

Interactive comment on “Development and testing of a community flood resilience measurement tool” by A. Keating et al.

Anonymous Referee #2

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General comments

The idea of the article is interesting and takes up current discussions in disaster risk research and management. The presented empirical approach with its focus on prevent conditions, their development over time and post-event outcomes is highly relevant for understanding resilience and developing appropriate actions. The transdisciplinary approach, which includes a wide range of practitioners, creates promising conditions for context-related, suitable and accepted solutions. However, in its current state the theoretical foundation and scientific arguments of the article are rather weak, especially the theoretical embedding of the resilience concept and the variety of associated and applied frameworks and concepts remains insufficient. Furthermore, the presentation quality should be substantially improved. Too many details and disorganized structure with references to other chapters leave the reader tired and confused.

C1

Restructuring the some chapters might be useful.

Specific comments

Chapter 2: Review: the challenge of measuring resilience

Before referring to different aspects and challenges of measuring, it would be helpful to start with a wider (critical) theoretical reflection on the idea of resilience, community and wellbeing, their interplay as well as the derived definitions.

The challenges described remain relatively general (and also applies to Vulnerability). The interconnected and predominant qualitative character is not considered.

The aim and target group of the presented framework should be defined more at the beginning of the article.

Chapter 3: Development of the measurement framework

The second and third paragraph on the understanding of resilience and definition of community should be elaborated (s. chapter 2) and placed earlier in this article. If data collection and framework development is mainly conducted exploratory, it should be more emphasized.

Chapter 3.1: foundations of the measurement framework

The link between the two theoretical concepts on the one hand and the concepts of operationalization on the other hand is not obvious. What additional value do the IFRC-Approach and the V to R Framework have? How does risk understanding of engineering is compatible with resilience and development context? What are the factors that need to be graded? Parts of these questions are explained in the following chapters, but it's hard to establish the link three pages later. The theoretical foundation is not clearly described.

Chapter 4.1: How sources are organized within the tool

C2

The title of this chapter already refers to the “tool”, although the development of the tool is described in chapter 5. For a better understanding any kind of visualization of the categories and proceedings would be useful.

Chapter 4.2:

The selection of outcome measures is not explained and appears arbitrary.

Chapter 6: Conclusion and way foreword:

A critical reflection of the used methods and challenges regarding data integration and analysis would be interesting. What are underlying assumptions or structures and how they will be addressed in data analysis? If different perspectives are captured, how contradicting data is handled and weighted?

Technical corrections

line 16: “is is”

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-188, 2016.