

RC1

Dear authors,

Firstly, thank you very much for your submission of your paper to the NHESS journal. The paper addresses a very interesting and important topic, which warrants further in-depth consideration within the field of vulnerability research. I have some general comments, which I would like to address below:

Dear Reviewer 1,

thank you very much for the kind and very helpful review.

Overall, I would like to ask you to reconsider four core issues:

a) The current version lacks a strong theoretical framework. Section 3 tries to initiate a debate on why we need to rethink the current critical infrastructure literature. I suggest shifting some parts of section 3 to section 1, or creating a new section, where you provide a broader theoretical discourse.

Thank you, that is an important point. We will reconsider shifting some parts from section 3 to section 1. Moreover, we will definitely add some more theoretical background, especially with regard to the risk framework of the Intergovernmental Panel on Climate Change (IPCC) and to the components that risk is made up of within this risk concept, since it is on this theoretical basis (exposure and vulnerability, including coping and adaptive capacity) that our framework for risk assessment for sensitive infrastructure has been developed. We will also refer to further publications that have dealt with specific indicators for risk assessment.

b) The lack of a broader theoretical discussion also affects your discussion section, which does not read like a discussion. You need to show how your results/paper link to the ongoing literature and what your new theoretical contribution is.

Thank you. We would be happy to revise this as well, particularly with regard to the additions to the theoretical background already mentioned under a). Our new contribution here is the concrete application of the theoretical, established risk framework to sensitive infrastructures and their user groups and the comprehensible and easy applicability.

c) The research questions need to be reconsidered. Provide a more in-depth explanation of why these questions are important and what the new and innovative contribution of the paper is.

Thank you. We will also reconsider the research questions and elaborate the questions more specifically in relation to the content of our paper and the new findings - an easy-to-use framework for assessing the risk of sensitive infrastructure and the resulting implications.

d) The method section needs to be reconsidered. The literature review in your paper does not need to be mentioned, as it does not employ a proper scientific meta-analysis or systematic literature review. Furthermore, regarding the household survey, I am unsure of its added value.

Clarify what you aim to answer with the survey. It might be beneficial to rethink which methods and data you can include in the paper to address your research questions and the gap in the literature.

Thank you. We will remove the literature review as it hasn't been a systematic literature review. Moreover, we will look into our household survey data to see to what extent the survey data can generate added value for our paper and how the survey results can meaningfully underline the content.

A minor aspect: Sections 3.2 and 3.3 are interesting but feel somewhat misplaced in the paper. While I see the value of both sections, they might need to be relocated to different parts of the paper. Regarding Section 5.2.5: first, I am not sure if the title is appropriate, and second, it currently only uses descriptive statistics. More analysis is needed to justify the inclusion of this data in your paper.

Thank you. We will try to relocate those both sections (3.2 and 3.3), but we would not want to delete them, as they are important for the context of the paper. The title of section 5.2.5 is a bit misleading, since it is not exclusively about a conclusion regarding the Levana School, but also considers other aspects – we are therefore happy to adjust the title.