

Dear referee,

thank you very much for your comment and interest in our research. We appreciate your opinion and input as well as the specific issues you raised and the valuable thoughts. In response, we would like to address your comments.

1. Introduction: It is not clear what the national water code (1979), based on the danger areas identified, is about. It is mentioned that it does not include flood probability and vulnerability, but what does it include for defining flood risk zones? And how the new settlement locations are identified? Do people know about the flood probability, vulnerability, and exposure of new areas before their relocations?

The water code does not define flood risk zones. Article 51 of the water code only designates zones near river banks, streams and the shores of the sea and lakes where building structures of any kind are prohibited. In urban areas, this zone extends 3 meters, in agricultural areas 20 meters and in forest areas 40 meters. The water code is the legal basis for justification of no build zones, flood protection and for preventive resettlement.

Subsequent legislation such as for example the Urban Development and Housing Act of 1992 define danger areas allowing eviction and demolition of buildings and structures as following: “When persons or entities occupy danger areas such as esteros, railroad tracks, garbage dumps, riverbanks, shorelines, waterways, and other public places such as sidewalks, roads, parks, and playgrounds”.

The landmark decision of the Supreme Court to clear river banks aligns with the water code “Giving urgent dimension to the necessity of removing these illegal structures is Art. 51 of PD 1067 or the Water Code, which prohibits the building of structures within a given length along banks of rivers and other waterways” The major resettlement program “Oplan Likas” then is in line with the water code and the danger area definition.

NHA guidelines (from 2015) exist for site selection and site suitability of resettlement sites. They require site selection outside potential hazard prone and protected areas. However, no clear legislative backing or standardised tools are named. We cannot assure if people who are resettled are informed or aware of potential vulnerability and exposure of the new areas. We can only assume that they trust the argument for relocation, namely that they are resettled from danger areas to safer areas.

The legislation and how resettlement is embedded in strategies in The Philippines is elaborated in chapter 2.2

The named documents are available at these official websites:

- Water Code: <https://www.officialgazette.gov.ph/1976/12/31/presidential-decree-no-1067-s-1976/>
- Republic Act No. 7279: <https://www.officialgazette.gov.ph/1992/03/24/republic-act-no-7279/>
- Supreme Court Decision from 2008: https://lawphil.net/judjuris/juri2008/dec2008/gr_171947_2008.html

2. **Figure 1: This figure is confusing: a circular graph, particularly with the arrow connecting the outcome to the start, indicates an iterative process. However, the data collection and analysis process from phases 1 to 3 was a one-off process. The way it is presented in Figure 1 implies that the entire process has been repeated. A linear graph can better explain the process of this study.**

Figure 1: If the whole process is connected, with each step building upon the findings of the preceding one, this should be shown by directed arrows indicating the direction of input and output. The type of data transferred between steps can also be shown in these areas, e.g., ‘enabling factors for resilient retreat’.

Figure 1 and methodology: I do not understand how the factors identified in the FGD, which is the second step, were already included in the household survey and were then evaluated in phase 3. Is it that the predefined factors identified and included in the HH survey are only ranked (but not identified) in the FGDs? In this case, how is Phase 3 built upon the finding of phase 2? Please elaborate a bit more on the relationships between the three phases and why the analysis needed to be done in separate phases.

FIGURE 1 will be revised to a linear format to better illustrate the progression of steps and their corresponding input and output data. Based on the newly developed figure, we might also slightly modify the text trying to enhance the clarity in explaining the applied methodology and in how each step builds upon the previous one.

Why was there the need to separate the analysis in three phases? Basically, that structure is an outcome of the work in progress of the whole research process and project proceeding. Meaning that the project planning envisaged the household survey as the first step of primary data gathering. But it was clear that this survey needs to be accompanied by a more qualitative validation. That is why the two FGS were conducted after the initial analysis of the survey. The FGDs not only helped to validate the initial findings but also brought new ideas – the community-defined enabling factors. For us, they were worth to be used as thematic basis for the more detailed analysis of the survey data. This implies that the factors identified in the FGD were not yet included in the household survey. They were identified after the completion of the household survey and thus serve subsequently as a frame to look on the data and analyse it.

3. **The overarching survey questions need to be presented, particularly because the survey and FGD questions are not attached as SM.**

The survey is very long and detailed with 19 pages, more than 70 questions and more than 250 variables making it difficult to name single questions as overarching survey questions. However, the survey was structured into different thematic areas with headlines. These are:

1. Resettlement and mobility profile (Basic questions)
2. Livelihood (Physical, Financial, Human, Social, Natural Capital)
3. Settlement (Hazard profile, Material and design, Planning and comfort)
4. Process (Self-organization, Co-production and participation, Long-term prospect, Governance and trust)
5. Respondent household profile

The FGD was an open and qualitative dialogue following 8 guiding questions.

If wished and needed, we might upload the questionnaire and the guiding question of the FGD as supplementary material.

4. Line 218: Mai should be May

Will be changed in the revised version

5. While graphs are shown for all questions, explaining the content of the graphs in the text is redundant.

We do not fully understand the comment. We can check the redundancy of explanations and titles of figures and tables with explanations in the text in the revised version of the paper.

6. Table 2: why an aggregated response on the previous settlement is presented instead of separate in-city and off-city responses to allow for comparison with the current settlement?

Thank you for that comment. We can delete the “overall” response in table 2.

7. Limitations: the on-site facilities and services of the new settlements are not included in the analysis. For example, availability or access to basic services might be related to the already available basic services in the new sites rather than their distance from the city. In addition, the period of time since the relocations is also important in what people think about social cohesion or even experiencing flood and there might be a difference between those who moved recently and a long time ago. These kinds of limitations can be acknowledged in the paper.

A household survey has inherent limitations. Thus, it was crucial to employ a research design, which not only relied on the household survey but also integrated the FGDs as well as various field visits and transect walks. However, still, particularly the diverse nature of the settlements may pose limitations, which is why our site selection was based on a detailed settlement typology. Nevertheless, factors like the age of the settlement, as you mentioned, could influence the outcome. This temporal aspect can potentially influence the likelihood of experiencing hazards since longer-term residency in an area increases the probability of encountering such a hazard in that area. Nonetheless, the results indicate that certain hazards, such as storms and floods, are recurring events happening yearly or even multiple times a year. Moreover, the whole region experienced a series of severe typhoons in the last years, impacting all the surveyed settlements. Accordingly, it is reasonable to assume that the data provides a representative picture of hazard exposure across different sites.

8. Future study: More granular analysis of relationships among factors and demographic characteristics of the population (age, gender, income, etc.)

More granular analysis is exactly what is intended to be done in following research work. The dataset is very rich and can deliver more insights, allowing testing different hypothesis and investigate relationships.