

## A New Social Vulnerability Index for Evaluating Social Vulnerability to Climate Change at the Local Scale

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**Abstract :** Social vulnerability to climate change is increasingly being acknowledged, and proposals to measure and manage it are emerging. Building upon this work, this paper proposes an approach to social vulnerability assessment using a new mechanism to aggregate and account for causal relationships among components of a Social Vulnerability Index (SVI). To operationalize this index, the authors propose a means to develop an appropriate primary dataset, through application of a specifically-designed household survey questionnaire. The data collection and analysis, including calibration and calculation of the SVI is demonstrated through application in case study city in central coastal Vietnam. The calculation of SVI at the fine-grained local neighbourhood scale provides high resolution in vulnerability assessment, and also obviates the need for secondary data, which may be unavailable or problematic, particularly at the local scale in developing countries. The SVI household survey is underpinned by the results of a Delphi survey, an in-depth interview and focus group discussions with local environmental professionals and community members. The research reveals inherent limitations of existing SVIs but also indicates the potential for their use in assessing social vulnerability and making decisions associated with responding to climate change at the local scale.

**Keywords :** climate change, local scale, social vulnerability, social vulnerability index

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