources, a skilled labour force, available land and ready access to a major city. We overlayed different sources of data to examine the process of creating a boundary to the social dimension of this social-ecological system and compared these boundaries. We combined broad, macro level census data of the region with more nuanced, local qualitative data, and expert knowledge. First, we used census data, to generate a longitudinal social profile of the region and drew on two indices providing measures of relative social-economic disadvantage. Second, we analysed in-depth qualitative interviews with local stakeholder participants (n=30) using a Factors-Actors-Sectors (FAS) framework, to depict local conceptualisations of the system for each stakeholder. Using qualitative content analysis, we mapped the boundaries of each depiction of the social dimension of the social-ecological system. Finally, we combined these data using expert knowledge of the region. We found that each of the three sources of data depicted a social dimension that oriented to different areas of focus and as well that different stakeholders oriented to certain parts and had particular areas of strength. Accurately defining the social boundary could be the first step in regional planning, transformation, or analysing change, and combining data sources such as we have could provide twofold gains: 1) the comparable census data can provide leverage for developmental or transformative policy; 2) the intimate nature of qualitative data draws on the knowledge and creativity of local stakeholders to find unique ways to shape regional change.

Keywords: Boundary, Social, Transformation, Regional, Agriculture, Groundwater

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