Deepening Social Resilience Assessment in Flood affected communities – an evolutionary resilience indicators-based approach

Rita Jacinto (1), João Ferrão (2), and Eusébio Reis (1)

(1) Centre for Geographical Studies, Institute of Geography and Spatial Planning, Universidade de Lisboa, Lisbon, Portugal ,
(2) Instituto de Ciências Sociais, Universidade de Lisboa, Lisbon, Portugal

Social resilience has been debated extensively during the past two decades. It has also been discussed in the disaster risk reduction field. Some authors consider that it corresponds to the capacity to bounce back to an original state, while others consider it as an adaptive or evolutionary capacity to learn from experience, leading to transformational change. Many authors still compare social resilience to the concept of vulnerability, either considering both as a part of risk assessment or as two opposite characteristics of societies and communities. The enlarged conceptual discussion regarding this topic has resulted in some indicators-based assessments which hardly reflect the conceptual discussion developed so far. Those indicators-based approaches still lack an accurate inclusion of social dynamics and the capacity to learn from experience. Floods are a recurring phenomenon worldwide, including Europe and Portugal, which causes severe social, economic and environmental losses. In a global change context it is very difficult to accurately predict extreme events that may cause more flash floods or even increase disaster frequency. Disasters are a concern, but they only can be classified as such when they endanger socio-economic contexts. The Sendai framework places the tonic of Disaster Risk Reduction (DRR) on reducing vulnerability and into building resilience. This paper focus on evolutionary resilience and presents a collection of indicators based on different social sciences fields as an inter-disciplinary approach to deepen the social resilience assessment in flood affected communities. The paper addresses the following questions: how can inputs from psychology, neurology, sociology and other social sciences contribute to build social resilience indicators? Are social resilience indicators independent from the type of hazard/threat? How does this evolutionary approach differ from other existing indicators-based approaches? A database of Social Resilience and Disaster Risk Reduction (DRR) indicators grouped by components was built based on literature review from social psychology, sociology, geography and DRR fields. Those indicators and domains are analysed through the application of content analysis/text mining. This methodology was applied in order to find key-words and key-factors both for conceptual and indicators approaches. Our findings are a contribution to this research field and show the need to deepen this research line by: discussing the community concept, progressing on mapping the results, and including these results in DRR governance.